

**PLANNING COMMISSION REPORT**  
**Regular Agenda -- Public Hearing Item**

PC Staff Report  
06/23/10

**ITEM NO. 9      TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE;  
CHAPTER 20, ARTICLE 12; FLOODPLAIN OVERLAY DISTRICT (AMB)**

**TA-4-6-10:** Consider Text Amendments to the City of Lawrence Land Development Code, Chapter 20, Article 12 to reference 2010 effective dates for new Floodplain Overlay District Maps and related regulation changes. *Initiated by Planning Commission on 4/28/10.*

**RECOMMENDATION:** Staff recommends approval of the revised text for Sections 20-1201(a)(3)(i), 20-1201(b)(1), 20-1201(c)(1) and forwarding of the proposed text amendments to Chapter 20, Article 12 to the City Commission for approval and adoption.

**Reason for Request:** The Planning Commission initiated this amendment on April 28, 2010 as a result of the Flood Map Modernization project undertaken by the Federal Emergency Management Administration (FEMA) by which new floodplain maps will be produced for Douglas County. The effective date for those maps needs to be reflected in the Development Code in order to comply with the State of Kansas model floodplain ordinance.

**RELEVANT GOLDEN FACTOR:**

- Conformance with the Comprehensive Land Use Plan is the relevant factor that applies to this request. Adoption of new regulatory tools, one of which is zoning regulations, is an implementation step in Chapter 13 of HORIZON 2020, the City/County Comprehensive Land Use Plan.

**PUBLIC COMMENT RECEIVED PRIOR TO PRINTING**

- No written comments received to date.
- Staff has conferred with State Division of Water Resources floodplain program administrators regarding the proposed changes.

**OVERVIEW OF PROPOSED AMENDMENT**

The Federal Emergency Management Agency (FEMA) recently completed a re-evaluation of flood hazards for Douglas County. Staff has received the preliminary maps and has been in the process of reviewing them. As part of the issuance of new Flood Insurance Rate Maps (FIRMs), staff has set up an informational website with information about the new maps, and conducted outreach activities within the community to raise awareness about the new flood hazard maps. FEMA requires each community to amend their floodplain regulations to include the new effective date of the FIRM maps, which will be August 5, 2010. Sections 1201(a)(3)(i), 20-1201(b)(1), and 20-1201(c)(1) need to be changed to reflect the new effective date.

Prior to adoption, this proposed language will need to be officially reviewed by the Kansas Department of Agriculture, Division of Water Resources (DWR) to ensure compliance with the City's participation in the National Flood Insurance Program (NFIP), including alignment with the current

State Model Floodplain Ordinance.

## **CRITERIA FOR REVIEW & DECISION-MAKING**

Section 20-1302(f) provides review and decision-making criteria on proposed text amendments. It states that review bodies shall consider at least the following factors:

- 1) Whether the proposed text amendment corrects an error or inconsistency in the Development Code or meets the challenge of a changing condition.**

**Staff Response:** The proposed amendment addresses a change to reflect the issuance of new Federal Insurance Rate Maps by FEMA for Douglas County. Changing the effective date of the maps addresses an inconsistency that is a result of the issuance of those new maps.

- 2) Whether the proposed text amendment is consistent with the Comprehensive Plan and the stated purpose of this Development Code (Sec. 20-104).**

**Staff Response:** The comprehensive plan does not specifically address the amendment. The amendment helps to carry out the plan's goal of using zoning standards to create compatible neighborhoods and efficient development processes.

## **PROPOSED LANGUAGE:**

FEMA requires each community to amend their floodplain regulations to include the new effective date of the FIRM maps, which will be August 5, 2010. Sections 1201(a)(3)(i), 20-1201(b)(1), and 20-1201(c)(1) have been changed to reflect the new effective date.

Text to be deleted is shown with ~~strikeout~~ and proposed text is shown in ***bold italic underlined font***.

### **20-1201 GENERAL**

#### **(a) Findings of Fact**

- (1) The **Areas of Special Flood Hazard** of Lawrence, Kansas, are subject to inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for **Flood** protection and relief, and impairment of the tax base; all of which adversely affect the public health, safety, and general welfare.
- (2) **These Flood losses are caused by:**
  - (i) the cumulative effect of **Development** in any delineated **Floodplain** causing increases in **Flood** Heights and velocities;
  - (ii) urbanization of upstream areas, resulting in increased Impervious Surface and increased stormwater runoff;

- (iii) the occupancy of Flood hazard areas by uses vulnerable to Floods, hazardous to others, inadequately elevated, or otherwise unprotected from Flood damages; and
  - (iv) the modification of the Floodplain by grading or filling.
- (3) The Flood Insurance Study (FIS) that is the basis of the National Flood Insurance Program uses a standard engineering method of analyzing Flood hazards, which consists of a series of interrelated steps:
  - (i) Selection of a Base Flood that is based upon engineering calculations, which permit a consideration of such Flood factors at its expected frequency of occurrence, the area inundated, and the depth of inundation. The Base Flood selected for this Article is representative of large Floods, which are characteristic of what can be expected to occur on the particular streams subject to this Article. It is in the general order of a Flood which could be expected to have a one percent (1%) chance of occurrence in any one year as delineated in the Federal Insurance Administrator's FIS, and illustrative materials dated ~~November 7, 2001~~ **August 5, 2010**, as amended, and any future revisions thereto;
  - (ii) Calculation of water surface profiles are based on a standard hydraulic engineering analysis of the capacity of the stream channel and overbank areas to convey the Regulatory Flood;
  - (iii) Computation of a Floodway required to convey this Flood without increasing Flood Heights more than one (1) foot at any point;
  - (iv) Delineation of Floodway Encroachment Lines within which no Development is permitted that would cause any increase in Flood Height; and
  - (v) Delineation of Floodway Fringe, i.e., that area outside the Floodway Encroachment Lines, but still subject to inundation by the Base Flood.

**(b) Floodplain Overlay District – Property within the City Limits on 03/01/03**

- (1) The Floodplain Overlay District boundaries for properties within the city's corporate limits as of March 1, 2003 shall be consistent with the Base Flood Elevations and Floodplain widths identified by the FIS and Flood Insurance Rate Map (FIRM) for "Douglas County Kansas and Incorporated Areas dated ~~November 7, 2001~~ **August 5, 2010**".

**(c) Floodplain Overlay District – Property Annexed into the City after 03/01/03**

- (1) The Base Flood Elevations and Floodplain widths identified by the FIS and Flood Insurance Rate Map (FIRM) for "Douglas County, Kansas, and Incorporated Areas dated ~~November 7, 2001~~ **August 5, 2010**," may increase over time as a result of additional watershed Development; therefore the City has identified the Floodplain (FP) Overlay District for property annexed into the city's corporate limits after March 1, 2003, as the area that includes:

- (i) All **Zones A** on the current **FIRM**;
  - (ii) All **Zones AE** and **AH** on the current **FIRM** and all adjacent areas inundated by a **Flood** having an elevation of the **FIS Base Flood Elevation** plus an additional two feet of **Freeboard**. If an approved **Hydrologic and Hydraulic Study** has been completed, the boundary information provided in that study will be utilized to amend the **Floodplain Overlay District** boundaries;
  - (iii) All **Zones AO** on the current **FIRM** and all adjacent areas inundated by a **Flood** having an elevation of the **FIS** average depth of **Flooding** plus an additional two feet of **Freeboard**. If an approved **Hydrologic and Hydraulic Study** has been completed, the boundary information provided in that study will be utilized to amend the **Floodplain Overlay District** boundaries; and
  - (iv) All stream tributaries having a drainage area of 240 acres or more regardless of the limits of the **FIS**. Upstream of the limits of the **FIS**, the width of the **Floodplain Overlay District** shall be determined by the City using recognized engineering practices.
- (2) The **Floodplain Overlay District** will be shown and identified on the Official Zoning Map of the City of Lawrence.