The following list explains how the proposed Code changes are depicted on the redlined document.

Strikethrough: Deleted code language vetted through the Committee on the Environment.

<u>Underlined</u>: Proposed new language vetted through the Committee on the Environment.

: Planning and Zoning Commission (P&Z) recommended changes. P&Z proposed changes are included on the Summary of Comments for each page.

# Subchapter 17 – Environmentally Sensitive Areas



#### Sections:

35.17.1	Purpose-
35.17.2	Application-
35.17.3	Environmentally Sensitive Areas Review. Criteria Manua 2
35.17.4	Environmentally Sensitive Area Classifications. Review
35.17.5	Official Maps Environmentally Sensitive Areas Classifications.
35.17.6	Developed Floodplain Development Standards. Official Map
35.17.7	Undeveloped-Floodplain Development Standards-
35.17.8	Riparian Buffer and Water Related Habitat Development Standards-
35.17.9	Upland Habitat Development Standards-
35.17.10	General Design and Improvement Standards Clustering Standards
35.17.11	Clustering Standards Alternative Environmentally Sensitive Areas Plan
35.17.12	Alternative Environmentally Sensitive Area Plans

### 35.17.1 Purpose-

This Subchapter is adopted for the following purposes:

- A. Manage and protect environmentally sensitive areas within the City, as well as detail such areas that have been previously identified in The Denton Plan.
- B. Protect the natural and ecological resources that are essential elements of the City's health and community character and which provide irreplaceable plant and wildlife habitat;
- C. Establish a development framework for the City that is respective of private property rights, while encouraging them to be used responsibly for the benefit of the entire community;
- D. Preserve and enhance the City's distinctive community character and quality of life by ensuring that its natural and built environments are consistent with the community vision and values embodied in The Denton Plan.
- E. Establish regulations that conform to the requirements of the state and federal government regarding air quality, water quality and environmental protection.
- F. This Subchapter is adopted pursuant to authority vested under the City's charter, and Texas Local Government - Loc. Gov't Code, Chapters 211, 212, and 55401.

#### 35.17.2 Application.

- A. The standards of this Subchapter shall apply to all land and all development within the within the corporate limits of the City, except as otherwise specifically provided for in this Subchapter.
- B. The floodplain standards of this Sub-tapter shall apply to all land and all development within the extraterritorial jurisdiction of the City.
- C. The type of regulation applicable to the land depends upon the classification in which the land is placed, as provided in this Chapter. If those regulations conflict with other regulations of this Subchapter, the more stringent of the two regulations shall apply.

# Summary of Comments on Redlines with P&Z revisions.pdf

# Page: 1

Number: 1 Author: 113144 Subject: Sticky Note Date: 3/7/2018 6:52:35 PM

P&Z recommends adding the ESA acronym at the end of chapter title, in accordance with Public comment 1.

Number: 2 Author: 113144 Subject: Sticky Note Date: 3/7/2018 6:52:47 PM

P&Z recommends renaming section as Environmental Sensitive Areas Compliance Review, in accordance with Public comment 31.

Number: 3 Author: 113144 Subject: Sticky Note Date: 3/6/2018 7:44:31 PM

P&Z recommends renaming section as Definitions as new definitions has been added under this section, in accordance with Public comments 9, 24, 27.

Number: 4 Author: 113144 Subject: Sticky Note Date: 3/7/2018 6:53:18 PM

P&Z recommends adding ETJ acronym, in accordance with Public comment 5.

Number: 5 Author: 113144 Subject: Text Box Date: 3/7/2018 7:26:29 PM

Page 1

Status

113144 None 3/7/2018 7:27:51 PM

#### 35.17.3 Environmentally Sensitive Areas Criteria Manual

In addition to meeting the requirements expressly established in this Subchapter, all environmentally sensitive areas shall comply with the Environmentally Sensitive Areas Criteria Manual. Where there is conflict between a provision set forth in this Subchapter and a provision of the Environmentally Sensitive Areas Criteria Manual, the provisions of this Subchapter shall apply.

### Environmentally Sensitive Areas view-*35.17.4*

Review Required.

Environmentally Sensitive Area review for residential and non-residential development must be performed as part of a final plat applications and site plan applications, respectively irronmentally Sensitive Areas Review is required for all development except for the following. Application for an Environmentally Sensitive Area Review can be made in conjunction with a Site Review required under Subchapter 13.

- 1. Property that does not contain any environmentally sensitive areas as depicted on the City's Environmentally Sensitive Areas Map.
- Grading, filling, cutting or other earth-moving activity on any lot involving less than 25 cubic vards for residential projects or fifty (50) cubic yards for non-residential projects;
  - 3. Activities such as ordinary maintenance and landscaping operations, individual home gardens, repairs, and additions or minor modifications of a single-family dwelling, except as required by the Development Code.
  - Development of single-family homes at a density of one home for 2 acres or more shall be permitted and shall be subject to the following restrictions:
  - The home shall not be located in the Environmentally Sensitive Areas.
  - Clustering is required where more than one home is permitted within a development in order to preserve the greatest extent of the Environmentally Sensitive Areas.
  - The dwelling shall be in compliance with all other development regulations.
  - Septic tanks, septic tank drain fields, and other forms of on-site wastewater treatment shall not be built within the Environmentally Sensitive Areas.
  - 5.—The applicant can demonstrate to the Director of Planning and Development's satisfaction that the subject property contains no Environmentally Sensitive Areas. subject property contains no Environmentally Sensitive Areas.

#### B. Completed Application Required-

Information as required on the final plat and site plan checklists must be provided. Additional information deemed appropriate and necessary to process the application may also be required. A completed application for Environmentally Sensitive Areas Review shall contain the following:

- A plan containing the following information:
  - extent of all Environmentally Sensitive Areas as defined in this Subchapter. Mapping of Environmentally Sensitive Areas shall be based on the Denton Environmentally Sensitive Areas Map and the text of this Subchapter, but may also be supplemented by gathering and reviewing documentation such as: field verification, Section 404 wetland permit delineation, aerial photography, FEMA reports that delineate and identify Environmentally Sensitive Areas.
    - A determination, by the U.S. Army Corps of Engineer or a qualified environmental scientist with a delineation certified by the Corps, of the presence or absence of jurisdictional wetlands and waters of the U.S., and an indication of the location of any jurisdictional wetlands.
  - Culverting or bridges and associated land disturbances in conformance with the Drainage Criteria Manual.
    - Building envelopes for new or redevelopment parcels that include concept plans for the buildable area.
- Additional plans and studies as required in the applicable sections of this Subchapter.
- Criteria for Approval-

Number: 1	Author: 113144	Subject: Sticky Not	e Date: 3/7/2018 6:55:03 PM			
P&Z recommends renaming the process as Environmental Sensitive Areas Compliance Review, in accordance with Public comment 31.						
Number: 2	Author: 113144	Subject: Sticky Not	, ,			
P&Z recommends renaming the process as Environmental Sensitive Areas Compliance Review, in accordance with Public comment 31.						
Number: 3	Author: 113144	Subject: Sticky Not	e Date: 3/7/2018 7:01:33 PM			
P&Z recommends adding the following sentence, in accordance with Public comment 35:						
	ng shall clearly mark a	nd delineate all ESAs	to be protected and preserved for the duration of the land disturbing activities on the			
property.						
Number: 4	Author: 113144	Subject: Sticky Not				
P&Z recommends adding a phrase at the end of the sentence in accordance with Public comment 15:						
The applicant can demonstrate through an Environmentally Sensitive Area field assessment application the subject property						
contains no Environmentally Sensitive Areas or their location is not as depicted on the ESA map.						
Number: 5	Author: 113144	Subject: Text Box	Date: 3/7/2018 7:29:24 PM			

The requirements of an Environmentally Sensitive Areas review shall be deemed met when the Applicant demonstrates: The following criteria shall be used for the management and protection of Environmentally Sensitive Areas:

- 1. Environmentally Sensitive Area Standards. The Director of Planning and Development shall approve the proposed development when the Applicant The land development activity complies demonstrates the land development activity is incompliance with the requirements of this Subchapter for floodplains, Riparian Buffers, Water Related Habitat, and Upland Habitat and all other federal, state or local laws a part of the final plat or site plan. The applicant shall meet the following requirements:
- a. The Environmentally Sensitive Areas have been properly identified and indicated on the required plan-
- <u>2</u>b. The land disturbing activity will not cause damage to Environmentally Sensitive Areas <u>located on property</u> adjacent to the areas <u>of disturbance</u> to <u>be disturbed</u>.
- <u>3e</u>. The land disturbing activity <u>complies</u> is in compliance with the requirements of this <u>Subchapter and Subchapter 18</u>.
- 4d. A wetland delineation by a trained scientist has been performed if encroachments into jurisdictional wetlands are proposed, a n d a Section 404 Na t i o n w i d e Permit or a Letter of Permission from the U.S. Army Corps of Engineers has been obtained. If jurisdictional wetlands are determined to be present by the U.S. Army Corp of Engineers or a wetland delineator certified by them, a Section 404 Permit or Letter of Permission from the Corps shall be required before approval of the Environmental Review.
- 52. An Environmentally Sensitive Areas field assessment has provided evidence the subject property contains no ESAs. The specific delineation of the Environmentally Sensitive Area will be determined a part of the review by the Director of Planning and Development based on the best available data.

  6. An alternative Environmentally Sensitive Area plan has been approved for the subject development.

#### D. Expiration

The Environmentally Sensitive Area review shall expire when the final plat for residential development approval expires, or when the site plan approval for a non-residential development expires. The Environmentally Sensitive Area Review approved by the Director shall expire one year after the date of approval unless the applicant has made application for a final plat for the development. The Environmentally Sensitive Area review shall expire when final plat approval expires.

#### E. Credit-

Any Environmentally Sensitive Area that is preserved may be used towards meeting:

- 1. Landscape and Tree Canopy requirements contained in Subchapter 13
  - a. One square foot of tree canopy will be given for every square foot of preserved ESA tree canopy (1:1).
  - b. Two square feet of landscape credits will be given for every square foot of preserved ESA tree canopy (2:1).
  - c. One square foot of landscape credits will be given for every square foot of non-wooded preserved ESA (1:1)
- 2. Parkland dedication in accordance with the Parkland Dedication Ordinance
- 3. Drainage standards in accordance with Subchapter 19. Any Environmentally Sensitive Area that is protected may be used towards meeting the Landscape and Tree Canopy requirements contained in Subchapter 13, the Parkland Dedication and drainage requirements.

# 35.17.54 Environmentally Sensitive Area Classifications

The following are used to define the classifications of land areas, their constraints to building and land disturbing activity on them activity on them. The Environmentally Sensitive Areas Map:

#### A. Developed Floodplain.

Area within the FEMA 1% Annual Chance Floodplain (a.k.a. 100-year floodplain) for which the natural stream has been redesigned and no longer exhibits characteristics of a natural channel and/or its floodplain has been significantly modified, Any area defined as a floodplain within the FEMA 100 year floodplain. These areas have typically been channelized or the land within these areas has been graded, filled, or otherwise disturbed.

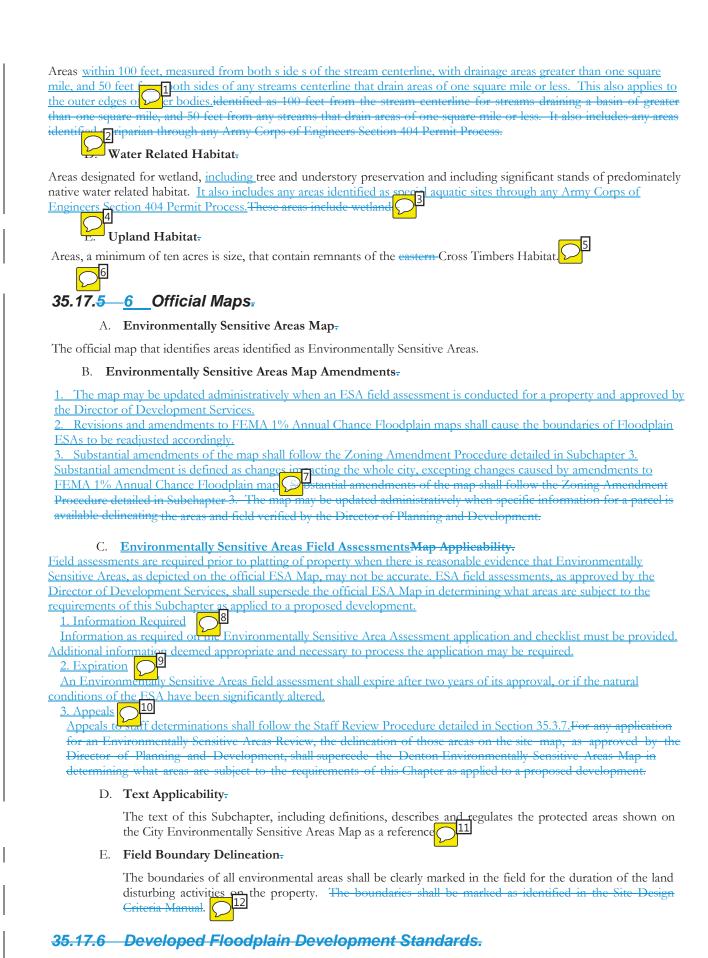
Undeveloped Floodplain-

Areas within the FEMA 1% Annual Chance Floodplain (a.k.a. 100-year floodplain), that are 100 year floodplain, or other floodplain that is undeveloped and in its natural state.





Number: 1	Author: 113144	Subject: Sticky Note	Date: 3/7/2018 7:03:11 PM			
P&Z recommends deleting item 5, in accordance with Public comment 14.						
Number: 2	Author: 113144		Date: 3/7/2018 7:07:22 PM			
	P&Z recommends adding new definitions under this section, in accordance with Public comments 9, 24, 27. Renaming this Section as Definitions					
would be approp	oriate.					
Number: 3	Author: 113144	Subject: Sticky Note	Date: 3/7/2018 7:13:07 PM			
	P&Z recommends adding new definitions under this section, in accordance with Public comments 9, 24, 27.					
Adding a phrase	Adding a phrase referencing the new terms at the end of the sentence would be appropriate:					
The following are	e used to define the o	classifications of Environmenta	ally Sensitive Areas comprising the Environmentally Sensitive Areas Map and			
other related ter	ms used throughout	this Subchapter:				
Number: 4	Author: 113144	Subject: Sticky Note	Date: 3/6/2018 2:16:21 PM			
P&Z recommend	P&Z recommends adding a definition for nuisance in accordance with Public comment 55, as follows:					
Physical or environmental conditions resulting in regular and/or continuous problems affecting the health, safety, and quality of life of citizens.						
Number: 5	Author: 113144	Subject: Sticky Note	Date: 3/6/2018 2:35:44 PM			
P&Z recommends adding a definition for Streams in accordance with Public comment 24, as follows:						
Linear geographic feature that conveys flowing waters. Headwater streams are the uppermost, low-order streams of a watershed and comprise						
the majority of streams in the United States, both in terms of number and length. Streams can be perennial, intermittent or ephemeral.						
Number: 6	Author: 113144	Subject: Text Box Date: 3/	7/2018 7:30:26 PM			
Page 3		-				



Date: 3/6/2018 7:40:45 PM Author: 113144 Number: 1 Subject: Sticky Note P&Z recommends adding the word surface to be consistent with definition of surface water body recommended by P&Z, in accordance with Public comment 24. Number: 2 Author: 113144 Subject: Sticky Note Date: 3/7/2018 7:14:17 PM P&Z recommends adding a definition for valley storage in accordance with Public comment 50, as follows: Water storage capacity of a stream and is a volume that is measured below the base flood elevation. Date: 3/6/2018 1:48:43 PM Number: 3 Author: 113144 Subject: Sticky Note P&Z recommends revising the Water-related habitat definition, in accordance with Public comment 28 as follows: Areas designated as wetlands, and trees and understory vegetation containing 50 percent or more of predominately native bottomland hardwood. Bottomland hardwoods occur on the first terrace of floodplains and flats along channels. Periodic inundation prevents establishment of upland species and maintains the functioning of this type of vegetation. Number: 4 Author: 113144 Subject: Sticky Note Date: 3/6/2018 2:01:03 PM P&Z recommends adding a definition of wetlands in accordance with public comment 27, as follow: Area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Includes adjacent and isolated wetlands. Author: 113144 Subject: Sticky Note Date: 3/6/2018 2:50:25 PM Number: 5 P&Z recommends revising the definition of Upland habitat as follows: Contiguous areas ten acres or larger of Cross Timbers habitat. Number: 6 Author: 113144 Subject: Sticky Note Date: 3/6/2018 2:50:33 PM P&Z recommends adding a definition for surface water bodies in accordance with Public comment 24, as follows: Term to include streams, ponds, lakes, and freshwater wetlands. Author: 113144 Subject: Sticky Note Date: 3/6/2018 3:07:42 PM P&Z recommends replacing the language about amendments to the FEMA 1% Annual Chance Floodplain maps in accordance with Public comment 29, as follows: Substantial amendments of the map shall follow the Zoning Amendment Procedure detailed in Substantial amendment is defined as changes impacting the whole city, excepting changes caused by the publication of new flood insurance rate maps (FIRMs) by FEMA. Date: 3/6/2018 5:07:08 PM Number: 8 Author: 113144 Subject: Sticky Note P&Z recommends adding a semicolon at the end in accordance to Public comment 32, as follows: Information Required; Number: 9 Author: 113144 Subject: Sticky Note Date: 3/6/2018 5:08:10 PM P&Z recommends adding a semicolon at the end in accordance to Public comment 32, as follows: Expiration; Number: 10 Author: 113144 Subject: Sticky Note Date: 3/6/2018 5:08:22 PM P&Z recommends adding a semicolon at the end in accordance to Public comment 32, as follows: Appeals; Number: 11 Author: 113144 Subject: Sticky Note Date: 3/7/2018 7:14:55 PM P&Z recommends replacing the word "areas" with "ESAs" and adding 's after the word City in accordance with Public comment 34, as follows: The text of this Subchapter, including definitions, describes and regulates the protected ESAs shown on the City's Environmentally Sensitive Areas Map as a reference. Number: 12 Author: 113144 Subject: Sticky Note Date: 3/6/2018 3:11:35 PM P&Z recommends relocating this requirement under Sec. 35.17.4.A in accordance with Public comment 35. Number: 13 Author: 113144 Subject: Text Box Date: 3/7/2018 7:30:58 PM

Development within the Developed Floodplains as identified on the Environmentally Sensitive Areas Map shall comply with Subchapter 35.19 Drainage. Gas well drilling and production within developed floodplains shall comply with Subchapter 35.22 (Gas Well Drilling and Production).

### 35.17.7 Undeveloped Floodplain Development Standards.

Upon field verification areas designated as FEMA 1% Annual Chance Floodplain would be classified according to the existing conditions as Developed or Undeveloped floodplains. The following uses and activities are allowed in the Undeveloped Floodplain and are in addition to the restrictions for development of floodplains contained in this Subchapter. Site disturbance shall be delineated on the completed application for Environmentally Sensitive Areas review:

#### A. Developed Floodplain

- 1. Development within the Developed Floodplains shall comply with Subchapter 35.19 Drainage Standards.
- 2. Section 35.17.8 applies when Riparian buffers and Water-related habitats are nested, partially or wholly, inside Developed floodplain ESAs.
- 3. Gas well drilling and production within developed floodplains shall comply with Subchapter 35.22 (Gas Well Drilling and Production).

#### B. Undeveloped Floodplain

The following uses and activities are regulated in the Undeveloped Floodplain. Regulations listed below are in addition to the restrictions for floodplains contained in this Subchapter.

#### A1. Permitted Uses and Activities

The following permitted uses and activities are allowed if in compliance with the Subchapter 19 Drainage Standards and Chapter 30 of the Code of Ordinances: The following permitted uses and activities are allowed if in compliance with the Drainage code:

- <u>a</u><del>1</del>. The planting of any new trees or vegetation.
- <u>b2</u>. Restoration or enhancement of floodplains, riparian buffers, water related habitats, upland habitats, wetlands and streams as required by federal and state standards.
- <u>c3</u>. The placement of public or private utility facilities such as sewer, storm water, water, electricity, gas, or other utilities as long as <u>the disturbed area is restored to minimized erosion and promote the recovery of the Environmentally Sensitive Areas, installation will not have a negative impact on environmentally sensitive areas and when adequately flood proofed.</u>

2

- <u>d</u>4. Measures to remove or abate nuisances, <u>the removal of invasive plant species</u>, or any other violation of federal, state or local law, <u>with the approval of the Director of Environmental Services</u>.
- e5. Parking lots, subject to the limitations on fill as specified in Section 35.17.7.B.3 and constructed of pervious materials.
- 6. Parks, open space, recreational uses, trails, walkways and bike paths.
- g7. New sStorm water quality controls pre-treatment facilities.
- h8. Construction of roadways identified on the Mobility Plan as long as the disturbed areas are restored to minimize erosion and promote the recovery of the Environmentally Sensitive Area subject to the Director of Environmental Services approval, and requirements outlined in Section 35.17.7.B.4.
- i. Routine repair and maintenance of existing structures, roadways, driveways, utilities, and accessory uses.
- j9. Agricultural- activity- permitted -through -<u>Nationwide Permit 40 (NWP- 40)</u>, -Agricultural -Activities pursuant Section 404 of the Clean Water Act or any other federal permits. or any other permit as required by FEMA or Section 404 pursuant to the Clean Water Act.
- k40. Any action taken by federal, state, or local officials in an emergency to mitigate an existing or potential hazard.
- 141. The construction of a private driveway, subject to Section 35.17.7.B.4.

  141. The construction of a private driveway, subject to Section 35.17.7.B.4.

  142. Gas- well- drilling -and -production -shall -comply- with -Subchapter -35.22- Gas -Well- Drilling -and -production
- n. Fill activities subject to limitations as outlined in Section 35.17.7.B.3.
- o. Culverts and bridges as long as the disturbed areas are restored to minimize erosion and promote the recovery of the Environmentally Sensitive Area subject to the Director of Environmental Services approval, and requirements outlined in Section 35.17.7.B.4.

#### 2B. Prohibited Uses and Activities.

The following prohibited uses and activities are not allowed in <u>#U</u>ndeveloped floodplains:

Number: 6
Page 5

Author: 113144

Number: 1	Author: 113144	Subject: Sticky Note	Date: 3/6/2018 5:12:27 PM			
P&Z recommends deleting the last sentence in accordance with Public comment 40.						
Number: 2	Author: 113144	Subject: Rectangle Date: 3	/7/2018 7:15:05 PM			
_						
Number: 3	Author: 113144	Subject: Sticky Note	Date: 3/6/2018 4:10:54 PM			
	P&Z recommends deleting last part of sentence and relocating Sec. 35.17.7.B.4 into the ESA Criteria Manual in accordance with Public comment					
6. References to the ESA Criteria Manual have been incorporated in Sec. 35.17.7.B.3						
		•				
Number: 4	Author: 113144	<u> </u>	Date: 3/7/2018 7:16:52 PM			
P&Z recommend 47, as follows:	s relocating Sec. 35.	17.7.B.4 into the ESA Criteria	Manual and revising the language in accordance with Public comments 6 and			
The construction of a private driveway, as long as the disturbed areas are restored to minimize erosion and promote the recovery of the Environmentally Sensitive Area subject to the Director of Environmental Services approval.						
Number: 5	Author: 113144	Subject: Sticky Note	Date: 3/7/2018 7:17:56 PM			
P&Z recommends relocating Sec. 35.17.7.B.4 into the ESA Criteria Manual in accordance with Public comments 6 and adding a sentence as follows:						
Culverts and bridges as long as the disturbed areas are restored to minimize erosion and promote the recovery of the Environmentally Sensitive Area subject to the Director of Environmental Services approval. Culverts and bridges are exempt from the limitations in fill set in Section 35.17.7.B.3.						

Subject: Text Box Date: 3/7/2018 7:34:35 PM

- a4. Placement, handling, processing areas, and/or storage of hazardous waste. Uncontained and contained areas of hazardous materials. Handling or processing areas for the receiving and storage of hazardous waste. Hazardous waste and solid waste landfills.
- <u>b2</u>. Land disturbing activity not authorized by a <u>U.S. Army Corp of Engineers Section</u> 404 Permit or Letter of Permission and by the Director as part of the environmentally sensitive area review.
- c3. Any new structures or additions, including garages and carports, and storage sheds located within the area mapped as Undeveloped Floodplain.
- <u>d</u>4. Tree and understory vegetation removal, except as allowed by Subsection 35.22.5.A.8(c) <u>and 35.19.4.E.2</u> <u>e. Septic tanks, septic tank drain fields, and other forms of on-site wastewater treatment.</u>
- 3-€. Standards for Fill in Undeveloped Floodplains.



The following are standards for fill in the Unndeveloped floodplain:

- <u>a</u>4. Filling of any floodplain of a stream that drains more than one square mile is prohibited unless the fill on any lot is less than 50 cubic yards or 300 cubic feet per acre, whichever is greater.
- b. Up to 15% of the floodplain valley storage may be filled if the stream drains less than one square mile in area pursuant to this Subchapter, Subchapter 19 Drainage Standards, and federal law.
- c. If additional fill is necessary beyond the permitted amounts in (a) above, the fill materials must be obtained from cutting or excavation only to the extent allowed to create an elevated site per Subchapter 19 Drainage Standards.
- d2. Excavation to balance fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.
- e3. Fill and other material imported to the lot shall be limited to the following:
  - ia. Poured concrete and other materials necessary to build permitted structures on the lot.
  - <u>iib</u>. Aggregate base and paving materials.
  - iiie. Pervious materials as allowed in Subchapter 13, Site Design Standards.
  - ivd. Plants and other landscaping material.
- 4. If additional fill is necessary beyond the permitted amounts in (1) above for sites with streams that drain an area greater than one square mile, then fill materials must be obtained from cutting or excavation only to the extent allowed to create an elevated site for permitted land disturbing activity.
- 5. Adequate drainage shall be provided for the stability of the fill.
- g6. Any fill necessary for elevating a building pad site per Subchapter 19 Drainage Standards shall be located as far as possible from Environmentally Sensitive Areas in order to reduce the impact of that fill on the adjacent areas. Fill to raise elevations for a building site shall be located no closer than permitted to the

Environmentally Sensitive Areas in order to reduce the impact of that fill on the adjacent areas.

h. All disturbances to floodplains from permitted fill activities shall be revegetated using appropriate native vegetation as listed in the City of Denton's Native Plant List.

#### 4D. Culverts and Bridges-

Fill for culverts and bridges shall be kept to the minimum necessary for proper installation, and meet all requirements outlined in Subchapter 19 Drainage Standards. Culverts and bridges are exempt from the limitations in Section 35.17.7.B.3 Culverts or bridges of any waterway or creek identified on the official maps adopted pursuant to this Subchapter must be designed by an engineer. Stream crossings shall be designed to the standards of the Drainage Subchapter, or where no floodway has been identified, to pass a one hundred (100) year flood without any increase in the upstream flood height elevation. The engineer shall consider in the design the probability that the culvert will be blocked by debris in a severe flood and accommodate expected overflow. Fill for culverts and bridges shall be kept to the minimum allowed, but is exempt from the limitations in section (A) above.

## 35.17.8 Riparian Buffer and Water Related Habitat Development Standards

The following uses and activities are <u>regulated</u> in the Riparian Buffer and Water Related Habitats and are in addition to the restrictions for development in this Subchapter., <u>Site Disturbance and shall be delineated on the completed application for Environmentally Sensitive Areas review:</u>

Date: 3/7/2018 7:19:17 PM Number: 1 Author: 113144 Subject: Sticky Note

P&Z recommends simplifying Sec. 35.17.7.B.3 and relocating all technical information about fill to the ESA Criteria Manual in accordance with Public comments 51, 52, and 53. Proposed Sec. 35.17.7.B.3 reads as follows:

- a. Filling of any floodplain of a stream that drains more than one square mile is prohibited unless the fill on any lot is less than 50 cubic yards or 300 cubic feet per acre, whichever is greater.
- b. Up to 15% of the floodplain valley storage may be filled if the stream drains less than one square mile.
- c. In addition to meeting the requirement for fill set above, all fill activities in the Undeveloped floodplain shall comply with the Environmental Sensitive Area Criteria Manual, Subchapter 19 Drainage Standards, and federal law.

Number: 2 Author: 113144 Subject: Sticky Note Date: 3/6/2018 7:45:47 PM

P&Z recommends relocating Sec. 35.17.7.B.4 into the ESA Criteria Manual in accordance with Public comments 6.

Number: 3

Author: 113144 Subject: Text Box Date: 3/7/2018 7:35:18 PM

Page 6

#### A. Permitted Uses and Activities

The following uses and activities are allowed in Riparian Buffer and Water Related Habitats and shall be delineated on the completed application for Environmentally Sensitive Areas review:

- 1. Placement of private residential yard amenities, including but not limited to: gardens, yards, trails, and clearings, that would result in disturbing up to 10% of the area, but in no instance shall the protective buffer width be decreased below 25 feet measured each direction from the center line of the existing channel or the liter edge of water bodies. Up to 10% of the area may be disturbed for private yard structures including but not limited to: gardens, yards, trails, and clearings, but which are no closer than 25 feet from the stream bank or riparian buffer. No disturbance is permitted in delineated wetlands.
- 2. Riparian buffers nested, partially or wholly, inside Developed floodplains may be disturbed up to 10% of the area but in no instance shall the protective buffer width be decreased below 25 feet measured each direction from the center line of the existing channel or the outer edge of water bodies. No disturbance is permitted in delineated wetlands.
- 32. Repair, replacement or improvement of utility facilities where:
- a. Tthe disturbed portion of the Environmentally Sensitive Area is restored, ; and,
- b. Non-native vegetation <u>listed as invasive is removed is removed from the Environmentally Sensitive Area</u> and replaced with vegetation from the City Native Plant List.
- 43. Additions, alterations, rehabilitation, or replacement of existing structures that do not increase the existing structural footprint in the Riparian Area or Water Related Habitat. Any disturbed areas must be restored Area where the disturbed portion of the area is restored using native vegetative cover.
- 54. Stream, wetland, riparian and upland enhancement or restoration projects;
- 65. Agricultural activity, including buildings and structures is permitted outside of the environmentally sensitive areas, unless otherwise permitted through Nationwide Permit 40 (NWP 40), Agricultural Activities pursuant Section 404 of the Clean Water Act or any other federal permit or any other permit as required by FEMA or Section 404 or as allowed in this Subchapter.
- 76. Routine repair and maintenance of existing structures, roadways, driveways, utility facilities, accessory uses and other development.
- 8. Construction of roadways identified on the city Mobility Plan as long as the disturbed areas are restored to minimize erosion and promote the recovery of the Environmentally Sensitive Area and subject to the Director of Environmental Services approval, and as outlined in Section 35.17.7.B.4.
- <u>9</u>7. Measures to remove or abate nuisances, or any other violation of State statute, administrative rule, or City Code of Ordinances.
- 108. Any action taken by the City in an emergency to mitigate an existing or potential hazard.
- 119. Gas well drilling and production within riparian buffers and water related habitats shall comply with Subchapter 35.22 Gas Well Drilling and Production.

#### B. Prohibited Uses and Activities-

The following uses and activities are not allowed in Riparian Buffers and Water Related Habitats:

- 1. Land disturbing activity not authorized by a <u>US Army Corp of Engineers Section 404 Permit of Letter of Permission and by the Director as part of the ESA review.</u>

  Placement handling processing or storage of hexardous westell acceptained and contained.
- Placement, handling, processing, or storage of hazardous waste Uncontained and contained areas of hazardous materials handling areas for the receiving and storage of hazardous waste.
- 3. Any structures, including storage sheds, garages and carports, located within the area mapped as Riparian Buffer and Water Related Habitats.
- 4. Septic tanks, septic tank drain fields, and other forms of on-site wastewater treatment.

### 35.17.9 Upland Habitat Development Standards.

The following uses and activities are regulated allowed in the Upland Habitat and are in addition to the restrictions for development within this Subchapter. Site disturbance shall be delineated on the completed application for Environmentally Sensitive Areas review:

#### A. Permitted Uses and Activities.

The following uses and activities are allowed in Upland Habitats and shall be delineated on the completed application for Environmentally Sensitive Areas Review:

Date: 3/6/2018 7:40:07 PM Number: 1 Author: 113144 Subject: Sticky Note P&Z recommends adding the word surface to be consistent with definition of surface water body recommended by P&Z, in accordance with Public comment 24. Number: 2 Date: 3/6/2018 7:46:25 PM Author: 113144 Subject: Sticky Note P&Z recommends adding the word surface to be consistent with definition of surface water body recommended by P&Z, in accordance with Public comment 24. Number: 3 Author: 113144 Subject: Sticky Note Date: 3/7/2018 7:20:48 PM P&Z recommends clarifying that removal of vegetation for the purpose of removing drainage blockages is allowed as per Sec. 35.19.4.E.2, in accordance with Public comment 47. A new entry was added to the prohibited uses as follows: Tree and understory vegetation removal, except as allowed by Subsection 35.19.4.E.2. Number: 4

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- 4.—Residential development shall be designed to retain a contiguous fifty percent (50%) tree canopy, which shall remain predominantly in its natural state. Preservation of upland habitat contiguous to forested areas on adjacent properties or parcels is strongly encouraged.
- Non-residential development shall be designed to retain thirty percent (30%) tree canopy which shall remain predominantly in its natural state. Preservation of upland habitat contiguous to forested areas on adjacent properties or parcels is strongly encouraged. may remove any or all of the Upland Habitat.
- Selective pruning conducted by or under the supervision of an International Society of Arboriculture (ISA) certified arborist by a qualified and licensed tree surgeon is allowed to remove up to one-quarter of the canopy for the purposes of a trees health.
- 3. Clustering of development in these areas shall be utilized to minimize impact to the natural environment. Clustering shall be designed to maintain a contiguous forested area.
- Agricultural activity, including buildings and structures is permitted outside of the environmentally sensitive areas, unless otherwise permitted through NWP 40, Agricultural Activities or any other permit as required by FEMA or Section 404, or as allowed in this Subchapter.
  - Enhancement or restoration projects as approved by the Director of Environmental Services.

#### **Prohibited Uses and Activities**

Septic tanks, septic tank drain fields, and other forms of on-site wastewater treatment.



#### 35.17.10 General Design and Improvement Standards.

The design and improvement of environmentally sensitive areas shall be in accordance with the following standards:

- A. These areas shall be linked to existing or planned open space or conserved areas overall open space system.
- B. These developments shall be arranged in order to maximize access and utilization of the environmentally sensitive areas by residents of the development and the City.
- C. These developments shall comply with the open space plans and requirements of the City.
- D. The unbuildable site area shall be placed either in a lot or lots that incorporate a permanent conservation easement, restrictive covenants, or such other legal mechanism to allow for the long term conservation of said areas. Such legal mechanism shall limit any future land disturbing activity or construction within the environmentally sensitive areas and shall run with the land and be binding upon all successors and assigns of the current owner. The unbuildable site area may be incorporated into lots of over ½ acre in size.

## 35.17.104 Clustering Standards.

Clustering of development shall be utilized to minimize impact to the natural environment. Clustering shall be designed to maintain a contiguous forested area.

Residential units or non-residential floor area ratio of a site may be clustered within the buildable areas of that site provided the following standards are met:

- A. Clustered density or floor area intensity may be transferred to contiguous lots under common ownership. Clustering from one development site to another development site is prohibited.
  - A general development plan shall be used to designate all areas of common ownership.
  - A general development plan may be used to allocate the transfer of density between lots under common ownership prior to their being sold.

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The minimum two acre size requirement for clustering contained in Subchapter 5 is not applicable to properties impacted by an Environmentally Sensitive Area.

### 35.17.112 Alternative Environmentally Sensitive Area Plans-

Number: 1 Author: 113144 Subject: Sticky Note Date: 3/6/2018 7:57:15 PM

P&Z recommends clarifying that septic tank and associated equipment is only prohibited in areas destined for preservation, in accordance with Public comment 57. The sentence was revised as follows:

1. Septic tanks, septic tank drain fields, and other forms of on-site wastewater treatment are prohibited in areas set aside for required preservation.

Number: 2

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The Alternative Environmentally Sensitive Area Plan provides the option to address the regulations through a flexible discretionary process utilizing the Zoning Amendment Procedure outlined in Subchapter 35.3.4.

#### B. Criteria for Approval

The goals and objectives which must be met, and by which the proposal will be judged are:

- 1. Mitigation goals are obtained by creating, expanding, and/or improving environmentally sensitive areas.
- 2. Mitigation goals are obtained by preserving environmentally sensitive areas above the minimum requirements, exchanges between different types of ESAs, installing pollution prevention controls, and/or implementing best management practices or any other approaches that result in the improvement of the environment being impacted.
- 3. Areas offered as mitigation are linked to existing or planned open space or conserved areas to provide an overall open space system.
- 4. Development is arranged for maximizing access and utilization of the environmentally sensitive areas by
- 5. Areas offered as mitigation are placed either in a lot or lots that incorporate a permanent conservation easement, restrictive covenants, or such other legal mechanism to allow for the long term conservation of said areas. Such legal mechanism shall limit any future land disturbing activity or construction within the environmentally sensitive areas and shall run with the land and be binding upon all successors and assigns of the current owner.
- 6. The Alternative Environmentally Sensitive Area Plan shall demonstrate that the developer's alternative proposal results in a high quality development meeting the intent of the standards in the Denton Development Code.

#### C. Information Required

Information as required on the alternative environmentally sensitive areas plan checklist must be provided. Additional information deemed appropriate and necessary to process the application may also be required. The Alternative Environmentally Sensitive Area Plan provides the option to address the regulations through a flexible discretionary process utilizing the Zoning Amendment Procedure outlined in Subchapter 35.3.4. The Alternative Environmentally Sensitive Area Plan shall demonstrate that the developer's alternative proposal results in a high quality development meeting the intent of the standards in the Denton Development Code.

(Amended Ord. No. 2004-059, 03/02/2004) (Amended Ord. No. 2005-366, 12/06/2005)

Number: 1
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