

**DEVELOPMENT CODE OF THE CITY OF LAWRENCE, KANSAS  
TEXT AMENDMENTS, FEBRUARY 2, 2010 EDITION**

Amending Sections  
20-1203 and 20-1204

**OF CHAPTER 20 OF THE CODE OF THE CITY OF LAWRENCE,  
KANSAS**



*City of Lawrence*

Incorporated By Reference Pursuant to K.S.A. 12-3009, *et seq.* K.S.A. 12-3301  
*et seq.* and the Home Rule Authority of the City

Passed by the Governing Body of the City of Lawrence, Kansas

**Ordinance No. 8484**

First Reading: January 26, 2010  
Second Reading: February 2, 2010  
Date of Publication:

**ORDINANCE NO. 8484**

**AN ORDINANCE RELATING TO CHAPTER 20, THE DEVELOPMENT CODE OF THE CITY OF LAWRENCE, KANSAS OF THE CODE OF THE CITY OF LAWRENCE, KANSAS 2009 EDITION AND AMENDMENTS THERETO; AMENDING CHAPTER 20, ARTICLE 12, SECTION 20-1203 PERTAINING TO THE ADMINISTRATION OF FLOODPLAIN MANAGEMENT REGULATIONS AND SECTION 20-1204 PERTAINING TO PROVISIONS FOR FLOOD HAZARD REDUCTION BY ADOPTING AND INCORPORATING BY REFERENCE THE "DEVELOPMENT CODE OF THE CITY OF LAWRENCE, KANSAS, TEXT AMENDMENTS, FEBRUARY 2, 2010 EDITION" PREPARED BY THE LAWRENCE-DOUGLAS COUNTY METROPOLITAN PLANNING OFFICE OF THE CITY OF LAWRENCE, KANSAS, AND REPEALING THE EXISTING SECTIONS.**

**BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LAWRENCE, KANSAS:**

**SECTION ONE:** Chapter 20, the Development Code of the City of Lawrence, Kansas of the Code of the City of Lawrence, 2009 Edition and amendments thereto, is hereby amended as follows:

There is hereby adopted and incorporated by reference, as if fully set forth herein, for the purpose of amending sections to Chapter 20, the Development Code of the City of Lawrence, Kansas of the Code of the City of Lawrence, Kansas 2009, Edition, and amendments thereto, the "Development Code of the City of Lawrence, Kansas Text Amendments, February 2, 2010 Edition" prepared, compiled, published and promulgated by the Lawrence-Douglas County Metropolitan Planning Office of the City of Lawrence, Kansas. At least one copy of the "Development Code of the City of Lawrence, Kansas Text Amendments, February 2, 2010 Edition" shall be marked or stamped as "Official Copy as Adopted by Ordinance No. 8484" with all sections or portions thereof intended to be omitted clearly marked to show any such omission or showing the sections, articles, chapters, parts or portions that are incorporated, as the case may be, and to which shall be attached a copy of this incorporating ordinance, and filed with the City Clerk, to be open to inspection and available to the public at all reasonable business hours. The police department, municipal judge, and all administrative departments of the City charged with the enforcement of the ordinance shall be supplied, at the cost of the City, such number of official copies of such "Development Code of the City of Lawrence, Kansas Text Amendments, February 2, 2010 Edition" marked as may be deemed expedient.

**SECTION TWO:** Existing Chapter 20, Article 12, Sections 20-1203 and 20-1204 of the Code of the City of Lawrence, Kansas 2009 Edition, and amendments thereto, are hereby repealed it being the intent that the provisions of this ordinance supersede the repealed code provisions.

**SECTION THREE:** If any section, clause, sentence, or phrase of this ordinance is found to be unconstitutional or is otherwise held invalid by any court of competent jurisdiction, it shall not affect the validity of any remaining parts of this ordinance.

**SECTION FOUR:** This ordinance shall take effect and be in force from and after its passage and publication as provided by law.

Passed by the Governing Body this \_\_\_\_ day of \_\_\_\_\_, 2010.

**APPROVED:**

\_\_\_\_\_  
Robert Chestnut, Mayor

**ATTEST:**

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Jonathan M. Douglass, City Clerk

**APPROVED AS TO FORM AND LEGALITY:**

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Toni Ramirez Wheeler  
Director of Legal Services

Publish one time and return one Proof of Publication to the City Clerk and one to the Director of Legal Services.

**SECTION ONE:** Chapter 20, Article 12, Section 20-1203 of the Code of the City of Lawrence, Kansas, 2009 Edition, and amendments thereto is hereby amended and shall read as follows:

(e) **Floodplain Development Permit**

A **Floodplain Development** permit shall be required for all proposed construction or other **Development**, including the placement of **Mobile Homes**, in the **Floodplain Overlay District**. No **Person**, firm, corporation, or unit of government shall initiate any **Development** or Substantial Improvement or cause the same to be done without first obtaining a separate **Floodplain Development** permit for each **Structure** or other **Development**.

(f) **Designation of Floodplain Administrator**

The Director of Planning is hereby appointed as the **Floodplain** Administrator to administer and implement the provisions of this article.

(g) **Duties and Responsibilities of Floodplain Administrator**

Duties of the **Floodplain** Administrator shall include, but not be limited to:

- (1) Review of all applications for **Floodplain Development** permits to assure that the requirements of this Article have been satisfied;
- (2) When an application for a **Floodplain Development** permit requires the submittal of a **Hydrologic and Hydraulic Study**, coordinate the review and approval of the study by the City Stormwater Engineer to assure that the requirements of this Article have been satisfied;
- (3) Issue **Floodplain Development** permits for all approved applications;
- (4) Notify adjacent communities, impacted Drainage Districts, and the Division of Water Resources, Kansas Department of Agriculture, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management **Agency** (FEMA);
- (5) Verify through an "Elevation Certificate" and maintain a record of the actual elevation (in relation to **Mean Sea Level**) of the **Lowest Floor**, of all new or substantially improved residential **Structures**;
- (6) Verify through an "Elevation Certificate" the actual elevation (in relation to **Mean Sea Level**) that the new or substantially improved non-residential **Structures** have been Floodproofed;
- (7) Maintain a record of the actual elevation (in relation to **Mean Sea Level**) that the new or substantially improved non-residential **Structures** have been **Flood**-proofed; and
- (8) When **Floodproofing** techniques are utilized for a particular non-residential **Structure**, the **Floodplain** Administrator shall require certification from a registered professional engineer or architect.

(h) **Floodplain Development Permit**

- (1) To obtain a **Floodplain Development** permit, the applicant shall first file an application in writing, on a form furnished for that purpose, with the **Floodplain** Administrator. Every **Floodplain Development** permit application shall:
  - (i) When required pursuant to Section 20-1204, provide two copies of the **Hydrologic and Hydraulic Study** for the proposed **Development**;

- (ii) Identify the **Base Flood Elevation**;
    - a. When required pursuant to Section 20-1204 identify the **Water Surface Elevation** of the **Base Flood** as determined by both the **Flood Insurance Study** and the **Hydrologic and Hydraulic Study**. The higher of these elevations shall be the **Base Flood Elevation** for compliance with the provisions of this article; or,
    - b. When a **Hydrologic and Hydraulic Study** is not required, identify the **Water Surface Elevation** of the **Base Flood** as determined by the **Flood Insurance Study**.
    - c. When the **Water Surface Elevation** of the **Base Flood** is not provided by the **Flood Insurance Study** or an approved **Hydrologic and Hydraulic Study**, the applicant shall provide a signed study by a registered, professional engineer that states the **Water Surface Elevation** of the **Base Flood** for the property.
  - (iii) Provide a legal description of the land on which the proposed work is to be done by Lot, Block and Tract, Street address, and description of **Structures** or provide a similar description that will readily identify and specifically locate the proposed **Structure** or work;
  - (iv) Identify and describe the work to be covered by the **Floodplain Development** permit;
  - (v) Provide verification that all necessary permits from Federal, State, and local government agencies have been obtained;
  - (vi) Indicate the use or occupancy for which the proposed work is intended;
  - (vii) Indicate the county appraiser's assessed value of the existing **Structure(s)** and the **Market Value** of the improvement;
  - (viii) Specify whether **Development** is located in designated **Floodway Fringe**, **Floodway**, or an **Unmapped Floodplain Area**;
  - (ix) Show existing contours lines and proposed contours;
  - (x) Give such other information as reasonably may be required by the **Floodplain** Administrator;
  - (xi) Be accompanied by scaled plans and engineering specifications for proposed construction; and
  - (xii) Be signed by the permittee or his authorized Agent who may be required to submit evidence to indicate such authority.
- (2) Before a final inspection, the **Floodplain** Administrator must be provided with a completed FEMA "Elevation Certificate" stating the finished construction elevation of the **Lowest Floor** in relation to **Mean Sea Level** signed by a land surveyor **or professional engineer** licensed by the State of Kansas.

(i) **Expiration of Floodplain Development Permits**

Floodplain Development permits expire 18 months from the date of issuance if a certificate of elevation has not been received. If requested, and for good cause shown, the Floodplain Administrator may grant a 6-month extension.

**SECTION TWO:** Chapter 20, Article 12, Section 20-1204 of the Code of the City of Lawrence, Kansas, 2009 Edition, and amendments thereto is hereby amended and shall read as follows:

20-1204 PROVISIONS FOR FLOOD HAZARD REDUCTION

(e) **Development of Property in the Floodplain Overlay District**

- (1) Development of land or subdivision of property (including Lot splits) into a Buildable Lot(s) within the Floodplain Overlay District shall be permitted only where an approved Hydrologic and Hydraulic Study demonstrates that there will be no rise in the Base Flood Elevation and no increase in Flood velocities at any point resulting from the proposed Development.
- (2) Property platted prior to December 31, 2003, may Develop and/or replat or subdivide (including Lot splits) for non-residential uses without conducting a Hydrologic and Hydraulic Study. Such Development is still subject to the remaining sections of this Article [Article 12].
- (3) Development of undeveloped residential property that was platted prior to December 31, 2003, may occur without conducting a Hydrologic and Hydraulic Study until December 31, 2008. Such Development is still subject to the remaining sections of this Article [Article 12]. After December 31, 2008, Development of the property is subject to all sections contained within this Article [Article 12].

(f) **Floodway Restrictions**

Any encroachment, including fill, New Construction, substantial improvements, or other Development is prohibited within the Regulatory Floodway, except for the following Structures:

- (1) Flood control and stormwater management Structures;
- (2) Road improvements and repair;
- (3) Utility Easements/Rights-of-Way; and
- (4) Public improvements or public Structures for bridging the Floodway.

(g) **Hydrologic and Hydraulic Study**

- (1) Hydrologic and Hydraulic Studies shall comply with the following standards:
  - (i) The study shall be signed and sealed by a professional engineer, licensed by the State of Kansas;

- (ii) The study shall be submitted for approval by the City Stormwater Engineer concurrent with the initial submittal of a [Floodplain Development](#) permit application, preliminary plat, [Development](#) plan or site plan;
  - (iii) Hydrologic and hydraulic methods of analysis shall be consistent with those used in the current [Flood Insurance Study](#) for Douglas County, and shall comply with the City "Stormwater Management Criteria";
  - (iv) The study shall extend an adequate distance upstream and downstream of the proposed [Development](#) to encompass the hydraulic effects of the proposed [Development](#);
  - (v) The study shall assume full [Development](#) of the watershed based on the current Comprehensive Land Use Plan or other reasonable assumptions of impervious cover. Full [Development](#) of the watershed shall be assumed in all calculations, for either existing conditions or proposed modifications;
  - (vi) The study shall determine the [Water Surface Elevations](#) of the [Base Flood](#) for the existing stream and for any proposed [Development](#). Based on the assumption of full watershed [Development](#) and other factors, the findings of the [Hydrologic and Hydraulic Study](#) may differ from the [Flood Insurance Study](#). At a given location, the higher [Water Surface Elevation](#) shall be the [Base Flood Elevation](#) for compliance with the provisions of this Article;
  - (vii) The study shall identify the velocities of the [Base Flood](#) for the existing stream and for any proposed [Development](#);
  - (viii) The study shall determine the areas of inundation of the [Base Flood](#) for the existing stream and for any proposed [Development](#). The area of inundation shall be dimensioned to the property corners for use in revising the [Floodplain Overlay District](#) on all property within the extent of the study; and
  - (ix) In areas outside [Zone AE](#), the study shall also identify the [Floodway](#) for the proposed [Development](#).
- (2) Once a study is approved, the City shall initiate the rezoning of any property in and around the [Floodplain Overlay District](#) to reflect the limits of [Flooding](#) determined by the study based on full [Development](#) of the watershed.
  - (3) For a [Hydrologic and Hydraulic Study](#) that proposes an alteration of FEMA's designated [Floodplain](#) or [Floodway](#), a letter of map revision (LOMR) must be obtained from FEMA before a Building permit will be issued for any Lot containing a [Zone A](#), AE, AH or AO of the current [FIRM](#).

(h) **Land Disturbance**

Land disturbance or removal of vegetation within the [Floodplain Overlay District](#) shall be minimized to the extent possible. When excavation, grading, removal of vegetation or other modifications to the cross-sectional geometry of the [Floodplain](#) are proposed in order to meet the requirements set forth in Section 20-1204 those modifications shall comply with the following:

- (1) Construction plans shall be prepared for the proposed modifications and shall be submitted for review and approval by the City Engineer. Design and plan preparation shall comply with the "City of Lawrence Design Guidelines and Standard Specifications" and the City "Stormwater Management Criteria".
- (2) As approved by the City Engineer, pursuant to the "Stormwater Management Criteria":
  - (i) Channel lining materials shall be limited to native vegetation, stabilized as necessary to prevent erosion. The use of concrete lining, pipe or other structural materials shall be minimized;
  - (ii) Within the area of inundation, all disturbed areas above the channel lining shall be restored with native vegetation, including trees, to promote wildlife habitat; and
  - (iii) Channel designs shall preserve existing low-flow channels to the extent possible.

(e) **General Development Standards**

The following standards apply to any and all **Development** that is proposed within the **Floodplain Overlay District**.

- (1) All **Development** shall comply with the following standards:
  - (i) Fill shall not be placed in the Setback areas except at approved Access points;
  - (ii) **Structures** must be designed and constructed with adequate anchorage to prevent flotation, collapse, or lateral movement of the **Structure** resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
  - (iii) **Structures** must be designed and constructed with materials resistant to **Flood** damage using methods and practices that minimize **Flood** damages;
  - (iv) All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities must be designed and/or located to prevent water from entering or accumulating within the mechanical components during conditions of **Flooding**;
  - (v) New or replacement water supply systems and/or sanitary sewage systems must be designed to eliminate infiltration of **Flood** waters into the systems and discharges from the systems into **Flood** waters, and on-site waste disposal systems must be located so as to avoid impairment or contamination;
  - (vi) All public utilities and facilities, such as sewer, gas, electrical, and water systems must be located and constructed to eliminate **Flood** damage;
  - (vii) Fully enclosed areas below the **Lowest Floor** that are used solely for Parking of vehicles, Building Access, or storage in an area other than a **Basement** and that are subject to **Flooding** must be designed to automatically equalize hydrostatic **Flood** forces on exterior walls by allowing for the entry and exit of **Flood** waters. Designs for meeting this requirement must either be certified by a



registered professional engineer or architect to meet or exceed the following minimum criteria:

- a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to **Flooding** shall be provided; and,
- b. The bottom of all openings shall be no higher than one foot above Grade. Openings may be equipped with Screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(viii) Storage of Material and Equipment;

- a. The storage or processing of materials within the **Floodplain Overlay District** area that are in time of **Flooding** buoyant, flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited; and
- b. Storage of other material or equipment may be allowed if not subject to major damage by Floods, if firmly anchored to prevent flotation, or if readily removable from the area within the time available after a **Flood** warning.

(2) **Additional Standards for Residential Construction**

- ~~(i) Proposed **Development** or **Substantial-Improvement** of any residential **Structures**, including **Mobile Homes** or Manufactured Homes, shall have the **Lowest Floor** elevated a minimum of two (2) feet above the **Base Flood Elevation**. A licensed land surveyor shall provide written certification of the **Lowest Floor** elevation to the **Floodplain** Administrator as set out in Section 20-1203(c)(7).~~
- ~~(ii) Impervious Surface cover shall be no more than (30%) of the property within the **Floodplain Overlay District**.~~
- (i) *Proposed New Construction or Substantial-Improvement of any residential Structures, including Mobile Homes or Manufactured Homes, shall comply with the following:***
  - a. *The **Lowest Floor** shall be elevated a minimum of two (2) feet above the **Base Flood Elevation**. A licensed land surveyor or licensed professional engineer shall provide written certification of the **Lowest Floor** elevation to the **Floodplain** Administrator as set out in Section 20-1203(c)(7).***
  - b. *For the portion of a property within the **Floodplain Overlay District**, the maximum impervious surface coverage shall not exceed 30%.***
- (ii) Fill on individual Lots shall meet the following requirements:**
  - a. No fill dirt shall be placed closer than five (5) feet to perimeter Lot Line(s) of the property;
  - b. No fill dirt shall be placed greater than 20 feet from the **Structure**;
  - c. Fill dirt shall be placed on a Lot so that it does not exceed a 3:1 slope; and
  - d. Where additional elevation over the Height that can be achieved from a 3:1 slope is needed to meet the

requirements of this Article, the additional elevation shall be met through the use of vertical walls and the construction of non-residential areas, such as garages, crawl spaces with gravel floors, or similar structurally sound designs, as part of the residential **Structure**.

(3) **Additional Standards for Non-Residential Construction**

~~(i) Any proposed **Development** or **Substantial-Improvement** of any non-residential **Structures** shall meet either of the following standards:~~

- ~~a. The **Lowest Floor**, including **Basement**, elevated a minimum of one (1) foot above the **Base Flood Elevation**. A licensed land surveyor shall certify the elevation of the **Lowest Floor**. Such certifications shall be provided to the **Floodplain Administrator** as set forth in Section 20-1203(c)(7); or~~
- ~~b. Together with attendant utility and sanitary facilities, the **Structure** must be Floodproofed so that the portion of the **Structure** below the **Base Flood Elevation** is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied.~~

~~(ii) Impervious Surface cover shall be no more than 60% of the property within the **Floodplain Overlay District**.~~

**(i) Any proposed **New Construction** or **Substantial-Improvement** of any non-residential **Structures** shall meet the following standards:**

**a. Either of the following:**

- 1. The **Lowest Floor**, including **Basement**, shall be elevated a minimum of one (1) foot above the **Base Flood Elevation**. A licensed land surveyor or licensed professional engineer shall certify the elevation of the **Lowest Floor**. Such certifications shall be provided to the **Floodplain Administrator** as set forth in Section 20-1203(c)(7); or**
- 2. Together with attendant utility and sanitary facilities, the **Structure** shall be **Floodproofed** to at least one foot above the **Base Flood Elevation**. The portion of the **Structure** below this level is to be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied.**

**b. For the portion of a property within the **Floodplain Overlay District**, the maximum impervious surface coverage shall not exceed 60%.**

(f) **Duties of a Landlord**

A landlord, or any **Person** authorized to enter a rental agreement on the landlord's behalf, of rental property that is located within the **Floodplain Overlay District** shall, before the signing of a lease agreement, provide the prospective tenant(s) the following information in writing:

- (3) The property is within the City's **Floodplain Overlay District**;
- (4) There is the possibility that **Structures** within the **Floodplain Overlay District** may be inundated with water during a **Flood**;
- (5) There is the possibility of the loss of life and/or the loss of **Personal** property as a result of a **Flood**;
- (6) Insurance against the loss of **Personal** property due to a **Flood** may be available and is typically the responsibility of the tenant to obtain; and
- (7) Such notice shall be in 12-point bold type, signed by all parties to the rental agreement, and retained by the landlord as long as the rental agreement is in full force and effect.

(g) **Duties of a Seller**

A seller, or any **Person** authorized to represent the seller in the sales transaction of property that is located within the **Floodplain Overlay District** shall, before the sale of the property, provide the prospective buyer(s) the following information in writing:

- (3) The property is within the City's **Floodplain Overlay District**;
- (4) There is the possibility that **Structures** within the **Floodplain Overlay District** may be inundated by water during a **Flood**;
- (5) There is the possibility of the loss of life and/or the loss of **Personal** property as a result of a **Flood**;
- (6) Insurance against the loss of **Personal** property or structural damage due to a **Flood** may be available and is typically the responsibility of the property **Owner** to obtain; and
- (7) Such notice shall be in 12-point bold type, signed by all buyers, and retained by the seller for five years following the closing of the sale.

(h) **Mobile Homes or Manufactured Homes**

- (3) All **Mobile Homes** or **Manufactured Homes** to be placed within the **Floodplain Overlay District** shall be required to be installed using methods and practices that minimize **Flood** damage. For the purposes of this requirement, **Mobile Homes** or **Manufactured Homes** must be elevated and anchored to resist floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
- (4) **Mobile Homes** or **Manufactured Homes** to be placed or substantially improved on sites in an **Existing Mobile Home Park** or Subdivision within the **Floodplain Overlay District** must be elevated so that either:
  - (i) The **Lowest Floor** of the **Mobile Home** or **Manufactured Home** shall be a minimum of two (2) feet above the **Base Flood Elevation** and be securely attached to an adequately anchored foundation system to resist floatation, collapse, and lateral movement. A licensed land

surveyor **or licensed professional engineer** shall certify the elevation of the **Lowest Floor**; or

- (ii) The **Mobile Home** or **Manufactured Home** chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in **Height** above **Grade** and be securely attached to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. A licensed land surveyor **or licensed professional engineer** shall certify the elevation of the **Lowest Floor**.

(i) **Areas of Shallow Flooding (Zones AO and AH)**

The following provisions apply to areas designated as **Zone AO** and **Zone AH**:

(3) **Zone AO**

- (i) All **Development** and **Substantial-Improvements** of residential **Structures**, including **Mobile Homes** and **Manufactured Homes**, shall have the **Lowest Floor**, including **Basement**, elevated above the **Highest Adjacent Grade** at least as high as the depth number specified in feet on the **Community's FIRM** (at least two feet if no depth number is specified);
- (ii) All **Development** and **Substantial-Improvements** of any commercial, industrial, or other non-residential **Structures** shall have the **Lowest Floor**, including **Basement**, elevated above the **Highest Adjacent Grade** at least as high as the depth number specified in feet on the **Community FIRM** (at least two feet if no depth number is specified) or together with attendant utilities and sanitary facilities be completely Floodproofed so that the **Structure** is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- (iii) Drainage paths must be provided to adequately guide floodwaters around **Structures**.

(4) **Zone AH**

- (i) The **Development** standards for all **Areas of Special Flood Hazard** where **Base Flood Elevation** has been provided shall be required as set forth in Section 20-1204; and
- (ii) Drainage paths must be provided to adequately guide floodwaters around **Structures**.

(j) **Recreational Vehicles**

**Recreational Vehicles** placed on sites in the **Floodplain Overlay District** shall either:

- (3) Be on the site for fewer than 180 consecutive days; or
- (4) Be fully licensed and ready for highway use; or
- (5) Meet the permitting, elevation, and anchoring requirements For **Mobile Homes** or **Manufactured Homes** of this Article [Article 12].