Updated:
12/ 12/ 11 @ 12:30pm
Added communications for the following items:
Item 3 - Conditional Use Permit for Good Earth Gatherings; 858 E 1500 Rd
Item 4 - Text Amendment; Defining Occupancy & Clarifying Occupancy Limits in non-RS
Item 5 - Comprehensive Plan Amendment to H2020; NE Sector Plan
Item 6 - Text Amendment; Subdivision Regulations

12/ 7/ 11 @ 10:00am
Added the following items:
Item 1 - Preliminary Plat & Variance; Dan & Trisha Simons Addition; 444 Country Club Terr
Item 2 - Variance for Minor Subdivision; 1043 Indiana St
Item 3 - Conditional Use Permit for Good Earth Gatherings; 858 E 1500 Rd
Item 4 - Text Amendment; Defining Occupancy & Clarifying Occupancy Limits in non-RS

Draft November 14, 2011 Planning Commission minutes

12/ 2/ 11 @ 2:00pm
The following items will be added when available:
Item 1 - Preliminary Plat; Dan & Trisha Simons Addition; 444 Country Club Terr
Item 2 - Variance for Minor Subdivision; 1043 Indiana St
Item 3 - Conditional Use Permit for Good Earth Gatherings; 858 E 1500 Rd
Item 4 - Text Amendment; Defining Occupancy & Clarifying Occupancy Limits in non-RS
Draft November 14, 2011 Planning Commission minutes

**The Wednesday, December 14th Planning Commission meeting has been cancelled**

GENERAL BUSINESS:

PLANNING COMMISSION MINUTES
Receive and amend or approve the minutes from the Planning Commission meeting of November 14, 2011.

COMMITTEE REPORTS
Receive reports from any committees that met over the past month.

COMMUNICATIONS
a) Receive written communications from the public.
b) Receive written communications from staff, Planning Commissioners, or other commissioners.
c) Receive written action of any waiver requests/determinations made by the City Engineer.
d) Disclosure of ex parte communications.
e) Declaration of abstentions from specific agenda items by commissioners.

AGENDA ITEMS MAY BE TAKEN OUT OF ORDER AT THE COMMISSION’S DISCRETION

REGULAR AGENDA (DECEMBER 12, 2011) MEETING

NON-PUBLIC HEARING ITEMS:
PUBLIC HEARING on Variances Only:

ITEM NO. 1 PRELIMINARY PLAT AND VARIANCE; DAN & TRISHA SIMONS ADDITION; 444 COUNTRY CLUB TERR (MKM)

PP-10-10-11: Consider a 1 lot Preliminary Plat for Dan & Trisha Simons Addition, approximately 2.36 acres, located at 444 Country Club Terrace and associated variance from requirement in Section 20-810(b) that all lots have frontage on a public street. Submitted by Treanor Architects, PA for Dan & Trisha Simons, property owners of record.

ITEM NO. 2 VARIANCE FOR MINOR SUBDIVISION; 1043 INDIANA ST (MKM)

Request for variance from standard street and alley right-of-way associated with a minor subdivision application, MS-11-6-11, Varsity House Addition for property located at 1043 Indiana Street.

PUBLIC HEARING ITEMS:

ITEM NO. 3 CONDITIONAL USE PERMIT FOR GOOD EARTH GATHERINGS; 858 E 1500 RD (SLD)

CUP-10-5-11: Consider a Conditional Use Permit for Good Earth Gatherings, a recreation facility, to provide community outreach, education, and ancillary retail sales on approximately 10.5 acres, located at 858 E 1500 Rd. Submitted by Tamara Fairbanks-Ishmael, property owner of record.

ITEM NO. 4 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; DEFINING OCCUPANCY & CLARIFYING OCCUPANCY LIMITS IN NON-RS ZONING DISTRICTS (MJL)

TA-10-15-11: Consider a text amendment to the City of Lawrence Land Development Code, Articles 2 and 17, defining occupancy and clarifying the applicability of occupancy limits in RS and non-RS districts. Initiated by City Commission on 10/4/11.

ITEM NO. 5 COMPREHENSIVE PLAN AMENDMENT TO H2020 - CHP 14; NORTHEAST SECTOR PLAN (DDW)

CPA-6-5-09: Reconsider Comprehensive Plan Amendment to Horizon 2020 - Chapter 14 to include the Northeast Sector Plan. Approved by Planning Commission 5-4 on 9/20/10. Referred to Planning Commission by the Board of County Commission and City Commission for consideration of specific issues.

ITEM NO. 6 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE & DOUGLAS COUNTY CODE; SUBDIVISION REGULATIONS (SMS)

TA-3-3-10: Consider Text Amendments to the joint city/county subdivision regulations in the City of Lawrence Land Development Code, Chapter 20, Article 8 and the Douglas County Code, Chapter 11, Article 1 to revise process requirements for division of property through Certificates of Survey, Minor
Subdivisions and Major Subdivisions. Modifications include reformatting this article/chapter to eliminate duplicative text and to delete terminology not used. Initiated by City Commission on 2/16/10. Re-initiated by Planning Commission on 5/23/11. Deferred by Planning Commission on 10/26/11.

NON-PUBLIC HEARING ITEM:

ITEM NO. 7 LONG RANGE PLANNING 2012 WORK PROGRAM

Receive Long Range Planning 2012 Work Program.

MISCELLANEOUS NEW OR OLD BUSINESS

Consideration of any other business to come before the Commission.

ADJOURN

CALENDAR

PCCM Meeting: (Generally 2nd Wednesday of each month, 7:30am-9:00am)

Sign up to receive the Planning Commission agenda or weekly Planning Submittals via email:
http://www.lawrenceks.org/subscriptions
PLANNING COMMISSION MEETING
November 14, 2011
Meeting Minutes DRAFT

November 14, 2011 – 6:30 p.m.
Commissioners present: Belt, Blaser, Britton, Culver, Finkeldei, Hird, Liese, Singleton, von Achen, and Student Commissioner Cory Davis
Staff present: McCullough, Stogsdill, Larkin, M. Miller, Leininger, Ewert

MINUTES
Receive and amend or approve the minutes from the Planning Commission meeting of October 22 & 24, 2011.

Motioned by Commissioner Singleton, seconded by Commissioner Blaser, to approve the October 22 & 24, 2011 Planning Commission minutes.

Motion carried 6-0-2, with Commissioners Belt and Culver abstaining. Student Commissioner Davis voted in the affirmative.

COMMITTEE REPORTS
Receive reports from any committees that met over the past month.

Commissioner Hird said the Agritourism Committee continued to meet the first Thursday of each month. He said they made some progress on the draft for consideration by the Commission. He said there was a change in approach of the language.

COMMUNICATIONS
Mr. Scott McCullough, Planning Director, reviewed new attachments and communications that were posted to the online Planning Commission agenda after the initial posting date.

EX PARTE / ABSTENTIONS / DEFERRAL REQUEST
- Ex parte:
  Commissioner Liese said he spoke with Mr. Jim Baggett regarding Farmers Turnpike and Ms. Marci Francisco regarding the Oread District.

  Commissioner Britton said he had a conversation with Ms. Candice Davis regarding the congregate living text amendment. He said he also spoke with Ms. Jane Eldredge regarding the Industrial district text amendment and her desire that it be deferred.

  Commissioner Belt said he also had conversations with Ms. Davis and Ms. Eldredge regarding the same topics.

  Commissioner Culver said he had communications with Ms. Eldredge and Mr. Kyle Thompson.
Commissioner Blaser said he received a phone call from Ms. Davis and Ms. Eldredge about the same topics.

Commissioner von Achen said she received the same calls from Ms. Davis and Ms. Eldredge.

Commissioner Hird said he had a brief conversation with Mr. John Josserand about congregate living. He said he received a voicemail from Ms. Eldredge that he did not have a chance to return. He said she sent a letter summarizing her voicemail. He said he also talked to Mr. Ron Schneider about the Industrial text amendment. He stated Mr. Paul Werner sent an email expressing his desire for more time to study the Industrial text amendment.

- No abstentions.
ITEM NO. 1  PRELIMINARY PLAT; SADIES LAKE ADDITION; 778 E 1300 RD (MKM)

PP-8-8-11: Consider a one lot Preliminary Plat for Sadies Lake Addition, approximately 207 acres, located at 778 East 1300 Road. Submitted by Grob Engineering for Sadies Lake LC, property owner of record.

STAFF PRESENTATION
Ms. Mary Miller presented the item.

APPLICANT PRESENTATION
Mr. Dean Grob, Grob Engineering, was present for questioning.

ACTION TAKEN
Motioned by Commissioner Singleton, seconded by Commissioner Blaser, to approve the Preliminary Plat of the Sadies Lake Addition and forwarding it to the Board of County Commissioners for consideration of dedication of easements and rights-of-way subject to the following conditions of approval:

1. The plat shall be revised with the following changes:
   a. General Note 6 shall be revised to reference the amended Subdivision Section 20-810(i)(4) and to remove the language regarding the Temporary Set Aside Agreement provisions as the agreement has not yet been executed.
   b. Revise the site summary to note the gross area of the plat as 205.837 acres.

Commissioner Hird asked what a dry hydrant was.

Ms. Miller said it was connected to a pond and only utilize when needed. She said it was not hooked on to a waterline.

Unanimously approved 8-0. Student Davis voting in the affirmative.
ITEM NO. 2A  RSO & CS TO CS; 3.3 ACRES; 2600 REDBUD LN, 2620 IOWA ST, 2626 IOWA ST, 2032 W 27TH ST (SLD)

Z-9-24-11: Consider a request to rezone approximately 3.3 acres from RSO (Single-Dwelling Residential-Office) & CS (Strip Commercial) to CS (Strip Commercial), located at 2600 Redbud Lane, 2620 Iowa Street, 2626 Iowa Street, and 2032 W 27th Street. Submitted by Landplan Engineering for KMAH LLC, property owner of record.

STAFF PRESENTATION
Ms. Sandra Day presented the item.

APPLICANT PRESENTATION
Mr. Matt Gough, Barber Emerson, agreed with the staff report. He said this would be an infill redevelopment of a busy retail corridor. He said there was strong public interest to see the site put back to productive use. He stated the rezoning applied to a small portion of the property. He said the denial of the applicant’s neighborhood revitalization act application slowed down the development of the smaller lot. He said the larger parcel was still planned for development as an Olive Garden. He said the arrangement was not final but if all went well there would be a site plan application submitted for the large lot. He said regardless of the end user the rezoning and preliminary plat were prerequisites to putting the property back to productive use.

PUBLIC HEARING
No public comment.

ACTION TAKEN
Motioned by Commissioner Singleton, seconded by Commissioner Liese, to approve the request to rezone approximately 3.3 acres, from RSO (Single-Dwelling Residential-Office) District and CS (Strip Commercial) to CS (Strip Commercial) District based on the findings presented in the staff report and forwarding it to the City Commission.

Unanimously approved 8-0. Student Commissioner Davis voting in the affirmative.
ITEM NO. 2B  PRELIMINARY PLAT; MEADOW LEA ESTATES; 2600 REDBUD LN, 2620 IOWA ST, 2626 IOWA ST, 2032 W 27TH ST (SLD)

PP-9-9-11: Consider a two lot Preliminary Plat and variances related to street design standards included in Section 20-810 of the Subdivision Regulations regarding minimum street right-of-way and street termination for Meadow Lea Estates, approximately 3.3 acres, located at 2600 Redbud Lane, 2620 Iowa Street, 2626 Iowa Street, and 2032 W 27th Street. Submitted by Landplan Engineering for KMAH LLC, property owner of record.

STAFF PRESENTATION
Ms. Sandra Day presented the item.

APPLICANT PRESENTATION
Mr. Matt Gough, Barber Emerson, was present for questioning.

Public Comment on Variance Only
No public comment.

ACTION TAKEN
Motioned by Commissioner Blaser, seconded by Commissioner Liese, to approve the variance with regard to the minimum right-of-way width for Iowa Street from 150’ to 100’.

   Unanimously approved 8-0. Student Commissioner Davis voted in the affirmative.

Motioned by Commissioner Blaser, seconded by Commissioner Liese, to approve the Preliminary Plat of KMAH and Lawrence 27th Addition and forwarding it to the City Commission for consideration of acceptance of easements and rights-of-way subject to the following condition:

   Provision of a 10’ easement along 27th Street and a 10’ easement along Iowa Street to accommodate existing and future utilities.

   Unanimously approved 8-0. Student Commissioner Davis voted in the affirmative.
ITEM NO. 4 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; INDUSTRIAL DISTRICTS (MJL)

TA-10-16-11: Consider a text amendment to Chapter 20 of the City Code, Land Development Code, to review the uses of the existing industrial districts and explore creating a new district that permits uses with intensities between the IL (Limited Industrial) district and IG (General Industrial) district.

STAFF PRESENTATION
Planning Commission heard item 4 before item 3. Commissioner Finkeldei arrived at the meeting at 7:00pm

Ms. Michelle Leininger presented the item.

PUBLIC HEARING
Ms. Margerette Ermeling, asked for deferral.

Ms. Beth Johnson, Lawrence Chamber of Commerce, felt more needed to be done. She asked for deferral.

Mr. Jim Baggett said the intensity of IG was apparent to everyone but that one sentence taken out of the original zoning that says incompatible with residential. He felt that compatibility reference to a lot of different categories would be helpful for people to understand.

Ms. Gwen Klingenberg, Lawrence Association of Neighborhoods, referenced the League of Women Voters letter and agreed 100% with their comments. She said definitions should be looked at and considered working on. She asked for a deferral to allow more time for stakeholder review.

Ms. Jane Eldredge, Barber Emerson, said landowners and stakeholders were excluded from discussions before Planning Commission. She asked Planning Commission to direct staff to meet with stakeholders.

COMMISSION DISCUSSION
Commissioner Liese asked staff about the process of meeting with stakeholders.

Mr. McCullough said it was initiated by City Commission with some direction to present to the Planning Commission with haste. He said staff drafted the amendment and met with the Chamber of Commerce, members of the Scenic Riverway Association, and Lawrence Association of Neighborhoods. He said staff was happy to meet with any and all stakeholders to continue the discussion.

Commissioner Liese asked why the use permitted would be allowed in light industrial and general industrial but not in the middle.

Mr. McCullough said staff did an exhaustive search about uses that already existed in the IL and IG. He said one of the criteria was that we did not want to create any non-conformities.

Ms. Leininger said staff was trying to keep manufacturing and industrial uses in the IM district and trying to keep some of the non-industrial traffic out of those areas.
Commissioner Liese inquired about the staff wording of ‘impactful to surrounding neighborhoods.’

Mr. McCullough said it was in the purpose statement of Article 2. He said it was the only zoning district in the purpose statement that passes judgment on its compatibility with another land use category. He said in staffs’ opinion that was not appropriate as a purpose statement.

Commissioner Liese inquired about the phrase requiring ‘good transportation access.’

Ms. Leininger said good transportation and access was important for all districts so it was not something that gave to the purpose of the district.

Commissioner Liese said he was in favor of maintaining the statement about impact surrounding neighborhoods in a very intense application. He said regarding food service facilities he felt that fast food availability would be important in a developing industrial area.

Mr. McCullough said staff talked about that and believed through the sector planning process good locations for those types of support uses can be identified. He said they were trying to build a district that creates an atmosphere for primary jobs, not secondary jobs of retail and food industry.

Commissioner Singleton thanked staff for their work. She was in favor of more meetings with developers. She thought it would be helpful to have a Mid-Month meeting that stakeholders could be invited to.

Commissioner Finkeldei said the staff recommendation was for approval instead of deferral for a major change, which struck a lot of people wrong. He felt different stakeholders needed to be involved. He said the use table was strange looking and needed to be looked at long-term. He said regarding vehicle sales and rental staff should look at the heavy equipment sales and rental. He said he was not a big fan of special use. He said it struck him funny that small collection recycling would not be allowed in industrial areas.

Mr. McCullough said staff would provide definitions next time.

Commissioner Culver said having some clarification on uses that aren’t progressive would be helpful within the language of this. He suggested providing a summary or notes from stakeholder meetings to the Planning Commission to help understand what was discussed with those groups. He also suggested sharing that information with other stakeholders to bring more cohesiveness to the process.

Commissioner Finkeldei inquired about the process of down zoning.

Mr. McCullough said it would be a full rezoning process.

Commissioner Hird said the use table permitting some things in IL and IG but not in IM looked peculiar. He said it was interesting in the general discussions of the base districts that IL activity primarily occurs within enclosed structure, but that in IG and IM there was no reference to enclosed or exterior. He asked staff to take a sharp view of the number of uses allowed with a Special Use Permit. His personal preference was to allow it or not because the Special Use Permit process was very cumbersome to some that want to develop.

Commissioner Liese thanked staff for their time and work.
ACTION TAKEN
Motioned by Commissioner Liese, seconded by Commissioner Singleton, to defer text amendment, TA-10-16-11, to Chapter 20 of the City Code, Land Development Code, to review the uses of the existing industrial districts and explore creating a new district that permits uses with intensities between the IL (Limited Industrial) district and IG (General Industrial) district.

Motion carried 9-0. Student Commissioner Davis voted in the affirmative.
ITEM NO. 3  CONGREGATE LIVING & MULTI-DWELLING STRUCTURES (SDM)

Consider land use information related to recently adopted code amendments for Congregate Living and Multi-Dwelling Structures. Requested by City Commission at their October 4, 2011 regular meeting.

STAFF PRESENTATION
Mr. Scott McCullough presented the item.

Commissioner Hird said the staff report was very well prepared.

Commissioner Finkeldei asked staff to walk them through how the determination was made.

Mr. McCullough said there had been two applications since the January adoption that used the parking standard of .5 parking spaces per bedroom. He said the criteria was built off of compiling a number of different data sets. He said staff met with the Appraisers office and decided which data sets to use that would give the most accurate information to generate the numbers.

Commissioner Finkeldei inquired about unlivable basement space.

Mr. McCullough said the gross square footage assumed that it could all be converted to livable space, not necessarily currently livable.

Commissioner Liese inquired about attics.

Mr. McCullough said attics were introduced into the discussion as another type of space that usually does not start out livable but could be something within the envelope of the structure that could be converted into boarding house space.

PUBLIC HEARING
Ms. Candice Davis expressed concern about the footnoted exception that counting unfinished spaces was close to the average size of a home in the Oread Neighborhood. She said the .5 parking was less than the original boarding house parking standard of .75. She said it essentially negates the standard of one parking space per bedroom currently in the Code. She expressed concern about further parking issues in the neighborhood. She said the Oread Residents Association favors an interpretation where the exception does not count unfinished living spaces.

Ms. Gwen Klingenberg, Lawrence Association of Neighborhoods, supported the idea. She said the point of an exemption was to have a unique reason why you shouldn’t have to follow the regular rule of one parking space per bedroom. She said the way it was written was not unique.

Mr. Kyle Thompson said the map shown at City Commission meeting showed every house on his block qualifying under the exception. He said east of the University 50-90% of the houses on each block would qualify to become boarding houses under this exception. He said within a block radius of his house there were four empty houses and he did not think encouraging higher occupancy was a good idea.

Ms. Ellie Lecompte expressed concern about parking issues with a limited number of on street parking. She discussed managing blight and said she would like to see blight managed instead of
housing being completely reformatted. She said they should be registered rentals and regularly inspected. She said rental registration would allow funds to hire another inspector.

Mr. Dennis Brown, Lawrence Preservation Alliance, said he agreed congregate living could be a solution for certain structures but not a one size fits all application that could be addressed by the Code. He recommended the exception be set at .75 spaces. He said Oread Neighborhood had the most development pressure than any other area of town. He said the Overlay districts would be able to identify and account for the few true hardship properties that could only be preserved by congregate living. He said a recent preservation issue, the Varsity House, had enough parking to not need the exception. He said for the exception they were better off minimizing, not maximizing, what it qualifies for.

Ms. Marci Francisco said one problem with the exception is that it gives exception for a large structure on a lot and there is no difference between the size of the lot and how many parking spaces are needed. She expressed concern that the change might allow an existing congregate living structure to put more bedrooms within the structure. She wanted the exception to be as tight as possible.

Mr. John Josserand discussed the number of boarding houses and displayed on the overhead Lawrence population density. He expressed concern about the possibility of 89 boarding houses.

Mr. Aaron Paden felt the exception might need to be revisited. He said it was a matter of smart density and how it was developed.

Mr. Tom Harper said he walked away from the City Commission meeting thinking that the City Commission thought 89 houses were too many and that it was Planning Commissions job to scale it way down. He said the Oread Neighborhood was so dense already and this would increase the density.

Mr. Josserand said from an economic standpoint .75 parking was nice and .5 was great.

**COMMISSION DISCUSSION**

Commissioner Finkeldei said in his mind what he voted for he did not intend to include the basements or attics. He said 89 boarding houses was a large number and not what he intended when he voted. He said there were certain structures that were not likely to be converted back to single-family or remain single-family. He said they were trying to limit it to just a few houses. He said the average structure size was 2,171 square feet excluding basements and 3,100 square feet including basements. He did not think basements should be included in the count. He said the 3,500 square feet, not counting basements and attics, was adequate.

Commissioner Singleton agreed with Commissioner Finkeldei.

Commissioner Blaser inquired about the next step.

Mr. McCullough said it would be forwarded to City Commission.

Commissioner Blaser recommended they stay with the 3,500 square feet and .5 parking but do not use attics and basements in the calculation.

Mr. McCullough said if 3,500 square feet, excluding basements, was a possible new interpretation that would leave about 2.3% of Oread properties eligible for the .5 parking space.
Commissioner Liese inquired about rental registration.

Mr. McCullough said it has been a topic of discussion several times at the City Commission level.

Commissioner Culver agreed with excluding basements and attics. He wondered if it would be worthwhile to look at 3,250 square feet.

Mr. McCullough said there were a number of ways to look at it.

Commissioner Britton said he supported an interpretation that excluded basements and attics. He wondered if the best way to do that was through a text amendment.

Commissioner Belt felt 89 boarding houses was a large number. He said the University of Kansas was a key player in the discussion and he would like to see them involved.

Commissioner Hird felt 89 boarding houses were way too many. He encouraged City Commission to consider limiting the exemption to homes built before a certain date. He said the idea was that it had to be big structures we’re interested in keeping and maybe a date requirement could be part of the equation. He felt it made more sense for the people trying to protect the Oread Neighborhood to include the basement in the calculation and raise the square footage number. He felt that by not including the basement in the calculation it was inviting mischief for someone to do something that was unintended, such as packing more bedrooms in.

**NO ACTION TAKEN**
ITEM NO. 5  COMPREHENSIVE PLAN AMENDMENT TO H2020 - CHP 14; NORTHEAST SECTOR PLAN (DDW)

CPA-6-5-09: Reconsider Comprehensive Plan Amendment to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan. Approved by Planning Commission 5-4 on 9/20/10. Referred to Planning Commission by the Board of County Commission and City Commission for consideration of specific issues.

*Item 5 was deferred prior to the meeting.*
MISCELLANEOUS NEW OR OLD BUSINESS

MISC NO. 1  Adopt the 2012 Planning Commission meeting calendar.

Commissioner Liese asked if it was possible to change the meeting dates in February to the 27th and 29th.

Motioned by Commissioner Liese, seconded by Commissioner Hird, to accept the 2012 Planning Commission meeting calendar with the change suggested by Commissioner Liese.

Motion carried 9-0. Student Commission Davis voted in the affirmative.

Consideration of any other business to come before the Commission.

ADJOURN 9:14pm
# LAWRENCE-DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION

## M ID-MONTH & REGULAR MEETING DATES

<table>
<thead>
<tr>
<th>Mid-Month Meetings, Wednesdays 7:30 - 9:00 AM</th>
<th>Mid-Month Topics</th>
<th>Planning Commission Meetings 6:30 PM, Mon &amp; Wed</th>
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<tr>
<td>Jan 11</td>
<td>Industrial Districts TA</td>
<td>Jan 23, Jan 25</td>
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<td>Feb 8</td>
<td>Agritourism</td>
<td>Feb 27, Feb 29</td>
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<td>Dec 10, Dec 12</td>
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**Suggested topics for future meetings:**

- How City/County Depts interact on planning issues
- Stormwater Stds Update – Stream Setbacks
- Overview of different Advisory Groups – potential overlap on planning issues
- Open Space Acquisition/Funding Mechanisms (examples from other states)
- TDRs
- Library Expansion Update
- Joint meeting with other Cities’ Planning Commissions
- Joint meeting with other Cities and Townships – UGA potential revisions
- Presentation from KC-metro Planning Directors
- Tour City/County Facilities
- 2010 Census Data

**Meeting Locations**
The Planning Commission meetings are held in the City Commission meeting room on the 1st floor of City Hall, 6th & Massachusetts Streets, unless otherwise noticed.

**Planning & Development Services | Lawrence-Douglas County Planning Division | 785-832-3150 | www.lawrenceks.org/pds**

Revised 11/16/11
ITEM NO. 1: PRELIMINARY PLAT; DAN & TRISHA SIMONS ADDITION; 444 COUNTRY CLUB TERR (MKM)

PP-10-10-11: Consider a 1 lot Preliminary Plat for Dan & Trisha Simons Addition, approximately 2.36 acres, located at 444 Country Club Terrace and associated variance from requirement in Section 20-810(b) that all lots have frontage on a public street. Submitted by Treanor Architects, PA for Dan & Trisha Simons, property owners of record.

STAFF RECOMMENDATION:
Staff recommends approval of the variance requested from Section 20-810(b) to allow the creation of a lot without street frontage.

Staff recommends approval of the Preliminary Plat of the Dan and Trisha Simons Addition; 444 Country Club Terrace and referring it to the City Commission for acceptance of dedication of easements subject to the following conditions of approval:

1) If the Planning Commission approves the variance requested from the frontage requirement in Section 20-810(b), a note shall be added to the plat with the section and the date the Planning Commission approved the variance.

2) The property owner shall execute an easement for the off-site service line and the Book and Page Number shall be noted on the face of the final plat.

Applicant’s Reason for Request: Due to a recent land combination, subdivision is required prior to obtaining a building permit.

KEY POINTS
- A house is located on the property addressed as 444 Country Club Terrace. The property owner recently purchased unplatted land from the Lawrence Country Club to the north and intends to build an accessory structure.

SUBDIVISION CITATIONS TO CONSIDER
- This application is being reviewed under the Subdivision Regulations for Lawrence and Unincorporated Douglas County, effective Dec 31, 2006.
- Section 20-813 states that building permits will not be issued for unplatted property.

ASSOCIATED CASES/OTHER ACTION REQUIRED
- Dedication of private easement for the sanitary sewer service line which crosses other sites. The Book and Page Number shall be noted on the final plat.
PLANS AND STUDIES REQUIRED

- **Traffic Study** - Not required for project.
- **Downstream Sanitary Sewer Analysis** - The City Utility Engineer indicated that a DSSA is not required as no change in use is being proposed.
- **Drainage Study** - The property is currently developed with a single-family home. A drainage study is not required.
- **Retail Market Study** - Not applicable to project.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING

- No public comment was received prior to the printing of this staff report.

Site Summary

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<th>Category</th>
<th>Details</th>
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<tr>
<td>Gross Area</td>
<td>102,834 sq. ft. (2.36 acres)</td>
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<td>Rights of Way</td>
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<td>Net Area</td>
<td>102,834 sq. ft. (2.36 acres)</td>
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<tr>
<td>Number of Lots</td>
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</tr>
</tbody>
</table>

GENERAL INFORMATION

Current Zoning and Land Use: RS10 (Single-Dwelling Residential) District; undeveloped.

Surrounding Zoning and Land Use:

- RS10 (Single-Dwelling Residential) District surrounding the property in all directions with the exception of two lots south of the property; Country club with golf course to the west, north and east and detached dwelling to the west and south.
- RSO (Single-Dwelling Residential-Office) District 2 lots south of the subject property; detached dwellings.

Figure 1. Surrounding land use and zoning. Subject property outlined in blue.
STAFF REVIEW
The Subdivision Regulations permit building permits only on platted properties or nonconforming lots. A nonconforming lot is defined in Section 20-1503 of the Development Code as:

“A nonconforming lot is a tract of land, designated on a duly recorded subdivision plat, or by a duly recorded deed, or by other lawful means, that was established prior to adoption of the City's first zoning ordinance or development code, or that complied with all applicable lot area, lot width and lot depth standards of the zoning district in which it was located at the time of its creation, but which does not comply with the minimum lot area, lot width, or lot depth requirements of the zoning district in which it is now located.”

To qualify as a nonconforming lot, the lot had to be established prior to the adoption of the first zoning ordinance, which occurred in 1927. The existing house was constructed on the property in the 1960s. The property owner recently purchased the northern portion of the property from the Lawrence Country Club; therefore, it does not meet the definition of a nonconforming lot. Platting is therefore required prior to the issuance of a building permit.

Zoning and Land Use
The subject property is zoned RS10 (Single-Dwelling Residential) District which permits lots with a minimum area of 10,000 sq. ft. The property is located within an established neighborhood, also zoned RS10, which has been developed with single-dwelling residences and the Lawrence Country Club and golf course. Two lots to the south were rezoned to the RSO (Single-Dwelling Residential-Office) District. These lots are currently developed with detached dwellings. The lot to the southeast was rezoned to the RMO (Multi-Dwelling Residential-Office) District and a site plan has been approved for the construction of an office building at this site, 501 Rockledge; however the site is currently undeveloped.

Streets and Access
The subject property is located east of Country Club Terrace, and takes access from Country Club Terrace through ingress/egress right-of-way easements. The property does not have street frontage due to the dedication of Country Club Terrace right-of-way with earlier plats that ended within property owned by Lawrence Country Club rather than extending to the next property line(Figure 2).

As street frontage is required by the Subdivision Design Standards and none is provided for the new lot, a variance from the Planning Commission is necessary for the approval of this plat. The variance is discussed later in this report.

Figure 2. Narrow strip of land owned by LCC separating the subject property from Country Club Terrace Right-of-Way shown in red.
Utilities and Infrastructure
A detached dwelling on the site is currently served with City water and sewer. The City Code requires that the sanitary sewer main touch each new lot in a subdivision. In this case, the previously installed service line connects to an off-site sewer main as shown on the plat. The City Utility Engineer indicated an easement for areas where the service line is located off-site would be acceptable and recommended that the property owner also execute a maintenance agreement if the service line is shared. The property owner will execute an easement for the off-site service line and the Book and Page Number shall be noted on the face of the final plat.

Easements and Rights-of-way
The plat indicates that 10 ft perimeter utility easements are being provided. Country Club Terrace is considered a ‘limited local street’ due to the termination in the Country Club parking lot. Per Section 20-810(d)(4)(i), limited local streets require 50 ft of right-of-way and the plat shows that 50 ft of right-of-way currently exists. Adequate easements and rights-of-way are being provided.

Plat Contents
The contents of the plat meet the requirements of the Subdivision Regulations with the following exception:
• Per Section 20-810(b), all lots must have the required frontage on a public street. In order for the plat to be approved with the current lot and right-of-way configuration, a variance must be obtained from this requirement from the Planning Commission. If the Planning Commission grants the variance, the preliminary plat should be revised to note the date the variance was approved.

VARIANCE FROM SUBDIVISION DESIGN STANDARDS
Section 20-810(b) Frontage and Access requires that all lots have frontage on a public street except when private streets are approved through a Planned Development, or joint use driveways are used for commercial or industrial developments. A minimum street frontage of 40 ft is required for properties in the RS10 District.

The plat survey indicates that the right-of-way for Country Club Terrace did not extend to the owner's property line when it was dedicated. Ingress/Easement Right-of-Way easements were dedicated to allow the subject property access to Country Club Terrace, which provides legal access to the right-of-way. A variance from the requirement for all lots to have frontage on public streets is necessary.

Section 20-813(f) of the Subdivision Regulations provides that the Planning Commission may grant variances from the design standards of the Subdivision Regulations in cases where there is a hardship in carrying out the literal provisions of such design standards.

As per Section 20-813(f)(3) variance requests shall not be granted unless all of the following apply:

1) Strict application of these regulations will create an unnecessary hardship upon the subdivider;

The house on the subject property was constructed in the 1960s and ingress/egress right-of-way easements were dedicated in 1963 and 1989 to allow the property access to Country Club...
Terrace. When the right-of-way for Country Club Terrace was dedicated it did not extend to the property to the east; therefore, a narrow strip of land (approximately 5 ft wide) belonging to the Lawrence Country Club is located between the subject property and the street right-of-way. Due to this, the property has no actual frontage on the street. It is not possible for the property owners to provide frontage, as the strip of property is not owned by them and is not under their control. In staff’s opinion, the easements that allow access from the subject property to the right-of-way are an acceptable alternative to actually securing and providing the right-of-way. As the subject property was developed with a residence in the 1960s, right-of-way easements for ingress/easement have been recorded to permit access to Country Club Terrace, prohibiting the plat based on this unique frontage situation would be an unnecessary hardship. Figure 3 shows the right-of-way access easements and right-of-way lines.

2) The proposed variance is in harmony with the intended purpose of the Subdivision Regulations;

The variance is in harmony with the intended purpose of the regulations which is to ensure that all lots have access to the public street network. The property is currently developed and has access to Country Club Terrace via the existing access easement. Platting the property will allow the property owner to construct accessory dwellings, but will not result in additional lots. The variance will allow the lot to function as it has historically. The proposed lot is designed according to the Subdivision Regulations Standards and has over 40 ft of width that would be street frontage if the right-of-way were expanded to the property line.

3) The public health, safety and welfare will be protected.

The public health, safety and welfare are protected should the variance request be granted. The configuration of the property and right-of-way lines will not be changed with the platting of the property. The previously recorded ingress/egress right-of-way easements will continue to provide adequate access to and from the property.

Summary
The subject property was a nonconforming lot with the right to a building permit, per Section 20-1504 of the Development Code, prior to the purchase of additional land from the Lawrence Country Club. With the purchase of the land, the property lost its nonconforming status and is being platted to meet the eligibility requirements for a building permit. The lack of street frontage is a pre-existing situation which is not being altered with the platting of this property.

The preliminary plat, as conditioned and with a variance from Section 20-810(b) conforms with the Subdivision Regulations.
Figure 3. GIS map showing the location of the right-of-way, right-of-way easements, and property lines. The colored properties are platted, with each color being a different plat.
Legal Description

A tract of land located in the Northeast 1/4, Southeast 1/4 of Section 26, Township 12 South, Range 19 East of the 6th Principle Meridian, in the City of Lawrence, Douglas County, Kansas, more particularly described as follows:

Commencing at the Southeast corner of Section 26, Township 12 South, Range 19 East; thence North 01°53'42" East, along the East line of said Section 26, 1512.50 feet; thence South 88°16'18" West, 664.57 feet to the Point of Beginning; thence South 88°16'18" West, along the North line of County Club Terrace subdivision, 501.02 feet; thence North 31°21'14" East, 20.80 feet; thence North 49°09'14" East, 203.63 feet; thence North 89°49'46" East, 65.26 feet; thence North 75°49'40" East, 205.00 feet; thence North 57°49'10" East, 125.00 feet; thence South 01°49'17" East, 333.12 feet to the Point of Beginning. Contains 2.374 acres more or less.
PC Staff Report 12/12/11
MS-11-6-11 Variance Request  Item No. 2 - 1

PLANNING COMMISSION REPORT
Public Hearing Item on Variance Only

PC Staff Report
12/12/11

ITEM NO. 2: VARIANCE FOR MINOR SUBDIVISION; 1043 INDIANA ST (MKM)

MS-11-6-11: Request for variance from standard street and alley right-of-way associated with a minor subdivision application, MS-11-6-11, Varsity House Addition for property located at 1043 Indiana Street.

STAFF RECOMMENDATION: Staff recommends approval of the variance request from the requirement to dedicate additional street and alley right-of-way as required by Sections 20-810(d)(4)(i) and Section 20-810(d)(10)(ii).

SUBDIVISION CITATIONS TO CONSIDER
• This application is being reviewed under the Subdivision Regulations for Lawrence and Unincorporated Douglas County.
• This variance application is associated with MS-11-6-11, a minor subdivision which is being reviewed administratively.
• Section 20-813(f) provides that the Planning Commission may grant a variance to the literal provisions of the design standards of the Subdivision Regulations in cases where there is a hardship in carrying out such provisions.
• Minor Subdivision applications are reviewed administratively. The Planning Commission will not make a determination on the Minor Subdivision. A copy of the subdivision has been provided for illustrative purposes in considering the variance request.

ASSOCIATED CASES/OTHER ACTION REQUIRED
• Administrative approval of MS-11-6-11, a Minor Subdivision for Varsity House Addition, 1043 Indiana Street.
• Publication of Ordinance 8684 rezoning property from U-KU (University-Kansas University) District to RM32-PD (Multi-Dwelling Residential) Base and (Planned Development) Overlay District following recording of final development plan.
• Administrative approval and recording of FDP-11-4-11, a final development plan for the relocation of the existing structure on the property and development of a 53 unit multi-dwelling residence and parking structure.
• Historic Resources Commission approval of minor subdivision and final development plan.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
• None

GENERAL INFORMATION
Current Zoning and Land Use: U-KU (University-Kansas University) with rezoning to the RM32-PD District pending the publication of ordinance; vacant detached dwelling and gravel parking area.

Surrounding Zoning and Land Use: To the north, west, and south: RM32 (Multi-Dwelling...
Residential); multi-dwelling structures.

To the east: U-KU (University-Kansas University); parking structure and University residence halls.

To the southeast: RMG (Multi-Dwelling Residential-Greek Housing) District; Greek Student Housing.

**STAFF REVIEW**

This variance request is associated with a Minor Subdivision (MS-11-6-11) for the consolidation of several existing lots at 1043 Indiana. The minor subdivision review process is administrative; however, variance requests from the Subdivision Design Standards require Planning Commission approval. The Minor Subdivision is included with this staff report for additional information, but is not before the Commission for consideration.

Through the review of the Minor Subdivision the need for additional right-of-way per the Subdivision Design Standards in Section 20-810(d) was identified. The standards require 80 feet of right-of-way for collector streets; however only 40 feet of right-of-way currently exists for 11th Street in this location. The standards require a minimum of 20 feet right-of-way for all alleys; however, the alley to the west of the subject property is located within 16 feet of right-of-way. The applicant submitted a request for a variance from the requirement to dedicate additional right-of-way.

Section 20-813(f) of the Subdivision Regulations provides that the Planning Commission may grant variances from the design standards of the Subdivision Regulations in cases where there is a hardship in carrying out the literal provisions of such design standards. Unless a variance is granted by the Planning Commission as provided in Section 20-813(f), dedication of the necessary right-of-way is required in order to approve a Minor Subdivision.

As per Section 20-813(f)(3) variance requests shall not be granted unless all of the following apply:

1) **Strict application of these regulations will create an unnecessary hardship upon the subdivider;**

The applicant submitted preliminary and final development plans prior to the submittal of the minor subdivision. The City Commission and Historic Resource Commission have approved the design layout shown on the preliminary development plan. Strict application of the regulations would require the applicant to redesign the proposed development to maintain appropriate setbacks with the dedication of the additional right-of-way.

The City Public Works Director indicated that the additional right-of-way was not necessary for future improvements as the City has no plans to widen 11th Street in this location and the 16 ft alley is the standard width of most older alleys in the City. The Fire Code Official indicated that appropriate fire access is being provided for access from the alley and the existing 16 ft of alley width is acceptable. As the right-of-way is not necessary for future street or alley improvements or for maneuvering of emergency vehicles, the dedication of the additional right-of-way would constitute an unnecessary hardship upon the subdivider.
2) **The proposed variance is in harmony with the intended purpose of the Subdivision Regulations;**

The variance request is in harmony with the intended purpose of the regulations which is to ensure that adequate right-of-way is available for the construction or widening of roads. There are no plans to widen 11th Street in this location and the necessary infrastructure is installed within the current right-of-way (Figure 1). The City Public Works Director reviewed the request and does not object to the variance.

3) **The public health, safety and welfare will be protected.**

The public health, safety and welfare are protected should the variance request be granted. The Fire Code Official indicated that the fire access that is being provided with the development plan is acceptable and it is not necessary to widen the alley.

![Figure 1. Infrastructure including sanitary sewer and sidewalks are located within the existing right-of-way. Subject property highlighted.](image-url)
LEGAL DESCRIPTION
A tract of land described as the west half of Section 36, Township 13 North, Range 1 West, 3rd Principal Meridian, Kansas, excepting any reservations or easements.

SIGNATURE
[Signature]

TROWN M. WERNER
Vice President

ACKNOWLEDGEMENT

STATE OF KANSAS
COUNTY OF DOUGLAS

This instrument was acknowledged before me, on the 4th day of November, 2011, by the undersigned, the last above named, being first duly sworn, who acknowledged this instrument to be his act and deed, and acknowledged the execution of this instrument to be his act and deed, in the office of the undersigned, who is authorized to take acknowledgments in this County, State of Kansas.

COUNTY ATTORNEY

FILED IN CONCURRENCE
WITH A N. A. ABATEMENT

COUNTY COLLECTOR

FILED: NOVEMBER 17, 2011

MONUMENTATION

A MINOR SUBDIVISION

VARSITY ADDITION

A REPLY OF LOTS 7 THROUGH 12, BLOCK 13, IN LANE'S SECOND ADDITION, IN THE CITY OF LAWRENCE, DOUGLAS COUNTY, KANSAS

NE 1/4, SEC. 36-T12S-R19E

BASIS OF BEARINGS

A bearing of 0 degrees 00 minutes was assumed along the east line of Lot 1, where written.

NOTE

This document is a true and complete representation of the subdivision agreement and shall be received as such by the City of Lawrence.

Landplan Engineering, P.A.

11TH STREET (40' R/W)

INDIANA STREET (80' R/W)

ALLEY (16' R/W)
PLANNING COMMISSION REPORT
Regular Agenda - Public Hearing Item

PC Staff Report
12/12/11

ITEM NO. 3  CONDITIONAL USE PERMIT FOR GOOD EARTH GATHERINGS; 858 E 1500 RD (SLD)

CUP-10-5-11: Consider a Conditional Use Permit for Good Earth Gatherings, a recreation facility, to provide community outreach, education, and ancillary retail sales on approximately 10.5 acres, located at 858 E 1500 Rd. Submitted by Tamara Fairbanks-Ishmael, property owner of record.

STAFF RECOMMENDATION: Staff recommends approval of a Conditional Use Permit for a recreation facility, to provide community outreach, education, and ancillary retail sales on approximately 10.5 acres, located at 858 E 1500 Rd subject to the following condition:

1. Provision of a revised site plan to include the following notes
2. Use of the lake for public, business, commercial, and recreation activities associated with the home occupation is prohibited.
3. Class size shall be limited to not more than 12 students and 1 instructor.
4. No more than one class shall be conducted/offered at a time.

Reason for Request: “A home occupation requiring a Conditional Use Permit.”

KEY POINTS

- Property is located along a designated rural minor collector road.
- Property is located outside of any designated growth area of a city within Douglas County.
- The proposed use is intended to be operated as a home occupation with limited retail sales.

ATTACHMENTS

- Area Map
- Site Plan
- Business Plan provided by applicant

GOLDEN FACTORS TO CONSIDER
ZONING AND USES OF PROPERTY NEARBY

- Existing zoning is agricultural and includes residences along county roads.

CHARACTER OF THE AREA

- Property is located within a rural residential area characterized by large lots that extend into the common lake property.

SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN RESTRICTED

- The current zoning designation for the property is A, an agriculture-related district.
- Home Occupations are an allowed use on the A (Agricultural District)

ASSOCIATED CASES/OTHER ACTION REQUIRED

- Approval by Board of County Commissioners.
PUBLIC COMMENT RECEIVED PRIOR TO PRINTING

- Multiple residents have called about the request expressing significant concern that the lake not be included in the business activity. The area is described by residents as a residential neighborhood. Residents indicated they were generally opposed to any activity that includes public or commercial use of the lake and that may result in trespass onto private property.

GENERAL INFORMATION

Current Zoning and Land Use: A (Agricultural) District and FF (Flood Fringe Overlay); existing residence and accessory buildings.

Surrounding Zoning and Land Use: A (Agricultural) District in all directions; surrounding uses include rural residences and agricultural fields.

<table>
<thead>
<tr>
<th>Site Summary</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Subject Property:</td>
<td>10.48 acres</td>
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<tr>
<td></td>
<td>456,671.748 SF</td>
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<tr>
<td>Existing Total Building SF</td>
<td></td>
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<tr>
<td>(Accessory Building)</td>
<td>1,200 SF</td>
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<tr>
<td>(Accessory Building Addition)</td>
<td>240 SF</td>
</tr>
<tr>
<td>Total Accessory Building</td>
<td>1,440 SF</td>
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<tr>
<td>Residence including basement</td>
<td>3,876 SF</td>
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</tbody>
</table>

Summary of Request

This request is proposed to accommodate a home business that will incorporate the existing accessory building as a classroom/studio space and include limited retail sales. The intent of the request does not include traditional recreational use open to the general public. This use exceeds the minimum standards for a home occupation. The County Zoning allows a range of uses including “Rural Home Business Occupations”, instruction of students, and the use of detached accessory structures for a home business.

However, the Zoning Code limits these activities to a maximum number of students and the area of the space dedicated to the home business. The proposed use will not comply with the minimum standards for a Type II Rural Home Business Occupation set out in Section 12-319.602. The proposed use will include class sizes of 10 to 12 students plus an instructor. Evening class offerings 1-3 times per week and day classes of up to three weekends per month are planned.

Additionally, a retail element is included with this request. The attached description provided by the applicant is included with the staff report to more fully explain the intended use. No specific use enumerated in section 12-319 definitively describes the proposed activity. County Staff had determined that it is most similar to a Recreation Facility (12-319-4.11) thus the request is being reviewed under that Conditional Use Permit provision.

I. ZONING AND USES OF PROPERTY NEARBY

The property is zoned A (Agricultural) District as is the surrounding areas. The property is developed with numerous residential parcels along the County roads. Parcels located on the east side of E 1500
Road and the south side of N 900 Road share common property lines and extend into a privately owned and maintained lake.

**Staff Finding** - The area is rural and zoned A (agricultural). Surrounding uses are predominantly residential. The proposed request will not alter the base zoning or land use of the area.

**II. CHARACTER OF THE AREA**

The area is characterized by the County road network that follows section lines in this part of Douglas County. Parcels tend to be long and narrow with access to the abutting County roads. Several property lines are defined by natural features such as streams and lake ownership boundaries.

**Staff Finding** - The defining characteristic of the area is rural residential homes located along the County roads. The proposed use is consistent with the rural character of the area.

**III. SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN RESTRICTED**

Applicant’s response: “A Conditional Use Permit does not alter suitability of property.”

This property is zoned A (Agricultural) District. The purpose of this district is identified in Section 12-306 of the County Zoning Regulations and states: “…The purpose of this district is to provide for a full range of agricultural activities, including processing and sale of agricultural products raised on the premises, and at the same time, to offer protection to agricultural land from the depreciating effect of objectionable, hazardous and unsightly uses.” This district is associated with a majority of the unincorporated portion of Douglas County.

Uses allowed in the A district include: farms, truck gardens, orchards, or nurseries for the growing or propagation of plants, trees and shrubs in addition other types of open land uses. It also includes residential detached dwellings, churches, hospitals and clinics for large and small animals, commercial dog kennels, and rural home occupations. The County Zoning Regulations also allow for retail nurseries that do not exceed a total of 3,500 SF of net retail space excluding greenhouses, storage buildings, and outdoor display areas. The accessory building to be used for the proposed business is 1,800 SF. Much of this space will be dedicated to classroom activity. The hours of operation do not reflect a typical retail commercial store as a primary activity.

The property is developed with a residence and a detached building. The proposed use will not alter the base zoning district. A Conditional Use Permit (CUP) does not change the base, underlying zoning. The suitability of the property for agricultural residential use will not be altered.

**Staff Finding** - The property is suitable for a residential use with a home occupation that includes a limited retail element. The overall space dedicated to retails sales is clearly subordinate and accessory to the home occupation activity. The proposed retail use as a Conditional Use is suitable for this property.

**IV. LENGTH OF TIME SUBJECT PROPERTY HAS REMAINED VACANT AS ZONED**

This property is developed with a residence and accessory building. The residence was initially built in 1992 (2,276 SF). The detached garage building was constructed in 1997 (40’ by 30’).
(Agricultural) District was adopted as part of the September 23, 1966 Zoning Regulations when the County adopted county zoning.

**Staff Finding** - The subject property is developed as a residential use. The County Zoning Regulations were adopted in 1966.

**V. EXTENT TO WHICH REMOVAL OF RESTRICTIONS WILL DETRIMENTALLY AFFECT NEARBY PROPERTY**

Applicant’s Response: “Nearby properties will suffer no detriment. Additional road traffic is estimated to increase by 20 to 40 trips per week. Additional road traffic will be limited to evenings (7:00 P.M. to 9:00 P.M. and weekends 9:00 A.M. to 5:00 P.M.). No unusual noise will be generated. Building and parking are screened from public view by vegetation.”

Section 12-319-01.01 of the County Zoning Regulations recognize that “certain uses may be desirable when located in the community, but that these uses may be incompatible with other uses permitted in a district...when found to be in the interest of the public health, safety, morals and general welfare of the community may be permitted, except as otherwise specified in any district from which they are prohibited.” The proposed use falls under Section 12-319-4.11 Recreation Facility of the Zoning Regulations for the Unincorporated Territory of Douglas County.

The use is adjacent to a designated minor rural collector road. The proposed use is predominantly a Type II Home Occupation but because class size exceeds the maximum of that use and the limited retail element a Conditional Use Permit is being considered. Activity is primarily intended to be conducted indoors. Some use of the exterior grounds may be used for special class offerings related to gardening. No use of the lake is proposed as part of the application.

Staff received multiple calls regarding concerns about the application as it relates to the use of the lake area and the seemingly open nature of the request. After discussion with callers that clarified the application intent most concerns were addressed. Residents in the area expressed a desire to restrict the use and access by the public to the lake.

The limited scope of the project and inclusion of conditions prohibiting access and use of the lake will mitigate any detrimental impacts that could result from unintentional trespass onto private property.

**Staff Finding** - The significant concern generated by this request is the potential for trespass to private property and clarification in the application and operation of the use involving the lake. The addition of conditions that prohibit the use as part of the home occupation will ensure that detrimental effects are circumvented. The proposed use as described in the applicant’s Business Profile does not propose detrimental impacts to the surrounding area.

**VI. RELATIVE GAIN TO THE PUBLIC HEALTH, SAFETY AND WELFARE BY THE DESTRUCTION OF THE VALUE OF THE PETITIONER’S PROPERTY AS COMPARED TO THE HARDSHIP IMPOSED UPON THE INDIVIDUAL LANDOWNERS**

Applicant’s Response: “The public gains the opportunities to engage in learning experiences in a natural environment which relates to agricultural and ag-related products. No hardship is expected to impact neighboring landowners.”
Evaluation of the relative gain weighs the benefits to the community-at-large vs. the benefit of the owners of the subject property.

In Staff’s opinion, denial of this request would affect the individual landowner by prohibiting the scope of proposed home business. The property could be utilized as a residence with a Type II Home Occupation but limited in the total number of students to six per class and prohibiting the retail element of the business which is being provided as a service and product of the home occupation.

Benefit to the public is limited to personal improvement skills related to a specified topic: “Low-cost classes will be offered to adults on topics of interest to the community, primarily focusing on arts/crafts, home decorating, and health and sustainable living (gardening, food preservation, etc.).”

The retail aspect of the request includes: “Ancillary retail offerings will reflect the content of the class topics. Retail offerings will include supplies for projects taught in the classes, items handcrafted by the owner and other regional artisans, and some will be related items purchased at wholesale for resale.”

The Zoning Code allows retail sales for retail nurseries when limited to 3,500 SF. The proposed business is intended to be housed in the 1,800 SF accessory building. Any retail space within that building would be reduced by the area occupied by the classroom setup. This use is not identical to a retail nursery but does have some similar characteristics. Additionally, many of the activities proposed are allowed by right as a Type II Home Occupation. The scope of the activity is somewhat larger than what would be allowed as a Type II Home Occupation.

**Staff Finding** - Approval of this request does not directly harm the public health, safety and welfare. Denial of the request limits the scope of the business for this site.

**VI. CONFORMANCE WITH THE COMPREHENSIVE PLAN**

Applicant’s Response: “The Comprehensive Plan does not address Special Use Permits”

This property is located outside of a designated urban growth boundary. The property is developed with a residence and a detached garage. This property is located within the rural area of unincorporated Douglas County.

**Staff Finding** - A Conditional Use Permit can be used to allow specific uses that are not permitted in a zoning district with the approval of a site plan. This tool allows development to occur in harmony with the surrounding area and to address specific land use concerns.

**STAFF REVIEW (Site Plan)**

The proposed request is intended to occupy existing development on the site with a recent 600 SF building addition to the detached garage building. Off street parking would be provided in a 61’ by 61’ area for up to 12 off-street parking spaces.

**Parking and Access:** The site plan identifies 12 parking spaces to be located along the existing buildings and to include a paved area for an accessible space. The application states that a maximum of 12 students plus one instructor would be expected. There is not a specific use to classify the parking requirement for this activity. A retail nursery would require 1 space per 200 SF
of retail store area. Assuming the same ratio an 1800 SF building would require 9 off-street parking spaces. The proposed application would meet that standard with three additional spaces in excess of the standard. The proposed parking is adequate for the proposed use.

Access to the site is accommodated via a residential driveway to E 1500 Road. No changes to the access are proposed by the applicant and none were identified as needed in the review of the application.

**Landscape and Screening:** The plan shows landscape along the county road and along the south property line. Various stands of mature trees are located throughout the property. There is no exterior storage or activity associated with this use that requires screening. The existing landscape is consistent with the residential character of the property and surrounding area.

**Limits and Conditions:** Typical business hours are identified as:

- 7:00 to 9:00 P.M. 1-3 evenings per week and
- 9:00 AM to 5:00 PM two to three weekends per month.

As discussed earlier in the staff report, the use of the lake for business or commercial activity either as part of a class or as a public recreation facility, has been identified as a concern to area residents and property owners. To mitigate this concern staff recommends the site plan be revised to include a prohibition regarding the use of the lake for business and commercial activities and to also note that the access to the lake is prohibited by the general public.

**Conclusion**
This property is primarily to be used as a residence with an accessory home occupation. The scope of the proposal and the inclusion of a retail element requires a Conditional Use Permit. The applicant should be advised that changes to the accessory building to comply with minimum building code standards for non-residential use are required. The proposed CUP complies with the County Zoning Regulations and the land use recommendation of *Horizon 2020.*
Business Profile for *Good Earth Gatherings*

**Mission Statement**

*Good Earth Gatherings (GEG)* will offer unique learning opportunities and related retail items.

**Description**

*GEG* will be a small, part-time business featuring community outreach, education and ancillary retail.

Low-cost classes will be offered for adults on topics of interest to the community, primarily focusing on arts/crafts, home decorating, and healthy and sustainable living (gardening, food preservation, etc.).

Ancillary retail offerings will reflect the content of the class topics. Retail offerings will include supplies for projects taught in the classes, items handcrafted by the owner and other regional artisans, and some will be related items purchased at wholesale for resale.

Classes will be offered one to three times per week, usually in the evenings. Ancillary retail shop will be open in conjunction with classes and two to three weekends per month.

**Targeted Market**

*GEG* will attract patrons from the community (*Lawrence, Baldwin, and surrounding areas*) who are interested in arts/crafts, home decorating, and sustainable living practices.

**Growth Plan**

*GEG* will be a small, part-time business. Operating hours will include 1-3 evening classes per week and ancillary retail hours 2-3 weekends per month. There are no plans to grow the business beyond that.

**Competition**

*GEG* will be unique. The intention of the business is not to compete with area businesses. Rather, *GEG* is intended to fill a gap. The classes which will be offered are not available anywhere else locally, and the ancillary retail offerings will likewise be unique.

*GEG* will practice cooperation rather than competition with other local businesses. It is *GEG’s* intention to work with local businesses which may have related offerings in order to enhance both businesses. The classes offered will be sometimes taught by the owner and sometimes taught by other local experts – many with businesses of their own they can promote through *GEG*. For example, *GEG* may offer a class on growing herbs and partner with a local nursery to provide plants in conjunction with the class. In this way, *GEG*, the local nursery, and the community all benefit.
Marketing

GEG will market through advertising in the Merc News, listing relevant classes in the Sustainability Network e-newsletter, and producing a newsletter, website and blog for the business. GEG will partner with local businesses for mutual promotion.

Neighborhood Impact

The business will be located in an existing building adjacent to the owner’s rural residence. Additional traffic to the area will be limited. The maximum occupancy of the business will accommodate the anticipated range of 10 to 12 students plus an instructor.

The residence and business will be landscaped. Parking and building will be screened from public view by vegetation.

No unusual noise will be produced by this business.

Expected hours of operation will include classes offered from 7:00 p.m. to 9:00 p.m. one to three evenings per week and ancillary retail open additionally from 9:00 a.m. to 4:00 p.m. two to three weekends per month.

Depending on the classes offered, 10 to 20 trips may be generated during weeknight classes. Weekend ancillary retail hours may generate approximately 30 trips from a Friday to Saturday.

Sample GEG Calendar:

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- 7pm-9pm CLASS: Easy & Safe Food Preservation
- 7pm-9pm CLASS: Making & Using Herbal Vinegars (featuring herbs from Vinland Valley Nursery)
- 7pm-9pm CLASS: Wool Applique
- 7pm-9pm CLASS: Freeing Creativity: Art Journaling
- 7pm-9pm CLASS: Nature Printing
- 7pm-9pm CLASS: Beautiful & Simple Decorating Tips (Guest Instructor: Debbie DeCut from Lawrence Home Design)
- 7pm-9pm CLASS: Decorating with Naturals for the Holidays
- 7pm-9pm CLASS: Creating Table-Top Gardens (featuring plants from Sunrise Nursery)

Sample GEG Calendar:
Operating Procedures/Personnel

*GEG* will be a small, sole-proprietorship business. The business will be operated by the owner.

Relevant Education/Experience of Owners

*GEG* will be the sole proprietorship of Tamara Fairbanks-Ishmael. Tamara has worked as a sales manager, public school teacher, community college instructor, and professional speaker. She has a master’s degree in Liberal Arts from Baker University.

Community Benefits

*GEG* will benefit the community in several ways:

- GEG offers unique classes primarily related to arts/crafts, decorating, and healthy and sustainable living, benefiting individuals and the local community.
- GEG offers unique, often hand-made, class-related retail items which are not available otherwise locally.
- GEG partners with other local business owners to enhance existing businesses.

Contact

Tamara Fairbanks-Ishmael
858 E. 1500 Rd.
Baldwin City, KS 66006
785-331-4213
tsfairish@sbcglobal.net
General Notes:
1. Maximum occupancy of business will accommodate a total of 12 students and 1 instructor.
2. No more than 1 class shall be conducted at a time.
3. Use of the lake for public, business, commercial and recreational activities associated with the home occupation is prohibited.

Parking:
1. 11 spaces provided 9’ by 18’
2. One space provided paved 16’ by 18’ for accessible parking.

Legal Description:
Legal Description: 10.1Ac 5-14-20 COM AT SW COR NWQR TH N 0DEG52'02"W 183.39 FT TO PT BEG, SD PT BEING ON W LINE NW QR; TH CONT ALONG SD LINE N 0DEG52'02"W 250 FT TH SB8DEG42'32"E 1463.08 FT TH SO1DEG17'33"W 180.85 FT TH SB3DEG35'03"W 1122.94 FT TH 87DEG41'38"W 100 FT TH N69DEG38'13"W 202.36FT TH N85DEG23'51"W 250 FT TO PT BEG WW35(DIV 2006 700331)

Proposed Use:
Part-time business featuring community outreach, education and ancillary retail. Low-cost adult classes on topics of interest to community, focusing on arts/crafts, home decorating, and healthy and sustainable living (gardening, food preservation, etc.). Ancillary retail will reflect class topics and include project supplies for

Plan Not to Scale
Parking Area is gravel, with exception of paved and signed space for disabled. Accommodates up to 12 spaces [9' X 18'] plus disabled space [16' x 18'].

PLAN

Parking Area retains Redbud Tree

Floodlights

249 addition: 60 x 30

NOTE:

Building is 1,200 SF. Addition is 600 S.F.

NOTE:

Building is 1,200 SF. Addition is 600 S.F.
The building adjacent to the residence at 858 E. 1500 Rd., Baldwin City, Kansas, is the proposed site for a small, part-time, home-based business called *Good Earth Gatherings*.

**Legal Description:** 10.1A 5-14-20 COM AT SW COR NWQR TH N 0DEG52'02"W 183.39 FT TO PT BEG, SD PT BEING ON W LINE NW QR;TH CONT ALONG SD LINE N 0DEG52'02"W 250 FT TH S88DEG42'52"E 1663.08 FT TH S01DEG1733"W 180.85 FT TH S83DEG35'03"W 1122.94 FT TH N87DEG41'38"W 100 FT TH N69DEG38'13"W 202.36FT TH N85DEG35'51"W 250 FT TO PT BEG WW35(DIV 2006 7000331)

The building is currently 1200 square feet. A small addition will make the building more conducive to the proposed business, and the final building will have a footprint of 1420 sq. feet (Building Permit approved 2010). The entire interior space will be used for the business. No additional exterior storage is currently planned.

The maximum occupancy of the business will accommodate the anticipated range of 10 to 12 students plus an instructor. Twelve parking spaces will be created next to the building, including one paved handicapped space. Standard spaces will be 9’x18’; the handicapped space will be 16’x18’. Parking spaces will be indicated by railroad ties or landscaping timbers. The parking lot is expected to require 3600 sq. feet (60’x60’). The existing driveway will be used. Areas not used for driveway or parking will be landscaped. Parking and building are screened from public view by vegetation.

Outdoor electric motion security floodlights will be installed on the southeast and southwest corners of the building.

Waste generated by the business will be recycled whenever possible. Non-recyclable trash will be picked up at the curb with the household trash. A new, additional 1000 gallon septic tank was installed on the north side of the residence in summer 2009. The tank will accommodate septic waste generated by business patrons.

Signage will be situated at the south side of the end of the driveway. Signage size and materials will conform to zoning regulations.
CUP-10-05-11: Conditional Use Permit for Good Earth Gatherings
858 E 1500 Road

Lawrence-Douglas County Planning Office
December 2011

Scale: 1 Inch = 1500 Feet
TO: Lawrence-Douglas County Metropolitan Planning Commission

RE: CUP-10-5-11 Conditional Use Permit for Good Earth Gatherings

We write this to express concern about a Conditional Use Permit for Good Earth Gatherings at 838 E 1500 Road submitted by Tamara Fairbanks-Ishmael. East 1500 Road is primarily agricultural and residential. A business that “provides community outreach, education, and ancillary retail sales” has a very different flavor and can change the character of the neighborhood. By definition, a “community” enterprise involves a group of people at one set time (such as for a class). And “retail” implies that customers would come and go throughout the day. I offer the following items for the Commission’s consideration:

- There may be home-based businesses in the neighborhood, but I am not aware of any that I would consider a “retail” business. We have not observed other home businesses in the neighborhood, such as the one on 1450 Road, to have multiple customers at any one time. A car or two now and then is not intrusive.
- In rural areas, sound carries incredibly far. We could reasonably expect the traffic noise, possible traffic congestion, car doors, people noise, etc., (especially if there is a class having several participants) to be heard and magnified throughout the immediate neighborhood. Additionally, most of the activities would probably occur on weekends when residents are home and involved in outdoor activities.
- This particular stretch of E 1500 road has had its share of problems with noise over time. Gradually, things have improved, but there are still pockets of noise that are intrusive. Approving a retail business along that road may take us another direction-- back to a noise level that is infringes of the personal enjoyment of peace and quiet (which is why some of us moved to the rural areas in the first place). I also have a concern about increased traffic on that road. The landowners along the road all contributed to surfacing the road. The township maintains the road, but the wear and tear of customer traffic can be detrimental to a stretch of road that already is prone to potholes and cracking. We have learned in the past that we have to dodge potholes for many months before the crew shows up to fix them.
- I understand this venture is primarily a “community outreach” (?), “education,” and “ancillary retail sales,” but I am concerned that if the enterprise grows, problems will grow with it.

We write this with great reluctance because we want to be good neighbors and don’t wish to block someone from fulfilling a dream, but we also don’t want to be blaming ourselves for not voicing an objection when given the opportunity. We moved to the “country” to leave the traffic noise and congestion of town behind. We accept the noise related to farming, ranching, improving one’s property (such as cutting trees or adding an outbuilding, mowing, etc.) because those activities are central to a rural community. But we cannot stand back and implicitly approve increased intrusion in a neighborhood through a retail business.

We ask the Planning Commission to seriously consider our comments about the impact on the neighborhood as they make their decision. Thank you for the opportunity to comment.

Karen and Lynn Watney

847 E 1500th Road
PLANNING COMMISSION REPORT
Regular Agenda -- Public Hearing Item

PC Staff Report
12/12/11
ITEM NO. 4  TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; DEFINING OCCUPANCY & CLARIFYING OCCUPANCY LIMITS IN NON-RS ZONING DISTRICTS (MJL)

TA-10-15-11: Consider a text amendment to the City of Lawrence Land Development Code, Articles 2 and 17, defining occupancy and clarifying the applicability of occupancy limits in RS and non-RS districts. Initiated by City Commission on 10/4/11.

RECOMMENDATION: Staff recommends that the Planning Commission forward a recommendation for approval of the proposed amendments TA-10-15-11 to the Land Development Code to the City Commission based on the analysis in the staff report.

REASON FOR REQUEST: Issues with over occupancy violations (the number of unrelated persons living together) have been noted by enforcement staff. The City Commission initiated changes to the current regulations in order to address some of the issues. One of the items initiated was a text amendment to the Land Development Code in order to correct an oversight of the 2006 code related to occupancy limit regulations in non-RS districts and to include clarification of occupancy.

RELEVANT GOLDEN FACTOR:
• This text amendment is consistent with the comprehensive plan.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
– None

OVERVIEW OF PROPOSED AMENDMENT
The definition of Family establishes occupancy provision for RS and non-RS districts. Section 20-202(g) currently outlines occupancy limits in the RS (Single-Dwelling Residential) Districts by linking occupancy of a dwelling unit to the definition of Family. The proposed changes add a similar section to every non-RS zoning district description that permits residential uses. Additionally, staff is proposing modifying the definition of Family in Article 17 – Terminology to clarify and to add what the meaning of the phrase “living in a Dwelling Unit” means as stated in the Family definition.

CONFORMANCE WITH THE COMPREHENSIVE PLAN
Chapter 6 – Residential Land Use discusses neighborhood conservation and protecting existing housing stock. Over occupancy of structures could cause deterioration of a neighborhood. Horizon 2020 outlines residential density in dwelling units per acre. The Development Code defines a family as: (1) a person living alone; (2) two or more related persons or; (3) a group of three or four [depending on zoning district] unrelated persons living in a dwelling unit. If over occupancy due to the increase of unrelated persons occurs, it can increase the intensity of an area and potentially create a strain on the neighborhood and other services such as utilities (water and sewer service) and transportation (parking and street traffic).
CRITERIA FOR REVIEW AND 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; and

The text amendment clarifies regulations in relation to occupancy and the total number of people allowed living together in a dwelling unit. The proposed changes will help enforcement staff with violation cases and corrects an error in the code in that occupancy limits are established by the Family definition but its applicability in districts needs to be strengthened.

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

Horizon 2020 speaks to neighborhood conservation and protecting existing housing stock. Regulation and enforcement of occupancy limits in the neighborhoods protects the neighborhood stability. Housing stock is more likely to be preserved when occupancy limits are observed and a significant increase in occupants in one area is not permitted. Over occupancy of an area or house can lead to deterioration of structures. Additional residents in an area typically result in additional trash, activity and parking demand. These issues often are compounded when over occupancy occurs in a dense area and can lead to instability and deterioration of a neighborhood.

Staff Review
The City Commission has initiated various changes to the City Code and the Land Development Code to address the issue of occupancy and occupancy violations. The proposed changes to the Land Development Code strengthen the description of occupancy limits that currently exist and strengthen the definition of Family. The proposed changes are located in Article 2 – Base Districts and in Article 17 – Terminology. Descriptions of the proposed changes are below.

- Article 2 – Base Districts
  The proposed changes to Article 2 are to Sections 202, 203, 204, 206, 207, 208, 210, 211, 213, 215, 216, 218, 219, 221, 222, and 223. These are the descriptions of the base districts where residential uses are permitted. The only section that currently includes language about occupancy limits is Section 20-202, Single-Dwelling Residential District. Below are the proposed changes proposed to that section and the similar section that is proposed to be added to the non RS districts.

  - RS Districts
    Occupancy Limits

    In RS, Single-Dwelling Residential Districts, a Dwelling Unit shall only be occupied by a Family as defined in Section 20-1701, Family (1), (2) or (3). On properties in RS Districts that have an Accessory Dwelling Unit established in accordance with Section 20-534, the total number of individuals that reside in both units shall not exceed the total persons allowed in a Dwelling Unit located in the RS District as defined in Section 20-1701, Family (1), (2) or (3), plus one additional person.

    In RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), shall occupy a Dwelling Unit. On properties in RS Districts that have an
Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.

- Non-RS Districts
  Occupancy Limits
  In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.

- Article 17 - Terminology
  Changes to the definition of Family are being proposed to provide greater intent of what it means to occupy, or “live” in a Dwelling Unit. Deletion of the definition of the term Housekeeping Unit is being proposed. This term is only used in the definitions of other terms (Dwelling Unit and Family). With the proposed changes to the definition of Family, the term Housekeeping Unit is confusing and no longer necessary. This proposal also removes the term from the definition of Dwelling Unit.

**Family**
A person living in a Dwelling Unit alone; (2) two or more persons related by blood, marriage, or legal adoption, living in a Dwelling Unit together; (3) (a) in an RS Zoning District, a group of not more than three persons, not related by blood or marriage, living in a Dwelling Unit together, as distinguished from a group of persons occupying a Dormitory, Congregate Living, motel, hotel, fraternity house or sorority house; or (4) (b) in a Zoning District other than RS non-RS Districts, a group of not more than four persons, not related by blood or marriage, living in a Dwelling Unit together, as a single Housekeeping Unit in a Dwelling Unit, as distinguished from a group of persons occupying a Dormitory, Congregate Living, motel, hotel, fraternity house or sorority house. For the purpose of this definition, “living in a Dwelling Unit” shall mean residing or sleeping at a Dwelling Unit the majority of a person’s time.

**Dwelling Unit**
One room, or a suite of two or more rooms, designed for or used by one Family or Housekeeping Unit for living and sleeping purposes and having only one kitchen or kitchenette.
20-202 RS, SINGLE-DWELLING RESIDENTIAL DISTRICT

(a) Purpose

(1) The primary purpose of the RS Districts is to accommodate predominantly single Detached Dwelling Units on individual Lots. The Districts are intended to create, maintain and promote housing opportunities for individual households, although they do permit nonresidential uses that are compatible with residential neighborhoods.

(2) The RS Districts are primarily differentiated on the basis of required minimum Lot size, as provided below:

(i) RS40, Single-Dwelling Residential District – 40,000 square feet.
(ii) RS20, Single-Dwelling Residential District – 20,000 square feet.
(iii) RS10, Single-Dwelling Residential District – 10,000 square feet.
(iv) RS7, Single-Dwelling Residential District – 7,000 square feet.
(v) RS5, Single-Dwelling Residential District – 5,000 square feet.
(vi) RS3, Single-Dwelling Residential District – 3,000 square feet.

(b) Principal Uses

Principal Uses are allowed in RS Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Structures

Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Accessory Dwelling Units and Home Occupations, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards

Unless otherwise expressly stated, all development in RS Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) Street Access

RS Districts are intended primarily for implementation along Local and Residential Collector Streets.

(f) Other Regulations

There are a number of other development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.
(2) Landscaping See Article 10.
(3) Off-Street Parking and Loading See Article 9.
(4) Outdoor Lighting See Section 20-1103.
(5) Overlay Districts See Article 3.
(g) Occupancy Limits

In RS, Single-Dwelling Residential Districts, a Dwelling Unit shall only be occupied by a Family as defined in Section 20-1701, Family (1), (2) or (3). On properties in RS Districts that have an Accessory Dwelling Unit established in accordance with Section 20-534, the total number of individuals that reside in both units shall not exceed the total persons allowed in a Dwelling Unit located in the RS District as defined in Section 20-1701, Family (1), (2) or (3), plus one additional person.

In RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), shall occupy a Dwelling Unit. On properties in RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-203  RSO, SINGLE-DWELLING RESIDENTIAL – OFFICE DISTRICT

(a) **Purpose**
The primary purpose of the RSO District is to accommodate low to medium-intensity Administrative and Professional Offices that are compatible with the character of low and medium-Density residential neighborhoods. The District is also intended to be used as a transitional Zoning District between higher intensity commercial areas and residential neighborhoods. The District allows Detached Dwellings, Duplexes, Attached Dwellings and Administrative and Professional Offices uses, which may be combined in the same Structure (e.g., office on the Ground Floor or at the front of the Building with Dwelling Units on upper floors or toward the rear of the Building).

(b) **Principal Uses**
Principal Uses are allowed in RSO Districts in accordance with the Use Table of Article 4.

(c) **Accessory Uses and Structures**
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations Section 20-532 et seq.

(d) **Density and Dimensional Standards**
Unless otherwise expressly stated, all development in RSO Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) **Street Access**
RSO Zoning is generally appropriate along Collector Streets, although primary Access from RSO properties to such Collector Streets should be avoided where practicable.

(f) **Other Regulations**
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. General Development Standards  See Article 11.
2. Landscaping  See Article 10.
3. Off-Street Parking and Loading  See Article 9.
4. Outdoor Lighting  See Section 20-1103.
5. Overlay Districts  See Article 3.

(g) **Occupancy Limits**
In RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), shall occupy a Dwelling Unit. On properties in RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(a), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-204 RM, MULTI-DWELLING RESIDENTIAL DISTRICT

(a) Purpose

(1) The primary purpose of the RM Districts is to accommodate multi-Dwelling housing. The Districts are intended to create, maintain and promote higher Density housing opportunities in areas with good transportation Access.

(2) The RM Districts are primarily differentiated on the basis of maximum allowed Net Density as provided below:

(i) The RM12 and RM12D, Multi-Dwelling Residential Districts – 12 Dwelling Units per acre.

(ii) The RM15, Multi-Dwelling Residential District – 15 Dwelling Units per acre.

(iii) The RM24, Multi-Dwelling Residential District – 24 Dwelling Units per acre.

(iv) The RM32, Multi-Dwelling Residential District – 32 Dwelling Units per acre.

(3) The RM12D District is differentiated from the other RM Districts on the basis of Building Type and the maximum allowed Net Density. In the RM12D district, the Building Type is restricted to Duplexes or Attached Dwellings of 2 units. Only one Principal Building per Lot is permitted in this District.

(b) Principal Uses

Principal Uses are allowed in RM Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Structures

Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards

Unless otherwise expressly stated, all development in RM Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) Street Access

RM Districts are intended for implementation along Residential Collector, Collector and some Arterial Streets.
(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.
(2) Landscaping See Article 10.
(3) Off-Street Parking and Loading See Article 9.
(4) Outdoor Lighting See Section 20-1103.
(5) Overlay Districts See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-206 RMO, MULTI-DWELLING RESIDENTIAL – OFFICE DISTRICT

(a) **Purpose**
The primary purpose of the RMO District is to accommodate Mixed Use development of low- and moderate-intensity Administrative and Professional Offices that are compatible with the character of medium- and high-Density residential neighborhoods. The District is also intended to be used as a transitional Zoning District between higher-intensity commercial areas and residential neighborhoods. The District allows residential uses and Administrative and Professional Office uses, which may be combined in the same Structure (e.g., office on the Ground Floor or at the front of the Building with Dwelling Units on upper floors or toward the rear of the Building).

(b) **Principal Uses**
Principal Uses are allowed in RMO Districts in accordance with the Use Table in Article 4.

(c) **Accessory Uses and Structures**
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations of Section 20-532 et seq.

(d) **Density and Dimensional Standards**
Unless otherwise expressly stated, all development in RMO Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) **Street Access**
RMO zoning is generally appropriate for implementation along Collector or Arterial Streets.

(f) **Other Regulations**
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. General Development Standards See Article 11.
2. Landscaping See Article 10.
3. Off-Street Parking and Loading See Article 9.
4. Outdoor Lighting See Section 20-1103.
5. Overlay Districts See Article 3.

(g) **Occupancy Limits**
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
CN1, INNER NEIGHBORHOOD COMMERCIAL DISTRICT

(a) **Purpose**

The CN1, Inner Neighborhood Commercial District is primarily intended to accommodate pedestrian-oriented, small-scale retail and service businesses that serve nearby residential areas, typically within a developed neighborhood. The District is restricted in use to unique situations where the Center is part of an overall planned neighborhood development or where the Center can easily be integrated into an existing neighborhood and where it can be served by Collector or Arterial Streets pursuant to adopted Access Management standards.

(b) **Principal Uses**

Principal Uses are allowed in CN1 Districts in accordance with the Use Table of Article 4.

(c) **Accessory Uses and Structures**

Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Accessory Dwelling Units and Home Occupations, are subject to the regulations of Section 20-532, et seq.

(d) **Density and Dimensional Standards**

Unless otherwise expressly stated, all development in CN1 Districts shall comply with the City’s Comprehensive Land Use Plan and the Density and Dimensional Standards of Article 6.

1. **Site Requirements**

Site area of any development within the CN1 District shall not exceed 1 acre. See Article 6.

2. **Lot Requirements**

No Additional Standards.

3. **Floor Area Requirements**

Floor Area of any Structure for a Principal Use within the CN1 District shall not exceed 3,000 gross square feet.

(e) **Street Access**

Development in the CN1 District may take Access to local, Collector or Arterial Streets and to public Alleys (if they abut the property being developed).

(f) **Other Regulations**

There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. **General Development Standards**

   See Article 11.

2. **Landscaping**

   See Article 10.

3. **Off-Street Parking and Loading**

   See Article 9.

4. **Outdoor Lighting**

   See Section 20-1103.

5. **Overlay Districts**

   See Article 3.

(g) **Occupancy Limits**

In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS
Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
CN2, NEIGHBORHOOD COMMERCIAL CENTER DISTRICT

(a) Purpose
The CN2, Neighborhood Shopping Center District, is primarily intended to implement the Comprehensive Plan’s "Neighborhood Commercial Centers" policy of providing for the sale of goods and services at the neighborhood level. Neighborhood Commercial Centers are generally located at least one mile from another Commercial Center. Developments in CN2 Districts are intended for Collector/Arterial Street intersections or at Arterial/Arterial Street intersections. Development is intended on only one corner of the intersection.

(b) Principal Uses
Principal Uses are allowed in CN2 Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
Unless otherwise expressly stated, all development in CN2 Districts shall comply with the City’s Comprehensive Land Use Plan and the Density and Dimensional Standards of Article 6.

(1) Site Requirements
Site area shall not exceed 15 acres for any CN2 development. See Article 6.

(2) Lot Requirements
Lot Area of any development within the CN2 District shall maintain a width-to-depth ratio between 1:1 and 3:2. Neighborhood Commercial Centers shall contain no more than 100,000 gross square feet of commercial space, unless the Center contains a grocery (Food and Beverage Retail Sales) store that has over 60,000 gross square feet. In this case, the Center may contain no more than 125,000 gross square feet of commercial space.

(3) Floor Area Requirements
Floor Area of any Structure for a Principal Use within the CN2 District, other than a grocery (Food and Beverage Retail Sales) store, shall not exceed 40,000 gross square feet. A grocery (Food and Beverage Retail Sales) store shall not exceed 80,000 gross square feet.

(e) Street Access
Development in the CN2 District may take Access to Local, Collector or Arterial Streets and to public Alleys (if they abut the property being developed).
(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. General Development Standards
   See Article 11.
2. Landscaping
   See Article 10.
3. Off-Street Parking and Loading
   See Article 9.
4. Outdoor Lighting
   See Section 20-1103.
5. Overlay Districts
   See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-210 CD, DOWNTOWN COMMERCIAL DISTRICT

(a) Purpose
The CD, Downtown Commercial District, is primarily intended to implement the Comprehensive Plan’s Downtown Commercial Center policy of providing for a variety of land uses, including governmental, retail, office, public and Community Facilities, institutional, churches, and residential and to accommodate new neighborhood, community and regional retail uses within the downtown area.

(b) Principal Uses
Principal Uses are allowed in CD District in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
Unless expressly stated below, all development in the CD District shall comply with the Density and Dimensional Standards of Article 6. The following additional Density and Dimensional Standards shall apply in the CD District:

(1) Site Requirements
   No Additional Standards.

(2) Lot Requirements
   No Additional Standards.

(3) Floor Area Requirements
   Floor Area of any Building footprint for a Principal Use within the CD District shall not exceed 25,000 gross square feet.

(e) Street Access
   No street Access shall be permitted to individual Lots along Massachusetts Street. Lots along numbered side Streets in the Downtown area shall take Access from the public Alley or at the mid-Block point where a public Alley would be. Street Access to New Hampshire and Vermont Streets shall only be approved where it is consistent with the Downtown Design Guidelines and established street patterns.

(f) Other Regulations
   There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

   (1) General Development Standards See Article 11.
   (2) Landscaping See Article 10.
   (3) Off-Street Parking and Loading See Article 9.
   (4) Outdoor Lighting See Section 20-1103.
   (5) Overlay Districts See Article 3.

(g) Occupancy Limits
   In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with
Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
(a) Purpose

(1) The CC, Community Commercial Centers District, is primarily intended to implement the Comprehensive Plan's Community Commercial Centers policy for commercial development at a community scale to serve multiple neighborhoods. Within the Community Commercial Center classification there are two categories of commercial centers; the CC200 Center and the CC400 Center. Permitted uses are the same in both categories; Density and dimensional standards are greater in the CC400 Center than in the CC200 Center.

(2) The Primary Purpose of the CC200 Center is to provide for the redevelopment of existing Community Commercial Centers and to provide an alternative for the existing highway strip commercial areas.

(3) The Primary Purpose of the CC400 Centers is to provide opportunities for development of new Community Commercial Centers for fringe areas as neighborhoods grow and develop.

(b) Principal Uses

Principal Uses are allowed in CC Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures

Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Additionally, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards

Unless otherwise expressly stated, all development in CC Districts shall comply with the City's Comprehensive Land Use Plan and Density and Dimensional Standards of Article 6, as modified by the design standards set forth in Section 20-526. The following additional Density and Dimensional Standards shall apply in the CC District:

(1) Site Requirements

Not all corners of a CC200 Commercial Node shall be devoted to commercial uses. For a Center that has Buildings between 40,000 and 100,000 gross square feet in size, the maximum gross square feet of the Center shall not exceed 50% of the allowable commercial square feet for a CC200 Commercial Node.

A minimum of 95% of the commercial gross square feet of a new CC400 Center shall be located on two (2) or fewer corners of the Commercial Node intersection. If there are remaining allowable square feet at a Node (intersection) after two or fewer corners are developed, one of the remaining corners may have 50% or less of the remaining 400,000 gross square feet of allowable commercial space. Any corner of an intersection where the gross square feet of commercial space is 20,000 or more shall have a minimum site area of 20 acres and a width to depth ratio between 1:1 and 3:2.

(2) Lot Requirements
Lot Area of any development within the CC Centers District shall maintain a width-to-depth ratio between 1:1 and 3:2. A maximum Building coverage of 25% shall apply to all development within the CC Centers District.

(3) Floor Area Requirements
CC200 Centers: CC200 Centers shall contain no more than 200,000 gross square feet of the entire Node’s commercial space as provided in Chapter 6 of Horizon 2020. Floor Area of any Structure for a Principal Use within a CC200 Center shall not exceed 100,000 gross square feet. Within a Large Retail Establishment, no more than 15% of the Floor Area may be devoted to ancillary uses separate in management or operation from the principal retail use. Ancillary uses shall take their public Access internally from the larger Retail Establishment. General retail stores (including general merchandise and apparel) shall not exceed 65,000 gross square feet.

CC400 Centers: CC400 Centers shall contain no more than 400,000 gross square feet of the entire Node’s commercial space as provided in Chapter 6 of Horizon 2020. Floor Area of any Structure for a Principal Use within a CC400 Center shall not exceed 175,000 gross square feet. Within a Large Retail Establishment, no more than 15% of the Floor Area may be devoted to ancillary uses separate in management or operation from the principal retail use. Ancillary uses shall take their public Access internally from the larger Retail Establishment.

(e) Street Access
Development in the CC Centers District shall take Access from a Collector Street, Arterial Street, or designated highway. CC200 Centers shall be located at Collector/Arterial Street intersections or Arterial/Arterial Street intersections. CC400 Centers shall be located at the intersection of two Arterial Streets that have at least a four-lane cross section or at the intersection of a four-lane Arterial Street with a State or Federally designated highway. Whenever possible, CC Centers development shall share direct or indirect Access through common curb cuts or private Access roads. When the CC Center site abuts a controlled intersection, Access shall be directed to a side street with adequate distance between the intersection and the site Access point(s).

(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.
(2) Landscaping See Article 10.
(3) Off-Street Parking and Loading See Article 9.
(4) Outdoor Lighting See Section 20-1103.
(5) Overlay Districts See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-213 CS, COMMERCIAL STRIP DISTRICT

(a) Purpose
The CS, Commercial Strip District, is primarily intended to provide for existing commercial strip development along the City’s Major Arterial Streets. No new undeveloped Parcel shall be zoned CS, except in the case where an undeveloped Parcel is adjacent to an existing CS, then the adjacent undeveloped Parcel may be zoned to the classification CS to allow for expansion of an existing CS use onto the undeveloped adjacent Parcel.

(b) Principal Uses
Principal Uses are allowed in CS Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations of Section 20-532.

(d) Density and Dimensional Standards
Unless expressly stated, all development in CS Districts shall comply with the City’s Comprehensive Land Use Plan and the Density and Dimensional Standards of Article 6.

(1) Unless otherwise expressly stated, all development in CS Districts shall comply with the Density and Dimensional of Article 6.

(2) Expansion of a Development in the CS District to an adjacent Lot may be allowed only to square off the boundaries of an area designated on the official zoning map as a CS District along the rear or Side Setback of the Development; provided, however, this expansion may not exceed twenty-five percent (25%) of the Lot Area of the development and provided, further, the expansion on the adjacent Lot must implement the goals, policies and strategies of the Comprehensive Land Use Plan by providing one of the following:

(i) Shared Access with adjacent Development;

(ii) Perimeter Landscaping between the street and the development;

(iii) A Bufferyard or other landscape Screening between the development and any residential development; or

(iv) A sidewalk or extension of a sidewalk, along the public right-of-way adjacent to the Lot being redeveloped.

(e) Street Access

(1) The creation of shared public Access or consolidation of multiple Access points shall be required where determined by access management policy or adopted corridor plans identify potential changes upon redevelopment of a Major Development Project in the CS District.

(f) Other Regulations
There are a number of other Development standards that may apply to development in **Base Districts**, including but not limited to the following:

1. **General Development Standards**  
   See Article 11.

2. **Landscaping**  
   See Article 10.

3. **Off-Street Parking and Loading**  
   See Article 9.

4. **Outdoor Lighting**  
   See Section 20-1103.

5. **Overlay Districts**  
   See Article 3.

**g) Occupancy Limits**

In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
IL, LIMITED INDUSTRIAL DISTRICT

(a) Purpose
The IL, Limited Industrial District, is primarily intended to accommodate low-impact industrial, wholesale and warehouse operations that are employment-intensive and compatible with commercial land uses.

(b) Principal Uses
Principal Uses are allowed in IL Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
Unless otherwise expressly stated, all development in IL Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) Street Access
The IL District is intended for implementation along Collector or Arterial Streets. When industrial development abuts Arterial Streets, Access shall be directed to a non-Arterial side street or Driveway with adequate distance between the intersection and the site Access point(s) as per the standards of Section 20-915. Whenever possible, the industrial development shall share direct or indirect Access through common curb cuts and Driveways or private Access roads.

(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. General Development Standards
   See Article 11.
2. Landscaping
   See Article 10.
3. Off-Street Parking and Loading
   See Article 9.
4. Outdoor Lighting
   See Section 20-1103.
5. Overlay Districts
   See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
IG, GENERAL INDUSTRIAL DISTRICT

(a) Purpose
The IG, General Industrial District, is primarily intended to accommodate moderate- and high-impact industrial uses, including large scale or specialized industrial operations requiring good transportation Access and public facilities and services. The District is generally incompatible with residential areas and low-intensity commercial areas.

(b) Principal Uses
Principal Uses are allowed in IG Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
Unless otherwise expressly stated, all development in IG Districts shall comply with the Density and Dimensional Standards of Article 6.

(e) Street Access
The IG District is intended for implementation along Arterial Streets. Whenever possible, Access shall be directed to a non-Arterial side street or Driveway with adequate distance between the intersection and the site Access point(s) as per the standards of Section 20-915. Whenever possible, such industrial development shall share direct or indirect Access through common curb cuts and Driveways or private Access roads.

(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.
(2) Landscaping See Article 10.
(3) Off-Street Parking and Loading See Article 9.
(4) Outdoor Lighting See Section 20-1103.
(5) Overlay Districts See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-218 GPI, GENERAL PUBLIC AND INSTITUTIONAL USE DISTRICT

(a) Purpose
The GPI District is a Special Purpose Base District primarily intended to accommodate Institutional Uses occupying significant land areas but not appropriate for development in the H District or on property designated on the official zoning map as U. The District regulations are designed to offer the institution maximum flexibility for patterns of uses within the District while ensuring that uses and development patterns along the edges of the District are compatible with adjoining land uses.

(b) Principal Uses
Principal Uses are those uses that are institutional by definition that are allowed in GPI Districts in accordance with the Use Table of Article 4.

(c) Accessory Uses and Accessory Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
Unless otherwise expressly stated, all development in GPI Districts shall comply with the Density and Dimensional Standards of Article 6. Setbacks for the GPI District are the same as those established in 20-601(b) for the IBP District. The GPI may include a Type 3 Bufferyard, expanded to a width of 75 feet, along the border. The Height standards of Section 20-602(h)(2) shall apply to uses in the GPI District.

(e) Street Access
The GPI District is intended to be implemented along Collector and/or Arterial Streets. Development in the GPI District shall take its primary Access from Collector and/or Arterial Streets, except uses defined as Major Utilities and Services and Minor Utilities which may take primary Access from any street classification deemed suitable due to their unique circumstances. Development in the GPI District may take its secondary Access from a Local Street or Alley except where the zoning of the property across the Street or Alley is in an RS Zoning District; in those cases, the GPI development shall be allowed only emergency Access to the Local Street or public Alley.

(f) Development Standards Required
Subject to the standards of this Article, the institution responsible for the property within the GPI District shall from time to time prepare and update an Institutional Development Plan for all of the property contained within the GPI District. The procedure for review and action on the Institutional Development Plan is set out in Section 20-1307.

(g) Expansions
The GPI District should generally be expanded in logical increments that preserve an orderly boundary between the Institutional Use and any adjoining residential uses.

(h) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.
(2) Landscaping See Article 10.
(3) Off-Street Parking and Loading
See Article 9.

(4) Outdoor Lighting
See Section 20-1103.

(5) Overlay Districts
See Article 3.

(i) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
H, HOSPITAL DISTRICT

(a) **Purpose**

The H District is a Special Purpose Base District primarily intended to accommodate a Hospital and accessory and related uses under common control and planning.

(b) **Principal Uses**

Principal Uses are allowed in H Districts in accordance with the Use Table of Article 4.

(c) **Accessory Uses and Structures**

Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures are subject to the regulations of Section 20-532 et seq.

(d) **Density and Dimensional Standards**

Unless otherwise expressly stated, all development in H Districts shall comply with the Density and Dimensional Standards of Article 6. Setbacks for the H District are the same as those established in 20-601 (b) for the IBP District. Alternatively, the H District can include a Type 3 Bufferyard, expanded to a width of 75 feet, along the border. The Height standards of Section 20-602(h)(2) shall apply to uses in the H District.

(e) **Street Access**

Development in the H District shall have primary Access onto Collector and/or Arterial Streets. Development in the H District may have Access to a Local Street or Alley except where the zoning of the property across the Street or Alley is in an RS Zoning District; in those cases, the H District development shall be allowed emergency Access only to the Local Street or public Alley.

(f) **Development Standards Required**

Subject to the standards of this Article, the institution responsible for the property within the H District shall prepare and update an Institutional Development Plan for all of the property contained within the H District when a Significant Development Project is proposed. The procedure for review and action on the Institutional Development Plan is set out in Section 20-1307.

(g) **Expansion**

The H District should generally be expanded in logical increments that preserve an orderly boundary between the Institutional Use and any adjoining residential uses.

(h) **Other Regulations**

There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

1. General Development Standards  
   See Article 11.
2. Landscaping  
   See Article 10.
3. Off-Street Parking and Loading  
   See Article 9.
4. Outdoor Lighting  
   See Section 20-1103.
5. Overlay Districts  
   See Article 3.

(i) **Occupancy Limits**

In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with
Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-221  PUD, PRD, PCD, PID, POD (PLANNED DEVELOPMENT) DISTRICTS

(a) Purpose
The Planned Development Districts, PRD, Planned Residential Development District, PUD, Planned Unit Development District, PCD, Planned Commercial Development District, PID, Planned Industrial District, and POD, Planned Office District are all Special Purpose Base Districts intended only to provide a suitable classification for land included in a Planned Development approved prior to the Effective Date. This District is expressly not intended for implementation through application to additional land after the Effective Date. For Planned Developments after that date, see the provisions of Section 20-701.

(b) District Name
The name of this District shall, in each geographic implementation, include the specific Planned Development designation followed by the name of the Development in brackets. For example, the actual District designation for an older Planned Unit Development that was created as an Overlay District would be PUD [Development Name] and for a Planned Residential Development that was created as a Base District would be “PRD [Development Name].”

(c) Principal Uses
The Principal Uses allowed in a specific Planned Development District shall be those uses — and only those uses — allowed by the terms and conditions of the original approval of the Planned Development, as amended from time to time in accordance with the provisions of this Chapter and its predecessors. Where an issue of interpretation of the terms and conditions of the original approval arises, the procedures of Section 20-1304(g) should be followed. A change or intensification of the approved Principal Uses shall require approval under Article 7.

(d) Accessory Uses and Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Accessory Dwelling Units and Home Occupations, are subject to the regulations of Section 20-532 et seq.

(e) Density and Dimensional Standards
The development or expansion of any Structure in the Planned Development District shall comply with the Density and Dimensional Standards contained or incorporated in the terms and conditions of the original approval of the Planned Development, as amended from time to time in accordance with the provisions of this Chapter and its predecessors. Where an issue of interpretation of the terms and conditions of the original approval arises, the procedures of Section 20-1304(g) should be followed.

(f) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following. Where there is a conflict between the Development standards to which reference is made below and the terms and conditions of the approved Planned Development, the terms and conditions of the approved Planned Development shall control. Where an issue of interpretation of the terms and conditions of the original approval arises, the procedures of Section 20-1304(g) should be followed.
(1) General Development Standards  See Article 11.
(2) Landscaping  See Article 10.
(3) Off-Street Parking and Loading  See Article 9.
(4) Outdoor Lighting  See Section 20-1103.
(5) Overlay Districts  See Article 3.

(g) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
20-222 UR, URBAN RESERVE DISTRICT

(a) Purpose
The UR, Urban Reserve District, is a Special Purpose Base District primarily intended to provide a suitable classification for newly annexed land. The District is intended to avoid premature or inappropriate development that is not well served by Infrastructure or community services. It is also intended for implementation in areas where an adopted neighborhood plan or area development plan is not in place. It permits only very low-intensity development until such time that a land use plan and Infrastructure and community services are in place.

(b) Principal Uses
The only Principal Uses allowed in the UR District are Crop Agriculture and any lawful uses(s) in existence immediately prior to annexation with the exception of billboard signs. No billboard signs may be annexed into the city. Communications facilities are allowed in the UR District if approved by a Special Use Permit in accordance with Section 20-1306.

(1) Any use or Development Activity that requires Site Plan Review and approval (see Section 20-1305) will be allowed only after the property is rezoned to the appropriate City zoning classification (in accordance with Section 20-1303).

(2) No increase in the number of Livestock is permitted, nor shall swine be kept in the UR District pursuant to Chapter 3, Article 1 of the City Code.

(c) Accessory Uses and Structures
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Accessory Dwelling Units and Home Occupations, are subject to the regulations of Section 20-532 et seq.

(d) Density and Dimensional Standards
The development or expansion of any Structure in the UR District shall comply with the Density and Dimensional Standards of the RS40 District (See Section 20-601).

(e) Other Regulations
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) General Development Standards See Article 11.

(2) Landscaping See Article 10.

(3) Off-Street Parking and Loading See Article 9.

(4) Outdoor Lighting See Section 20-1103.

(5) Overlay Districts See Article 3.

(f) Occupancy Limits
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
MU, MIXED USE DISTRICT

(a) **Purpose**
The MU, Mixed Use District, is primarily intended to permit a variety of land uses together in one or more Structures on a site including governmental, retail, office, public and Community Facilities, institutional, religious, and residential uses in a pedestrian-oriented and transit-oriented setting. Retail and service uses that attract and generate foot traffic are encouraged to be located at ground level along the Public Frontage. Development in the Mixed Use District shall include both residential and nonresidential uses.

(b) **Where Appropriate**
The Mixed Use District zoning classification may not be appropriate in all areas of the City of Lawrence. Specific standards apply to Mixed-Use Developments. See Section 20-1108.

(c) **Compatibility**
Mixed-Use developments shall be compatible with existing development which surrounds the proposed Mixed-Use development. Specific standards apply to Mixed-Use Developments. See Section 20-1108.

(d) **Principal Uses**
Principal Uses are allowed in MU District in accordance with the Use Table of Article 4.

(e) **Accessory Uses and Structures**
Accessory Uses and Structures are permitted by right in connection with any lawfully established Principal Use, except as otherwise expressly provided in this Development Code. Also, unless otherwise stated, Accessory Uses are subject to the same regulations as the Principal Use. Accessory Uses and Structures, including Home Occupations, are subject to the regulations of Article 5.

(f) **Density and Dimensional Standards**
All development in the MU District shall comply with the Density and Dimensional Standards of Article 6.

(g) **Other Regulations**
There are a number of other Development standards that may apply to development in Base Districts, including but not limited to the following:

(1) **General Development Standards**
Specific standards apply to Mixed-Use Developments. See Article 11.

(2) **Landscaping**
Specific standards apply to Mixed-Use Developments. See Article 10.

(3) **Off-Street Parking and Loading**
Specific standards apply to Mixed-Use Developments. See Articles 9 & 11.

(4) **Outdoor Lighting**
Specific standards apply to Mixed Use Developments. See Section 20-1103.

(5) **Overlay Districts**
Specific standards apply to Mixed Use Developments. See Article 3.

(h) **Occupancy Limits**
In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-
1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.
### 20-1701 GENERAL TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>A way or means of approach to provide vehicular or pedestrian physical entrance to a property.</td>
</tr>
<tr>
<td>Access, Cross</td>
<td>A service drive providing vehicular Access between two or more contiguous sites so the driver need not enter the public Street system.</td>
</tr>
<tr>
<td>Access Management</td>
<td>The process of managing Access to land development while preserving the regional flow of traffic in terms of safety, capacity and speed.</td>
</tr>
<tr>
<td>Accessory Dwelling Unit</td>
<td>A Dwelling Unit that is incidental to and located on the same Lot as the Principal Building or use, when the Principal Building or use is a Dwelling.</td>
</tr>
<tr>
<td>Accessory Structure</td>
<td>A subordinate Structure, the use of which is clearly incidental to, or customarily found in connection with, and located on the same Lot as the Principal Building or use.</td>
</tr>
<tr>
<td>Accessory Use</td>
<td>A use that is clearly incidental to, customarily found in connection with, and (except in the case of off-Street Parking Space) located on the same Lot as the Principal Use to which it is related.</td>
</tr>
<tr>
<td>Accessway, also Access Drive</td>
<td>Any Driveway, Street, turnout or other means of providing for the movement of vehicles to or from the public roadway system.</td>
</tr>
<tr>
<td>Adult Care Home</td>
<td>See Group Home</td>
</tr>
<tr>
<td>Agent (of Owner or Applicant)</td>
<td>Any person who can show certified written proof that he or she is acting for the Landowner or applicant.</td>
</tr>
<tr>
<td>Airport/Lawrence Municipal Airport</td>
<td>The location from which take-offs and landings may be made by any manned aircraft, excluding free balloons, within the corporate limits of the City of Lawrence, Kansas.</td>
</tr>
<tr>
<td>Airport Hazard</td>
<td>Any Structure or tree or use of land that obstructs the airspace required for the flight of aircraft in landing or taking off at any Airport or is otherwise hazardous to such landing or taking off of aircraft.</td>
</tr>
<tr>
<td>Alley</td>
<td>A public or private way not more than 20 feet wide primarily designed to serve as a secondary means of Access to abutting property.</td>
</tr>
<tr>
<td>Antenna</td>
<td>Any system of wires, poles, rods, reflecting discs or similar devices used for the reception or transmission of electromagnetic waves which system is attached to an Antenna support Structure or attached to the exterior of any Building. The term includes devices having active elements extending in any direction, and directional beam-type arrays having elements carried by and disposed from a generally horizontal boom which may be mounted upon and rotated through a vertical mast, tower or other Antenna support Structure.</td>
</tr>
<tr>
<td>Antenna, Receive-Only</td>
<td>An Antenna capable of receiving but not transmitting electromagnetic waves, including Satellite Dishes.</td>
</tr>
<tr>
<td>Antenna, Amateur Radio</td>
<td>An Antenna owned and utilized by an FCC-licensed amateur radio operator or a citizens band radio Antenna.</td>
</tr>
<tr>
<td>Arterial</td>
<td>A Street classified as an Arterial in the Lawrence/Douglas County MPO Transportation Plan, as amended.</td>
</tr>
<tr>
<td>Arterial Street, Minor</td>
<td>A Street which is anticipated to have 2-4 travel lanes designed for speeds ranging from 30-45 mph and which is defined specifically as such on the Major Thoroughfares Map of the City.</td>
</tr>
<tr>
<td>Arterial Street, Principal</td>
<td>A Street which is anticipated to have 4-6 travel lanes designed for speeds ranging from 30-45 mph and which is defined specifically as such on the Major Thoroughfares Map of the City.</td>
</tr>
<tr>
<td>Assisted Living</td>
<td>Building or group of Buildings containing Dwellings designed for occupancy by persons 55 years or older where the Dwelling Units are independent but include special support services such as central dining and limited medical or nursing care.</td>
</tr>
<tr>
<td>Basement</td>
<td>Any floor level below the first Story in a Building, except that a floor level in a Building having only one floor level shall be classified as a Basement unless such floor level qualifies as a first Story as defined herein.</td>
</tr>
<tr>
<td>Base Density</td>
<td>The number of dwelling units that can be developed on a subject property, rather than the number of dwelling units that are permitted for the zoning district. Base density is the number of dwelling units that can be developed given the size of the parcel, the area required for street rights-of-way or infrastructure, the density and dimensional standards of Section 20-601(a), the environmental protection standards, as well as topographical or other features unique to the property.</td>
</tr>
<tr>
<td>Base District</td>
<td>Any Zoning District delineated on the Official Zoning District Map under the terms and provisions of this Development Code, as amended, for which regulations governing the area, use of Buildings, or use of land, and other regulations relating to the development or maintenance of existing uses or Structures, are uniform; but not including Overlay Zoning Districts.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td><strong>Base District, Special Purpose</strong></td>
<td>A District established to accommodate a narrow or special set of uses or for special purposes. The use of this term in the Development Code applies to Districts beyond the conventional residential, commercial, industrial and agricultural districts. Examples include government and public institutional uses, open space uses, hospital use, planned unit developments that pre-date the Effective Date of this Development Code or newly annexed urban reserve areas.</td>
</tr>
<tr>
<td><strong>Berm</strong></td>
<td>An earthen mound at least two feet (2') above existing Grade designed to provide visual interest, Screen undesirable views and/or decrease noise.</td>
</tr>
<tr>
<td><strong>Bicycle</strong></td>
<td>A two-wheeled vehicle for human transportation, powered only by energy transferred from the operator's feet to the drive wheel.</td>
</tr>
<tr>
<td><strong>Bicycle-Parking Space</strong></td>
<td>An area whose minimum dimensions are two feet by six feet or two feet by four feet for upright storage.</td>
</tr>
<tr>
<td><strong>Big Box</strong></td>
<td>See Retail Establishment, Large.</td>
</tr>
<tr>
<td><strong>Block</strong></td>
<td>A Parcel of land entirely surrounded by public Streets, highways, railroad rights-of-way, public walks, parks or green strips, or drainage channels or a combination thereof.</td>
</tr>
<tr>
<td><strong>Block Face</strong></td>
<td>That portion of a Block or Tract of land facing the same side of a single Street and lying between the closest intersecting Streets.</td>
</tr>
<tr>
<td><strong>Bufferyard</strong></td>
<td>A combination of physical space and vertical elements, such as plants, Berm, fences, or walls, the purpose of which is to separate and Screen changes in land uses from each other.</td>
</tr>
<tr>
<td><strong>Build-to-Line (minimum Building setback)</strong></td>
<td>An imaginary line on which the front of a Building or Structure must be located or built and which is measured as a distance from a public right-of-way.</td>
</tr>
<tr>
<td><strong>Building</strong></td>
<td>Any Structure having a roof supported by columns or walls, used or intended to be used for the shelter or enclosure of persons, animals, or property. When such a Structure is divided into separate parts by one or more walls unpierced by doors, windows, or similar openings and extending from the ground up, each part is deemed a separate Building, except as regards minimum Side Setback requirements as herein provided.</td>
</tr>
<tr>
<td><strong>Building Envelope</strong></td>
<td>The three-dimensional space on a Lot on which a Structure can be erected consistent with existing regulations, including those governing maximum Height and bulk and the Setback lines applicable to that Lot consistent with the underlying Zoning District, or as modified pursuant to a Variance, a site review, or prior City approval.</td>
</tr>
<tr>
<td><strong>Building Frontage</strong></td>
<td>That portion of a Building or Structure that is adjacent to or faces the Public Frontage.</td>
</tr>
<tr>
<td><strong>Building, Principal</strong></td>
<td>A Building in which is conducted the Principal Use of the Building site on which it is situated. In any residential District, any Dwelling shall be deemed to be the Principal Building on the site on which the same is located.</td>
</tr>
<tr>
<td><strong>Building Type (also referred to as housing type)</strong></td>
<td>A residential Structure defined by the number of Dwelling Units contained within.</td>
</tr>
<tr>
<td><strong>Caliper</strong></td>
<td>The American Association of Nurserymen standard for trunk measurement of nursery stock, as measured at six (6) inches above the ground for trees up to and including four-inch Caliper size, and as measured at 12 inches above the ground for larger sizes.</td>
</tr>
<tr>
<td><strong>City Regulations</strong></td>
<td>Provisions of the Lawrence City Code or other provisions located in ordinances adopted by the City.</td>
</tr>
<tr>
<td><strong>Clear Zone</strong></td>
<td>An area designated within the Public Frontage of a Mixed Use Project which reserves space for a sidewalk. The Clear Zone shall be clear of any obstruction to a minimum height of eight (8) above grade.</td>
</tr>
<tr>
<td><strong>Cross Access Agreement</strong></td>
<td>A document signed and acknowledged by Owner of two or more adjoining pieces of property establishing Easements, licenses or other continuing rights for Access across one property to one or more other properties.</td>
</tr>
<tr>
<td><strong>Collector Street</strong></td>
<td>A Street which is anticipated to have two (2) travel lanes designed for speeds ranging from 25-35mph and which serves a collecting function by distributing traffic between local neighborhood Streets and Arterial Streets.</td>
</tr>
<tr>
<td><strong>Collector Street, Minor</strong></td>
<td>See Collector, Residential</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Collector Street,</td>
<td>Residential collector is a special category of collector street characterized by lower speeds &amp; the</td>
</tr>
<tr>
<td>Residential</td>
<td>residential nature of land uses along the corridor. Bicycle &amp; pedestrian facilities are strongly recommended for residential collectors. Various traffic-calming treatments may be used to reduce travel speeds. Residential collector streets with adjacent residential land uses should be limited to two lanes. These streets can serve as a connector street between local streets and the thoroughfare system.</td>
</tr>
<tr>
<td>Collector Street System</td>
<td>A system of one (1) or more Collector Streets that allow traffic to be distributed to at least two (2) Arterial Streets.</td>
</tr>
<tr>
<td>Common Open Space</td>
<td>Land, water, water course, or drainageway within a development that is designed and intended for the use or enjoyment of all the residents and Landowners of the Development. Common Open Space, except for Common Open Space designated as Environmentally Sensitive may contain such supplementary Structures and improvements as are necessary and appropriate for the benefit and enjoyment of all the residents and Landowners of the Development. Common open space shall not include space devoted to streets, alleys, and parking areas. While required setbacks may function as common open space, they may not be used to meet the minimum requirements.</td>
</tr>
<tr>
<td>Comprehensive Plan</td>
<td>The Lawrence/Douglas County Comprehensive Plan, also known as “Horizon 2020,” and any other applicable plans adopted by the Lawrence/Douglas County Metropolitan Planning Commission, as amended or superseded by adoption of a replacement plan from time to time.</td>
</tr>
<tr>
<td>also Comprehensive</td>
<td></td>
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<tr>
<td>Land Use Plan</td>
<td></td>
</tr>
<tr>
<td>Congregate Living</td>
<td>A Dwelling Unit that contains sleeping units where 5 or more unrelated residents share a kitchen and communal living areas and/or bathing rooms and where lodging is provided for compensation for persons who are not transient guests. Congregate Living is commonly referred to as a lodging house, boarding house, rooming house, or cooperative but is not considered a Dormitory, fraternity or sorority house, Assisted Living, Extended Care Facility, Group Home or similar group living use.</td>
</tr>
<tr>
<td>Conservation Easement</td>
<td>A non-possessory interest of a holder in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic or open-space values of real property, assuring its availability for agricultural, forest, recreational or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological or cultural aspects of real property. In case of any conflict between this definition and K.S.A. §58-3810, as it may be amended from time to time, the amended statute shall control and shall be used in the construction and interpretation of this Development Code.</td>
</tr>
<tr>
<td>Deciduous</td>
<td>A tree or Shrub with foliage that is shed annually.</td>
</tr>
<tr>
<td>Deferred Item</td>
<td>An item that has been deferred from a published agenda by the Planning Director, Planning Commission or the City Commission (City or County Commission), or by the applicant.</td>
</tr>
<tr>
<td>Density</td>
<td>A measure of the number of Dwelling Units contained within a given area of land, typically expressed as units per acre.</td>
</tr>
<tr>
<td>Density Bonus</td>
<td>An incentive-based tool that permits property owners to increase the maximum allowable development on a property in exchange for helping the community achieve public policy goals, such as protection of environmentally sensitive areas.</td>
</tr>
<tr>
<td>Density Cap</td>
<td>Maximum density levels set by the Comprehensive Plan. Low-density (6 dwelling units per acre); medium density (15 dwelling units per acre) and high density (24 dwelling units per acre).</td>
</tr>
<tr>
<td>Density, Gross</td>
<td>The numerical value obtained by dividing the total number of Dwelling Units in a development by the total area of land upon which the Dwelling Units are proposed to be located, including rights-of-way of publicly dedicated Streets.</td>
</tr>
<tr>
<td>Density, Net</td>
<td>The numerical value obtained by dividing the total number of Dwelling Units in a development by the area of the actual Tract of land upon which the Dwelling Units are proposed to be located, excluding rights-of-way of publicly dedicated Streets.</td>
</tr>
<tr>
<td>Designated Transit Route</td>
<td>Any bus route identified on the route map published by the Lawrence Transit System or KU on Wheels transit system.</td>
</tr>
<tr>
<td>Development Activity</td>
<td>Any human-made change to Premises, including but not limited to: (a) the erection, conversion, expansion, reconstruction, renovation, movement or Structural Alteration, or partial or total demolition of Buildings and Structures; (b) the subdivision of land; (c) changing the use of land, or Buildings or Structures on land; or (d) mining, dredging, filling, grading, paving, excavation, drilling, or Landscaping of land or bodies of water on land.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Development Project, Major (Ord. 8465)</td>
<td>Any development proposing the following:</td>
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<tr>
<td></td>
<td>a. Any Development Activity on a site that is vacant or otherwise undeveloped; or</td>
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<tr>
<td></td>
<td>b. Any Significant Development Project on a site that contains existing development, defined as:</td>
</tr>
<tr>
<td></td>
<td>1. Any modification to a site that alters Parking Areas, drive aisles, or impacts on-site pedestrian and vehicular circulation and traffic patterns that the Planning Director determines to be significant in terms of impacting adjacent roads or adjacent properties; or</td>
</tr>
<tr>
<td></td>
<td>2. In the IG zoning district, the construction of one or more Building(s) or building additions that contain a Gross Floor Area of fifty percent (50%) or more of the Gross Floor Area of existing Building(s); or</td>
</tr>
<tr>
<td></td>
<td>3. In any zoning district other than IG, the construction of one or more Building(s) or building additions that contain a Gross Floor Area of twenty percent (20%) or more of the Gross Floor Area of existing Building(s); or</td>
</tr>
<tr>
<td></td>
<td>4. Separate incremental Building additions below 50% for IG zoning and 20% for all other zoning districts of the Gross Floor Area of existing Building(s) if the aggregate effect of such Development Activity over a period of 24 consecutive months would trigger the 50% (for IG) or 20% (for all other zoning districts) threshold; or</td>
</tr>
<tr>
<td></td>
<td>5. The installation or addition of more than 50% for IG zoning and 20% for all other zoning districts of existing Impervious Surface coverage.</td>
</tr>
<tr>
<td>Development Project, Minor (Ord. 8465)</td>
<td>Any development proposing the minor modification of a site, as determined by the Planning Director, which does not meet the criteria for a Standard or Major Development Project, or the proposed change in use to a less intensive use on a site which has an approved site plan on file with the Planning Office. Only sites which have an existing approved site plan on file which reflects existing site conditions are eligible for review as a Minor Development Project.</td>
</tr>
</tbody>
</table>
**Term** | **Definition**
---|---
**Development Project, Standard (Ord. 8465)** | a. For any property containing existing development which does not have an approved site plan on file with the Planning Office and which does not meet the criteria for a Major Development Project, any development proposing the following shall be considered a Standard Development Project:

1. a change in use to a less intensive use and where physical modifications to the site, excluding interior Building modifications, are proposed; or

2. A change in use to a more intensive use regardless of whether modifications to the site are proposed; or

3. the substantial modification of a site, defined as:

   a. The construction of any new Building(s) on the site; or

   b. The construction of any Building addition that contains a Gross Floor Area of ten percent (10%) or more of the Gross Floor Area of existing Building(s); or

   c. Separate incremental Building additions below ten percent (10%) of the Gross Floor Area of existing buildings if the aggregate effect of such Development Activity over a period of 24 months would trigger the 10% threshold; or

   d. The addition of Impervious Surface coverage that exceeds 10% of what exists; or

   e. Any modification determined by the Planning Director to be substantial.

b. For property which does have an approved site plan on file with the Planning Office and which does not meet the criteria for a Major Development Project, any development proposing the following shall be considered a Standard Development Project:

1. any change in use of a site to a more intensive use regardless of whether modifications to the site are proposed; or

2. any modification of a site which meets the following criteria or proposes the following:

   a. A modification to a site which alters the Parking Area, drive aisles, or on-site pedestrian and vehicular circulation and traffic patterns with impacts to the interior of the site; or

   b. A development, redevelopment, or modifications to the exterior style, design or material type of a Structure that is subject to the Community Design Manual; or

   c. An outdoor dining or hospitality use in the CD and CN1 Zoning Districts and any outdoor dining use located in any other Zoning District that would result in an increase of the number of Parking Spaces required; or

   d. In the IG zoning district, the construction of one or more new Building(s) or building additions that contain a Gross Floor Area of less than fifty percent (50%) of the Gross Floor Area of existing Building(s); or

   e. In any zoning district other than IG, the construction of one or more new Building(s) or building additions that contain a Gross Floor Area of less than twenty percent (20%) of the Gross Floor Area of existing Building(s); or

   f. In the IG zoning district, the installation or addition of less than fifty percent (50%) of existing Impervious Surface coverage; or

   g. In any zoning district other than IG, the installation or addition of less than twenty percent (20%) of existing Impervious Surface coverage; or

   h. Any modification to an approved site plan on file with the Planning Office which proposes an adjustment to the total land area of the site plan, if determined necessary by the Planning Director.

**Development Zone, Primary** | Land area in a Mixed Use development designated at time of rezoning to the Mixed Use District and reserved for the most intense development proposed for the mixed use development.

**Development Zone, Secondary** | Land area in a Mixed Use development designated at time of rezoning to the Mixed Use District and reserved for less intense development than the Primary Development Zone, but more intense development than the Tertiary Development Zone. The Secondary Development Zone may serve as a transitional zone within a larger Mixed Use Development.

**Development Zone, Tertiary** | Land area in a Mixed Use development designated at time of rezoning to the Mixed Use District and reserved for the least intense development proposed for the mixed use development.

**Dependent Living Facility** | See Extended Care Facility
<table>
<thead>
<tr>
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<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director, Planning</td>
<td>See Planning Director</td>
</tr>
<tr>
<td>Distance Between Structures</td>
<td>The shortest horizontal distance measured between the vertical walls of two Structures as herein defined perpendicular to an axis, all points along which are midway between the vertical walls.</td>
</tr>
<tr>
<td>District, Zoning</td>
<td>A portion of the territory of the City of Lawrence within which certain uniform regulations and requirements or various combinations thereof apply under the provisions of this Chapter.</td>
</tr>
<tr>
<td>Dormitory</td>
<td>A Building occupied as the more-or-less temporary abiding place of individuals who are lodged with or without meals and in which there are more than eight (8) sleeping rooms or 16 sleeping accommodations. As such the rooms are let on a weekly or monthly basis or for greater period of time and are not available to the general public on a nightly basis as distinguished from a hotel. Ingress to and egress from all rooms is made through an inside lobby or office supervised by a person in charge at all hours. General kitchen and eating facilities may be provided for the primary use of the occupants of the Building, provided that the main entrance to these facilities is from within the Building.</td>
</tr>
<tr>
<td>Drip Line</td>
<td>An imaginary ground line around a tree that defines the limits of the tree canopy.</td>
</tr>
<tr>
<td>Driveway</td>
<td>A private drive or way providing Access for vehicles to a single Lot or facility.</td>
</tr>
<tr>
<td>Driveway, Joint-Use</td>
<td>A privately-owned Driveway that provides Access to 2 or more Lots in a commercial or industrial Development, such as in a shopping center (without Lots) or a business or industrial park.</td>
</tr>
<tr>
<td>Driveway, Shared</td>
<td>A single Driveway serving two or more adjoining Lots.</td>
</tr>
<tr>
<td>Driveway Apron (or Approach)</td>
<td>The Driveway area or approach located between the sidewalk and the curb. When there is no sidewalk, the apron or approach shall be defined as extending a minimum of six (6) feet from the back of the curb toward the Lot Line.</td>
</tr>
<tr>
<td>Dwelling</td>
<td>A Building or portion thereof designed or used exclusively as the residence or sleeping place of one or more persons, but not including a tent, trailer, or Mobile Home.</td>
</tr>
<tr>
<td>Dwelling Unit</td>
<td>One room, or a suite of two or more rooms, designed for or used by one Family or Housekeeping Unit for living and sleeping purposes and having only one kitchen or kitchenette.</td>
</tr>
<tr>
<td>Easement</td>
<td>A grant by a property Owner to the use of land by the public, a corporation, or persons for specific purposes such as the construction of utilities, drainageways, pedestrian Access, and roadways.</td>
</tr>
<tr>
<td>Effective Date</td>
<td>The date the ordinance adopting this Development Code takes effect.</td>
</tr>
<tr>
<td>Elderhostel</td>
<td>A Building occupied as the more-or-less temporary abiding place of individuals who are either: 1) participating in a travel-study program at a university or college. These individuals are lodged with or without meals. These Buildings typically contain more than eight (8) sleeping rooms or 16 sleeping accommodations. The rooms are let on a weekly or monthly basis or for greater period of time, but are not available to the general public on a nightly basis, as distinguished from a hotel. Ingress to and egress from all rooms is made through an inside lobby or office supervised by a person in charge at all hours. General kitchen and eating facilities may be provided for the primary use of the occupants of the Building, provided that the main entrance to these facilities is from within the Building.</td>
</tr>
<tr>
<td>Evergreen (Coniferous) Tree</td>
<td>An Evergreen Tree, usually of pine, spruce or juniper genus, bearing cones and generally used for its Screening qualities. A Coniferous Tree may be considered a Shade Tree if it is at least five (5) feet in Height when planted and reaches a mature Height of at least 20 feet.</td>
</tr>
<tr>
<td>Extended Care Facility (Dependent Living or Nursing Care Facility), General</td>
<td>A long term facility or a distinct part of an institution occupied by nine (9) or more persons with a disability who require the provision of health care services under medical supervision for twenty-four (24) or more consecutive hours and who need not be related by blood or marriage. An Extended Care Facility must be licensed by one (1) or more of the following regulatory agencies of the State: Department of Social and Healing Arts, Behavioral Sciences Regulatory Board, State Board of Healing Arts, or Kansas Department on Aging. Disability means, with respect to a person: (a) a physical or mental impairment which substantially limits one (1) or more of such person’s major life activities; (b) a record of having such impairment; or (c) being regarded as having such impairment. Such term does not include current illegal use or addiction to a controlled substance, as defined in Sec. 102 of the Controlled Substance Act (21 U.S.C.802). Extended Care Facilities include facilities for the provision of skilled nursing care, hospice care and similar services.</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td><strong>Extended Care Facility (Dependent Living or Nursing Care Facility), Limited</strong></td>
<td>A long term facility or a distinct part of an institution occupied by not more than ten (10) persons, including eight (8) or fewer persons with a disability who need not be related by blood or marriage, and who require the provision of health care services under medical supervision for twenty-four (24) or more consecutive hours, and also not to be occupied by more than two (2) staff residents who need not be related by blood or marriage to each other or to other residents of the home. An Extended Care Facility must be licensed by one (1) or more of the following regulatory agencies of the State: Department of Social and Healing Arts, Behavioral Sciences Regulatory Board, State Board of Healing Arts, or Kansas Department on Aging. Disability means, with respect to a person: (a) a physical or mental impairment which substantially limits one (1) or more of such person’s major life activities; (b) a record of having such impairment; or (c) being regarded as having such impairment. Such term does not include current illegal use or addiction to a controlled substance, as defined in Sec. 102 of the Controlled Substance Act (21U.S.C.802). Extended Care Facilities include facilities for the provision of skilled nursing care, hospice care and similar services.</td>
</tr>
<tr>
<td><strong>Extended Stay Lodging</strong></td>
<td>A Building, including a single-Family residence, or group of Buildings providing living and sleeping accommodations for short-term occupancy, typically three (3) months or less. Bed &amp; Breakfasts, hotels and motels are not considered extended stay facilities, although hotels and motels may provide this service. Extended stay facilities using single-Family Dwellings are not considered rental housing and are not subject to the rental licensing provisions of the City.</td>
</tr>
<tr>
<td><strong>Exterior Storage</strong></td>
<td>Outdoor storage of any and all materials related to the principal use of the Lot or site, not including areas for special events, temporary outdoor events or seasonal events, transient merchant sales areas, or any other outdoor area dedicated to the sale of retail goods, regardless of the proprietor. Outdoor storage and sales areas, open to the public and in which transactions may occur are not considered Exterior Storage areas.</td>
</tr>
<tr>
<td><strong>Facade</strong></td>
<td>Exterior face (side) of a Building which is the architectural front, sometimes distinguished by elaboration or architectural or ornamental details.</td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td>(1) A person living in a Dwelling Unit alone; (2) two or more persons related by blood, marriage, or legal adoption, living in a Dwelling Unit together; (3) (a) in an RS Zoning District Districts, a group of not more than three persons, not related by blood or marriage, or legal adoption, living together as a single Housekeeping Unit in a Dwelling Unit together, as distinguished from a group of persons occupying a Dormitory, Congregate Living, motel, hotel, fraternity house or sorority house; or (4) (b) in a Zoning District other than RS non-RS Districts, a group of not more than four persons, not related by blood or marriage, or legal adoption, living in a Dwelling Unit together, as a single Housekeeping Unit in a Dwelling Unit, as distinguished from a group of persons occupying a Dormitory, Congregate Living, motel, hotel, fraternity house or sorority house. For the purpose of this definition, “living in a Dwelling Unit” shall mean residing or sleeping at a Dwelling Unit the majority of a person’s time.</td>
</tr>
<tr>
<td><strong>Floodplain</strong></td>
<td>The land inundated by a flood of a given magnitude as determined by the Flood Insurance Study or by an approved Hydrologic &amp; Hydraulic Study.</td>
</tr>
<tr>
<td><strong>Floor Area</strong></td>
<td>The sum of the horizontal areas of each floor of a Building, measured from the interior faces of the exterior walls or from the centerline of walls separating two Buildings.</td>
</tr>
<tr>
<td><strong>Floor Area, Gross</strong></td>
<td>The sum of the horizontal areas of the several stories of a Building, measured from the exterior faces of exterior walls, or in the case of a common wall separating two Buildings, from the centerline of such common wall.</td>
</tr>
<tr>
<td><strong>Floor Area, Net</strong></td>
<td>The horizontal area of a floor or several floors of a Building or Structure; excluding those areas not directly devoted to the principal or Accessory Use of the Building or Structure, such as storage areas or stairwells, measured from the exterior faces of exterior or interior walls.</td>
</tr>
<tr>
<td><strong>Floor Area Ratio (F.A.R.)</strong></td>
<td>The sum of the horizontal areas of the several floors inside the exterior walls (excluding basements) of a Building or a portion thereof divided by the Lot Area.</td>
</tr>
<tr>
<td><strong>Foot-candle</strong></td>
<td>A unit of measurement referring to the illumination incident to a single point. One (1) Foot-Candle is equal to one (1) lumen uniformly distributed over an area of one (1) square foot.</td>
</tr>
<tr>
<td><strong>Frontage</strong></td>
<td>All the property on one side of a Thoroughfare between two intersecting Thoroughfares (crossing or terminating), or if the Thoroughfare is Dead-Ended, then all of the property abutting on one side between an intersecting Thoroughfare and the Dead-End.</td>
</tr>
<tr>
<td><strong>Frontage Road, Private</strong></td>
<td>Any thoroughfare that is not publicly owned and maintained and that is parallel and adjacent to any Lot Frontage as defined above.</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td>The lowest point of elevation of the finished surface of the ground, paving or sidewalk within the area between the Building and the Lot Line or, when the Lot Line is more than 5 feet from the Building, between the Building and a line five feet from the Building.</td>
</tr>
<tr>
<td><strong>Greek Housing</strong></td>
<td>A group living Structure occupied by a university approved fraternity or sorority, certified by the Panhellenic Association or Intraraternity Council at KU. Residential occupancy by the majority of residences primarily follows the academic calendar for fall and spring semesters each year.</td>
</tr>
<tr>
<td>Term</td>
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<tr>
<td><strong>Ground Cover</strong></td>
<td>Living Landscape Materials or living low-growing plants other than turf grasses, installed in such a manner so as to provide a continuous cover of the ground surface and which, upon maturity, normally reach an average maximum Height of not greater than 24 inches.</td>
</tr>
<tr>
<td><strong>Ground Floor</strong></td>
<td>A level of Building floor which is located not more than 2 feet below nor 6 feet above finished Grade.</td>
</tr>
<tr>
<td><strong>Group Home (or Adult Care Home), General</strong></td>
<td>Any Dwelling occupied by 11 or more persons, including eight (8) or more persons with a disability who need not be related by blood or marriage and staff residents who need not be related by blood or marriage to each other or to other residents of the home. The Dwelling is licensed by one (1) or more of the following regulatory agencies of the State: Dept. of Social and Healing Arts, Behavioral Sciences Regulatory Board, or State Board of Healing Arts. Disability means, with respect to a person: (a) a physical or mental impairment which substantially limits one (1) or more of such person’s major life activities; (b) a record of having such impairment; or (c) being regarded as having such impairment. Such term does not include current illegal use or addiction to a controlled substance, as defined in Sec. 102 of the Controlled Substance Act (21U.S.C.802). A Special Use Permit is required before operation of the home can begin.</td>
</tr>
<tr>
<td><strong>Group Home (or Adult Care Home), Limited</strong></td>
<td>Any Dwelling occupied by not more than ten (10) persons, including eight (8) or fewer persons with a disability who need not be related by blood or marriage and not to exceed two (2) staff residents who need not be related by blood or marriage to each other or to other residents of the home. The Dwelling is licensed by one (1) or more of the following regulatory agencies of the State: Dept. of Social and Healing Arts, Behavioral Sciences Regulatory Board, or State Board of Healing Arts. Disability means, with respect to a person: (a) a physical or mental impairment which substantially limits one (1) or more of such person’s major life activities; (b) a record of having such impairment; or (c) being regarded as having such impairment. Such term does not include current illegal use or addiction to a controlled substance, as defined in Sec. 102 of the Controlled Substance Act (21U.S.C.802).</td>
</tr>
<tr>
<td><strong>Growing or Planting Season</strong></td>
<td>From the beginning of March to the end of June and from the beginning of September to the beginning of December.</td>
</tr>
<tr>
<td><strong>Height (Building)</strong></td>
<td>Refers to the vertical distance from the finished Grade, or base flood elevation where applicable, to the highest point of the coping of: a flat roof, the deck line of a mansard roof, or the average Height of the highest gable of a pitch or hip roof.</td>
</tr>
<tr>
<td><strong>Historic Resources Commission (HRC)</strong></td>
<td>The Commission established by Sections 22-201 – 22-205, part of the Conservation of Historic Resources of the Code of the City of Lawrence</td>
</tr>
<tr>
<td><strong>Home Occupation</strong></td>
<td>An Accessory Use that complies with the provisions of Section 20-537.</td>
</tr>
<tr>
<td><strong>Housekeeping Unit</strong></td>
<td>A suite of one or more rooms having separate cooking facilities, used as the domicile or home of one Family.</td>
</tr>
<tr>
<td><strong>Housing for the Elderly</strong></td>
<td>See Assisted Living or Extended Care Facility</td>
</tr>
<tr>
<td><strong>HRC</strong></td>
<td>See Historic Resources Commission</td>
</tr>
<tr>
<td><strong>Hydrologic and Hydraulic Study</strong></td>
<td>See Hydrologic and Hydraulic Study definition in Section 20-1205</td>
</tr>
<tr>
<td><strong>Impervious Surface</strong></td>
<td>That portion of developed property which contains hard-surfaced areas (primed and sealed AB3, asphalt, concrete and Buildings) which either prevent or retard the entry of water into the soil material.</td>
</tr>
<tr>
<td><strong>Inactive File</strong></td>
<td>An application, either complete or incomplete, which has had no new information submitted within a period of twelve (12) or more months. New information within this context shall be information that responds to a request for additional information or that provides additional information essential to completing a review of the request in response to the land use review criteria, retail market information, or traffic impact analysis.</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>Those man-made Structures which serve the common needs of the populations, such as: potable water systems, wastewater disposal systems, solid waste disposal sites or retention areas, storm drainage systems, electric, gas or other utilities, bridges, roadways, Bicycle paths or trails, pedestrian sidewalks, paths or trails and transit stops.</td>
</tr>
<tr>
<td><strong>Jurisdictional Wetland</strong></td>
<td>Wetlands which are regulated by Section 404 of the Clean Water Act and are under the regulatory jurisdiction of the Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA).</td>
</tr>
<tr>
<td><strong>Landowner</strong></td>
<td>See Owner</td>
</tr>
<tr>
<td><strong>Landscaped Peninsula</strong></td>
<td>A concrete curbed planting area typically found in Parking Lots to provide areas for trees and Shrubs between Parking Spaces and along the terminus of single and double Parking aisles.</td>
</tr>
<tr>
<td><strong>Landscape Material</strong></td>
<td>Such living material as trees, Shrubs, Ground Cover/vines, turf grasses, and non-living material such as: rocks, pebbles, sand, bark, brick pavers, earthen mounds (excluding pavement), and/or other items of a decorative or embellishing nature such as: fountains, pools, walls, fencing, sculpture, etc.</td>
</tr>
<tr>
<td><strong>Landscaping</strong></td>
<td>Any combination of living plants such as trees, Shrubs, plants, vegetative Ground Cover or turf grasses. May include structural features such as walkways, fences, benches, works of art, reflective pools, fountains or the like. Landscaping shall also include irrigation systems, Mulches, topsoil use, soil preparation, re-vegetation or the preservation, protection and replacement of trees.</td>
</tr>
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<td>Term</td>
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<tr>
<td>Licensed Premises</td>
<td>A Premises where alcoholic liquor or cereal malt beverages, or both, by the individual drink as defined by K.S.A. Chapter 41, and amendments thereto, is served or provided for consumption or use on the Premises with or without charge. This term shall include drinking establishments, Class A Private Clubs, Class B Private Clubs, and cereal malt beverage retailers, all as defined by K.S.A. Chapter 41, and amendments thereto and City Regulations.</td>
</tr>
<tr>
<td>Light Court</td>
<td>An area within the Public Frontage in a Mixed Use development adjacent to the Building Frontage which provides a means of outdoor light to reach an underground level of a Structure. It may also provide a means of emergency exit from the Structure but shall not serve as a primary entrance or exit to the Structure.</td>
</tr>
<tr>
<td>Light Truck</td>
<td>A truck or other motor vehicle, one ton or less in rated capacity, with a single rear axle and single pair of rear wheels.</td>
</tr>
<tr>
<td>Livestock</td>
<td>Any animal customarily kept for producing food or fiber.</td>
</tr>
<tr>
<td>Local Street</td>
<td>A Street which is anticipated to have two (2) travel lanes at desirable speeds of up to 30mph and which provides Access to abutting property and primarily serves local traffic.</td>
</tr>
<tr>
<td>Local Street System</td>
<td>A system of two (2) or more Local Streets that allow traffic to be distributed throughout a neighborhood.</td>
</tr>
<tr>
<td>Lot</td>
<td>A contiguous Parcel or Tract of land located within a single Block fronting on a dedicated public Street that is occupied or utilized, or designated to be occupied, developed, or utilized, as a unit under single Ownership or control. A Lot may or may not coincide with a Lot shown on the official tax maps or on any recorded subdivision or deed.</td>
</tr>
<tr>
<td>Lot Area</td>
<td>The total horizontal area within the Lot Lines of a Lot.</td>
</tr>
<tr>
<td>Lot Frontage</td>
<td>See Frontage</td>
</tr>
<tr>
<td>Lot, Corner</td>
<td>A Lot abutting upon two or more Streets at their intersection, or upon two parts of the same Street, such Streets or part of the same Street forming an angle of more than 45° and of less than 135°. The point of intersection of the Street Lines is the corner. Any portion of a Corner Lot that is more than 100 feet from the point of intersection of the two Street Lines or the two tangents of the same Street shall not be considered a Corner Lot.</td>
</tr>
<tr>
<td>Lot, Through</td>
<td>A Lot abutting two Streets, not at their intersection. Any Lot meeting the definition of Corner Lot shall not be considered a Through Lot; any Lot abutting two Streets and not meeting the definition of a Corner Lot shall be considered a Through Lot.</td>
</tr>
<tr>
<td>Lot Depth</td>
<td>The mean horizontal distance between the Front Lot Line and Rear Lot Line of a Lot.</td>
</tr>
<tr>
<td>Lot Line</td>
<td>A boundary of a Lot.</td>
</tr>
<tr>
<td>Lot Line, Exterior Side</td>
<td>A Side Lot Line separating a Lot from a Street other than an Alley.</td>
</tr>
<tr>
<td>Lot Line, Front</td>
<td>The Street Line at the front of a Lot. On Corner Lots, the Landowner may choose either Street Frontage as the Front Lot Line.</td>
</tr>
<tr>
<td>Lot Line, Rear</td>
<td>The Lot Line opposite and most distant from, and parallel or closest to being parallel to, the Front Lot Line. A triangular Lot has no Rear Lot Line.</td>
</tr>
<tr>
<td>Lot Line, Side</td>
<td>A Lot Line that is not a Front Lot Line or Rear Lot Line.</td>
</tr>
<tr>
<td>Lot Width</td>
<td>Lot Width is the distance between Side Lot Lines measured at the point of the required Front Setback or chord thereof.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Manufactured Home</td>
<td>Any Structure that is manufactured to the standards embodied in the National Manufactured Home Construction and Safety Standards (generally know as the HUD Code) established in 1976 pursuant to 42 U.S.C. Sec. 5403, but does not comply with the standards and provisions of Section 20-513.</td>
</tr>
<tr>
<td>Manufactured Home, Residential-Design</td>
<td>Any Structure that is manufactured to the standards embodied in the National Manufactured Home Construction and Safety Standards (generally know as the HUD Code) established in 1976 pursuant to 42 U.S.C. Sec. 5403 and that also complies with the standards and provisions of Section 20-513. (Ord. 8098)</td>
</tr>
<tr>
<td>Massing</td>
<td>The size and shape of Structure(s) individually and their arrangements relative to other Structure(s).</td>
</tr>
<tr>
<td>Mature Trees, Stand of</td>
<td>An area of ½ acre (21,780 sq ft) or more located on the development land area, per Section 20-1101(d)(2)(i) or on other contiguous residentially zoned properties containing trees that are 25 feet or more in height, or are greater than 8&quot; caliper, in an amount adequate to form a continuous or nearly continuous canopy. (Canopy may be determined from resources such as, but not limited to, NAIP, National Agricultural Imaging Program; City/County GIS aerials; and field surveys.)</td>
</tr>
<tr>
<td>Minimum Elevation of Building Opening</td>
<td>The minimum elevation above sea level at which a Building located in the Floodplain may have a door, window, or other opening.</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>The development of a Lot, Tract or Parcel of land, Building or Structure with two (2) or more different uses including, but not limited to: residential, office, retail, public uses, personal service or entertainment uses, designed, planned and constructed as a unit.</td>
</tr>
<tr>
<td>Mixed Use Structure, Horizontal</td>
<td>A Building or Structure containing both nonresidential and residential uses distributed horizontally throughout the Structure.</td>
</tr>
<tr>
<td>Mixed Use Structure, Vertical</td>
<td>A Building or Structure, a minimum of two stories in height, containing both nonresidential and residential uses distributed vertically throughout the Structure.</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>Any vehicle or similar portable Structure having no foundation other than wheels or jacks or skirtings and so designed or constructed as to permit occupancy for Dwelling or sleeping purposes. Mobile Home includes any Structure that otherwise meets this description, but that was not subject to the National Manufactured Home Construction and Safety Standards (generally known as the HUD Code), established in 1976 pursuant to 42 U.S.C. Sec. 5403, at the time it was manufactured. Mobile Homes are considered to be Dwelling Units only when they are parked in a Mobile Home Park.</td>
</tr>
<tr>
<td>Moderately-Priced Dwelling Unit</td>
<td>A Dwelling Unit marketed and reserved for occupancy by a household whose income is equal to or less than 80% of the City of Lawrence’s median household income, as defined by the most current U.S. Department of Housing and Urban Development (HUD) guidelines.</td>
</tr>
<tr>
<td>Mulch</td>
<td>Non-living organic material customarily used to retard soil erosion and retain moisture.</td>
</tr>
<tr>
<td>Native Prairie Remnants</td>
<td>Prairie areas that have remained relatively untouched on undeveloped, untilled portions of properties that are 'native prairies'. Native prairie remnants will be confirmed by the Kansas Biological Survey, or a consulting firm with local expertise in these habitats, as areas that have remained primarily a mixture of native grasses interspersed with native flowering plants. (These areas have not been planted, but are original prairies). A list of approved consulting firms for prairie determination is available in the Planning Office.</td>
</tr>
<tr>
<td>Natural Drainageway</td>
<td>Natural rivers, streams, channels, creeks or other areas that naturally convey Stormwater runoff or portions thereof that have not been channelized and which is unaltered and retains a predominantly natural character.</td>
</tr>
<tr>
<td>Natural Open Space</td>
<td>Common Open Space that includes undisturbed natural resources, such as Floodplains, Wetlands, steep slopes, and Woodlands.</td>
</tr>
<tr>
<td>Nodal Development Plan</td>
<td>A land use plan for all four corners of an intersection that applies to the redevelopment of existing commercial center areas or new commercial development for neighborhood, community or regional commercial centers, as described in Horizon 2020, and is designed to avoid continuous lineal and shallow Lot Depth developments along Street corridors through the use of natural and man-made physical characteristics to create logical terminus points for the Node.</td>
</tr>
<tr>
<td>Node</td>
<td>An identifiable grouping of uses subsidiary and dependent upon a larger urban grouping of similar related uses.</td>
</tr>
<tr>
<td>Non-encroachable Area</td>
<td>That portion of a Lot or development set aside for enjoyment of the natural features or sensitive areas contained within it that cannot be encroached upon by Building or Development Activity, excluding encroachment for common maintenance needs of the land, its vegetation, natural stream beds, etc.</td>
</tr>
<tr>
<td>Nursing Care Facility</td>
<td>See Extended Care Facility</td>
</tr>
<tr>
<td>Official Zoning District Map</td>
<td>A map or maps outlining the various Zoning District boundaries of the City of Lawrence, Kansas.</td>
</tr>
<tr>
<td>Open Porch</td>
<td>A roofed space attached to a Building on one side and open on the three remaining sides.</td>
</tr>
<tr>
<td>Open Use of Land</td>
<td>A use that does not involve improvements other than grading, drainage, fencing, surfacing, signs, utilities, or Accessory Structures: Open uses of land include, but are not limited to, auction yards, auto wrecking yards, junk and salvage yards, dumps, sale yards, storage yards and race tracks.</td>
</tr>
<tr>
<td>Term</td>
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</tr>
<tr>
<td>Ornamental Tree</td>
<td>A Deciduous tree possessing qualities such as flowers, fruit, attractive foliage, bark or shape, with a mature Height generally under 40 feet.</td>
</tr>
<tr>
<td>Outdoor Use Zone</td>
<td>An area designated for outdoor use by a nonresidential or residential tenant within the Public Frontage in a Mixed Use development. At ground level, Outdoor Use Zones may include sidewalk dining, sidewalk sales, product demonstrations or any use accessory and incidental to a permitted nonresidential use in the Mixed Use District. Outdoor Use Zones may also include upper level uses such as balconies or terraces as well as Building-mounted signs.</td>
</tr>
<tr>
<td>Overlay Zoning District (or Overlay Zoning District)</td>
<td>Any Zoning District included in this Development Code with the word “overlay” in its title. The Overlay Zoning District regulations are found in Article 3 of this Development Code.</td>
</tr>
<tr>
<td>Owner</td>
<td>An individual, association, partnership or corporation having legal or equitable title to land other than legal title held only for the purpose of security. For the purpose of notice, the Owner may be determined using the latest Douglas County Appraiser’s assessment roll.</td>
</tr>
<tr>
<td>Parcel</td>
<td>A Lot or contiguous tracts owned and recorded as the property of the same persons or controlled by a single entity.</td>
</tr>
<tr>
<td>Parking Access</td>
<td>Any public or private area, under or outside a Building or Structure, designed and used for parking motor vehicles including parking Lots, garages, private Driveways and legally designated areas of public Streets.</td>
</tr>
<tr>
<td>Parking Area</td>
<td>An area devoted to off-Street Parking of vehicles on any one Lot for public or private use.</td>
</tr>
<tr>
<td>Parking Space</td>
<td>A space for the parking of a motor vehicle or Bicycle within a public or private Parking Area. Typically Parking Spaces for private uses are located off the public right-of-way.</td>
</tr>
<tr>
<td>Peak Hour</td>
<td>The four (4) highest contiguous 15-minute traffic volume periods.</td>
</tr>
<tr>
<td>Pedestrian Scale (human scale)</td>
<td>Means the proportional relationship between the dimensions of a Building or Building element, Street, outdoor space or Streetscape element and the average dimensions of the human body, taking into account the perceptions and walking speed of a typical pedestrian.</td>
</tr>
<tr>
<td>Planned Development</td>
<td>Developments processed and considered in accordance with the procedures specified in the Planned Development Overlay Zoning District provisions of Sec. 20-701 and in the Cluster Housing Projects provisions of Sec. 20-702. Generally, an area of land controlled by the Landowner to be developed as a single entity, commonly pursuant to an Overlay Zoning District, for a number of Dwelling Units, office uses, commercial uses, or combination thereof, if any, wherein a development plan detailing the proposed development and adjacent areas directly impacted thereby is reviewed and approved by the appropriate decision maker. In approving the development plan, the decision maker may simultaneously modify specified standards of the Base District.</td>
</tr>
<tr>
<td>Planning Commission</td>
<td>The Lawrence-Douglas County Metropolitan Planning Commission established by City Ordinance 395/ County Resolution 69-8 on March 24th, 1969.</td>
</tr>
<tr>
<td>Planning Director</td>
<td>The Director of the Lawrence-Douglas County Metropolitan Planning Commission or her or his designee.</td>
</tr>
<tr>
<td>Premises</td>
<td>A Lot, together with all Buildings and Structures thereon.</td>
</tr>
<tr>
<td>Principal Building</td>
<td>See Building, Principal</td>
</tr>
<tr>
<td>Principal Use</td>
<td>The primary purpose for which land or a Structure is utilized, based in part on the amount of Floor Area devoted to each identifiable use. The main use of the land or Structures as distinguished from a secondary or Accessory Use.</td>
</tr>
<tr>
<td>Public Frontage</td>
<td>The publicly-owned layer between the Lot line or Street Line and the edge of the vehicular lanes. The public frontage may include sidewalks, street planters, trees and other vegetated landscaping, benches, lamp posts, and other street furniture.</td>
</tr>
<tr>
<td>Public Frontage, Primary</td>
<td>The Public Frontage along a designated Primary Development Zone. Primary Public Frontages are commonly associated with pedestrian-oriented urban commercial and retail areas in Mixed Use settings. They are commonly served by or are accessible to public transit and may contain medium to high residential densities and Vertical Mixed Use Structures. Primary Public Frontages are designed to accommodate heavy pedestrian traffic, street vendors and sidewalk dining and typically consist of a sidewalk or clear area paved from the back of curb of the Thoroughfare to the Building Frontage or Right-of-way line, reserving space for street furniture.</td>
</tr>
<tr>
<td>Public Frontage, Secondary</td>
<td>The Public Frontage along a designated Secondary Development Zone. Secondary Public Frontages are commonly associated with pedestrian-oriented Thoroughfares and Mixed Use settings. They are designed to accommodate moderate amounts of pedestrian traffic and typically consist of a sidewalk or clear area adjacent to the Building Frontage or Right-of-way line, reserving space for street furniture, and a landscaped strip with street trees between the back of curb of the Thoroughfare and the sidewalk or clear area.</td>
</tr>
<tr>
<td>Public Frontage, Tertiary</td>
<td>The Public Frontage along a designated Tertiary Development Zone. Tertiary Public Frontages are commonly associated with pedestrian-friendly Thoroughfares in lower intensity mixed residential settings, consisting of a 5’ wide sidewalk and street trees. Tertiary Public Frontages are designed to accommodate pedestrians who seek to walk to a nearby destination.</td>
</tr>
<tr>
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<tr>
<td>Recreational Open Space</td>
<td>Common Open Space that is improved and set aside, dedicated, or reserved for recreational facilities such as swimming pools, play equipment for children, ball fields, ball courts, and picnic tables.</td>
</tr>
<tr>
<td>Recyclable Materials</td>
<td>Reusable materials including but not limited to metals, glass, plastic, paper and yard waste, which are intended for remanufacture or reconstitution for the purpose of using the altered form. Recyclable Materials do not include refuse or hazardous materials. Recyclable Materials may include used motor oil collected and transported in accordance with environmental and sanitation codes.</td>
</tr>
<tr>
<td>Registered Neighborhood Association</td>
<td>A neighborhood or local interest group that represents a defined area of the City and that has registered with the Planning Director in accordance with the applicable registration procedures of the Planning Director.</td>
</tr>
<tr>
<td>Regulatory Flood</td>
<td>See Base Flood definition in Article 12.</td>
</tr>
<tr>
<td>Regulatory Floodplain</td>
<td>See Floodplain definition in Article 12.</td>
</tr>
<tr>
<td>Regulatory Floodway</td>
<td>See Floodway definition in Article 12.</td>
</tr>
<tr>
<td>Regulatory Floodway Fringe</td>
<td>See Floodway Fringe definition in Article 12.</td>
</tr>
<tr>
<td>Residential Collector</td>
<td>See Collector, Residential</td>
</tr>
<tr>
<td>Residential-Design Manufactured Home</td>
<td>See Manufactured Home, Residential-Design</td>
</tr>
<tr>
<td>Retail Establishment, Large</td>
<td>An establishment engaged in retail sales, where the aggregate of retail uses within a Building is 100,000 or more gross square feet of Floor Area that may or may not include ancillary uses with internal Access from the Principal Use Building.</td>
</tr>
<tr>
<td>Retail Establishment, Medium</td>
<td>An establishment engaged in retail sales, provided the aggregate of retail uses within a Building is less than 100,000 gross square feet of Floor Area.</td>
</tr>
<tr>
<td>Retail Establishment, Specialty</td>
<td>An establishment engaged in retail sales where new or used goods or secondhand personal property is offered for sale to the general public by a multitude of individual vendors, usually from compartmentalized spaces within a Building. A specialty retail sales establishment shall not exceed 100,000 gross square feet of Floor Area and may have an unlimited number of individual vendors within it.</td>
</tr>
<tr>
<td>Root System Zone</td>
<td>A subsurface area designated within the Public Frontage in a Mixed Use development. Such zones shall reserve space for the root system of street trees and landscaping planted in the Street Tree &amp; Furniture Zone.</td>
</tr>
<tr>
<td>Sadomasochistic Practices</td>
<td>Flagellation or torture by or upon a person clothed or naked, or the condition of being fettered, bound, or otherwise physically restrained on the part of one so clothed or naked.</td>
</tr>
<tr>
<td>Satellite Dish</td>
<td>A dish Antenna, with ancillary communications equipment, whose purpose is to receive communication or other signals from orbiting satellites and other extraterrestrial sources and carry them into the interior of a Building.</td>
</tr>
<tr>
<td>Scale</td>
<td>A quantitative measure of the relative Height and Massing of Structure(s) Building(s) and spaces.</td>
</tr>
<tr>
<td>Screen or Screening</td>
<td>A method of visually shielding, obscuring, or providing spatial separation of an abutting or nearby use or Structure from another by fencing, walls, Berms, or densely planted vegetation, or other means approved by the Planning Director.</td>
</tr>
<tr>
<td>Setback</td>
<td>The minimum horizontal distance by which any Building or Structure must be separated from a street right-of-way or Lot line. (See also 20-602(e))</td>
</tr>
<tr>
<td>Setback, Front</td>
<td>The Setback required between a Building and the Front Lot Line. (See also 20-602(e))</td>
</tr>
</tbody>
</table>

[Diagram of Setback]
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Setback, Rear</strong></td>
<td>The Setback required between a Building and the Rear Lot Line.</td>
</tr>
<tr>
<td><strong>Setback, Side</strong></td>
<td>The Setback required between a Building and the Side Lot Line.</td>
</tr>
<tr>
<td><strong>Setback, Side (Exterior)</strong></td>
<td>The Setback required between a Building and the Exterior Side Lot Line.</td>
</tr>
<tr>
<td><strong>Setback, Side (Interior)</strong></td>
<td>The Setback required between a Building and the Interior Side Lot Line.</td>
</tr>
<tr>
<td><strong>Sexually Oriented Media</strong></td>
<td>Magazines, books, videotapes, movies, slides, CD-ROMs or other devices used to record computer images, or other media that are distinguished or characterized by their emphasis on matter depicting, describing or relating to Specified Sexual Activities or Specified Anatomical Areas.</td>
</tr>
<tr>
<td><strong>Sexually Oriented Novelties</strong></td>
<td>Instruments, devices or paraphernalia either designed as representations of human genital organs or female breasts, or designed or marketed primarily for use to stimulate human genital organs.</td>
</tr>
<tr>
<td><strong>Shade Tree</strong></td>
<td>Usually a Deciduous tree, rarely an Evergreen; planted primarily for its high crown of foliage or overhead Canopy.</td>
</tr>
<tr>
<td><strong>Shared Parking</strong></td>
<td>Development and use of Parking Areas on two (2) or more separate properties for joint use by the businesses or Owner of these properties.</td>
</tr>
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</table>
### Article 17– Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Shrub</strong></td>
<td>A Deciduous, Broadleaf, or Evergreen plant, smaller than an Ornamental Tree and larger than Ground Cover, consisting of multiple stems from the ground or small branches near the ground, which attains a Height of 24 inches.</td>
</tr>
<tr>
<td><strong>Significant Development Project</strong></td>
<td>1. Any modification to a site that alters Parking Areas, drive aisles, or impacts on-site pedestrian and vehicular circulation and traffic patterns that the Planning Director determines to be significant in terms of impacting adjacent roads or adjacent properties; or 2. In the IG zoning district, the construction of one or more Building(s) or building additions that contain a Gross Floor Area of fifty percent (50%) or more of the Gross Floor Area of existing Building(s); or 3. In any zoning district other than IG, the construction of one or more Building(s) or building additions that contain a Gross Floor Area of twenty percent (20%) or more of the Gross Floor Area of existing Building(s); or 4. Separate incremental Building additions below 50% for IG zoning and 20% for all other zoning districts of the Gross Floor Area of existing Buildings if the aggregate effect of such Development Activity over a period of 24 consecutive months would trigger the 50% (for IG) or 20% (for all other zoning districts) threshold; or 5. The installation or addition of more than 50% for IG zoning and 20% for all other zoning districts of existing Impervious Surface coverage.</td>
</tr>
<tr>
<td><strong>Slip Road</strong></td>
<td>A road which provides access to and runs a course parallel to an Arterial Street or other limited access street or highway. Slip Roads are commonly used along boulevards to provide access to adjacent properties, on-street parking, and to buffer high-speed traffic lanes from pedestrian areas. Slip roads may also be known as access roads.</td>
</tr>
<tr>
<td><strong>Special Purpose Base District</strong></td>
<td>See Base District, Special Purpose</td>
</tr>
<tr>
<td><strong>Specified Anatomical Areas</strong></td>
<td>(1) Less than completely and opaquely covered: human genitals, pubic region, buttock and female breast below a point immediately above the top of the areola; and (2) human male genitals in a discernibly turgid State, even if completely and opaquely covered.</td>
</tr>
<tr>
<td><strong>Specified Sexual Activities</strong></td>
<td>Human genitals in a State of sexual stimulation or arousal or acts of human masturbation, sexual intercourse or sodomy or fondling or other erotic touching of human genitals, pubic region, buttock or female breast.</td>
</tr>
<tr>
<td><strong>Story</strong></td>
<td>That portion of a Building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost Story shall be that portion of a Building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a Basement or unused under-floor space is more than six (6) feet above Grade as defined herein for more than 50% of the total perimeter or is more than 12 feet above Grade as defined herein at any such point, or unused under-floor space shall be considered a Story.</td>
</tr>
<tr>
<td><strong>Stream Corridor</strong></td>
<td>A strip of land 100 feet wide, of which the centerline shall be the centerline of a stream that is not ephemeral stream: a stream where flow occurs for only a short time after extreme storms and does not have a well-defined channel, similar to a drainage way.</td>
</tr>
<tr>
<td><strong>Street, Arterial</strong></td>
<td>Arterial Streets are the highest level of Street classification, generally providing for longer distance trips with relatively high traffic volumes and high speeds for the context. Principal Arterials permit traffic flow through the urban area and between major destinations. Minor Arterials collect and distribute traffic from principal Arterials and expressway to Streets of lower classification, and, in some cases, allow traffic to directly Access destinations.</td>
</tr>
<tr>
<td><strong>Street, Collector</strong></td>
<td>A Collector Street provides for land Access and traffic circulation within and between residential neighborhoods and commercial and industrial areas. They distribute traffic movements from these areas to the Arterial Streets. Collectors do not typically accommodate long through trips and are not continuous for long distances.</td>
</tr>
<tr>
<td><strong>Street, Cul-de-sac</strong></td>
<td>A Street having only one outlet and being permanently terminated by a vehicle Turnaround at the other end.</td>
</tr>
<tr>
<td><strong>Street, Dead-End</strong></td>
<td>A Street having only one outlet and which does not benefit from a Turnaround at its end.</td>
</tr>
<tr>
<td><strong>Street, Expressway</strong></td>
<td>Any divided Street or highway with no Access from Abutting property and which has either separated or at-Grade Access from other public Streets and highways.</td>
</tr>
<tr>
<td><strong>Street, Freeway</strong></td>
<td>Any divided Street or highway with complete Access Control and Grade separated interchanges with all other public Streets and highways.</td>
</tr>
<tr>
<td><strong>Street, Limited Local</strong></td>
<td>A Local Street providing Access to not more than eight Abutting single-Family residential Lots.</td>
</tr>
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<td>Term</td>
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<tr>
<td><strong>Street, Local</strong></td>
<td>Local Streets provide direct Access to adjacent land uses. Direct Access from a Local Street to an Arterial Street should be discouraged.</td>
</tr>
<tr>
<td><strong>Street, Marginal Access</strong></td>
<td>A Street that is generally parallel and adjacent to an Arterial Street or other limited-access Street and that is designated to provide direct Access to adjacent property. Marginal Access Streets are commonly known as &quot;Frontage Roads.&quot;</td>
</tr>
<tr>
<td><strong>Street, Private</strong></td>
<td>Any tract of land or access easement set aside to provide vehicular Access within a Planned Development that is not dedicated or intended to be dedicated to the City and is not maintained by the City. Owners of a private street may choose to gate access to this type of street from the general public.</td>
</tr>
<tr>
<td><strong>Street, Public</strong></td>
<td>A way for vehicular traffic, whether designated as a local, collector, arterial, freeway or other designation, which is improved to City standards, dedicated for general public use, and maintained by the City. The term shall also include alleys.</td>
</tr>
<tr>
<td><strong>Street, Ultimate Design</strong></td>
<td>The Street design that is based on the planned carrying capacity of the roadway consistent with its functional classification on the Major Thoroughfares Maps in the Comprehensive Plan.</td>
</tr>
<tr>
<td><strong>Street Line</strong></td>
<td>The line separating the Street right-of-way from the abutting property.</td>
</tr>
<tr>
<td><strong>Street Tree and Furniture Zone</strong></td>
<td>An area designated within the Public Frontage in a Mixed Use development. Such zones shall reserve space for street trees and other landscaping as well as street furniture including, but not limited to benches, street lights and transit stops.</td>
</tr>
<tr>
<td><strong>Streetscape</strong></td>
<td>The built and planned elements of a street that define the street’s character.</td>
</tr>
<tr>
<td><strong>Structural Alteration</strong></td>
<td>Any change in the supporting or structural members of a Building, including but not limited to bearing walls, columns, beams or girders, or any substantial change in the roof, exterior walls, or Building openings.</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>A Building or anything constructed that requires permanent location on the ground or attachment to something having a permanent location on the ground, including but not limited to fences, signs, billboards, and Mobile Homes.</td>
</tr>
<tr>
<td><strong>Subsurface Utility Zone</strong></td>
<td>A subsurface area designated within the Public Frontage in a Mixed Use development. Such zones shall reserve space for public utilities.</td>
</tr>
<tr>
<td><strong>Thoroughfare</strong></td>
<td>Any public right-of-way that provides a public means of Access to abutting property.</td>
</tr>
<tr>
<td><strong>Tract (of land)</strong></td>
<td>An area, Parcel, site, piece of land or property that is the subject of a development application or restriction.</td>
</tr>
<tr>
<td><strong>Transitional Use</strong></td>
<td>A permitted use or Structure that, by nature or level and scale of activity, acts as a transition or buffer between two (2) or more incompatible uses.</td>
</tr>
<tr>
<td><strong>Tree Protection</strong></td>
<td>Means the measures taken, such as temporary fencing and the use of tree wells, to protect existing trees from damage or loss during and after construction projects.</td>
</tr>
<tr>
<td><strong>Trip Generation</strong></td>
<td>The total number of vehicle trip ends produced by a specific land use or activity.</td>
</tr>
<tr>
<td><strong>Unnecessary Hardship</strong></td>
<td>The condition resulting from application of these regulations when viewing the property in its environment that is so unreasonable as to become an arbitrary and capricious interference with the basic right of private property ownership, or convincing proof exists that it is impossible to use the property for a conforming use, or sufficient factors exist to constitute a hardship that would in effect deprive the Owner of their property without compensation. Mere financial loss or the loss of a potential financial advantage does not constitute Unnecessary Hardship.</td>
</tr>
<tr>
<td><strong>Vertical Mixed Use Structure</strong></td>
<td>See Mixed Use Structure, Vertical</td>
</tr>
<tr>
<td><strong>Woodlands</strong></td>
<td>Natural hardwood forests, whether or not actively forested.</td>
</tr>
<tr>
<td><strong>Working Days</strong></td>
<td>Monday through Friday, 8AM to 5PM excluding city holidays</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<td>--------------------</td>
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</tr>
<tr>
<td>Yard</td>
<td>Any Open Space located on the same Lot with a Building, unoccupied and unobstructed from the ground up, except for accessory Buildings, or such projections as are expressly permitted by these regulations. “Yard” refers to the actual open area that exists between a Building and a Lot Line, as opposed to the Required Yard or open area (referred to as a “Setback”).</td>
</tr>
<tr>
<td>Yard, Front</td>
<td>A space extending the full width of a Lot between any Building and the Front Lot Line and measured perpendicular to the Building at the closest point to the Front Lot Line.</td>
</tr>
<tr>
<td>Yard, Rear</td>
<td>A space extending the full width of a Lot between the Principal Building and the Rear Lot Line and measured perpendicular to the Building at the closest point to the Rear Lot Line.</td>
</tr>
<tr>
<td>Yard, Required</td>
<td>The unobstructed Open Space measured from a point on a Principal Building to the Lot Line from the ground upward, within which no Structure shall be located, except as permitted by this Development Code.  It is the three-dimensional equivalent of the required Setbacks for every Lot.</td>
</tr>
<tr>
<td>Yard, Side</td>
<td>A space lying between the side line of the Lot and the nearest line of the Principal Building and extending from the Front Yard to the Rear Yard, or in the absence of either of such front or Rear Yards, to the front or Rear Lot Lines. Side-yard widths shall be measured perpendicular to the side Lot Lines of the Lot.</td>
</tr>
<tr>
<td>Zoning District</td>
<td>A portion of the territory of the City of Lawrence within which certain uniform regulations and requirements or various combinations thereof apply under the provisions of this Chapter.</td>
</tr>
</tbody>
</table>
December 11, 2011

Mr. Richard Hird, Chairman
Members
Lawrence-Douglas County Metropolitan Planning Commission
City Hall
Lawrence, Kansas 66044

RE: ITEM NO. 4 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; DEFINING OCCUPANCY & CLARIFYING OCCUPANCY LIMITS IN NON-RS ZONING DISTRICTS (MJL)

Dear Chairman Hird and Planning Commissioners:

The following regulation regarding Occupancy Limits is being included as a text amendment to our Land Development Code:

(g) Occupancy Limits
   In non-RS Districts, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), shall occupy a Dwelling Unit. On properties in non-RS Districts that have an Accessory Dwelling Unit, established in accordance with Section 20-534, no more than one Family, as that term is defined in Section 20-1701(1), (2), and (3)(b), plus one additional person shall, in the aggregate, occupy a Dwelling Unit and Accessory Dwelling Unit.

Accessory Dwelling Units, in our current Land Development Code, are intentionally limited to the following districts: RS40, RS20, RS10, RS7, MU and CN1 Districts (Section 20-534).

We believe that an unintentional wording has been included in this text amendment which if not corrected could lead to misinterpretation of the zoning ordinance. It is the inclusion in all of the non-RS Districts as well as the RS-5 and RS-3 Districts the portion of the statement above that reads “plus one additional person” and the term “Accessory Dwelling Unit.” To include accessory dwelling use in the definition of Occupancy Limits in zoning districts where it is not permitted will cause confusion as to the interpretation of where these accessory dwelling units are intended to be permitted.

We ask that you reword the regulations for “Occupancy Limits” in all of those zoning districts where Accessory Dwelling Units are not expressly permitted.

Thank you for your interest and concern.

Sincerely yours,

Caleb Morse
Secretary and Member of the Board

Alan Black
Chairman
Land Use Committee
Memorandum
City of Lawrence – Douglas County Planning & Development Services

To: Lawrence-Douglas County Planning Commission

From: Dan Warner, AICP, Long Range Planner

Date: For December 12, 2011 Planning Commission Meeting

RE: CPA-6-5-09: Reconsider Comprehensive Plan Amendment to Horizon 2020 Chapter 14 to include the Northeast Sector Plan.

Introduction:

The Northeast Sector Plan was approved the Lawrence-Douglas County Planning Commission by a vote of 5-4 on September 20, 2010. The Douglas County Board of Commissioners considered the Northeast Sector Plan at meetings on May 11, 2011 and June 1, 2011. The County Commission, by a vote of 2-1, referred the Northeast Sector Plan back to the Planning Commission with specific statements outlined below. The City Commission reviewed the Northeast Sector Plan at their meeting on August 9, 2011. The City Commission also provided direction to the Planning Commission as noted below.

The items below are staff’s discussion of the direction provided by the County Commission and City Commission. The respective governing bodies’ direction is italicized.

County Commission Direction

1. Consider the public/private infrastructure costs of development of the area southwest of the airport currently designated Industrial when compared with the infrastructure costs of developing other identified industrial sites around Lawrence, in particular the Farmland site and the sites in the NW corridor along Farmer’s Turnpike, to determine if such costs are extraordinary for the amount of industrial land developed.

All of the future industrial sites have challenges to develop that will incur costs associated with the development of those properties. The following information details many of those challenges:

Farmland 293 acres/per the Farmland Industries Redevelopment Plan Development challenges
• Environmental remediation necessary to deal with the nitrogen in the ground caused by the fertilizer processing at the former Farmland Industries site.
• New public streets necessary throughout the future business park.
• Water and sewer will need to be extended to the site to serve the future business park.
• Stormwater control on the property currently is a priority and will remain a priority for the site.

**Airport area** 240 acres/per the Northeast Sector Plan

**Development Challenges**
• A sewer extension is necessary to serve new development.
• There are stormwater issues due to the flat nature of the area. Development may trigger upgrades to existing stormwater infrastructure (such as stream channels and pump stations) in North Lawrence.
• Public streets will have to upgraded and/or created to accommodate industrial development.

**Farmer’s Turnpike area** 262 acres

**Venture** – 47 acres
**Farmer’s Turnpike & I-70** – 155 acres
**Rothwell** – 60 acres

**Development Challenges**
• All properties need sewer and water extensions if developing at an urban standard.
• There will be costs associated with accessing Farmer’s Turnpike, such as turn lanes. Public street extensions into the sites are possible as well.

It is difficult to generate and compare cost estimates to develop the above areas. The areas have different challenges to develop that make apples to apples comparisons difficult when trying to determine which area has the extraordinary development costs and if the costs are extraordinary for the amount of industrial land developed. Further, different project proposals for any of the areas likely will produce different cost estimates. Therefore, without having specific projects to respond to, it is difficult to develop cost estimates for serving areas with public infrastructure. For instance, a single large user in one of those areas will require only 1 point of contact for infrastructure, whereas multiple users in the same area may require more public infrastructure and will likely cost more to serve.
Who ultimately pays for the infrastructure can be a factor in deciding if costs are too high. The City’s development policy, outlined in Resolution No. 5614, generally requires that a development pay to extend necessary services to the site. This is accomplished through a benefit district, pay-back district, or direct developer construction.

A developer may petition the governing body for assistance in paying for infrastructure. If a policy choice is made by the governing body to pay for public infrastructure costs, the city or county at-large takes on the costs. However, a benefit district may be created and those properties that receive a direct benefit from the public infrastructure pay a share of the total cost. Who ends up paying what share of the costs oftentimes is a decision made during the negotiations for specific development projects.

**Staff finding**: There are simply too many variables to determine if the costs to develop the industrial designated area in the Northeast Sector Plan are extraordinary for the amount of industrial land proposed for development. Decisions regarding public funding of infrastructure improvements, and whether or not those costs are too high, are best made by governing bodies at the time of specific development project requests.
2. **Considering the presumed extraordinary costs to provide public infrastructure, such as storm water, sewer and street improvements, presumed to be needed to support industrial or other urbanized development in Grant Township, discuss whether urbanization should be reasonably expected outside of the airport property.**

Large-scale urbanization would be challenging in the area given the stormwater issues and perceived costs to resolve the issues. Because of these and other factors, the Northeast Sector Plan limits urbanization outside of the airport property. The future industrial area reflected in the current Northeast Sector Plan would require some amount of drainage improvements but could be reasonably developed, in staff’s opinion.

As discussed in the previous section, there are public infrastructure costs associated with developing all of the future industrial areas. Governing bodies typically make funding decisions as they respond to development proposals and decisions about whether or not a project’s cost are extraordinary are considered at that time. Decisions are based on availability of funds, the scope of the project, type of industry, and the number of jobs being created, etc. Funding decisions are not typically made at the sector planning level where there are no specific development projects being considered and where the timeframe for particular developments is unknown.

The North Lawrence Drainage Study recommended millions of dollars in stormwater infrastructure improvements for the Grant Township area based on a future land use assumption of considerably more urban development than what is proposed in the Northeast Sector Plan. It stands to reason then that the stormwater costs related to development according to the Northeast Sector Plan will not be as high as what was proposed by the North Lawrence Drainage Study.

As noted in Question #3, if the amount of designated urbanized area were reduced, the presumed public infrastructure costs would likely also be reduced. Consideration should be given to reducing the amount of urbanized area outside of the airport in order to reduce the presumed public infrastructure costs.

**Staff finding:** The limited urbanization proposed by the Northeast Sector Plan for the area outside of the airport is reasonable.
3. **Considering the unique challenges present in the area of the sector plan, including infrastructure costs, identified storm water issues, the presence of class 1 and 2 soils, etc., and considering the other areas in the county, especially those that surround Lawrence, designated or recently zoned for industrial uses, discuss whether industrial development outside of the airport property is a necessary designation in this plan area in order to meet the “Horizon 2020” goal of expanding the industrial inventory.**

Horizon 2020, Chapter 7 Industrial and Employment designates the area south and west of the airport as a future Industrial and Employment area. That assumption was used in developing the Northeast Sector Plan. There is also a strategy in Chapter 7 to secure 20,000 new jobs in Douglas County by 2020. Further, Horizon 2020, Chapter 12 Economic Development states: *“Within the next few years, the City and County Commissions shall identify and designate at least 1,000 acres of land for industrial expansion of the next 25 years.”*

Recent sector planning has designated approximately 1,426 acres of future industrial areas. Those plans and the approximate industrial acreages are:

- 6th & K-10/West of K-10  
  - 224 acres
- Farmland Industries Redevelopment Plan  
  - 293 acres
- K-10 & Farmer’s Turnpike Plan  
  - 671 acres
- Southeast Area Plan  
  - 238 acres

The designation of industrial in this area is necessary if providing choices for future industrial development is a priority. This industrial area benefits from being near I-70 and also being near the airport. Certain industrial users may choose to locate near the airport because they value those key location traits over those that are present for other potential industrial sites.

It’s been stated previously in this document that costs to develop may or may not be extraordinary. Class I and II soils are of high value for several reasons; however, the designated industrial land area accounts for only approximately 6% of the Class I and II soils in Grant Township.

If identifying significantly more land for industrial purposes and providing choices for industrial development around the community are priorities then it is necessary to designate land near the airport for industrial development. However, considering the stormwater challenges, presence of Class I and II soils and the presumed infrastructure costs, perhaps the question is how much land for industrial should be provided around the airport?
The proposed land area for the Industrial classification for the area outside of the airport in the Northeast Sector Plan is approximately 300 acres. By comparison, the development proposal for the area in 2007 included approximately 125 acres proposed for industrial west and south of the airport.

Is approximately 125 acres classified as industrial more appropriate for the area than the Northeast Sector Plan’s classification of approximately 300 acres? Fewer acres south and west of the airport would reduce the overall amount of future industrial area developed, which would likely reduce infrastructure costs, arguably create less environmental impact on the airport and have less impact on stormwater control. It would also reduce the percentage of potential future industrially developed Class I & II soils from approximately 6% of Grant Township (from original Northeast Sector Plan proposal) to approximately 2.5%.

In staff’s opinion, reducing the area designated as industrial to approximately 125 acres is still an appropriate amount of development to generate economic development potential south and west of the airport when considering all of the factors – infrastructure costs, stormwater impacts, soils, transportation, etc.

![Approximately 125 acres overall.](image1)

![Approximately 300 acres overall.](image2)

Staff finding: Providing options for industrial development should be considered a priority for the community. Consider reducing the area designated as Industrial south and west of the airport in the Northeast Sector Plan from the current approximate 300 acres to approximately 125 acres.
4. Discuss whether or not the area southwest of the airport currently designated Industrial is a true future multi-modal transportation area. Consider the growth and intensity of uses at the airport as well as how realistic it is that rail can be extended to the industrially designated area southwest of the airport. Discuss whether rail and airport transportation modes are valid reasons to support industrial designations on the property southwest of the airport.

The transportation modes available for the area include highway (via I-70 and Highways 24/40/59), air (via the airport) and rail (via a possible future spur connection).

Commuter traffic is currently driving the demand of the airport. Large-scale freight shipping isn’t on the immediate horizon for the airport. The airport may not support a large cargo shipping operation in the future, but that isn’t the only way an airport can support industrial/employment related development. The airport currently supports helicopters and airplanes up to business jets as modes of transportation. Those modes of air transportation can be used to support businesses that locate at or near the airport.

For instance, a diesel mechanic currently uses the airport to fly to different areas to make engine repairs. Further, a business that produces items that can be shipped via the current modes available at the airport may find the area attractive to locate.

Executives of companies may also want to locate their businesses near the airport to take advantage of commuting to and from Lawrence via airplane.

A rail spur to serve the area is possible. Union Pacific owns track west of the area along Hwy. 24/59 and south of the area in North Lawrence. While a connection from the south is likely to be much too prohibitive, it is perhaps more possible to connect a spur to the rail west of the area. That rail line is a major route so any spur off of it would require a significant amount of infrastructure in order to keep the trains running while constructing the spur. The spur itself also would require two switches, a highway crossing and the
necessary track and would cost millions of dollars to execute. While a rail connection is possible to the west, it may likely prove to be too cost prohibitive.

Interstate access alone has been a reasonable justification to date to locate industrial in this area.

Staff finding: Highway, and to some extent air, are valid transportation modes to support industrial uses in the area. Rail is possible, but is more likely to be too costly to be considered a viable mode to solely justify industrial development in the area.
5. Discuss more thoroughly the impact of developing to the proposed land use designations in the area and the recommendations of the North Lawrence Drainage Study. Consider how the Federal Aviation Administration’s circular regarding waterfowl around the airport impacts the recommendations of the drainage study that may result in retaining/detaining stormwater in the area around the airport. Consider the potential future of regulations regarding development in levee protected areas.

As discussed previously, the future land use assumption used for the North Lawrence Drainage Study is different than the future land use of the Northeast Sector Plan. The North Lawrence Drainage Study was developed with an assumption of considerably more urbanized development than what is proposed by the Northeast Sector Plan. The stormwater improvements needed for the development area proposed by the Northeast Sector Plan likely aren’t as significant or as costly as those assumed by the North Lawrence Drainage Study.

Stormwater can be managed in ways that can limit the impact of potential waterfowl issues for the airport. The use of detention ponds, rather than retention ponds, which will hold water during storm events for a short period time and then quickly release that water, may be appropriate. There is also the option to direct the stormwater underground. Another method is to move the stormwater through the area as the rain event is occurring so that it keeps moving and doesn’t pond.

The City has embarked on a process to create a Wildlife Hazard Assessment Study for the airport. The study is meant to identify potential wildlife hazards and propose improvements to mitigate those hazards. A consultant is currently working on the study and should complete it in 2012.

A large portion of the planning area is designated “Zone X Protected by Levee”. Zone X is not currently regulated nor is flood insurance required. There may come a time in the future when the National Flood Insurance Program (NFIP) will be changed to include a flood insurance requirement for “Zone X Protected by Levee” properties.

The NFIP is due for reauthorization in 2011. There were dueling reauthorization bills in Congress this past federal legislative session. One bill included a provision for a flood insurance requirement in Zone X. The other included an insurance requirement and a requirement for regulations for Zone X. It remains to be seen what form the re-authorization takes however. If only the option for flood insurance in Zone X is adopted, that may, in turn, spur changes to state and local floodplain regulations that may bring about local regulation of Zone X.
However, when, and if, that may occur and to what form the regulations may take is not clear at this time.

Reducing the industrial designated area south and west of the airport to approximately 125 acres was discussed in Section 3. Designating approximately 125 acres south and west of the airport as industrial instead of approximately 300 acres as designated in the Northeast Sector Plan would reduce the impact to the airport and reduce stormwater issues.

**Staff Finding:** The above factors to not appear to preclude development in the area; however, any reduction to the designated industrial area south and west of the airport would reduce the impact regarding waterfowl around the airport.
City Commission Direction

1. Soil Conserving Agri-Industry.

Certain City Commissioners wanted to revisit the term “Soil Conserving Agri-Industry” since the term is used in the Industrial future land use category to determine if greater clarification would benefit the plan. The Planning Commission discussed three options related to the Soil-Conserving Agri-Industry future land use category. There was the definition from the 3rd draft along with two other options that were developed by planning staff. The Planning Commission approved Option 1 below, which the City Commission desires to be reviewed to determine if it provides enough clarity for future use. Those three options are presented below:

The description from the 3rd draft:

3.2.1.4 Soil Conserving Agri-Industry
The intent of the Soil Conserving Agri-Industry category is to allow for soil conserving agriculture-related businesses that conserve and use the Class 1 and 2 Soils in the area and that take advantage of Highway 24/40 and I-70 for materials transportation. Soil conserving agri-industry business is a term with its basis found in Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use. This Plan seeks to better describe the intent of this classification. The distinction between the Soil Conserving Agri-Industry classification and Industrial/Employment classification is the component of protecting and/or using existing high-quality agricultural land either through agricultural use or preservation for future agricultural use.

Protection of the soils through agriculture use or preservation can be implemented in different ways and the community should be open to creative ways that development projects could utilize this classification. Projects that could meet the value of this classification include, but are not limited to, the following: crop research, local food production, or small amounts of conventional industrial with large percentages of the soil protected or used for agriculture. The Agri-Industry Use may or may not urbanize. This use is identified south of Highway 24/40 and also should be included at Midland Junction when a nodal plan is developed for that area.

Intensity: Medium-High
Zoning Districts: Douglas County – I-1 (Limited Industrial District) and I-2 Light Industrial District; Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)
Primary Uses: Soil-conserving agri-businesses
Option #1 from Staff (Planning Commission approved option):
Delete the Soil Conserving Agri-Industry category and change the area south of Highway 24/40 designated as such to the Industrial category. Add language to the Industrial category encouraging soil conserving agri-industry businesses to locate in areas with Class I and II soils. This reflects more directly the policies of Chapter 7 in Horizon 2020.

3.2.1.4 Soil Conserving Agri-Industry
The intent of the Soil Conserving Agri Industry Use category is to allow for soil conserving agriculture related industrial uses businesses that conserve and use the Class 1 and 2 Soils in the area and that take advantage of Highway 24/40 and I-70 for materials transportation. Soil conserving agri industry business is a term with its basis found in Horizon 2020 Chapter 7 Industrial and Employment Related Land Use. This Plan seeks to better describe the intent of this classification. The distinction between the Soil Conserving Agri Industry classification and Industrial/Employment classifications is the component of protecting and/or using existing high-quality agricultural land either through agricultural use or preservation for future agricultural use.
Protection of the soils through agriculture use or preservation can be implemented in different ways and the community should be open to creative ways that development projects could utilize this classification. Projects that could meet the value of this classification include, but are not limited to, the following: crop research, local food production, or small amounts of conventional industrial with large percentages of the soil protected or used for agriculture. The Agri Industry Use may or may not urbanize. This use is identified south of Highway 24/40 and also should be included at Midland Junction when a nodal plan is developed for that area.
Intensity: Medium High
Zoning Districts: Douglas County — I-1 (Limited Industrial District) and I-2 Light Industrial District; Lawrence — IBP (Industrial and Business Park District) IL (Limited Industrial District), IC (General Industrial District), PD (Planned Development Overlay)
Primary Uses: Soil conserving agri-businesses

3.2.1.4 Industrial
The intent of the Industrial Use category is to allow for moderate to high-impact uses including large scale or specialized industrial uses that utilize Highway 24/40 and I-70 for materials transportation. This category includes existing industrial developments in the area. This category also includes land at the airport dedicated to aviation related development. Land west of the airport and north of Highway 24/40 and south of Highway 24/40 is also designated classified as industrial. Soil conserving agri-industry businesses that will protect the quality of existing high quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in areas with Class I and II soils. The industrial use classification category is expected to urbanize.
Intensity: Medium-High
Zoning Districts: Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)

Primary Uses: Aviation-related uses, utility facilities, building maintenance services, fleet storage, business support services, construction sales and service, industrial facilities, wholesale, distribution, and storage, research services, manufacturing and production limited and technology, soil-conserving agri-businesses

Option #2 from Staff:
Retain the Soil Conserving Agri-Industry category. Add language to the description that creates specific ratio to protect Class 1 and 2 soils when developing in that category.

3.2.1.4 Soil Conserving Agri-Industry
The intent of the Soil Conserving Agri-Industry Use category is to allow for soil conserving agriculture-related industrial uses but permit other, more conventional industrial uses, as long as a high percentage of a development’s Class I and II soils land area is protected. Businesses that conserve and use the Class 1 and 2 Soils in the area and that take advantage of Highway 24/40 and I-70 for materials transportation.

Soil conserving agri-industry business is a term with its basis found in Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use. This Plan seeks to better describe the intent of this classification. The distinction between the Soil Conserving Agri-Industry classification and Industrial/Employment classifications is the component of protecting and/or using existing high-quality agricultural land either through agricultural use or preservation for future agricultural use.

Protection of the soils through agriculture use or preservation can be implemented in different ways and the community should be open to creative ways that development projects could utilize this classification. Projects that could meet the value of this classification include, but are not limited to, the following: crop research, local food production, or small amounts of conventional industrial with large percentages of the soil protected or used for agriculture. Projects must set aside, protect, or use a minimum of 50% of the Class I and II soils on the property being developed for agriculture use. This protection must take the form of a conservation easement or some other legal instrument mandating perpetual protection. The Soil Conserving Agri-Industry Use may or may not urbanize. This use is identified south of Highway 24/40 and also should be included at Midland Junction when a nodal plan is developed for that area.

Intensity: Medium-High
Zoning Districts: Douglas County – I-1 (Limited Industrial District) and I-2 Light Industrial District; Lawrence – IBP (Industrial and Business Park
District) IL (Limited Industrial District), IG (General Industrial District),
PD (Planned Development Overlay)
Primary Uses: Soil-conserving agri-businesses, aviation-related uses, utility
facilities, building maintenance services, fleet storage, business support
services, construction sales and service, industrial facilities, wholesale,
distribution, and storage, research services, manufacturing and production
limited and technology

Staff Finding: Staff does not have a specific finding to provide for this item.
Consider the direction provided from the City Commission.

2. There were also City Commission concerns about losing Class I & II soils.

It was discussed in Question #3 of the County Commission questions to consider
reducing the industrially designated area west and south of the airport from the
approximately 300 acres proposed by the Northeast Sector Plan to 125 acres.
This would reduce the percentage of potentially developed Grant Township Class
I & II soils from approximately 6% to approximate 2.5%.

Staff finding: Consider reducing the area designated as Industrial south and west
of the airport in the Northeast Sector Plan from the current approximate 300
acres to approximately 125 acres.
A RESOLUTION ADOPTING AMENDMENTS TO HORIZON 2020, THE COMPREHENSIVE PLAN FOR THE CITY OF LAWRENCE AND UNINCORPORATED DOUGLAS COUNTY, KANSAS PERTAINING TO THE NORTHEAST SECTOR PLAN.

WHEREAS, the City Commission of Lawrence, Kansas and the Board of County Commissioners of Douglas County, Kansas, for the purpose of promoting the public health, safety, morals, comfort and general welfare, conserving and protecting property values throughout Lawrence and Douglas County, are authorized by K.S.A. 12-741 et seq. to provide for the preparation, adoption, amendment, extension and carrying out of a comprehensive plan; and

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Commission, the City Commission of Lawrence, Kansas and the Board of County Commissioners of Douglas County, Kansas have adopted an official comprehensive plan for the coordination of development in accordance with the present and future needs and to conserve the natural resources of the City and County, ensure efficient expenditure of public funds and promote the health, safety, convenience, prosperity and general welfare of the citizens of Lawrence and Douglas County; and

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Commission held public hearings on July 26, 2010 and September 20, 2010 for the proposed amendments to Horizon 2020, the Comprehensive Plan, contained in Planning Staff Report CPA 6-5-09, to adopt and approve the Northeast Sector Plan and amend Chapter 14 – Specific Plans to add the Northeast Sector Plan, after notice by publication in the official city and county newspaper.

BE IT RESOLVED BY THE LAWRENCE-DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION:

SECTION ONE: The above stated recitals are by reference incorporated herein, and shall be as effective as if repeated verbatim.

SECTION TWO: Pursuant to K.S.A. 12-747, the Lawrence-Douglas County Metropolitan Planning Commission adopts and recommends for approval the amendments to Horizon 2020, the Comprehensive Plan for the City of Lawrence and Unincorporated Douglas County, to adopt the Northeast Sector Plan and amend the Chapter 14 - Specific Plans to add the Northeast Sector Plan.

SECTION THREE: The amendment to Horizon 2020, Chapter 14 – Specific Plans, Specific Plans reads as follows:

Specific Plans

- 6th and SLT Nodal Plan
  Location: The intersection of 6th Street (US Highway 40) and the SLT (South Lawrence Trafficway)
  Adoption Date: November 11, 2003 by Lawrence City Commission
  Review Date: 2009

- 6th and Wakarusa Area Plan
  Location: The intersection of 6th Street and Wakarusa Drive
  Adoption Date: December 2, 2003 by Lawrence City Commission
  Review Date: 2009

- HOP District Plan
Location: Bordered by W. 5th St. on the north, California St. on the west, W. 7th St. on the south and Alabama St. on the east.
Adoption Date: May 10, 2005 by Lawrence City Commission
Review Date: 2010

- Burroughs Creek Corridor Plan
  Location: Area around the former BNSF railroad corridor between E. 9th St. and E 31st St.
  Adoption Date: February 14, 2006 by Lawrence City Commission
  Review Date: 2011

- East Lawrence Neighborhood Revitalization Plan
  Location: Bordered by the Kansas River on the North; Rhode Island Street from the Kansas River to E. 9th Street, New Hampshire Street from E. 9th Street to approximately E. 11th Street, Massachusetts Street from approximately E. 11th Street to E. 15th Street on the west; E. 15th Street on the south; BNSF railroad on the east.
  Adoption Date: November 21, 2000 by Lawrence City Commission
  Review Date: 2010

- Revised Southern Development Plan
  Location: Bounded roughly to the north by W. 31st Street and the properties north of W. 31st Street between Ousdahl Road and Louisiana Street; to the west by E. 1150 Road extended (Kasold Drive); to the south by the north side of the Wakarusa River; and to the east by E. 1750 Road (Noria Road).
  Adoption Date: December 18, 2007 by Lawrence City Commission January 7, 2008 by the Douglas County Board of Commissioners
  Review Date: 2017

- Southeast Area Plan
  Location: Bounded roughly to the north by E. 23rd Street/K-10 Highway; to the west by O’Connell Road; to the south by the northern boundary of the FEMA designated floodplain for the Wakarusa River; and to the east by E. 1750 Road (Noria Road).
  Adoption Date: January 8, 2008 by Lawrence City Commission
  January 28, 2008 by the Douglas County Board of Commissioners
  REVISED June 14, 2008 by Lawrence City Commission
  July 24, 2008 by Douglas County Board of Commissioners
  REVISED October 7, 2008 by Lawrence City Commission
  November 10, 2008 by Douglas County Board of Commissioners
  Review Date: 2018

- Farmland Industries Redevelopment Plan
  Location: The former Farmland Industries property is located east of Lawrence along K-10 Highway and just west of the East Hills Business Park. It is approximately one half mile south of the Kansas River.
  Adoption Date: March 11, 2008 by Lawrence City Commission
  March 31, 2008 by Douglas County Board of Commissioners
  Review Date: 2013

- K-10 & Farmer's Turnpike Plan
  Location: Generally located around the intersection of I-70 and K-10 and to the east approximately four miles.
  Adoption Date: December 9, 2008 by Lawrence City Commission
  January 7, 2009 by Douglas County Board of Commissioners
  Review Date: 2019
- **Lawrence SmartCode Infill Plan**
  
  **Location:** General areas are: 19th St. and Haskell Ave., 23rd St. and Louisiana St.
  
  **Adoption Date:** January 27, 2009 by Lawrence City Commission
  
  February 23, 2009 by Douglas County Board of Commissioners
  
  **Review Date:** 2019

- **West of K-10 Plan**
  
  **Location:** Generally located north and south of Highway 40 and west of K-10 Highway.
  
  It does contain some land east of K-10 Highway
  
  **Adoption Date:** June 9, 2009 by Lawrence City Commission
  
  May 6, 2009 by Douglas County Board of Commissioners
  
  **Review Date:** 2019

- **Northeast Sector Plan**
  
  **Location:** Generally located north and east of Lawrence and north of the Kansas River to the Douglas County line.

  **SECTION FOUR:** The Northeast Sector Plan attached as Exhibit 1 shall be incorporated as part of Horizon 2020 the Comprehensive Plan of the City of Lawrence and Unincorporated Douglas County.

  **SECTION FIVE:** This resolution together with a certified copy of the amendments to Horizon 2020, the Comprehensive Plan for the City of Lawrence and Unincorporated Douglas County, and a written summary of the public hearing shall be submitted to the City Commission and the Board of County Commissioners, as appropriate.
Adopted by the Lawrence-Douglas County Metropolitan Planning Commission on this, the 20th day of September, 2010.

Chair
Lawrence-Douglas County Metropolitan Planning Commission

Vice-Chair
Lawrence-Douglas County Metropolitan Planning Commission

Scott McCullough, Secretary
Lawrence-Douglas County Metropolitan Planning Commission
Northeast Sector Plan

Lawrence-Douglas County Planning and Development Services

Lawrence-Douglas County Planning Commission – 09/20/10
Douglas County Board of County Commissioners –
Lawrence City Commission –

I hereby certify that this is a true and correct copy of the comprehensive plan or part of the plan; that the Lawrence-Douglas County Metropolitan Planning Commission adopted said comprehensive plan or part of the plan on September 20, 2010.

[Signature]

Assistant Director of Planning and Development Services.
# Table of Contents

Section 1 Introduction
- Purpose ........................................................................................................... 1-1
- Description of Planning Area .................................................................... 1-2
- Policy Framework ....................................................................................... 1-6

Section 2 Existing Conditions
- Land Uses ...................................................................................................... 2-1
- Zoning Patterns ........................................................................................... 2-4
- Infrastructure ............................................................................................... 2-6
- Environmental Conditions .......................................................................... 2-16
- Community Facilities .................................................................................. 2-23

Section 3 Recommendations
- Goals and Policies ...................................................................................... 3-1
- Land Use ...................................................................................................... 3-9
- Implementation ............................................................................................. 3-14

## List of Tables

- Table 2-1 Existing Land Use Summary ...................................................... 2-2
- Table 2-2 County Zoning Classifications .................................................. 2-4
- Table 2-3 City Zoning Classifications ....................................................... 2-4

## List of Maps

- Map 1-1 Planning Area Boundary in Relation to Lawrence ....................... 1-4
- Map 1-2 Planning Area Boundary and Parcels .......................................... 1-5
- Map 2-1 Existing Land Use ......................................................................... 2-3
- Map 2-2 Existing Zoning ............................................................................ 2-5
- Map 2-3 Existing Water Facilities ............................................................... 2-7
- Map 2-4 Existing Wastewater & Stormwater Infrastructure .................... 2-8
- Map 2-5 Existing Gas & Electric Utilities Infrastructure ......................... 2-9
- Map 2-6 Drainage Districts .......................................................................... 2-10
- Map 2-7 Existing and Future Road Classifications .................................... 2-14
- Map 2-8 Existing and Future Bicycle Facilities ......................................... 2-15
- Map 2-9 Regulatory Flood Hazard Area and Streams ............................... 2-18
- Map 2-10 Land Cover .................................................................................. 2-19
- Map 2-11 Contours ...................................................................................... 2-20
- Map 2-12 Steep Slopes .............................................................................. 2-21
- Map 2-13 Class I and II Soils ...................................................................... 2-22
- Map 2-14 Community Facilities ................................................................. 2-25
- Map 2-15 Airspace Overlay Zones ............................................................... 2-26
- Map 2-16 FAA Wildlife Mitigation Buffer .................................................. 2-27

- Map 3-1 Future Land Use ........................................................................... 3-13
Section 1: Introduction

1.1 Purpose

The purpose of the Northeast Sector Plan is to outline specific land use goals, policies and recommendations for the planning area shown on Map 1-1, while being consistent with the overall adopted comprehensive plan for the community. Portions of the planning area are adjacent to the city of Lawrence and because of their proximity to the city and highways, they are likely to be areas of rural and urban development pressure. However, this plan recognizes that this area is unique in its development potential and the community may benefit most by limited development.

The plan outlines future land uses for the planning area to be used as a guide for rural and urban development. This plan does not annex property nor does it rezone property upon adoption. These types of proposals are typically requested by the property owners and/or developers that have a stake in such property and wish to develop within Douglas County and within the city of Lawrence.

The plan should fit like a puzzle piece into the larger context of the surrounding street, utility, and land use network of the entire community. Logical connections between the planning area and adjacent neighborhoods are a key factor in the development of the plan. The recommendations contained within this plan are intended to guide the area’s future growth patterns.

It is expected that development in the planning area will occur within the span of decades as the market demands and as urban services are able to be provided. It is anticipated that rural and agricultural uses will continue to be present and maintained as the planning area urbanizes. Because of the long timeframe of the plan, it should be reviewed on a regular basis.
1.2 Description of Planning Area

The *Northeast Sector Plan* planning area is located north of the city of Lawrence (see Map 1-1) and within Grant Township, in northeastern Douglas County, Kansas. The planning area contains approximately 10,640 gross acres and encompasses Grant Township north of the Kansas River.

The planning area boundaries are: E 1700 Road on the east, N 2100 Road on the north, the riverfront park on the west, and the Lawrence city limits and the Kansas River on the south. See Map 1-1. The planning area encompasses the Lawrence Urban Growth Area (UGA) in northeast Douglas County, as currently identified in *Horizon 2020*. A majority of the planning area is located in Service Area 4 which is the outer most service area in *Horizon 2020*. For Service Area 4 *Horizon 2020* states: “The land uses north of US-24/40 shall be primarily non-residential uses such as industrial, warehouse and office” and “Urban development in Service Area 4 north of the Kansas River shall not occur until after an extensive drainage study for the area north of the Kansas River has been completed.” The North Lawrence Drainage Study was completed in 2005.

A portion of the planning area, south of Highway 24/40 is located in Service Area 2. *Horizon 2020* states: “Until these areas, are served by the extension of municipal services, residential urban densities of development or non-residential urban development will not be permitted. Divisions of land for rural residential development shall be permitted only when the following criteria exist: access to paved roads, conformance with minimum road frontage requirements, and availability of rural water meters. Development shall not be permitted on steep slopes (15% or greater), regulatory floodplains or other environmentally sensitive areas, and state or federally designated historic sites or landmarks. The pattern and lot layout of rural residential developments shall provide, through early planning, dedications or reservations for the logical extension of public roads and infrastructure“ and “Development of these areas to urban densities should be allowed only after coordination with the phasing of municipal services and public infrastructure improvements to serve these new urban densities.”

As mentioned earlier, the entire planning area is within the Lawrence UGA. The UGA was expanded to the Douglas County line in this area in 2004. This action was largely in response to concerns that the Douglas County Subdivision Regulations did not regulate rural residential growth, i.e., the 5 and 10 acre exemptions allowed the creation of residential lots without platting. The UGA was expanded into this area to help regulate rural residential growth.

The subdivision regulations for Douglas County were amended and adopted in 2007 and put in place standards to regulate rural residential growth. These standards regulate rural residential growth in the Rural Area, as well as the UGA. Since there are now standards for the division of property in the Rural Area, one of the reasons for expanding the UGA to the county line in this area is no longer necessary.

The dominant character of the area is rural in nature although there are a variety of uses within the planning area. The main rural uses in the flat, lower parts of the planning area are agriculture row crop, livestock production, and pastureland uses.
Rural residential uses are found in the higher northern parts of the planning area. Rural uses dominate those portions of Jefferson County that are north of the planning area and also those parts of Leavenworth County east of the planning area. The KU Field Station is located in the northeast corner of the planning area and also within Jefferson and Leavenworth counties.

I-70 and a toll plaza, along with Highways 24/40/59 are major elements within the area. Industrial and commercial uses are located along Highway 24/59 and Highway 24/40. The Lawrence Municipal Airport is another major element within the planning area. The airport is annexed into the city, but is an island not contiguous with the corporate boundary of Lawrence. The Kansas River is generally west and south of the planning area. Urban uses within Lawrence are generally south of the planning area.

The planning area boundaries and parcel composition are illustrated in Map 1-2.
Northeast Sector Plan

Planning Area Boundary w/Parcel Lines

Legend
- Northeast Plan Boundary
- Lawrence UGA
- City Limits
- Water Bodies

Lawrence-Douglas County Planning
1.3 Policy Framework

*Horizon 2020* serves as the overall planning guide and policy document for this plan. In addition to *Horizon 2020*, guiding policy is also obtained in other adopted physical element plans. Together, these plans provide the general “umbrella” policies under which this plan is developed. Listed, these plans are:

- *North Lawrence Drainage Study*. 2005
Section 2 - Existing Conditions

The inventory and analysis of existing conditions in this plan are intended to serve as a resource and background for the recommendations included in Section 3 of this plan.

2.1 Land Uses

2.1.1 Existing Land Uses

There are currently a variety of land uses within the planning area. The planning area has approximately 10,116 acres of land dedicated to uses other than public rights-of-way. The source information for the existing land use summary and map are based on the County Appraisers’ land use code and updated by planning staff.

Agricultural uses, in the form of row crops, livestock production, pasturelands, and farms are the dominant land uses and encompass approximately 7,330 acres of land, which accounts for 72% of the planning area. There are farms of varying sizes (less than 5 acres up to hundreds of acres) within the planning area. Production includes row crops, local market production and animal production. Farms are owner operated or leased to larger operations. The City leases land around the airport for agriculture use.

The second largest land use category is parks/rec/open space use with approximately 956 acres. The parks/rec/open space use category includes the KU Field Station properties in the northeast portion of the planning area.

The third largest land use category is transport/communication/utility. This land use category includes the Lawrence Municipal Airport.

The next largest category is single family residential use. This category includes property with one dwelling unit located on it. The Douglas County Zoning Regulations define a dwelling as, “Any building or portion thereof designed or used for residential purposes. This shall include structures designed as underground structures but shall not include trailers or mobile homes”. The single-family residential use is seen within the planning area primarily in the rural form – typically a house on 1 to 10 acres (although some larger single family properties in the area range between 10 – 40 acres).

The remaining land is designated a variety of uses ranging from industrial/warehouse/distribution to public/institutional uses. These uses are located primarily along Highway 24/59. The existing land uses are shown on Map 2-1 and the planning area breakdown is described in Table 2-1.
TABLE 2-1: EXISTING LAND USE SUMMARY

<table>
<thead>
<tr>
<th>Land use</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>7,330</td>
<td>72%</td>
</tr>
<tr>
<td>Single Family Residential</td>
<td>550</td>
<td>5%</td>
</tr>
<tr>
<td>Vacant Residential</td>
<td>232</td>
<td>2%</td>
</tr>
<tr>
<td>Residential - Other</td>
<td>72</td>
<td>1%</td>
</tr>
<tr>
<td>Commercial</td>
<td>186</td>
<td>2%</td>
</tr>
<tr>
<td>Industrial/Warehouse/Distribution</td>
<td>125</td>
<td>1%</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>110</td>
<td>1%</td>
</tr>
<tr>
<td>Parks/Rec/Open Space</td>
<td>956</td>
<td>10%</td>
</tr>
<tr>
<td>Transport/Communication/Utility</td>
<td>555</td>
<td>6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,116</td>
<td>100%</td>
</tr>
</tbody>
</table>

2.1.1 Historic Resources

Currently, there is one structure listed on the National Register of Historic Places within the planning area. The Vermilya Boener House is located at the northwest corner of N 1900 Rd. and E 1400 Rd and was listed in 1992.
Map 2.1 – Existing Land Use

Northeast Sector Plan

Existing Land Use

Legend
Existing Land Use
Plan Code
- Cemetery
- Commercial
- Farm
- Farm Residence
- Industrial
- Mobile Home
- Other Transport/Communication/Utility
- Parks/Rec/Open Space
- Public/Institutional
- Single Family Residential
- Transport/Communication/Utility
- Warehouse/Distribution
- Northeast Plan Boundary
- Lawrence UGA
- City Limits
- Water Bodies

Lawrence-Douglas County Planning
2.2 Zoning Patterns

The planning area encompasses approximately 10,640 acres of land including public rights-of-ways. Approximately 520 acres are located within the city of Lawrence and the rest is located within the unincorporated area of Douglas County. The majority of the planning area that is located within unincorporated Douglas County is zoned A (Agriculture District). This is mainly used for row crops, pasture land and farm purposes. Industrial zoning is found in the planning area with specific areas zoned I-1, I-2, I-3 and I-4 Districts. There is also some B-2 (General Business District) zoning along Hwy. 24/40. See Map 2-2.

The main portion of the planning area located within the city of Lawrence is the Lawrence Municipal Airport, which is zoned IG (General Industrial). The Maple Grove Cemetery is also within the city of Lawrence and is zoned OS (Open Space District). Both of these properties are islands that are not contiguous to the corporate limits of Lawrence. See Map 2-2.

Table 2-2 County Zoning Classifications

<table>
<thead>
<tr>
<th>County Zoning</th>
<th>District Name</th>
<th>Comprehensive Plan Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Agricultural</td>
<td>Agriculture</td>
</tr>
<tr>
<td>A-1</td>
<td>Suburban Homes</td>
<td>Very Low-Density Residential</td>
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<td>I-1</td>
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<td>I-2</td>
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<tr>
<td>I-3</td>
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<tr>
<td>I-4</td>
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</tr>
<tr>
<td>VC</td>
<td>Valley Channel</td>
<td>N/A</td>
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Table 2-3 City Zoning Classifications

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<th>City Zoning</th>
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<th>Comprehensive Plan Designation</th>
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<td>RS20</td>
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<td>Low-Density Residential</td>
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<td>IG</td>
<td>General Industrial</td>
<td>Warehouse and Distribution or Industrial</td>
</tr>
<tr>
<td>OS</td>
<td>Open Space</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Map 2.2 – Existing Zoning

Northeast Sector Plan

Existing City and County Zoning

Legend
- City Zoning
- County Zoning
- Northeast Plan Boundary
- City Limits
- Lawrence UGA
- Water Bodies

Lawrence-Douglas County Planning
2.3 Infrastructure

2.3.1 Water and Wastewater Infrastructure
A summary of the existing water utilities is shown on Map 2-3 and wastewater utilities (sanitary sewer) is shown on Map 2-4. Municipal water and wastewater is provided to the majority of those properties that are within the current city limits. Properties that are within the planning area, but outside the city limits, are served by Jefferson County Rural Water District #13, or private wells, and private septic systems.

The city of Lawrence sanitary sewer infrastructure does not extend outside the current city limits. The City, however, recently approved extending water and sewer infrastructure to serve the municipal airport. The flat topography of the area poses a challenge to providing urban wastewater infrastructure to the planning area. The flatness of the area makes it difficult to gravity flow wastewater and thus drives up the the relative cost of providing those services.

A portion of the planning area will be included in the City’s Wastewater Master Plan update, underway in 2010. That update will provide a better idea of the actual cost of extending wastewater infrastructure. It is important to note that prior to any wastewater infrastructure extensions to the planning area, impacts to the downstream wastewater system will also have to be evaluated. Improvements to that system may also be part of the cost to extend infrastructure to the area.

2.3.2 Stormwater Infrastructure
A summary of the existing stormwater utilities, channels, and natural streams are shown on Map 2-4. The majority of the stormwater is handled by open channels and streams. The stormwater drains to the south, by way of the tributaries, to the Kansas River.

2.3.3 Gas Infrastructure
The planning area includes three natural gas lines. One pipeline owned by Southern Star Gas enters the planning area from the north and crosses to the east through the center of the planning area. A second Southern Star Gas pipeline enters the planning area in the southeast corner, proceeds northeast and exits the planning area near Highway 24/40 and Highway 32. Another pipeline is owned by Williams Natural Gas and it enters the planning area on the west center portion and crosses northeast through the planning area. See Map 2-5.

2.3.4 Electric Infrastructure
Westar serves the planning area. Large electric transmission lines also traverse the planning area. See Map 2-5.

2.3.5 Drainage Districts
The Douglas County KAW Drainage District is the only drainage district in the planning area, but it does not cover the entire planning area. See Map 2-6.
Map 2-3 – Water Infrastructure

Northeast Sector Plan

Existing Water Infrastructure

Legend
- Lawrence Lateral Line
- Lawrence Pressurized Main Subtype
- Central Service
  - 1
  - 2
- Jefferson RWD #13 District
- Jefferson County RWD #13 Line
- Northeast Plan Boundary
- Lawrence UGA
- City Limits
- Water Bodies

Lawrence–Douglas County Planning
Map 2-5 – Gas and Electric Utilities

Northeast Sector Plan

Gas and Electric Utilities

Legend
- Southern Star Gas
- Williams Natural Gas
- Electric Transmission Lines

Northeast Plan Boundary
- Lawrence/UGA
- City Limits
- Water Bodies

Lawrence-Douglas County Planning
2.3.5 Transportation

2.3.5.1 Road and Streets
The majority of the roads in the planning area are rural township roads, most of which are gravel. Grant Township maintains the majority of the roads in Grant Township. However, Douglas County has maintenance responsibility over Douglas County Route 9 (E 1500 Rd from city limits north to Highway 24/40) and Wellman Road north of Midland Junction to the Jefferson County line. KDOT has responsibility over Highways 24/59 and 24/40.

Douglas County has adopted access management standards that spell out minimum frontage and access standards for rural roads based upon road classifications.

*Transportation 2030* (T2030) is the comprehensive, long-range transportation plan for the metropolitan area. T2030 designates streets according to their functional classification or their primary purpose. These functional classifications are shown on Map 2-7. The classification system can be described as a hierarchy from the lowest order, (local roads and streets) that serve to provide direct access to adjacent property, to (collector streets) that carry traffic from local roads and streets, to major thoroughfares (arterial streets) that carry traffic across the entire city and county. Freeways and expressways are the highest order of streets and are designed with limited access to provide the highest degree of mobility to serve large traffic volumes with long trip lengths.

T2030 was adopted in 2008 and is updated at least every 5 years. This area should be fully studied during the next update to address the future street network.

2.3.5.2 Gateways
Chapter 2 of T2030 discusses and identifies minor and major gateway into and out of Lawrence. T2030 states, “Gateways are locations on transportation corridors that define the entrances to cities. These provide visitors with a first impression of the city and often indicate the transition from rural to urban land uses. As such, cities desire to make these locations as attractive and informative as possible. As noted in T2030 in Figure 2.4, there are several roadways that represent gateways into the city of Lawrence or into smaller communities within the region that should be reviewed for aesthetic and informational enhancements when they are improved.”
T2030 identifies Highway 24/59 as a major gateway into Lawrence based on the corporate boundaries shown in Figure 2.4 of T2030.

2.3.5.3 Rail
There are also rail lines that weave through the planning area. All lines are currently active and make a number of trips through the area over the course of a typical day. These rail lines pose issues at the various crossings in the area. See Map 2-7 and Map 3-1 for the location of the rail lines.

2.3.5.4 Transit
Lawrence has a public transportation system (The T) which operates throughout the city. This system allows people to travel to other areas of the city without relying on a personal automobile. There are currently no transit routes that travel into the planning area. However, paratransit service is available to all of Douglas County. Paratransit service is a demand response service available to seniors and people with disabilities.

2.3.5.5 Bicycle Facilities
Lawrence and Douglas County have a joint bicycle plan for the community, the Lawrence-Douglas County Bicycle Plan. This plan identifies existing and future bicycle routes, lanes, and multi-use paths. A bicycle route is a network of streets to enable direct, convenient and safe access for bicyclists. A bicycle lane is a separate space designated with striping, signage or pavement markings for exclusive use by bicycles within a street. A multi-use path is a separate path adjacent to and independent of the street and is intended solely for non-motorized travel.

Map 2-8 identifies existing and future bicycle facilities that include:
- An existing multi-use path along the north side of the Kansas River Levee.
- A future bike lane identified along Highway 24/40.
- A future bike route is identified along E 1600 Road, via N 1650 Road east from Lawrence, north to N 2000 Road.
- A future bike route is identified along E 1500 Road from Lawrence north to the county line.
- Another future bike route is identified along E 1550 Road from Lawrence to Highway 24/40.
- A future bike route identified along North Street in Lawrence.
Northeast Sector Plan

Existing and Future Bicycle Facilities

Legend

Biikeways - T2030
- existing Bike Lane
- existing Bike Route
- existing Shared Use Path
- future Bike Lane
- future Bike Route
- future Shared Use Path

Northeast Plan Boundary
LawrenceUGA
City Limits
Water Bodies

Lawrence-Douglas County Planning
2.4 Environmental Conditions

The planning area is made up of several drainage basins which drain to the Kansas River. There is Federal Emergency Management Agency (FEMA) designated floodplain and floodway located within the planning area. These are areas around Mud Creek and its tributaries, Maple Grove Creek, and the Kansas River. See Map 2-9. The floodplain is any land area susceptible to being inundated by flood waters from any source. The floodway is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Developing in the floodplain is allowed both in the city and in the county based on the corresponding regulations. No development is allowed in the floodway except for flood control structures, road improvements, easements and rights-of-way, or structures for bridging the floodway.

Mud Creek and its tributaries flow through portions of the planning area. The Kansas River is immediately outside of the west and south parts of the planning area.

The North Lawrence Drainage Study was commissioned by the City in 2005 to develop a stormwater plan for the North Lawrence watershed. Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
- Future development in the watershed should maintain the current conveyance levels in the 100-year floodplain – development should not reduce the capacity for floodplain storage
- The City should purchase parcels of land as necessary for use as dedicated ponding areas
- Major roads and hydraulic structures should be improved to meet the current APWA criteria with regard to overtopping during the 100-year event, in order to provide adequate emergency services to the area

Tens of millions of dollars of cost were identified to accomplish the recommendations of the study for dealing with existing stormwater issues and future ones that will be created with development.

The majority of the land coverage within the planning area is agricultural land used for crop and animal production. The planning area also contains areas of prairie, grazing land and reserved areas of land that are a part of the KU Field Station. There are some water bodies and woodlands are also present in the northwest and northeast parts of the planning area. See Map 2-10 for a land coverage summary.

There is a range of topography within the planning area. The high points are along the northern and northeastern portions of the planning area north of the airport and Highway 24/59. The low points are essentially the rest of the planning area. This area is notable for the fact that it is so flat. As such, it is this area that has portions encumbered by floodplain. See
Map 2-11 and Map 2-12. Detailed topographic surveys will be required as individual properties are developed.

The planning area also contains Class I and II soils as determined by the Natural Resources Conservation Service, a division of the United States Department of Agriculture. These soils are considered to be high quality agricultural land. Horizon 2020, Chapter 7 Industrial and Employment Related Land Use states "The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community. High-quality agricultural land is generally defined as available land that has good soil quality and produces high yields of crops. Within Douglas County these are capability class (non-irrigated) I and II, as identified by the National Resources Conservation Service.” These soils are highly permeable and assist in stormwater management. See Map 2-13.
Map 2-10 – Land Cover

Northeast Sector Plan

Land Cover

Legend
- Lawrence USA
- City Limits
- Northeast Plan Boundary

Land Cover

COVERNAME
- Bar Oak-Floodplain Woodland
- Mixed Oak-Rivine Woodland
- Cottonwood Floodplain Woodland
- OPP (Conservation Reserve Program)

- Cottonwood Floodplain Forest
- Pecan Floodplain Forest
- Ash - Elm - Hackberry Floodplain Forest
- Redwood Marsh
- Freshwater Marsh
- Cultivated Land
- Mixed Prairie
- Tallgrass Prairie
- Low or Wet Prairie
- Non-Native Grassland
- Water
- Urban Areas
- Water Bodies

Lawrence-Douglas County Planning
2.5 Community Facilities

Community facilities are services provided either by government or non-government agencies for the benefit of, and use by, the community. Within the planning area there are a few community facilities. Grant Township owns and maintains a community building east of the airport on E 1600 Rd. That building is also currently being used by Prairie Moon Waldorf School, a private kindergarten and grade school. The Township also maintains a facility near Midland Junction where it stores and services equipment needed for road maintenance. KDOT also has a maintenance facility in the planning area at the northeast corner of Highway 24/40 and Highway 24/59.

Kansas University maintains the Kansas University Field Station (KUFS) in the northeast corner of the planning area. The KSR was established in 1947 and is the biological field station of Kansas University. Numerous research and teaching activities take place at the KUFS. Much of the KUFS is also located in neighboring Jefferson and Leavenworth counties and is not accessible to the public. However, the KUFS also maintains ecological reserves in the planning area that are accessible to the public. For example, the Fitch Natural History Reservation and McColl Nature Reserve, located in the very northeast corner of the planning area, have 4 miles of self-guided nature trails within Douglas County that allow users to explore forest, grassland, stream, wetland, and pond areas.

The planning area is located within the Lawrence Public School District (USD 497). The students in the planning area attend Woodlawn Elementary for elementary school; Central Junior High for junior high; and Free State High for high school. Students in the area can also attend the aforementioned private Prairie Moon Waldorf School for kindergarten and grade school.

Most of the community facilities including urban public services, schools, fire/medical, law enforcement, developed parks, etc., are located to the south of the planning area within the city of Lawrence. See Map 2-14

The rural portions of the planning area are served by Lawrence-Douglas County Fire & Medical through an agreement with Grant Township. The Lawrence-Douglas County Health Department is also serves the planning area.

Law enforcement is shared between the City of Lawrence Police Department and the Douglas County Sheriff’s Department, depending on whether the property is within the city or in the county. Both are located in the Law Enforcement Center in downtown Lawrence.

The city-owned Lawrence Municipal Airport is located in the planning area north of Highway 24/40 and east of E 1500 Road. The city has owned and operated the airport at this site since 1929. The airport is a general aviation facility that is an all weather facility for business and recreation flyers. A portion of the airport is dedicated to aviation-related employment activities and the city is actively marketing the airport for new businesses while recently approving water and sewer extensions to serve the airport.

The Federal Aviation Administration (FAA) regulates certain aspects of the operation of the airport and the activity around the airport. There are restrictions in place that manage structure heights around the airport to help maintain the integrity of runway approaches. See Map 2-15. The FAA also mandates a 10,000 foot Wildlife Mitigation Buffer around the runway and taxiway improvements at the airport. The buffer extends 10,000 feet beyond the runway
and taxiways. The buffer is meant to keep water bodies and other wildlife attractants to a minimum. Proposed developments within the 10,000 foot buffer require FAA review. See Map 2-16.
Section 3 – Recommendations

The Northeast Sector Plan planning area is anticipated to develop with a range of uses and intensities that extend from agriculture to industrial uses. The more intensive industrial and commercial use areas are recommended where they are in close proximity to US 24/40 Highway and the airport. Agriculture uses are located in the majority of the planning area which is not anticipated to urbanize within the foreseeable future.

Compared to other areas of the fringe area of Lawrence, this area is not anticipated to be significantly urbanized.

Due to the area’s unique challenges to development, including:
   - Costly stormwater infrastructure needs as urbanization occurs
   - Significant amounts of regulatory floodplain
   - Significant amounts of Class 1 and 2 soils
   - FAA Regulations and Lawrence Municipal Airport Protection Zones

Yet the planning area also benefits from the Lawrence Municipal Airport, nearby urban services, and access to I-70.

This plan recognizes the interconnectedness of these unique elements and proposes only limited urban development in the planning area.

3.1 Goals and Policies

Goals are broad statements of ideal future conditions that are desired by the community. Policies are guiding principles that provide direction for decisions to be made regarding the planning area in order to meet the goals. These policies are in addition to the policies in Horizon 2020 and are only applicable to the property within the Northeast Sector Plan planning area.

3.1.1 Land Use

Goal: Establish future land uses appropriate for the following unique characteristics of the area:

- The interaction of urban and rural lifestyles and development patterns
- Multi-modal transportation system
  - Airport
  - Highway 24/40/59
  - Interstate 70
  - Railroad
- Predominate agriculture use with existing industrial and commercial uses along the highways
- Relatively flat terrain
- Floodplain/stormwater challenges
- KU Field Station and ecological reserves
- Kansas River/Levee
3.1.1.1 Policies
3.1.1.1.a General
1. Establish an urban growth area boundary that considers the costs of urban development and that recognizes that the majority of the planning area will not develop in an urban manner during the time horizon of this plan.
2. Recognize that infrastructure challenges will limit urban growth in the planning area. Stormwater management costs identified by the North Lawrence Drainage Study are significant for urban development. The lack of slope of part of the planning area presents challenges for urban wastewater infrastructure and management.
3. Consider allowing alternate development standards for urbanized development that promote sustainable development– swales, no curb and gutter, pervious surfaces, etc. – that will limit the downstream impact of development.
4. Annex property in an orderly manner as urbanization of new development occurs. Further, consider annexing existing county industrial developments as utility issues in the area are better understood and as properties redevelop.

3.1.1.1.b Agriculture Use
1. Encourage continued agriculture use for the majority of the planning area, especially in areas with Class I and II soils and in the regulatory floodplain areas.
2. Encourage incentives/partnerships that assist the ongoing agriculture uses in the area.
3. Recognize that the impacts of farming – truck traffic, noises, etc. – are necessary and are not nuisances in the community.
4. Identify and create programs that promote continued agriculture use by supporting existing and new agriculture ventures.

3.1.1.1.c Industrial/Employment Use
1. Per Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use, designate and support the areas southwest of the Airport and north of I-70 as a future industrial area. Soil conserving agri-industry businesses that will protect the quality of existing high-quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in these areas.
2. Designate and support industrial/employment uses north of Highway 24/40 and west of the airport.
3. Per Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use, designate the Midland Junction area as a future industrial/employment area. Soil conserving agri-industry businesses that will protect the quality of existing high-quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in these areas. Adoption of Nodal Plan is encouraged prior to urbanizing and/or providing urban services to this site.
4. Support continued development of the Airport property for aviation-related businesses.
5. Require compatible land uses within FAA guidelines related to runway protection zones and wildlife mitigation.

3.1.1.1.d Commercial Use
1. Per Horizon 2020 Chapter 6 – Commercial Land Use, designate the intersection of E 1500 Rd. and Highway 24/40 as a future Neighborhood Commercial Center.
2. Allow future commercial uses, in addition to industrial/employment uses, at Midland Junction to provide a greater mix of uses to support highway travelers after Nodal Plan is adopted. Consider improvements to Highway 24/59 that address the safety of the curves as part of a future Nodal Plan.
3.1.1.1.e Residential Use
1. Rural residential (rural estate) uses are permitted in portions of the planning area and are encouraged if supporting agriculture uses.
2. Very low density residential uses are encouraged for the non-regulatory floodplain area between the North Lawrence neighborhood and I-70.

3.1.1.1.f Open Space
1. Protect the existing and future Kansas University Field Station and protect it from future development projects with tools such as appropriate buffers and land uses that will minimize the impact of neighboring development.
2. Encourage continued use of the Kansas River levee as an open space amenity.

3.1.1.1.g Lawrence Urban Growth Area (UGA)
1. Consider adjusting Lawrence’s Urban Growth Area boundary by limiting it to those areas of Grant Township feasible for urban-type development through the analysis of this Sector Plan and the analysis of future water and wastewater master plans.
3.1.2 Environmental Resources

Goal: Consider the unique environmental resources of the area when reviewing development applications. Environmental resources include:

- Class I and II soils
- Flat terrain
- Floodplain
- Groundwater/Wells
- KU Field Station and ecological reserves
- Kansas River/Levee
- Sand, gravel, topsoil, etc.

3.1.2.1 Policies

3.1.2.1.a Class I and II Soils

1. Recognize Class I and II soils as valuable to this portion of Douglas County for its permeability (positive attribute for stormwater and flooding) and crop production capabilities.
2. Encourage the preservation of high quality agriculture land (Class I and II soils) through conservation programs, private/public partnerships, and other funding mechanisms.
3. Encourage private agriculture easements that will preserve high quality agriculture land in perpetuity.

3.1.2.1.b Floodplain

1. The City and County should consider developing and implementing higher regulatory standards that promote no adverse impact in regulatory flood hazard areas as shown on the Flood Insurance Rate Maps for Douglas County and within the Floodplain Overlay District for the City of Lawrence.
2. Development should not be allowed within the regulatory floodway.
3. Promote the natural and beneficial functions of the floodplain.
4. Encourage natural stormwater management.
5. Crop and animal agriculture uses are appropriate in the regulatory floodplain.

3.1.2.1.c Groundwater

1. Promote land management choices that limit the potential for negative groundwater impacts.
2. Minimize pollutants percolating into groundwater systems to help ensure the quality of the area's groundwater systems.
3. Provide educational opportunities regarding natural stormwater management features, Best Management Practices (BMPs) for stormwater structures and pollutant discharge, erosion and sediment control, and water quality.

3.1.2.1.d Kansas University Field Station

1. Encourage future development that is compatible with the Kansas University Field Station. Buffers and other methods may be necessary to mitigate the impacts of the built environment of future development projects in close proximity to the Field Station.
2. Promote the research and educational aspects of the Kansas University Field Station.
3.1.2.1.e Recreation
1. Maximize recreation opportunities by developing trails that connect to focal points in the area and to the larger interconnected Lawrence and Douglas County network, including the Kansas River levee trail.

3.1.2.1.f Sand, gravel, topsoil, etc.
1. Support the extraction of natural resources such as sand, gravel, topsoil, etc. if compatible with existing land uses, especially the Lawrence Municipal Airport and Kansas University Field Station, and if infrastructure can support the process of extraction.
3.1.3 Economic Development

**Goal:** Promote economic development opportunities that take advantage of the unique characteristics of the area, which include:

- A multi-modal transportation system
  - Airport
  - Highways 24/40/59
  - Interstate 70
  - Railroad
- Class I and II soils
- Relatively flat terrain
- Existing industrial and commercial businesses along the highways
- KU Endowment land

3.1.3.1 Policies

3.1.3.1.a Airport

1. Support aviation-based development at the airport, and the necessary road and utility infrastructure, as an economic development generator for Lawrence and Douglas County.

3.1.3.1.b Industrial/Employment

1. Support goals and policies of Horizon 2020 Chapter 7 – Industrial & Employment Related Land Use and recognize that certain areas identified in Chapter 7 in the planning area are valuable to the goal of creating jobs for Douglas County.

3.1.3.1.c Agriculture Economy

1. Encourage public/private partnerships and programs to establish and support a sustainable local food program.
2. Establish incentives as part of a local food program that foster farm to table relationships.
3. Support the ag community by creating partnerships and programs that further economic development of an agricultural nature.
4. Per Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use, designate and support the areas southwest of the Airport and north of I-70 as a future industrial area. Soil conserving agri-industry businesses that will protect the quality of existing high-quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in these areas.
5. Designate and support industrial/employment uses north of Highway 24/40 and west of the airport.

3.1.3.1.d KU

1. Create partnerships with KU that help build the agricultural, research, aviation, and industrial businesses of the area.
3.1.4 Infrastructure

Goal: Improve existing services for the area and recognize the infrastructure challenges posed by the unique characteristics of the area when considering development applications. The unique characteristics include:

- Relatively flat terrain
- Floodplain/stormwater challenges
- Township roads

3.1.4.1 Policies

3.1.4.1.a Existing Services

1. Develop partnerships between Douglas County, Grant Township and the City of Lawrence for appropriate road maintenance programs in the planning area as development occurs.
2. When conditions warrant, the City should consider locating a fire station near the airport to improve emergency service for the airport, the North Lawrence neighborhood, and the remainder of Grant Township.
3. Heavy truck traffic from commercial and industrial development should use highways or improved roads for travel through the area.

3.1.4.1.b Floodplain/Stormwater/Flat terrain

1. Consider implementing alternate sustainable development standards to help reduce the cost of stormwater improvements needed for existing and future development.
2. The flat terrain in some parts of the planning area hinders storm drainage. Stormwater improvements identified in the North Lawrence Drainage Study should be constructed as development occurs in the area.
3. Implement appropriate stormwater management practices throughout the planning area.
4. Flat terrain poses cost challenges to providing sanitary sewer to the area. Consider alternative sewer solutions when prudent.
3.1.5 Transportation

Goal: Continue developing a multi-modal transportation system that supports the designated land uses of the area.

3.1.5.1 Policies

3.1.5.1.a Safety
1. Work with KDOT to improve the Midland Junction Highway 24/59 curves to make the route safer for travelers.
2. Consider improvements to Highway 24/40 that facilitate easier turning movements onto and off of the highway – in particular at E 1500 Rd./N 7th Street and at the airport entrance.
3. Encourage on-going discussion with the railroad companies regarding rail crossing safety.

3.1.5.1.b Trails/Pathways
1. Develop a trail/bikeway system for the planning area that considers connecting to open space and recreation areas.
2. Include the planning area in the county-wide bikeway system map.
3. Identify and build pathways throughout the planning area.
3.2 Land Use

This section outlines the recommended land uses for the planning area. The future land use maps (Map 3-1) and land use descriptions are explained on the subsequent pages. The map is an illustration to help visually identify the recommended land uses in the Northeast Sector Plan planning area. The land use descriptions are more detailed information regarding the different land use categories. The official definitions and the permitted uses within each zoning district are outlined in the use tables that are located in the Zoning Regulations for the Unincorporated Territory of Douglas County and the Land Development Code for the City of Lawrence. The map and text descriptions must be used in conjunction with one another in order to obtain the complete recommendation for each particular area. The map is not intended to provide a scaleable map for determining specific land use/zoning boundaries within this area.

This plan encompasses a large area that for the most part is not intended to urbanize, and as such, a large area is designated Agriculture on the future land use map. There are a number of properties in the planning area that have existing county zoning designations other than Agricultural zoning. Some of those properties are shown on the future land use map to have a different future land use through possible future urbanization. There are also properties that have county industrial and business zoning, and that are currently developed, that are shown on the future land use map as industrial or commercial, reflecting their existing developed use.

There are other properties that have County industrial or business zoning, but that are not presently developed and that are outside the anticipated urbanization area of this plan, that are shown as Agriculture on the future land use map. It is important to note that this plan does not take away those properties’ rights to develop under the current county zoning regulations. Properties with zoning other than Agricultural that seek to develop for a permitted use may do so without oversight of the future land use map of this plan as long as they receive the appropriate approvals to do so.

3.2.1 Land Use Descriptions

3.2.1.1 Agriculture
The Agriculture classification is intended for those parts of the planning area not anticipated to urbanize over the course of the planning horizon. The primary existing use of this classification is agriculture uses such as row crops, livestock production, and pastureland. Secondary uses include residential and other uses allowed in zoning districts. The intent of the Agriculture classification is to allow for existing and future agriculture activities along with rural residential uses and other uses permitted by the Zoning Regulations of Douglas County. Existing uses that are not agriculture or residential, and that have the appropriate existing zoning for the use, are not affected because this policy classification is not changing the zoning on the property. The Agriculture classification contains regulatory flood hazard areas. Development on properties containing flood hazard area must comply with the flood plain regulations of Douglas County.

Density: Per Douglas County Zoning Regulations
Intensity: Very low
Zoning Districts: Douglas County - A (Agriculture District), “A-1” (Suburban Homes District)
Primary Uses: Agriculture, commercial greenhouse, commercial riding stable, grain storage structures, single-family dwellings, churches, schools, parks and open space and utilities.

3.2.1.2 Very Low-Density Residential
The intent of the Very Low-Density Residential classification is to allow for large lot, single-dwelling type uses. The very low-density classification is expected to urbanize within the city of Lawrence.

Density: 1 or fewer dwelling units per acre
Intensity: Very low
Zoning Districts: Lawrence – RS40 (Single-Dwelling Residential), PD (Planned Development Overlay)
Primary Uses: Detached dwellings, cluster dwellings, manufactured home residential-design, zero lot line dwellings, group home, public and civic uses

3.2.1.3 Neighborhood Commercial Center
A Neighborhood Commercial Center provides for the sale of goods and services at the neighborhood level. This commercial center is intended to serve the surrounding employment center area in addition to the commuters using Highway 24/40. Horizon 2020, Chapter 6 – Commercial Land Use offers more specific language regarding Neighborhood Commercial Centers. The Neighborhood Commercial Center classification is intended to urbanize around Highway 24/40 and E 1500 Rd. Other areas designated are rural and are not anticipated to urbanize.

Intensity: Medium-High
Zoning Districts: Douglas County – B-1 (Neighborhood Business District) and B-2 (General Business District); Lawrence – MU (Mixed Use), CN1 (Inner Neighborhood Commercial District), CN2 (Neighborhood Commercial Center District), PD (Planned Development Overlay)
Primary Uses: non-ground floor dwellings, civic and public uses, eating and drinking establishments, general office, retail sales and services, hotels, motels, gas and fuel sales, car wash

3.2.1.4 Industrial
The intent of the Industrial category is to allow for moderate to high-impact uses including large scale or specialized industrial uses that utilize Highway 24/40 and I-70 for materials transportation. This category includes existing industrial developments in the area. This category also includes land at the airport dedicated to aviation related development. Land west of the airport and north of Highway 24/40 and south of Highway 24/40 is also classified as industrial. Soil conserving agri-industry businesses that will protect the quality of existing high quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in areas with Class I and II soils. The industrial category is expected to urbanize.

Intensity: Medium-High
Zoning Districts: Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)
Primary Uses: Aviation-related uses, utility facilities, building maintenance services, fleet storage, business support services, construction sales and service, industrial facilities, wholesale, distribution, and storage, research services, manufacturing and production limited and technology, soil-conserving agri-businesses

3.2.1.5 Airport
The intent of the Airport category is to designate the existing City-owned Lawrence Municipal Airport land and allow for aviation-related development.

Intensity: Medium-High
Zoning District: Lawrence – IG (General Industrial District)
Primary Uses: Aviation-related uses

3.2.1.6 Public/Institutional
The intent of the Public/Institutional Use is to allow for public, civic, and utility uses.

Intensity: Variable
Zoning Districts: Douglas County – A (Agriculture District); Lawrence – GPI (General Public and Institutional)
Primary Uses: Cultural center/library, school, utilities, recreational facilities, utility services

3.2.1.7 Kansas University Field Station
The intent of the KU Field Station Use is to classify the existing Kansas University property.

Intensity: Low
Zoning Districts: Douglas County – A (Agriculture District)
Primary Uses: crop agricultural, cultural center, teaching, active recreation, passive recreation, nature preserve, research

3.2.1.8 Open Space
The intent of the Open Space classification is to provide future opportunities for public and private recreational facilities and natural area preservation. This category primarily includes regulatory floodway areas as well as regulatory floodplain areas that are not in the Agriculture Land Use classification.

Intensity: Low
Zoning Districts: Douglas County – A (Agriculture District), V-C (Valley Channel District); Lawrence – GPI (General Public and Institutional District), OS (Open Space), UR (Urban Reserve),
Primary Uses: crop agricultural, cultural center, schools, active recreation, passive recreation, nature preserve, entertainment and spectator sports, participant sports and recreation outdoor, private recreation

3.2.1.9 Future Industrial/Employment
This classification recognizes the Midland Junction area as a future employment center. Although the area may or may not urbanize and support a larger employment base and possibly expanded commercial uses, this likely won’t happen for at least 30 years (Per Horizon 2020 Chapter 7 Industrial and Employment Related Land Use).
A Nodal Plan will be required prior to the area substantially developing. A Nodal Plan will provide a detailed land use examination of the Midland Junction intersection. The Nodal Plan should determine future land use, including a consideration for some commercial land use. In addition to future land use, among the other issues the Nodal Plan should examine are: traffic safety issues with Highway 24/59, stormwater, and Class I and II soils.
Map 3-1 – Future Land Use

Northeast Sector Plan

Future Land Use

Legend

Future Land Use
- Very Low Density Residential
- Agriculture
- Neighborhood Commercial
- Airport
- Industrial
- Public/Institutional
- Kansas University Field Station
- Open Space

Future Industrial/Employment

Railroad
Plan Growth Area
Northeast Plan Boundary
Existing Lawrence UGA
City Limits
Water Bodies

Lawrence-Douglas County Planning

Northeast Sector Plan DRAFT 3-13
3.3 Implementation

1. Amend Horizon 2020 Chapter 6 - Commercial Land Use designate the Neighborhood Commercial Center at the intersection of E 1500 Road and US Highway 24/40 to the southern portion of the intersection of E 1500 Road and US Highway 24/40.

2. Reevaluate and update the Lawrence Urban Growth Area (UGA) in Horizon 2020.

3. Include the planning area in the future wastewater and water master plan updates.

4. Include the planning area in future long-range transportation plan updates.

5. Reassess the planning area in a Bikeway Map update to include connecting the open space areas to the greater trail network.

6. Consider implementing regulations that promote no adverse impact for floodplain management.
RESOLUTION NO. 11-21

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS PROVIDING DIRECTION TO THE LAWRENCE-DOUGLAS COUNTY PLANNING COMMISSION FOR ADDITIONAL CONSIDERATION OF THE NORTHEAST SECTOR PLAN (CPA-6-5-09)

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Commission on September 20, 2010, by Resolution No. PCR-7-5-10, adopted and recommended the adoption of the "Northeast Sector Plan" and an amendment to Chapter 14 to add the Northeast Sector Plan, to "Horizon 2020," contained in planning staff report CPA-6-5-09; and

WHEREAS, the Board of County Commissioners and the Lawrence City Commission held a joint study session on the Northeast Sector Plan on March 8, 2011; and

WHEREAS, the Board of County Commissioners considered the Northeast Sector Plan at public meetings held on May 11, 2011 and June 1, 2011, and by a vote of 2-1 on June 1, 2011, returned the Northeast Sector Plan to the Lawrence-Douglas County Planning Commission for additional consideration.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS:

Section 1. The above recitals are incorporated by reference as if fully set forth herein and shall be as effective as if repeated verbatim.

Section 2. The Board of County Commissioners provides the following direction to the Lawrence-Douglas County Planning Commission for further consideration of the Northeast Sector Plan:

1. Consider the public/private infrastructure costs of development of the area southwest of the airport currently designated Industrial when compared with the infrastructure costs of developing other identified industrial sites around Lawrence, in particular the Farmland site and the sites in the NW corridor along Farmer's Turnpike, to determine if such costs are extraordinary for the amount of industrial land developed.

2. Considering the presumed extraordinary costs to provide public infrastructure, such as storm water, sewer and street improvements, presumed to be needed to support industrial or other urbanized development in Grant Township, discuss whether urbanization should be reasonably expected outside of the airport property.

3. Considering the unique challenges present in the area of the sector plan, including infrastructure costs, identified storm water issues, the presence of class 1 and 2 soils, etc., and considering the other areas in the county, especially those that surround Lawrence, designated or recently zoned for industrial uses, discuss whether industrial development outside of the airport property is a necessary designation in this plan area in order to meet the "Horizon 2020" goal of expanding the industrial inventory.

4. Discuss whether or not the area southwest of the airport currently designated Industrial is a true future multi-modal transportation area. Consider the growth and intensity of uses at the airport as well as how realistic it is that rail can be extended to the industrially designated area southwest of the airport. Discuss whether rail and airport transportation modes are valid reasons to support industrial designations on the property southwest of the airport.

5. Discuss more thoroughly the impact of developing to the proposed land use designations in the area and the recommendations of the North Lawrence Drainage Study. Consider how the
Federal Aviation Administration's circular regarding waterfowl around the airport impacts the recommendations of the drainage study that may result in retaining/detaining stormwater in the area around the airport. Consider the potential future of regulations regarding development in levee protected areas.

Section 3. This Resolution shall be in full force and effect upon its adoption by the Board of County Commissioners and being published once in the official County newspaper.

Adopted by the Board of County Commissioners of Douglas County, Kansas, this 16th day of July, 2011.

BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

Jim Flory
Chair

Mike Gaughan
Commissioner

Nancy Theilman
Commissioner

ATTEST:

Jameson D. Shows
County Clerk
STATE OF KANSAS
Douglas County

Erika Gray of the Legal Dept. of the Lawrence Daily Journal-World being first duly sworn, deposes and says:

That this daily newspaper printed in the State of Kansas, and published in and of general circulation in Douglas County, Kansas, with a general paid circulation on a daily basis in Douglas County, Kansas, and that said newspaper is not a trade, religious or fraternal publication, and which newspaper has been admitted to the mails as periodicals class matter in said County, and that a notice of which is hereeto attached, was published in the regular and entire issue of the Lawrence Daily Journal-World

Said newspaper is published daily 365 days a year; has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice and been admitted at the post office of Lawrence in said County as second class matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for 1 consecutive days/weeks the first publication thereof being made as aforesaid on 07/11/2011 with publications being made on the following dates:

07/11/2011

Subscribed and sworn to before me this 7/19/2011

Notary Public

My Appointment expires 7/19/2015

(Published in the Lawrence Daily Journal-World July 11, 2011)

RESOLUTION NO. 11-21

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS PROVIDING DIRECTION TO THE LAWRENCE-DOUGLAS COUNTY PLANNING COMMISSION FOR ADDITIONAL CONSIDERATION OF THE NORTHEAST SECTOR PLAN (CPA-6-5-09)

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Commission on September 20, 2010, by Resolution No. PCR-7-5-10, adopted and recommended the adoption of the "Northeast Sector Plan" and an addition to Chapter 14 to add the Northeast Sector Plan, to "Horizon 2030," contained in planning staff report CPA-6-5-09; and

WHEREAS, the Board of County Commissioners and the Lawrence City Commission held a joint study session on the Northeast Sector Plan on March 8, 2011; and

WHEREAS, the Board of County Commissioners considered the Northeast Sector Plan at public meetings held on May 11, 2011 and June 1, 2011, and by a vote of 2-1 on June 1, 2011, returned the Northeast Sector Plan to the Lawrence-Douglas County Planning Commission for additional consideration.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS:

Section 1. The above resolutions are incorporated by reference as if fully set forth herein and shall be as effective as if repeated verbatim.

Section 2. The Board of County Commissioners provides the following direction to the Lawrence-Douglas County Planning Commission for further consideration of the Northeast Sector Plan:

1. Consider the public/private infrastructure costs of development of the area southwest of the airport currently designated Industrial when compared with the infrastructure costs of developing other identified industrial sites around Lawrence, in particular the Farmstead site and the sites in the NW corridor along Farmer's Turnpike, to determine if such costs are extraordinary for the amount of industrial land developed.

2. Considering the presumed extraordinary costs to provide public infrastructure, such as storm water, sewer and street improvements, presumed to be needed to support industrial or other urbanized development in Grant Township, discuss whether urbanization should be reasonably expected outside of the airport property.

3. Considering the unique challenges present in the area of the sector plan, including infrastructure costs, identified storm water issues, the presence of class 1 and 2 soils, etc., and considering the other areas in the county, especially those that surround Lawrence, designated or recently zoned for industrial uses, discuss whether industrial development outside of the airport property is a necessary designation in this plan area in order to meet the "Horizon 2020" goal of expanding the industrial inventory.

4. Discuss whether or not the area southwest of the airport currently designated Industrial is a true future multi-modal transportation area. Consider the growth and intensity of uses at the airport as well as how realistic it is that rail can be extended to the industrially designated area southwest of the airport. Discuss whether rail and airport transportation modes are valid reasons to support industrial designations on the property southwest of the airport.

5. Discuss more thoroughly the impact of developing to the proposed land use designations in the area and the recommendations of the North Lawrence Drainage Study. Consider how the Federal Aviation Administration's circular regarding waterfront around the airport impacts the recommendations of the drainage study that may result in retaining / detaining stormwater in the area around the airport. Consider the potential future of regulations regarding development in levee protected areas.

Section 3. This Resolution shall be in full force and effect upon its adoption by the Board of County Commissioners and being published once in the official County newspaper.

Publication Charges $196.50
Notary And Affidavit $0.00
Additional Copies $0.00
$196.50
STATE OF KANSAS
Douglas County

Erika Gray of the Legal Dept. of the Lawrence Daily Journal-World being first duly sworn, deposes and says:

That this daily newspaper printed in the State of Kansas, and published in and of general circulation in Douglas County, Kansas, with a general paid circulation on a daily basis in Douglas County, Kansas, and that said newspaper is not a trade, religious or fraternal publication, and which newspaper has been admitted to the mails as periodicals class matter in said County, and that a notice of which is hereto attached, was published in the regular and entire issue of the Lawrence Daily Journal-World

Said newspaper is published daily 365 days a year; has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice and been admitted at the post office of Lawrence in said County as second class matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for 1 consecutive days/weeks the first publication thereof being made as aforesaid on 07/1/2011 with publications being made on the following dates:

07/11/2011

Subscribed and sworn to before me this

Notary Public

My Appointment expires

Publication Charges $196.50
Notary And Affidavit $0.00
Additional Copies $0.00

$196.50
May 11, 2011

Flory called the regular session meeting to order at 6:35 p.m. on Wednesday, May 11, 2011 with all members present.

PLANNING/COMPREHENSIVE PLAN 05-11-11
The Board considered approving Comprehensive Plan Amendment, CPA-6-5-09, to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan and adopt joint Ordinance No. 8591/Resolution for Comprehensive Plan Amendment (CPA-6-5-09) amending Horizon 2020 - Chapter 14 to include the Northeast Sector Plan. Dan Warner, Lawrence-Douglas County Metropolitan Planning Staff, presented the item. The Planning Commission approved the item with a 5-4 vote on September 20, 2010.

Warner stated the role of the sector plan is to help guide future development and anticipate development over a long period of time. He gave the history on the meetings and the drafts leading up to tonight’s meeting. Staff received a large amount of public comment during the three drafts. The Planning Commission asked staff to consider the language option for considering Class 1 and Class 2 soils.

Flory opened the item for public comment.

Jerry Jost, 2002 E 1600 Road, pointed out areas he has concerns with throughout Northeastern Douglas County regarding storm water runoff and preserving Class 1 and 2 soils.

Charles Nova Gradac, 945 Ohio Street, stated he has concerns that development will create drainage issues for his orchard and he also wants to preserve Class 1 and 2 soils.

Ron Schneider, 1979 E 1600 Road, stated he has two main concerns: 1) flooding and 2) use of high quality soils. He feels no development should be approved until improvements to North Lawrence have been made to decrease flooding.

Barbara Clark, 2050 E 1500 Road, said we have already urbanized over 21,000 acres of class 1 and 2 soils with the largest section of Class 1 and 2 soils located in the NE Sector area. She stated it would make sense to choose areas that are not competing with the best soils for agriculture.

Hank Booth, Lawrence Chamber of Commerce, stated many more people were involved in the Sector Plan process, providing input and compromise. He feels there is no reason to restart the study process; the compromise is on the table.

Kim Sherman, Coordinator for the KU Student Farm, stated the Student Farm program is located in this NE Sector area on Class 1 soil. To allow development on this land sends a message to young farmers that we are willing to sacrifice the best soil for industry.
Phil Toevs, 1961 N. 1200 Road, stated he is a chef and 90 percent of restaurant revenue is lost out of town because they purchase shipped in produce. We need to look at keeping our money here.

Ted Boyle, president of North Lawrence Improvement Association, stated the increase in home development in North Lawrence created storm water runoff flooding problems. He supports the original third draft.

Charles Marsh, 3309 Riverview, stated there needs to be a way to make it advantageous for the people who own the Class 1 and 2 soils to keep it that way. He has concerns over food shortages in the future.

Debbie Milks, 945 Ohio, showed photos of flooding in Sioux City, IA where the dam failed and there was a rain storm. She is concerned that development in NE Douglas County could create similar circumstances due to runoff.

Daniel Poull, 821 Ohio, commented that if only 20% of the money going out of the area would stay. We have an incredible opportunity to preserve Class 1 and 2 soils that can’t be replaced.

Pat Ross, 1616 B, 1799 Road, Nunamaker Ross Farms, stated he owns land in the in Grant Township and grows produce on this property. He doesn’t feel Douglas County is at risk for running out of cultivated prime farm land to sustain local food production.

Simran Sethi, 1333 New York, stated she is pro development, but the right kind of development. She feels as a community we need to recognize the value of our agricultural assets and natural resources.

RECESS
At 8:05 p.m. Flory recessed the Board for a 10 minute break until 8:15 p.m.

RECONVENED AT 8:15 P.M.

Frank Male, 861 E 2100 Road, Eudora, stated compromises have been reached on this plan. He urged the Board to approve the NE Sector Plan as recommended by the Planning Commission.

Natalya Lowther, 1480 N 1700 Road, stated when the pump station is unable to clear water immediately, her land comes underwater. She doesn’t want to see more industrial development in this area.

Lane Williams, 1735 E 1500 Road, stated we need to be aware that the current levee system will be undependable at some point. We need to consider what the best public policy is for land owners and people in general.

Flory closed the public hearing.

Flory made several observations. It is a sector plan, a general generic description of a vision of potential use of land; just an option. The industrial use of land that at
one point was considered for soil conservative agri-business and then became industrial is just an option. If categorized as industrial, it is just one option. It could continue to be agricultural for years or forever. If this land is considered for development and if it would take millions of dollars to correct the drainage issues, that would have to be addressed. This is a category of land not a mandate that it be developed. Flory stated that soil preservation is a concern to everyone, but Douglas County doesn’t own that land. Neither do some of the people in this room. As an elected official, he feels government doesn’t need to tell everyone what is best for them. Only when there is clear necessity for government to act should they act. Many of those with an interest in this land have agreed to the option passed by the Planning Commission. They saw that as a compromise. The food argument he doesn’t find compelling. Flory stated it’s important to conserve Class 1 and 2 soils, but we need to keep it in a real world perspective. He added he will not resist efforts to study the plan if the other commissioners wish to. However, he doesn’t feel it needs to. Flory commented he would like to keep the option of development of industrial available, just in case. It would be tough to meet challenges to develop but it can be done.

Gaughan stated the thing he is most interested in is the North Lawrence Drainage Study and how it intersects with the decision made and sequences of events if this is passed. McCullough replied the North Lawrence Drainage Study has been used to determine what specific improvements would be required of any development proposal that comes in and what above and beyond that might be of any value to the community that we think is required as well.

Gaughan stated the study showed a $41 million improvement projected six years ago, which couldn’t be all done at once, but he asked if the costs are still relevant. Matt Bond, City Storm water Engineer, said the $16 million was recommended for improvements inside the City limits and $25 million in improvements was recommended outside the city limits in Douglas County. He discussed in more detail the suggested improvements. In today’s dollars the improvements will cost more.

Flory stated the study wasn’t prepared in response to the sector plan, but prepared for drainage issues to decide if matters needed to be addressed then or continuing no matter what happened. Bond stated that is correct.

Thellman stated it was her understanding the study was ordered by the City to determine how development might progress after a previous commission significantly expanded the Urban Growth Area, against staff advice. Bond responded he does not know the specific history, this all came before him. McCullough stated it is fair to say the study was ordered with development in mind and it was a plan to look at current issues to address some of the flooding issues today and a build out of a particular scenario.

Gaughan asked how different the development was at the time of the study than what is proposed now. McCullough replied the study looked at much more intense development than what is proposed in this sector plan.
Thellman stated that the discussion of food production on Class 1 and 2 soils is an important issue, but not the key issue for this sector plan. She stated that while we need to honor agriculture in that area in all its forms--big farms and small farms, conventional and organic--the most critical issue for the Northeast Sector Plan is the problem of flooding and storm water management. Thellman said she heard Flory say that just because we identify some land as purple on the map doesn't mean it will become industrial. He said any project will have a steep road because of all the obstacles, primarily storm water management. Thellman said that if the map shows green in the area that people want to industrialize, it doesn't prevent them from proposing an industrial project--it just doesn't send a signal that industrial development is encouraged when there are so many issues like the extraordinary expense of developing around flooding and storm water obstacles. She said this area is plagued with development problems, some of them fixable. Thellman stated she heard it said there was a grand compromise with this sector plan, but what she sees is language taken directly from Chapter 7 where the assumption was for industrial development and no significant or enforceable language regarding preservation of prime soils, not representing the year’s long public discussion about trying to find a balance between the two. She stated she wondered by the second option, where the 50/50 compromise of allowing intense industrial development on some acres balanced with preservation of some acres wasn't chosen since it seemed like a truer compromise.

There was discussion by staff of needing to clarify what Soil Conserving Agri Industry was.

Flory moved to defer the item the June 1, 2011 meeting for further discussion.
June 1, 2011

Flory called the regular session meeting to order at 6:35 p.m. on Wednesday, June 1, 2011 with all members present.

MINUTES 06-01-11
Thellman moved to approve the minutes of March 30, April 6, April 20 and May 4, 2011 (as amended). Motion was seconded by Gaughan and carried 3-0.

CONSENT AGENDA 06-01-11
Flory moved approval of the following Consent Agenda:

- Lease Agreement between Douglas County and United Way of Douglas County for extension of lease for the Valleyview Building. The term of the lease commences September 10, 2011 and expires at 11:59 p.m. on December 31, 2026;
- Resolution 11-14 granting a Cereal Malt Beverage License for Clinton Marina Parking Lot Special Event on June 18, 2011 at 1329 E 800 Road;
- Midwest Mayhem Triathlon to be held July 17, 2011 at Lone Star Lake and marina; and
- Resolution 11-17 directing notice of a public hearing to be held on June 15, 2011 to discuss establishing an alternate methodology for disposal of certain Douglas County Property at located south of Lone Star.

Motion was seconded by Gaughan and carried 3-0.

PUBLIC WORKS 06-01-11
Thellman moved to approve Resolution 11-19 providing for the establishment of the Douglas County Heritage Conservation Council; prescribing the purpose, composition, powers, and duties of the Heritage Conservation Council. Motion was seconded by Flory and carried 3-0.

PUBLIC HEARING/YANKEE TANK 06-01-11
Flory moved to open a public hearing to consider creating a community improvement district in the vicinity of Yankee Tank Dam, to contribute to financing the costs of rehabilitating Yankee Tank Dam to bring the structure into compliance with state and federal safety regulations. Motion was seconded by Thellman and carried 3-0.

No public comment was received. Flory closed public hearing.
Flory moved to approve Resolution 11-16 relating to and amending a regulated Planning and Zoning Classification within the unincorporated territory of Douglas County, Kansas; changing the zoning classification from “A” (Agricultural District) to “B-2” (General Business District) for the property described on a recorded subdivision plat as Lot 1 Rockwall Farms Addition. Motion was seconded by Gaughan and carried 3-0.

ZONING & CODES 06-01-11
The Board considered the approval of a resolution amending a Planning and Zoning Classification from “A-1” suburban Home District to “I-1” Limited Industrial District for VINLAND AIRZONE 2nd Plat, Lot 1, Block 1. Keith Dabney, Director of Zoning & Codes, presented the item.

Flory opened the item for public comment. No comment was received.

Gaughan moved to approve Resolution 11-15 relating to and amending a regulated Planning and Zoning Classification within the unincorporated territory of Douglas County, Kansas; changing the zoning classification from “A” (Agricultural District) to “I-2” (Limited Industrial District) for the property described on a recorded subdivision plat as VINLAND AIRZONE 2nd Plat Lot 1, Block 1. Motion was seconded by Thellman and carried 3-0.

PLANNING/NORTHEAST SECTOR PLAN 06-01-11
The Board continued discussion from the May 11, 2011 meeting, to consider approving Comprehensive Plan Amendment, CPA-6-5-09, to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan and adopt joint Ordinance No. 8591/Resolution for Comprehensive Plan Amendment (CPA-6-5-09) amending Horizon 2020 - Chapter 14 to include the Northeast Sector Plan. (PC Item 4; approved 5-4 on 9/20/10)

Flory reopened the item for continued public discussion.

Roger Pine, 20758 Golden Road, stated he is in support of Option 1 as is 70% of the landowners in the northeast area. Most of these landowners sent in support letters showing support for Option 1.

Matt Eichman, 512 Ohio Street, said he feels the language in this plan puts an undue focus on just the soils and there are other natural resources the County should be considered. His right to open a sand plant can be effected by only the preservation of class 1 and 2 soils.

Hank Booth, Lawrence Chamber, stated he feels what he watched transpire from the many preceding NE Sector Plan meetings was a compromise. He feels the area is a prime location for Class 1 and 2 soils, but it is also prime location for business due to highway development, rail and air in one particular location.
Jerry Jost, 2007 E 1600 Road, stated there's a reason why Lawrence has not grown north and it's because of storm water and flooding issues. He questioned at what point in development will cause the need for Highway 24/40 to be raised and how it will be paid for.

Lori McMinn, 500 Mississippi Street, stated she feels we should prioritize our resources. Just because you can grow in lower class soils doesn't mean it is ideal.

Pat Ross, 1616 N 1700 Road, stated he farms about 3400 acres in Grant Township growing corn, soybeans and vegetables and a large portion of that is owned by people that support the plan proposed by the Planning Commission. He supports Option 1 and feels it represents the largest number of landowners north of Lawrence.

Ted Boyle, North Lawrence Improvement Association, said there are 1500 homes and businesses in North Lawrence which are major stakeholders in this event. Storm water coming from the north affects residents from the 100 or more homes built in last 15 years, which has taken up the natural storm drainage system.

Frank Male, 861 N 2100 Rd, asked the Board to approve the plan supported by the Planning Commission.

Dorothy Congrove, 1829 E 1700 Road, stated she feels the 120 acres of land, as described in the proposed NE Sector Plan, should be set aside for future industrial use. The County has potential loss if the industrial is not located on the map.

Barbara Clark, 2050 E 1550 Road, stated a mark on the map is a siren call for development. It will draw people in. The premise of development in that area, industrial development in the Northeast Sector, is faulty.

Rich Bireta, 2010 E 1600 Road, said he thinks this is a really good Sector Plan. He asked the County Commission, on behalf of the Grant Township Board, to pass the NE Sector Plan regardless of whatever decision the Board makes on the designation of the land south of the airport.

Lew Phillips, 2000 Crossgate Drive, stated he feels there is a problem of drainage in North Lawrence whether we industrialize or not. He is concerned that even a small amount of development would be impact runoff.

There was discussion with staff to clarify the location criteria for industrial development, the amount of acres already zoned for development in Douglas County, the life span of the sector plan, the costs associated with correcting flooding issues and having the property owners take more responsibility in improvements.
Gaughan stated he doesn’t feel the NE Sector Plan passes the common sense test to move forward; at least he stated he can’t move forward in good conscience. Arguments on both sides make a lot of sense but there is a public investment that is required before we even get this point. Gaughan feels the property should be kept in agriculture until some of questions are addressed. He is sure our engineers can come up with solutions to some of these problems but it will cost serious amounts of money. Gaughan stated he can’t move forward with something that doesn’t make sense financially for this community. The level of investment we are going to be asked to make is undefined. Gaughan commented that the perpetuation of a snowflake should really be an asterisk saying “don’t develop here, we can’t afford it.”

Flory stated we’re putting the cart before the horse. This is a sector plan. We’ve done two sector plans since we’ve been on the Commission. He said never before have we tried to get into such minute detail on uses and water flow. A sector plan is a statement saying that this land conceivably could be used for this purpose. If we say that, then the option Commissioner Gaughan is concerned about with financing all gets worked out in the process if and when it ever gets developed. This is a signal that this is an area that based upon the general locational criteria is appropriate for industrial. Flory stated that we aren’t rezoning it, we aren’t approving a site plan, and we aren’t approving a storm water management system for it. This is just a general statement. He said he doesn’t see how the Board can ignore 70% of the people that own the property. We passed an environmental chapter that affected the whole County and every property owner in the County after two hours of public comment and zero discussion by the Commission, and we’re going to send this back for more discussion, more meetings, more disputes. He said he doesn’t understand what level of certainty the other Commissioners want on how much something is going to cost at a sector plan level. We haven’t had any cost assessments on any sector plans. He stated he assumes we are getting into this discussion now because of a group that is very emphatically concerned about the preservation of Class 1 and 2 soils. He stated he understands the concerns but will not apologize for keeping government protectionism from telling landowners what they can or cannot do with their property. Flory questioned how much government we need. People should have the option of industrial available to them. Flory said the City of Lawrence or the County doesn’t have to spend one dime if we don’t want to.

Thellman stated with this plan we are encouraging and enticing an industrial employment center in the very area that prompted previous commissions to order the North Lawrence Drainage Study to be performed, which found $16 million in flood infrastructure needs within the community of North Lawrence and then $25 million in improvements for modest development on the watershed. Thellman stated they were working from a different land use map but it didn’t represent an industrial complex at Midland Bend. She feels it would be irresponsible to ignore that this is a
historically, disastrously flooding area. One of the basic duties of government is public safety and stewardship of public tax dollars. Thellman said yes, you have dozens of landowners that represent thousands of acres and you have one voice here representing 2500 people in North Lawrence. Although we are only hearing one voice, it is incumbent on us, this being her district, the community of North Lawrence is the most vulnerable population in this whole conversation. She feels it is not out of line to be concerned about the public safety issue of enticing development that will make flooding even more likely, requiring at extraordinary public cost to try to prevent it. It's a real risk and a real danger. Thellman stated since she's been on this commission she has seen the industrial zoning of nearly 1000 new acres not in the flood plain.

Flory stated he doesn't like the inference that since he is willing to approve this plan, he doesn't care about public safety. Flory stated, "Of course I do." This document doesn't authorize anything. It doesn't authorize anyone to turnover a shovel of dirt. When it got to the point where someone has a development request, he concurs, all of the challenges would have to be overcome before moving forward. Flory added, "This document does not endanger public safety. If it did, I wouldn't vote for it. It doesn't put the 2500 residents in North Lawrence in danger of flooding, if so, I wouldn't vote for it."

Gaughan said this is a big unidentified expense to the local government, to the City and the County. What is at stake is spending between zero and $40 million on improving drainage among other things. Flory replied that is true, zero to $40 million because we don't know.

After further discussion, Gaughan moved to send the Northeast Sector Plan back to the Planning Commission for further discussion and the Board will give direction to staff at a later date. Motion was seconded by Thellman and carried 2-1 with Flory in opposition.

ACCOUNTS PAYABLE 06-01-11
Flory moved approval of accounts payable in the amounts of $249,306.34 paid on 05/26/11 and $104,445.31 to be paid on 06/02/11; a manual check in the amount of $10,000.00 paid on 05/27/11; and a wire transfer in the amount of $400,000.00 paid on 05/27/11. Motion was seconded by Gaughan and carried 3-0.

APPOINTMENT 06-01-11
Gaughan moved to appoint David Clay Britton, Lawrence, as a County Representative to the Lawrence-Douglas County Metropolitan Planning Commission for a term of three years to expire in May 2014. Britton will replace Stanley Rasmussen. Motion was seconded by Thellman and carried 2-1 with Flory in opposition.
APPOINTMENT 06-01-11
Thellman moved to appoint Pennie von Achen, Eudora, as a County Representative to the Lawrence-Douglas County Metropolitan Planning Commission for a term of three years to expire in May 2014. Von Archen will replace Charles Dominguez. Motion was seconded by Gaughan and carried 2-1 with Flory in opposition.

APPOINTMENT 06-01-11
Thellman moved to appoint the following people to the Heritage Conservation Council: Larry McElwain and Paul Bahnmaier for one-year terms to expire 05/31/12; Shelley Hickman Clark and Julia Mangliz for two-year terms to expire 05/31/13; and Ken Groteveld, Dr. John Bradley and Gary Price to three-year terms to expire 05/31/14. Motion was seconded by Flory and carried 3-0.

APPOINTMENT 06-01-11
Thellman moved appoint Barbara Higgins Dover to the Grant Township Treasurer position effective July 31, 2011, filling the remaining term of Jerry Jost. Motion was seconded by Flory and carried 3-0.

APPOINTMENT 06-01-11
Flory moved reappoint Bob Newton to the Douglas County Emergency Management Board for a one-year term. Motion was second by Thellman and carried 3-0.

Flory moved to adjourn the meeting; Thellman seconded and the motion carried 3-0.

Jim Flory, Chair

Mike Gaughan, Vice-Chair

ATTEST:

Jamie Shew, County Clerk

Nancy Thellman, Member
Scott McCullough, Director, presented the staff report.

Corliss said this was an exciting project to see redevelopment in the area. He said there was money in the capital budget for the parking lot on Delaware Street. The development agreement would be finalized and the land use approvals would be processed. This project would get the building back in good shape.

Tony Krsnich said a nice article came out in the Journal World a couple weeks ago. He thought the project was important and he wanted everyone to remember that nothing is perfect and you can’t let the great get in the way of the good. The project would create 150 jobs. The tax credits would go somewhere and they might as well come to us in the City of Lawrence.

Vice Mayor Schumm called for public comment. None was received.

Amyx said it was a great project and he appreciated the investment in Lawrence. He was glad to see someone pick up this district and want to develop it.

Dever and Carter said they agreed.

Schumm said the project would strengthen the neighborhood and preserve a historical building.

**Moved by Amyx, seconded by Dever, to initiate text amendment.** Motion carried 4-0 with Mayor Cromwell abstaining.

Mayor Cromwell returned to the room at 7:30 p.m.

4. **Discuss Comprehensive Plan Amendment, CPA-6-5-09, to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan.**

Dan Warner, Planner, presented the staff report.

Mayor Cromwell called for public comment.

Ted Boyle, North Lawrence Improvement Association, said he wanted to consider the reason for the lack of development in the area. He said it was stormwater. Water always runs downtown and North Lawrence was downhill from any development that might occur. He said that in the early 1990s North Lawrence had a housing boom. That sucked up the natural
stormwater drainage system. The water got deeper and deeper during rains because of the addition of rooftops and impervious surface. He heard from each development that there would be no negative development, but now we are working on a five million dollar pump station to take water out of North Lawrence that was caused by development. They had been waiting 20 years for that pump. The city has purchased three properties for the project. That was money spent as a direct result of stormwater runoff. That runoff in 1993 came from the airport and as far north as the quarry. Unless the city or county goes out and spends 25-30 million dollars before development is started there would be more flooding problems. A good thing that came from this plan development was that there are Type 1 and 2 soils in North Lawrence that should be protected and preserved. We thought that option 3 should be considered, but all the Planning Commission wanted to talk about was defining ag-related business. We needed to go back to the original option 3.

Hank Booth, Lawrence Chamber of Commerce, asked how the vote goes from here, since the county sent it back to the Planning Commission, and whether it would go back to the Planning Commission regardless of the city commission’s vote tonight.

Corliss said yes.

Booth said he did not agree that there was no compromise in this. One of the participants that wanted to keep the land in the purview of the owners felt that they didn’t like the plan but they were okay with its passage because it was a compromise that had been reached over time. He said that the flood issue must be addressed over a long term plan. We have more work that needs to be done on flood control in North Lawrence. He said that keeping our eye on the NE Sector as a limited development area was the way to get the money flowing into the area for the development of a more complete and safe flood control program.

Pat Ross said he farmed several farms in Grant Township. This process of planning for the NE sector had gone on a long time. His family and other property owners felt that the plan
originally passed by the Planning Commission but then voted down by the County was a good plan. He hoped that plan could be passed.

Charles NovoGradac displayed a map of the area. He showed his property and said he had developed it as a nut tree orchard. He was concerned that the incremental development had created an increased risk of damage from storm water flooding. He said the new floodplain map showed the floodplain expanding to the point where it now touches his property where it had previously been hundreds of feet away. Development in the area was adverse to the farmers in the area due to the demand on drainage. He said when you had floodplain, property owners brought in truck loads of soil to raise their buildings, but farmers couldn’t do that. The new dollar store raised the ground 10-12 feet. The rest of North Lawrence became a drainage basin for that property. He said capability one soils were the soils found in the bottomland which were significantly better than capability two soils. You must respect capability one soils for their water holding capacity.

Roger Pine said he represented Pine Family Investments and Pine Family Farms. He said before Charles put this orchard out there he had farmed it. Prior to that the only time it had flooded was 1951. He was here to talk about the fact that the County Commissioners did not approve the plan that had been made under considerable compromise. He said he was disappointed that that plan wasn’t good enough for all of the county commissioners. He said the Planning Commission’s responsibility was to look at land use and not cost. If you looked at the resolution by the county costs were mentioned multiple times. That was not necessarily what should be talked about. He pointed out that out of all the sector plans approved, this one went into much more detail. In this particular case we were trying to make decisions on things that wouldn’t take place for many years, and we were looking at all of the negatives and none of the positives. Part of the infrastructure problems were resolved by the water and sewer line projects of the city to the airport. Owners representing 70% of the area were in support of the
compromise and he hoped that would have some influence. If we do develop any of the land out there not all of the water would go to North Lawrence, some of it diverts to the east.

Chuck Marsh said he asked that this be sent back to the Planning Commission and challenging the rationale of the airport industrial district, because 100% of that land was Class I soils. Proposing that as industrial conflicted with other city policies and plans. Protection of high quality agricultural land was a key value in Chapter 16 of Horizon 2020 and other plans. The forthcoming report of the Peak Oil Task Force had a recommendation to discourage urban and suburban development on high quality soils.

Barbara Clark, Citizens for Responsible Planning, said it was important to take the plan in the context of all of Douglas County. It is evident that the area in question was the largest deposit of contiguous Class I and II soils. Of the 11 indicated areas for proposed industrial areas, there was only one area, the airport site, that was comprised entirely of Class I and II soils. Why would we opt to develop where the soils were entirely Class I and II? There may also be FAA restrictions on development. Another pitfall was that the proposed area for development was in the FAA wildlife mitigation area.

Kirsten Bosnak said as part of her job she managed the KU medicinal garden near the airport. She said she wanted to appeal to our sense of the education potential and imagination of things that couldn’t be done elsewhere in the county. The garden was only in it’s second year but we have had many tours. At the latest tour there were 85 people. We should think about what we might do that would limit educational opportunities in the future.

Debbie Milks said that we had been told that these plans were not zoning maps, but that expectations were created and where would the lines be set in the future as development occurs. At some point you would reach a tipping point and we didn’t know what that is yet. It didn’t seem there had been any particular mitigation of the downhill flowing water in the last 15 years.
Carter asked about the new flood plain map. He said a lot of people had been affected by that map all over Lawrence. All through Lawrence that floodplain changed significantly.

McCullough said development might be one issue but there were different factors. We could get information for the commission.

Carter said he wanted to confirm that the map also changed in areas not affected by development.

Amyx said the County Commission asked for specific questions to be considered by the Planning Commission. Regarding the infrastructure costs, is that something the planning commission would generally look at?

McCullough said when accompanied by a specific request for public assistance, we usually advise the planning commission to focus on the land use issues and separate that from other requests.

Amyx said he wanted to make sure they had a responsibility to consider the costs to the city. He asked if the county had voted anything down.

McCullough said they sent it back, but did not take a negative vote.

Amyx asked whether Marsh talked about the airport or land adjacent to the airport.

Marsh said the land adjacent to the airport.

Carter said he was on the planning commission through the consideration of this plan. Looking at the notes from the county commission, a couple things jumped out. The topic of Class I and II soils has already been considered. He said that Marsh had said this conflicts with Chapter 16, but he would point out that that is exactly what came out of this plan, that there was a confluence of factors that all screamed industrial. Only 200 acres out of 10,000 was designated industrial. The Planning Commission considered Class I and II soils already. Related to infrastructure costs, the city and county commissions wore different hats than the Planning Commission. The Planning Commission was to look at land use. He said regarding flooding, that it was a legitimate concern. The fear that the opposition to the plan had was that the
commission would not consider the flooding issue at the time a development was proposed, and he didn’t think that was true. Regarding costs it was impossible to say what should or shouldn’t go forward because we didn’t know who would be involved years from now. He thought city staff should look at infrastructure costs, not the Planning Commission.

Cromwell asked whether this had to go back to Planning Commission.

Corliss said yes, the city and county had to agree on substantially the same language. The county had indicated they wanted the planning commission to look at the language.

Carter said he favored sending it forward and having a study session with the County Commission.

Corliss said the purpose of receiving it today was to receive public comment, review the county commission comments and the planning commission recommendation, and get city commission comments as well since it is going back to the Planning Commission. It made sense to get the views of both bodies before the Planning Commission considers it again. It was appropriate for the Planning Commission to look at infrastructure costs. They had a role to consider an improvement plan, but ultimately it was up the City Commission to decide how much consideration the Planning Commission should give to infrastructure costs and land use considerations. It wasn’t necessarily a very tidy division but it usually worked out. The drainage study had been suggested by the Planning Commission.

Amyx said we were in an adoption phase of the plan. The plan adopted by the Planning Commission was before us tonight. The plan would come back to the City and County commissions after the Planning Commission. We were down to looking where the industrial property would go and whether we would define agribusiness. We need a specific answer to that question – what is agribusiness? He said he didn’t know of anything else he wanted answered at this time. Could there possibly be a brand new plan that would come back to us?

McCullough said he didn’t think so. The PC has options which would be lined out to them for acting on the item.
Cromwell said we didn’t currently have a definition of agribusiness.

McCullough said they started down that path, but the Planning Commission chose not to accept any of the proposed definitions and instead settled on the general statement from Chapter 7.

Amyx asked if that was the compromise language from the 5-4 vote.

McCullough said that was what was sent to the City and County Commissions. Most stakeholders said we need to define that so expectations could be clear. At the end of the day that might be a criticism, that it still wasn’t entirely clear.

Carter said the reason the language came up as it did was because it could get a positive vote. By the time development comes up we may not even know what kind of agribusiness could exist at that time. This plan had extensive public comment and was as well planned out as possible for a sector plan. He thought we should move forward. He didn’t have any direction to give to the planning commission.

Schumm said the comments tonight helped round out the discussion. Not surprisingly, he said, he had made strong statements against developing Class I and II soils. He said he was conflicted over this because this particular area around the airport had the most and highest quality soils. The far west area around K10 on the turnpike and the farmland property would appeal to the same type of industrial users. If we had requests for industrial development at those locations where the soil was not as high quality he was concerned about industrial development here. Flooding was a serious issue and the people of North Lawrence needed to know how we were going to address it. He said we had been down the road of Class I and II soils before and we needed to honor our commitments on that.

Dever said this was a strange juxtaposition of procedures since it was going back to the Planning Commission anyway. Development could mean something as reasonable as a higher level of agribusiness. We needed to consider all areas of the community. Some of the industrial
areas that we had tried to identify were still in flux due to lawsuits and other issues. It was important to keep the ball rolling so we knew what this area of our community would look like.

Cromwell said he also had concerns about the loss of Class I and II soils. He said he was in favor of having the questions made by the County Commission answered. After the Planning Commission has their say he thought the city and county should have a study session.

Amyx asked if under the county resolution, under item 4, he didn’t find any comments in the minutes related to that. Did they have a question about future uses?

McCullough said the issue was to understand the ability of the airport to serve industrial uses outside of the airport. If the airport were improved to accept larger aircraft it could support additional uses near the airport.

Amyx said it didn’t have to do with the uses and intensities on the airport.

McCullough said no.

Cromwell said other than the items from the county and the definition of soil conserving agribusiness, he didn’t have other items for the Planning Commission to consider. That was his recommendation moving forward, as well as setting up a joint study session with the county.

Schumm said the amount of land zoned industrial should be looked at.

McCullough said there was a smaller amount of land for a specific rezoning request than the land designated in the current plans. The rezoning was for less property than made it into Chapter 7.

Corliss said he didn’t think there was a need for a resolution from the City Commission.

Moved by Schumm, seconded by Amyx, to refer the plan to the Planning Commission. Motion carried unanimously.

The commission recessed for a ten minute break at 8:55 p.m.

The commission returned to regular session at 9:05 p.m.
ITEM NO. 4  COMPREHENSIVE PLAN AMENDMENT; H2020 CHP 14; NORTHEAST SECTOR PLAN (DDW)

CPA-6-5-09: Consider Comprehensive Plan Amendment to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan.

STAFF PRESENTATION
Mr. Dan Warner presented the item.

PUBLIC HEARING
Mr. Hank Booth, Lawrence Chamber of Commerce, ask that this item be deferred. He said there are two commissioners absent who have been in on these meetings from the beginning and their expertise should be heard. He also stated there are two new commissioners who just joined the Planning Commission. He felt that the Airport Master Plan should be completed first. He said people in the agri-industry have concerns about future use. He said the Douglas County budget is still being worked on and land preservation is important. He said even with 500 acres designated for something in the industrial or business component, set aside for some sort of future compromise, would still leave approximately 95% of type 1 and 2 soils undisturbed.

Mr. Roger Pine, Pine Family Investment, owns 340 acres in Grant Township. About half of that land is being designated as soil conserving agri-industry. He said the staff report states that the definition of soil conserving agri-industry says all four words need to be used together when discussing this land use. He said staff gives the example of a meat packing plant as not being acceptable and a crop research business as being acceptable. He said Grant Township has a research facility, Pioneer International, that does not own the building or property they are on. He said they do not do any research on adjoining land around the facility. They lease research sites annually according to their needs. He felt this was not a good example of a soil conserving agri-industry because it did not meet the criteria. He said he could not think of anything that would work in this area related to agriculture other than traditional farming. He was concerned about having 170 acres designated to something that cannot be used in a way other than what is currently being done. He discussed concerns about drainage issues. He felt that if 65 acres south of Hwy 40 were designated Industrial drainage issues would be addressed. He said he expressed his opinions to Mr. Matt Bond, City Stormwater Engineer. He said farmers eventually have to retire and selling land is their 401K. He said his property is most ideal for development because of access to transportation. He felt this was an opportunity for economic development for the community. He said in preparation for the Airport Master Plan the City is forming a steering committee and a new consultant may mean more changes at the airport. He said there have been talks about acquiring adjacent property.

Commissioner Carter asked Mr. Pine if he spoke with Mr. Bond about the drainage study and that if what Mr. Pine found was not reflected in the study.

Mr. Pine said he discovered that the water would not go to North Lawrence, it would drain to the east.

Commissioner Singleton asked where Mr. Pine thought drainage should be if not to the east.

Mr. Pine felt there should be infrastructure in place to get the water to Mud Creek instead of meandering through private property.

Mr. Lew Phillips said his family owns 250 acres of farmland in the Midland Junction area. He felt the proposed limitations on development would add to the perception of Douglas County being business unfriendly. He felt that Douglas County needs more Industrial tax base. Nowhere else in Douglas County is it possible to offer the transportation advantages that could be developed in the northeast sector. He said he would support having the item deferred for further review.
Mr. Ken Reiling said he owns 60 acres at the east end. He felt that the Airport Master Plan data should be included. He said that soil conserving agri-industry is extremely narrow, vague, and confusing when used to define a land use classification. He asked staff to draft a list of potential agri-industries which may be attracted to the infrastructure of Grant Township. He asked if a tractor supply store or a seed processing plant would be allowed in this designation. He would like to see more long range plans for police and fire protection. He also felt there should be complete separation of bicycles and vehicles for the general public safety.

Ms. Dorothy Congrove said she owns 235 acres in Grant Township. She felt that very little of the property owners opinions have been incorporated into Northeast Sector Plan. She felt the definition of soil conserving agri-industry was too restrictive. She said she was not advocating development without standards. She said the soil conserving agri-industry designated area is closest to the city. She asked that the plan be deferred.

Mr. Bart Hall said he farms Kansas River Bottom land and also a soil scientist by training. He said he does not take any Federal farm program subsidy for which he is eligible. He said he rejects the premise that farming is something that is done with land while waiting for a higher use to come along. He said that 1/10 - 2/10 of 1% of all the soil in the world is the quality that is in the Kansas River Valley. Agriculture is the highest and best use and when that land is removed from agriculture it is removed from agricultural forever, there is no replacement.

Commissioner Dominguez asked what kind of scientist Mr. Hall was.

Mr. Hall said he was a soil chemist by training.

Commissioner Liese asked what kind of farming he did.

Mr. Hall said he has a mixture of wheat, beans, alfalfa, and assorted horticultural crops.

Commissioner Liese asked Mr. Hall to repeat his statistics and his source.

Mr. Hall said the Eudora type soils are probably about 1/10 - 2/10 of 1% of all the soils in the world that are of that caliber and information regarding it can be found in numerous soil rating science text books.

Mr. Ron Schneider said he has lived in Grant Township for 23 years and owns about 40 acres. He said he was speaking for himself, not speaking on behalf of any clients. He said the community has a responsibility to step up to save the unique land for agriculture. He agreed with the previous speaker that the best and highest use of this land that is so rare is agricultural purpose. He said it was similar to the National Park Service. He felt that land owners should be compensated in some way. He questioned the definition of soil conserving agri-industry and felt it needed to be broadened and made more general. He said the future designation of Midland Junction Designation makes no sense. He said it is a dangerous intersection and would require massive infrastructure changes.

Commissioner Singleton said she lives in a residential neighborhood in Old West Lawrence and is clearly limited by what she can do with her land. She said she knows she cannot put a gas station there and it is not her 401K. She inquired about agricultural zoning being different.

Mr. Schneider gave the analogy of someone who has a vacant lot and they are told they cannot build on it but that a lot with a house on it has far more value than a vacant lot. He said he would like every farmer to keep their land as farmland but he does not think that would be fair.

Commissioner Hird asked what changes he would recommend to the sector plan.

Mr. Schneider said Midland Junction is a dangerous intersection and massive infrastructure will need to be addressed. He would like the definition of soil conserving agri-industry needs to be worked on further.
Mr. Ted Boyle, North Lawrence Improvement Association, was concerned about storm drainage. He said everything that happens north of North Lawrence directly affects North Lawrence. He said the pumps are overwhelmed and that it will take extensive infrastructure to make the water go east.

Ms. Barbara Clark, Citizens for Responsible Planning (CRP), said she sent a letter with attachments that had good examples of Best Practices that other communities are using. The Comprehensive Plan, Airport Master Plan, T2030, Wastewater Management, Flood Zoning Mapping are not a static system. They are dynamic and always moving. She said there is already an Airport Plan in existence but is being updated. She did not necessarily think that was a legitimate stop-stick to the approval of the Northeast Sector Plan. She said CRP has discussed the interconnectedness of the deep fertile soils in North Lawrence and floodwater mitigation. Class 1 soils in that area, specifically Rossville silt loam, has 80” before it meets any restrictive layer, which means it has the capacity to absorb water. She said Long Range Planning is comprehensive. Many areas of the county are identified for industrial development. She said there are areas already where there is the need for environmental mitigation and great opportunity for infill development. She felt there were transportation limitations because Grant Township has railroads but not active rail spurs. She hoped they would not put the brakes on this process and suggested an accelerated study session with groups such as American Farmland Trust and other communities.

Commissioner Liese asked Ms. Clark to give a brief description of Citizens for Responsible Planning.

Ms. Clark said Citizens for Responsible Planning came about on June 23, 2007 when a group of residents in the Grant Township area learned about an industrial development plan in the area that the Lawrence Journal World reported was to be a 900 acre industrial park.

Commissioner Liese asked how many people Ms. Clark was representing.

Ms. Clark said the Citizens for Responsible Planning mailing list contains about 400 people.

Mr. Michael Almon, Sustainability Action Network, showed legal information on the overhead projector. He said the landowners in the northeast area are concerned with regulations that this body and the governing body might impose that limit their options on the use of their land. He wanted to point out that it was a red herring because everyone who is a land owner within a zoning category has some limits on how they use their land. He said there is an established Supreme Court precedent that regulatory takings are primarily for the public health and safety and that’s where the community needs come in. They determine and establish that reasonable public policy is fully justified for the public health and safety and that’s where the community needs come in. They determine and establish that reasonable public policy is fully justified for the protection of the population in Lawrence from flooding through floodplain preservation, for assuring the solvency of City and County infrastructure budgets, and justified for securing the communities ability to feed themselves as peak oil increasingly drives up food prices and limits food imports. He said the Commission is on firm legal footing when adopting plans with specific provisions for regulatory takings that protect the common health and safety. He urged them to include these in the Northeast Sector Plan. Land owners can still farm their property. They can use their property viably and economically, it’s just that they should not be given value added. He urged the Commission to incorporate the following into the Northeast Sector Plan:

1. Promulgate public policies and codes that recognize numerous U.S. Supreme Court case decisions which say reasonable, uniformly applied land use regulations do not constitute legal takings. Some of the rulings include:
   - No one may claim damages due to police regulation designed to secure the common welfare, especially in the area of health and safety regulations. The distinguishing characteristic between eminent domain and police regulation is that the former involves the taking of property because of its need for the public use, while the latter involves the regulation of such property to prevent the use thereof in a manner that is detrimental to the public interest. (Nichols’ The Law of Eminent Domain Sec. 1.42; J. Sackman, 3d rev. ed 1973)
   - Land use controls constitute takings, the Court stated, if they do not “substantially advance legitimate governmental interests”, or if they deny a property owner “economically viable use of his land”. (Agins v. City of Tiburon)
• When the owner of real property has been called upon to sacrifice all economically beneficial uses in the name of the common good, that is, to leave his property economically idle, he has suffered a taking. (Lucas v. South Carolina Coastal Council, 112 S. Ct 2886, 2895-1992)
• These and considerably more may be found at: [http://caselaw.lp.findlaw.com/data/constitution/amendment05/16.html#f236](http://caselaw.lp.findlaw.com/data/constitution/amendment05/16.html#f236)

2. Adopt a zoning category of “exclusive agricultural use” for rural properties, with a gradient of development limitations keyed to the USDA soil classification levels. This would not be a requirement, merely a zoning category that a landowner may request for their land. [http://www2.co.multnomah.or.us/Community_Serivces/LUT-Planning/urban/zonordin/efu/efu.html](http://www2.co.multnomah.or.us/Community_Serivces/LUT-Planning/urban/zonordin/efu/efu.html)

3. Adopt code provisions for the Transfer of Development Rights (TDR) or Capability I and Capability II prime soils specifically. Using such a program, lands containing these soils are so designated, and owners of such farmland can sell the development rights to a publicly managed fund, thus continuing to farm while realizing a financial gain. Land developers who plan to urbanize other second tier farmland would pay to buy the development rights, the proceeds going into the publicly managed fun. [http://www.greenvalleyinstitute.org/landuse_innovativezoning.htm](http://www.greenvalleyinstitute.org/landuse_innovativezoning.htm)

Commissioner Liese asked Mr. Almon to give a brief background of the Sustainability Action Network.

Mr. Almon said the Sustainability Action Network is non-profit Kansas group locally based in Lawrence. They have been in existence for approximately two years with a focus on any aspect of local or regional ecologically sustainability. He said he is the Secretary of Board of Directors and that there are 25 active members and a newsletter that goes out to approximately 425 people.

Mr. Matt Eichman, Midwest Concrete Materials, own 420 acres within the Northeast Sector Plan. He said soil was not the only natural resource and that sand is also a natural resource. He felt the plan was narrow sided and only addresses agriculture and does not allow for any other use of natural resources that could be used for the benefit of the county. He said currently many aggregates are trucked in from Topeka. He requested the item be tabled to allow for other sustainable resources can be researched.

Commissioner Carter asked if Midwest Concrete was based in Lawrence and if the recent sand plant they proposed would have been taxed at an industrial rate.

Mr. Eichman said the office is based out of Manhattan and recently expanded in to Lawrence. Taxes would be under the industrial classification.

Commissioner Dominguez inquired about his argument for resources.

Mr. Eichman said there needs to be a balance of resources. He said sand was just as limited as class 1 and 2 soils.

Commissioner Liese said Mr. Eichman mentioned a sand/gravel extraction project that was stopped. He said sand occurs in river bottoms and asked if Mr. Eichman said where the soil is located.

Mr. Eichman said the 420 acres that Midwest Concrete owns is cornered by Midland Junction.

Commissioner Liese asked what soils it is located on.

Mr. Eichman said it has class 1 and 2 soils going through it but not its entirety.

Commissioner Liese asked what percentage of land that he owns is class 1 or class 2.

Mr. Eichman said his best guess would be about 25%.

Commissioner Liese asked Mr. Eichman to explain sand extraction from class 1 soils.
Mr. Eichman he said they are not together and that the soil is over the top. They remove the soil and sell it to farmers and/or developers. He said the soil is not destroyed, it is relocated to other sites. He said the sand is then extracted and a pond is left. It is common for a community to then turn the site into a public use area such as a park or fishing lake.

Commissioner Liese asked if extracting the sand and gravel and selling the soil was in the best interest of the community versus importing the sand from elsewhere.

Mr. Eichman said it is a good thing for a few reasons; he said there is a growing concern of carbon footprint. Once resources are trucked in there is quite a bit of carbon footprint. A community needs materials to build streets, foundations for houses, etc, and sand is as basic as it gets for a construction component. He said he would argue that sand is every bit as needed as feeding people. He said there is an increased tax for industrial over agriculture use.

Commissioner Liese said Mr. Hall claims that 1/10 - 2/10 of 1% of all the soil in the world is the quality that is in the Kansas River Valley. He asked Mr. Eichman how much sand is available in the world.

Mr. Eichman said he had no way of answering that. He said Kansas has 13 distinct geographical areas. He said for different types of soil there is also different types of sand.

Commissioner Harris asked if knew how much sand in the county is located under soils other than high quality soils.

Mr. Eichman said sand generally is not outside of river valleys.

Commissioner Harris asked if there are other areas along the Kansas River that have sand not under top quality soils.

Mr. Eichman said that there probably are but he didn’t know how much. He said that the depth of the alluvium is not uniform.

Commissioner Harris said that Planning Commission was told in a study session that when high class soils are moved from their locations the quality of the soil is not the same.

Mr. Eichman said he did not know the answer to that and it was not his area of expertise.

Mr. Rich Bireta, Grant Township Trustee, said the board voted unanimously to approve the plan. He said all of Grant Township is covered by the Northeast Sector Plan. He thanked staff for their work on a complex issue.

Mr. Pat Ross said the notice letter he received was postmarked July 22, 2010. He asked that the item be deferred since he did not have enough time to review it. He wanted to comment on an earlier comment by Barbara Clark who said there were no active rail spurs in North Lawrence. He said he knew of at least 5 active rail spurs in the North Lawrence/Grant Township area. He felt the plan as presented was too restricted. He said the transportation corridors can support development and jobs.

Commissioner Dominguez asked how many acres Mr. Ross owns.

Mr. Ross said he and different family members own 450 acres in Grant Township.

Commissioner Liese asked if a rail spur is a place where a train can stop and make deliveries.

Mr. Ross said yes.
Ms. Beth Johnson, Lawrence Chamber of Commerce, said Union Pacific is always looking for more spurs. Rail, airway, and highway are important to industrial development. Nowhere else in Douglas County are there all three. She asked for a better definition of soil conserving agri-industry.

Commissioner Carter asked if there have been any inquiries for industrial in that area.

Ms. Johnson said the airport has and the fact that the airport now has water/sewer makes it more marketable.

Commissioner Carter asked Ms. Johnson if she saw Commissioner Rasmussen’s comments regarding the plan.

Ms. Johnson said no.

Commissioner Liese said he was struck by staff’s presentation where Mr. Warner showed the development of Lawrence and North Lawrence in 10 year segments. He asked Ms. Johnson if she could explain why there would be more development now suddenly if they did eliminate agri-industry.

Ms. Johnson said the City has extended sewer and water to the airport so that changes the perception of what can be done in that area. She said the City has indicated by putting those services there that they want to see growth in that area.

Commissioner Liese wondered how much effort has been put in to development along North 2nd Street.

Ms. Johnson said most of those are retail and she works with Industrial or Office. She said the City has a Retail Task Force to work on those types of issues.

Commissioner Dominguez asked what kind of business could be at the airport.

Ms. Johnson said she sees it for testing/research or prototyping type businesses that can take advantage of the small airport size.

Mr. Frank Male, Lawrence Landscape, supported deferring the item. He felt that not a lot of changes were made to the plan. He did not feel like public comments were being heard. He said the term highest and best use had to do with maximizing the existing transportation network and there are three state highways, an interstate, a railway, and an airport in that area. It doesn’t get anymore intense than that. Also when talking about highest and best use Utilities comes into play; electricity, water, natural gas, and sewer, which are available at the site. Another thing to consider is the population and how far the population center is from the workforce and neighbors. He discussed the constraints of a site such as noise, the airport, I-70, and the railroad. Anything other then farming and industrial development would be severely limited. He said the world would not come to an end if 10% of the area was allowed to be developed for business purposes. It is a prime area for industrial development because there isn’t anywhere else for it to go. He asked that this be tabled until the Airport Master Plan was complete. He asked staff to come up with a better description of soil conserving agri-industry.

**COMMISSION DISCUSSION**

Commissioner Harris asked staff to respond to the questions about drainage related to the soil conserving agri-industry.

Mr. McCullough said the City Stormwater Engineer provided a graphic that was displayed on the overhead. One of the issues is that it is relatively flat out there so it has created its own drainage network at this point. If development is allowed in the area drainage patterns and impacts could be changed. He said the dots on the map represent where all the water in each water shed comes down to. He said the proposed 2007 development plan took the water more directly to the east.

Commissioner Harris asked if that is planned in the North Lawrence Drainage Study.
Mr. McCullough said he would have to review the study more.

Commissioner Finkeldei asked if there have been any discussions with the County Commission about $5,000 being spent on Heritage.

Mr. McCullough said he has not been part of those conversations.

Commissioner Harris inquired about who was on the stakeholder list.

Mr. Warner said all the property owners in the area and others who have signed up on the list serve.

Commissioner Harris asked if those folks received notification via email.

Mr. Warner said he believed he mailed letters out on or about July 6th and then a list serve message on or about July 12th. He said notice has gone out several times.

Commissioner Hird said there are type 1 and 2 soils all through the area so he wondered why agri-industry wasn’t designated to other areas such as Midland Junction.

Mr. McCullough said in some regard staff is coming at it fresh in designating the area southwest of the airport as industrial uses. This discussion has occurred with the Chapter 7 update several years ago. Staff begins sector planning with adopted policies as assumptions. So staff assumed when working on the Northeast Sector Plan that Midland Junction and this area (pointed to map) would align with Chapter 7. Those policies would be brought forth and become the base maps for the policies of the Northeast Sector Plan. Toward the end of the Chapter 7 update there was a term proposed and ultimately adopted, soil conserving agri-industry. That concept was brought forward to the Northeast Sector Plan. He said from staffs perspective it is not simply the soil classification being looked at. Staff is trying to be realistic in laying out the expectation for the public, development community, Planning Commission, and governing bodies, about where and how staff sees services being put forth in this area of the community, and it’s a real challenge. Even if you strip out the soil conserving agri-industry or class 1 or 2 soils it is still left with significant flooding issues and challenges. Even without intervention it is not historically developed because of those reasons. He said in staffs opinion Chapter 7 policies and concepts is how they got to this location.

Commissioner Hird said if the goal is to preserve soils then the protected area could be wherever there is class 1 or 2 soils.

Mr. McCullough said its root is industry. In some ways the soil conserving agri-industry is still industrial designated property. It has been a challenge to define it and ultimately up to the governing bodies to determine what it means. He suggested possibly looking at percentages preserved and look at some more conventional industry. He said for all the other class 1 and 2 soils that are shown as agriculture it is mainly because it is not expected for services to be brought there and developed.

Commissioner Hird asked if staff has developed a list of businesses that would meet the definition.

Mr. McCullough said staff has not but the plan language talks about projects being creative in their seeking to meet the soil conserving agri-industry classification.

Commissioner Harris asked if it was important for those industries to be ag-related regarding the production on their soil or was it really most important for the open space around industries to be conserved for agricultural use.
Mr. McCullough said it was difficult to answer that because it is difficult to say which one gets more weight. Staff’s answer is that the term includes four words that all need to work together. He said there was still opportunity to do some conventional industry perhaps with a good ratio preserved.

Commissioner Liese asked if he was suggesting a compromise.

Mr. McCullough said staff started pretty general with Chapter 7 and it contains language that says certain sites in the community contain high quality ag-land and those sites should be encouraged to develop as soil conserving agri-industry businesses. In the Northeast Sector Plan it has been better developed to designating it to a land use category. Staff has proposed one way to get at that value and there may be other ways such as a more objective intent.

Commissioner Finkeldei suggested focusing on language that encourages businesses to locate, rather than regulate. He said the current definition is too narrow and he suggested looking into a more general definition of soil conserving agri-industry to encourage it in the entire area rather than designating a particular area. He liked the idea of a creative approach. He said he liked the language in the plan that says ‘Protection of soils through agricultural use or preservation can be implemented in different ways and the community should be open to creative ways that develop projects that can utilize this classification. He suggested crossing the rest of the paragraph out. He agreed with the earlier speaker, Ron Schneider, who said that there should be compensation or assistance for land owners. He said there should be systems set up to do that.

Mr. McCullough said Chapter 7 does not have a category of soil conserving agri-industry but the Sector Plan does.

Commissioner Carter expressed concern about unintended consequences. He said that it would be helpful at the next meeting for the City Stormwater Engineer, Matt Bond, to be present. He agreed with keeping the language general and incentives for land owners.

Commissioner Dominguez said he did not think it was a good idea to set a precedence of compensating land owners.

Commissioner Finkeldei said his thoughts on incentives was for the entire area to permanently protect a valuable resource. He felt their four possibilities for the area were agriculture (no industrial), which is contradictory to Chapter 7; soil conserving agri-industry; industrial but encourages soil conserving; or flat industrial with or without soil conserving. He did not feel the first and last option were appropriate. He was in favor of industrial but encourages soil conserving.

Commissioner Harris asked Commissioner Finkeldei what if 80 acres were proposed for industrial development and a developer could not think of a way to preserve that land.

Commissioner Finkeldei said the plan says to encourage soil conserving in the area. It would need to comply with Horizon 2020. If soil conserving was in there and a project came in that was 80 acres the plan could be changed. Trying to define what a soil conserving agri-business is will always come up with something creative. He felt they should allow people to be creative unless they want to go all the way to a zoning category type chart.

Commissioner Singleton thanked staff for their work. She said the class 1 and 2 soils map on page 2-24 shows the airport having gotten the portion of class 1 and 2 soils that she would be willing to give up. She felt they needed to protect the land that is left. She said the airport is not completely developed and there is more space out there for more development to occur. She did not feel the item should be deferred because certain Commissioners were absent or new Commissioners were present. She said fresh perspectives represent more closely to the views of the public and are valuable. She said she understands farmers wanting to use their land as their 401k.
Commissioner Harris thanked staff for their hard work and agreed with Commissioner Singleton. She said the things she was thinking about in the plan were soil conservation as primary, stormwater storage, fiscal responsibility for infrastructure development, opportunities for industrial development, and sand along the river in Douglas County. She said the soil conserving agri-area was not come to lightly in developing the plan. It was a compromise that attempts to preserve the existing soil but also allows some low impact/low footprint industry near the airport. She said if she had to lean one way or the other she would lean toward agri use in that area rather than industry. She said she does see some value in allowing some industry in that area if it conserves soil as well. She agreed with providing incentives for preserving soil. She appreciated that the Grant Township Trustees considered the plan and voted unanimously in favor of it.

Commissioner Hird thanked the members of the public who came out to speak this evening. He said he was not sure he was willing to go backwards on Chapter 7 in Horizon 2020. He agreed with Commissioner Finkeldei’s earlier statements about providing incentives. He asked how much land at the airport was available for industrial development.

Mr. McCullough said somewhere between 30-60, aviation based industry.

Commissioner Hird expressed concern about Commissioner Rasmussen not being present and felt they would benefit from having his input. He said he would like to know more about whether the Airport Master Plan is essential to considering this sector plan and what the implications are of the Airport Master Plan. He would also like more thought put into incentives to have soil conserving industry in this area.

Mr. McCullough said there was a question at the last meeting about the Airport Master Plan and he said he spoke with staff that support the advisory board and they do not believe there will be any boundary changes. There may be some implications but shouldn’t impact the major concepts of the Northeast Sector Plan.

Commissioner Dominguez agreed with Commissioner Singleton’s comments about their responsibility to the environment. He felt if they start compromising on that area then where does it stop. He did not feel they should compensate owners. He felt they should move the plan forward.

Commissioner Burger thanked staff for a very detailed packet of information. She said the charts and maps were very helpful. She thanked the community for sharing their viewpoints. She liked the idea of incentives and keeping the door open to creativity. She was in favor of being more conservative in their approach because once the land is gone that’s it.

Commissioner Liese said they would put the community at risk by compromising a precious resource that won’t come back if it goes away. He was not in favor of development on class 1 and 2 soils. He said he was unsure of how he would vote. He thanked Commissioner Singleton for saying the new Commissioners don’t have a deficit and provide a fresh perspective. He said he read Commissioner Rasmussen’s letter and did not feel as though his perspective was absent from the meeting tonight.

Commissioner Hird said they are unanimously concerned about the conservation of class 1 and 2 soils. He did not think that tabling this would give that up. Nobody knows what a soil conserving agri-industry means and he would like the ability to better define it.

Commissioner Harris said in the packet on page 69 there is a good definition of what soil conserving agri-industry is.

Commissioner Hird said that is not in the plan, it is staffs interpretation of it. He would prefer there was something in the plan that addressed what that definition was.

Commissioner Liese said he did not find the definition of soil conserving agri-industry to be that confusing.
Commissioner Hird said he did not want their enthusiasm for protecting class 1 and 2 soils to overshadow the realities of it, because trucking in lots of sand from another county would be an environmental disaster. He did not want to be too rigid on this that they lose sight of the fact that there will be circumstances where industrial development, such as a sandpit, makes sense for the community.

Commissioner Liese said one of the greenest ways to move things is by train and there are a number of spurs available in the area so sand could be moved via train. He said the image of digging up class 1 and 2 soils in order to get sand did not excite him.

Commissioner Carter said they did not know how much of class 1 and 2 soils are represented in soil conserving agri-industry. He felt they needed to drive the economy.

Commissioner Harris wanted to clarify why the area is being designated the way it is. She said one reason was to try and preserve the soil. She asked if another reason was stormwater issues and that if they do not develop it too intensely there will be fewer problems with stormwater in the area.

Mr. McCullough said the cumulative effect of development in Grant Township will exasperate already existing stormwater issues.

**ACTION TAKEN**

Motioned by Commissioner Dominguez, seconded by Commissioner Harris, to approve the Northeast Sector Plan (CPA-6-5-09).

Commissioner Finkeldei said he would vote against the motion for reasons he stated earlier. He said if the motion fails he would like to make a motion to send it back to staff for a more general definition.

Commissioner Carter said he would vote against the motion and did not see a rush to send it through when it could be improved.

Commissioner Harris said she would support the motion because the definition strikes the right balance between being general and providing some specifics to help grasp what is meant by soil conserving agri-industry.

Commissioner Liese said he would also support the motion.

Commissioner Hird said he would vote against the motion because of the same reasons Commissioner Finkeldei stated earlier. He said he was not opposed to protecting class 1 and 2 soils but did not want to create language that would eliminate the opportunity for industrial uses that might be beneficial to the community. He said he would support a deferral to allow staff time to work on the definition and perhaps broaden the language to protect more areas of class 1 and 2 soils.

Motion failed 4-4, with Commissioners Dominguez, Harris, Liese, and Singleton voting in favor. Commissioners Burger, Carter, Finkeldei, and Hird voted in opposition.

Motioned by Commissioner Finkeldei, seconded by Commissioner Carter, to defer the Northeast Sector Plan (CPA-6-5-09) and direct staff to generalize the definition of soil conserving agri-business, to be heard at a future Planning Commission meeting.

Commissioner Harris said she would not support the motion because she felt they will see the same arguments as tonight if the description is generalized more.

Motioned failed 4-4, with Commissioners Dominguez, Harris, Liese, and Singleton voting in opposition. Commissioners Burger, Carter, Finkeldei, and Hird voted in favor.
Motioned by Commissioner Carter, seconded by Commissioner Finkeldei, to defer the Northeast Sector Plan (CPA-6-5-09) to a future Planning Commission meeting.

Commissioner Singleton said she would change her vote and let it go back to staff.

Commissioner Harris said she would not vote in favor of the motion.

Commissioner Dominguez said he would vote in opposition of the motion.

Motion carried 4-3-1, with Commissioner Burger abstaining. Commissioners Dominguez, Harris, Liese, voted in opposition. Commissioners Carter, Finkeldei, Hird, and Singleton voted in favor.
ITEM NO. 4 COMPREHENSIVE PLAN AMENDMENT; H2020 CHP 14; NORTHEAST SECTOR PLAN (DDW)

CPA-6-5-09: Consider Comprehensive Plan Amendment to Horizon 2020 – Chapter 14 to include the Northeast Sector Plan. Deferred by Planning Commission on 7/26/10.

STAFF PRESENTATION
Mr. Dan Warner presented the item.

Commissioner Harris asked if in Option 2 the name of the category would be Agri-Industry but would permit other kinds of industrial uses.

Mr. Warner said that was correct, it clarified that industrial uses were appropriate but mandates setting aside 50% of the soil in perpetual protection.

Commissioner Harris asked Mr. Matt Bond what the area would look like if it was 50% farming and 50% industrial. She asked if the industrial sites would have to be built up to meet other codes.

Mr. Matt Bond, City Stormwater Engineer, said it would be based on where it falls on the FEMA floodplain map. He showed area floodplain maps on the overhead.

Commissioner Harris asked if more conventional industry, not agri-industry, are built in that area and the land next to it is saved would it affect the quality of the land that is trying to be protected.

Mr. Bond said as far as additional runoff, yes. He said impervious surface creates more runoff downstream.

Commissioner Rasmussen inquired about the language in the definition of Industrial that says ‘Land west of the airport and north of Highway 24/40 and south of Highway 24/40 is also….’ He wondered if the word ‘and’ should be ‘or’ instead.

Mr. Warner said the language describes two areas so he suggested adding a comma:
‘Land west of the airport and north of Highway 24/40, and south of Highway 24/40 is also….’

Commissioner Rasmussen asked if it would be possible to just reference the map instead of having a written description.

Mr. Warner said that was possible.

Mr. McCullough said they have typically tried to include a narrative in the map. Option 1 is depicting a change in land use classification for the area south of 24/40. The narrative talks about the existing industrial developments and also the undeveloped land. He said it was a matter of wordsmithing or referencing a map.

Commissioner Blaser asked that public comments be kept to the options proposed tonight.

PUBLIC HEARING
Mr. Hank Booth, Lawrence Chamber of Commerce, said he was amazed at the patience and calm determination of the people who have lived and farmed the area for generations. He said he has attended all the meetings outside of Planning Commission and has left some of those meetings with the sense that farmers can’t be trusted or are somehow incompetent when it comes to making sure the land is well cared for. He thanked staff for providing Option 1 and that a large number of people are in favor of proceeding with at this level. He said after a decade of basic zero job growth in Douglas County that every opportunity to move forward in job creation was needed. He did not believe that using Option 1 would jeopardize that opportunity.
He said Option 1 most closely represents what was originally passed in Horizon 2020. He asked that Planning Commission support Option 1.

Mr. Roger Pine. Pine Family Investments, was pleased and felt encouraged after working on this for a year and a half. He said he was in favor of Option 1 and felt it gave land owners options to have choices in how they use the land. He showed a map of land owners who supported Option 1. He said the green areas on the map were equal to 5,000 acres of the 7,000 acres that staff identified as agricultural land.

Commissioner Rasmussen asked Mr. Pine to clarify the green areas on his map.

Mr. Pine said the green areas of the map identify agricultural land that owners are in support of Option 1.

Mr. Matt Eichman, Midwest Concrete Materials, said he was one of the land owners on the map that Mr. Pine showed in favor of Option 1. He said Option 1 still includes language specific to class 1 and 2 soils. He said at the last meeting he went into detail about other resources being important. He requested an amendment to take out specific language of class 1 and 2 soils and add language that protects all natural resources in the area.

Mr. Charles Novogradac, Chestnut Charlie’s, owns land on other side of Maple Grove. He said he did not sign the letter Mr. Pine mentioned in favor of Option 1. He was concerned about drainage. He said drainage follows from capability of the soils. He said at an earlier meeting he tried to explain that the soaking up capability of capability 1 lands is much greater than capability 2 lands. He said since 1995 when he started planting his tree crop, all the absorbing capability of the soil in that drainage district was being sucked up by other development. He said when he started his tree crop the FEMA floodplain did not touch his land but the most recent map has the FEMA touching his land. He was concerned the incremental development of the area and felt that industrial development may conflict with his ability to grow crops.

Ms. Barbara Clark, owns 47 acres in Grant Township, said the dynamics of the water issues in the area was changing at a rapid clip. She said Citizens for Responsible Planning was still in favor of the original 3rd draft proposal as presented at the July meeting. She said she could not support Option 1 because flooding concerns for the area were high. She said any impervious surface on those soils would exacerbate flooding issues already affecting the North Lawrence community. She showed a map on the overhead of planned growth areas. She said the total acres of capability class 1 and 2 soils in the planned growth area was 93.56%. She said that was a staggering figure of contiguous class 1 and 2 soils. She was not in favor of dropping out language regarding the preservation of class 1 and 2 soils.

Commissioner Singleton asked which language Ms. Clark preferred.

Ms. Clark said she preferred the language in the original 3rd draft as presented.

Commissioner Singleton asked what her concerns were with the 2nd draft.

Ms. Clark said her greatest concern was clarification of just what that might be. It would come down to this body deciding whether they were compatible uses.

Commissioner Dominguez asked if there was a percentage she was willing to compromise with.

Ms. Clark said that was difficult without having an actual application to look at. She thought the soil conserving agri-industry language was stronger and a much better language rather than trying to look at a percentage.

Commissioner Liese said it seemed that one of the biggest controversies was what an agri-industry was. He asked what Ms. Clark would consider an agri-industry business.
Ms. Clark said it would have to be all four words, soil conserving agri-industry. She said the seed research being done on a lease basis on that land is a soil conserving agri-industry. She said the Endowment has also initiated a native medicinal plant area.

Commissioner Dominguez asked staff to confirm the numbers Ms. Clark came up with for class 1 and 2 soils.

Mr. McCullough said staff has not studied them in that way.

Mr. Ted Boyle, President of North Lawrence Improvement Association, said he was representing approximately 2,500 North Lawrence residents. He expressed concern about class 1 and 2 soils and storm drainage. He felt they went hand in hand. He said as a result of the 1993 flood the City built a big pump on North 2nd Street in 1995. He said that pump today is small, overwhelmed, and over capacity. He said the residents of North Lawrence were not worried about the river flooding, but rather a 1-2” rainstorm in a short time creating a lot of storm water runoff. He said North Lawrence has endured stormwater flooding for 15 years and was concerned about more runoff due to development.

Mr. Frank Male said he owns two businesses in North Lawrence as well as three industrial properties and three single-family homes with basements in North Lawrence. He said he was deeply invested in North Lawrence. He said drainage was a prime consideration. He said as part of the City’s drainage study in 2005 two pumps will be installed at 5th & Maple Street and he felt that would be a tremendous help to North Lawrence. He liked Option 1. He said the area was a good transportation hub.

Commissioner Liese asked Mr. Male if he had seen any basement flooding.

Mr. Male said no.

Commissioner Dominguez inquired about benefit of his property value.

Mr. Male felt Option 1 benefited the entire community. He said his true interest was economic development.

Mr. Bill Woods said he was a professor in the Geography Department and Courtesy Professor in the Anthropology Department at KU. He said his research specialty was human influences on soils through time. He said soils were really a nonrenewable and finite resource and they are the most important resource. He said they were being called upon to produce ever more as populations rise and that they are increasingly under pressures throughout the world and are degrading. He felt that every effort must be made to adversely impact highly productive soils and put them into other uses. Almost always these alternate, less productive sites exist for whatever alternate uses are proposed. He was highly dismayed by what he has seen during his 40 years of working with agricultural soils in this hemisphere and felt the US should lead in efforts to protect productive soils. He said generally, an alternative use has a finite lifetime of a few years or at most decades and then is done. Soils have been destroyed in the meantime and the site from an agricultural standpoint is worthless. He said as stewards for future generations they need to think beyond this time scale and look to the future. Productive soils, with proper treatment, have proved to be resilient for hundreds, if not thousands of years. He urged the Commission to do everything in their power to aid in the effort to protect these fertile soils.

Ms. Sue Pine said the hardest vote she ever made while serving on Planning Commission was to expand the Urban Growth Area. She said Douglas County needed a tax base to support the community and to do that they needed to expand the urban growth area to the Douglas county line. She said she was not sorry for her decision. She said this area was important to the community. She felt they needed to allow the entire area to develop. She said soils were great but that climate and irrigation were contributing factors to the quality of those soils.

Mr. Jim Congrove said he signed the letter in support of Option 1. He provided data compiled by the Sustainable Agriculture Specialist at K-State. The study focused on 51,518 acres of class 1 cropland between
Manhattan and Kansas City that could support local food production. He said climate was the limiting factor, not soil, as far as local food production. He said class 1 was not necessarily the best for some crops like melons.

Mr. Pat Ross said he owns 450 acres within the Northeast Sector Plan. He felt Option 1 gave direction to staff and the Commission that was easy to understand and directly reflects the policies of Chapter 7 and Horizon 2020. He felt it eliminated the controversial grey area of what fits in the soil conserving agri-industry category. He also felt it allowed staff and Commissioners to be proactive not reactive.

Commissioner Harris asked about his comment regarding eliminating confusion about soil conserving.

Mr. Ross felt the way it was presented in Option 1 was easier to understand that it would be encouraged but not demanded.

Ms. Crystal Hammerschmidt said Lawrence has a wonderful community of young growers and she was in favor of soil conservation for food production.

Mr. Ken Holladay said he grew up in North Lawrence. He owns farm land and wants to be able to do with it what he wants and not be confined even though agricultural was the current use.

Mr. Jerry Jost, resident of Grant Township, wondered why the area wasn’t already developed since it has all the assets of transportation, airport, railroad, etc. He felt it hadn’t already been developed due to flooding. He said there were better places to invest limited public resources for industrial development. He supported the original 3rd draft of the plan.

Ms. Debbie Milks, Chestnut Charlie’s, said their business was not a hobby, it was 15 years worth of investment. She said if soil was covered by parking or development she would be drown out of business. She supports the original 3rd draft.

**COMMISSION DISCUSSION**

Commissioner Blaser said that Ms. Gwen Klingenberg requested item 6 be deferred.

Motioned by Commissioner Harris, seconded by Commissioner Finkeldei, to defer item 6 to the next Planning Commission meeting.

Motion carried 9-0. Student Commissioner Davis voted in the affirmative.

Commissioner Finkeldei said he didn’t hear support for Option 2. He agreed that class 1 and 2 soils were important and should be protected but there were competing concerns. He felt that Option 1 was consistent with what was approved in Chapter 7. He said draft 3 expanded that language greatly and he does not support draft 3. He said he supported Option 1.

Commissioner Liese asked for input on stormwater and flooding.

Mr. Bond said everything (water) off of E 1500 Road goes to the east. He said everything (water) on the west side of E 1500 Road ends up in Maple Grove Drainage the way it is now.

Commissioner Finkeldei asked if a development plan could include improvements to mitigate.

Mr. Bond said some of it could be kicked east by putting in a culvert pipe under 7th Street based off of the ridgeline and then upsize the pumps at the 2nd Street pump station.

Commissioner Burger asked staff to comment about Ms. Pine’s comments about water rights for irrigation.
Mr. McCullough said he did not have any information about water rights on irrigation and said that was the first time they had heard that issue.

Commissioner Harris asked Mr. Bond about the improvements he just mentioned and how much they would cost and if it could be funded by a developer.

Mr. Bond said the cost would be determined by the size of the pump. He said as far as a small drainage culvert it would probably be $50,000-$100,000.

Commissioner Rasmussen asked how many acres in the entire Northeast Sector area were class 1 and 2 soils.

Mr. Warner said he did not have that information right at hand.

Commissioner Carter said it was easy to get emotional and think they are overdoing things as far as growth goes but he didn’t think it was a choice of drowning or not drowning Chestnut Charlie’s or other businesses out there. He said the site planning process would address issues of flooding. He said even if they choose Option 1 they are not committing to send the infrastructure out there to develop it they are just allowing it to be an option for the future.

Commissioner Harris responded to Commissioner Liese’s question about stormwater. She said if the area that’s agri-business is developed more intensely than talked about before, not only would they be adding more impervious surface but they would be taking away the soil that retains water so well. She said that Mr. Bond mentioned earlier that there would be a problem if a stormwater detention area was built because it would attract water fowl. She said the vision she has for the area would be very limited buildings and a lot of land saved. She did not think Option 1 did that and had way too much leeway for development of the area and that there would be a potential for problems with stormwater because of that. She said she could not support Option 1. She said she would support the original language but did not think it was perfect.

Commissioner Singleton said she would not support Option 1 and preferred draft 3. She felt they needed to look past traditional job growth and encourage preserving the soil to be used for innovative green types of industry. She felt this would be a win-win for future generations as well as for the economy. She said they needed to change the way they look at growth. She did not think the language in Option 1 was the best for future generations.

Commissioner Liese inquired about language under Option 1: ‘Add language to the Industrial category encouraging soil conserving agri-industry businesses to locate in areas with class 1 and 2 soils.’ He wondered what the ‘encouraging’ part meant.

Commissioner Finkeldei said the language in Option 1 was almost word for word from Chapter 7. He said they don’t know exactly what ‘soil conserving agri-industry’ meant except that they want to encourage it.

Commissioner Rasmussen said the Northeast Sector Plan encompasses a very large area of 10,640 acres and considers a number of potential uses in that area. All of the discussions have focused on less than 200 acres out of the 10,000 acres. He said the reality is that the 200 acres is best suited for industrial use. It’s bounded by highways, close to airport and railroad. He said Option 1 makes the most sense from a Planning perspective and he would support it.

Commissioner Dominguez agreed with Commissioner Rasmussen’s comments. He said he is pro-business. He said Sector Plans change lives. He said he would support the original language.

Commissioner Blaser said they are not asking anyone to change their lives if they don’t want to. He said he would support Option 1 because it gives options to the landowner.
Commissioner Finkeldei said just because he would vote against it doesn't mean the land would go away and doesn't mean he don't care about class 1 and 2 soils. He said 200 acres was the total area but once building starts there would be setbacks, stormwater, etc so it would actually only be built on a small fraction of the 200 acres.

**ACTION TAKEN**
Motioned by Commissioner Finkeldei, seconded by Commissioner Carter, to approve the Northeast Sector Plan (CPA-6-5-09) with the addition of Option 1 as set forth in the staff memo for item 4.

Motion carried 5-4, with Commissioners Burger, Dominguez, Harris, and Singleton voting in opposition. Commissioners Blaser, Carter, Finkeldei, Liese, and Rasmussen voted in favor of the motion. Student Commissioner Davis abstained.

Motioned by Commissioner Finkeldei, seconded by Commissioner Carter, to approve and authorize the Planning Commission Chair to sign PC Resolution (PC-7-5-10).

Motion carried 5-4, with Commissioners Burger, Dominguez, Harris, and Singleton voting in opposition. Commissioners Blaser, Carter, Finkeldei, Liese, and Rasmussen voted in favor of the motion. Student Commissioner Davis abstained.
Dear Lawrence City Commission,

Citizens for Responsible Planning has been actively engaged in the planning process for the Northeast Sector Plan. We appreciate the intensive efforts to build community input into this planning process. We believe there are some core strengths to this plan and wish to emphasize these fundamental policy guidelines.

Historically the Northeast Sector has been shaped by the repeated flooding of this river valley. This movement of water has deposited some of the finest soils and created some of the best agricultural land in Kansas and concentrated this rich natural asset in the Northeast Sector. Horizon 2020, Chapter 7 Industrial and Employment Related Land Use states “The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community.” This unique feature is illustrated in the following map.
Situated close to Lawrence, this sector naturally faces development pressure. Surprisingly, and for understandable good reasons, this area has experienced limited development. As the draft Northeast Sector Plan states in Section 3 – Recommendations (page 3-1):

“Compared to other areas of the fringe area of Lawrence, this area is not anticipated to be significantly urbanized.

Due to the unique challenges to development, including:
- Costly stormwater infrastructure needs as urbanization occurs
- Significant amounts of regulatory floodplain
- Significant amounts of Class 1 and 2 soils
- FAA Regulations and Lawrence Municipal Airport Protection Zones”

Critical to future land use planning is flooding and stormwater management in the Northeast Sector. This is of paramount importance to the residents of North Lawrence and Grant Township, area businesses, transportation, and the airport. Wisely, Lawrence commissioned the North Lawrence Drainage Study in 2005. As stated in the draft Northeast Sector Plan (page 2-16):

“Tens of millions of dollars of cost were identified to accomplish the recommendations of the study for dealing with the existing stormwater issues and future ones that will be created with development.”

In response to these development limitations, Horizon 2020 states that development shall not be permitted in “regulatory floodplains or other environmentally sensitive areas.”

These flooding and stormwater limitations are intertwined with the unique soils of the Northeast Sector. As the draft Northeast Sector Plan (page 2-17) states “these soils are highly permeable and assist in stormwater management.” These unpaved soils act as a sponge absorbing water, mitigating stormwater damages, and recharging our valuable groundwater aquifers. These soils in their undeveloped state form our community’s greatest and most cost effective stormwater mitigation device.

Citizens for Responsible Planning wishes to emphasize the implementation of the long-view recommendations in Section 3.3 (page 3-14):
- Reduce the Lawrence Urban Growth Area to the area identified in Map 3-1 (page 3-13) to minimize stormwater mitigation costs, conserve prime farm land, preserve area farms, and protect the rural heritage surrounding Lawrence for both local residents and visitors.
- Implement regulations that promote no adverse impact for floodplain management.
The early planning process for the Northeast Sector Plan involved broad and respectful community participation contributing to early drafts of this Sector Plan. The Lawrence Planning Commission approved a recently revised draft (the first of three options presented) Northeast Sector Plan by a contested 5-4 vote. We believe this last draft option does not adequately respond to the earlier community input and creates troubling contradictions between the recommendations to protect Class 1 and 2 soils and the concluding Map 3-1 Future Land Use (page 3-13). Please note the industrial section south and west of the airport and the following USDA/NRCS map of the same area which identifies this area as the heaviest contiguous concentration of Class 1 and 2 soils. The red shaded area is Class 1 soils and the yellow shaded area is Class 2 soils.

We recommend that Industrial Section 3.2.1.4 (pages 3-10, 11) conform to the third draft of this plan and identify the above area as a “soil conserving agri-industry” category of land use. We believe this land use would conform to the stated goals within the plan and best represent the community planning process.
In conclusion, Citizens for Responsible Planning has consistently recognized private property rights as a critical factor in land use determinations. Weighting these rights must be accomplished in an equitable manner. We believe the third draft of this Sector Plan best balances the private property rights of the diverse interests of both farmland owners and homeowners within our community.

Thank you for your consideration of these recommendations.

Sincerely,

Jerry Jost
Barbara Clark
Ted Boyle
Chet Fitch
Deborah A. Milks
Charles K. NovoGradac
Lane Williams
Scott Allegrucci
Michael Almon
Deborah Altus
David Baird
Bruce Barlow
Kris Barlow
Kelly Barth
Leo Beier
Sheryl Beier
Pat Benabe
Sandy Beverly
Marilyn Brune
Judy Burch
Jan Butin
Kathryn Compton
Cole Cottin
Linda Cottin
Courtney Crouch
Janet Dehnert
Joseph M. Douglas, MD
Victoria B. Douglas
Donna Eades
Jill C. Elmers

Hilda Enoch
Jim Fischer
Marcia Fisher
Madeline Finch
Deanna Fitch
Bob Gent
Margot Gray
Crystal Hammerschmidt
Susan Harper
Bob Harper
Kim Heck
Lauretta Hendricks-Backus
Doug Hitt
Shirley Hitt
Maryam Hjersted
Lisa Grossman
Hugh Janney
Pat Kehde
Joshua Kendall
Kevin Kennedy
David Lambertson
Sacie Lambertson
Eileen Larson
Cheryl B. Lester
Jim Lewis
Bob Lominska
Jake Lowen
Janet Majure
Carey Maynard-Moody
Sally McGee

Lori McMinn
Dan McMinn
Lowen Millspaugh
Rick Mitchell
Nancy O’Connor
Ellen Paulsen
Dan Phelps
Kevin Prather
Wayne Propst
Daniel Poull
Vanessa Sanburn
Carol Schmitt
Ronald Schneider
P. Simran Sethi
Margaret Shirk
Frank Shopen
Jim Smith
Jerry Sipe
Mary Ann Stewart
Dan Parker-Timms
Denise Parker-Timms
Pat Petrovits
Julie Trowbridge-Alford
Sarah Trowbridge-Alford
Jordan Wade
Maurice R. Woolsoncroft
Jim Yonally
Nancy Yonally
Rita York
December 9, 2010

Dear City Commissioners:

The North Lawrence Improvement Association has been working with Citizens for Responsible Planning and Grant Township residents on the drafting of the NE Sector Plan. NLIA appreciates the work the Planning Department has devoted to this project in the last year. The NLIA, CRP and the Planning Department were all in consensus until the next to last time the plan came before the Planning Commission. At that meeting the Commission asked for a definition of agricultural related industry as it was never defined in the document. At the end of that meeting Planning Director Scott McCullough made his assessment of why slow development or no development has occurred in North Lawrence and the Grant Township. A copy of his statement is attached. The NLIA agrees with this statement.

When the NE Sector Plan was next on the agenda of the Planning Commission, there were two more options that were not publicly discussed and the option (#3) that all of the stakeholders worked on for over a year and supported was not discussed.

The NE Sector Plan is a very important planning project, but the NLIA feels there are enough choices for industrial development in and around Lawrence without allowing that type of development to occur in the area covered by the NE Sector Plan. If industrial development is allowed in this area the storm water flooding problems in North Lawrence and the Grant Township will be exacerbated. I have attached a storm water survey that the City conducted in June 2004. About 100 residents responded to the survey regarding the storm water flooding issues that occurred on their property.

The NLIA also believes that Type I & II soils that make up a significant portion of the NE Sector Plan area should be protected from development. These soils are not only an invaluable resource for agriculture, but serve as a natural storm water resource. If this land is allowed to be covered with asphalt, concrete and rooftops, the storm water from this land will be flowing into North Lawrence. The pump on North 2nd is at it’s maximum and the planned upgrade of the pump at 5th & Maple is designed to only take care of the current existing storm water problem in North Lawrence. We have been waiting fifteen plus years for the upgrade of this pump.

North Lawrence did not have storm water problems until residential housing development was allowed and 100 plus new homes were built. Much of the vacant property that existed in North Lawrence that served as a natural runoff turned into concrete and rooftops. These homes were built in a flood plain or flood prone area. The City and the developers assured us that this development would not adversely affect our neighborhood with flooding. The NLIA disagreed with that assessment.

The Grant Township is also a flood plain/flood prone area. The NLIA is in full agreement with Citizens for Responsible Planning and want to see Option 3 restored to the NE Sector Plan.

Sincerely,

Ted Boyle, President
North Lawrence Improvement Association

CC: David Corliss, Lawrence City Manager
    Scott McCullough, Planning Department
noted. Recurring concerns related specifically to development patterns, current stormwater management practices and future construction impacts, as well as a desire to limit new development. With those comments came concerns about enforcement of stormwater management controls with new development and construction. The concerns were both in terms of fears of too great of restrictions and desires for stringent development controls.

Survey questions and responses:

**How often in the past 10 years have you had a problem with stormwater on your property?**

<table>
<thead>
<tr>
<th>Address</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1567 Hwy 40</td>
<td>Yes</td>
</tr>
<tr>
<td>1728 E. 1500</td>
<td>Twice really bad, but every time with a heavy rain</td>
</tr>
<tr>
<td>1804 E. 1600</td>
<td>15</td>
</tr>
<tr>
<td>1480 N. 1700</td>
<td>Too many to count</td>
</tr>
<tr>
<td>1662 N. 1700</td>
<td>3 or 4</td>
</tr>
<tr>
<td>792 N. 2nd</td>
<td>Several</td>
</tr>
<tr>
<td>645 N. 3rd</td>
<td>Frequently</td>
</tr>
<tr>
<td>1001 N. 3rd</td>
<td>1993 &amp; 1997</td>
</tr>
<tr>
<td>624 N. 5th</td>
<td>1</td>
</tr>
<tr>
<td>725 N. 5th</td>
<td>8</td>
</tr>
<tr>
<td>649 N. 6th</td>
<td>Every time it rains</td>
</tr>
<tr>
<td>625 N. 7th</td>
<td>Every time it rains</td>
</tr>
<tr>
<td>227 N. 8th</td>
<td>1</td>
</tr>
<tr>
<td>625 N. 8th</td>
<td>2-3 times over the last two years</td>
</tr>
<tr>
<td>769 Ash</td>
<td>5</td>
</tr>
<tr>
<td>600 Center</td>
<td>When it rains</td>
</tr>
<tr>
<td>310 Elm</td>
<td>20</td>
</tr>
<tr>
<td>411 Elm</td>
<td>Every time it rains</td>
</tr>
<tr>
<td>761 Grant</td>
<td>When it rains more than 1 day</td>
</tr>
<tr>
<td>711 Maple</td>
<td>2</td>
</tr>
<tr>
<td>819 Maple</td>
<td>Every time it rains</td>
</tr>
<tr>
<td>321 Maiden Lane</td>
<td>2</td>
</tr>
<tr>
<td>403 Lincoln</td>
<td>4</td>
</tr>
<tr>
<td>624 Lincoln</td>
<td>During heavy rains</td>
</tr>
<tr>
<td>641 Lincoln</td>
<td>Continual erosion; habitual standing water</td>
</tr>
<tr>
<td>628 Locust</td>
<td>Ongoing</td>
</tr>
<tr>
<td>788 Locust</td>
<td>Every time it rains</td>
</tr>
<tr>
<td>806 Locust</td>
<td>Continuous</td>
</tr>
<tr>
<td>818 Locust</td>
<td>Yearly</td>
</tr>
<tr>
<td>836 Locust</td>
<td>10</td>
</tr>
<tr>
<td>520 Lyon</td>
<td>2</td>
</tr>
<tr>
<td>835 Lyon</td>
<td>20</td>
</tr>
<tr>
<td>711 North Street</td>
<td>Often</td>
</tr>
<tr>
<td>732 North Street</td>
<td>Every time it rains</td>
</tr>
</tbody>
</table>
501 Perry Every 1" or more
517 Perry 2
304 Pleasant Too many to count
786 Walnut Every time it rains

What types of problems have you had? Never Sometimes Often

Erosion [37] [20] [5]
Home or business flooded [45] [10] [4]
Over flowing ditches/culverts [22] [23] [26]
Standing water outside [22] [28] [30]
Street or driveway access flooded [32] [24] [21]

Other:
- 1480 N. 1700 Road – pasture flooded/electric fences out of service
- 1567 Hwy 40 – Farm fields due to inadequate landscaping and car accidents in Hwy 24/40 due to flooding
- 1662 N. 1700 Road – Water runs across road into our field
- 1735 E. 1500 Road – Front ditch plugged
- 411 Elm Street – Alley always floods
- 625 Lake Street – Up the street the water stands
- 628 Locust – Curb water does not flow off, drainage easement not graded properly
- 800 Walnut – Water does not pass through culvert under drive
- 818 Locust – Storm runoff from several nearby properties, mainly from the east of our property
- 827 Maple – some ditches do not drain
- Ditches and culvert need to be cleaned
- Fields with standing water
- I have noticed the (train) underpass flooded on 2nd Street
- Mainly standing water in culverts
- Mosquitoes
- Mosquitoes due to standing water (health hazard)
- Mosquitoes heavy/standing water
- No curbs on streets
- Problem corrected with cleaning ditches and culverts
- Water backing up in basement
- Water crosses road and erodes ditches that we mow; I’ve seen 6" – 8" of water pooled at Roanoke and 7th Street.

What do you see as major storm water problems in your area? (Check all that apply)

[61] Poor drainage
[37] Excessive run-off from streets
[35] Loss of property values
[31] Flooding
[12] Loss of property through erosion
[8] Poor water quality
[7] Loss of natural habitat
[4] Unsafe stream/stream bank conditions

Other:
- 1662 N. 1700 Road – Road contour to keep water from running into our field
- 1804 E. 1600 Road – Runoff from airport
- 800 Walnut – Redo the ditch created in my yard, which was not done properly anyway; also do something about the property across the street
Commissioners, I guess there’s one thing I’d like to leave you with while we go to work on these comments is – we’ve put this in the context of what are the planning efforts city/county wide. The reason we start with our cartoon of annexation is that there’s a reason that this area hasn’t developed substantially over the decades and those reasons have to do with the costs of development and public infrastructure and the storm drainage and those sorts of things. I think as planners we need to start thinking, or continue to think, about where are we going to put our limited resources in relation to development costs. We have / you all have planned a substantial amount of industrial employment center activity along with other areas of high density residential and commercial nodes and the like – Farmland Industries is one area, Farmer’s Turnpike is another area, 6th Street and SLT is an area. There’s room for all those things and areas of low growth/low development and so as we talk more about the utilities master plan and come back with this plan for your review and consideration I think we need to think of it in terms of the county as a region and not just – it’s easy to get into Grant Township and say “why aren’t we pro-development here”? “Why are we restrictive”? and those kind of things. We’re trying to let the history and the land talk to us on this one and say “there are reasons for this today, what do we reasonably anticipate”? We talk about expectations for the residents – is it fair to put out a plan for pro-growth if we’re not as a city going to put any infrastructure in that area. We’ve got to talk about those things and come to some reasonable conclusions I think. We’ll get to work on your comments and come back with those things in mind as well.

Mayor Amyx and esteemed Commissioners,

Last month's Kansas Drought Report (from the Kansas Water Office) indicates, "The range of precipitation and warmer than normal temperatures has expanded the area of abnormally dry and moderate drought conditions in the latest Drought Monitor. The western third of the state is mostly in moderate drought conditions and an area of abnormally dry conditions has developed in the Southeastern division. The percentage of the state in abnormally dry to moderate drought conditions has increased from 31.6 % at the beginning of November to the current 47.3 % on November 30."

We believe that this data further emphasizes the need to protect the Capability Class I and II soils in our region. Cycles of drought and flooding are intensifying. Our fertile, deep alluvial soils have a greater capacity to absorb water and present a unique opportunity to develop a strong agricultural base in Douglas County. Although industrial development offers viable short-term opportunities, impervious surfaces placed over our Class I and II soils intensifies flooding to adjacent properties and will adversely impact both residential and agricultural neighbors.

Development in the area should reflect the most efficient use of resources and reap the greatest benefit to our community. Agriculture can better sustain periods of flooding that heavy industry devastated by floods cannot. We urge you to consider this capacity as you review the Comprehensive Plan Amendment, CPA-6-5-09, to Horizon 2020 (Chapter 14) and seek to adopt an option that supports soil preservation and protection on contiguous tracts of land.

Thank you for your attention,

Simran Sethi
Matt Lehrman, SmartStar Lawrence Program Analyst, Westar Energy
Alice Lieberman, Distinguished Professor of Social Welfare, KU
Tom McDonald, Associate Dean & Professor, School of Social Welfare, KU
Sarah Smarsh, Assistant Professor of English, Washburn University
Jordan Tucker, Graduate Student, KU
Rick Martin, Executive Chef, Free State Brewing Company
Richard Heckler
Lily Siebert, Education Outreach Assistant, The Community Mercantile
Courtney Crouch, Produce Buyer, The Community Mercantile
Margit Hall, Owner and Farmer, Prairie Star Farms

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Simran Sethi
Associate Professor, Journalism
University of Kansas
E-mail: simran@ku.edu
Twitter: @simransethi
Web: www.simransethi.com
FB: www.facebook.com/laprofaKU
Memorandum
City of Lawrence
Douglas County
Planning & Development Services

TO:       David L. Corliss, City Manager
FROM:     Planning Staff
CC:       Scott McCullough, Director of Planning and Development Services
Date:     For August 9, 2011 City Commission Meeting
RE:       Northeast Sector Plan

The Northeast Sector Plan is a long-range development plan for the Grant Township area north of North Lawrence and the Kansas River to the Douglas County line. If adopted, the plan will act as the official land use policy guide for Lawrence and Douglas County. In short, the County Commission has returned the plan to the Planning Commission to discuss specific concerns/questions. To ensure an efficient process, the plan is being submitted to the City Commission for review and comment prior to being resubmitted to the Planning Commission in case there are City Commission comments in addition to those of the County Commission.

Timeline
Three public meetings were held to gather input on the plan in the fall and winter of 2009. The first draft of the plan was released on March 12, 2010. The first draft was presented in a public meeting on April 7, 2010. The second draft of the plan was released on May 5, 2010.

The Lawrence-Douglas County Planning Commission reviewed the 2nd draft at their mid-month meeting on May 12, 2010. The second draft was also presented to the Planning Commission for review and comment during their regular meeting on May 24, 2010. Staff produced a third draft based on Planning Commission comments and direction.

The Planning Commission considered the third draft of the plan at public meetings held on July 12, 2011 and September 20, 2011 when, by a vote of 5-4, they adopted the 3rd draft of the Northeast Sector Plan with changes to the future land use plan.

The Douglas County Board of County Commissioners considered the Planning Commission approved Northeast Sector Plan and took public comments at their meetings on May 11, 2011 and June 1, 2011. The Commission, by a vote of 2-1, voted to return the Northeast Sector Plan to the Planning Commission for further consideration. Subsequently, on July 6, 2011, the County Commission adopted, by a 2-1
vote, Resolution 11-21 which provides direction for the Planning Commission to consider as they reconsider the Northeast Sector Plan.

The plan and the County’s resolution are being provided to the City Commission in order to determine if additional direction should be given to the Planning Commission. If additional comments are made, all comments will be forwarded to the Planning Commission for additional processing of this sector plan.

**Action Requested**
Review the Northeast Sector Plan and receive public comment. Consider the direction provided by the County Commission to the Planning Commission and provide additional direction if deemed appropriate.
Memorandum
City of Lawrence – Douglas County Planning & Development Services

To: Douglas County Board of County Commissioners
From: Dan Warner, AICP, Long Range Planner
Date: For May 11, 2011 County Commission Meeting
RE: CPA-6-5-09: Consider Comprehensive Plan Amendment to Horizon 2020 Chapter 14 to include the Northeast Sector Plan.

The Douglas County Board of County Commissioners and the Lawrence City Commission held a joint study session on the Northeast Sector Plan on March 8, 2011. In the discussion of the plan a few issues were raised. This memo addresses those issues, as well as discusses the key issue for the Northeast Sector Plan.

Joint Study Session Issues
1. Is the Plan Growth Area being used for the City’s wastewater master plan update? Yes, the Plan Growth Area from Map 3-1 Future Land Use is the boundary being used for the study area in the wastewater master plan update.

2. Why not classify the existing Douglas County industrial zoned property south of I-70 as a future employment area instead of the Plan’s Very Low Density Residential classification?
   Horizon 2020 Chapter 7 designates a future employment center for the area at land south of the airport and north of I-70. This plan used that assumption when classifying the area north of I-70 as a future employment center.
   The area south of I-70 has not developed in an industrial manner despite the existing county industrial zoning. The development of the area is predominately agriculture, very low density residential and rural residential. City services are expected to be delivered to the area south of I-70 in the future. The Very Low Density Residential classification will direct development in a manner more in character with the existing development of the area (larger lot residential).

Main Issue of the Plan
The most discussed element of the plan is how to classify the future land use of the property south of the airport and north of I-70. The Planning Commission considered this question during their deliberations and discussed three options during their meeting on September 20, 2010. The Commission chose Option 1 which deleted the proposed Soil Conserving Agri-Industry future land use category from the plan and designated the property south of the airport as Industrial, with language added to this category that encourages soil conserving agri-industry businesses to locate in areas with Class I and II soils. The Planning Commission desired the flexibility provided by the language, which also aligns with the language contained in Chapter 7.
Memorandum
City of Lawrence – Douglas County
Planning & Development Services

TO: Lawrence-Douglas County Planning Commission
FROM: Dan Warner, AICP, Long Range Planner
Date: For September 20, 2010 Regular PC Meeting
RE: Northeast Sector Plan – Options for the Soil Conserving Agri-Industry Category

The Planning Commission took public comment and discussed the Northeast Sector Plan at their regular meeting on July 26, 2010. The Commission directed Planning Staff to develop options for the Soil Conserving Agri-Industry future land use category.

The following two options are presented for consideration by the Planning Commission:

**Option #1**
Delete the Soil Conserving Agri-Industry category and change the area south of Highway 24/40 designated as such to the Industrial category. Add language to the Industrial category encouraging soil conserving agri-industry businesses to locate in areas with Class I and II soils. This reflects more directly the policies of Chapter 7 in Horizon 2020.

3.2.1.4 Soil Conserving Agri-Industry
The intent of the Soil Conserving Agri-Industry Use category is to allow for soil conserving agriculture-related industrial uses businesses that conserve and use the Class 1 and 2 Soils in the area and that take advantage of Highway 24/40 and I 70 for materials transportation. Soil conserving agri-industry business is a term with its basis found in Horizon 2020 Chapter 7 Industrial and Employment Related Land Use. This Plan seeks to better describe the intent of this classification. The distinction between the Soil Conserving Agri-Industry classification and Industrial/Employment classifications is the component of protecting and/or using existing high quality agricultural land either through agricultural use or preservation for future agricultural use.

Protection of the soils through agriculture use or preservation can be implemented in different ways and the community should be open to creative ways that development projects could utilize this classification. Projects that could meet the value of this classification include, but are not limited to, the following: crop research, local food production, or small amounts of conventional industrial with large percentages of the soil protected or used for agriculture. The Agri-Industry Use may or may not urbanize. This use is
identified south of Highway 24/40 and also should be included at Midland Junction when a nodal plan is developed for that area.

Intensity: Medium High
Zoning Districts: Douglas County – I-1 (Limited Industrial District) and I-2 Light Industrial District; Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District); PD (Planned Development Overlay)

Primary Uses: Soil conserving agri-businesses

3.2.1.84 Industrial
The intent of the Industrial use category is to allow for moderate to high-impact uses including large scale or specialized industrial uses that utilize Highway 24/40 and I-70 for materials transportation. This category includes existing industrial developments in the area. This category also includes land at the airport dedicated to aviation related development. Land west of the airport and north of Highway 24/40 and south of Highway 24/40 is also designated classified as industrial. Soil conserving agri-industry businesses that will protect the quality of existing high quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in areas with Class I and II soils. The industrial use classification category is expected to urbanize.

Intensity: Medium-High
Zoning Districts: Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)

Primary Uses: Aviation-related uses, utility facilities, building maintenance services, fleet storage, business support services, construction sales and service, industrial facilities, wholesale, distribution, and storage, research services, manufacturing and production limited and technology, soil-conserving agri-businesses

Option #2
Retain the Soil Conserving Agri-Industry category. Add language to the description that creates a specific ratio to protect Class 1 and 2 soils when developing in that category.

3.2.1.4 Soil Conserving Agri-Industry
The intent of the Soil Conserving Agri-Industry Use category is to allow for soil conserving agriculture-related industrial uses but permit other, more conventional industrial uses, as long as a high percentage of a development’s Class I and II soils land area is protected. Businesses that conserve and use the Class 1 and 2 Soils in the area and that take advantage of Highway 24/40 and I-70 for materials transportation.

Soil conserving agri-industry business is a term with its basis found in Horizon 2020 Chapter 7 – Industrial and Employment-Related Land Use. This Plan seeks to better describe the intent of this classification. The distinction
between the Soil Conserving Agri-Industry classification and Industrial/Employment classifications is the component of protecting and/or using existing high-quality agricultural land either through agricultural use or preservation for future agricultural use.

Protection of the soils through agriculture use or preservation can be implemented in different ways and the community should be open to creative ways that development projects could utilize this classification. Projects that could meet the value of this classification include, but are not limited to, the following: crop research, local food production, or small amounts of conventional industrial with large percentages of the soil protected or used for agriculture. Projects must set aside, protect, or use a minimum of 50% of the Class I and II soils on the property being developed for agriculture use. This protection must take the form of a conservation easement or some other legal instrument mandating perpetual protection. The Soil Conserving Agri-Industry Use may or may not urbanize. This use is identified south of Highway 24/40 and also should be included at Midland Junction when a nodal plan is developed for that area.

Intensity: Medium-High
Zoning Districts: Douglas County – I-1 (Limited Industrial District) and I-2 Light Industrial District; Lawrence – IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)
Primary Uses: Soil-conserving agri-businesses, aviation-related uses, utility facilities, building maintenance services, fleet storage, business support services, construction sales and service, industrial facilities, wholesale, distribution, and storage, research services, manufacturing and production limited and technology
Hi, Bobbie.

I am on the steering committee of the Citizens' for Responsible Planning. We noticed that the attachment which we presented to the County Commissioners on the Northeast Sector Plan was apparently not forwarded to the City Commissioners. We request that this attachment be available to the City Commissioners for their review. This document compares the soil classes within the potential locations for future industrial and employment related land uses. This comparison dramatically identifies the proposed industrial sites in the Northeast Sector having dramatically more class I and II soils than any of the other proposed sites. This is understandable since this area has historically been an area of repeated flooding depositing high quality soils.

Thank you for your cooperation.

--

Jerry Jost
2002 East 1600 Road
Lawrence, KS 66044
jerryjost@gmail.com
(785) 766-0428
<table>
<thead>
<tr>
<th>Potential Industrial Development Sites According to Horizon 2020 (Pages 7-4 through 7-8)</th>
<th>Acres (Approximate)</th>
<th>Class I Soils (Approximate Acres)</th>
<th>Class II Soils (Approximate Acres)</th>
<th>Total Class I and II Soils (Approximate Acres)</th>
<th>% Soils that are Class I and II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmland Industries</td>
<td>509</td>
<td>12</td>
<td>7</td>
<td>19</td>
<td>3.7%</td>
</tr>
<tr>
<td>Southeast Area</td>
<td>173</td>
<td>0</td>
<td>21</td>
<td>21</td>
<td>12.1%</td>
</tr>
<tr>
<td>Airport</td>
<td>374</td>
<td>217</td>
<td>157</td>
<td>374</td>
<td>100.0%</td>
</tr>
<tr>
<td>I-70 and K-10</td>
<td>607</td>
<td>0</td>
<td>42</td>
<td>42</td>
<td>6.9%</td>
</tr>
<tr>
<td>K-10 and Highway 40</td>
<td>386</td>
<td>0</td>
<td>28</td>
<td>28</td>
<td>7.3%</td>
</tr>
<tr>
<td>Eudora North and Eudora South</td>
<td>845</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>1.4%</td>
</tr>
<tr>
<td>Baldwin City</td>
<td>648</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Highway 56 and Highway 59</td>
<td>656</td>
<td>0</td>
<td>36</td>
<td>36</td>
<td>5.5%</td>
</tr>
<tr>
<td>Midland Junction</td>
<td>652</td>
<td>69</td>
<td>214</td>
<td>283</td>
<td>43.4%</td>
</tr>
<tr>
<td>Highway 56 and K-33</td>
<td>719</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total Acres (Approximate)</td>
<td>5569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class–Douglas County, Kansas
(Farmland Industries 275+ Acres)

**MAP LEGEND**

- **Area of Interest (AOI)**
- **Soils**
- **Soil Ratings**
  - Capability Class - I
  - Capability Class - II
  - Capability Class - III
  - Capability Class - IV
  - Capability Class - V
  - Capability Class - VI
  - Capability Class - VII
  - Capability Class - VIII
  - Not rated or not available

- **Political Features**
  - Cities
  - PLSS Township and Range
  - PLSS Section

- **Water Features**
  - Oceans
  - Streams and Canals

- **Transportation**
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads

**MAP INFORMATION**

Map Scale: 1:13,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: National Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010

Date(s) aerial images were photographed: 6/15/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>21.4</td>
<td>4.2%</td>
</tr>
<tr>
<td>7090</td>
<td>Wabash silty clay loam, occasionally flooded</td>
<td>3</td>
<td>33.3</td>
<td>6.5%</td>
</tr>
<tr>
<td>7155</td>
<td>Kimo silty clay loam, rarely flooded</td>
<td>2</td>
<td>7.1</td>
<td>1.4%</td>
</tr>
<tr>
<td>7176</td>
<td>Rossville silt loam, very rarely flooded</td>
<td>1</td>
<td>12.3</td>
<td>2.4%</td>
</tr>
<tr>
<td>7280</td>
<td>Wabash silty clay, very rarely flooded</td>
<td>3</td>
<td>13.1</td>
<td>2.6%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>0.5</td>
<td>0.1%</td>
</tr>
<tr>
<td>7502</td>
<td>Pawnee clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>177.9</td>
<td>35.0%</td>
</tr>
<tr>
<td>7503</td>
<td>Pawnee clay loam, 3 to 6 percent slopes, eroded</td>
<td>3</td>
<td>8.4</td>
<td>1.6%</td>
</tr>
<tr>
<td>7602</td>
<td>Sibleyville complex, 7 to 12 percent slopes</td>
<td>6</td>
<td>111.4</td>
<td>21.9%</td>
</tr>
<tr>
<td>7603</td>
<td>Sibleyville loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>8.3</td>
<td>1.6%</td>
</tr>
<tr>
<td>7651</td>
<td>Vinland complex, 3 to 7 percent slopes</td>
<td>6</td>
<td>58.7</td>
<td>11.5%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>18.8</td>
<td>3.7%</td>
</tr>
<tr>
<td>9986</td>
<td>Miscellaneous water</td>
<td></td>
<td>37.8</td>
<td>7.4%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>509.0</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Description

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Rating Options

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified
Tie-break Rule: Higher
Nonirrigated Capability Class—Douglas County, Kansas
(Southeast Industrial Area 200+ Acres)

Natural Resources
Conservation Service
Web Soil Survey
National Cooperative Soil Survey

Map Scale: 1:6,610 if printed on A size (8.5" x 11") sheet.
Nonirrigated Capability Class--Douglas County, Kansas
(Southeast Industrial Area 200+ Acres)

MAP LEGEND

- **Area of Interest (AOI)**
- **Soils**
  - Soil Map Units
- **Soil Ratings**
  - Capability Class - I
  - Capability Class - II
  - Capability Class - III
  - Capability Class - IV
  - Capability Class - V
  - Capability Class - VI
  - Capability Class - VII
  - Capability Class - VIII
  - Not rated or not available
- **Political Features**
  - Cities
  - PLSS Township and Range
  - PLSS Section
- **Water Features**
  - Oceans
  - Streams and Canals
- **Transportation**
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads

MAP INFORMATION

Map Scale: 1:6,610 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
Date(s) aerial images were photographed: 6/15/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7500</td>
<td>Pawnee clay loam, 1 to 3 percent slopes</td>
<td>2</td>
<td>21.3</td>
<td>12.3%</td>
</tr>
<tr>
<td>7502</td>
<td>Pawnee clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>100.9</td>
<td>58.4%</td>
</tr>
<tr>
<td>7503</td>
<td>Pawnee clay loam, 3 to 6 percent slopes, eroded</td>
<td>3</td>
<td>20.5</td>
<td>11.9%</td>
</tr>
<tr>
<td>7602</td>
<td>Sibleyville complex, 7 to 12 percent slopes</td>
<td>6</td>
<td>2.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>28.1</td>
<td>16.3%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>172.8</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
MAP LEGEND

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

Political Features

Cities
PLSS Township and Range
PLSS Section

Water Features

Oceans
Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads

MAP INFORMATION

Map Scale: 1:10,000 if printed on A size (8.5” × 11”) sheet.
The soil surveys that comprise your AOI were mapped at 1:24,000.
Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
Date(s) aerial images were photographed: 6/15/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7106</td>
<td>Eudora-Bismarckgrove silt loams, rarely flooded</td>
<td>1</td>
<td>53.3</td>
<td>14.3%</td>
</tr>
<tr>
<td>7119</td>
<td>Eudora-Urban land complex, rarely flooded</td>
<td>2</td>
<td>8.0</td>
<td>2.1%</td>
</tr>
<tr>
<td>7127</td>
<td>Eudora-Kimo complex, overwash, rarely flooded</td>
<td>2</td>
<td>18.5</td>
<td>5.0%</td>
</tr>
<tr>
<td>7155</td>
<td>Kimo silty clay loam, rarely flooded</td>
<td>2</td>
<td>47.7</td>
<td>12.7%</td>
</tr>
<tr>
<td>7176</td>
<td>Rossville silt loam, very rarely flooded</td>
<td>1</td>
<td>164.0</td>
<td>43.8%</td>
</tr>
<tr>
<td>7213</td>
<td>Reading silt loam, moderately wet, very rarely flooded</td>
<td>2</td>
<td>82.7</td>
<td>22.1%</td>
</tr>
<tr>
<td>9983</td>
<td>Gravel pits and quarries</td>
<td></td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>374.2</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class–Douglas County, Kansas
(I-70AndK-10)

**MAP LEGEND**

- **Area of Interest (AOI)**
- **Soils**
  - Soil Map Units
  - **Soil Ratings**
    - Capability Class - I
    - Capability Class - II
    - Capability Class - III
    - Capability Class - IV
    - Capability Class - V
    - Capability Class - VI
    - Capability Class - VII
    - Capability Class - VIII
    - Not rated or not available
- **Political Features**
  - Cities
  - PLSS Township and Range
  - PLSS Section
- **Water Features**
  - Oceans
  - Streams and Canals
- **Transportation**
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads

**MAP INFORMATION**

Map Scale: 1:17,800 if printed on A size (8.5” × 11”) sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010

Date(s) aerial images were photographed: 6/26/2006; 6/15/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4752</td>
<td>Sogn-Vinland complex, 3 to 25 percent slopes</td>
<td>7</td>
<td>53.2</td>
<td>8.8%</td>
</tr>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>7.2</td>
<td>1.2%</td>
</tr>
<tr>
<td>7301</td>
<td>Martin silty clay loam, 1 to 3 percent slopes</td>
<td>2</td>
<td>11.2</td>
<td>1.9%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>156.8</td>
<td>25.8%</td>
</tr>
<tr>
<td>7307</td>
<td>Martin soils, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>10.0</td>
<td>1.7%</td>
</tr>
<tr>
<td>7325</td>
<td>Martin-Oska silty clay loams, 3 to 6 percent slopes</td>
<td>3</td>
<td>160.2</td>
<td>26.4%</td>
</tr>
<tr>
<td>7460</td>
<td>Oska silty clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>34.9</td>
<td>5.8%</td>
</tr>
<tr>
<td>7530</td>
<td>Sharpsburg silt loam, 1 to 4 percent slopes</td>
<td>2</td>
<td>31.1</td>
<td>5.1%</td>
</tr>
<tr>
<td>7535</td>
<td>Sharpsburg silt loam, 4 to 8 percent slopes</td>
<td>3</td>
<td>0.2</td>
<td>0.0%</td>
</tr>
<tr>
<td>7657</td>
<td>Vinland-Martin complex, 7 to 15 percent slopes</td>
<td>6</td>
<td>77.2</td>
<td>12.7%</td>
</tr>
<tr>
<td>7658</td>
<td>Vinland-Rock outcrop complex, 15 to 45 percent slopes</td>
<td>6</td>
<td>12.7</td>
<td>2.1%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>52.1</td>
<td>8.6%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>606.8</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
**MAP LEGEND**

- **Area of Interest (AOI)**
  - Area of Interest (AOI)
- **Soils**
  - Soil Map Units
- **Soil Ratings**
  - Capability Class - I
  - Capability Class - II
  - Capability Class - III
  - Capability Class - IV
  - Capability Class - V
  - Capability Class - VI
  - Capability Class - VII
  - Capability Class - VIII
  - Not rated or not available
- **Political Features**
  - Cities
  - PLSS Township and Range
  - PLSS Section
- **Water Features**
  - Oceans
  - Streams and Canals
- **Transportation**
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads

**MAP INFORMATION**

Map Scale: 1:9,160 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
Date(s) aerial images were photographed: 6/26/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4752</td>
<td>Sogn-Vinland complex, 3 to 25 percent slopes</td>
<td>7</td>
<td>17.9</td>
<td>4.6%</td>
</tr>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>16.2</td>
<td>4.2%</td>
</tr>
<tr>
<td>7301</td>
<td>Martin silty clay loam, 1 to 3 percent slopes</td>
<td>2</td>
<td>28.0</td>
<td>7.3%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>163.3</td>
<td>42.3%</td>
</tr>
<tr>
<td>7307</td>
<td>Martin soils, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>9.3</td>
<td>2.4%</td>
</tr>
<tr>
<td>7325</td>
<td>Martin-Oska silty clay loams, 3 to 6 percent slopes</td>
<td>3</td>
<td>37.9</td>
<td>9.8%</td>
</tr>
<tr>
<td>7460</td>
<td>Oska silty clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>7.8</td>
<td>2.0%</td>
</tr>
<tr>
<td>7651</td>
<td>Vinland complex, 3 to 7 percent slopes</td>
<td>6</td>
<td>24.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>7657</td>
<td>Vinland-Martin complex, 7 to 15 percent slopes</td>
<td>6</td>
<td>81.1</td>
<td>21.0%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>386.0</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class–Douglas County, Kansas
(Eudora North and Eudora South)

MAP LEGEND

Area of Interest (AOI)
Soils
Soil Map Units
Soil Ratings
Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

Political Features
Cities
PLSS Township and Range
PLSS Section

Water Features
Oceans
Streams and Canals

Transportation
Rails
Interstate Highways
US Routes
Major Roads

MAP INFORMATION

Map Scale: 1:13,100 if printed on A size (8.5" × 11") sheet.
The soil surveys that comprise your AOI were mapped at 1:24,000.
Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
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# Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7050</td>
<td>Kennebec silt loam, occasionally flooded</td>
<td>2</td>
<td>1.6</td>
<td>0.2%</td>
</tr>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>54.6</td>
<td>6.5%</td>
</tr>
<tr>
<td>7170</td>
<td>Reading silt loam, rarely flooded</td>
<td>1</td>
<td>7.5</td>
<td>0.9%</td>
</tr>
<tr>
<td>7301</td>
<td>Martin silty clay loam, 1 to 3 percent slopes</td>
<td>2</td>
<td>2.6</td>
<td>0.3%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>5.3</td>
<td>0.6%</td>
</tr>
<tr>
<td>7423</td>
<td>Morrill clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>247.3</td>
<td>29.3%</td>
</tr>
<tr>
<td>7502</td>
<td>Pawnee clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>295.7</td>
<td>35.0%</td>
</tr>
<tr>
<td>7503</td>
<td>Pawnee clay loam, 3 to 6 percent slopes, eroded</td>
<td>3</td>
<td>30.2</td>
<td>3.6%</td>
</tr>
<tr>
<td>7535</td>
<td>Sharpsburg silt loam, 4 to 8 percent slopes</td>
<td>3</td>
<td>35.2</td>
<td>4.2%</td>
</tr>
<tr>
<td>7600</td>
<td>Sibleyville complex, 3 to 7 percent slopes</td>
<td>4</td>
<td>13.5</td>
<td>1.6%</td>
</tr>
<tr>
<td>7658</td>
<td>Vinland-Rock outcrop complex, 15 to 45 percent slopes</td>
<td>6</td>
<td>32.8</td>
<td>3.9%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>118.5</td>
<td>14.0%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>844.8</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Map Scale: 1:13,800 if printed on A size (8.5" x 11") sheet.

Nonirrigated Capability Class—Douglas County, Kansas
(Baldwin City)

Web Soil Survey
National Cooperative Soil Survey

1/29/2011
Page 1 of 4
MAP LEGEND

Area of Interest (AOI)  Area of Interest (AOI)
Soils  Soil Map Units
Soil Ratings
- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

Political Features
- Cities
- PLSS Township and Range
- PLSS Section

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:13,800 if printed on A size (8.5” × 11”) sheet.
The soil surveys that comprise your AOI were mapped at 1:24,000.
Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
Date(s) aerial images were photographed: 6/15/2006
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
## Nonirrigated Capability Class

### Nonirrigated Capability Class—Summary by Map Unit—Douglas County, Kansas

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4752</td>
<td>Sogn-Vinland complex, 3 to 25 percent slopes</td>
<td>7</td>
<td>35.8</td>
<td>5.5%</td>
</tr>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>66.2</td>
<td>10.2%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>311.8</td>
<td>48.1%</td>
</tr>
<tr>
<td>7307</td>
<td>Martin soils, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>64.0</td>
<td>9.9%</td>
</tr>
<tr>
<td>7460</td>
<td>Osaka silty clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>0.2</td>
<td>0.0%</td>
</tr>
<tr>
<td>7600</td>
<td>Sibleyville complex, 3 to 7 percent slopes</td>
<td>4</td>
<td>22.5</td>
<td>3.5%</td>
</tr>
<tr>
<td>7603</td>
<td>Sibleyville loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>92.1</td>
<td>14.2%</td>
</tr>
<tr>
<td>7651</td>
<td>Vinland complex, 3 to 7 percent slopes</td>
<td>6</td>
<td>23.1</td>
<td>3.6%</td>
</tr>
<tr>
<td>7652</td>
<td>Vinland complex, 3 to 7 percent slopes, eroded</td>
<td>6</td>
<td>4.0</td>
<td>0.6%</td>
</tr>
<tr>
<td>7657</td>
<td>Vinland-Martin complex, 7 to 15 percent slopes</td>
<td>6</td>
<td>27.8</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

**Totals for Area of Interest**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>647.6</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class–Douglas County, Kansas
(Highway 56 and Highway 59)

**MAP LEGEND**

<table>
<thead>
<tr>
<th>Area of Interest (AOI)</th>
<th>Local Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soils</td>
<td>Soil Map Units</td>
</tr>
<tr>
<td><strong>Soil Ratings</strong></td>
<td></td>
</tr>
<tr>
<td>- Capability Class - I</td>
<td></td>
</tr>
<tr>
<td>- Capability Class - II</td>
<td></td>
</tr>
<tr>
<td>- Capability Class - III</td>
<td></td>
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<tr>
<td>- Capability Class - IV</td>
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</tr>
<tr>
<td>- Capability Class - V</td>
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</tr>
<tr>
<td>- Capability Class - VI</td>
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<tr>
<td>- Capability Class - VII</td>
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</tr>
<tr>
<td>- Capability Class - VIII</td>
<td></td>
</tr>
<tr>
<td>- Not rated or not available</td>
<td></td>
</tr>
</tbody>
</table>

**Political Features**

- Cities
- PLSS Township and Range
- PLSS Section

**Water Features**

- Oceans
- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads

**MAP INFORMATION**

Map Scale: 1:14,000 if printed on A size (8.5” × 11”) sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 15N NAD83

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Soil Survey Area: Douglas County, Kansas
Survey Area Data: Version 8, Nov 30, 2010
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## Nonirrigated Capability Class

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4752</td>
<td>Sogn-Vinland complex, 3 to 25 percent slopes</td>
<td>7</td>
<td>3.8</td>
<td>0.6%</td>
</tr>
<tr>
<td>7050</td>
<td>Kennebec silt loam, occasionally flooded</td>
<td>2</td>
<td>2.1</td>
<td>0.3%</td>
</tr>
<tr>
<td>7051</td>
<td>Kennebec silt loam, frequently flooded</td>
<td>5</td>
<td>57.6</td>
<td>8.8%</td>
</tr>
<tr>
<td>7301</td>
<td>Martin silty clay loam, 1 to 3 percent slopes</td>
<td>2</td>
<td>33.5</td>
<td>5.1%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>142.2</td>
<td>21.7%</td>
</tr>
<tr>
<td>7307</td>
<td>Martin soils, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>53.6</td>
<td>8.2%</td>
</tr>
<tr>
<td>7325</td>
<td>Martin-Oska silty clay loams, 3 to 6 percent slopes</td>
<td>3</td>
<td>1.0</td>
<td>0.1%</td>
</tr>
<tr>
<td>7600</td>
<td>Sibleyville complex, 3 to 7 percent slopes</td>
<td>4</td>
<td>74.0</td>
<td>11.3%</td>
</tr>
<tr>
<td>7603</td>
<td>Sibleyville loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>120.8</td>
<td>18.4%</td>
</tr>
<tr>
<td>7604</td>
<td>Sibleyville loam, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>0.9</td>
<td>0.1%</td>
</tr>
<tr>
<td>7651</td>
<td>Vinland complex, 3 to 7 percent slopes</td>
<td>6</td>
<td>19.6</td>
<td>3.0%</td>
</tr>
<tr>
<td>7652</td>
<td>Vinland complex, 3 to 7 percent slopes, eroded</td>
<td>6</td>
<td>12.6</td>
<td>1.9%</td>
</tr>
<tr>
<td>7657</td>
<td>Vinland-Martin complex, 7 to 15 percent slopes</td>
<td>6</td>
<td>6.0</td>
<td>0.9%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>116.2</td>
<td>17.7%</td>
</tr>
<tr>
<td>8964</td>
<td>Woodson silty clay loam, 1 to 3 percent slopes, eroded</td>
<td>4</td>
<td>11.7</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>655.5</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class—Douglas County, Kansas
(Midland Junction)

MAP LEGEND

<table>
<thead>
<tr>
<th>Area of Interest (AOI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soils</td>
</tr>
<tr>
<td>Soil Map Units</td>
</tr>
<tr>
<td>Soil Ratings</td>
</tr>
<tr>
<td>Capability Class - I</td>
</tr>
<tr>
<td>Capability Class - II</td>
</tr>
<tr>
<td>Capability Class - III</td>
</tr>
<tr>
<td>Capability Class - IV</td>
</tr>
<tr>
<td>Capability Class - V</td>
</tr>
<tr>
<td>Capability Class - VI</td>
</tr>
<tr>
<td>Capability Class - VII</td>
</tr>
<tr>
<td>Capability Class - VIII</td>
</tr>
<tr>
<td>Not rated or not available</td>
</tr>
<tr>
<td>Political Features</td>
</tr>
<tr>
<td>Cities</td>
</tr>
<tr>
<td>PLSS Township and Range</td>
</tr>
<tr>
<td>PLSS Section</td>
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<tr>
<td>Water Features</td>
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<tr>
<td>Oceans</td>
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<tr>
<td>Streams and Canals</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Rails</td>
</tr>
<tr>
<td>Interstate Highways</td>
</tr>
<tr>
<td>US Routes</td>
</tr>
<tr>
<td>Major Roads</td>
</tr>
</tbody>
</table>

MAP INFORMATION

Map Scale: 1:12,800 if printed on A size (8.5” × 11”) sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map:  Natural Resources Conservation Service
Coordinate System:  UTM Zone 15N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area:  Douglas County, Kansas
Survey Area Data:  Version 8, Nov 30, 2010

Date(s) aerial images were photographed:  6/15/2006

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## Nonirrigated Capability Class

### Nonirrigated Capability Class—Summary by Map Unit—Douglas County, Kansas

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7050</td>
<td>Kennebec silt loam, occasionally flooded</td>
<td>2</td>
<td>159.6</td>
<td>24.5%</td>
</tr>
<tr>
<td>7090</td>
<td>Wabash silty clay loam, occasionally flooded</td>
<td>3</td>
<td>21.4</td>
<td>3.3%</td>
</tr>
<tr>
<td>7127</td>
<td>Eudora-Kimo complex, overwash, rarely flooded</td>
<td>2</td>
<td>9.7</td>
<td>1.5%</td>
</tr>
<tr>
<td>7155</td>
<td>Kimo silty clay loam, rarely flooded</td>
<td>2</td>
<td>7.6</td>
<td>1.2%</td>
</tr>
<tr>
<td>7170</td>
<td>Reading silt loam, rarely flooded</td>
<td>1</td>
<td>59.2</td>
<td>9.1%</td>
</tr>
<tr>
<td>7176</td>
<td>Rossville silt loam, very rarely flooded</td>
<td>1</td>
<td>9.4</td>
<td>1.4%</td>
</tr>
<tr>
<td>7213</td>
<td>Reading silt loam, moderately wet, very rarely flooded</td>
<td>2</td>
<td>37.0</td>
<td>5.7%</td>
</tr>
<tr>
<td>7271</td>
<td>Falleaf-Grinter soils, 8 to 20 percent slopes</td>
<td>6</td>
<td>17.3</td>
<td>2.7%</td>
</tr>
<tr>
<td>7280</td>
<td>Wabash silty clay, very rarely flooded</td>
<td>3</td>
<td>277.3</td>
<td>42.6%</td>
</tr>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>5.0</td>
<td>0.8%</td>
</tr>
<tr>
<td>7502</td>
<td>Pawnee clay loam, 3 to 6 percent slopes</td>
<td>3</td>
<td>2.4</td>
<td>0.4%</td>
</tr>
<tr>
<td>7550</td>
<td>Rosendale-Bendena silty clay loams, 3 to 40 percent slopes</td>
<td>7</td>
<td>8.7</td>
<td>1.3%</td>
</tr>
<tr>
<td>7657</td>
<td>Vinland-Martin complex, 7 to 15 percent slopes</td>
<td>6</td>
<td>29.9</td>
<td>4.6%</td>
</tr>
<tr>
<td>7658</td>
<td>Vinland-Rock outcrop complex, 15 to 45 percent slopes</td>
<td>6</td>
<td>0.7</td>
<td>0.1%</td>
</tr>
<tr>
<td>9983</td>
<td>Gravel pits and quarries</td>
<td></td>
<td>0.3</td>
<td>0.0%</td>
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<tr>
<td>9999</td>
<td>Water</td>
<td></td>
<td>6.1</td>
<td>0.9%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>651.6</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Nonirrigated Capability Class—Douglas County, Kansas (Highway 56 and K-33)

Natural Resources
Conservation Service
Web Soil Survey
National Cooperative Soil Survey

Map Scale: 1:13,200 if printed on A size (8.5" x 11") sheet.

318900 319200 319500 319800 320100 320400
38° 46' 48'' 38° 46' 50'' 38° 45' 20'' 38° 46' 48'' 38° 45' 19'' 38° 46' 48''
95° 3' 51'' 95° 3' 48'' 95° 5' 13'' 95° 5' 16''

1/29/2011
Page 1 of 4
Nonirrigated Capability Class—Douglas County, Kansas
(Highway 56 and K-33)

MAP LEGEND

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

Political Features

Cities
PLSS Township and Range
PLSS Section

Water Features

Oceans
Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads

MAP INFORMATION

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Coordinate System: UTM Zone 15N NAD83
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# Nonirrigated Capability Class

## Nonirrigated Capability Class—Summary by Map Unit—Douglas County, Kansas

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7302</td>
<td>Martin silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>8.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>7600</td>
<td>Sibleyville complex, 3 to 7 percent slopes</td>
<td>4</td>
<td>9.5</td>
<td>1.3%</td>
</tr>
<tr>
<td>7603</td>
<td>Sibleyville loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>215.4</td>
<td>29.9%</td>
</tr>
<tr>
<td>7604</td>
<td>Sibleyville loam, 3 to 7 percent slopes, eroded</td>
<td>4</td>
<td>15.8</td>
<td>2.2%</td>
</tr>
<tr>
<td>8301</td>
<td>Verdigris silt loam, frequently flooded</td>
<td>5</td>
<td>67.6</td>
<td>9.4%</td>
</tr>
<tr>
<td>8912</td>
<td>Summit silty clay loam, 3 to 7 percent slopes</td>
<td>3</td>
<td>8.6</td>
<td>1.2%</td>
</tr>
<tr>
<td>8962</td>
<td>Woodson silt loam, 1 to 3 percent slopes</td>
<td>3</td>
<td>389.8</td>
<td>54.2%</td>
</tr>
<tr>
<td>9999</td>
<td>Water</td>
<td>4.8</td>
<td>719.4</td>
<td>100.0%</td>
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</tbody>
</table>

**Totals for Area of Interest**

<table>
<thead>
<tr>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>719.4</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
I will not be able to attend the meeting Tuesday evening when comments will be received concerning the Northeast Sector Plan but as a North Lawrence property owner and resident, I wanted to express my continued concern. I do believe that the problems with drainage and flooding have been well outlined during previous meetings. Solutions, within a reasonable budget, not so much. As a tax paying property owner, I look to my commissioners to make certain that these issues are addressed before any decisions are made. Thank you for your time. Ellen Paulsen 785-312-0801
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support.

- This language reflects almost directly the previously approved policies in Chapter 7 of Horizon 2020. All of our long-range plans for our farms and family homes were based on those policies.

- We have worked the land and soils in this area for decades. Understanding the production capabilities, vulnerabilities, climate, erosion, water retention and production limitations has allowed us to maximize yields of tillable acreage for generations. It is how we make our living and is part of our lives.

- With proximity to major highways, rail and air transportation, this area serves the needs of Lawrence and all of northeast Kansas. We should not compromise access to industrial and commercial use in this critical transportation hub by placing severe limits on potential development nearby.

- The relatively undefined concept of soil conserving agri-industry opens the possibility that current agri-industry uses such as livestock feeding operations, turf and sod production, agricultural field stations and test plots could be jeopardized in the future.

- The proposed commercial use of land in no way conflicts with our ability to grow crops for our community or increase production to support local demands.

As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support.

- This language reflects almost directly the previously approved policies in Chapter 7 of Horizon 2020. All of our long-range plans for our farms and family homes were based on those policies.

- We have worked the land and soils in this area for decades. Understanding the production capabilities, vulnerabilities, climate, erosion, water retention and production limitations has allowed us to maximize yields of tillable acreage for generations. It is how we make our living and is part of our lives.

- With proximity to major highways, rail and air transportation, this area serves the needs of Lawrence and all of northeast Kansas. We should not compromise access to industrial and commercial use in this critical transportation hub by placing severe limits on potential development nearby.

- The relatively undefined concept of soil conserving agri-industry opens the possibility that current agri-industry uses such as livestock feeding operations, turf and sod production, agricultural field stations and test plots could be jeopardized in the future.

- The proposed commercial use of land in no way conflicts with our ability to grow crops for our community or increase production to support local demands.

As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

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Sincerely,

Grant Township Property Owners

[Signature]

150 acres
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan, we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support:

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Sincerely,

Grant Township Property Owners

[Signature]

Lawrence Farms LLC

[Date] 24A
September 15, 2010

To: Members of the Lawrence Douglas County Planning Commission

We are Grant Township property owners, and we are in favor of the letter dated September 10, 2010, in support of option #1 of the NE Sector plan.

Gary L. Black
Larry D. Black
17 acres owned in Grant Township
Sept 15, 2010

TO: Planning Commission

I am a Grant Township property owner and I am in favor of the letter dated Sept 10, 2010, in support of option #1 of the NE sector plan.

Respectfully yours,

Larry Atchley
Owner of approx 40 acres in Grant Township

Address: 47 Hickey Ridge
Cicero, Sw.
46034
I am a Grant Township property owner, and I am in favor of the letter dated September 10, 2010, in support of option #1 of the NE Sector plan.

Jane McCabe

Acres owned in Grant Township approx 35
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan we strongly support Option #1 as presented in the memorandum from Dan Wamer AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support.

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- The proposed commercial use of land in no way conflicts with our ability to grow crops for our community or increase production to support local demands.

As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

[Signatures]

[Number of Acres and Date]
To: Members of the Lawrence Douglas County Planning Commission

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Sincerely,

Grant Township Property Owners

[Signature]

51 A
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

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Sincerely,

Grant Township Property Owners
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

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We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

Roger & Sue Pine
Brian & Kathy Pine

349 acres

Kathleen R. Pine
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan, we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support:

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We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

Matthew J. Eichman

420 acres
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

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As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

Roger Kistmiller - Owner

Ralph Kistmiller - Owner

508+ Acres
September 19, 2010

Mr. Charles Blaser, Chairman
Members
Lawrence-Douglas County Planning Commission
City Hall
Lawrence, Kansas 66044

RE: ITEM NO. 4: COMPREHENSIVE PLAN AMENDMENT FOR NORTHEAST SECTOR PLAN.

Dear Chairman Blaser and Planning Commissioners:

We would like to present some comments on the new recommendations for inclusion in the Northeast Sector Plan: a choice between the Options #1 and #2.

The important question addressed here is how to preserve the Class I and II Soils as a goal, but at the same time accommodate some industrial development. After reviewing these options we believe that the consequences of adopting either of these options at this stage would not achieve the desired outcome.

We have attached our analysis of some of the problems involved in attempting to accommodate both the preservation of these irreplaceable soils and at the same time accommodate industrial development.

We suggest that before you incorporate either of these options into the Northeast Sector Plan that you review our discussion and consider this particular issue further.

Thank you for your consideration.

Sincerely yours,

Brooke Goc
President

Alan Black, Chairman
Land Use Committee

ATTACHMENT
PROBLEMS WITH SUGGESTED OPTIONS FOR PRESERVING CLASS I & II SOILS IN INDUSTRIAL AREAS

**Option #1:** The recommendation to incorporate into the *Northeast Sector Plan* suggested by staff for preserving Class I and II Soils in industrially designated areas is to “encourage” Agri-Industrial use in these areas.

**Problem:** With only “encouragement” there is no way to guarantee that Agri-Industrial uses will go into such areas. It seems to us that this would not be an effective method for saving these valuable soils. This is not recommended as a requirement nor is there recommended any incentive to do it. To be effective, there should be both a requirement and an incentive incorporated into the Land Development Code.

**Option #2:** The recommended suggestion here is to require a portion of an industrial development on Class I and/or II Soil to be set aside and permanently preserved for agricultural use. The suggested amount is half of the original tract. If this recommendation of Option #2 is incorporated into the Land Development Code and the Douglas County Zoning Regulations, the Agri-Industrial use would be a permitted use within the Industrial category.

**Problems:**

1. **Implementation:** There should be some mechanism for separating out the undesirable industrial permitted uses from the benign ones. Although there is one permitted use added—Agri-Industrial—there is no distinction in terms of the many choices for permitted uses available under the “Industrial” category in Option #2. Not all of these other industrial uses included here are equal in intensity and in possible negative effects on the set-aside farmland. There is a need to be able to select or condition uses, or to be able to do both.
   (a) One method used recently has been to allow conditioning of conventional zoning to eliminate all permitted uses other than agricultural-business uses. It could be applied to Agri-Industrial permitted uses in the Industrial category.
   (b) Another method would be to require a Planned Development.
   (c) A third method would be to establish all industrial uses in Class I and II soils as Special Uses with the ability to establish strict environmental controls through the Conditional or Special Use Permits.
   (d) A fourth method could be to create a new zoning district for Class I and II soils and then control uses individually under the Section 20-501 Use Regulations.

2. **The size and configuration of the original tracts and their set-aside parcels is critical** in preserving the set-aside land for its agricultural usefulness.
   (a) If half of the land of a single tract is set-aside for preserving Class I and II soils each parcel from the tract should be contiguous so that it is not preserved in separate small pieces. Set-backs and required open spaces between buildings or other normal “open space” requirements would not preserve sufficiently large tracts for usable agricultural land.
   (b) The original acreage of the industrial tract would determine how useful a set-aside parcel would be. For example, the parcels set-aside from small industrial tracts—under one acre—would generally be less agriculturally useful. You need to know what is considered economically and practically feasible to preserve.
3. Protecting the set-aside farmland area from pollution and runoff from the developed industrial parcel would have to be a condition placed on any industrial development adjacent to preserved farmland—an additional development expense and difficult to enforce.

4. An additional problem is that almost the entire Class I and II Soils are also subject to flooding. Added problems and hazards of developing in the floodplain:
   (a) The cost/benefit to the city and county of industrial development in the floodplain is apt to be negative. Why?
      (1) Both the flat North Lawrence area and the floodplain have a very high water table and minimal slope. This causes major engineering problems with sewer ing and added costs of providing and maintaining it. Sewering would likely need lift stations and because of the high water table, sump pumps would likely be necessary. A major public cost.
      (2) Floodplain development requires high capital investment. Needed flood protection or raising building levels, generally with added soil, makes development cost higher than average.
      (3) Raising soil levels adjacent to farmland can change the drainage patterns to the disadvantage of the farmland, marginalizing it and reducing its productivity.
   (b) Hazards are created with floodplain development because of the proximity of the airport. Raising soil levels may create ponds that attract waterfowl and other wildlife if fill dirt comes from the same floodplain area. This effect is due in part to the high water table.

5. Problems of jurisdiction.
   (a) If a development is not annexed and provided public utilities, it will likely be substandard; public benefit will likely be negative.
   (b) If a development is provided utilities and public services but not annexed, costs to the city will not be publicly compensated through taxes, resulting in lack of public benefit to city.
   (c) If development is annexed and provided public services, costs may still exceed public benefits in taxes because of above listed problems.

6. Cost implications: Farming is one of the land uses in the county that costs the county much less than the county regains from it in taxes. When the League made its study on county development, one of our sources was the Farmland Trust. The Trust found that for every dollar returned in taxes from open space and farmland, expenditures to counties averaged about $0.50. On the other hand, for every dollar returned to the county in taxes from rural residential use, the county expenditures for this use were higher, up to $1.50 per household. That was in 1999. The disparity now is likely more.
September 18, 2010

Dear Commissioners Blaser, Harris, Finkeldei, Carter, Burger, Hird, Dominguez, Rasmussen, Singleton, and Liese,

Citizens for Responsible Planning (CRP) remains in support of the 3rd Draft of the Northeast Sector Plan as presented at the Planning Commission meeting on July 21, 2010. This draft document skillfully and fairly represents public input from the beginning of the public document planning sessions that began in the Fall of 2009.

One of our primary concerns remains flooding and stormwater run-off associated with development and urbanization in the Northeast Sector. The "Option #1" alternative being presented clearly states, "The industrial category is expected to urbanize." This statement is in direct conflict with the desires expressed through the public process. It will also increase the probability of catastrophic flooding within the area and the North Lawrence residential community. Urbanization within the Northeast Sector will force implementation of the costly North Lawrence Drainage Study recommendations. CRP would request that should any development proposal come forward it be reviewed through a cost-benefit analysis whenever public dollars are being used for infrastructure extension.

It is impossible to segregate the area's unique challenges to development. As stated on Pg. 3-1 under Recommendations these unique challenges include:

- Costly stormwater infrastructure needs as urbanization occurs
- Significant amounts of regulatory floodplain
- Significant amounts of Class I and II soils
- FAA Regulations and Lawrence Municipal Airport Protection Zones
The current draft states on: Page 3-13  3.3 Implementation, Item 6. "Consider implementing regulations that promote no adverse impact for floodplain management."  CRP supports this statement of an Implementation recommendation. It is recognized that flooding is the number one natural disaster in the United States (FEMA). To identify flood hazards, the risks they pose to people and property, and the regulatory boundaries of floodplains, the Federal Emergency Management Agency (FEMA) develops flood hazard maps, officially known as Flood Insurance Rate Maps (FIRMs).  The Flood Hazard Area map shown on page 2-18 should be updated to reflect the new LiDAR - DFIRM County map dated August 5, 2010.


The map seen in the above link replaces the flood hazard map that dates back to November 7, 2001. Drainage patterns have changed dramatically due to land use, surface erosion, and other natural forces. As a result, the likelihood of riverine flooding in some areas has increased significantly. Moreover, the technology used to estimate risk has been much improved. Up-to-date maps will much more accurately represent the risk of flooding; they are an important tool in the effort to protect lives and properties in Douglas County.  This statement is taken from the National Initiative for Flood Map Modernization.

This August 5, 2010 DFIRM Map indicates areas to be in the 1% chance floodplain or 100 year floodplain that are indicated on the Future Land Use Map Draft Pg. 3-12 for both Industrial and Soil-Conserving Agri-Industry. The new 100 year floodplain designations for these areas should require further detailed study prior to determining future land use possibilities within the Northeast Sector Plan.

Thank you for considering CRP's comments and requests.

As always, with great respect.

Citizens for Responsible Planning Steering Committee
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support.

- This language reflects almost directly the previously approved policies in Chapter 7 of Horizon 2020. All of our long-range plans for our farms and family homes were based on those policies.

- We have worked the land and soils in this area for decades. Understanding the production capabilities, vulnerabilities, climate, erosion, water retention and production limitations has allowed us to maximize yields of tillable acreage for generations. It is how we make our living and is part of our lives.

- With proximity to major highways, rail and air transportation, this area serves the needs of Lawrence and all of northeast Kansas. We should not compromise access to industrial and commercial use in this critical transportation hub by placing severe limits on potential development nearby.

- The relatively undefined concept of soil conserving agri-industry opens the possibility that current agri-industry uses such as livestock feeding operations, turf and sod production, agricultural field stations and test plots could be jeopardized in the future.

- The proposed commercial use of land in no way conflicts with our ability to grow crops for our community or increase production to support local demands.

As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners
Attachment to Grant Township Property Owners Letter

Dusted Management
By Carolyn Phillips
252 acres

Vogelland
By Nancy Vogel
≈ 170 acres

Kenneth R. Halladay M.D.
40 acres

Kenneth D. Reiling
60+ acres

Must
Hillside Farm

Dorothy L. Congemi Trust
By Dorothy Congemi

Grant Land L.C.
By Neil Grant, Mark Grant
145 acres

Irene Vogel Trust
Douglas County Bank Trust
By: John P. Savard

John Vogel Trust
Douglas County Bank Trust
By: John P. Savard

510 acres
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

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We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

[Signatures]

457 acres

[Signatures]
10520 Inverness Ct  
Fishers, IN 46037  
September 13, 2010

Lawrence-Douglas County Metropolitan Planning Commission  
6 East 6th Street  
Lawrence, KS 66044

Dear Planning Commission:

As the owner of 54 acres on the NW corner of the Midland Junction in Grant Township, I support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the upcoming September 20, 2010 Planning Commission Meeting.

I appreciate the opportunity to express my opinion. If you have any questions or would like to discuss this issue further, please contact me at 317-450-6242. Additionally, you may speak with my father, Earl Van Meter, who manages my property. He can be reached at 785-749-5956.

Sincerely,

[Signature]

Karen Van Meter

Cc: Earl Van Meter  
621 Country Club Terrace  
Lawrence, KS 66049
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

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As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

[Signature]

(132 Acres)
BILL & MARY KING
2231 GARFIELD
GREAT BEND, KS 67530

Tel. #620 793 6168
Fax # 620 793 8475
Cell # 620 791 7150
E-mail bking6@cox.net

September 12, 2010

Members of the Lawrence Douglas County Planning Commission:

I am a Grant Township property owner, and I am in favor of the letter dated September 10, 2010, in support of option #1 of the NE Sector plan. I own 170 acres in Grant Township.

Mary E. King

Mary E. King
September 10, 2010

To: Members of the Lawrence Douglas County Planning Commission

As owners of a large percentage of the commercial agriculture acreage represented in the Northeast Sector Plan we strongly support Option #1 as presented in the memorandum from Dan Warner AICP, Long Range Planner, which will be considered at the September 20, 2010 Planning Commission meeting. These are the key reasons for our support.

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3. With proximity to major highways, rail and air transportation, this area serves the needs of Lawrence and all of northeast Kansas. We should not compromise access to industrial and commercial use in this critical transportation hub by placing severe limits on potential development nearby.

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As landowners and citizens directly affected by this decision, we ask that the Lawrence/Douglas County Planning Commission approve option #1 as recommended by its Planning staff.

We will be present for the September 20 meeting and look forward to answering any questions you may have concerning our position on this issue.

Sincerely,

Grant Township Property Owners

Don & Wanda Westhafer

306 acres in Grant Township
Dear Commissioners,

I am forwarding three very recent documents to you that may act as "best practices" guides. I believe at the last meeting on May 24th when the Northeast Sector Plan was discussed there was a statement that there should be communities that are engaged in the same issues we are here in Douglas County. I hope these will assist as we move forward.

Two are from Pennsylvania and one from Washington State.

The first link: http://www.tpl.org/content_documents/OkanoganValley_WhitePaper_LowRez.pdf

_Agricultural Land Preservation and Land Conservation in Okanogan County: Challenges, Opportunities, and Recommendations for Moving Forward, January 2010._

This document addresses the need for "common ground" between divergent interests. From my perspective the process the planning staff undertook and skillfully facilitated for the Northeast Sector Plan fits within the recommendations of this white paper. While there are variances in the players involved in this county in Washington State, the critical natural resource at risk is high quality agricultural land. This document, if for no other value, clearly shows that the discussions and difficulties Douglas County is facing are common to many other communities in our nation.

The second link: http://www.shrewsburytownship.org/Codorus%20Comprehensive%20Plan%20DRAFT.pdf

_Codorus Township Comprehensive Plan Update Draft, March 2010_

This very recent Comprehensive Plan Draft has a strong focus on agricultural soils preservation, tools to achieve agricultural preservation, and valuation systems for implementation. On page 11, a lengthy discussion of soils begins and the various land use capabilities appropriate to various soil types. Page 38 begins a discussion of this county's preservation work.

The third link: http://www.ycpc.org/County_Long_Range_Pages/comp_plan.html

After opening this link, scroll down the page to the list of documents. Click on the first document: _York County Agricultural Land Protection Plan_

This planning document looks at agricultural land protection tools. One of the most important being good long-range comprehensive planning. There are other zoning and incentive tools referenced in this planning document. Soils play a very significant role in land use planning in this document and other township plans I've looked at from the York County Planning Department.

Thank you all for taking the time to review these documents. I know you are called upon by many groups to read volumes of text. Your time and dedication to our community is greatly appreciated.

Best,
Barbara Clark
Maggie's Farm
www.maggiesfarm-ks.com
July 21, 2010

Dear Commissioners Blaser, Harris, Finkeldei, Carter, Burger, Hird, Dominguez, Rasmussen, Singleton, and Liese,

Citizens for Responsible Planning (CRP) would like to express their gratitude for the diligence shown by the Planning Department Staff in their skillful and inclusive facilitation of the Northeast Sector Plan Draft development. From the initial "kick-off" meeting in the Fall of 2009 public attendance and public input has been carefully recorded and used to direct language currently represented in the 3rd draft of this document.

It is also our expressed opinion that the Q and A paper has been invaluable in clarifying and giving further elaboration on questions and concerns that were voiced at the May 24th Planning Commission meeting.

CRP recommends the following new language additions (identified in black bold type) to the 3rd draft.

Pg. 3-1 - Due to the area's unique challenges to development, including:

CRP's two overarching concerns for the Northeast Sector Plan have consistently been stormwater mitigation and the preservation of the largest contiguous tract of Capability Class 1 and 2 soils in Douglas County.
The plan recognizes the interconnectedness of these unique elements and proposes only limited development in the planning area.

The addition of “the interconnectedness of” gives recognition of how these deep, fertile soils are the best mitigation source for recurring stormwater issues facing this area. These soil's natural absorptive sponge capabilities offer both from a cost basis and highest and best land use perspective the greatest mitigation option available. These two concerns are best addressed in tandem.

Lawrence Urban Growth Area (UGA)
1. Consider adjusting Lawrence's Urban Growth Area boundary by limiting it to those areas of Grant Township feasible for the urban-type development through the analysis of the Sector Plan and the analysis of future water and wastewater master plans.

CRP supports the Plan Growth Area as defined by the Future Land Use map presented on pg. 3-14 of this draft.

In addition, we would like to use a transcribed reference from the May 24th Planning Commission meeting to further support CRP's thoughts on the limiting of the UGA.

"Commissioners, I guess there's one thing I'd like to leave you with while we go to work on these comments is --we've put this in the context of what are the planning efforts city/county wide. The reason we start with our cartoon of annexation is that there's a reason that this area hasn't developed substantially over the decades and those reasons have to do with the costs of development and public infrastructure and the storm drainage and those sorts of things. I think as planners we need to start thinking, or continue to think, about where are we going to put our limited resources in relation to development costs. We have / you all have planned a substantial amount of industrial employment center activity along with other areas of high density residential and commercial nodes and the like - Farmland Industries is one area, Farmers' Turnpike is another area, 6th Street and SLT is an area. There's room for all those things and areas of low
growth / low development and so as we talk more about the utilities master plan and come back with this plan for your review and consideration I think we need to think of it in terms of the county as a region and not just - It's easy to get into Grant Township and say, 'why aren't we pro-development here?' Why are we restrictive?' ...and those kind of things. We're trying to let the history and the land talk to us on this one and say, "there are reasons for this today; what do we reasonably anticipate?' We talk about expectations for the residents...is it fair to put out a plan for pro-growth if we're not as a city going to put any infrastructure in that area. We've got to talk about those things and come to some reasonable conclusions I think. We'll get to work on your comments and come back with those things in mind as well."

Scott McCullough, Lawrence/Metropolitan Planning Director - May 24, 2010

CRP agrees with Scott McCullough that good long-range, comprehensive land-use planning should consider the most effective allocation of limited public resources for the costly infrastructure necessary for industrial employment centers and high density residential areas. Our community already has identified these public investments for other areas. There are historically validated reasons why Grant Township has experienced limited development in significant part due to flooding and storm water drainage. Sustaining agricultural land uses within Grant Township complements best economic land use with storm water mitigation. We hope that you concur in your thoughts and actions.

CRP has consistently pressed for incentive mechanisms to aid in farmland preservation. Some "Best Practices" documents have been sent to you under separate cover. At this time we would like to suggest some other references that may aid in finding appropriate tools for Douglas County to incorporate into their practices. The first would be a link to the American Farmland Trust toolbox. This link is: http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

This fact sheet will give you a brief description of many of the planning and incentive tools available for farmland protection.
A second link is to the American Planning Association's Policy Guide on Agricultural Land Preservation. This link is:
http://www.planning.org/policy/guides/adopted/agricultural.htm

This is a frequently cited reference and in CRP's opinion reflects many of the planning guides set forth in the Northeast Sector Plan Draft.

As always, CRP is aware of the many factors that come to bear on your decisions. Our continued efforts have been to present reasonable, authoritative data to assist in your deliberations.

With great respect and appreciation for your tireless efforts on behalf of our community,

Citizens for Responsible Planning Steering Committee

Barbara Clark
Jerry Jost
Lane Williams
Ellen Paulsen
Lori McMinn
Chet and Deanna Fitch

cc: Dan Warner, Scott McCullough, Sheila Stogsdill
July 22, 2010

Re: Draft Northeast Sector Plan

Dear Planning Commissioners:

Although we will be out-of-town for the next meeting on the Northeast Sector Plan, my wife and I wish to encourage your continued work on this and, in particular, your attention to storm drainage challenges and soils. As most of you know, we have a tree farm in the area and have made comments in the past.

In the past few days we have driven North 3rd street and watched as at least 6 feet of clay fill has been trucked in and compacted for the pad and parking lot of the new Dollar Store. It is an impressive, but typical, fill for North Lawrence. We have remarked how each development in the flood plain incrementally degrades the drainage for their neighbors who had previously built at the natural grade.

In the ten years since the last FEMA floodplain map was adopted, degradation of the Maple Grove drainage has now resulted in a new FEMA map with a greatly increased 100-year floodplain area. The new regulatory floodplain covers much more of our neighbors’ lands and, for the first time, includes part of our orchard. The map reflects the cumulative effect of development over the past decade. Ironically, floodplain regulations encourage or require building on fill, which is invariably less permeable than the natural soil. New development is built on ever higher fill. Whoever is lower, whoever built before, is burdened with the runoff.

In North Lawrence the better agricultural soils are sponges of storm water. The higher Capability 1 soils are better sponges than the lower Capability 2 soils; loss of Capability 1 soils to development will impact area drainage more severely, although it is the lower soils that will flood more quickly.

We are encouraged by the fact that the Northeast Sector Plan articulates that drainage and agricultural soils are important planning considerations for the City of Lawrence. For us, as interested farmer landowners, drainage and prime soil preservation are paramount considerations for this particular area. We encourage your continued efforts to incorporate a reasonable reference respecting the best agricultural soils into the Northeast Sector Plan.

We appreciate your thoughtful efforts throughout this process.

Charles NovoGradic
Deborah Milks

*Chestnut Charlie’s*
*Organic Tree Crops*
P.O. Box 1166
Lawrence, KS 66044
www.chestnutcharlie.com
nuts2sell@aol.com
Dan Warner

From: Scott McCullough
Sent: Wednesday, July 14, 2010 4:17 PM
To: 'Rasmussen, Stanley L NWK'
Cc: Dan Warner; Denny Ewert
Subject: RE: Northeast Sector Plan

Dan – for PC packet and file.

Scott McCullough, Director - smccullough@ci.lawrence.ks.us
Planning and Development Services | www.lawrenceks.org
City Hall, 6 E. 6th Street
P.O. Box 708, Lawrence, KS 66044-0708
office (785) 832-3154 | fax (785) 832-3160

From: Rasmussen, Stanley L NWK [mailto:Stanley.L.Rasmussen@usace.army.mil]
Sent: Wednesday, July 14, 2010 4:12 PM
To: Scott McCullough
Subject: Northeast Sector Plan

Scott,

After reviewing the 12 July 2010 draft of the Northeast Sector Plan, I am particularly concerned with the Soil Conserving Agri-Industry boundary designated on the Future Land Use Map 3-1 (see page 3-14). Specifically, the proposed boundary appears to be better suited for industrial development than to soil-preservation activities.

This area is bounded on the north and the east by the airport (as well as on the north by U.S. Highway 24/40), to the south by Interstate-70, and is essentially bounded on the west by US Highway 40/59.

In my opinion, an area such as this, with immediate access to multiple highways, the interstate, the airport, as well as close proximity to rail access, and an area which is essentially devoid of residential property, is naturally suited to industrial development as opposed to soil preservation. By looking at the soil classification map 2-13 (on page 2-24), better areas for soil conserving agri-industry can be readily identified. For example, while the draft designated area contains a mix of soil types, there are areas south of I-70 and north of the Kansas River that contain large swaths of Class I soil types, that are adjacent to existing industrial land, and that appear to be much better suited to soil conserving agri-industry activities.

I suggest that the Soil Conserving Agri-Industry classification be eliminated from the Future Land Use Map 3-1 (on page 3-14) and that this area be designated as Industrial. Second, I suggest that the last sentence in Section 3.2.1.4 be deleted (this is the sentence which reads: This use is identified south of highway 24/40...when a nodal plan is developed for that area). Alternatively, it may be appropriate to discuss the merits of designating the general area in the southeast portion of this Sector Plan as an area where soil-conserving agri-industry may be encouraged.

Please share my comments with my fellow Planning Commissioners, Planning Department staff, and other interested parties.

Stanley L. Rasmussen, Planning Commissioner
Dear Dan,

I wanted to take a moment to thank you for your lucid and strong articulation of the reasoning behind the Northeast Sector Plan at Monday's meeting.

Though I certainly realize the county can't please everyone with its documents, I want to express my concerns about the following:

* Potential flooding of the area and the expense and logistical nightmare created by implementation of the North Lawrence Drainage study recommendations that would be needed to accommodate large-scale develop in the area.

* Potential damage to irreplaceable Class 1 and 2 soils that have developed over millennia and represent one of Douglas County's most valuable cultural, environmental, and commercial assets.

I also appreciate the document's recognition that the development of aviation-related industry sited at the airport itself is an entirely appropriate development use for the area given the above two concerns.

Thanks for all your good work!

Best,

Kelly Barth
Dear Commissioners Moore, Finkeldei, Harris, Blaser, Rasmussen, Hird, Chaney, Singleton, Carter, and Dominguez,

I'm forwarding information you requested at the Planning Commission meeting on Monday evening.

My intention has always been to submit objective, current data from authoritative sources concerning the soils in Douglas County. The majority of what I am forwarding to you in this document came from Cleveland Watts, State Agronomist with the USDA/NRCS out of the Salina offices. Mr. Watts has always been extremely helpful and generous with his time in assisting me with the generation of maps designating location and acreage of Capability Class 1 and 2 Soils in Douglas County. I am forwarding the actual communication received from Mr. Watts for your review.

On Tuesday of this week I called Mr. Watts to once again ask for his assistance in generating a map that will show Capability Class 1 and 2 Soils within the State of Kansas. I believe this was a question Commissioner Rasmussen posed. Mr. Watts told me he would have this data for me within 30 days. They are currently short staffed because of vacation schedules. So, my hope is that this time frame will be agreeable. I will forward this new information at the earliest possible date.

Under separate email I will forward the maps that show Capability Class 1 and 2 Soils within the county that are urbanized. This map and the corresponding acreage updates were created for me by DeAnn Presley, Associate Professor Environmental Soil Science/Soil and Water Management at Kansas State University - Agronomy Department. Professor Presley utilized a combination of GIS layers with Web Soil Survey data to create these maps and data tables.

Thank you for reviewing these documents. I would be glad to answer any questions, or secure answers from Mr. Watts or Professor Presley for any clarification you may want.

Respectfully,
Barbara Clark
Citizens for Responsible Planning

Maggie's Farm
www.maggiesfarm-ks.com
Mrs Clark

Larry Sabata submitted to me the request that you had made to him in regards to developing land capability interpretation map for Douglas county for class 1 and 2 land.

Attached is 6 maps related to this request. I developed maps for capability class 1 and 2 and also, with capability classes 1 and 2 combined. Each class is in a .jpeg and .pdf format.

If this information is not what you need, please feel free to give me a call at 785-823-4558.
Land Capability Class 1 and 2 in Douglas County, Kansas
Land Capability Class 1 and 2 in Douglas County, Kansas
Land Capability Class 1 in Douglas County, Kansas
Land Capability Class 1 in Douglas County, Kansas
Land Capability Class 2 in Douglas County, Kansas
Dear Commissioners,

Attached are the documents created by DeAnn Presley, KSU Agronomy Department. These files show the urbanized percentages and acres of Capability Class 1 and 2 Soils in Douglas County. I also believe these documents are included in early public comments associated with the Northeast Sector Plan. I might add this data is based on a 2005 dataset. So, any urbanization of Capability Class 1 and 2 Soils after that date would not be reflected in these percentages or acres calculations.

As always, I will be happy to answer any questions you may have or obtain further information for you.

With many thanks.
Barbara Clark

I have included contact information for DeAnn Presley

---

**DeAnn Presley**

Extension Specialist/Assistant Professor

Environmental Soil Science/Soil and Water Management

Kansas State University

Agronomy Department

2014 Throckmorton Hall

Manhattan, KS 66506

785-532-1218 (office)

785-313-4193 (cell)

dean@ksu.edu
Class 1 and 2 Soils, plus all Urban land types

- Class 1 Soils
- Class 2 Soils
- All urban land types
- County boundaries

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</tbody>
</table>
Dan and Scott,

I'm forwarding two links to planning documents from communities that are currently addressing some of the same issues we are with the Northeast Sector Plan.

The first link: http://www.tpl.org/content_documents/OkanoganValley_WhitePaper_LowRez.pdf

_Agricultural Land Reservation and Land Conservation in Okanogan County: Challenges, Opportunities, and Recommendations for Moving Forward, January 2010._

This document addresses the need for "common ground" between divergent interests. I think much of what you did through the use of inclusive, public process to begin the formation of concepts and language in the draft of the Northeast Sector Plan fits within the recommendations of this white paper. While there are variances in the players involved in this county in Washington State, the critical natural resource at risk is high quality agricultural land. This document, if for no other value, clearly shows that the discussions and difficulties Douglas County is facing are common to many other communities in our nation.

The second link: http://www.ycpc.org/County_Long_Range_Pages/comp_plan.html

After opening this link, scroll down the page to the list of documents. Click on the first document: _York County Agricultural Land Protection Plan_

This planning document looks at agricultural land protection tools. One of the most important being good long-range comprehensive planning. This is exactly what I heard you speak to at the last meeting of the Planning Commission. There are other zoning and incentive tools referenced in this planning document. Soils play a very significant role in land use planning in this document and other township plans I've looked at from the York County Planning Department.

Thank you both for reviewing these two documents. I know you are constantly called upon to read volumes of data. I would appreciate hearing your thoughts on what might be applicable for Douglas County from these two texts.

Best,

Barbara Clark
-Hello, I am Jim Congrove. Thank you for giving me some time to explain our position on proposed restrictions on use of Class I and II soils in the Northeast Sector plan. My wife and I own three tracts of land within the boundaries of the plan. One tract is located just Southeast of Midland within the plan growth area and is predominately Class II soils, another tract is located southwest of Midland, and is predominately Class I soils and then a tract where we live is just off Highway 24 on the Leavenworth-Douglas County on the hills overlooking the river valley.

In reviewing the draft Northeast Sector plan, a great deal of emphasis is placed on prohibiting or discouraging any industrial development on Class I and II soils. Please refer to map 3-13. The purple shaded area is designated as Soil conserving – Agri-Industry. Based on the definition of this designation on pages 3-10 and 3-11 I believe the result will be no business or industry. Much of this discussion is based on a concern that the potential for local food production could be greatly impaired if any Class I or II soils were allowed to be developed. While we strongly support the efforts to promote more local food that can be marketed at Farmer’s Markets, grocery stores, restaurants or any other outlet, I am going to argue that there is sufficient land for local food production and also allow landowner’s freedom to exercise their property rights if opportunities arise. If this plan is approved as drafted, we believe that our property rights and land values could be impaired.

Class I and II soils have similar physical properties. They both have potential for high productivity of crops and have less than 1% slope. The main difference in these two soil classes is that Class I has better permeability. Reference is made to map 2-22. The class 1 & 2 soils are cross-hatched. Please note there are some areas not cross-hatched. One area just north of the Kansas River along the eastern side of the plan and another area northwest of teepee junction along the river levee are class 3 because they are too sandy to be considered Class 1 or 2.

While studying at K-State I took several soils courses while obtaining my Bachelor’s and Master’s degrees in Agronomy. However, most of my remarks will be based on my experience growing various crops on these soils.

I believe too much emphasis has been placed on the Class I and II soils in the sector plan as being the only major soil resource for the production of local foods. First of all, we should be thinking more about regional food policies. For example there are more than 50,000 acres of Class I soils in the Kansas River valley between Manhattan and Kansas City. Back in the 30’s and 40’s about 6,000 acres of potatoes were grown in the Kansas River Valley and were marketed under a regional brand of Kaw Valley potatoes. Because of weather, storage and marketing problems, acreage gradually decreased and potatoes ceased to be a commercial enterprise in the valley after the 51 flood. We moved to this area in 1973 and had an opportunity to farm in partnership with the Pine family for 18 years. In 1974 we ventured into the potato business by growing about 40 acres. Over the 18 years the acreage had increased to around 300 acres which were marketed to chip companies in Topeka and Kansas City. Our market window was only about 3 weeks in July. As I recall we didn’t look at soils maps to see what class of soils we would plant potatoes on. Today as I look at the map to see where the class I and II soils are located, I realize we planted at least half of the acreage on class III sandy soils located in Grant Township and Kansas River Valley land near Linwood in Leavenworth County. During wet years these class III
sandy fields could be harvested when fields of Class I were too wet. Being able to harvest during wet
periods was essential to keep the factories supplied. I hope this points out there are other acres in the
area that need to be included for potential to produce locally grown food. In fact many of the fruit and
vegetable crops that can be grown for a local food program are better adapted to the sandier soils that
are not included in Class I and II.

As mentioned earlier our home is located on the hills overlooking the river valley. The hillsides are
designated class IV based on a majority of the soils having a slope of more than 4-6%. In addition the
soil is sandy. Even on these soils we have areas that are excellent for growing any of the vegetable and
fruit crops adapted to this climate. We are growing over 30 fruit and vegetable crops this year. When
we purchased this farm in 1984, we learned from some oldtimers in the area that previous owners of
the land had produced cantalope and watermelons commercially on this Class IV land. This is another
example of land that should be included as potential for local food production. In fact I believe most of
the current producers who participate in the local Farmers Market grow their crops on land outside the
Kansas River Valley.

Another example of productive soils are the Class III and IV soils in Doniphan County, Kansas which is
about 60 miles north. Here again, I believe that should be considered regional. These are soils that have
that classification because of slopes greater than 2%. Other than the slope they have similar
characteristics as Class I soils. According to information published by Kansas Agricultural Statistics the
average corn yield in Doniphan County for the last five years on 82,000 acres was 164 bushels per acre
while soybeans averaged 51 bushels per acre on 66,000 acres. The yield information from Kansas Ag
Statistics is published on a county basis and therefore I was not able to obtain yields specifically for Class
I and II soils in the Kansas River valley. Based on my work in the area as a crop insurance adjuster and
from knowledge as a landowner, the yields from 148,000 acres* - of these Class III and IV soils in
Doniphan County compare very favorably with the Class I and II soils in the Kansas River Valley. I just
want to emphasize there is much potential for all types of food production from soils in the region in
addition to Class I and II.

I contend the limiting factor for vegetable and fruit production is climatic conditions not soil resources.
Some climatic conditions which are limiting factors when compared to other areas include late spring
freezes, early fall frosts, hot dry winds in summer and the possibility of excessive precipitation. Using
my garden as an example, we have only harvested a few crops such as lettuce, spinach, asparagus and
radishes so far this year.

Another example of potential food production is from areas not suitable for cultivation such as the area
on our property where I have a forest improvement project on land classified as Class V. It is Class V as
it subject to periodic flooding along a stream. Over the past seven years I have removed undesirable
trees and planted over 800 walnut trees. This is an example of potential local food production on soils
that cannot be cultivated or developed. There are many acres along streams in Douglas County that
could be utilized in this manner.
Hello, 
I am an owner of 936 N. 3rd Street. I am deeply concerned with regard to the suggested plan to convert this property into “open space.” I strongly fear if such a plan is adopted, this would likely decrease the value of the land, because any buyer would know that to obtain a building permit on the land, they would have to get approval for something contrary to the plan.

Thank you,
Cynthia Puckett-Davis
Dear Mr. Warner,

I'm deeply concerned about the future of Douglas County's Northeast Sector. I know you're already well aware of the rich soils present there, so vital for current and future agricultural economy. I know you're aware of the flooding issues, and associated difficulties installing sewer and water infrastructure, as well as the importance of the Lawrence Municipal Airport and the need for open spaces surrounding it.

Please set your sights on long-term planning that values the future of sustainable food production for this county and region. Every day you see agriculture moving toward smaller, healthier, and more profitable production and I believe this land in Douglas County could be the center of such industry. This town is ripe for green industry job development, and we truly don't need more of the same kinds of big box business parks that render the priceless soils useless and benefit a very small segment of society.

Thanks so much for your consideration.

Lisa Grossman,
Lawrence, KS
Dear Mr. Warner,

I am writing today as a member of Citizens for Responsible Planning regarding the Northeast sector plan. I am highly concerned about the preservation of this space for agricultural needs. It is clearly highly valuable agricultural land, and should be put to it's best use for our local food economy.

Please support development of the aviation related industry at the Lawrence Municipal Airport PROPER and not over the incredibly valuable resource of Class 1 and 2 soils.

Thank you,

Samantha Snyder,
Lawrence
The Northeast Sector Plan Draft

I feel the concerns put forth by the Citizens for Responsible Planning are quite valid and deserving of much consideration. It's becoming ever more apparent the loss of prime farm land near a municipality is a loss to that municipality. The owners of such land shouldn't be faced with the paving over of the land in which they've worked in order to provide for their retirement. Personally, I would support tax wise the city buying the land and leasing it out for food production, or other means that would preserve this resource.

Steve Stemmerman
315 Maiden Lane
Lawrence, Kansas
66044
The Northeast Sector Plan Draft

I feel the concerns put forth by the Citizens for Responsible Planning are quite valid and deserving of much consideration. It's becoming ever more apparent that the loss of prime farm land near a municipality is a loss to that municipality. The owners of such land shouldn't be faced with the paving over of the land in which they've worked in order to provide for their retirement. Personally, I would support tax wise the city buying the land and leasing it out for food production, or other means that would preserve this resource.

Steve Stemmerman
315 Maiden Lane
Lawrence, Kansas
66044

The primary concerns put forward by CRP for the past three years since our initial opposition to the Airport Industrial Park are:

* Concerns associated with flooding if development takes place without costly implementation of the North Lawrence Drainage Study recommendations.

* Preservation of Capability Class 1 and 2 Soils for current and future agricultural needs of our community.

* Recognition that development of aviation related industry should be focused at the Lawrence Municipal Airport proper. This should be the primary industry/economic development focus for the Northeast Sector.
Dear Mr. Warner,
I appreciate the process of involving the Grant Township neighborhood and am supportive of the Northeast Sector Plan currently under consideration by the Planning Commission.

In 2009, I wrote two successful grants to establish the Okanis Garden at the Prairie Moon Waldorf School. Located squarely in Capability Class I soils, this market garden--a part of the local food system for Lawrence and the surrounding areas--selling produce to area grocery stores, restaurants, and through an Okanis Garden Community Supported Agriculture (CSA). The garden's productivity, due to the high quality soils, is tremendous. The grant created an agriculture job in the form of a garden manager. Future plans call for more gardening and gardening/education jobs.

Thank you for your part in helping Lawrence and Douglas County plan for best and land-use, taking into consideration the excellent Class 1 and 2 soils, and guiding towards preserving and expanding agricultural use in this part of the Kansas River Valley.

Prairie Moon enthusiastically welcomes its new neighbor to the north on 1600 Road: the University of Kansas Native Medicinal Plant Research Program--a perfect example of appropriate activity in the area.
Laurie Ward
38 Winona Ave.
Lawrence, KS 66046
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
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</tr>
</tbody>
</table>

Note: All costs are concept level estimates only. Actual costs may vary significantly.
* Required capacity at ultimate build-out
B. Internal System

Analyses for the Internal Drainage System provided areas of concern throughout the City operated drainage network. The excess peak flow was used to represent the degree to which a conduit is undersized for the ultimate build-out condition. Each investigated lateral flowing into the main stem of a system and each main stem conduit were ranked by excess peak flow. This led to the following priority listing of recommended improvements.

<table>
<thead>
<tr>
<th>Link Name</th>
<th>Excess Peak Flow (cfs)</th>
<th>Total Estimated Cost of Improvements (dollars)</th>
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<tr>
<td>S1-1</td>
<td>315</td>
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<td>S1L1-1</td>
<td>96</td>
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<td>S6L3-7D</td>
<td>New pipes</td>
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<tr>
<td>S6L2-1</td>
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<tr>
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<tr>
<td>S10-1</td>
<td>6</td>
<td>$106,000</td>
</tr>
<tr>
<td>S1L4-1</td>
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<td>$7,000</td>
</tr>
<tr>
<td>S1L6-1</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>$16,206,000</strong></td>
</tr>
</tbody>
</table>
The flows calculated in the analysis of the internal system assume that the cutoff north of 24/40 Highway, as recommended by the Watershed Analysis, is in place. However, the costs in the table for the Internal System Analysis are independent of the costs for the Watershed Analysis improvement recommendations. By adding the total costs from each of the two summary tables, the estimated cost of all recommendations is approximately $41 million.

As with the overall watershed, a viable option within the internal system is land purchase. In areas that naturally drain to a low point, it is often advantageous to preserve the ponding area by purchasing the parcel of land. Those costs are included in several of the system costs in the table.

III. Background

A. Watershed Description

The North Lawrence watershed is estimated to be 9,100 acres generally bordered by the Kansas River levee on the south and the Mud Creek levee on the east. Most of the drainage contributes to the Maple Grove system, which either conveys water south to the City or east eventually to Mud Creek. A few areas near the levee, to the northwest and southeast, drain directly to the Kansas River, while a thin strip of land along part of the northeastern portion of the watershed flows directly to Mud Creek. Refer to the North Lawrence Drainage Study map in Section I of the main report for an overview of the project area.

The Kansas River floodplain completely encompasses North Lawrence. The natural silt loam soils are highly permeable. However, increased development is replacing those soils with nearly impermeable clay material in certain areas. In addition, extremely mild slopes across the landform cause frequent ponding and roadway overtopping. Historically, North Lawrence has been an agricultural community with low density residential development. Pockets of commercial and industrial development now appear in areas of the watershed. While parts of North Lawrence will likely remain agricultural, the projected future land use in other areas will add more and more impervious surfaces.

B. Purpose

The Lawrence-Douglas County Planning Commission proposed this study to address repeated flooding concerns from residents of the North Lawrence area. Flooding problems occur in a number of areas within the North Lawrence watershed. The major causes are as follows:

- Development that has significantly increased runoff from design storm events
- Undersized drainage system components such as culverts, drainage channels, underground pipe systems and inlets
- Siltation within the storm drainage system
- Past development of flood-prone areas
- A shallow, flat and interrupted watershed drainage network

Public comments relating to current drainage issues, proposed developments, long-range plans, and floodplain regulations are at the root of this study. The purpose of this study is
to identify areas with flooding problems, analyze the major elements of the storm drainage system with respect to long-term land use, and recommend needed improvements to correct or prevent systems from flooding. By doing this, proposed developments and long-range plans will be influenced. At the same time, regulations can be conceptualized to avoid potential pitfalls.

C. Scope of Project

The North Lawrence Drainage Study has several major components which work toward the generation of system requirements for stormwater conveyance and infrastructure in the ultimate buildout scenario. The following major tasks were included in the study:

- Integration of the public involvement program that gathered and used information from residents, business owners and property owners when considering alternatives or upgrades within the watershed
- Estimation of the ultimate land use for the watershed
- Survey and general inspection of the drainage system
- Development of a digital database that shows the existing components of the City’s drainage system
- Evaluation of the internal drainage system for the ultimate buildout scenario and recommendation of improvements
- Evaluation of the watershed drainage system for the ultimate buildout scenario and recommendation of improvements
- Completion of an analysis of Kansas River flooding resulting from levee overtopping

Along with the recommended improvements, the magnitude of the costs required to implement them were assessed. It should be noted though, that detailed design of the projects recommended in this report is required to produce proper construction documents and accurate cost estimates for system components.

The main body of the project report is divided up into seven sections. Summaries of the various sections are detailed below. For a detailed description of the methods or results of each section, refer to the main report.

IV. Public Involvement

The North Lawrence Drainage Study public involvement program was designed to establish meaningful and useful dialogue between stakeholders, businesses, residents in the area and the study team. A series of outreach efforts were conducted to catalogue and assess the public’s concerns. Members of the project team provided an overview of study activities and public input to the Lawrence Planning Commission.

V. Ultimate Land Use for Watershed

To accomplish the goals of the North Lawrence Drainage Study, the ultimate land use condition had to be determined for the study area. The future land uses within the watershed will help determine where to focus the stormwater system improvements and provide better insight into heading off potential development problems. The project team
conferred with the Public Works Department, the Planning Office, and the Utilities Department of Lawrence. Information was gathered with regard to current zoning, potential developments and long-range plans and was used to produce an ultimate watershed land use guide.

While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

VIII. Watershed Analysis

There were three main goals for this portion of the study: to reduce the demand on the 2nd Street Pump Station, to expel floodwater from the basin during times of high water on the Kansas River, and to investigate the effects of development in the floodplain. It is recommended that the drainage from the area north of 24/40 Highway be cut off and the water pumped over the levee. The recommendation for reducing the burden on the 2nd Street Pump Station appraises the 10-year event in conjunction with the design criteria of the internal drainage system, however the 100-year event is investigated as well.

The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

IX. Kansas River Floodplain Analysis

The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breech condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

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<td>$75/sq-ft</td>
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<td>$290/ft</td>
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<tr>
<td>Trib. B, E. 1700 Rd., 140' Bridge</td>
<td>7000 sq-ft</td>
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<tr>
<td>Trib. B, E. 1700 Rd., Roadway</td>
<td>4250 ft</td>
<td>$290/ft</td>
<td>$703,000</td>
</tr>
<tr>
<td>Trib. B, E. 1650 Rd., 100' Bridge</td>
<td>5000 sq-ft</td>
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</tr>
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<td>Trib. B, E. 1650 Rd., Roadway</td>
<td>1130 ft</td>
<td>$290/ft</td>
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</tr>
</tbody>
</table>

**Total**                                                                 |          |            | $24,802,000   |

Note: All costs are concept level estimates only. Actual costs may vary significantly.

* Required capacity at ultimate build-out
B. Internal System

Analyses for the Internal Drainage System provided areas of concern throughout the City operated drainage network. The excess peak flow was used to represent the degree to which a conduit is undersized for the ultimate build-out condition. Each investigated lateral flowing into the main stem of a system and each main stem conduit were ranked by excess peak flow. This led to the following priority listing of recommended improvements.

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As with the overall watershed, a viable option within the internal system is land purchase. In areas that naturally drain to a low point, it is often advantageous to preserve the ponding area by purchasing the parcel of land. Those costs are included in several of the system costs in the table.

III. Background

A. Watershed Description

The North Lawrence watershed is estimated to be 9,100 acres generally bordered by the Kansas River levee on the south and the Mud Creek levee on the east. Most of the drainage contributes to the Maple Grove system, which either conveys water south to the City or east eventually to Mud Creek. A few areas near the levee, to the northwest and southeast, drain directly to the Kansas River, while a thin strip of land along part of the northeastern portion of the watershed flows directly to Mud Creek. Refer to the North Lawrence Drainage Study map in Section I of the main report for an overview of the project area.

The Kansas River floodplain completely encompasses North Lawrence. The natural silt loam soils are highly permeable. However, increased development is replacing those soils with nearly impermeable clay material in certain areas. In addition, extremely mild slopes across the landform cause frequent ponding and roadway overtopping. Historically, North Lawrence has been an agricultural community with low density residential development. Pockets of commercial and industrial development now appear in areas of the watershed. While parts of North Lawrence will likely remain agricultural, the projected future land use in other areas will add more and more impervious surfaces.

B. Purpose

The Lawrence-Douglas County Planning Commission proposed this study to address repeated flooding concerns from residents of the North Lawrence area. Flooding problems occur in a number of areas within the North Lawrence watershed. The major causes are as follows:

- Development that has significantly increased runoff from design storm events
- Undersized drainage system components such as culverts, drainage channels, underground pipe systems and inlets
- Siltation within the storm drainage system
- Past development of flood-prone areas
- A shallow, flat and interrupted watershed drainage network

Public comments relating to current drainage issues, proposed developments, long-range plans, and floodplain regulations are at the root of this study. The purpose of this study is
to identify areas with flooding problems, analyze the major elements of the storm drainage system with respect to long-term land use, and recommend needed improvements to correct or prevent systems from flooding. By doing this, proposed developments and long-range plans will be influenced. At the same time, regulations can be conceptualized to avoid potential pitfalls.

C. Scope of Project

The North Lawrence Drainage Study has several major components which work toward the generation of system requirements for stormwater conveyance and infrastructure in the ultimate buildout scenario. The following major tasks were included in the study:

- Integration of the public involvement program that gathered and used information from residents, business owners and property owners when considering alternatives or upgrades within the watershed
- Estimation of the ultimate land use for the watershed
- Survey and general inspection of the drainage system
- Development of a digital database that shows the existing components of the City’s drainage system
- Evaluation of the internal drainage system for the ultimate buildout scenario and recommendation of improvements
- Evaluation of the watershed drainage system for the ultimate buildout scenario and recommendation of improvements
- Completion of an analysis of Kansas River flooding resulting from levee overtopping

Along with the recommended improvements, the magnitude of the costs required to implement them were assessed. It should be noted though, that detailed design of the projects recommended in this report is required to produce proper construction documents and accurate cost estimates for system components.

The main body of the project report is divided up into seven sections. Summaries of the various sections are detailed below. For a detailed description of the methods or results of each section, refer to the main report.

IV. Public Involvement

The North Lawrence Drainage Study public involvement program was designed to establish meaningful and useful dialogue between stakeholders, businesses, residents in the area and the study team. A series of outreach efforts were conducted to catalogue and assess the public’s concerns. Members of the project team provided an overview of study activities and public input to the Lawrence Planning Commission.

V. Ultimate Land Use for Watershed

To accomplish the goals of the North Lawrence Drainage Study, the ultimate land use condition had to be determined for the study area. The future land uses within the watershed will help determine where to focus the stormwater system improvements and provide better insight into heading off potential development problems. The project team
conferred with the Public Works Department, the Planning Office, and the Utilities Department of Lawrence. Information was gathered with regard to current zoning, potential developments and long-range plans and was used to produce an ultimate watershed land use guide.

While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

VIII. Watershed Analysis

There were three main goals for this portion of the study: to reduce the demand on the 2nd Street Pump Station, to expel floodwater from the basin during times of high water on the Kansas River, and to investigate the effects of development in the floodplain. It is recommended that the drainage from the area north of 24/40 Highway be cut off and the water pumped over the levee. The recommendation for reducing the burden on the 2nd Street Pump Station appraises the 10-year event in conjunction with the design criteria of the internal drainage system, however the 100-year event is investigated as well.

The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

IX. Kansas River Floodplain Analysis

The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breech condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
- Future development in the watershed should maintain the current conveyance levels in the 100-year floodplain – development should not reduce the capacity for floodplain storage
- The City should purchase parcels of land as necessary for use as dedicated ponding areas
- Major roads and hydraulic structures should be improved to meet the current APWA criteria with regard to overtopping during the 100-year event, in order to provide adequate emergency services to the area

A cost summary with regard to these Watershed Analysis recommendations is shown in the table on the next page.
## Watershed Recommendations Cost Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise road west of 24/40 intersection</td>
<td>370 ft</td>
<td>$290/ft</td>
<td>$110,000</td>
</tr>
<tr>
<td>Remove 2 existing 24/40 culverts</td>
<td>Lump Sum</td>
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<td>$75,000</td>
</tr>
<tr>
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<td>KDOT Entrance Culvert</td>
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</tr>
<tr>
<td>New 24/40 Culvert</td>
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<td>$8/ft/sq-ft</td>
<td>$228,000</td>
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<tr>
<td>Remove Maple Grove East culvert</td>
<td>Lump Sum</td>
<td></td>
<td>$22,000</td>
</tr>
<tr>
<td>Property containing ponding easement</td>
<td>Full Parcels</td>
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</tr>
<tr>
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<td>361,000 gpm *</td>
<td>$30/gpm</td>
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<tr>
<td>Main Channel, E. 1675 Rd., 155' Bridge</td>
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<td>$75/sq-ft</td>
<td>$1,364,000</td>
</tr>
<tr>
<td>Main Channel, E. 1675 Rd., Roadway</td>
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<tr>
<td>Maple Grove East, E. 1500 Rd., 100' Bridge</td>
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</tr>
<tr>
<td>Trib. A, 24/40 Hwy., 2-11'x7' RCB</td>
<td>60 ft</td>
<td>$8/ft/sq-ft</td>
<td>$326,000</td>
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<tr>
<td>Trib. A, 24/40 Hwy., Roadway</td>
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III. Background

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- Survey and general inspection of the drainage system
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Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
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The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

IX. Kansas River Floodplain Analysis
The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breech condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
- Future development in the watershed should maintain the current conveyance levels in the 100-year floodplain – development should not reduce the capacity for floodplain storage
- The City should purchase parcels of land as necessary for use as dedicated ponding areas
- Major roads and hydraulic structures should be improved to meet the current APWA criteria with regard to overtopping during the 100-year event, in order to provide adequate emergency services to the area

A cost summary with regard to these Watershed Analysis recommendations is shown in the table on the next page.
<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise road west of 24/40 intersection</td>
<td>370 ft</td>
<td>$290/ft</td>
<td>$110,000</td>
</tr>
<tr>
<td>Remove 2 existing 24/40 culverts</td>
<td>Lump Sum</td>
<td></td>
<td>$75,000</td>
</tr>
<tr>
<td>Channel Excavation, MG0East to 24/40</td>
<td>3500 cu-yd</td>
<td>$4.31/cu-yd</td>
<td>$15,000</td>
</tr>
<tr>
<td>KDOT Entrance Culvert</td>
<td>30 ft</td>
<td>$8/ft/sq-ft</td>
<td>$27,000</td>
</tr>
<tr>
<td>New 24/40 Culvert</td>
<td>475 ft</td>
<td>$8/ft/sq-ft</td>
<td>$228,000</td>
</tr>
<tr>
<td>Remove Maple Grove East culvert</td>
<td>Lump Sum</td>
<td></td>
<td>$22,000</td>
</tr>
<tr>
<td>Property containing ponding easement</td>
<td>Full Parcels</td>
<td>Total Value</td>
<td>$942,000</td>
</tr>
<tr>
<td>Pump Station: west of airport, north of 24/40</td>
<td>361,000 gpm</td>
<td>$30/gpm</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>Main Channel, E. 1675 Rd., 155’ Bridge</td>
<td>7750 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,364,000</td>
</tr>
<tr>
<td>Main Channel, E. 1675 Rd., Roadway</td>
<td>2700 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Main Channel, E. 1600 Rd., 160’ Bridge</td>
<td>8000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,108,000</td>
</tr>
<tr>
<td>Main Channel, E. 1600 Rd., Roadway</td>
<td>1750 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Main Channel, E. 1500 Rd., 155’ Bridge</td>
<td>7750 sq-ft</td>
<td>$75/sq-ft</td>
<td>$929,000</td>
</tr>
<tr>
<td>Main Channel, E. 1500 Rd., Roadway</td>
<td>1200 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Main Channel, E. 1400 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$786,000</td>
</tr>
<tr>
<td>Main Channel, E. 1400 Rd., Roadway</td>
<td>900 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Main Channel, E. 1900 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,221,000</td>
</tr>
<tr>
<td>Main Channel, E. 1900 Rd., Roadway</td>
<td>2400 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Maple Grove East, E. 1500 Rd., 100’ Bridge</td>
<td>5000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,419,000</td>
</tr>
<tr>
<td>Maple Grove East, E. 1500 Rd., Roadway</td>
<td>3600 ft</td>
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<td></td>
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<tr>
<td>Maple Grove East, E. 1900 Rd., 120’ Bridge</td>
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<td>$75/sq-ft</td>
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<tr>
<td>Maple Grove East, E. 1500 Rd., 120’ Bridge</td>
<td>6000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$711,000</td>
</tr>
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<td>Maple Grove East, E. 1500 Rd., Roadway</td>
<td>900 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Trib. A, 24/40 Hwy., 2-11’x7’ RCB</td>
<td>60 ft</td>
<td>$8/ft/sq-ft</td>
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<tr>
<td>Trib. A, 24/40 Hwy., Roadway</td>
<td>870 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Trib. A, E. 1600 Rd., 60’ Bridge</td>
<td>3000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$477,000</td>
</tr>
<tr>
<td>Trib. A, E. 1600 Rd., Roadway</td>
<td>870 ft</td>
<td>$290/ft</td>
<td></td>
</tr>
<tr>
<td>Trib. B, E. 1700 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
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</tr>
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<td>Trib. B, E. 1700 Rd., Roadway</td>
<td>4250 ft</td>
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<td></td>
</tr>
<tr>
<td>Trib. B, E. 1650 Rd., 100’ Bridge</td>
<td>5000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$703,000</td>
</tr>
<tr>
<td>Trib. B, E. 1650 Rd., Roadway</td>
<td>1130 ft</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$24,802,000</strong></td>
</tr>
</tbody>
</table>

Note: All costs are concept level estimates only. Actual costs may vary significantly.

* Required capacity at ultimate build-out
B. Internal System

Analyses for the Internal Drainage System provided areas of concern throughout the City operated drainage network. The excess peak flow was used to represent the degree to which a conduit is undersized for the ultimate build-out condition. Each investigated lateral flowing into the main stem of a system and each main stem conduit were ranked by excess peak flow. This led to the following priority listing of recommended improvements.

<table>
<thead>
<tr>
<th>Link Name</th>
<th>Excess Peak Flow (cfs)</th>
<th>Total Estimated Cost of Improvements (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1-1</td>
<td>315</td>
<td>$9,163,000</td>
</tr>
<tr>
<td>S6-1</td>
<td>168</td>
<td>$3,994,000</td>
</tr>
<tr>
<td>S9-1</td>
<td>133</td>
<td>$1,132,000</td>
</tr>
<tr>
<td>S1L1-1</td>
<td>96</td>
<td>$333,000</td>
</tr>
<tr>
<td>S1L5-1</td>
<td>85</td>
<td>$235,000</td>
</tr>
<tr>
<td>S1L7-1</td>
<td>85</td>
<td>$59,000</td>
</tr>
<tr>
<td>S1L3-1</td>
<td>56</td>
<td>$187,000</td>
</tr>
<tr>
<td>S6L3-1</td>
<td>56</td>
<td>$195,000</td>
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<tr>
<td>S6L3-7D</td>
<td>New pipes</td>
<td>$181,000</td>
</tr>
<tr>
<td>S4-1</td>
<td>43</td>
<td>$60,000</td>
</tr>
<tr>
<td>S6L2-1</td>
<td>37</td>
<td>$5,000</td>
</tr>
<tr>
<td>S4L4-1</td>
<td>35</td>
<td>$53,000</td>
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<tr>
<td>S4L2-1</td>
<td>27</td>
<td>$36,000</td>
</tr>
<tr>
<td>S9L1-1</td>
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<tr>
<td>S1L2-1</td>
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<tr>
<td>S8-1</td>
<td>17</td>
<td>$115,000</td>
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<tr>
<td>S10L2-1</td>
<td>13</td>
<td>$4,000</td>
</tr>
<tr>
<td>S7-1</td>
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<td>$38,000</td>
</tr>
<tr>
<td>S5-1</td>
<td>10</td>
<td>$56,000</td>
</tr>
<tr>
<td>S10-1</td>
<td>6</td>
<td>$106,000</td>
</tr>
<tr>
<td>S1L4-1</td>
<td>1</td>
<td>$7,000</td>
</tr>
<tr>
<td>S1L6-1</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
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<tr>
<td>S12-1</td>
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<td>$0</td>
</tr>
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<td>Main Channel, E. 1900 Rd., 140’ Bridge</td>
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<td><strong>Total</strong></td>
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<td><strong>$24,802,000</strong></td>
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Note: All costs are concept level estimates only. Actual costs may vary significantly.
* Required capacity at ultimate build-out
### B. Internal System

Analyses for the Internal Drainage System provided areas of concern throughout the City operated drainage network. The excess peak flow was used to represent the degree to which a conduit is undersized for the ultimate build-out condition. Each investigated lateral flowing into the main stem of a system and each main stem conduit were ranked by excess peak flow. This led to the following priority listing of recommended improvements.

<table>
<thead>
<tr>
<th>Link Name</th>
<th>Excess Peak Flow (cfs)</th>
<th>Total Estimated Cost of Improvements (dollars)</th>
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<td>315</td>
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<td>168</td>
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<td>133</td>
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<td>S1L1-1</td>
<td>96</td>
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<td>S1L5-1</td>
<td>85</td>
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<td>S1L7-1</td>
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<td>$59,000</td>
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<td>S1L3-1</td>
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</tr>
<tr>
<td>S6L3-1</td>
<td>56</td>
<td>$195,000</td>
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<tr>
<td>S6L3-7D</td>
<td>New pipes</td>
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<td>43</td>
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<tr>
<td>S6L2-1</td>
<td>37</td>
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<tr>
<td>S4L4-1</td>
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<tr>
<td>S4L2-1</td>
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</tr>
<tr>
<td>S9L1-1</td>
<td>21</td>
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<td>S1L2-1</td>
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<td>S1L4-1</td>
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<td>S1L6-1</td>
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<tr>
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</tr>
<tr>
<td>S12-1</td>
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<td>$0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$16,206,000</strong></td>
</tr>
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</table>
The flows calculated in the analysis of the internal system assume that the cutoff north of 24/40 Highway, as recommended by the Watershed Analysis, is in place. However, the costs in the table for the Internal System Analysis are independent of the costs for the Watershed Analysis improvement recommendations. By adding the total costs from each of the two summary tables, the estimated cost of all recommendations is approximately $41 million.

As with the overall watershed, a viable option within the internal system is land purchase. In areas that naturally drain to a low point, it is often advantageous to preserve the ponding area by purchasing the parcel of land. Those costs are included in several of the system costs in the table.

III. Background

A. Watershed Description

The North Lawrence watershed is estimated to be 9,100 acres generally bordered by the Kansas River levee on the south and the Mud Creek levee on the east. Most of the drainage contributes to the Maple Grove system, which either conveys water south to the City or east eventually to Mud Creek. A few areas near the levee, to the northwest and southeast, drain directly to the Kansas River, while a thin strip of land along part of the northeastern portion of the watershed flows directly to Mud Creek. Refer to the North Lawrence Drainage Study map in Section I of the main report for an overview of the project area.

The Kansas River floodplain completely encompasses North Lawrence. The natural silt loam soils are highly permeable. However, increased development is replacing those soils with nearly impermeable clay material in certain areas. In addition, extremely mild slopes across the landform cause frequent ponding and roadway overtopping. Historically, North Lawrence has been an agricultural community with low density residential development. Pockets of commercial and industrial development now appear in areas of the watershed. While parts of North Lawrence will likely remain agricultural, the projected future land use in other areas will add more and more impervious surfaces.

B. Purpose

The Lawrence-Douglas County Planning Commission proposed this study to address repeated flooding concerns from residents of the North Lawrence area. Flooding problems occur in a number of areas within the North Lawrence watershed. The major causes are as follows:

- Development that has significantly increased runoff from design storm events
- Undersized drainage system components such as culverts, drainage channels, underground pipe systems and inlets
- Siltation within the storm drainage system
- Past development of flood-prone areas
- A shallow, flat and interrupted watershed drainage network

Public comments relating to current drainage issues, proposed developments, long-range plans, and floodplain regulations are at the root of this study. The purpose of this study is
to identify areas with flooding problems, analyze the major elements of the storm drainage system with respect to long-term land use, and recommend needed improvements to correct or prevent systems from flooding. By doing this, proposed developments and long-range plans will be influenced. At the same time, regulations can be conceptualized to avoid potential pitfalls.

C. Scope of Project

The North Lawrence Drainage Study has several major components which work toward the generation of system requirements for stormwater conveyance and infrastructure in the ultimate buildout scenario. The following major tasks were included in the study:

- Integration of the public involvement program that gathered and used information from residents, business owners and property owners when considering alternatives or upgrades within the watershed
- Estimation of the ultimate land use for the watershed
- Survey and general inspection of the drainage system
- Development of a digital database that shows the existing components of the City’s drainage system
- Evaluation of the internal drainage system for the ultimate buildout scenario and recommendation of improvements
- Evaluation of the watershed drainage system for the ultimate buildout scenario and recommendation of improvements
- Completion of an analysis of Kansas River flooding resulting from levee overtopping

Along with the recommended improvements, the magnitude of the costs required to implement them were assessed. It should be noted though, that detailed design of the projects recommended in this report is required to produce proper construction documents and accurate cost estimates for system components.

The main body of the project report is divided up into seven sections. Summaries of the various sections are detailed below. For a detailed description of the methods or results of each section, refer to the main report.

IV. Public Involvement

The North Lawrence Drainage Study public involvement program was designed to establish meaningful and useful dialogue between stakeholders, businesses, residents in the area and the study team. A series of outreach efforts were conducted to catalogue and assess the public’s concerns. Members of the project team provided an overview of study activities and public input to the Lawrence Planning Commission.

V. Ultimate Land Use for Watershed

To accomplish the goals of the North Lawrence Drainage Study, the ultimate land use condition had to be determined for the study area. The future land uses within the watershed will help determine where to focus the stormwater system improvements and provide better insight into heading off potential development problems. The project team
conferred with the Public Works Department, the Planning Office, and the Utilities Department of Lawrence. Information was gathered with regard to current zoning, potential developments and long-range plans and was used to produce an ultimate watershed land use guide.

While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

VIII. Watershed Analysis

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<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
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<td>Maple Grove East, E. 1500 Rd., 100’ Bridge</td>
<td>5000 sq-ft</td>
<td>$75/sq-ft</td>
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</tr>
<tr>
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<td>3600 ft</td>
<td>$290/ft</td>
<td>$1,044,000</td>
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<tr>
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<td>3000 sq-ft</td>
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<td><strong>$24,802,000</strong></td>
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Note: All costs are concept level estimates only. Actual costs may vary significantly.

* Required capacity at ultimate build-out
B. Internal System

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<tr>
<th>Link Name</th>
<th>Excess Peak Flow (cfs)</th>
<th>Total Estimated Cost of Improvements (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1-1</td>
<td>315</td>
<td>$9,163,000</td>
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<td>56</td>
<td>$195,000</td>
</tr>
<tr>
<td>S6L3-7D</td>
<td>New pipes</td>
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<td>43</td>
<td>$60,000</td>
</tr>
<tr>
<td>S6L2-1</td>
<td>37</td>
<td>$5,000</td>
</tr>
<tr>
<td>S4L4-1</td>
<td>35</td>
<td>$53,000</td>
</tr>
<tr>
<td>S4L2-1</td>
<td>27</td>
<td>$36,000</td>
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<tr>
<td>Total</td>
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<td>$16,206,000</td>
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</tbody>
</table>
The flows calculated in the analysis of the internal system assume that the cutoff north of 24/40 Highway, as recommended by the Watershed Analysis, is in place. However, the costs in the table for the Internal System Analysis are independent of the costs for the Watershed Analysis improvement recommendations. By adding the total costs from each of the two summary tables, the estimated cost of all recommendations is approximately $41 million.

As with the overall watershed, a viable option within the internal system is land purchase. In areas that naturally drain to a low point, it is often advantageous to preserve the ponding area by purchasing the parcel of land. Those costs are included in several of the system costs in the table.

III. Background

A. Watershed Description
The North Lawrence watershed is estimated to be 9,100 acres generally bordered by the Kansas River levee on the south and the Mud Creek levee on the east. Most of the drainage contributes to the Maple Grove system, which either conveys water south to the City or east eventually to Mud Creek. A few areas near the levee, to the northwest and southeast, drain directly to the Kansas River, while a thin strip of land along part of the northeastern portion of the watershed flows directly to Mud Creek. Refer to the North Lawrence Drainage Study map in Section I of the main report for an overview of the project area.

The Kansas River floodplain completely encompasses North Lawrence. The natural silt loam soils are highly permeable. However, increased development is replacing those soils with nearly impermeable clay material in certain areas. In addition, extremely mild slopes across the landform cause frequent ponding and roadway overtopping. Historically, North Lawrence has been an agricultural community with low density residential development. Pockets of commercial and industrial development now appear in areas of the watershed. While parts of North Lawrence will likely remain agricultural, the projected future land use in other areas will add more and more impervious surfaces.

B. Purpose
The Lawrence-Douglas County Planning Commission proposed this study to address repeated flooding concerns from residents of the North Lawrence area. Flooding problems occur in a number of areas within the North Lawrence watershed. The major causes are as follows:
- Development that has significantly increased runoff from design storm events
- Undersized drainage system components such as culverts, drainage channels, underground pipe systems and inlets
- Siltation within the storm drainage system
- Past development of flood-prone areas
- A shallow, flat and interrupted watershed drainage network

Public comments relating to current drainage issues, proposed developments, long-range plans, and floodplain regulations are at the root of this study. The purpose of this study is
to identify areas with flooding problems, analyze the major elements of the storm drainage system with respect to long-term land use, and recommend needed improvements to correct or prevent systems from flooding. By doing this, proposed developments and long-range plans will be influenced. At the same time, regulations can be conceptualized to avoid potential pitfalls.

C. Scope of Project

The North Lawrence Drainage Study has several major components which work toward the generation of system requirements for stormwater conveyance and infrastructure in the ultimate buildout scenario. The following major tasks were included in the study:

- Integration of the public involvement program that gathered and used information from residents, business owners and property owners when considering alternatives or upgrades within the watershed
- Estimation of the ultimate land use for the watershed
- Survey and general inspection of the drainage system
- Development of a digital database that shows the existing components of the City’s drainage system
- Evaluation of the internal drainage system for the ultimate buildout scenario and recommendation of improvements
- Evaluation of the watershed drainage system for the ultimate buildout scenario and recommendation of improvements
- Completion of an analysis of Kansas River flooding resulting from levee overtopping

Along with the recommended improvements, the magnitude of the costs required to implement them were assessed. It should be noted though, that detailed design of the projects recommended in this report is required to produce proper construction documents and accurate cost estimates for system components.

The main body of the project report is divided up into seven sections. Summaries of the various sections are detailed below. For a detailed description of the methods or results of each section, refer to the main report.

IV. Public Involvement

The North Lawrence Drainage Study public involvement program was designed to establish meaningful and useful dialogue between stakeholders, businesses, residents in the area and the study team. A series of outreach efforts were conducted to catalogue and assess the public’s concerns. Members of the project team provided an overview of study activities and public input to the Lawrence Planning Commission.

V. Ultimate Land Use for Watershed

To accomplish the goals of the North Lawrence Drainage Study, the ultimate land use condition had to be determined for the study area. The future land uses within the watershed will help determine where to focus the stormwater system improvements and provide better insight into heading off potential development problems. The project team
conferred with the Public Works Department, the Planning Office, and the Utilities Department of Lawrence. Information was gathered with regard to current zoning, potential developments and long-range plans and was used to produce an ultimate watershed land use guide.

While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

VIII. Watershed Analysis

There were three main goals for this portion of the study: to reduce the demand on the 2nd Street Pump Station, to expel floodwater from the basin during times of high water on the Kansas River, and to investigate the effects of development in the floodplain. It is recommended that the drainage from the area north of 24/40 Highway be cut off and the water pumped over the levee. The recommendation for reducing the burden on the 2nd Street Pump Station appraises the 10-year event in conjunction with the design criteria of the internal drainage system, however the 100-year event is investigated as well.

The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

IX. Kansas River Floodplain Analysis

The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breech condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
- Future development in the watershed should maintain the current conveyance levels in the 100-year floodplain – development should not reduce the capacity for floodplain storage
- The City should purchase parcels of land as necessary for use as dedicated ponding areas
- Major roads and hydraulic structures should be improved to meet the current APWA criteria with regard to overtopping during the 100-year event, in order to provide adequate emergency services to the area

A cost summary with regard to these Watershed Analysis recommendations is shown in the table on the next page.
## Watershed Recommendations Cost Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise road west of 24/40 intersection</td>
<td>370 ft</td>
<td>$290/ft</td>
<td>$110,000</td>
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<tr>
<td>Remove 2 existing 24/40 culverts</td>
<td>Lump Sum</td>
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<td>KDOT Entrance Culvert</td>
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</tr>
<tr>
<td>New 24/40 Culvert</td>
<td>475 ft</td>
<td>$8/ft/sq-ft</td>
<td>$228,000</td>
</tr>
<tr>
<td>Remove Maple Grove East culvert</td>
<td>Lump Sum</td>
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<td>$22,000</td>
</tr>
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<td>Property containing ponding easement</td>
<td>Full Parcels</td>
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<td>Main Channel, E. 1675 Rd., 155’ Bridge</td>
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</tr>
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<td>S1L4-1</td>
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<tr>
<td>S12-1</td>
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While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

VIII. Watershed Analysis

There were three main goals for this portion of the study: to reduce the demand on the 2\textsuperscript{nd} Street Pump Station, to expel floodwater from the basin during times of high water on the Kansas River, and to investigate the effects of development in the floodplain. It is recommended that the drainage from the area north of 24/40 Highway be cut off and the water pumped over the levee. The recommendation for reducing the burden on the 2\textsuperscript{nd} Street Pump Station appraises the 10-year event in conjunction with the design criteria of the internal drainage system, however the 100-year event is investigated as well.

The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

IX. Kansas River Floodplain Analysis

The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breach condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
EXECUTIVE SUMMARY

I. Introduction

The City of Lawrence has embarked on a program to develop a stormwater management plan for the North Lawrence watershed. This program is based on a recognized need to upgrade existing facilities to modern design standards and to provide coordinated facilities in developing areas. The economic well being of the City depends on its ability to attract and retain business and industry, as well as residents to live in the City. Part of the City’s ability to attract businesses and residents depends on its ability to provide adequate services such as drinking water, sewers, transportation and stormwater management. With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing. This has caused the City to focus its attention on the need to provide adequate stormwater management policies and infrastructure in all areas within the watershed. The North Lawrence Drainage Study is one important step in this process.

The North Lawrence Drainage Study was divided into two main focus areas. The Internal System consists of the City operated ditches, pipes, and pumps within the existing City boundaries. The overall watershed analysis modeled the less developed drainage aspects of the North Lawrence Drainage Area. More detailed descriptions of the two focus areas can be found later in the report.

II. Recommendations

A. Overall Watershed

Several alternatives were investigated in the overall North Lawrence Drainage Study watershed to reduce flood elevations, lessen impacts on the “Internal Drainage System” facilities, provide drainage in the event of high flows on the Kansas River, and assess the effects of development in the floodplain. The investigations led to the four major recommendations below. The first bullet item is the key to reducing the burden on the Internal System from areas beyond the existing city limits.

- Drainage from north of 24/40 Highway should be cutoff by the highway embankment and the water should be pumped over the levee at a point just east of the 24/40 intersection to reduce the burden on the 2nd Street Pump Station
- Future development in the watershed should maintain the current conveyance levels in the 100-year floodplain – development should not reduce the capacity for floodplain storage
- The City should purchase parcels of land as necessary for use as dedicated ponding areas
- Major roads and hydraulic structures should be improved to meet the current APWA criteria with regard to overtopping during the 100-year event, in order to provide adequate emergency services to the area

A cost summary with regard to these Watershed Analysis recommendations is shown in the table on the next page.
<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise road west of 24/40 intersection</td>
<td>370 ft</td>
<td>$290/ft</td>
<td>$110,000</td>
</tr>
<tr>
<td>Remove 2 existing 24/40 culverts</td>
<td>Lump Sum</td>
<td></td>
<td>$75,000</td>
</tr>
<tr>
<td>Channel Excavation, MG0East to 24/40</td>
<td>3500 cu-yd</td>
<td>$4.31/cu-yd</td>
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<td>KDOT Entrance Culvert</td>
<td>30 ft</td>
<td>$8/ft/sq-ft</td>
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<td>New 24/40 Culvert</td>
<td>475 ft</td>
<td>$8/ft/sq-ft</td>
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</tr>
<tr>
<td>Remove Maple Grove East culvert</td>
<td>Lump Sum</td>
<td></td>
<td>$22,000</td>
</tr>
<tr>
<td>Property containing ponding easement</td>
<td>Full Parcels</td>
<td></td>
<td>Total Value $942,000</td>
</tr>
<tr>
<td>Pump Station: west of airport, north of 24/40</td>
<td>361,000 gpm *</td>
<td>$30/gpm</td>
<td>$11,000,000</td>
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<tr>
<td>Main Channel, E. 1675 Rd., 155’ Bridge</td>
<td>7750 sq-ft</td>
<td>$75/sq-ft</td>
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<tr>
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<tr>
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<td>8000 sq-ft</td>
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<tr>
<td>Main Channel, E. 1400 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
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<td>900 ft</td>
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<td></td>
</tr>
<tr>
<td>Main Channel, E. 1900 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,221,000</td>
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<td>Main Channel, E. 1900 Rd., Roadway</td>
<td>2400 ft</td>
<td>$290/ft</td>
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<tr>
<td>Maple Grove East, E. 1500 Rd., 100’ Bridge</td>
<td>5000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$1,419,000</td>
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<td>Maple Grove East, E. 1500 Rd., 120’ Bridge</td>
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<td>$75/sq-ft</td>
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<td></td>
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<tr>
<td>Trib. A, 24/40 Hwy., 2-11’x7’ RCB</td>
<td>60 ft</td>
<td>$8/ft/sq-ft</td>
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<td>870 ft</td>
<td>$290/ft</td>
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</tr>
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<td>Trib. A, E. 1600 Rd., 60’ Bridge</td>
<td>3000 sq-ft</td>
<td>$75/sq-ft</td>
<td>$477,000</td>
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<tr>
<td>Trib. A, E. 1600 Rd., Roadway</td>
<td>870 ft</td>
<td>$290/ft</td>
<td></td>
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<td>Trib. B, E. 1700 Rd., 140’ Bridge</td>
<td>7000 sq-ft</td>
<td>$75/sq-ft</td>
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<td>4250 ft</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$24,802,000</strong></td>
</tr>
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</table>

Note: All costs are concept level estimates only. Actual costs may vary significantly.

* Required capacity at ultimate build-out
B. Internal System

Analyses for the Internal Drainage System provided areas of concern throughout the City operated drainage network. The excess peak flow was used to represent the degree to which a conduit is undersized for the ultimate build-out condition. Each investigated lateral flowing into the main stem of a system and each main stem conduit were ranked by excess peak flow. This led to the following priority listing of recommended improvements.

<table>
<thead>
<tr>
<th>Link Name</th>
<th>Excess Peak Flow (cfs)</th>
<th>Total Estimated Cost of Improvements (dollars)</th>
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<td>S1-1</td>
<td>315</td>
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<td>S6-1</td>
<td>168</td>
<td>$3,994,000</td>
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<td>S9-1</td>
<td>133</td>
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<td>96</td>
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<td>S1L5-1</td>
<td>85</td>
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<td>S1L7-1</td>
<td>85</td>
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<td>S1L3-1</td>
<td>56</td>
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<td>S6L3-1</td>
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<tr>
<td>S6L3-7D</td>
<td>New pipes</td>
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<td>S4-1</td>
<td>43</td>
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<td>$5,000</td>
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<td>10</td>
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<tr>
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provide better insight into heading off potential development problems. The project team
conferred with the Public Works Department, the Planning Office, and the Utilities Department of Lawrence. Information was gathered with regard to current zoning, potential developments and long-range plans and was used to produce an ultimate watershed land use guide.

While the information gathered was used to create the Ultimate Build-Out map, it was not intended to dictate specific policies with regard to land use in the North Lawrence Drainage Area. However, certain policies could be inferred from the findings of this study. For instance, lot splits currently require a hydraulic study to determine impacts. Due to the extensive hydraulic studies detailed in this report, it would not be necessary for developers to conduct individual studies, as long as the general recommendations of this study are followed (i.e. conveyance needs to be maintained within the floodplain).

VI. Data Collection

Several field visits were made to the study area to observe drainage patterns, take photographs and verify structure sizes and orientations. A significant portion of the North Lawrence watershed was surveyed for this project. This information was used in the development of computer models of the watershed. Information from the field survey forms was entered into GIS. The basis for the evaluation of the North Lawrence watershed is the digital base maps developed by the City. These maps also show land features with a 2-foot contour interval. The base maps include topographical drainage information such as open channels, bridges, culverts, manholes, inlets, and enclosed drainage systems. They also include houses, transportation and above ground utility locations. Field surveys were completed as part of this study to update and verify any existing information on size, location, and slope of the conveyance structures. Survey data on the conveyance system and watershed characteristics were combined with the City database to create a comprehensive database of the most up-to-date information.

VII. Internal Drainage System Analysis

The system of City operated ditches, pipes, and pumps throughout North Lawrence are collectively referred to as the “internal drainage system” in this report. This system collects the drainage from about 1.8 square miles and largely conveys it through gravity and pressure pipe to the Kansas River. The intent of the internal drainage system analysis portion of the North Lawrence Drainage Study was to investigate necessary improvements to the existing infrastructure system for a 10-year frequency event, assuming the land uses specified by the Buildout Scenario Map. The performance of the Maple Street Pump Station (529 Maple Street) and the 2nd Street Pump Station (732 N. 2nd Street) were closely considered in the overall evaluation.

Results of the hydrologic and hydraulic analyses for the set of 12 systems representing the existing stormwater infrastructure within North Lawrence identified many surcharge locations for the ultimate buildout condition.

Recommendations were determined for each conduit or channel in a system based on the analysis of the entire system. It should be noted that improvements are to generally be made in a downstream to upstream manner within the system, as there is no advantage trying to deliver more flow to a downstream component that cannot convey the existing flow. Overall costs for each system upgrade were estimated; however, for the purposes
of prioritizing public improvements on a smaller scale, excess peak flow was determined for each main stem and each lateral draining to the main stem of the system.

**VIII. Watershed Analysis**

There were three main goals for this portion of the study: to reduce the demand on the 2nd Street Pump Station, to expel floodwater from the basin during times of high water on the Kansas River, and to investigate the effects of development in the floodplain. It is recommended that the drainage from the area north of 24/40 Highway be cut off and the water pumped over the levee. The recommendation for reducing the burden on the 2nd Street Pump Station appraises the 10-year event in conjunction with the design criteria of the internal drainage system, however the 100-year event is investigated as well.

The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.

As the area develops, it will become necessary to provide emergency services to the homes and businesses that populate the area. This will require the improvement of the major roads in the area and significant improvement of the hydraulic structures which carry flow under the roads. With a more dense urban population, the roads should be raised to meet the current APWA criteria with regard to overtopping during the 100-year event. This will result in some significant increases in required flow capacity over the existing hydraulic structures.

**IX. Kansas River Floodplain Analysis**

The existing conditions FEMA hydraulic model was revised to assess the amount of flooding that would occur in the North Lawrence area in the event of a breach of the Kansas River levee system. A “most likely” breach location was determined for the purpose of this analysis. For the levee breach condition, a 100-year Kansas River event would result in flood levels 0 to 7 feet deep in the North Lawrence Watershed (refer to the exhibit titled Watershed Analysis – Kansas River Inundation in Section VII).
Legend
- Interstate
- Highways
- Diversion Channel
- Diversion Culvert
- Leavenworth County Line
- Jefferson County Line
- Tributary Streamline
- Levees
- Streets

Watershed Analysis Alternatives
Mr. Richard Hird, Chairman
Members
Lawrence-Douglas County Metropolitan Planning Commission
City Hall
Lawrence, Kansas 66044

RE: ITEM NO. 5: COMPREHENSIVE PLAN AMENDMENT TO H2020 - CHP 14; NORTHEAST SECTOR PLAN (DDW))

Dear Chairman Hird and Planning Commissioners:

The Planning Commission is being asked by the City and County Commissioners to review certain aspects of the Northeast Sector Plan as approved by the Planning Commission. Two of the considerations that you are being asked to review are costs of developing the Northeast Sector for industrial use compared with other areas, and the definition and appropriate location of agriculturally oriented industries as well as general industrial uses.

We would like to mention that we believe the cost of developing an area should be a consideration in determining its appropriateness for a use. The hazards and risks of developing an area, which will be reflected in the cost, must be a consideration because these issues are of public concern, as well as is the issue of preserving our irreplaceable resources.

These are issues that were mentioned in our September 19, 2010 letter to you. Therefore, we are including this letter to you again as an attachment.

Thank you for considering our letter again.

Sincerely yours,

Caleb Morse
Secretary and Member of the Board

Alan Black, Chairman
Land Use Committee

ATTACHMENT
League of Women Voters of Lawrence-Douglas County  
P.O. Box 1072, Lawrence, Kansas 66044

September 19, 2010

Mr. Charles Blaser, Chairman  
Members  
Lawrence-Douglas County Planning Commission  
City Hall  
Lawrence, Kansas 66044

RE: ITEM NO. 4: COMPREHENSIVE PLAN AMENDMENT FOR NORTHEAST SECTOR PLAN.

Dear Chairman Blaser and Planning Commissioners:

We would like to present some comments on the new recommendations for inclusion in the Northeast Sector Plan: a choice between the Options #1 and #2.

The important question addressed here is how to preserve the Class I and II Soils as a goal, but at the same time accommodate some industrial development. After reviewing these options we believe that the consequences of adopting either of these options at this stage would not achieve the desired outcome.

We have attached our analysis of some of the problems involved in attempting to accommodate both the preservation of these irreplaceable soils and at the same time accommodate industrial development.

We suggest that before you incorporate either of these options into the Northeast Sector Plan that you review our discussion and consider this particular issue further.

Thank you for your consideration.

Sincerely yours,

Brooke Goe  
President

Alan Black  
Chairman  
Land Use Committee

RECEIVED
SEP 20 2010
City County Planning Office  
Lawrence, Kansas
PROBLEMS WITH SUGGESTED OPTIONS FOR PRESERVING CLASS I & II SOILS IN INDUSTRIAL AREAS

Option #1: The recommendation to incorporate into the Northeast Sector Plan suggested by staff for preserving Class I and II Soils in industrially designated areas is to “encourage” Agri-Industrial use in these areas.

Problem: With only “encouragement” there is no way to guarantee that Agri-Industrial uses will go into such areas. It seems to us that this would not be an effective method for saving these valuable soils. This is not recommended as a requirement nor is there recommended any incentive to do it. To be effective, there should be both a requirement and an incentive incorporated into the Land Development Code.

Option #2: The recommended suggestion here is to require a portion of an industrial development on Class I and/or II Soil to be set aside and permanently preserved for agricultural use. The suggested amount is half of the original tract. If this recommendation of Option #2 is incorporated into the Land Development Code and the Douglas County Zoning Regulations, the Agri-Industrial use would be a permitted use within the Industrial category.

Problems:

1. Implementation: There should be some mechanism for separating out the undesirable industrial permitted uses from the benign ones. Although there is one permitted use added—Agri-Industrial—there is no distinction in terms of the many choices for permitted uses available under the “Industrial” category in Option #2. Not all of these other industrial uses included here are equal in intensity and in possible negative effects on the set-aside farmland. There is a need to be able to select or condition uses, or to be able to do both.
   (a) One method used recently has been to allow conditioning of conventional zoning to eliminate all permitted uses other than agricultural-business uses. It could be applied to Agri-Industrial permitted uses in the Industrial category.
   (b) Another method would be to require a Planned Development.
   (c) A third method would be to establish all industrial uses in Class I and II soils as Special Uses with the ability to establish strict environmental controls through the Conditional or Special Use Permits.
   (d) A fourth method could be to create a new zoning district for Class I and II soils and then control uses individually under the Section 20-501 Use Regulations.

2. The size and configuration of the original tracts and their set-aside parcels is critical in preserving the set-aside land for its agricultural usefulness.
   (a) If half of the land of a single tract is set-aside for preserving Class I and II soils each parcel from the tract should be contiguous so that it is not preserved in separate small pieces. Set-backs and required open spaces between buildings or other normal “open space” requirements would not preserve sufficiently large tracts for usable agricultural land.
   (b) The original acreage of the industrial tract would determine how useful a set-aside parcel would be. For example, the parcels set-aside from small industrial tracts—under one acre—would generally be less agriculturally useful. You need to know what is considered economically and practically feasible to preserve.
3. Protecting the set-aside farmland area from pollution and runoff from the developed industrial parcel would have to be a condition placed on any industrial development adjacent to preserved farmland—an additional development expense and difficult to enforce.

4. An additional problem is that almost the entire Class I and II Soils are also subject to flooding. Added problems and hazards of developing in the floodplain:
   (a) The cost/benefit to the city and county of industrial development in the floodplain is apt to be negative. Why?
      (1) Both the flat North Lawrence area and the floodplain have a very high water table and minimal slope. This causes major engineering problems with sewering and added costs of providing and maintaining it. Sewering would likely need lift stations and because of the high water table, sump pumps would likely be necessary. A major public cost.
      (2) Floodplain development requires high capital investment. Needed flood protection or raising building levels, generally with added soil, makes development cost higher than average.
      (3) Raising soil levels adjacent to farmland can change the drainage patterns to the disadvantage of the farmland, marginalizing it and reducing its productivity.
   (b) Hazards are created with floodplain development because of the proximity of the airport. Raising soil levels may create ponds that attract waterfowl and other wildlife if fill dirt comes from the same floodplain area. This effect is due in part to the high water table.

5. Problems of jurisdiction.
   (a) If a development is not annexed and provided public utilities, it will likely be substandard; public benefit will likely be negative.
   (b) If a development is provided utilities and public services but not annexed, costs to the city will not be publicly compensated through taxes, resulting in lack of public benefit to city.
   (c) If development is annexed and provided public services, costs may still exceed public benefits in taxes because of above listed problems.

6. Cost implications: Farming is one of the land uses in the county that costs the county much less than the county regains from it in taxes. When the League made its study on county development, one of our sources was the Farmland Trust. The Trust found that for every dollar returned in taxes from open space and farmland, expenditures to counties averaged about $0.50. On the other hand, for every dollar returned to the county in taxes from rural residential use, the county expenditures for this use were higher, up to $1.50 per household. That was in 1999. The disparity now is likely more.
December 11, 2011

Planning Commission

To Whom It Concerns:

I apologize that I cannot attend the Planning Commission meeting on Monday, December 12. The North Lawrence Improvement Association meeting is also on Monday evening. This is our annual holiday meeting when we accept donations for our adopted families and non-perishable food items for The Ballard Center.

The NLIA is in full agreement with Citizens for Responsible Planning and the people of Grant Township about the storm water flooding as in 1993 and to keep type 1 and 2 soils intact.

I have attached letters showing the history of our support.

Sincerely,

Ted Boyle, President
North Lawrence Improvement Association
310 Elm Street, Lawrence KS 66044
December 9, 2010

Dear City Commissioners:

The North Lawrence Improvement Association has been working with Citizens for Responsible Planning and Grant Township residents on the drafting of the NE Sector Plan. NLIA appreciates the work the Planning Department has devoted to this project in the last year. The NLIA, CRP and the Planning Department were all in consensus until the next to last time the plan came before the Planning Commission. At that meeting the Commission asked for a definition of agricultural related industry as it was never defined in the document. At the end of that meeting Planning Director Scott McCullough made his assessment of why slow development or no development has occurred in North Lawrence and the Grant Township. A copy of his statement is attached. The NLIA agrees with this statement.

When the NE Sector Plan was next on the agenda of the Planning Commission, there were two more options that were not publicly discussed and the option (#3) that all of the stakeholders worked on for over a year and supported was not discussed.

The NE Sector Plan is a very important planning project, but the NLIA feels there are enough choices for industrial development in and around Lawrence without allowing that type of development to occur in the area covered by the NE Sector Plan. If industrial development is allowed in this area the storm water flooding problems in North Lawrence and the Grant Township will be exacerbated. I have attached a storm water survey that the City conducted in June 2004. About 100 residents responded to the survey regarding the storm water flooding issues that occurred on their property.

The NLIA also believes that Type I & II soils that make up a significant portion of the NE Sector Plan area should be protected from development. These soils are not only an invaluable resource for agriculture, but serve as a natural storm water resource. If this land is allowed to be covered with asphalt, concrete and rooftops, the storm water from this land will be flowing into North Lawrence. The pump on North 2nd is at it’s maximum and the planned upgrade of the pump at 5th & Maple is designed to only take care of the current existing storm water problem in North Lawrence. We have been waiting fifteen plus years for the upgrade of this pump.

North Lawrence did not have storm water problems until residential housing development was allowed and 100 plus new homes were built. Much of the vacant property that existed in North Lawrence that served as a natural runoff turned into concrete and rooftops. These homes were built in a flood plain or flood prone area. The City and the developers assured us that this development would not adversely affect our neighborhood with flooding. The NLIA disagreed with that assessment.

The Grant Township is also a flood plain/flood prone area. The NLIA is in full agreement with Citizens for Responsible Planning and want to see Option 3 restored to the NE Sector Plan.

Sincerely,

Ted Boyle, President
North Lawrence Improvement Association

CC: David Corliss, Lawrence City Manager
     Scott McCullough, Planning Department
Commissioners, I guess there's one thing I'd like to leave you with while we go to work on these comments is — we've put this in the context of what are the planning efforts city/county wide. The reason we start with our cartoon of annexation is that there's a reason that this area hasn't developed substantially over the decades and those reasons have to do with the costs of development and public infrastructure and the storm drainage and those sorts of things. I think as planners we need to start thinking, or continue to think, about where we going to put our limited resources in relation to development costs. We have / you all have planned a substantial amount of industrial employment center activity along with other areas of high density residential and commercial nodes and the like — Farmland Industries is one area, Farmer's Turnpike is another area, 6th Street and SLT is an area. There's room for all those things and areas of low growth/low development and so as we talk more about the utilities master plan and come back with this plan for your review and consideration I think we need to think of it in terms of the county as a region and not just — it's easy to get into Grant Township and say "why aren't we pro-development here"? "Why are we restrictive"? and those kind of things. We're trying to let the history and the land talk to us on this one and say "there are reasons for this today, what do we reasonably anticipate"? We talk about expectations for the residents — is it fair to put out a plan for pro-growth if we're not as a city going to put any infrastructure in that area. We've got to talk about those things and come to some reasonable conclusions I think. We'll get to work on your comments and come back with those things in mind as well.

Dear Planning Commissioners,

Citizens for Responsible Planning, an informal network of interested citizens, has been actively engaged in the planning process for the Northeast Sector Plan. We appreciate the efforts to build community input into this planning process. We believe there are some core strengths to this plan and wish to emphasize these fundamental policy guidelines.

Historically the Northeast Sector has been shaped by the repeated flooding of this river valley. This movement of water has deposited some of the finest soils and created some of the best agricultural land in Kansas. This rich natural asset in the Northeast Sector creates the largest contiguous acres of Capability Class I and II Soils. Horizon 2020, Chapter 7 Industrial and Employment Related Land Use states "The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community."

Of the 303,808 acres in Douglas County, only 8,370 acres have Class I soils and by 2009 24% of those acres have been developed. There are 33,053 acres of Class II soils in our county and 38% has already been developed. (Please refer to the attached Exhibit A.) Citizens for Responsible Planning recommends directing industrial development to other areas already designated for industrial that do not have the high concentration of Class I and II soils. Attached with this letter is a comparison of all eleven sites identified on Map 7-2 - Potential Location for Future Industrial and Employment Related Land Use in Chapter 7 of Horizon 2020. (Please refer to Exhibit B.) The table in Exhibit C demonstrates the many options available to our community for future industrial sites that do not present the extreme challenges or contain comparable content of contiguous acres of Capability Class I and II Soils.

We would like to present some important contextual information for your consideration using maps referenced within the Northeast Sector Plan. It is our feeling that graphically placing the proposed industrial area on these attached maps gives clear context to the challenges facing development in this area.

- Map 3-1 Northeast Sector Plan - Future Land Use pg. 3-13, Exhibit D
- Map 2-9 Regulatory Flood Hazard Area and Streams - Flood Hazard Area pg. 2-18, Exhibit E
- Map 2-13 Class I and II Soils pg. 2-22, Exhibits E and F
- Map 2-15 Airspace Overlay Zones pg. 2-26, Exhibit G
- Map 2-16 FAA Wildlife Mitigation Buffer pg. 2-27, Exhibit H
We have placed comment boxes on each of these mapping tools. We consider these restrictive conditions would impact development in this proposed industrial area. We would also request that the recommendations within the North Lawrence Drainage Study and the difficulty of supplying sewer and water to this area be fully understood.

An example of the unforeseen difficulty with an assumed simple engineering task near this proposed industrial area, placing a septic tank for the airport, has created a significant headache even during a time of severe drought. (Please refer to the Lawrence Journal World news article in Exhibit I.) This story begins to help us anticipate the larger problems associated with attempting to engineer solutions to storm water management after storms within a very flat and flood prone area.

The great likelihood of catastrophic flooding, not unlike that of 1993, the expense of infrastructure, both installation, need of redundancy built into the system, and associated maintenance make this an extremely costly area to develop.

On page 6 of the Memorandum provided by the Douglas County Planning and Development Services, a 125-acre industrial development option is proposed alongside the 300-acre option. Exhibits J and K illustrate the high concentration of Class I and II soils in the proposed industrial areas southwest of the airport.

Citizens for Responsible Planning strongly recommends these parcels not be designated for industrial land uses and continue to be available for agricultural production. The staff finding on page 3 states there are too many variables to determine development costs and states that governing bodies should determine the cost/benefit ratio at the time of specific development requests. If this becomes the decision path for consideration of industrial development of this area, we recommend the following decision criteria should be used by the governing bodies:

1. A clear and comprehensive cost/benefit analysis should be available to the public comparing the development of this area in contrast to other industrial development sites in Douglas County.

2. A comparison of the change in land use of Class I and II soils with industrialization of this site with other industrial development sites in Douglas County.

3. At a minimum, the developer pays for all the additional infrastructure costs compared to similar development with other industrial development sites in the county.

4. A clear and comprehensive analysis determining whether the proposed development would have any adverse impact for floodplain management.

Respectfully Submitted,

Jerry Jost, Ted Boyle, Barbara Clark, Charlie NovoGradac, Lane Williams

Citizens for Responsible Planning Steering Committee
The agricultural Kaw River floodplain north of Lawrence is about to become Lawrence's industrial bottoms. And our storm water and flooding problems are going to get worse.

North Lawrence neighborhoods and businesses are being flooded more and more due to increasing infill development. Nevertheless, the City is making plans to annex and develop an industrial park on the historic Pine family farm.

The Pines' farm, controlled by State Senator Roger Pine, has been successfully operated by the same family since the 1860s. The old house sits upon the best farm soil in Douglas County. It is highly permeable silt-loam topsoil several feet deep which is underlain with several feet of sandy subsoil. This extraordinary soil is a sponge which, if managed well, absorbs tremendous quantities of rainfall before any runoff occurs.

Last October 24, the Lawrence-Douglas County Planning Commission recommended annexation and rezoning of the Pine family farm, about 145 acres, for an industrial subdivision. The subdivision project is a land speculation venture—no industrial tenant has yet committed. Most of the farmland will be made impermeable—roads, sidewalks, parking lots, and warehouses are planned. The storm water runoff from this large and concentrated development will increase flooding, burdening other farms, businesses and residences throughout North Lawrence. The taxpayer is being asked to pay for all needed off-site infrastructure, including flood control earthworks, pumps, and drainways.

The City Commission will discuss and decide this issue at a meeting very soon. If you are for conserving prime agricultural land, if you are against increasing flood risk in North Lawrence, or if you think there are smarter, cheaper, better locations for expansive industrial development, please write our Lawrence City Commissioners now!

For more information, visit: http://www.lawrencecrp.org/

Write to: City Hall, City Commission, c/o Bobbie Walthall, Executive Secretary, 6 East 6th St., Lawrence, KS 66044, or email: bwalthall@ci.lawrence.ks.us. Re: Airport Industrial Park

------------------------------------------------------------------------------------------Sample letter------------------------------------------------------------------------------------------

City Commission
c/o Executive Secretary Bobbie Walthall
City Hall
6 E. 6th Street
Lawrence, KS 66044

RE: Airport Industrial Park, application of Pine Family Farms for Rezoning/Annexation

Dear City Commissioners:

I oppose the plan to annex and rezone the historic Pine farm for an industrial park. The development would destroy prime agricultural land, it would increase the likelihood of flooding in established parts of North Lawrence, and it would require large expenditures for infrastructure that the city, and its taxpayers, cannot afford. Industrial development will be better located in other less sensitive locations already identified around the city.

[Signature]
November 19, 2009

Dan Warner, Long Range Planner
Lawrence-Douglas County Planning Office
PO Box 708
Lawrence, KS 66044

Dear Dan:

The North Lawrence Improvement Association and the residents of North Lawrence endorse and are in full agreement with the comments provided by Citizens for Responsible Planning regarding the process of developing the Northeast Sector Plan.

The NLIA would also like to see the Urban Growth Area pulled back. The other concerns of the NLIA are flooding into North Lawrence from this area as well as the preservation of type 1 & 2 soils for future food production.

Furthermore the NLIA appreciates the opportunity provided by the public meetings concerning this issue and the ability to provide input while this process is taking place.

Sincerely,

Ted Boyle, President
North Lawrence Improvement Association
April 7, 2009

City Commission,

The North Lawrence Improvement Association and the residents of North Lawrence would like to encourage the City Commission to adopt the North Lawrence storm water study as a regulation for development in North Lawrence and in the surrounding area.

The NLIA and residents in the community see this study as a necessity for future development and as a way to protect the residents by making certain development occurs in the appropriate areas.

The storm water study would encourage responsible planning and development if adopted as a regulation.

Thank You,

Ted Boyle
NLIA President
January 7, 2002

Dear Planning Commission,

The North Lawrence Improvement Association and North Lawrence residents wish to strongly express their concerns about development in North Lawrence. We do not want development in the 100-year flood plain or on larger lots in flood prone or fringe areas.

The residents concern about current and future development in the flood plains causing flooding in their homes and properties is the number one concern brought up at NLIA meetings.

There is also concern about the current trend of developers digging ever deeper and wider ditches and water drainage routes. Deep and wide trenches are unsafe and dangerous and are not a substitute for a planned drainage system in North Lawrence.

Thank you for listening to our concerns,

[Signature]

Ted Boyle
President
North Lawrence Improvement Association
Some people are buying it just like gold'

By Chad Lawhorn
clawhorn@world.com

Midwest farmers are certainly growing corn, wheat and soybeans, but now there are questions about whether they're nurturing a real estate bubble as well.

A new report by the Federal Reserve Bank of Kansas City found that crop land prices in the Midwest have risen by more than 25 percent during the last 12 months. It was the highest rate of increase ever monitored by the Kansas City Fed.

"There are people out there looking for alternative investments to the stock market right now," said Calvin Heck, a broker with Lawrence's Colliers International.

"Land is still something they aren't making any more of, and I think some people are buying it just like gold as a hedge against bad times." The Federal Reserve report estimated that in Kansas, non-irrigated crop land increased by 20 percent for the year, irrigated crop land by about 15 percent and pasture land by about 12 percent.

In the Douglas County area, the market is more mixed. Heck said the market for fertile bottom ground in the Kansas River has been active, and prices likely have been increasing near the rates suggested by the Federal Reserve.

But the price for less fertile property outside of the river valleys has seen less of an increase, said Dale Bohn, an appraiser with Frontier Farm Credit. Bohn said those types of properties have been hit by the slowdown in new housing growth.

That's because many of those types of properties in Douglas County aren't just bought as farm land but also are used for rural housing.

Prices shoot up for Midwest crop land

Strong commodity prices, especially for corn during the ethanol boom, have helped drive up land prices. The Fed noted that Nebraska has seen crop land values increase by about 40 percent for the year.

Prices

CONTINUED FROM PAGE 1A

But Bohn agreed with the Fed's assessment that land being bought for truly agricultural purposes is increasing rapidly in value.

"We've been seeing some record income levels for farming the last few years," Bohn said.

Strong commodity prices, especially for corn during the ethanol boom, have helped drive up land prices. The Fed noted that Nebraska has seen crop land values increase by about 40 percent for the year.

Heck said he had heard reports of even more rapidly increasing prices in Iowa, saying that some bottomland in Iowa has sold for $6,000 an acre. For comparison, Douglas County bottomland is more likely to sell for about $4,500 an acre, he said.

The rapid increase has some in the agricultural industry watching the situation closely and hoping that the 1980s-style agriculture bubble doesn't emerge. Lenders are leading many to hope that any bursting of a bubble won't be as devastating as it was 30 years ago.

"But the pendulum always swings too far in these sorts of things," Bohn said. "I don't know how far agriculture land values have to rise before it happens — it may be 5 percent higher or 50 percent higher — but it will get to the point that the pendulum swings the other way."

Tom Dillon, president of Baldwin State Bank, said he thinks area farmers aren't likely to drive up land prices too much in the coming year. He said area farmers did not have a particularly good year in 2011 because of the dry conditions.

"If they would have had a good year, I would have been sitting pretty right now," Dillon said. "But they didn't get the rain when they needed it, and based on what has gone on this fall, I don't think you'll find many farmers real optimistic about next season either."
Richard Hird, Chair
Lawrence-Douglas County Metropolitan Planning Commission

Dear Chairman Hird,

Citizens for Responsible Planning, an informal network of interested citizens, has been actively engaged in the planning process for the Northeast Sector Plan. We appreciate the efforts to build community input into this planning process. We believe there are some core strengths to this plan and wish to emphasize these fundamental policy guidelines.

Historically the Northeast Sector has been shaped by the repeated flooding of this river valley. This movement of water has deposited some of the finest soils and created some of the best agricultural land in Kansas. This rich natural asset in the Northeast Sector creates the largest contiguous acres of Capability Class I and II Soils. Horizon 2020, Chapter 7 Industrial and Employment Related Land Use states “The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community.”

Of the 303,808 acres in Douglas County, only 8,370 acres have Class I soils and by 2009 24% of those acres have been developed. There are 33,053 acres of Class II soils in our county and 38% has already been developed. (Please refer to the attached Exhibit A.) Citizens for Responsible Planning recommends directing industrial development to other areas already designated for industrial that do not have the high concentration of Class I and II soils. Attached with this letter is a comparison of all eleven sites identified on Map 7-2 - Potential Location for Future Industrial and Employment Related Land Use in Chapter 7 of Horizon 2020. (Please refer to Exhibit B.) The table in Exhibit C demonstrates the many options available to our community for future industrial sites that do not present the extreme challenges or contain comparable content of contiguous acres of Capability Class I and II Soils.

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Map 2-13 Class I and II Soils pg. 2-22, Exhibits F and G
Map 2-15 Airspace Overlay Zones pg. 2-26, Exhibit H
Map 2-16 FAA Wildlife Mitigation Buffer pg. 2-27, Exhibit I

We have placed comment boxes on each of these mapping tools. We believe these restrictive conditions would impact development in this proposed industrial area. We would also request that the recommendations within the North Lawrence Drainage Study and the difficulty of supplying sewer and water to this area be fully understood. We question the assertion that a reduction in the urbanized area...
within the Northeast Sector Plan necessarily reduces the costs associated with the North Lawrence Drainage Study. We feel an adequate data set is not available to substantiate this statement.

An example of the unforeseen difficulty with an assumed simple engineering task near this proposed industrial area, placing a septic tank for the airport, has created a significant headache even during a time of severe drought. (Please refer to the Lawrence Journal World news article in Exhibit J.) This story begins to help us anticipate the larger problems associated with attempting to engineer solutions to storm water management after storms within a very flat and flood prone area.

The perennial local storm water problems within the levy, compounded by the likelihood of river flooding and the consequent closing of the floodgates (such as in 1993), and the almost level drainage gradients throughout the area, demand extraordinary engineering solutions. Development on farm land near the drainways reduces the natural buffering and increases the risk of property loss from flooding. The high cost of artificial drainage, including not only the costs of construction but also its maintenance in perpetuity, make the farmland within the natural floodplain a comparatively costly area to develop.

On page 6 of the Memorandum provided by the Douglas County Planning and Development Services, a 125-acre industrial development option is proposed alongside the 300-acre option. Exhibits K and L illustrate the high concentration of Class I and II soils in the proposed industrial areas southwest of the airport.

Citizens for Responsible Planning recommends that these parcels not be designated for industrial land uses and continue to be agricultural.

The staff finding on page 3 states there are too many variables to determine development costs and states that governing bodies should determine the cost/benefit ratio at the time of specific development requests. If this becomes the decision path for consideration of industrial development of this area, we recommend the following decision criteria should be used by the governing bodies:

1. A clear and comprehensive cost/benefit analysis should be available to the public comparing the development of this area in contrast to other industrial development sites in Douglas County.
2. The area of Class I and II soils lost to development shall be less than with any other industrial sites in Douglas County.
3. At a minimum, the developer pays for all the additional infrastructure costs compared to similar development with other industrial development sites in the county.
4. A clear and comprehensive analysis determining whether the proposed development would have any adverse impact for floodplain management.

Respectfully Submitted,

Jerry Jost, Ted Boyle, Barbara Clark, Charlie NovoGradac, Lane Williams

Citizens for Responsible Planning Steering Committee
The Northeast Sector is outlined with a blue boundary. As you can see, the NE Sector has an extremely high concentration of Class I and II soils compared to the rest of the county. Approximately 27.4% (2,708 acres) is Class I soils and 28.7% (2,842 acres) is Class II soils. This translates as approximately 56% of the land has Class I or Class II soils with fertility created by historical flooding and siltation.
### Approximate Acreages Containing Class I and II Soils in the Potential Industrial Development Sites According to Horizon 2020

<table>
<thead>
<tr>
<th>Potential Industrial Development Sites According to Horizon 2020 (Pages 7-4 through 7-8)</th>
<th>Acres (Approximate)</th>
<th>Class I Soils (Approximate Acres)</th>
<th>Class II Soils (Approximate Acres)</th>
<th>Total Class I and II Soils (Approximate Acres)</th>
<th>% Soils that are Class I and II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmland Industries</td>
<td>509</td>
<td>12</td>
<td>7</td>
<td>19</td>
<td>3.7%</td>
</tr>
<tr>
<td>Southeast Area</td>
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<td>21</td>
<td>21</td>
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<td>217</td>
<td>157</td>
<td>374</td>
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</tr>
<tr>
<td>I-70 and K-10</td>
<td>607</td>
<td>0</td>
<td>42</td>
<td>42</td>
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</tr>
<tr>
<td>K-10 and Highway 40</td>
<td>386</td>
<td>0</td>
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<td>28</td>
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</tr>
<tr>
<td>Eudora North and Eudora South</td>
<td>845</td>
<td>8</td>
<td>4</td>
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</tr>
<tr>
<td>Baldwin City</td>
<td>648</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Highway 56 and Highway 59</td>
<td>656</td>
<td>0</td>
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<td>36</td>
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</tr>
<tr>
<td>Midland Junction</td>
<td>652</td>
<td>69</td>
<td>214</td>
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</tr>
<tr>
<td>Highway 56 and K-33</td>
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<td>0.0%</td>
</tr>
<tr>
<td>Total Acres (Approximate)</td>
<td>5569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The green shaded area was proposed to be a Soil Conserv- ing Agri-Industry land use in the first three drafts of this Sector plan but was changed through a very close vote within the Planning Commission to an Industrial land use.
The community NE Sector planning meetings overwhelmingly ranked flooding and drainage as the primary concern in the NE Sector. The plan recommends considering implementing regulations that promote no adverse impact for floodplain management. (Section 3.3) This proposed industrial area (purple shaded) is nested between 100-year floodway, 100-year flood plain, and would be subject to storm water runoff from the airport. Industrial development in this area would adversely impact floodplain management.
The community NE Sector planning meetings ranked Class I and II soils as the greatest asset in the NE Sector. The plan encourages the preservation of such high quality soils. (Section 3.1.2.1) The purple shaded area converted to an Industrial land use is predominately composed of Class I and II soils. It is also recognized that these soils are highly absorptive and greatly assist in storm water mitigation. (Page 2-17)
This proposed Industrial area has a significant overlay of the non instrument approach zone. FAA restrictive development constraints would apply.
The airport is a valuable community resource. This proposed Industrial area would be centered in the FAA Wildlife Mitigation Buffer. These restrictive FAA development codes associated with the Wildlife Mitigation Buffer would deny the use of storm water detention ponds as a storm water mitigation means.
Speaking of North Lawrence, city officials are finding out how difficult it is to get expanded sewer service to the Lawrence Municipal Airport. Folks traveling along U.S. Highway 24-40 in front of the airport may have noticed some digging in an open field by the airport. It may not look like much, but that digging has become a major headache, and now is becoming a concern for some neighbors. A Topeka-based contractor hired by the city is trying to install a sewage holding tank to provide greater sewage capacity for the airport property. But this being North Lawrence, digging a hole in the ground can be challenging because of how quickly you hit groundwater. My understanding is that the hole needs to be more than 25 feet deep. In North Lawrence, that’s called a deep swimming pool. Crews have not gotten that far down yet, but now have had to install seven temporary wells around the hole to try pump the hole dry. Those wells are causing concern among some neighbors that the pumping will start drawing groundwater that supplies their wells. Brian Pine told me that his family has serious concerns about the pumping, and believes the city did not thoroughly think this project through. City officials note that the pumping activities do have the proper permits from state water officials.

North Lawrence residents also are keeping an eye on the issue, now that they know what is going on. They are concerned about where all the water will go once it is pumped. Plans call for it to go down the Maple Grove tributary and into a North Lawrence pump station. But Ted Boyle, president of the North Lawrence Improvement Association, said that concerns him because that pump station already is near capacity during rain storms. At the moment, city engineers tell me that all the issues with this project aren’t costing the city extra dollars. The city contends that it provided the contractor with all the information it needed to know what to expect in terms of water at the site, and thus it must do the project for the bid amount. (I’m not sure what that is, but I’ll get it.) That sounds like an issue that could get debated in a court at some point.

The sewer project is designed only to provide service to the airport property, but all the difficulties may end up playing into a larger debate about industrial development surrounding the airport. Like the Farmers Turnpike area, economic development leaders have touted this area’s easy access to the turnpike. But neighbors have opposed it, in part, because they say the issue has serious stormwater issues. Whether fair or not, I expect this little episode will come up as an example of how difficult it would be to convert this area into an industrial park.
The approximately 300 acres southwest of the airport proposed for industrial land uses in the NE Sector Plan are 59% Class I soils and 41% Class II soils. This is an exceptionally high concentration of the best soils in Kansas. These soils also act as an important sponge absorbing storm rainfall helping to mitigate flooding.
The approximately 125 acres southwest of the airport proposed for industrial land uses in the NE Sector Plan are 77% Class I soils and 23% Class II soils. This is an exceptionally high concentration of the best soils in Kansas. This parcel represents approximately 3.5% of the Class I soils and 1% of the Class II soils in the NE Sector. These soils also act as an important sponge absorbing storm rainfall helping to mitigate flooding.
December 11, 2011

Dear Chairman Hird and Commissioners;

I would like to submit this information for your review as you consider the Northeast Sector Plan. I have attached a series of articles from the Lawrence Journal World that give important insight into stormwater flooding issues relevant to both land within Grant Township and North Lawrence. These articles all date from 1993.

In that year my husband and I were North Lawrence residents, living at 742 N. 5th St. The events of that summer starting with the rain event that began Friday, July 9th are very clear in my memory.

It should be noted that the Flood of ’93 was flooding caused by stormwater run-off from the watershed to the north of Lawrence. North Lawrence was most heavily impacted because of its “bathtub” topography. Within the text of the articles I have copied it will be made clear that because of heightened Kansas River levels, floodgates that were designed to aid in the stormwater drainage of North Lawrence failed. Extraordinary pumping measures were required at extraordinary cost to eventually relieve the floodwaters in North Lawrence.

Our community has identified eleven proposed industrial and employment related sites in Chapter 7 of Horizon 2020. We have exceeded our expressed need for 1,000 new acres of industrial sites. "Within the next few years, the City and County Commission shall identify and designate at least 1,000 acres of land for industrial expansion in the next 25 years." (Horizon 2020, Chapter 12). Recent sector planning has designated approximately 1,426 acres of future industrial areas. We are not without choices about where our community locates its industrial and employment related sites. One of the considerations given significant weight should be the ability to insure no adverse impact from stormwater run-off to downstream neighbors. I have grave reservations about our ability to insure this justice to North Lawrence residents if industrial development is identified within the Northeast Sector Plan.

I feel a reminder of the 5" rain event of 1993 has significant relevance to your deliberations this evening.

As always, I appreciate the time you dedicate to the important issues brought before you.

With respect,

Barbara Clark
1993 FLOOD FACTS

The U. S. Department of Agriculture estimated that the Flood of '93 affected about 7,000 acres of farm land in Douglas County along the Kansas River. Reference: LJW, 2/14/1994, Potluck brings, survivors and neighbors together: Summer floods, winter memories, Andrew E. Nachison; Journal World Writer

City waits for water to recede - Moody said the main culprit - besides more than 5 inches of rainfall Friday night and Saturday morning - was a power failure that shut down an electrical pump in the city's storm sewage system. "When the lights went out, we didn't get the running start we needed," he said. By the time the pumps were running, the water levels were just keeping up with the runoff into the basin, Moody said. City waits for water to recede, Lawrence Journal World, 7/11/93

George Williams, the city's public works director, placed the individual and infrastructure loss in Lawrence at $1.6 million. This total included private property losses of $1 million. LJW, 7/13/1993, Finney considers disaster status: Estimate of flood damage is $1.6 million, Tim Carpenter, Journal World Staff Writer

"Along North Second Street, flooding on Monday (7/12/1993) extended 3/4 of a mile from the north side of the Kansas River Bridge toward the Kansas Turnpike. In addition, acres and acres of crop land north of the river remain under water. "Near the airport there is a great deal of land under water," Nalbandian said. "That's all trying to drain into North Lawrence." LJW ibid as above

Mike Wildgen, City Manager said the series of Kansas River levee gates used to drain water from North Lawrence were overloaded. Nalbandian said he was concerned that water in reservoirs upstream from Lawrence would be released.

North Lawrence residents should boil tap water before drinking it or cooking with it, the city announced at a news conference Monday (7/12/1993). "This is only precautionary," Roger Coffey, City Utilities Director. The recent storm flooded a part of the city's water treatment system, namely a "lift station" at Forth and North streets. The station is designed to get sanitary waste to the treatment plant. Because flooding has rendered the station inoperable, sewage is running off into the standing floodwater, Coffey said. City Manager Mike Wildgen said, "Floodwater covers several hydrants in North Lawrence, and a hole in them or in a water main could cause untreated water to be sucked into drinking water supplies." City sounds drinking water precaution: N. Lawrence residents asked to boil tap water due to flooding, Peter Lundquist, Journal World Staff Writer, 7/14/1993.

North Lawrence residents and business owners last night voiced their concerns to the City Commission about the City handling of recent flooding. Frank Male, a North Lawrence resident, also was unhappy with what he thought was slow action on the city's part. He said he thought the meeting at Johnny's Tavern was unsuccessful. "We didn't get a lot of answers." he said. Commission hears plight of flood victims, Katie Greenwald, University Daily Kansan, 7/14/93.

Debi Moore, Assistant Director of Economic Development for the Lawrence Chamber of Commerce, said the Chamber is collecting flood damage and economic loss estimates from business owners in North Lawrence to help in compiling information for an application for federal disaster relief funds. Moore said that about 100 businesses or property owners with either damage from the flood or economic loss because of inaccessibility have been identified. Flooding proves costly:
Flood cost climbing: Damages from flood set at 2.7 million. A storm that pounded Douglas County a week ago caused at least $2.7 million damage to government and business property and marred at least 900 acres of crops in the county, officials said today. The county's revised assessment indicated $1.5 million damage to public property and $1.2 million in losses to businesses. "It could go higher. These are shots in the dark," said Paula Phillips, coordinator of the county's emergency preparedness office. The $2.7 million figure excluded residential damage as well as destruction of crops and cleanup costs for government and businesses in the county, she said.

Damages set at $2.7 million, Tim Carpenter, Journal World Staff Writer, 7/16/1993

Bob Moody (City Commissioner) said the city planned to continue pumping water from North Lawrence, at least through Saturday. Just how much water has been pumped out? Since 11 PM July 9, city and private pumps have pumped 66.99 million gallons of water from North Lawrence, enough to fill a creek 4 feet wide and a foot deep across the entire length of Kansas, Assistant City Manager Rod Bremby said today. Water in rural land around and north of the Lawrence Municipal Airport continues draining into North Lawrence, Moody said. "The problem is, there's such a stack up of water," he said. "It just keeps coming down."

N. Lawrence faces a daunting task, Mark Fagan, Journal World Staff Writer, 7/17/1993

Kansas Gov. Joan Finney's chief of staff, Mary Holladay, on Monday also signed a disaster declaration for the entire state, allowing state resources to be used to assist flood victims and the state to be eligible for federal aid. (Paula) Phillips said Douglas County was awaiting a visit from FEMA later this week before filing a claim for federal aid.

River raging, but levee safe, officials say, Mark Fagan, Journal World Staff Writer, 7/20/1993

Officials at Perry Lake today began releasing water from the rain-swollen reservoir, adding flow entering the Kansas River. Despite the additional water entering the Kaw, a U.S. Army Corps of Engineers official said this morning he didn't expect any serious downstream flooding. Perry Lake sends water into Kaw, Journal World, 7/24/93

The Kaw already is swollen by floodwaters because of heavy July rains and water releases from Milford Lake near Junction City and Tuttle Creek Lake near Manhattan. The decision to release water (from Perry) came Friday after officials determined that the Delaware River, which feeds into Perry Lake, was at flood stage and water was flowing into the lake at a rate of 16,000 to 17,000 cubic feet per second, said Frank Funk, Perry project manager. LJW, ibid above
To Whom It May Concern,

My name is Julia Mathias Manglitz. I am a licensed Architect in the State of Kansas. I live near Stull now and so you may wonder why I would be writing a letter regarding the Northeast Sector Plan. But I lived in North Lawrence for over a decade. And I am writing this letter to tell the story that explains why, in large part, my husband and I (both witnesses to the 1993 Flood) no longer live in North Lawrence. And further I feel a need to explain why I believe that the policies proposed for developing this area are fundamentally flawed from a storm water management perspective.

North Lawrence — A Personal History

My association with North Lawrence began in 1990 when I took a part time job at Roger’s Food Center which, at the time, occupied the building at North 2nd and Lincoln. Roger liked to call it “Roger’s Fun, Fabulous, Family, Food Center”! It was fun. It was fabulous. And it was family. Not just the Roger Kuker family, but the whole North Lawrence neighborhood family.

And that is why on July 10th 1993, even though I no longer worked for Roger, I came back to help Roger, his family, and some of his employees move anything we could from the store and away from the rising flood waters. My folks grew up on the convergence of the Illinois and Mississippi Rivers. I grew up with my dad’s stories of the 1951 flood. And I knew that I needed to help, just as my dad and his family had helped in ‘51. As I waded through flood water up to my hips in the parking lot, kids and adults jumped off the Union Pacific trestle into the water that was nearly to the bottom of the structure. I climbed over the sandbag wall that was keeping the water at bay – but just barely - and spent a sultry afternoon carrying perishables out to fully charged refrigerated trucks left by generous distributors.

Too exhausted to drive back to my home in Johnson County that evening I went to my now husband’s - then boyfriend’s house. That house stands at 220 North 4th Street. Across the street from that house is Walnut Park, a little pocket park that sits right at the base of the levee. I remember standing on the porch of the little house that evening. We could see the swollen river rushing along just on the other side of the levee. Never before or since that July has that view been possible. We wondered what would happen if the river topped the levee. We wondered

Figure 1 - Grocery store at N 2nd & Lincoln during the 1951 Flood, home to Roger’s Food Center during the 1993 Flood. Lawrence Journal World, file photo.
what would happen if the levee broke. And that night we slept fitfully, taking some small comfort in knowing that the little house had withstood 1951, and probably 1903. We knew the whole first floor had to have been underwater. We knew how high the water was in 1951. Roger’s Food Center was completed just in time for the flood of 1951, and when we worked there, the high water mark from 1951 could still be seen on the back wall of the stock room. I met my husband in that store. For a time we had both worked there.

Figure 2 - Roger’s Food Center, 608 N. 2nd Street, during the July 1993 Flood - Lawrence Journal World, file photo.

I had signed a lease that started in August of 1993 for an apartment at 326 Locust Street. And so I moved in, a block and a half from what became known as “the Hole”. The big hole, that got bigger and deeper, that took what seemed like forever to fix. And I spent many nights, especially rainy nights,
wondering if I was going to wake up in the bottom of a sink hole like it. People who live along rivers know that they have a life of their own; a life that we see above ground, and another that we don’t see below it.

In May of 2001, knowing everything that we knew, my husband and I still bought our first house, 836 Locust Street, in North Lawrence. We loved North Lawrence; we met there, we lived there, we married there. It is a place where people have their priorities straight and they help their neighbors. It is a place where keeping up with the Jones’ isn’t about what kind of car you drive. It’s about who grew the biggest tomato last year. And it is one of the few places in Lawrence with affordable housing. The house was not our dream house. But it was a good house and we were grateful to find a house we could afford in Lawrence. It had a nice yard and I turned out to be a pretty darn good gardener, at least I thought so until we moved to Stull. We felt safe in North Lawrence. We had seen and survived 1993, we knew where water congregated; we felt that there was a balance, maybe tenuous at times, but we felt that with restricted development we were safe. We knew where there were houses that had survived the onslaught of 1951.

But a couple of years later things started to change in North Lawrence. We have a friend who owns a house at North 7th and Lake Streets. She bought the house from the lady who lived there in 1951. The house had stayed dry then. No mean feat, because Lake Street comes by its name honestly. Up until about 2003 the eastern half of that block of Lake Street was open field, low lying open field. And it flooded with regularity. But then a developer bought the land and built houses on those fields, on trucked in, built up fill. And these new houses sit way above the older houses on the block. Our friend received a letter shortly thereafter telling her that house she owned was now required to have flood insurance; the house that did not flood in 1951.

Every time we allow more impervious surface the flood line gets higher because we inhibit drainage. Every time we allow land to be built up by fill, it makes existing adjacent land low land, land that will flood with runoff. What happened to our friend was a taking. The people who sold the land and the people who built and sold the houses made money at the expense of our friend and likely many of her neighbors. This was done without improving the existing drainage system in the area.
At about this time we were trying to buy a house on Elm Street, something more like our dream house. It was one of the 1951 survivors. It was on naturally higher ground. And unlike our friend on Lake Street, the area around it was already full of houses. It was not at risk from the same sort of thoughtless development. But when that deal fell through and houses started to be built on fill in empty low-lying lots across the street from us on Locust, again with no improvements to the existing drainage, we decided that it was time to leave.

We felt that the powers that be in the City of Lawrence, the planners and the politicians, did not fully appreciate or understand the fragile balance that North Lawrence has with water. Furthermore we felt that the governing bodies did not care about the existing residents and their investment in the neighborhood. We made these opinions clear in our response to the citizen survey the City solicited as part of the North Lawrence Drainage Study.

\textit{We Can Build Here – But at What Cost?}

My husband and I were lucky enough in 2004 to be able to afford to leave. We know that not all of our friends and former neighbors have that option. And I am writing this letter, in part, on their behalf. Every time I drive through the area I am struck by how much more has been developed and how little, if anything, has been done to improve the drainage situation.

In 1993 North Lawrence flooded from I-70 to the levee and from the levee to the east. Few roads did not have standing or flowing water. The levee helps protect North Lawrence under certain circumstances. But the levee impedes drainage from runoff and from the tributaries that drain from the higher land to the north which extends into Jefferson County. So there must be pumps. Every square foot of impervious surface, whether it is a parking lot, a road or a roof, added anywhere in North Lawrence or up-hill or up-stream of North Lawrence compounds the drainage problem and diminishes the capacity of the pumps.

\textit{Figure 5 - Standing on the levee at Walnut Park looking south, December 2011 (left) and July 1993 after the peak of the flood}

To those who say levees will protect us: As many as 1500 levees failed in 1993. There were several levee breaches along the Missouri just this year. The Galloway Report, prepared in the wake of the 1993 floods, seriously questions the protection that levees provide and goes so far as to call for an end to the practice of building levees to protect development saying that the economic development cost benefit does not outweigh the life and financial losses in the event of the inevitable failure.
*To those who say that pumps will protect us:* Pumps failed to protect New Orleans during Katrina. The pumps failed in North Lawrence in 1993. Pumps have a fixed capacity, when the rain won’t stop the capacity may not be enough to keep up. When the river level is above the pump discharge the pumps stop. When the power is out, the pumps stop.

All of these control, containment and management measures are only designed for a certain flood event. Generally a 100 year flood is considered the benchmark. This is done in the name of keeping the construction of this expensive infrastructure from becoming extraordinarily expensive. So which was the 100 year flood in North Lawrence; 1903, 1951 or 1993? The 1903 flood cut a new channel and swallowed blocks of North Lawrence. According to the Kansas Geological Survey 1951 was worse. According to the National Oceanic and Atmospheric Administration 1993 was unprecedented. And the trick with all the information that we use to make decisions is that it is all historic and based on an historic landscape that no longer exists and that we continue to change, generally for the worse so far as flooding is concerned.

![View of the 1903 Flood](image1)  ![Aerial view of the 1951 Flood](image2)

*Figure 6 - View of the 1903 Flood, UP Depot spire visible in the distance, Bowersock Power Plant at the far right, from F.M. Knight Booklet “Views of the Great Kansas River Flood – Lawrence”*. And aerial view of the 1951 Flood, Lawrence Journal World, file photo.

It is not a question of “if” these systems will fail. It is a question of “when”. It is a question of how great the loss of life, property and money will be, and which generation will pay that price.

When we allow development to continue we build a false sense of security in those who did not witness to the floods of the past. And we encourage ever more investment and ever more risk. Being near the river is a risk, not without benefit, but a risk nonetheless. The most beneficial and least risk land use for this area has been and continues to be agriculture. There is already a great deal of under-utilized developed area within the city limits in North Lawrence. There are other areas of Douglas County already zoned for industrial and other uses that are far less risky and far better suited to development than the Northeast Sector.

*To those who say that restricting potential future rezoning in currently agricultural areas is a taking for the current land owners:* I say that value which does not exist cannot be taken. Developing land for industrial or most other uses in the Northeast Sector will further endanger every existing property around it, downhill from it and downstream from it; and that is a very real taking.
The purpose of planning and governance is to look out for the greater good, both for us now and for future generations. And this plan needs to weigh the benefits and the risks in the harsh light of day with the full knowledge of flooding this area has witnessed, at least twice within the memories of many who are alive today.

Floods in 1844, 1903, 1951 and 1993 ravaged this area. North Lawrence did not bounce back from 1903 or 1951 and it still shows today. A drive through the area after a day-long rain will illustrate that the current storm drainage situation is tenuous in most areas of North Lawrence. The area needs help, and further development, even sensitive development, is not help. There is no form of development that will have zero impact.

![Figure 7 - Turnpike (I-70) entrance, looking south to the intersection of N 3rd and N 2nd Streets, North Lawrence (upper right) during the 1993 Flood, Lawrence Journal World file photo.](image)

As an architect I know that we can build anything, so long as money is no object. However, it has also been my professional experience that this is never the situation. The City of Lawrence is yet to demonstrate that they are able bear the extensive cost to improve the inadequate storm drainage for the development that currently exists.

Proposing policies that allow or encourage development; policies that will compound the existing problem is:

- An insult and an affront to the citizens and businesses that are already invested in North Lawrence.
- Not good planning or good governance.
The future losses in the event of development within this flood prone area far outweigh the potential benefits. Any plan for the Northeast Sector needs to strenuously restrict development and focus on developing policies that preserve and enhance the balance this area has with storm water and the river.

Sincerely,

Julia Mathias Manglitz

1581 E 400 Road
Lawrence, KS 66049
785/979-1081
jmanglitz@gmail.com
December 8, 2011

Lawrence and Douglas County
Planning Commission
Attn: Dan Warner
City Hall, at 6 E. 6th Street
Lawrence, KS 66044

Re: Comments to Planning Commission on Northeast Sector Plan
December 12 agenda item

Dear Planning Commissioners and Staff:

The governing bodies have sent the Northeast Sector Plan back to you asking for a more realistic assessment of the challenges of development on farm land in North Lawrence. In our view the Planning Commission is charged with recognizing and articulating these challenges, and removing misinformation.

We are grateful to see that the staff report finally puts to rest the notion that access to rail and to the municipal airport supports industrial development. Approval of an at-grade railroad crossing across US 24 has always been a practical impossibility. And the airport will never be a cargo jet runway.

We are also glad to learn that the sufficient industrial land (1,400 acres) has already been designated in sector plans, exceeding the target goals in Horizon 2020.

However, we believe that members of the governing bodies, and the public, want to see the following issues explored more realistically, with real data professionally collected and presented:

1. That the level terrain and very slight gradients (fall) in the sloughs and ditches create a great challenge for removal of storm water runoff.
2. That even if drainage ditches are widened and lined with concrete, the stormwater will ultimately have to be collected and pumped over the levees to the Kansas River, if not routinely, then certainly when the River is at flood stage.
3. That the shallow water table (10 feet, more or less) and the sandy substrate of the area means any excavation (for example, sewer ditches) will be inundated by the profuse underground water of the alluvial basin—essentially the underground portion of the Kansas River flowing through the sands.
4. That any excavation into the sandy substrate will be mechanically unstable, and that detention or retention ponds will need to be hardened and lined.
5. That the level topography over great distances mean that sanitary sewer mains will not be gravity-flow, their pipes must be pressurized or have multiple lift/pump stations.
6. Although storage warehouses and truck parking areas may have few employees and may be sufficiently served with septic tanks, any industrial use which actually becomes an employment center will require connections to gravity sanitary sewers.

7. That certain soils (Capability 1) within the area targeted for industrial uses have a superior capability for absorbing rainfall than other soils (Capability 2) which, although still good farm soils, have more restricted water transmitting capacity. These characteristics are quantifiable by reference to the cooperative soil surveys. (The development of the airport property, already zoned, is going to have a major impact on overall rainfall absorption.)

8. That the water and drainage features of the area in question is not a merely local concern but impacts the entire area protected by and enclosed within the Kansas River levee, including the Maple Grove drainage watershed and the population of existing residences and businesses of North Lawrence.

9. That resolving each of the points above add extraordinary costs to the developer, the city, and the neighborhood. These costs will not occur in other designated industrial areas.

10. In any severe weather event, with or without river flooding, the effect of any failure of a storm water drainage, pump station, or sewer lift station could flood or saturate farm land, contaminate domestic and irrigation wells, erode roadbeds, and harm improved property in any number of ways.

As owners and investors of a farm and also (now) an industrial building near the area where new industrial uses are proposed, we are very concerned about the effect of incremental development on the natural drainage and storm water and flooding.

We do not agree that these problems can be handled case-by-case in the plot plan reviews of individual projects as each arises. We suggest that the big problems be responsibly addressed, articulated, and explained in the larger planning process represented by this Northeast Sector Plan so that prospective investors/developers are not misled.

Please also consider amending the draft sector plan to restore the status quo, in particular restoring the agricultural use designation to the properties in the vicinity of the Airport (excepting the City-owned airport). We would like to see a statement that the undeveloped farm land proximate to the City is an asset to the community because of its value as farmland but also for natural and cost-free flood control.

Respectfully submitted

/s/
Charles Novogradac and Deborah Milks
ITEM NO. 6: TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE & DOUGLAS COUNTY CODE; SUBDIVISION REGULATIONS (SMS)

TA-3-3-10: Consider Text Amendments to the joint city/county subdivision regulations in the City of Lawrence Land Development Code, Chapter 20, Article 8 and the Douglas County Code, Chapter 11, Article 1 to revise process requirements for division of property through Certificates of Survey, Minor Subdivisions and Major Subdivisions. Modifications include reformatting this article/chapter to eliminate duplicative text and to delete terminology not used. Initiated by City Commission on 2/16/10. Re-initiated by Planning Commission on 5/23/11.

RECOMMENDATION: Staff recommends that the Planning Commission consider the proposed revisions and forward a recommendation for approval of the proposed amendments TA-3-3-10 [December 12, 2011 Edition] to Chapter 20, Article 8 of the Land Development Code to the City Commission and Chapter 11, Article 1 of the County Code to the County Commission for consideration and action.

Reason for Request: Revisions initiated in response to Chamber of Commerce request for changes regarding processing steps between Preliminary and Final Plats. Review of Article expanded to address consistency and readability issues following several years of use with the regulations since adoption in December 2006.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
- 07/01/09 Chamber of Commerce letter – initial request
- 06/17/11 Productive joint meeting – staff & members of development community
- 10/24/11 League of Women Voters (LWV) letter
- Attachment – 07/25/11 Staff Memo – Overview of proposed revisions

OVERVIEW OF PROPOSED AMENDMENT
The primary purpose of the initial amendment request was to provide criteria and thresholds in the regulations which would allow minor changes between preliminary plat approval and final plat submission. Process issues relating to dedication of easements at preliminary plat stage or by separate instrument with minor subdivision approvals were also identified for improvement. After several years working with the regulations as adopted in 2006, staff was of the opinion that the sequence/process outlined for subdivision of property needed improvement as well.

The majority of remaining revisions were related to formatting of the document in terms of where information was located, the repetitive nature of several sections, and inconsistencies throughout the Article. The specific changes are identified below.

The majority of this staff report remains the same as presented to the Planning Commission in October 2011. Additions to the report are shown in green font.
Changes from the October 26, 2011 version:

- Section 20-808(f)(xii) - Staff has substituted text as requested by County Surveyor so that Minor Subdivision/Replat requirement is consistent with Certificate of Survey & Final Plat requirements for surveyor signature information
- Section 20-810(b) - Staff has reworded section as proposed by LWV 10-24-11 correspondence regarding Lot Frontage
- Sections 20-810(d)(2)(v) and 20-815(b) -- Staff has modified text to indicate that Residential Collectors are streets that provide internal connections to non-residential uses within neighborhoods and do not typically connect with Arterial Streets. This change has been proposed to address comments presented in LWV 10-34-11 correspondence regarding ‘Connector Streets’
- Remaining changes have been formatting/blue text updates

CONFORMANCE WITH THE COMPREHENSIVE PLAN

Horizon 2020 recognizes the importance of having up-to-date development regulations in order to implement the goals and policies identified in the plan. The plan notes the need for regulations to be frequently reviewed to respond to changing conditions, unforeseen needs and/or new policies. Clear, streamlined development regulations improve the environment for both property owners and potential investors in the community.

CRITERIA FOR REVIEW AND 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; and

The Chamber letter identifies the omission of any standards with which to judge whether a Final Plat is consistent with, conforms to, or substantially complies with an approved Preliminary Plat. The proposed amendment adds criteria to Section 809/1109 which provides various triggers or thresholds that can be used to determine whether a submitted Final Plat is in substantial compliance with the approved Preliminary Plat and may be processed without further review by the Planning Commission.

As noted below, a number of the proposed revisions address either errors or inconsistencies that have been identified by Staff or the public since the adoption of these regulations. As described, the majority of these changes are proposed for readability and usability of the document.

Changes in the Certificate of Survey sections are the result of changing conditions. After working with the regulations for five years, Staff has found that the Large Parcel Property Divisions in the UGAs are not utilized and would encourage more curb cuts to township roads. Therefore, changes are proposed to expand the ability to utilize the Cluster Development process for land divisions within the UGAs. Changes to standards for this type of rural development have also included suggestions from members of the development community who have worked with the regulations in the last several years.

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

Horizon 2020 supports the continual review of development regulations. The plan notes the need for regulations to be frequently reviewed to respond to changing conditions, unforeseen needs and/or new policies. Clear, streamlined development regulations improve the environment for both property owners and potential investors in the community.

The proposed amendments are intended to enhance the general welfare of the community and are consistent with the stated purpose of the Development Code.
Staff Review
As noted above, Staff has been working over the last year to address issues initially raised by the Chamber of Commerce and to address numerous items identified internally as Staff has utilized the regulations since adoption in 2006. Staff provided updates to the Planning Commission in August 2010, February 2011, May 2011, July 2011 and October 2011 which included a brief list highlighting both Substantive and Housekeeping Changes. Throughout the Article, a number of the revisions are to provide the existing text in a list format, rather than long paragraphs for ease in reading. Existing regulatory statements included in term definitions have been relocated to appropriate sections. Terms not used in the body of the Article have been deleted and defined terms have been highlighted in Blue as provided in the remainder of the Development Code. The revisions also include the amendments adopted in December 2010 that were included in the Environmentally Sensitive Lands text amendment (TA-06-12-08) which have not yet been incorporated into the printed code. Below is a section by section summary of the revisions as shown in the December 12, 2011 Draft Subdivision Regulations.

Section 20-801/Section 11-101 General
Revisions were made in (d) Exemptions to include the common terms ‘Boundary Line Adjustment’, ‘Correction Survey’ and ‘Homestead Exemption Survey’ which are terms used in recent years to describe common surveys filed in association with Unincorporated Area land transfers.

Revisions were made in (e) Vested Rights to indicate the status of Nonconforming Lots or Parcels consistent with a draft Code Interpretation that Staff has been utilizing to determine when development parcels are subject to the Subdivision Regulations and must be platted or replatted as part of a proposed development process. Changes in this section also include another reference to the ‘Homestead Exemption Survey’ and clarify that a Land Combination does not increase the number of building permits a property is eligible to receive. This requirement was previously stated only in the Definitions section of the Article.

Section 20-802/Section 11-102 General Review and Approval Procedures
Revisions include updates to reflect current practice (receiving submissions in electronic format) and changes made in later sections of the Article. The principle change is the addition of a section for Notice Procedures which were omitted in the adopted version. This section is modeled after the Notice Procedures in Article 13 of the Land Development Code.

Section 20-803/Section 11-103 Property Divisions in Service Area 1, Lawrence UGA
No substantive changes.

Section 20-804 and Section 20-805/Section 11-104 and Section 11-105 Cluster Developments and Large Parcel Property Divisions in the UGAs
During the review process, County Zoning and Legal Staff suggested the need to make changes to the Land Division options for properties in within an Urban Growth Area. In the five years following adoption of these regulations, there have only been two divisions completed through these processes in the UGA. Staff has found that the Cluster Development process was narrowly written and the Large Parcel Property Division process forced more curb cuts to township roads. The proposed revisions eliminate the Large Parcel process and expand the Cluster Development to any properties more than 20 acres in size within a UGA.

The proposed changes to the Cluster Development process include suggestions from the development community regarding the layout/location of the cross access easement in relation to the Immediate and Future Development Areas. The revisions also include Legal Staff suggestions regarding the applicability of the Temporary Set Aside Agreements to the Immediate Development Areas, as well as the Future Development Areas.

Section 805/105 has been reserved for future use (and to eliminate the need to renumber the remaining sections).
Section 20-806/Section 11-106 Property Divisions in the Rural Area
The County Sanitary Code requires parcels proposed for development and served with publicly treated water to contain a minimum of three acres to accommodate an on-site sewer management system. The regulations state that property divisions in accordance with the subdivision regulations must contain three acres outside of the floodplain. Sections 804/104 and 805/105 contain specific language which requires the minimum parcel size for RDPs to exclude property within the floodplain. This specific restriction is not identified for property divisions in the Rural Area. The amendments propose to specifically include this requirement so that the regulations are consistent throughout the county.

Section 20-807/Section 11-107 Certificate of Survey, Administrative Review Procedures
All application requirements that were stated in Sections 804/1104, 805/1105 and 806/1106 were relocated to this section so that they were only stated once. Revisions also include restating the requirement for Health Department approval of Certificate of Surveys prior to approval since this requirement had only been stated in Section 811/1111 which did not clearly apply to the Certificate of Survey process.

A section was also added to provide a 24 month approval for Certificate of Surveys and to include a process for requesting extensions similar to that provided in the Land Development Code.

Section 20-808/Section 11-108 Minor Subdivisions/Replats
The Minor Subdivision process has been expanded to allow Replats of property divisions in more situations than currently are permitted. The process will allow lot line adjustments or mergers that do not increase the total number of lots even if the property has previously been part of a Minor Subdivision. This change provides an administrative review of the proposed divisions/mergers, but streamlines the review process to reduce the amount of time involved.

The proposed revisions also provide an opportunity to dedicate or vacate easements or rights-of-way with a Minor Subdivision/Replat by placing the application on a governing body agenda for action. Since the governing bodies meet weekly, this action can be efficiently accommodated in the administrative review period. The proposed process also includes a mailed notice provision prior to placement on the governing body's agenda for action. Having easements dedicated and shown graphically on replats is considered more useful to end users than having easements dedicated and recorded separately.

The amendments also include a section indicating a 24 month approval period and a process for requesting extensions similar to that provided in the Land Development Code.

The required information from the Land Surveyor has been modified so that it is the same as required on Certificate of Surveys and Final Plat documents.

Section 20-809/Section 11-109 Major Subdivisions
Proposed revisions specifically identify that the term ‘Major Subdivision’ is the overall process that involves two steps: Preliminary Plats and Final Plats. The content required for both preliminary and final plats has been moved from Section 812/1112 so that both process and content information is located in the same place in the Article. This is considered a usability improvement for both preparers and reviewers of subdivision plats.

The requirement to show surveyed topographic data on a Preliminary Plat has been revised to limit the survey requirement to areas where land disturbance has taken place. This revision is in response to development community concerns that the existing requirement was costly and too restrictive.

The revisions include a reference to Mailed Notice requirements for applications which had been inadvertently omitted from the adopted regulations.

The current regulations require dedication of all easements with the approval of the Preliminary Plat. Following design of public improvements, easements often need to be revised which has required additional processing and
review of a revised Preliminary Plat. The proposed amendments defer dedication of interior easements until the Final Plat stage and only require that perimeter easements for the entire subdivision be dedicated with the first Final Plat phase. The process changes for dedication of rights-of-way and easements mean that the Planning Commission will continue to approve Preliminary Plats and Final Plats will be administratively approved, but dedications will be considered by the Governing Body during the Final Plat review process. Final Plats will be placed on the Governing Body's agenda for acceptance of easements and/or rights-of-way prior to recording the Final Plats. By this time in the process, public improvement plans have been reviewed and easements are more precisely determined.

In Section (l) Final Plat Contents, a statement regarding the completion of required Public Improvements has been moved from Section 811/1111 to emphasize that improvements must be designed to the degree that reasonable cost estimates for guarantee can be provided when the Final Plat is submitted for review and prior to recording the plat. Having public improvement plans at this design level provides a level of assurance that easements and rights-of-way are correctly located and sized to serve the development and that financial assurances are provided prior to lots being sold after plat recordation. In Staff's opinion, this is a critical issue with the review of Final Plats and prior to their recordation and it is important to emphasize this requirement in the regulations.

This section also includes the majority of the requested changes from the Chamber of Commerce, specifically in sub-section (m) Final Plat – Review and Action by the Planning Director. Standards have been provided to evaluate a Final Plat's substantial compliance with the approved Preliminary Plat. Including these standards that allow for some degree of change between Preliminary and Final Plat stages, allows for minor revisions that do not require additional process time and a second review through the Planning Commission.

The section also increases the approval time period for Preliminary and Final Plats from 18 months to 24 months to align the approval period with the other development applications in the Development Code. This consistency is considered a usability improvement so that all applications have the same approval periods and processes for extensions.

**Section 20-810/ Section 11-110 Subdivision Design Standards**

This section has been modified to separate City and County requirements for ease in reviewing which standards apply. Design standards that currently are located in the Subdivision Improvements section (811/1101) have been moved to this section. Design standards that specify information to be shown on a plat have been moved to the ‘contents’ section of the respective plat section. Design standards that are currently listed within definitions have been moved to this section.

Section (e)(2)(iv) regarding the requirement for two access points to subdivisions over a certain size has been revised. The existing text conflicts with the International Fire Code. The proposed language simply references the adopted IFC requirements so as not to create an internal conflict between the codes.

After consultation with both the City and County Engineers, staff has proposed eliminating specific cross section construction requirements for streets and roads that currently are specified in Section (e)(5) and have instead provided references to standards used by the City and County Engineering departments.

Currently the regulations in Section (i) Parks, Open Space, Schools and Other Public Facilities includes a statement ‘encouraging or requiring’ the donation of 5% of the land area of a residential subdivision plus a fee of $600 per lot for each single-family dwelling lot. As written, this section has been determined to be unenforceable and vaguely worded. During the review of subdivision plats, staff works with the developer to identify potential open space areas that may be environmentally sensitive lands. The code amendments adopted in December 2010 provide the basis for retaining some of these natural features as part of the subdivision design. At this time, this method is preferable to a specific percentage dedication. The concept of park impact fees has not yet been accepted by the governing body and, as worded, the existing code language would only apply to one segment of residential lots which does not seem equitable. Therefore, staff has recommended that this text be eliminated from these regulations at this time.
The Lot Frontage requirement in Section 20-810(2) has been modified to address comments made in the LWV 10-24-11 letter. The description of Residential Collector Streets has been modified to reflect the purpose identified in the LWV correspondence - specifically that these streets provide internal connections within a neighborhood.

Section 20-811/Section 11-111 Public Improvement Standards
Throughout this section, Public Improvement Standards that apply differently to city or county subdivisions have been listed separately. As in the previous section, where Public Improvement Standards were located in the Design Standards section, they have been relocated to this section.

In this section, the term ‘waivers’ has been deleted so that ‘variances’ from Design Standards or Public Improvement Standards are the consistent mechanism used. The Planning Commission is specified as the approval body for all of these variances (except the wastewater standards in Section 813/1113 specifically required by the governing body).

The existing regulations inadvertently omitted standards for city wastewater and water utility improvements that had been stated in the previous subdivision regulations. Sections (d) and (e) have been updated to include this previous text and to provide a reference to the City's Administrative Policies regarding review of proposed improvements to the infrastructure system.

A common review comment from private utility providers has been to inform the applicant that the developer is responsible for the cost of relocation of any existing utilities. This comment has been added to section (f) to provide up-front notice to designers and owners regarding this development cost.

Section 20-812/Section 11-112 Contents of Plats
The contents of this section have been moved to Section 809/109 so that both process and content of preliminary and final plats are provided in one section of the Article. This was a revision identified by Staff to improve the ease in which users can access the information either in preparing or reviewing plats.

The section has been reserved for future use (and to eliminate the need to renumber the remaining sections).

Section 20-813/Section 11-113 Administration and Enforcement
The revisions in this section reference the changes made in previous sections regarding process revisions. A reference is also provided in the city building permit section to the Nonconforming Lots provisions of the Development Code to clarify when property is eligible for development.

Section 20-814/Section 11-114 Building Setbacks, Enforcement, Exceptions
No substantive changes.

Section 20-815/Section 11-115 Interpretations, Rules of Construction and Definitions
The introductory portion of this section has been updated to include text similar to Article 17 of the Land Development Code regarding permissive and mandatory terms. A reference has also been provided to the Floodplain Management articles in the Development Code and the County Zoning Regulations so that all floodplain terms deleted from this Article are still defined elsewhere in the respective codes. Eliminating duplication is helpful so that when updates are made in the future multiple articles do not need to be revised and future inconsistencies can be avoided.

Terms not used in the Article have been deleted unless those definitions were considered helpful to the general discussion of the subdivision process. Where regulatory language was found in definitions, it has been moved to the appropriate section of the regulations. In several places, alternate definitions have been provided for consideration if the given definition is not consistent with the definition found in either the County Zoning Regulations or the Development Code. Several definitions have been identified for future amendments to those documents for consistency.
The definition of Residential Collector Street has been modified to reflect their purpose to provide internal connections within neighborhoods in response to the LWV 10-24-11 letter.

Conclusion
Attached is the draft language in the code sections. Deleted text is shown as strikethrough and new or relocated text is shown in green font. Bold green or blue text typically indicates new text rather than relocated text. Due to the multiple drafts of this Article, some previously suggested text may be shown as green strikethrough font. The text proposed for Section 809/1109 is shown in red text. Throughout the document, staff has changed defined terms to Blue Font even if found in a new text section.

An updated edition [November 22, 2011] was emailed to the various stakeholders that have been involved in the discussion of revisions on November 23, 2011. The version presented with this staff report is dated December 12, 2011 and differs from the 11/22/11 version due to minor housekeeping and formatting revisions.

Staff Recommendation
Staff recommends that the Planning Commission consider the proposed revisions and forward a recommendation for approval of the proposed amendments TA-3-3-10 [December 12, 2011 Edition] to Chapter 20, Article 8 of the Land Development Code to the City Commission and Chapter 11, Article 1 of the County Code to the County Commission for consideration and action.
December 12, 2011 Draft
SUBDIVISION REGULATIONS
for
Lawrence
and
the Unincorporated Areas
of Douglas County, KS

Regulations Governing Land Divisions
in the City of Lawrence and
the Unincorporated Areas of Douglas County,
Kansas

Chapter 20, Article 8 of the Lawrence Development Code
AND
Chapter 11, Article 1 of the Douglas County Code

December 19, 2006 Edition
Amended: 09/11/07; 12/04/07; 03/25/08; 09/10/08
Amended: January 6, 2009
Approval and Amendment Dates:

**Original December 19, 2006 Edition**

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**Amended September 11, 2007:**

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Approved by the Lawrence City Commission on September 11, 2007

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Approved by the Board of Douglas County Commissioners on November 14, 2007
Approved by the Lawrence City Commission on November 20, 2007 and December 4, 2007

**Amended March 25, 2008:**

Joint Ordinance No. 8255/Resolution 08-14, published April 25, 2008
Approved by the Board of Douglas County Commissioners on November 14, 2007
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**Amended September 10, 2008:**

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**Amended January 6, 2009:**

Joint Ordinance No. 8364/Resolution 09-06, published February 28, 2009
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Approved by the Lawrence City Commission on February 10, 2009.

**Amended December 8, 2010**

Approved by the Board of Douglas County Commissioners on December 8, 2010.
Approved by the Lawrence City Commission on December 7, 2010.

Official Copy as Adopted by Ordinance No. 8364 8317 and Resolution 09-06 10-30.

February 28, 2009 December 28, 2010
/s/ Frank Reeb, Jonathan Douglass, City Clerk date of publication

February 28, 2009 December 28, 2010
/s/ Jameson D. Shew, County Clerk date of publication
Article 8. Subdivision Design and Improvements

Contents of Article

Article 8. Subdivision Design and Improvements

20-801 General
   (a) Purpose and Intent
   (b) Jurisdiction
   (c) Applicability
   (d) Exemptions
   (e) Vested Rights
   (f) Combination of Unplatted Lands in Unincorporated Douglas County

20-802 General Review and Approval Procedures
   (a) Authority to File Applications
   (b) Form of Application
   (c) Pre-application Meetings
   (d) Notices
   (e) Application Processing Cycles
   (f) Application Review and Recording fees
   (g) Application Completeness, Accuracy and Sufficiency
   (h) Applications Containing Technical Deficiencies

20-803 Property Divisions in Service Area 1, Lawrence Urban Growth Area
   (a) Prerequisite to Development
   (b) Procedure Required

20-804 Cluster Developments in the Urban Growth Areas
   (a) Purpose
   (b) Applicability
   (c) Immediate Development Acreage and Future Development Acreage
   (d) Restrictive Covenant
   (e) Notice to Nearby Property Owners
   (f) Cluster Developments – After Annexation
   (g) Application
   (h) Administrative Review and Consideration Procedures
Article 8    Subdivision Design and Improvements

Contents of Article

20-805     Large Parcel Property Divisions in Urban Growth Areas (RESERVED) 29

(a) Purpose

(b) Applicability

(c) Immediate Development Area and Future Development Area

(d) Restrictive Covenants

(e) Notice to Nearby Property Owners

(f) Large Parcel Property Divisions After Annexation

(g) Application

(h) Administrative Review and Consideration Procedures

(i) Developable Acreage and Development of Future Development Area

20-806     Property Divisions in the Rural Area (Outside the UGAs) ..........36

(a) Purpose

(b) Definitions

(c) Applicability

(d) Residential Development Parcel (RDP)

(e) Application

20-807     Certificate of Survey, Administrative Review Procedures ..........41

(a) Purpose

(b) Authority

(c) Applicability

(d) Application

(e) Requirements and Material to be Included

(f) Criteria for Review

(g) Review and Action by the Planning Director

(h) Amending an Approved Certificate of Survey

(i) Appeals Process for Sections 20-804, 20-805 and 20-806

(j) Certificate of Survey Expiration

20-808     Minor Subdivisions/ Replats .........................................................48

(a) Purpose

(b) Authority

(c) Applicability

(d) Criteria for Review
Article 8    Subdivision Design and Improvements

Contents of Article

20-809    Major Residential and Non-Residential Subdivisions

20-810    Subdivision Design Standards
(j) Land In Floodplain Overlay Districts ................................................................. 86
(k) Resource Preservation – City of Lawrence ......................................................... 86
(l) Resource Conservation – Unincorporated Area of the County ......................... 87
(m) Protection of Environmentally Sensitive Lands ............................................... 87
(n) Soils and Soil Testing – City of Lawrence ......................................................... 89
(o) Soils and Soil Testing – Unincorporated Area of the County ......................... 89

20-811 Public Improvements Standards ................................................................. 90
(a) General Public Improvement (-Construction ) Standards .................................. 90
(b) Streets or Roads .................................................................................................. 91
(c) Sidewalks and Pedestrian Ways ......................................................................... 92
(d) Wastewater Disposal Systems .......................................................................... 94
(e) Water Supply ...................................................................................................... 95
(f) Telephone, Cable Television Electrical Lines ................................................... 96
(g) Street Trees ........................................................................................................ 97
(h) Completion of Public Improvements ............................................................... 103
(i) Escrow Deposit ................................................................................................. 104
(j) Irrevocable Letter of Credit ............................................................................... 104
(k) Lot Pinning .......................................................................................................... 105

20-812 Contents of Plats (Reserved) ...................................................................... 106
(a) Preliminary Plat .................................................................................................. 106
(b) Final Plat ............................................................................................................ 111

20-813 Administration and Enforcement .............................................................. 115
(a) Planning Department Director Powers and Duties .......................................... 115
(b) Planning Commission Powers and Duties ......................................................... 115
(c) Dedications or Vacations .................................................................................. 115
(d) Building Permits in the Unincorporated Area of Douglas County .................. 115
(e) Building Permits in the City of Lawrence ......................................................... 116
(f) Appeals .............................................................................................................. 117
(g) Variances .......................................................................................................... 118
(h) Design Variances for Planned Development .................................................... 118
(i) Enforcement and Penalties ............................................................................. 118
(j) Violations ........................................................................................................... 118
(k) Penalties; Remedies ......................................................................................... 119
20-814 Building Setbacks, Enforcement, Exceptions .................................121
(a) Building or Setback Lines On Major Streets or Highways .........................121
(b) Exceptions ........................................................................................................121
(c) Appeal – Setback .............................................................................................121
(d) Enforcement .....................................................................................................122
(e) Interpretation ...................................................................................................122

20-815 Interpretations, Rules of Construction and Definitions .....................123
(a) Interpretation and Rules of Construction .......................................................123
(b) Definitions ........................................................................................................123
20-801 General

(a) Purpose and Intent

(1) The purpose of the Subdivision Regulations of this Article is to ensure that the division of land, which, in many instances, is an initial step in urbanization, will serve the public interest and general welfare. Since the allocation and arrangement of Parcels of land for both private uses and public uses helps to influence the health, safety, economy, livability, and amenities of an area, these regulations are intended to:

   (i) Provide for the harmonious and orderly development of land within the City and the Unincorporated Area of Douglas County by making provisions for adequate open space, continuity of the transportation network, recreation areas, drainage, utilities and related Easements, light and air, and other public needs;

   (ii) Contribute to conditions conducive to health, safety, aesthetics, convenience, prosperity, and efficiency; and

   (iii) Provide for the conservation and protection of human and natural resources.

(2) The Subdivision Regulations of this Article are designed, intended and should be administered to:

   (i) Ensure that in the City and in the Unincorporated Area of Douglas County is in accordance with the Comprehensive Plan; any adopted watershed/sub-basin plans, sector or Neighborhood Plans covering the subject Subdivision; the applicable Zoning Regulations enacted to implement those plans; and the Lawrence/Douglas County MPO Transportation Plan;

   (ii) Provide for the conservation of existing neighborhoods and facilitate the development of new neighborhoods;

   (iii) Prevent the development of substandard Subdivisions and blighted areas that will be a detriment to the community;

   (iv) Coordinate the development of each Parcel of land with the existing community and facilitate the proper of adjoining land;

   (v) Provide adequate and accurate records of all land Divisions;

   (vi) Ensure that the cost of Improvements, which benefit primarily the Tract of land being developed, be borne primarily by the Owners or Developers of the subject tract, and that the cost of Improvements that provide benefits to the subject Tract and the community as a whole be shared by the Developer and the community;

   (vii) Ensure that Subdivisions are designed and developed in a manner that is consistent with all applicable flood protection and storm water
management regulations and other applicable land use and development regulations of Lawrence and Douglas County;

(viii) Provide for the efficient arrangement and orderly location of Street/Roads;

(ix) Encourage the reduction of vehicular congestion and support multi-modal transportation design standards in a manner that supports multi-modal transportation;

(x) Provide for the reservation or Dedication of lands for open space and other community facilities;

(xi) Require the provisions of off-site and On-Site Public Improvements that are necessary to serve land being developed;

(xii) Provide for any other services, facilities and Improvements deemed necessary to serve land being developed; and

(xiii) Establish Building Envelope lines.

(b) Jurisdiction

(1) The Subdivision Regulations of this Article shall apply to all lands within the City of Lawrence and the Unincorporated Area of Douglas County.

(2) In some cases, different standards are established for lands within the City, the Urban Growth Areas and the Rural Area. Unless otherwise expressly stated, however, all regulations and standards of this Article shall apply with equal force to land located in incorporated and Unincorporated Areas.

(c) Applicability

(1) Unless expressly addressed as an exemption in Section 20-801(d) below, no Lot, Tract or Parcel of land shall be divided into two or more parts for the purpose of sale, transfer or Development, whether immediate or future, except through the procedures and in accordance with the standards set forth in this Article.

(2) For property within the incorporated city limits of Lawrence, no building permit shall be issued unless the property is Platted as a Lot of Record.

(3) If subdivision or Platting of a property is required within the City of Lawrence in order to receive a building permit prior to development, the Subdivider shall Preliminarily Plat all of their contiguously owned lands that are not Platted.
(d) **Exemptions**

(1) The purpose of this sub-section is to list specifically those divisions and transfers of land that are entirely exempt from regulation under this Article. This sub-section shall be strictly construed, so that any transaction failing in any way to meet one, or more, of the requirements for exemption shall be subject to the full effect of this Article.

(2) The following divisions and transfers of land are exempt from the requirement that divisions occur only in accordance with the standards and procedures set forth in this Article and may be accomplished by deed or other instrument of transfer without any reference to this Article:

(i) A division created exclusively for Agricultural Purposes, when that division does not involve the creation of any new public Streets, public Roads, or public Easements or residential development;

(ii) A division occurring through the sale or transfer of any Lot that has been legally Platted in accordance with Subdivision Regulations in effect at the time of the Platting;

(iii) A division used exclusively for cemetery purposes and accessory uses associated therewith;

(iv) A division occurring through the transfer of land for use as a Right-of-Way for widening a Road or railroad or as an Easement for public purposes or public utilities, when no new Street/Road or Easement of Access is involved;

(v) A division of unplatted land in the Unincorporated Area of the County (commonly utilized with Section 20-801(f)) for the purpose of combination with an existing Parcel or tract so long as the remaining portion of the unplatted land retains the minimum dimensional requirements for a buildable Residential Development Parcel Certificate of Survey;

(vi) A division of 5 acres or greater within the Unincorporated Area of the County that occurred on or before June 1, 2005 and that was not lawfully created through the Exemptions section of the Subdivision Regulations in effect at the time of the division, provided said division meets the minimum frontage requirements in the County's Access Management Standards or provided said division has a minimum frontage of 250’ on a Local or Minor Collector classified Road;

(vii) A correction of a description in a prior conveyance provided that the correcting instrument (commonly called a Correction Survey used to make a Boundary Line Adjustment between two existing parcels) contains a reference to the original instrument of conveyance by date, book and page and other description. Within a reasonable time after receiving a correction instrument, the Register of Deeds shall deliver a copy of the correction instrument to the Planning Department Director; or
(viii) Within the City of Lawrence, the division of land to allow for the sale of individual attached or detached residential Dwellings in a townhouse development; provided that, the following conditions are met:

a. The land has been developed with and is occupied by an attached or detached Dwelling;

b. The land being divided or transferred under this exemption is covered by a recorded declaration of covenants subjecting the land and Improvements thereon to procedures and conditions regulating the manner in which Improvements may be expanded, reconstructed and maintained;

c. Prior to recording of the first division for a townhouse development, a development plan, or similar document, shall be recorded at the Register of Deeds showing at a minimum:

1. The entire townhouse development,

2. A legal description of the boundaries of the entire development,

3. Any Tracts for common ownership, maintenance or use, ponds or drainage areas, and

4. The intended Tracts, Parcels or general building locations (along with building numbers or proposed addresses) for division into townhouse units.

d. If the declaration allows additional land to be submitted to the townhouse development, the location and description of the additional land shall also be shown.

(ix) Within the Unincorporated Area of the County, a division (commonly called a Homestead Exemption Survey) created to divide off a residential building that existed On-Site on December 31, 2006, provided that the following conditions are met:

a. The minimum size of the new Parcel upon which the residential building is located meets both the County’s Sanitary Code requirements for access to a Potable Water supply and the Height, Area and Bulk Requirements in Article 18 of the Douglas County Zoning Regulations;

b. The entire On-Site Sewage Management System is located entirely on the new Parcel upon which the residential building it serves is located and is in compliance with the County’s Sanitary Code requirements; and,
c. The new Parcel on which the residential building is located meets the minimum frontage and entrance spacing requirements established in the County’s Access Management Standards.

Such legally created Parcel of land on which the residential building is located shall not be subject to further review under this Article, unless or until this Parcel is further divided. The remaining Parcel without a residential building shall be subject to the County Zoning Regulations and shall not be deemed created in conformance with the Subdivision Regulations is not eligible for a building permit until Subdivided in accordance with this Article.

(e) Vested Rights

(1) A division of land created in conformance with this Article, or created in conformance with the Exemption section of the previously adopted Subdivision Regulations that were in effect prior to December 20, 2006, and said division of land was filed and recorded as a plat of survey, deed, or affidavit of equitable interest identifying the division as a separate Tract of real estate at the Register of Deeds office:

   (i) On or before June 1, 2005; or

   (ii) After June 1, 2005, and as of December 31, 2006, provided a division of land made after June 1, 2005, met the 10 acre requirement and other requirements for a residential building permit pursuant to Douglas County Resolution No. 05-6-5 and resolutions extending such Resolution, shall remain lawfully existing, retaining established rights to the issuance of a building permit, subject to additional regulatory authority of the Governing Body.

Such legally created Parcel shall not be subject to further review under this Article; unless or until it is further divided.

(2) Lot of Record or Non-Conforming Lots/Parcels

   (i) In the City of Lawrence, a Lot of Record or Parcel created before the Effective Date of this Article in the City of Lawrence that has been maintained in individual ownership, may be used for residential purposes for a single-family home detached Dwelling or for another use that is allowed in the City’s UR (Urban Reserve) District without further review under this Article, until such Lot of Record or Parcel is further Subdivided.

   (ii) In the City of Lawrence, Nonconforming Lots/Parcels that meet the requirements of Section 20-1504 of the Land Development Code may be used in accordance with Article 15 without further review under this Article, until such Lot/Parcel is further Subdivided.
(iii) In the City of Lawrence, properties which include partial Lot descriptions or multiple Lot descriptions which were created prior to December 19, 2006, are not subject to review under this Article if the property meets the standards of either the zoning district that it was governed by when the property was created or the current zoning district in which it is located unless the development pattern of the property is altered.

(iv) For property in the Unincorporated Areas of Douglas County, a Lot of Record or a Parcel lawfully created within the A (Agricultural) District, A-1 (Suburban-Home Residential) District, or R-1 (Single-Family Residential) District in the Unincorporated Area of Douglas County on or before December 31, 2006, that has been maintained in individual ownership, may be used for residential purposes for a single-family home or for another use allowed within the A (Agricultural) District the property is located in, without further review under this Article, until such Lot of Record or Parcel is further Subdivided.

(3) For property in the Unincorporated Areas of Douglas County, a Parcel created to divide off an existing residential building and grounds from a larger Parcel pursuant to Section 20-801(d)(2)(ix) through the recording of a Homestead Exemption Survey, when the principal building on the Parcel is for single-family residential purposes, shall have no further review under this Article until such Parcel is further subdivided only when:

(i) The residential building existed on site on or before December 31, 2006;

(ii) It is served by a Potable Water source located on the Parcel that includes the existing residential building improvement;

(iii) The Parcel conforms with the County's Sanitary Code; and,

(iv) That Parcel is zoned either A (Agricultural), A-1 (Suburban Home Residential), VC (Valley Channel), or R-1 (Single-Family Residential).

(4) Upon the recording of a Final Plat, development rights in land covered by that Plat shall vest in accordance with K.S.A. 12-764. This vesting shall be effective only so long as the same general category of residential uses is continued; any significant change of use shall subject the property to additional review and the applicability of additional regulations, which may affect some rights that are vested as to the particular use and the particular pattern of development. The development rights for a single-family residential Subdivision shall expire in accordance with K.S.A. 12-764(a).
(f) **Combination of Unplatted Lands in Unincorporated Douglas County**

(1) A vested Parcel may be combined with another unplatted Parcel and retain the right to a building permit for one principal building for residential purposes on the newly created Land Combination provided:

(i) A survey of the Land Combination is filed at the Register of Deeds; and

(ii) All land covered by the survey is owned by the same person or persons; and

(iii) The Owner requests in writing that the County Clerk combines the constituent Parcels for tax parcel purposes.

(2) A Land Combination does not increase the number of building permits a Parcel of land has a vested right to receive.
20-802 General Review and Approval Procedures

(a) Authority to File Applications

Unless otherwise expressly stated, applications for review and approval under this Article may be initiated by (1) all the Owners of the property that is the subject of the application; or (2) the Owners' authorized Agent.

(b) Form of Application

(1) Applications required under these Subdivision Regulations shall be submitted in a form and in the numbers of copies required by the official responsible for accepting the application—Planning Director. All application materials must be submitted in both print and electronic format.

(2) Officials responsible for accepting applications—The Planning Director shall develop checklists of application submittal requirements and make those checklists available to the public. Application forms and checklists of required submittal information shall be available in the office of the official responsible for accepting the application.

(3) The application also shall contain all materials required by:
  (i) Section 20-807(d) & (e) for Certificate of Survey applications;
  (ii) Section 20-808(e) for Minor Subdivision/Replat applications;
  (iii) Section 20-812(a)–20-809(f) for Preliminary Plat applications; or
  (iv) Section 20-812(b) 20-809(l) for Final Plat applications, whichever is applicable.

(c) Pre-application Meetings

All applicants submitting applications for approvals required by this Article must attend a pre-application meeting with Planning Staff. Pre-application meetings are also required whenever the provisions of this Article expressly state that they are required. Pre-application meetings shall be scheduled by the applicant to allow adequate time to review and respond to issues raised at the pre-application meeting. The meeting shall occur at least 7 working days before submitting an application.

(1) All other Applicants are encouraged to arrange a pre-application meeting with Planning Staff. The Planning Director will provide assistance to Applicants and ensure that appropriate Planning Staff members are involved in pre-application meetings.
(d) **Notices**

The notice provisions of this section apply to the **Major Subdivision** process except as otherwise expressly stated.

(1) **Content**

(i) **Newspaper and Mailed Notice**

All newspaper and Mailed notice shall:

- a. Indicate the date, time and place of the public hearing or date of action that is the subject of the notice;
- b. Describe the property involved in the application by street or Road address or by general description;
- c. Describe the nature, scope and purpose of the application or proposal; and
- d. Indicate where additional information on the matter can be obtained.

(ii) **Newspaper Notice**

When the provisions of these **Subdivision Regulations** require that “Newspaper Notice” be provided, the **Planning Director** is responsible for ensuring notice is published in the official newspaper of the City of Lawrence or Douglas County. The notices shall appear in the newspaper at least 20 days before the date of the public hearing.

(iii) **Mailed Notice**

When the provisions of these **Subdivision Regulations** require that “Mailed Notice” be provided:

- **Owner Notice; Radius**

  The official responsible for accepting the application shall mail notice to the record Owner of the subject property and all Owners of property located within 200 feet of the subject property if in the City of Lawrence and within 1,000 feet of the subject property if located in the **Unincorporated Areas** of Douglas County. If the subject property Abuts a City limits, the area of notification shall be extended to at least 200 feet inside the City or 1,000 feet into the **Unincorporated Area**.

- **Notice to Registered Neighborhood Associations**

  The official responsible for accepting the application shall mail or e-mail notice to any Registered Neighborhood Associations whose boundaries include or are contiguous to the subject property.

(iii) **Ownership Information**

The applicant is responsible for providing certified ownership information. Current ownership information shall be obtained from the Douglas County Clerk. Ownership information will be considered current if, at the time of submission, it is no more than 30 days old.
(iv) **Timing of Notice**

Required notices shall be deposited in the U.S. mail at least 20 days before the public hearing, meeting, or date of action that is the subject of the notice. When required notices have been properly addressed and deposited in the mail, failure of a party to receive such notice will not be grounds to invalidate any action taken.

(4) **Administrative Processes**

(i) **Minor Subdivision/Replats and Final Plats**

Subdivision or consolidation of property through the Minor Subdivision/Replat and Final Plat processes are administrative processes and do not require individual newspaper or mailed notice.

(ii) **Certificates of Survey**

Division of property through the Certificate of Survey process is an administrative process.

   a. Mailed notice requirements for divisions within the Urban Growth Areas are provided in Section 20-804.

   b. Mailed notice is not required for divisions located outside of the Urban Growth Areas.

   c. The notice requirements for appeals to Certificates of Survey determinations are provided in Section 20-807(i).

(e) **Application Processing Cycles**

Officials responsible for accepting applications may, after consulting with review and decision-making bodies, publish processing cycles for applications. Processing cycles may establish:

1. The official date upon which a completed application was submitted;
2. Deadlines before consideration;
3. Dates of regular meetings;
4. The scheduling of Staff staff reviews and Staff staff reports on complete applications; and,
5. Any required time frames for action by review and decision-making bodies.
(f) **Application Review and Recording fees**

Applications shall be accompanied by the review and recording fee amounts that have been established by the applicable Governing Body. Fees are not required for applications initiated by review or decision-making bodies. Application review fees are nonrefundable. Additional recording fees are required prior to recording approved documents at the Register of Deeds and will be collected at that time.

(g) **Application Completeness, Accuracy and Sufficiency**

1. An application will be considered complete and ready for processing only if it is: submitted in the required number and form; includes all required information; and, is accompanied by the required fees.

2. Within 7–5 working days of application filing, the Planning Director shall determine whether the application includes all information required by these Subdivision Regulations. If an application does not include all of the required information, it will be deemed incomplete. If an application includes all of the required information, it will be deemed complete. Written notice of the incompleteness and the specific information lacking shall be provided to the applicant or the applicant’s Agent within 2 working days of a determination.

3. No processing of incomplete applications shall occur and incomplete applications will be removed from the processing cycle. When the deficiencies are corrected, the application will be placed in the next processing cycle. If the deficiencies are not corrected by the applicant within 60 days, the application will be considered withdrawn. No refund of a review fee shall be made for applications that are withdrawn.

4. Applications deemed complete will be considered to be in the processing cycle and will be reviewed by Planning Staff and other review and decision-making bodies in accordance with the procedures of these Subdivision Regulations.

(h) **Applications Containing Technical Deficiencies**

1. The Planning Director may require that applications be revised before being placed on the agenda of the Planning Commission or Governing Body, if the Planning Director determines that:

   (i) The application contains one or more significant inaccuracies or omissions that hinder timely or competent evaluation of compliance with this Article;

   (ii) The application contains multiple minor inaccuracies or omissions that hinder timely or competent evaluation of compliance with this Article;

   (iii) The application cannot be approved without a Variance or some other change or modification that the decision-making body for that application does not have the authority to grant or approve. This determination shall be made in written form to thea. If the determination is based on this sub-section (iii), it shall include an explanation of what Variance, change or modification would be required to allow approval of the application.
Article 8  Subdivision Design and Improvements
Section 20-802 General Review and Approval Procedures

(2) Applications that contain the aforementioned types of inaccuracies or that substantially fail to comply with this Article shall be revised before they will be placed on an agenda of the Planning Commission or Governing Body.

(3) Action or inaction by the Planning Director under this section may be appealed to the appropriate Governing Body in accordance with Section 20-807(h) or Section 20-813(ef), whichever is applicable.

(i) **Applicability**

Unless expressly exempted under Section 20-801(d), no Subdivision or Rural Residential Development Parcel may be created and no Certificate of Survey may be recorded with the Register of Deeds until the division has been approved in accordance with the applicable Review and Approval Procedures of this Article.
20-803 Property Divisions in Service Area 1, Lawrence Urban Growth Area

(a) **Prerequisite to Development**

No division of land in Service Area 1 of the Lawrence Urban Growth Area shall be approved until the land proposed for division has been annexed into the City.

(b) **Procedure Required**

Upon annexation of land originally located in Service Area 1 into the City of Lawrence, a proposed division of platted or unplatted land shall be processed and considered in accordance with the Minor Subdivision/Replat or Major Subdivision provisions of this Article, whichever is applicable.
20-804 Cluster Developments in the Urban Growth Areas

(a) Purpose

The purpose of this Section is to allow for an alternative administrative approval procedure to Large Parcel Property Divisions in the Urban Growth Area for rural residential development. The purpose of this Section is to allow an administrative approval procedure for divisions of land to accommodate rural residential development on land Parcels that are located within the Urban Growth Areas of cities in Douglas County. The procedure contemplates that forethought and design considerations will be employed to identify the ultimate future Urban Density residential development of the land Parcel prior to any division occurring, and that based on these considerations, 3 acre or larger Residential Development Parcels may be created when they allow for future divisions through a ‘Build Out Plan’ of the Residential Development Parcels, at some future time, to create Urban Blocks and connective street networks in accordance with the Design Standards in the Subdivision Regulations for the city associated with the Urban Growth Area. These regulations will result in Residential Development Parcels that retain their rural character for the immediate future, but will also allow for more efficient transition to Urban Density development as subsequent circumstances dictate. The clustering of development Parcels within the Urban Growth Areas on Parcels that are contain at least 20 acres but less than 40 acres is intended to mitigate the strain on Infrastructure and public services and to anticipate future development patterns for the remainder of the property after annexation.

(b) Applicability

(1) A division of a Parcel of land that is less than 40 acres in area, but contains at least 20 acres in area, and that is located in Service Areas 2-4, of Lawrence’s Urban Growth Area or in another City’s Urban Growth Area, may be approved according to the Cluster Development provisions of this Section.

(i) For purposes of determining compliance with the 20 acre minimum Parcel area, an entire half of a quarter-quarter section (e.g. West ½ of the Southeast ¼ of the Southeast ¼) shall be deemed to be a 20 acre Parcel.

(ii) In calculating the size of a Parcel, the Parcel size shall be deemed to include ½ of the adjoining Road Right(s)-of-Way if this inclusion is necessary for the Parcel to conform to the applicable minimum Parcel size.

(c) Immediate Development Acreage and Future Development Acreage

Lands divided pursuant to this Section shall be developed as a Cluster Development and shall contain be identified as either the an Immediate Development Area and a or the Future Development Area in accordance with the following requirements.
(1) Immediate Development Area.

The Immediate Development Area of a Cluster Development shall not exceed 60% of the total acreage of the proposed development included in the Certificate of Survey. The Immediate Development Area may further be divided into Residential Development Parcels (RDPs) subject to the requirements of this Section. Residential Development Parcels and the cross access Easements serving these Parcels shall be located only in the Immediate Development Area. Individual Residential Development Parcels shall only take access from the a Cross Access Easement and shall be laid out in a manner that minimizes adverse impacts to the Future Development Area. Development of the Immediate Development Area, to the greatest extent practicable, shall conform to the following requirements:

(i) Minimum Parcel Acreage and dimensional standards. Residential Development Parcels shall be laid-out and designed to comply with all applicable zoning district regulations listed in the County Zoning Regulations. The minimum Residential Development Parcel size shall be 3 acres.

(ii) Location of Residential Development Parcels. Within the Cluster Development, each Residential Development Parcel shall be designed and developed in accordance with the requirements in this sub-section:

   a. Clustered to take access from Cross Access Easements to minimize Access points to the adjacent public Right(s)-of-Way.

      1. Cross Access Easements shall be established by a separate legal instrument, acceptable to the legal counsel of the nearby city and the easement shall be filed recorded at the Register of Deeds as a Restrictive Covenant of the Cluster Development that prohibits development of the Future Development Area until, upon annexation, the Cross Access Easement is dedicated to the annexing city as public Road Right-of-Way.

      2. The Cross Access Easements shall be written so that, upon annexation by a city, the Cross Access Easement shall be in acceptable form and dimensions to be dedicated to the City as public Road Right(s)-of-Way, to allow for construction of Streets within the Cross Access Easements to meet the then current city Street standards.

   b. Planned and laid out to allow for future subdivision of the Residential Development Parcels into Platted Lots at an Urban Density commensurate with the zoning and subdivision regulations of the annexing city.

(iii) Utility – Water. All Residential Development Parcels shall obtain Publicly Treated Water delivered through a water meter.
(iv) **Access to Future Development Area.**
All **Residential Development Parcels** shall have direct physical access to the Future Development Area, either by being contiguous thereto or by a dedicated pedestrian easement, as set forth identified in Section 20-810(f)(4).

(v) **(iv)** Utility - Wastewater.
All **Residential Development Parcels** shall have an **On-Site Sewage Management System** approved by the Director of Lawrence/Douglas County Health Department or a connection to a wastewater disposal system approved by the Kansas Department of Health and Environment.

(vi) **(v)** County Health Code Restriction in Floodplain.
**On-Site Sewage Management Systems** shall be located outside the FEMA designated regulatory Floodplain.

(vii) **(vi)** Building Envelopes.
The Immediate Development Area shall not contain any **Environmentally Sensitive Lands** identified as worthy for Resource Preservation in Section 20-810(j)(k). The buildable area for each **Residential Development Parcel** within the Immediate Development Area shall be defined by **Building Envelopes** and **structure placement is governed by the setbacks established in the Douglas County Zoning Regulations.**

  a. **Residential Development Parcels** shall be planned and arranged to allow for the future subdivision of these **Parcels** into **Urban Streets and Blocks** that conform to the development regulations of the city associated with the **Urban Growth Area.**

  b. The buildable area for each **Residential Development Parcel** shall be defined by **Building Envelopes** which accommodate the future **Block layout** and exclude lands which have been identified for protection as **Environmentally Sensitive Lands** areas.

  c. **The Building Envelopes for each RDP shall be shown on the Certificate of Survey.**
(viii) (vii) Access.

a. When the Cluster Development is located within the Lawrence Urban Growth Area or in the Urban Growth Area of another city, the development shall have direct Access to a Road that meets or exceeds the County’s Rock Road Standard.

b. When established as part of a Cluster Development in Lawrence's UGA, the service drive constructed within the Cross Access Easement shall be constructed, at a minimum, to meet the County’s Rock Road Standard, and the minimum width of traveled-way plus shoulder shall be 20 feet.

1. As an alternative, when a Cross Access Easement provides access to only one or two RDPs in the Immediate Development Area, a waiver from this construction standard may be permitted if approved by the County Engineer and when provisions for future improvement to Road standards are included in the Restrictive Covenants.

c. Only one Access point shall be allowed for the entire development unless a separate Access point is necessary to allow Access to the Future Development Area to prevent intrusion or damage to the resources Environmentally Sensitive Lands being conserved and protected.

(ix) (viii) Steep Slopes.

The Building Envelopes of Residential Development Parcels shall not contain any slopes greater than 15%.

(x) (ix) Minimum Road Right(s)-of-Way.

a. If the Cluster Development is located adjacent to public Road Right-of-Way that does not meet the minimum width standards of Section 20-810(d)(4)(e)(5), approval of the application for division pursuant to this Section 20-804 shall be subject to a condition that the Subdivider dedicate, by separate instrument to the County, ½ the additional land necessary to bring the Road(s) adjoining the Cluster Development to the required Right-of-Way standard based on the Road’s classification established in the County's Access Management Standards.

b. All necessary Dedications shall be by separate instrument, satisfactory to the County Counselor, and recorded with the Register of Deeds.

c. No final action may be taken on the Certificate of Survey until this additional Road Right-of-Way has been dedicated.
(xi) **(x)** Minimum Frontage and Entrance Spacing Requirements.

a. The Cluster Development must meet the minimum Frontage and Entrance Spacing Requirements established in the County’s Access Management Standards. The Frontage and Entrance Spacing Requirements are based on the classification of the Road upon which the Cross Access Easement is proposed to take Access.

b. **Minimum RDP Frontage on the Cross Access Easement is not subject to the Frontage requirements in Section 12-318 of the Douglas County Zoning Regulations.**

(xii) **(xi)** Drainage Easements.

If any portion of the Residential Development Parcel lies in a FEMA designated regulatory Floodplain, or if drainage Channels or Swales exist on the Residential Development Parcel that carry runoff from adjacent property or public Street/Roads, the FEMA designated regulatory Floodplain or drainage Channel or Swale shall be protected by grant of an Easement, or other similar device, evidenced by separate legal instrument, as may be required by the Planning Director and acceptable to the County Counselor.

(xiii) **(xii)** Restrictive Covenants.

Property in the Immediate Development Area shall be subject to a Restrictive Covenant as set forth in sub-section Section 20-804(d).

(2) Future Development Area.

The Future Development Area shall meet the requirements set forth in this sub-section:

(i) Minimum Requirement.

A minimum of 40% of the total Cluster Development shall be designated as Future Development Area. **To the extent practical, the Future Development Area should be one contiguous area of land for future planning purposes.**

(ii) **(3)** Conservation of Natural Resources.

**No matter where located within the boundaries of the Certificate of Survey,** land that is or contains the resources Environmentally Sensitive Lands identified in Section 20-810(j)(k), to the greatest extent reasonably practicable, shall be conserved and protected through the filing recording with the Register of Deeds of either a Temporary Set Aside Agreement or a permanent Conservation Easement.
a. **(i) Temporary Set Aside Agreement.**
   a. A **Temporary Set Aside Agreement** shall prohibit development, while the lands are located within the **Urban Growth Area** that would significantly impair or interfere with the environmental, geographical or historical characteristics of the identified natural resources.
   b. The **Temporary Set Aside Agreement** shall be provided to the City and County by separate legal instrument, satisfactory to the County Counselor and City Manager or other appropriate city official.
   c. The City will have regulatory authority over the **Temporary Set Aside Agreement** only after the property has been annexed into the City.
   d. Within 2 years of the date of annexation into the City, the **Temporary Set Aside Agreement** will expire unless further action is taken by either the City or the property **Owner** to secure its continuance.

b. **(ii) Conservation Easement.**
   a. A permanent **Conservation Easement** may be **developed** established by an **Owner** that desires a more permanent and perpetual method of protecting and conserving natural resources. The areas of land that a permanent **Conservation Easement** may cover include those lands identified in Section 20-810(j)–(k), or similar sensitive lands.
   b. A permanent **Conservation Easement** shall be **developed** established to retain the environmental, geographical or historical characteristics of the land.
   c. It shall be conveyed to a public or nonprofit organization that protects and preserves lands of ecological, scenic, historic, agricultural, or recreational significance.
   d. A permanent **Conservation Easement** created for protecting natural resources may or may not be sufficient to meet the requirements for re-evaluation by the county for land appraisal and taxation purposes.

(iii) **(4) Restriction on Subsequent Divisions.**
   Any further division for development purpose is prohibited until annexation or until an amended **Certificate of Survey** is approved and filed **recorded** with the Register of Deeds.

(iv) **(5) Restrictive Covenant.**
   The **Immediate and Future Development Areas** shall be subject to a ** Restrictive Covenant** as set forth in sub-section **Section** 20-804(d).
(d) **Restrictive Covenant**

The Immediate Development Area and Future Development Area each shall be restricted by a separate instrument, satisfactory to the County Counselor, which shall:

1. Incorporate by reference and have attached as an exhibit the **Build Out Plan**;
2. Require future division of the **Residential Development Parcels** to conform to the **Build Out Plan** or the **Subdivision Regulations in place at that time**, subject to the requirements of this Article;
3. For the Immediate Development Area, limit each **Residential Development Parcel** to one principal **Dwelling** and accessory buildings until annexation into a city and municipal water and **Sanitary Sewer** service are extended to the property;
4. For the Future Development Area, any further division for development purposes is prohibited until annexation or until an amended **Certificate of Survey** is approved and filed **recorded** with the Register of Deeds;
5. Restrict the location of structures within the Immediate Development Area to **Building Envelopes** that have been created to allow for the future **Subdivision** of the Immediate Development Area into **Blocks** of an **Urban Density** that avoids interference with planned future **Street/Roads, Easements** and setbacks;
6. Be binding upon the **Owner** and all of its successors and assigns, and shall constitute a covenant running with the land, expiring at the time the subject property is annexed by a city; and
7. Be in a recordable form and be recorded with the Register of Deeds.

(e) **Notice to Nearby Property Owners**

1. Written notice of the proposed division for rural residential purposes shall be mailed to the **Owner** of record of all property within ¼ mile of the subject property. The notice shall be sent by the applicant by regular mail, postage pre-paid. The mailing addresses for property **Owners** within the ¼ mile notification area shall be obtained from the Douglas County Clerk. The applicant shall submit a **Certificate of Mailing**, obtained from the US Post Office, at the time of submission of the **Certificate of Survey** application. A **Certificate of Survey** application shall be considered incomplete without an executed **Certificate of Mailing**. The notice shall provide:
   
   (i) A brief description of the location of the property proposed for division;
   
   (ii) The projected date a **Certificate of Survey** application will be submitted to the Lawrence/Douglas County Planning Office;
   
   (iii) A contact telephone number and address for the property **Owner** proposing the division for rural residential purposes; and,
(iv) The letter shall include the following statement and information:

<table>
<thead>
<tr>
<th>Notice of Proposal to divide land located at [road address or general description such as; ½ mile north of the intersection of x road and y road, on the east side] for rural residential development purposes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>This letter is being sent to the Owner of property adjoining and within ¼ mile of the boundaries of the property proposed for division for rural residential (Cluster) Development. The purpose of this letter is to provide general information to the recipient and/or Owner of property of a proposed or potential change in land use.</td>
</tr>
</tbody>
</table>

(2) The failure of a property Owner within the ¼ mile mailing distance to receive the written notice will not affect the validity of the application for a Certificate of Survey.

(f) Cluster Developments - After Annexation

(1) Land divided in accordance with this Section shall not be eligible for subsequent division until the land has been annexed by a city, or until an amended Certificate of Survey is approved and filed recorded with the Register of Deeds.

(2) Additional divisions or development of the Immediate Development Area shall be made in accordance with Section 20-810.

(3) After annexation, divisions or development of any portion of the Immediate or Future Development Area not subject to a Conservation Easement or Temporary Set Aside Agreement shall be made in accordance with the Subdivision Regulations of the applicable city.

(1) Upon Annexation, development of the Future Development Area shall occur in accordance with the Build Out Plan or an approved plan meeting the Subdivision Regulations in place at the time. If, however, the appropriate city’s plans or regulations for the area covered by the Build Out Plan recommend a different type of land use or scale of development, the property shall be Platted to conform to the city's current plans and regulations.

(2) Upon Annexation, all future divisions of land in the Immediate Development Area or Future Development Area shall be made in accordance with Section 20-809, Major Subdivisions for the City of Lawrence, or in accordance with the applicable procedures set forth in the annexing city’s Subdivision Regulations.
Application

Any person having legal or equitable interest in property that meets the criteria required by this Section may file, with the Planning Director, an application for a division of land in conformance with this Section. The completed application must:

1. Satisfy the requirements of Section 20-802;
2. Be submitted with an approved application form supplied by the Planning Department;
3. Be submitted in both print and electronic format; and,
4. Shall be accompanied by the application materials listed in 20-807(d):
   1. The applicable review and recording fees;
   2. Proof of legal or equitable interest in the property;
   3. Proof that there are no unpaid taxes on the subject property in the form of a certificate that all taxes and special assessments due and payable have been paid;
   4. Certificate of mailing from the U.S. Post Office for letters mailed to property owners within ¼ mile of the property proposed for the Cluster division for rural residential development purposes;
   5. A Build-Out Plan illustrating the following with respect to both the Immediate Development Area and Future Development Area:
      (i) A realistic future urban block layout designed consistent with the Comprehensive Land Use Plan of the applicable city and the Subdivision Design Standards set forth in Section 20-810 for the City of Lawrence or in the Subdivision Regulations set forth in the annexing city’s regulations;
      (ii) The layout of future Streets/Roads; provided that, local Streets/Roads shall be planned to provide Street/Road connections to adjoining Parcels, neighborhoods, or future development open spaces, at a spacing of 600’ to 800’ as a means of discouraging the reliance on County and State Roads or highways for local trips;
      (iii) Block level easement locations for utilities and storm water drainage;
      (iv) Locations of Building Envelopes for each Residential Development Parcel that are respective of the future urban street and block layout; and,
      (v) Supplemental written information that demonstrates how public utilities may be extended to the subdivision to accommodate future urban density development.
   6. One original and 3 copies of a Certificate of Survey that complies with the requirements of Section 20-807; and,
(7) An executed annexation agreement allowing annexation by the city that's Urban Growth Area the development is located within based on the adopted annexation policies of that city.

(h) **Administrative Review and Consideration Procedures**

The Planning Director shall review all applications for Cluster Developments pursuant to this Section in accordance with the Certificate of Survey administrative review procedures set forth in Section 20-807.

(i) **Developable Acreage and Development of Future Development Area**

(1) Land divided pursuant to this Section shall not be eligible for subsequent division until the land covered by the Build-Out Plan has been annexed by a city or the Build-Out Plan has been revised as part of an amended Certificate of Survey.

(2) Upon Annexation, development of the Future Development Area shall occur in accordance with the Build-Out Plan. If, however, the appropriate city’s plans or regulations for the area covered by the Build-Out Plan recommend a different type of land use or scale of development, the property shall be platted to conform to the city’s current plans and regulations.

(3) Upon annexation, all divisions of land in the Immediate Development Area or Future Development Area shall be made in accordance with Section 20-809, Major Subdivisions for the City of Lawrence, or in accordance with the applicable procedures set forth in the annexing city’s Subdivision Regulations.
20-805 Large Parcel Property Divisions in Urban Growth Areas (RESERVED)

(a) Purpose

The purpose of this Section is to allow an administrative approval procedure for divisions of land to accommodate rural residential development on large land Parcels that are located within the Urban Growth Areas of cities in Douglas County. The procedure contemplates that forethought and design considerations will be employed to identify the ultimate urban density residential development of the large land parcel prior to any division occurring, and that based on these considerations, 3 acre or larger Residential Development Parcels may be created when they allow for future divisions through a ‘Build-Out Plan’ of the Residential Development Parcels, at some future time, to create urban blocks and connective street networks in accordance with the design standards in the Subdivision Regulations for the city associated with the Urban Growth Area. These regulations will result in Residential Development Parcels that retain their rural character for the immediate future, but will also allow for more efficient transition to urban density development as subsequent circumstances dictate.

(b) Applicability

A division of a parcel of land, that is 40 acres in area or larger, that also is located in Service Areas 2-4, of Lawrence’s Urban Growth Area, or in other Cities’ Urban Growth Areas, may be approved pursuant to the provisions of this Section.

(1) For purposes of determining compliance with the 40 acre minimum parcel area, an entire quarter of a quarter section (e.g. Southeast ¼ of the Southeast ¼) shall be deemed to be a 40 acre parcel.

(2) In calculating the size of a parcel, the parcel size shall be deemed to include ½ of the adjoining road Right(s)-of-Way or Easements if this inclusion is necessary for the parcel to conform to the applicable minimum parcel size.

(c) Immediate Development Area and Future Development Area

Large Parcel Property Divisions of land made according to this Section shall consist of two components; Immediate Development Area and Future Development Area and shall be made in accordance with the requirements of this sub-section.

(1) Immediate Development Area:

(i) Maximum Development Acreage. The Immediate Development Area shall not exceed 60% of the total acreage of the Large Parcel Property Division that is covered by an application submitted pursuant to this Section. The Immediate Development Area may further be divided into individual Residential Development Parcels subject to the requirements of this Section.

(ii) Minimum Residential Development Parcel Area and dimensional standards. Residential Development Parcels shall be laid out and designed to comply with all applicable zoning district regulations listed in the County Zoning Regulations.
(iii) **Building Envelopes.**—Residential Development Parcels shall be planned and arranged to allow for future subdivision of these Parcels into blocks that conform to the development regulations of the city that is associated with the Urban Growth Area. The buildable area for each Residential Development Parcel shall be defined by Building Envelopes, which accommodate the future block layout and exclude lands which have been identified for protection as environmentally sensitive areas.

(iv) **Development Parcel Access.**—Each Residential Development Parcel shall have direct access to a road that meets or exceeds the County’s Rock Road Standard.

(v) **Minimum Road Right(s)-of-Way.**—If the Large Parcel Property Division is located adjacent to public road Right(s)-of-Way that does not meet the minimum width standards of Section 20-810(d)(4)(e)(5), approval of the application for division of land pursuant to this Section 20-805 will be subject to the condition that the Subdivider dedicate, by separate instrument to the County, ½ the additional land necessary to bring the road(s) adjoining the Large Parcel Property Division to the required Right-of-Way standard based on the road’s classification established in the County’s Access Management Standards. All necessary Dedications shall be by separate instrument, satisfactory to the County Counselor, and filed with the Register of Deeds. No final action may be taken on the Certificate of Survey until this additional road Right-of-Way has been dedicated.

(vi) **Minimum Frontage and Entrance Spacing Requirements.**—Residential Development Parcels must meet the minimum frontage and entrance spacing requirements established in the County’s Access Management Standards. The Frontage and Entrance Spacing Requirements are based on the classification of the road upon which the Residential Development Parcel is proposed to take access.

(vii) **Utility—Water.**—All Residential Development Parcels shall obtain Publicly Treated Water delivered through a water meter.

(viii) **Steep Slopes.**—The Building Envelopes of Residential Development Parcels shall not contain any slopes greater than 15%.

(ix) **Drainage Easements.**—If any portion of the Residential Development Parcel lies in FEMA designated regulatory floodplain, or if drainage Channels or Swales exist on the Residential Development Parcel that carry runoff from adjacent property or public Street/Roads, the FEMA designated regulatory floodplain or drainage Channel or Swale shall be protected by grant of Easement, or other similar device, evidenced by a separate legal instrument, as may be required by the Planning Director and acceptable to the County Counselor.

(x) **Utility—Wastewater.**—Residential Development Parcels shall have an On-Site Sewage Management System approved by the Director of Lawrence/Douglas County Health Department or a connection to a...
wastewater disposal system approved by the Kansas Department of Health and Environment.

(x) County Health Code Restriction in Floodplain. On-Site Sewage Management Systems shall be located outside of the FEMA designated regulatory floodplain.

(xii) Restrictive Covenants. Property in the Immediate Development Area shall be subject to a restrictive covenant as set forth in sub-section 20-805(d).

(2) Future Development Area. The Future Development Area shall meet the requirements set forth in this subsection.

(i) Minimum Requirement. The portion of a Large Parcel Property Division not included in the Immediate Development Area shall be designated Future Development Area.

(ii) Conservation of Natural Resources. Land that is or contains the resources identified in Section 20-810(j), to the greatest extent reasonably practicable, shall be conserved and protected through the filing with the Register of Deeds of either a Temporary Set Aside Agreement or a permanent Conservation Easement.

a. A Temporary Set Aside Agreement shall prohibit development, while the lands are located within the Urban Growth Area that would significantly impair or interfere with the environmental, geographical or historical characteristics of the identified natural resources. The Temporary Set Aside Agreement shall be provided to the City and County by separate legal instrument, satisfactory to the County Counselor and City Manager or other appropriate city official. The City will have regulatory authority over the Temporary Set Aside Agreement only after the property has been annexed into the City. Within 2 years of the date of annexation into the City, the Temporary Set Aside Agreement will expire unless further action is taken by either the City or the property owner to secure its continuance.

b. A permanent Conservation Easement may be developed by an Owner that desires a more permanent and perpetual method of protecting and conserving natural resources. The areas of land that a permanent Conservation Easement may cover include those lands identified in Section 20-810(j), or similar sensitive lands. A permanent Conservation Easement shall be developed to retain the environmental, geographical or historical characteristics of the land. It shall be conveyed to a public or nonprofit organization that protects and preserves lands of ecological, scenic, historic, agricultural, or recreational significance. A permanent Conservation Easement created for protecting natural resources may or may not be sufficient to meet the requirements for re-evaluation by the county for land appraisal and taxation purposes.
(iii) Restriction on Subsequent Divisions. Any further division for development purpose is prohibited until annexation or until an amended Certificate of Survey is approved and filed with the Register of Deeds.

(iv) Restrictive Covenant. The Future Development Area shall be subject to a restrictive covenant as set forth in sub-section 20-805(d).

(d) Restrictive Covenants

The Immediate Development Area and Future Development Area each shall be restricted by a separate instrument, satisfactory to the County Counselor, which shall:

1. Incorporate by reference and have attached as an exhibit the Build-Out Plan;

2. Require future division of the Residential Development Parcels to conform to the Build Out Plan, subject to the requirements of this Article;

3. For the Immediate Development Area, limit each Residential Development Parcel to one principal dwelling until annexation into a city and municipal water and sanitary sewer service are extended to the property;

4. For the Future Development Area, any further division for development purpose is prohibited until annexation or until an amended Certificate of Survey is approved and filed with the Register of Deeds;

5. Restrict the location of structures within the Immediate Development Area to Building Envelopes that have been created to allow for the future subdivision of the Immediate Development Area into blocks of an urban density that avoids interference with planned future Street/Roads, Easements and setbacks;

6. Be binding upon the owner and all of its successors and assigns, and shall constitute a covenant running with the land, expiring at the time the subject property is annexed by a city; and

7. Be in a recordable form and be recorded with the Register of Deeds.

(e) Notice to Nearby Property Owners

1. Written notice of the proposed division for rural residential purposes shall be mailed to the Owner of record of all property within ¼ mile of the subject property. The notice shall be sent by the applicant by regular mail, postage pre-paid. The mailing addresses for property owners within the ¼ mile notification area shall be obtained from the Douglas County Clerk. The applicant shall submit a Certificate of Mailing, obtained from the US Post Office, at the time of submission of the Certificate of Survey application. A Certificate of Survey application shall be considered incomplete without an executed Certificate of Mailing. The notice shall provide:

   i. A brief description of the location of the property proposed for division;
(ii) The projected date a Certificate of Survey application will be submitted to the Lawrence/Douglas County Planning Office;

(iii) A contact telephone number and address for the property owner proposing the division for rural residential purposes; and,

(iv) The letter shall include the following Statement and information:

| Notice of Proposal to divide land located at [road address or general description such as; ¼ mile north of the intersection of X road and Y road, on the east side] for rural residential development purposes. This letter is being sent to the Owner of property adjoining and within ¼ mile of the boundaries of the property proposed for division for rural residential (Large Parcel Property Division) development. The purpose of this letter is to provide general information to the recipient and/or owner of property of a proposed or potential change in land use. |

(2) The failure of a property owner within the ¼ mile mailing distance to receive the written notice will not affect the validity of the application for a Certificate of Survey.

(f) **Large Parcel Property Divisions After Annexation**

(1) Land divided in accordance with this Section shall not be eligible for subsequent division until the land has been annexed by a city.

(2) Additional divisions or development of any portion of the Future Development Area shall be made in accordance with Section 20-810.

(3) After annexation, divisions or development of any portion of the Future Development Area not subject to a Conservation Easement or Temporary Set Aside Agreement shall be made in accordance with the Subdivision Regulations of the applicable city.

(g) **Application**

Any person having legal or equitable interest in property that meets the requirements of this Section may file, with the Planning Director, an application for a Large Parcel Property Division in conformance with this Section. The completed application must satisfy the requirements of Section 20-802; be on an approved application form supplied by the Planning Department; be submitted in both print and electronic format, on disc; and, shall be accompanied by:

(1) The applicable review and recording fees;

(2) Proof of legal or equitable interest in the property;

(3) Proof that there are no unpaid taxes on the subject property in the form of a certificate that all taxes and special assessments due and payable have been paid;
Certificate of mailing from the U.S. Post Office for letters mailed to property owners within ¼ mile of the property proposed for the Large Parcel Property division for rural residential purposes;

A **Build-Out Plan** illustrating the following with respect to both the Immediate Development Area and Future Development Area:

(i) A realistic future urban block layout designed consistent with the Comprehensive Land Use Plan of the applicable city and the Subdivision Design Standards set forth in Section 20-810 for the City of Lawrence or in the Subdivision Regulations set forth in the annexing city's regulations;

(ii) The layout of future Streets/Roads; provided that, local Streets/Roads shall be planned to provide Street/Road connections to adjoining Parcels, neighborhoods, or future development open spaces, at a spacing of 600' to 800' as a means of discouraging the reliance on County and State Roads or highways for local trips;

(iii) Block-level easement locations for utilities and storm water drainage;

(iv) Locations of Building Envelopes for each Residential Development Parcel that are respective of the future urban street and block layout; and

(v) Supplemental written information that demonstrates how public utilities may be extended to the subdivision to accommodate future urban density development.

One original and 3 copies of a Certificate of Survey conforming to the requirements of Section 20-807; and;

An executed annexation agreement allowing annexation by the city, who's Urban Growth Area the development is located within, based on the adopted annexation policies of that city.

**Administrative Review and Consideration Procedures**

The Planning Director shall review all applications for Large Parcel Property Divisions pursuant to this Section in accordance with the Certificate of Survey administrative review procedures provided in Section 20-807.

**Developable Acreage and Development of Future Development Area**

Land divided pursuant to this Section shall not be eligible for subsequent division until the land covered by the Build-Out Plan has been annexed by a city or the Build-Out Plan has been revised as part of an amended Certificate of Survey.

Upon Annexation, development of the Future Development Area shall occur in accordance with the Build-Out Plan. If, however, the appropriate city's plans or regulations for the area covered by the Build-Out Plan recommend a different type of land use or scale of development, the property shall be platted to conform with the city's current plans and regulations.
(3) Upon annexation, all divisions of land in the Immediate Development Area or Future Development Area shall be made in accordance with Section 20-809, Major Subdivisions for the City of Lawrence, or in accordance with the Subdivision Regulations set forth in the annexing city’s regulations.
**20-806 Property Divisions in the Rural Area (Outside the UGAs)**

**a) Purpose**

Horizon 2020, the Comprehensive Land Use Plan, strongly encourages that residential development be located in the Lawrence Urban Growth Area or within the Urban Growth Areas of the other incorporated cities in the County. Horizon 2020 also recognizes the need for suitable residential development in the Rural Area of Douglas County.

**b) Definitions**

When used in this Section 20-806, the following terms have the following meanings:

1. **Original Tract** – shall be composed of a Parcel or a combination of all adjacent Parcels under a single ownership [not separated by public Right(s)-of-Way] that share common boundary lines or two separate ownerships that share a common boundary line, from which for the purpose of creating a Parent Parcel is created.

2. **Parent Parcel** – a surveyed area, site or land division created for the sole an area of 20 acres or more surveyed solely for the purpose of a residential Development action creating one or more Residential Development Parcels.

3. **Residential Development Parcel** – a Parcel created from the Parent Parcel through the administrative Certificate of Survey review process to make the new land division eligible for a residential building permit for the purpose of construction of one single-family residential Dwelling unit and permitted accessory uses, buildings and structures.

4. **Rural Area** – the area of the Unincorporated Douglas County lying outside the Urban Growth Areas of Lawrence, Baldwin City, Eudora and Lecompton.

**c) Applicability**

Residential Development Parcels may be created within the Rural Area according to the following requirements:

1. The Owner of the land must identify a Tract of land, which shall be a minimum of 20 acres and take access to a Full Maintenance Road, in accordance with this Section. The Tract containing the area for the proposed Residential Development Parcel(s) shall be known as the “Parent Parcel”. The land from which the Parent Parcel is identified shall be known as the “Original Tract”.

   (i) For purposes of determining compliance with the 20 acre minimum Tract area, entire half of a quarter-quarter section (e.g. West ½ of the Southeast ¼ of the Southeast ¼) shall be deemed to be a 20 acre Tract.
(ii) In calculating the size of a Tract, the Tract size shall be deemed to include ½ of the adjoining Road Right(s)-of-Way or Easements if such inclusion is necessary for the Tract to conform to the applicable minimum Tract size.

(iii) Proof is provided that no unpaid taxes exist on the subject property, in the form of a certificate or tax receipt, for all taxes and special assessments that are due and payable.

(2) To initiate a division of land according to this Section, the owner must submit an application to the Planning Director, on a form provided by the Planning Department accompanied by an original and 3 copies of a Certificate of Survey prepared in conformance with Section 20-807(d). The Certificate of Survey shall illustrate and identify the Original Tract on the location map. The Parent Parcel and Residential Development Parcels shall be identified by legal description and show all environmentally or geographically sensitive areas or sites of historic landmarks or historic features \(\text{[refer to Section 20-810(i)]}\).

(d) Residential Development Parcel (RDP)

(1) Up to 3 Residential Development Parcels (RDP) may be created by dividing from a Parent Parcel, depending on the classification of the Full Maintenance Roads bounding the property.

   (i) Up to 2 RDPs may be created by dividing the Parent Parcel in the following instances: If the Parent Parcel is bounded on only 1 side by a Road or the Parent Parcel is bounded on 2 or more sides by Roads and any of the Roads are classified as other than Local Roads.

   (ii) Up to 3 RDPs may be created if the Parent Parcel is bounded on 2 or more sides by Local Roads.

(2) Residential Development Parcels can be created through the Certificate of Survey process only when the Planning Director finds: the property is being subdivided divided for single-family residential purposes; the division does not involve or result in the creation of any minimum maintenance or Full Maintenance new Roads or Road Rights-of-Way or Easements; and, the division is made in accordance with the following requirements: in this sub-section:

   (i) Minimum Residential Development Parcel Area and dimensional standards.
   Residential Development Parcels shall be laid-out and designed to comply with all applicable zoning district regulations listed in the County Zoning Regulations. Each Residential Development Parcel shall have the minimum area required in Article 18 Section 12-318 in the County Zoning Regulations. The minimum Parcel area shall also meet the County Sanitary Code minimum requirements for residential development that has an On-Site Sewage Management System;

   (ii) Development Access.
   Each Residential Development Parcel shall have direct Access to a Full Maintenance Road;
(iii) County Health Code Requirements.
   a. The applicant has provided evidence that each Residential Development Parcel will satisfy all applicable health and sanitation requirements of the Lawrence/Douglas County Health Department;
   
   b. **On-Site Sewage Management Systems shall be located outside the FEMA designated regulatory Floodplain.**

(iv) Grouping Divisions.
   When a Parent Parcel has previously been identified and filed of record from an Original Tract, any subsequent Parent Parcel identified from that Original Tract shall, where practicable, be located with one boundary line adjacent to the previously created Parent Parcel to encourage the grouping of Residential Development Parcels to facilitate the efficient provision of Infrastructure and other public services.

(v) Minimum Frontage and Entrance Spacing Requirements.
   Each Residential Development Parcel must meet the minimum Frontage and Entrance Spacing Requirements established in the County's Access Management Standards. The Frontage and Entrance Spacing Requirements are based on the classification of the Road upon which the Residential Development Parcel is proposed to take Access.

(vi) Minimum Road Right(s)-of-Way.
   a. If the Original Tract/Parent Parcel Division is located adjacent to public Road Right(s)-of-Way that does not meet the minimum width standards of Section 20-810(d)(4)(e)(5), approval of the application for division of land pursuant to this Section 20-806 will be subject to the condition that the Subdivider Owner dedicate, by separate instrument to the County, ½ the additional land necessary to bring the Road(s) adjoining Original Tract/Parent Parcel to the required Right-of-Way standard based on the Road’s classification established in the County’s Access Management Standards.
   
   b. All necessary Dedications shall be by separate instrument, satisfactory to the County Counselor, and filed with recorded at the Register of Deeds.
   
   c. No final action may be taken on the Certificate of Survey until this additional Road Right-of-Way has been dedicated.

(vii) Building Envelope.
   d. When a Residential Development Parcel includes lands identified for Resource Preservation Protection of Environmentally Sensitive Lands in Section 20-810(j)(k), a Building Envelope is required to be shown on the Parcel and it shall not include the areas and sites identified for resource preservation.
   
   e. A Building Envelope is **not** required on a Residential Development Parcel that does not include lands within the categories identified for resource preservation in Section 20-810(j)(k); however,
(viii) **Conservation Easement.**
Land that is or contains the resources identified in Section 20-810(j)–(k), is encouraged to be made subject to a Conservation Easement or other conservation measure to permanently retain the environmental, geographical or historical characteristics of the land and prevent any use of these areas that will significantly impair or interfere with the environmental, geographical or historical characteristics of this land. The Conservation Easement shall be conveyed by a separate legal instrument to a public or nonprofit organization that protects and preserves lands of ecological, scenic, historic, agricultural, or recreational significance in Kansas.

a. A permanent Conservation Easement may be developed established by an Owner that desires a more permanent and perpetual method of protecting and conserving natural resources. The areas of land that a permanent Conservation Easement may cover include those lands identified in Section 20-810(j)–(k), or similar sensitive lands.

b. A permanent Conservation Easement shall be developed established to retain the environmental, geographical or historical characteristics of the land.

c. It shall be conveyed to a public or nonprofit organization that protects and preserves lands of ecological, scenic, historic, agricultural, or recreational significance.

d. A permanent Conservation Easement created for protecting natural resources may or may not be sufficient to meet the requirements for re-evaluation by the county for land appraisal and taxation purposes.

(3) With respect to any division made according to this Section, the subsequent Residential Development Parcels shall be considered Parcels but shall not be considered platted Lots created through a Major or Minor Subdivision/Replat process. Lots as defined in this Article. Each Residential Development Parcel shall be eligible for the issuance of building permits for one single-family Dwelling and permitted accessory uses, buildings and structures. Use for any other purpose (other than agricultural use), construction of more than one single-family Dwelling, or further division of the Residential Development Parcel shall be prohibited. Development for any other use will require review through the Major Subdivision process.

(e) **Application**

Any person having legal or equitable interest in property that meets the requirements of this Section may file, with the Planning Director, an application for a Property Division in the Rural Area in conformance with this Section. The completed
application must satisfy the requirements of Section 20-802; be on an approved application form supplied by the Planning Department; be submitted in both print and electronic format, on disc; and, shall be accompanied by:

1. The applicable review and recording fees;
2. Proof of legal or equitable interest in the property;
3. Proof that there are no unpaid taxes on the subject property in the form of a certificate that all taxes and special assessments due and payable have been paid; and
4. One original and 3 1 copies of a Certificate of Survey conforming to the requirements of Section 20-807(d).

5. The Certificate of Survey shall illustrate and identify the Original Tract on the location map. The Parent Parcel and Residential Development Parcels shall be identified by legal description and show all environmentally or geographically sensitive areas or sites of historic landmarks or historic features [refer to as identified in Section 20-810(j)(k)].
20-807 Certificate of Survey, Administrative Review Procedures

(a) **Purpose**

The purpose of the Certificate of Survey administrative review procedure is to provide an administrative process for creating an accurate record of the description and location of Residential Development Parcel divisions created in conformance with Sections 20-804, 20-805, or 20-806, whichever is applicable, without requiring full compliance with the Subdivision Development regulations of Section 20-809, Major Subdivisions.

(b) **Authority**

The Planning Director is authorized to review and approve applications for land divisions made in conformance with Sections 20-804, 20-805, and 20-806, subject to the requirements of this Section. This administrative review procedure allows for an administrative approval process with final action by the Planning Director.

(c) **Applicability**

An application for a division of land submitted with a complete Certificate of Survey shall be considered for approval in the following circumstances:

1. The proposed division meets the criteria of one of the types of division authorized by Sections 20-804, 20-805, or 20-806, for review in conformance with this Section.

2. Residential Development Parcels are eligible for Certificate of Survey approval only one time within the Lawrence Urban Growth Areas of the cities in Douglas County. However, an amended Certificate of Survey may be filed recorded for property in the Lawrence Urban Growth Areas, or within the Rural Area when it:
   - Includes the same land area as the original Certificate of Survey; and,
   - When it meets the applicable requirements in Sections 20-804, 20-805, or 20-806.

3. For the purpose of interpreting the applicability of the Certificate of Survey administrative review procedure, any proposed development or division of land, which the Planning Director determines is intended to evade the Major Subdivision procedures of Section 20-809 because it would result in a de facto Major Subdivision through the combination of previous contiguous Certificates of Survey, is not eligible to use the Certificate of Survey administrative review procedure.

4. Proof is provided that no unpaid taxes exist on the subject property, in the form of a certificate or tax receipt, for all taxes and special assessments that are due and payable.
(d) **Application**

Applications for a Certificate of Survey administrative review procedure shall be submitted to the Planning Director in conformance with the general requirements of Section 20-802; be submitted in both print and electronic format; and any specific requirements provided in this Article. be accompanied by:

1. The applicable review and recording fees;
2. Proof of legal or equitable interest in the property;
3. Proof that there are no unpaid taxes on the subject property in the form of a certificate that all taxes and special assessments due and payable have been paid; and
4. One original paper and 3 one electronic copies of a Certificate of Survey that complies with the requirements of Section 20-807(e).

5. **In addition, for Cluster Developments in an Urban Growth Area:**

   (i) A certificate of mailing from the U.S. Post Office for letters mailed to property Owners within ¼ mile of the property proposed for the Cluster Division Development for rural residential development purposes;

   (ii) A Build Out Plan illustrating the following with respect to both the Immediate Development Area and Future Development Area:

      a. A realistic future Urban Block layout designed consistent with the Comprehensive Land Use Plan of the applicable city and the Subdivision Design Standards and Public Improvement Standards set forth in Sections 20-810 and 20-811 for the City of Lawrence or in the Subdivision Regulations set forth in the annexing city’s regulations;

      b. The layout of future Streets/Roads; provided that, Local Streets/Roads shall be planned to provide Street/Road connections to adjoining Parcels, neighborhoods, or future development open spaces, at a spacing of 600’ to 800’ as a means of discouraging the reliance on County and State Roads or highways for local trips;

      c. Block level easement locations for utilities and storm water drainage;

      d. Locations of Building Envelopes for each Residential Development Parcel that are respective of the future Urban Street and Block layout; and,

      e. Supplemental written information that demonstrates how public utilities may be extended to the subdivision to accommodate future Urban Density development.

   (6) **For applications within Urban Growth Areas,** an executed annexation agreement allowing annexation by the city that’s Urban Growth Area the development is located within based on the adopted annexation policies of that city, when the city requires such an agreement.
Article 8  Subdivision Design and Improvements

Section 20-807 Certificate of Survey, Administrative Review Procedures

(7) For properties including Environmentally Sensitive Lands identified in Section 20-810(k), a proposed Temporary Set Aside Agreement or permanent Conservation Easement and a copy of proposed Restrictive Covenants as identified in Section 20-804(c)(3).

(e) Requirements and Material to be Included

A Certificate of Survey shall comply with the following requirements:

(1) The Certificate of Survey shall be legibly drawn on Mylar with permanent ink or printed or reproduced by a process guaranteeing a permanent record and shall be a minimum size of 11 inches by 17 inches;

(2) The Certificate of Survey shall show or contain on its face the following information; provided, however, that the licensed Land Surveyor may, at his or her discretion, provide additional information regarding the survey:

   (i) A title or title block including the quarter-section, section, township, range and principal meridian in which the surveyed land is located. A Certificate of Survey shall not bear the title “plat,” “subdivision” or any title other than “Certificate of Survey;”

   (ii) A note stating “This Certificate of Survey was not prepared for the purpose of the platting of land. No further divisions of the Parcels created by this survey shall occur until the property is subdivided in accordance with all applicable Subdivision Regulations of Douglas County or the city into which it is annexed or until an Amended Certificate of Survey is approved and recorded with the Register of Deeds.”;

   (iii) The name(s) of the person(s) who own the land and who commissioned the survey and the names of any adjoining platted subdivisions;

   (iv) The date the survey was completed;

   (v) A north arrow;

   (vi) A written and graphic scale. (The scale must be one inch equals 30 feet or less);

   (vii) A narrative legal description of the property surveyed, including a Benchmark or other vertical reference point tied to the United States Geological Survey;

   (viii) A location map showing the property surveyed in relation to property ownership lines within the same section and the nearest existing public Right(s)-of-Way;

   (ix) The dimensions and locations of all of the Parcels indicated on the survey, including dashed lines to depict the future Urban Street and Block layout in the Build Out Plan. This requirement is not applicable to a Certificate of Survey prepared in accordance with Section 20-806;
A numbering system or other clear and simple method of identifying each Parcel within the Certificate of Survey;

The location and width of public Right(s)-of-Way, existing and proposed;

The location of any Easements, existing and proposed;

The dimensions of all existing structures in relation to existing and proposed Parcel lines, and based on the future Urban Street and Block layout shown in the Build Out Plan, if applicable;

Building Envelopes, when required, shall be shown for every Residential Development Parcel and shall not include lands identified as environmentally or geographically sensitive areas or the sites of historic landmarks or historic features Environmentally Sensitive Lands as identified in Section 20-810(k);

Except for divisions made in conformance with Section 20-806, Building Envelopes shall be designed to allow for the placement of rural residences on Parcels that will facilitate future further subdivision of the Residential Development Parcel into Urban Streets and Blocks;

A note stating the specific Section [20-804, 20-805, or 20-806] pursuant to which the division is being made;

Restrictive Covenants, Temporary Set Aside Agreements, or Conservation Easements required by the proposed division shall be noted with book and page number in which the covenants, Temporary Set Aside Agreements, or Conservation Easement are recorded;

The signature of the Owner, properly acknowledged;

The dated signature and seal of the Kansas licensed Land Surveyor responsible for the survey along with a note stating: “This survey complies with the Kansas Minimum Standards for Boundary Surveys”;

A line on the survey for the review date and signature of the County Surveyor beneath a note stating: “Reviewed in compliance with K.S.A. 58-2005”;

A line for the approval date and signature of the Planning Director under a note stating: “Approved as a Certificate of Survey under the Subdivision Regulations of the City of Lawrence & the Unincorporated Area of Douglas County”; or the Subdivision Regulations of the appropriate City; and

(3) Before approval of a Certificate of Survey in the Lawrence Urban Growth Area that will not be served by City of Lawrence utilities, the property owner shall provide written documentation to the Lawrence-Douglas County Health Officer and the Lawrence-Douglas County Planning Director that Publicly Treated Water, delivered through a water meter, is available to and will be provided for all Residential Development Parcels.

(f) Criteria for Review

An application for a division requiring an approved Certificate of Survey shall be approved if, and only if, it meets all of the following criteria:

(1) The proposed division meets the requirements for a division of land under Sections 20-804, 20-805 or 20-806, as applicable;

(2) The Certificate of Survey meets all of the requirements of this Section 20-807;

(3) The proposed Residential Development Parcels and all other aspects of the proposed Certificate of Survey conform with the current Comprehensive Plan of Lawrence and Douglas County or, where applicable, the comprehensive plan of another city in Douglas County;

(4) The Certificate of Survey conforms to the County's Access Management Standards and does not preclude or interfere with the subsequent logical continuation of any Street/Roads shown thereon affecting the land included in the proposed Certificate of Survey. If additional Right-of-Way is needed to meet the minimum required for the classification of Road Accessed by the development in the Certificate of Survey, the Certificate of Survey review process shall be suspended for up to 90 days to allow for Dedication by separate instrument of the necessary Right-of-Way. If the criteria for review are not met by the end of the suspension period, this shall be sufficient cause for rejecting an application for a Certificate of Survey;

(5) The proposed Certificate of Survey is consistent with any conditions imposed on any previous division of any part of the same land; and

(6) The proposed Certificate of Survey complies with the Kansas Minimum Standards for Boundary Surveys.

(g) Review and Action by the Planning Director

(1) The General Review and Approval Procedures set forth in Section 20-802 shall apply to all applications under this Section.

(2) Upon receipt of a complete application, the Planning Director shall review the application for conformance with applicable regulations.
The Planning Director shall conduct the review of the application within 30 days of receipt of the complete application. If the Planning Director finds that the Certificate of Survey conforms to all of the standards set forth in this Article, the Director shall sign and indicate on an original copy of the Survey “Approved as a Certificate of Survey under the Subdivision Regulations of the City of Lawrence & the Unincorporated Area of Douglas County” with the date of approval.

If the Planning Director finds that the Certificate of Survey fails in any way to conform to the standards set forth in this Article or that the proposed division is not eligible for administrative approval pursuant to this Section, the Planning Director shall refuse to approve the proposed Certificate of Survey and shall notify the applicant by letter, within the 30 day review period, of the reason(s) for that refusal. If the deficiency or other reason for denial can be cured through action of the applicant, the applicant may submit a revised application and Certificate of Survey within 45 days after receipt of the letter and shall not be required to pay an additional fee.

If approved, the Certificate of Survey shall be recorded by the Planning Director with the Douglas County Register of Deeds. A copy shall be kept by the Planning Director, and a copy shall be furnished to the applicant and to the County Zoning & Codes office.

**Amending an Approved Certificate of Survey**

An approved Certificate of Survey may be amended for a Parent Parcel created in accordance with Section 20-806 or, prior to annexation by a city, in accordance with Sections 20-804 or 20-805 for Lawrence's or another city's Urban Growth Area. The amendment may occur when there is an application to revise an area designated as a Residential Development Parcel, Immediate Development Area, Future Development Area, or the layout of Residential Development Parcels and future Streets or Blocks on the Build Out Plan. The Future Development Area cannot be revised for those portions that include Environmentally Sensitive Lands identified in Section 20-810(h)(k), permanent Conservation Easement(s), or Temporary Set Aside Agreement(s). A revision to approved Access to the development (location of Cross Access Easement or individual Driveway Access) from public Road Right-of-Way shall be permitted only upon written recommendation from the County Engineer that revising the point of Access to the public Road is desirable for public safety.

An amendment to an approved Certificate of Survey shall:

(i) Include the entire land area of the original Certificate of Survey and be signed by all of the current Owners of land within the entire land area of the original Certificate of Survey;

(ii) Be submitted in the same form as an original Certificate of Survey and meet the requirements in sSection 20-807(e) (d) through (g);

(iii) Be eligible for the same appeals procedure [re: identified in sSection 20-807(i)] as the original Certificate of Survey;

(iv) Comply with the Subdivision Regulations in effect at the time the amended Certificate of Survey application is submitted for review; **and**
(v) For each amended Certificate of Survey, the creation of new Residential Development Parcels in addition to those created originally shall only be permitted if an additional Residential Development Parcel is permitted according to Sections 20-804, 20-805, and 20-806 and/or by the County’s Access Management Standards.

(2) An amendment of a Certificate of Survey shall not alter future Street layouts that would conflict with a Build Out Plan approved for an adjacent property.

(i) **Appeals Process for Sections 20-804, 20-805 and 20-806**

(1) Upon the approval or denial of an application for a division of land under Sections 20-804, 20-805, or 20-806, a party aggrieved by the Planning Director’s decision may appeal that decision to the Board of County Commissioners. To have standing to make an appeal, the party must have been the applicant or an Owner of property within ¼ mile of the land that is the subject of the decision.

(2) The Planning Director shall provide written notice of the filing of an appeal setting forth the subject of the appeal, the time and place and when the appeal shall be heard. The notice shall explain that there will be an opportunity to present evidence to the Board of County Commissioners and it shall be mailed to the applicant and all Owners of property within ¼ mile of the land that is the subject of the appeal.

(3) The County Commission shall set a hearing date for the appeal that is at least 15 days after written notice is sent to the appellant. The appellant shall have the burden of establishing by clear and convincing evidence that the Planning Director’s decision was incorrect.

(j) **Certificate of Survey Expiration**

(1) If an approved Certificate of Survey has not been recorded at the Register of Deeds office, the approval of a Certificate of Survey shall be effective for no more than 24 months from the date of approval unless all conditions of approval have been completed or an extension has been granted by the Planning Director for good cause.

(2) Such request for extension must be submitted to the Planning Director prior to the expiration of the original 24 month approval period.
20-808 Minor Subdivisions/Replats

(a) Purpose

The purpose of this administrative process is to provide a more economical and efficient procedure for the adjustment of Platted Lot Lines in developed areas through a Resubdivision or Replat procedure, where an adjustment involves little or no expansion of the public Infrastructure. The Minor Subdivision/Replat process allows for a one-step Resubdivision approval process with final action by the Planning Director.

(b) Authority

The Planning Director is hereby authorized to review and approve Minor Subdivisions/Replats in accordance with the procedures of this Section.

(c) Applicability

(1) Within the City of Lawrence, a Platted Lot may be split divided into 4 or fewer Platted Lots by using the Minor Subdivision/Replat procedures of this section; provided, that:

   (i) No new Street or extension of an existing Street is created, or

   (ii) A Vacation of Streets, Alleys, Setback Lines, Access Control or Easements is required or proposed.

   (iii) As an alternative, if Right-of-Way or Easements are proposed to be dedicated or vacated, after mailed notice to surrounding property Owners, the Minor Subdivision/Replat shall first be placed on the Governing Body’s agenda for approval of the subject Vacation or acceptance of additional Dedications after mailed notice to surrounding property Owners and prior to final administrative approval of the Minor Subdivision/Replat.

(2) Within the Unincorporated Area of the County, a Platted Lot may be split divided into 2 Platted Lots by using the Minor Subdivision/Replat procedures of this section, provided that:

   (i) Each resulting Lot has a minimum Lot area that conforms to the County Sanitation Requirements for minimum Lot area;

   (ii) The Platted Lot takes Access from a Hard Surfaced Road or from a Road that meets or exceeds the County’s Rock Road Standard;

   (iii) No new Road or extension of an existing improved Road is created, nor

   (iv) is a Vacation of Roads, Setback Lines, Access Control or Easements is required or proposed; and,

   (v) The lot split Minor Subdivision/Replat is not prohibited by any other Section of this Article;
(vi) As an alternative, if Right-of-Way or Easements are proposed to be dedicated or vacated, after mailed notice to surrounding property Owners, the Minor Subdivision/Replat shall first be placed on the Governing Body’s agenda for approval of the subject Vacation or acceptance of additional Dedications after mailed notice to surrounding property Owners and prior to final administrative approval of the Minor Subdivision/Replat.

(3) The merger or consolidation of full Lots or full Lots with portions of platted Lots into a fewer number of Lots shall be processed as a Minor Subdivision/Replat;

(4) For the purpose of interpreting the Minor Subdivision/Replat eligibility criteria of this sub-section, any proposed Subdivision that the Planning Director determines is designed, intended, or by proximity to a previous Minor Subdivision or Replat would evade the Major Subdivision procedures of this section by resulting in a de facto Major Subdivision, shall not be eligible for the Minor Subdivision/Replat process;

(5) Lots are eligible only one time for approval of a lot-split division or consolidation through the Minor Subdivision/Replat process and any further divisions or consolidations of the originally platted or newly created Lots shall be processed as Major Subdivisions; however,

(i) Lot Line adjustments or mergers that do not increase the total number of Lots may be accomplished through the Minor Subdivision/Replat process even if the property had previously been part of a Minor Subdivision or Replat;

(6) The Minor Subdivision/Replat shall contain a general note on the face of it stating: “Further division or consolidation of any Lots contained in this Minor Subdivisions/Replat is prohibited, and shall be processed as Major Subdivisions”.

(d) Criteria for Review

A Lot or group of Lots submitted as a Minor Subdivision/Replat shall be approved if all of the following criteria are met:

(1) The proposed division(s) or consolidation(s) meets the criteria of one of the types of divisions or consolidations eligible for review through the Minor Subdivision/Replat process under Section 20-808(c);

(2) All Lots created through the Minor Subdivision/Replat process conform to the Lot size requirements of the underlying zoning district;

(3) Each Lot resulting from the split division or consolidation will have direct Access to an existing public Street/Road that meets current adopted access and Public Improvement Standards or will meet such standards as a result of Improvements required as a condition of approval of the Minor Subdivision/Replat;
(4) If the property is located adjacent to a public Street/Road Right-of-Way that does not meet the minimum Right-of-Way standard of Section 20-810(d)(4)(e)(5), approval of the Minor Subdivision/Replat will be subject to the condition that the Subdivider dedicate to the City or County, as applicable, one-half the additional land necessary to bring the Road(s) adjoining the land to be divided to the required minimum Right-of-Way standards.

   (i) All necessary off-site Dedications shall be filed recorded by separate instrument with the Register of Deeds and proof of these Dedications shall be provided to the Planning Director. No final action shall be taken on the Minor Subdivision/Replat until this additional Right-of-Way Dedication has been recorded.

   (ii) All necessary On-Site Dedications may be filed recorded by separate instrument with the Register of Deeds office or may be provided on the Minor Subdivision/Replat; however, after mailed notice, the Minor Subdivision/Replat shall be placed on the Governing Body’s agenda for acceptance of the additional Right-of-Way after mailed notice and prior to final approval of the Minor Subdivision/Replat.

(5) Any additional public Easements necessary to serve the property shall be Dedicated prior to final approval of the Minor Subdivision/Replat, either by:

   (i) Separate instrument, or

   (ii) After mailed notice, the Minor Subdivision/Replat is placed on the Governing Body’s agenda for acceptance of the additional Easements after mailed notice and prior to final approval of the Minor Subdivision/Replat.

(6) If any portion of the property within the Minor Subdivision/Replat lies in a FEMA designated regulatory floodplain, or if drainage Channels or Swales exist on the property that carry runoff from adjacent property or public Street/Roads, the FEMA designated regulatory Floodplain or drainage Channel or Swale shall be protected by grant of Easement, Dedication or other similar devise device as may be required by the Planning Director. No final action shall be taken on the Minor Subdivision/Replat until this Dedication has been recorded, either by:

   (i) Separate instrument, or

   (ii) After mailed notice, the Minor Subdivision/Replat is placed on the Governing Body’s agenda for acceptance of the additional Right-of-Way or Easements after mailed notice and prior to final approval of the Minor Subdivision/Replat.

(7) The Owner shall provide written documentation for splits divisions or combination of Lots in the Unincorporated Area of the County to the Planning Director providing proof that the proposed Lots will have:

   (i) Access to Publicly Treated Water delivered through a water meter; and,
(ii) Test holes for an **On-Site Sewage Management System** have been reviewed and approved by the Director of Lawrence/Douglas County Health Department.

(8) The proposed **Lots** and all other aspects of the proposed **Minor Subdivision/Replat** conforms with the current **Comprehensive Land—Use Plan** of Lawrence and Douglas County;

(9) The **Minor Subdivision/Replat** conforms with the adopted **Major Thoroughfares Map** referenced in the **Comprehensive Land—Use Plan** and does not preclude or interfere with the subsequent logical continuation of any **Street/Roads** shown thereon affecting the land included in the proposed **Minor Subdivision/Replat** or the original **Platted Subdivision**;

(10) The proposed **Minor Subdivision/Replat** is consistent with any conditions imposed on the original **Platted Subdivision** from which the **Lots** being **split divided** or consolidated were originally **Platted**; and,

(11) The **Minor Subdivision/Replat** conforms to the Kansas **Minimum Standards** for **Boundary Surveys**.

**(e) Application**

(1) Requests for **Minor Subdivision/Replat** approval shall be submitted to the **Planning Director**.

(2) Each application shall be submitted on a form provided by the **Planning Director**; **be submitted in both print and electronic format**; and shall be accompanied by:

(i) The applicable review and recording fees;

(ii) Ten **Copies** of **scaled drawings of** a **Minor Subdivision/Replat as required by the Planning Director**, certified by a licensed **Land Surveyor**, at a scale of one inch equals 30 feet or less; and

(iii) A certificate that all taxes and special assessments due and payable have been paid.

a. Any unpaid special assessments shall be noted with the application submittal and a proposed redistribution plan for these unpaid special assessments, which meets the **City Clerk** and **City Engineer** requirements for **Lots** within the City of Lawrence or with the **County Clerk** and **County Engineer** requirements for **Lots** within the **Unincorporated Area** of Douglas County, also shall be submitted with the application.

(iv) **If Dedication or Vacation of Easements or Rights-of-Way is proposed**, a certified copy of a property ownership list to provide mailed notice in accordance with 20-802(d)(3).
Contents

(1) (3) The Minor Subdivision/Replat shall contain the following information:

(i) A title that includes the original Lot numbers and subdivision name and an indication that this is a Minor Subdivision/Replat replat of said Lots in the Subdivision;

(ii) Legal description of the property, including a Benchmark or other vertical reference point tied to the United States Geological Survey;

(iii) Location map identifying community features and the nearest existing public Right(s)-of Way within a one mile radius of the site;

(iv) Location and dimensions of existing and/or proposed Easements and utilities;

(v) Dimensions and locations of the new Lots to be created through the division or consolidation;

(vi) Location and width of access Driveways, existing and proposed;

(vii) Dimensions of all existing structures in relation to existing and proposed Lot Lines;

(viii) Signature of the Owner, properly attested;

(ix) A signature and date line for approval by the Planning Director, stating “Approved as a Minor Subdivision/Replat under the Subdivision Regulations of the City of Lawrence and the Unincorporated Area of Douglas County”;

(x) A signature and date line for the appropriate Governing Body Chair indicating acceptance or approval, if the Minor Subdivision/Replat proposes either the Dedication or Vacation of Easements or Right-of-Way;

(xi) A line on the survey for the review date and signature of the County Surveyor beneath a note stating: “Reviewed in compliance with K.S.A. 58-2005”; and,

(xii) A dated signature and seal of the licensed Land Surveyor licensed by the State of Kansas, who performed responsible for the survey for the Minor Subdivision/Replat and a note stating: “This survey conforms to the Kansas Minimum Standards for Boundary Surveys.”; and,

(xiii) A note on the face of the Minor Subdivision/Replat which states: “Further division or consolidation of any Lots contained in this Minor Subdivision/Replat is prohibited, and shall be processed as a Major Subdivision, unless the action meets the exception noted in Section 20-808(c)(5)(i).”
(g) **Review and Action by the Planning Director**

1. Upon receipt of a complete application, the Planning Director shall review the application for conformance with applicable regulations.

2. The Planning Director shall conduct the review of the application within 20-30 days of receipt of the complete application. If the Planning Director finds that the Minor Subdivision/Replat conforms to all of the standards set forth in this Section, the Director shall sign and date an original Mylar copy of the Minor Subdivision/Replat.

3. If the Minor Subdivision/Replat proposes either the Dedication or Vacation of Easements or Rights-of-Way, the Planning Director shall:
   
   (i) Provide mailed notice to surrounding property Owners as established in Section 20-802(d); and
   
   (ii) Place the Minor Subdivision/Replat on the Governing Body's agenda for either acceptance of Dedications or approval of proposed Vacations.

4. If the Planning Director finds that the Minor Subdivision/Replat fails in any way to conform to the standards set forth in this Section or that the proposed division or consolidation is not eligible for consideration as a Minor Subdivision/Replat, the Planning Director shall refuse to approve the proposed Minor Subdivision/Replat and shall notify the applicant by letter of the reason(s) for such refusal. If the deficiency or other reason for denial can be cured through action of the applicant, the applicant may submit a revised application and map within 45 days after receipt of such letter and shall not be required to pay an additional fee. If the reason for denial is that the proposed division or consolidation is not eligible for consideration as a Minor Subdivision/Replat because the Replat does not meet all of the criteria in Section 20-808(d), the Subdivider may submit an application for Major Subdivision approval at any time.

5. The Planning Director shall forward a signed, original Mylar copy of the Minor Subdivision/Replat to the Register of Deeds for recording.

6. A copy of the signed original Mylar shall be furnished to the Applicant.

7. Appeals of the Planning Director's decision on a Minor Subdivision/Replat shall be subject to Section 20-813(f)(1).

(h) **Review and Action by the Governing Body**

If the Planning Director determines that the Minor Subdivision/Replat includes a proposal to dedicate or vacate Easements and/or Rights-of-Way, the Minor Subdivision/Replat shall be placed on the Governing Body’s agenda for acceptance or Vacation of Easements and/or Rights-of-Way following the appropriate review process, mailed notice and prior to the Planning Director’s final approval of the application.
(i) Signatures on Minor Subdivision/Replat following Action by the Governing Body

If the Minor Subdivision/Replat includes the Dedication or Vacation of Easements and/or Rights-of-Way and the Governing Body has accepted the Dedication or approved the Vacation, the Planning Director shall submit the Minor Subdivision/Replat to the Mayor or Chairperson of the Board of County Commissioners, as applicable, for signatures.

(j) Processing after Approval of Minor Subdivision/Replat

(1) Prior to the Minor Subdivision/Replat being recorded with the Register of Deeds, a digital version of the Minor Subdivision/Replat shall be submitted to the Planning Director in a format approved by the Director of Planning Director as identified in the application packet. The digital file shall be registered to the State Plane Coordinate Grid System used by the city and county. Any Minor Subdivision/Replat submitted in a digital format will be converted by the City or County, and the cost for conversion will be paid by the Applicant before the Minor Subdivision/Replat can be recorded at the Register of Deeds.

(2) Errors found in closure or internal dimensions shall be corrected prior to filing recording the Minor Subdivision/Replat.

(k) Minor Subdivision/Replat Expiration

(1) Approval of a Minor Subdivision/Replat by the Planning Director and acceptance of Dedications by the appropriate Governing Body shall be effective for no more than 24 months from the date of acceptance unless all conditions of approval have been completed or an extension has been granted by the Planning Director for good cause.

(2) Such request for extension must be submitted to the Planning Director prior to the expiration of the original 24 month approval period.

...
20-809 Major Residential and Non-Residential Subdivisions

(a) Purpose

The Major Subdivision procedures of this Section are intended to provide a standardized review process for Preliminary and Final Plats. The Major Subdivision process requires a two-step review process with Preliminary Plat approval by the Planning Commission, and Final Plat approval by the Planning Commission Director, and in addition, Final Plats that include Dedication or Vacation of Easements and/or Rights-of-Way, require action acceptance of any Dedications by the appropriate Governing Body.

(b) Applicability

(1) The Major Subdivision procedures of this section apply to all Major Residential and Non-Residential Subdivisions land divisions or consolidations that are not eligible for review in conformance with the Certificate of Survey Administrative Review Procedures or the Minor Subdivision/Replat process.

(2) New Residential Subdivisions are not permitted in the Unincorporated Area of Douglas County, except on property zoned A-1 or R-1 prior to January 1, 2007.

(3) Non-Residential, Commercial and Industrial Subdivisions are permitted in the Unincorporated Area of Douglas County.

(c) Applications and Procedures

(1) The General Review and Approval Procedures set forth in Section 20-802 shall apply to all applications under this Section.

(2) Applications under this Section shall contain the materials required under Section 20-811(j)(4).

(2) Specific application and Preliminary Plat contents are provided in Section 20-809(e) & (f).

(3) Specific application and Final Plat contents are provided in Section 20-809(l) & (m).

(d) Criteria for Review

Approval or disapproval of Major Subdivisions shall be based on the following criteria:

(1) Each Lot resulting from the division will have direct Access to a public Street/Road that has been accepted by the county or city or a Private Street that has been approved as part of a Planned Development;

(2) Each Lot resulting from the division will conform with the minimum Lot size and other dimensional requirements applicable to the property through the Zoning District regulations;
(3) The proposed **Major Subdivision** and all **Lots** within it conform fully with the standards set forth in Section 20-810(a)(2);

(4) The proposed **Lots** and all other aspects of the proposed **Major Subdivision** conforms with the current **Comprehensive Plan** of Lawrence and Douglas County; and watershed/sub-basin plans, sector or **Neighborhood Plans**;

(5) The proposed **Major Subdivision** conforms with any adopted **Major Thoroughfares Plan** and provides for the logical continuation of any **Street/Roads** shown thereon affecting the land included in the proposed **Major Subdivision**;

(6) The proposed **Major Subdivision** shall provide for a logical connection of **Streets** between adjacent subdivisions taking into consideration constraints from steep **Topography** and other natural features that may limit **Street** connectivity but allow for pedestrian connectivity, shall conform with adopted watershed/sub-basin plans, sector or **Neighborhood Plans** for **Street layout**;

(7) The proposed **Major Subdivision** conforms to the adopted master plans for the water and wastewater systems and conforms to the overall drainage basin master plan; and

(8) The **Major Subdivision** plat conforms to the Kansas Minimum Standards for Boundary Surveys.

(e) **Preliminary Plat – Application**

A **Subdivider** shall apply for **Preliminary Plat** approval by submitting an application to the **Planning Director**.

(1) The application shall contain the materials required by Section 20-812(a), as well as any additional materials required as part of the application form provided by the Planning Director.

(1) Each application shall be accompanied by:

(i) The applicable filing fee;

(ii) A completed **Major Subdivision-Preliminary Plat** application form;

(iii) The required number of **paper copies and an electronic copy of** for a complete submission of a **Preliminary Plat**, containing all elements set forth in Section 20-812(a); and,

(iv) **A certified copy of a property ownership list to provide Mailed Notice in accordance with 20-802(d)(3)**; and

(v) A drainage plan for **Major Subdivisions** if within the City limits, or for **Major Non-Residential Subdivisions** that are located within an **Urban Growth Area**.
(f) Preliminary Plat Contents

The Preliminary Plat shall be drawn to a scale where all features presented are readable.

(1) Materials to be Included

The Preliminary Plat shall:

(i) State the name of the proposed Subdivision;

(ii) List names and addresses of the Subdivider, the land planner or Subdivision designer (if any) and the licensed Land Surveyor;

(iii) Show date of preparation, north arrow and graphic scale;

(iv) Identify the Plat as a Preliminary Plat;

(v) Give a legal description of the proposed Subdivision complete with section, township, range, principal meridian, county, and acreage. Show the location of the nearest section and/or quarter-section corner on the Plat, with a description tying it to the point of beginning for the Subdivision.

a. A Replat shall not be required to be referenced to a section and/or quarter-section corner, provided the original Plat for the subject Replat is tied to at least one of these corner monuments;

(vi) Include location, description and elevation of all Benchmarks established or source used for vertical control. There must be at least one established vertical control point as the basis for the topographic survey included with the application;

(vii) Show names of adjoining Subdivisions or, in the case of unplatted land, the names of the Owner or Owners of adjoining property;

(viii) Show Topography (contour interval not greater than 2 (feet) of the site. Topography shall be consistent with City of Lawrence and/or Douglas County aerial Topography. Where Land Disturbance, Grading or development has occurred on a site or within 100 feet of the subject site since the date the City of Lawrence and/or Douglas County, whichever is applicable, obtained aerial Topography, an actual field survey shall be required for the topographic data in the vicinity of the disturbed area;

(ix) Show on the face of the Plat or on a separate sheet, a general location of the proposed Subdivision. The general location map shall be drawn to an appropriate scale and shall show the relationship of the proposed Subdivision to the following:

a. The nearest Intersection of public Streets;

b. If not in the City, any state highway located within one-half mile of the property;
c. If in the City, any public school or park located within one-quarter mile of the property. If in the County, any public school located within one mile of the property;

d. If in the Urban Growth Area, the nearest City Limits, and the nearest boundary of the Urban Growth Area;

e. The zoning of the property and any other Zoning Districts located within one-quarter mile (if in the City or within the Urban Growth Area) or within one-half mile (if in the Rural Area).

(2) **Existing Conditions**

The Preliminary Plat shall also show the following existing conditions:

(i) Location of any area designated as Floodplain or Regulatory Floodplain, location and direction of the flow of existing water courses; and the surface elevation of the regulatory flood.

(ii) Location of any area zoned “Floodplain” in the Floodplain Overlay District, location and direction of flow of all water courses; and base flood elevation at water course entrances to and exits from the proposed Subdivision;

(iii) Location of section lines, private or public Streets, Alleys, Easements, and city boundaries within and immediately adjacent to the proposed Subdivision;

(iv) Location of natural features such as rock outcroppings, unique topographic features, lakes, individually significant mature trees, Stream Corridors, and insofar as can reasonably be shown, natural features to be removed;

(v) Boundaries of significant Stands of Mature Trees, Jurisdictional Wetlands, historic sites and archaeological sites on the property proposed for subdivision as identified on the GIS Baseline Environmentally Sensitive Lands Map maintained by the Planning Director;

(vi) Existing use of the property, including the location of all existing buildings, indicating those that will be removed and those that will remain on the property after the Final Plat is recorded;

(vii) Horizontal location and vertical elevation (if available) of existing Sanitary Sewers, storm water sewers, and Culverts within and adjacent to the proposed Subdivision, and the location of existing water mains, underground wiring, pipelines, and gas lines;

(viii) Zoning of all land within and adjacent to the Tract;

(ix) Location, description and elevation of all Benchmarks established or source used for vertical control;

(x) Types of soil, with the soil types generally indicated on the Preliminary Plat or a supplemental sheet; and,
(xi) For a Subdivision that will rely on the use of On-Site Sewage Management Systems, a summary of available information on the subsurface Water Table, including the depth of the Water Table at the highest, lowest and typical locations within the Subdivision.

(xii) Add note from 20-811(f) regarding underground utilities

(3) Streets; Sites; Proposed Improvements

The Preliminary Plat shall further show the following:

(i) Proposed Streets (including location, width, names, approximate grades), and their relation to Platted Streets or to proposed Streets as shown on any Watershed/Sub-basin Plan, sector or Neighborhood Plan of adjacent property.

(ii) Easements, showing width and general purpose;

(iii) Layout of all new municipal utilities proposed to serve the Subdivision;

(iv) Blocks and Lots, showing approximate dimensions and proposed Block and Lot numbers;

(v) Sites designated for other than single-family use by the adopted comprehensive or appropriately adopted Watershed/Sub-basin Plan, Sector or Neighborhood Plan. (Such plan shall be referenced on the face of the plat);

(vi) Sites proposed for Dedication as drainageway, park, school, or other public purposes;

(vii) Sites proposed by the applicant for land uses not in conformance with adopted comprehensive or Neighborhood Plans accompanied by a note on the face of the Plat stating that approval of the Preliminary Plat does not certify approval of these proposed land uses.

(viii) If requested by Planning Staff, the Building Envelope for proposed Lots.

   a. Any Lots that are not rectangular or that have a single dimension of less than 55 feet shall show include the BuildingEnvelope permitted under the current Zoning District regulations. A typical BuildingEnvelope diagram may be provided where the majority of Lots are the same size.

   b. A note referring to such BuildingEnvelope shall be included on the face of the Preliminary Plat regarding filed on a separate document in the Planning Department shall identify the applicable Zoning District and the date of the Zoning provisions on which the preparer has relied in designating the BuildingEnvelope.

(4) Supplemental Data

The following supplementary data and information shall be submitted with the Preliminary Plat or be included thereon:
(i) A table, shown on the face of the plat, including this data:
   a. Gross acreage of the Subdivision;
   b. Acreage within each Zoning District;
   c. Acreage to be dedicated for Streets or Roads, if any;
   d. Acreage to be dedicated for public uses other than Roads, if any;
   e. Total number of building Lots;
   f. Maximum, minimum, and average Lot size; and
   g. Phasing schedule if proposing phasing of final platting.

(ii) A statement on the face of the Plat, stating the method to be used for financing Public Improvements in the Subdivision and providing references to statutes, covenants or other sources for further information on the details of such financing. Such statement shall contain a heading in at least 24-point type saying “Provision and Financing of Roads, Sewer, Water and Other Public Services.” The rest of the statement shall be set out in at least 12-point type. At a minimum such statement shall indicate:
   a. Whether the Subdivision will have public Streets and Roads, Private Streets and Roads or a combination thereof;
   b. Whether the Subdivision will provide connections to a public water source (naming the source);
   c. Whether the Subdivision will provide connections to a public system for wastewater treatment (naming the system) or will rely on On-Site Sewage Management Systems or other On-Site wastewater treatment systems;
   d. Whether purchasers of Lots in the Subdivision will be subject to special assessments or other costs or fees specific to the Subdivision to pay for the capital costs of Streets, Roads, water lines and treatment, and/or wastewater lines and treatment; and
   e. Whether the provision of improved Roads, water service and/or wastewater service will depend in any way on a vote, petition or other collective action of property Owners in the Subdivision.

(iii) A separate narrative, explaining in detail the general nature and type of Public Improvements proposed for the Subdivision, and the manner by which the Subdivider intends to provide for their installation, as for example, by Public Improvement Petition, actual construction, escrow deposit, or performance bond. If other than by Public Improvement Petition, the approximate time for completion of such Improvements should be indicated.

(iv) Notation on the face of the Plat that all new telephone, cable television and electrical lines (except high voltage lines) must be located underground when in the City of Lawrence or in Lawrence Urban Growth Area.
(v) Notation on the face of the plat that the Developer is responsible for the cost of any relocation of existing utilities, if necessary to serve the proposed Subdivision.

(5) Stormwater Drainage - City of Lawrence

(i) Supplemental Data

The Preliminary Plat shall contain data, information and supplemental maps of surrounding property in sufficient detail regarding storm water drainage issues, as determined by the Staff of the Planning Department Planning Director or the Planning Commission. The Staff of the Planning Department Planning Director or the Planning Commission may request additional data, information and supplemental maps from the applicant regarding storm water drainage, as appropriate.

(ii) Minimum Floor Elevations

On Lots adjacent to all drainage Easements and on drainageways that are designated by the Director of Public Works or his or her designee, the Preliminary Plat and Final Plat shall indicate:

a. The required minimum habitable floor elevations for structures on Lots; or,

b. The minimum elevation for a foundation opening(s) which shall be certified by a licensed Land Surveyor or Engineer.

c. A note that states:  [If a basement is built on a Lot where a minimum elevation has been established, the building design is encouraged to incorporate a sump pump.]

(g) Review and Action by the Planning Commission

(1) The Planning Commission shall conduct the review of the application at the meeting at which it is scheduled by the Planning Director, unless the Subdivider shall request deferral to a future meeting. The Planning Commission shall determine if the Preliminary Plat conforms to the requirements of the Subdivision Regulations and such determination shall be made within 60 days after the first meeting the Planning Director has placed the submitted Plat on a Planning Commission agenda for action. take final action on the Preliminary Plat at a meeting occurring not later than 60 days after the date of receipt of a complete application by which the Planning Director has determined is ready to be placed on an agenda for the Planning Commission’s initial receipt of the Preliminary Plat that the Planning Director has found to be a complete application.

(2) If the Planning Commission finds that the proposed Major Subdivision Preliminary Plat conforms to all of the criteria set forth in Section 20-804(d), 20-809(d) the Planning Commission shall approve the Preliminary Plat.
(3) If the Planning Commission finds that the proposed Major Subdivision
Preliminary Plat fails in any way to conform to the standards set forth in
this paragraph, Section 20-809(d), the Planning Commission shall, by
motion, deny approval to the proposed Preliminary Plat and shall state in the
motion the reason(s) for that denial.

(4) The Planning Director shall give written notice to the Subdivider of the action
of the Planning Commission. If the Preliminary Plat has been disapproved, or
conditionally approved, the notice shall specifically state the ways in which the
Major Subdivision or the Preliminary Plat fails to conform to these Subdivision
Regulations.

(5) If the deficiency or other reason for denial can be cured through action of the
applicant, the applicant may submit a revised application and Preliminary Plat
within 60 days after receipt of the written notice and shall not be required to
pay a further fee. In case of a resubmission, the Planning Commission shall
consider the resubmitted application at the next meeting occurring at least 21
days after receipt of the complete resubmission by the Subdivider.

(6) If the Planning Commission fails to act on the Preliminary Plat within 60 days
of the date of their first meeting occurring after the receipt of a Preliminary
Plat on their agenda, determined to be a complete application by the
Planning Director, the Subdivider may, by letter, apply to the Planning
Director for a “Certificate of Deemed Approval”. If the Planning Director finds
that a complete application was received at least 60 days before the date of
the letter and placed on a Planning Commission agenda, and that no
action has been taken by the Planning Commission, the Planning Director shall
issue a “Certificate of Deemed Approval” indicating that “this Preliminary Plat
shall be deemed approved due to a failure of the Planning Commission to take
timely action in accordance with K.S.A. 12-752(b).”

(h) Phasing for Final Plats

(1) A Preliminary Plat may, at the option of the applicant, contain a proposed
schedule for submitting Final Plat applications in phases. The Planning
Commission may approve the proposed phasing plan if it finds that:

(i) The area represented by each proposed phase is of sufficient size to
permit the economical installation of Public Improvements;

(ii) All parts of the necessary public and private Improvements Plans to
serve the Major Subdivision Preliminary Plat Subdivision will be
provided concurrently with the phase which will first be served by those
Improvements or part thereof, or with an earlier phase; and

(iii) Dedication of All perimeter Rights-of-Way shall be dedicated for
the entire Preliminary Plat occur with the first Final Plat phase
of the approved Preliminary Plat.

(iv) That the application for the last phase of the Final Plat will be due no
later than the end of the fifth year after approval is given for the
Preliminary Plat.
(i) **Effects of Approval by the Planning Commission**

(1) Approval of the Preliminary Plat by the Planning Commission shall constitute approval of “the Plat” for purposes of K.S.A. 12-752(b), subject only to the following:

   (i) Submission of a Final Plat, in the form and containing all of the information required by Section 20-812(b) 20-809(k). The Final Plat shall be consistent in substantial compliance with the Planning Commission’s approval of the Preliminary Plat, including satisfying any conditions imposed on that approval; and

   (ii) Completion of Street/Roads, Roads and Public Improvements required by the terms of the approval of the Preliminary Plat, or provision of satisfactory Guarantees of Completion of Improvements, in accordance with Section 20-811(g)(8) (h). ; and

   (iii) Development of Building Envelopes and drainage plans consistent with these Building Envelopes; and

   (iv) Acceptance (or rejection) of all proposed Dedication by the Governing Body.

(j) **Preliminary Plat - Review and Action by Governing Body**

(1) A Preliminary Plat that has been approved by the Planning Commission shall be submitted to the Governing Body, as applicable, for its consideration of acceptance of the Dedication of Street/Roads and other public ways, service, and utility Easements and any land dedicated for public purposes.

(2) The Governing Body shall accept or refuse the Dedication of land for public purposes within 30 days after the first meeting of the Governing Body following the date of the Preliminary Plat’s submission to the Clerk of the appropriate Governing Body. The Governing Body may defer action for an additional 30 days for the purpose of allowing for modifications to comply with the requirements established by the Governing Body. No additional review and recording fees shall be assessed during that period.

(3) If the Governing Body defers or refuses these Dedications, it shall advise the Planning Commission of the reasons thereof.

(4) Failure of the Governing Body of the city or of the county to accept affirmatively a Dedication shown on the Preliminary Plat shall be deemed to be a refusal of the proposed Dedication.

(5) The respective Governing Bodies maintain full legislative discretion to reject any proposed Dedication, regardless of the approval of the Preliminary Plat. If the Governing Body rejects part or all of a proposed Dedication, the Subdivider may amend the Preliminary Plat and resubmit it for consideration by the Planning Commission—without the rejected Dedication; if the Subdivider takes no action within 60 days of the rejection of any proposed Dedication, it shall constitute failure of a material condition of the approval of the Preliminary Plat and the Preliminary Plat shall be deemed to have been rejected.
(k) **Preliminary Plat Expiration**

(1) Approval of a Preliminary Plat by the Planning Commission shall expire on the later of the following:

(i) Eighteen Twenty four (18-24) months from the date approval was granted, unless a complete application for Final Plat is submitted by that approval date.

(ii) Any application due date as shown on an approved phasing schedule, unless a complete application for Final Plat is submitted by that due date.

(2) Upon application by the Subdivider, the Planning Commission may, if the cause of failure of the Subdivider to submit a Final Plat is beyond the Subdivider's control, grant an extension of the time beyond this period, for a 24 month period for good cause shown. Such request for extension must be submitted to the Planning Director prior to the expiration of the 24 month approval period. Not to exceed one additional year.

   (i) The Planning Director shall place such request, with any recommendation, on the next available Planning Commission agenda based on the adopted submittal schedule.

   (ii) The Planning Director shall notify the applicant by mail of the date of the proposed consideration by the Planning Commission. Mailed notice of the extension request shall also be provided by the Planning Office in accordance with Section 20-802(d). On that date, the Planning Commission shall hear from the applicant and the Planning Director and may hear from other interested parties.

(3) If a Preliminary Plat expires under this sub-section after one or more Final Plats for a phased subdivision have been approved, then only that portion of the Preliminary Plat that relates to the phases with respect to which no Final Plat has been approved shall expire. If a Final Plat has not been submitted, approved, and filed recorded within this 18-24-month period, or within an extension period, a Preliminary Plat must be resubmitted to the Planning Commission, reviewed and considered by the Planning Commission in accordance with the procedures set forth herein.

(l) **Final Plat - Application**

The Subdivider may initiate review of the Final Plat at any time after approval of the Preliminary Plat by the Planning Commission, including satisfaction of all conditions of Preliminary Plat approval. The Final Plat shall be processed in accordance with the provisions of Section 20-809(l)(m).

(1) The Final Plat shall be submitted with an application form provided by the Planning Director. The application shall contain all of the materials required by Section 20-812(b)-809(l), as well as any additional materials required by the application form provided by the Planning Director.
Each application shall be accompanied by:

(i) The applicable filing fee;

(ii) A completed Major Subdivision-Final Plat application form;

(iii) The required number of paper copies and an electronic copy of a complete submission of a Final Plat; and

(iv) All of the materials required by Section 20-812(b) 809(l), as well as any additional materials required by the application form provided by the Planning Director.

(2) The Final Plat application shall be accompanied by all required fees; however, the fees necessary for recording the Final Plat at the Register of Deeds office may be submitted after approval; and

(3) The Final Plat shall be in the format and contain the information required by Section 20-812(b) 20-809(l), except that the Subdivider, at the Subdivider’s discretion, may delay submission of the final recording and electronic copies of the Final Plat until final action on the Final Plat by the Planning Director and, if applicable, by the Governing Body; and

(4) For Final Plats which represent only a phase of an approved Preliminary Plat and include minor revisions from the approved Preliminary Plat, as reflected in 20-809(m)(2)(i), a revised Preliminary Plat that includes the proposed revisions shall be submitted with the Final Plat application for record keeping purposes.

(m) Final Plat Contents

(1) Format

The Final Plat shall be prepared by a licensed Land Surveyor with black ink on permanent reproducible material meeting the current standards provided by the Register of Deeds. All drawings and signatures of certification shall be in waterproof ink. The overall sheet size shall be 24 inches by 36 inches. The scale shall be one inch equals 100 feet or less.

(2) Material to be Included

The Final Plat shall show:

Name under which the Subdivision is to be recorded;

(i) Descriptive information, which shall:

a. State the name of the proposed Subdivision;

b. Show date of preparation, north arrow and graphic scale;

c. Give a legal description of the proposed Subdivision complete with section, township, range, principal meridian, county, and acreage. Show the location of the nearest section and/or quarter-section
corner on the plat, with a description tying it to the point of beginning for the Subdivision.

(1) A Replat shall not be required to be referenced to a section and/or quarter-section corner, provided the original plat for the subject Replat is tied to at least one of these corner monuments;

d. Show names of adjoining Subdivisions or, in the case of unplatted land, the names of the Owner or Owners of adjoining property;

e. Easements, showing width and general purpose;

f. Sites proposed for Dedication as drainageway, park, school, or other public purposes;

(ii) In addition, the following information is required which is similarly required on the Preliminary Plat:

a. Location of any area zoned Floodplain or within a Floodplain Overlay District zoning district;

b. Boundaries of significant Stands of Mature Trees, Jurisdictional Wetlands, historic sites and archaeological sites on the property proposed for subdivision; protected environmentally sensitive lands as shown on the Preliminary Plat.

c. For properties within the City, the environmentally sensitive lands shall be located within a Tract or Easement and the Plat shall contain information regarding ownership and maintenance of the Tract or Easement as well as the protection measures for the environmentally sensitive lands.

d. For properties within the unincorporated portions of the County, the Plat shall include a Building Envelope which excludes the environmentally sensitive lands and one of the following: a note that a Temporary Set Aside Agreement or permanent Conservation Easement which contains use restrictions and maintenance and protection measures has been recorded for the environmentally sensitive lands and the Book and Page Number for the recorded Temporary Set Aside Agreement or permanent Conservation Easement; or the protected environmentally sensitive lands shall be placed within Easements or Tracts and the Plat shall note the ownership, maintenance responsibility and protection measures of the protected lands.

e. Proposed Streets (including location and proposed names), and their relation to Platted Streets or to proposed Streets as shown on any adopted general development plan of adjacent property; and,

f. Block and Lot numbers and dimensions of Blocks and Lots.
(iii) In addition, the following information is required which is similarly required on the Preliminary Plat:

a. Location of any area zoned Floodplain or within a Floodplain Overlay District zoning district;

b. Boundaries of significant stands of mature trees, Jurisdictional Wetlands, historic sites and Archaeological Sites on the property proposed for subdivision;

c. Proposed Streets (including location and proposed names), and their relation to Platted Streets or to proposed Streets as shown on any adopted general Development plan of adjacent property; and,

d. Block and Lot numbers and dimensions of Blocks and Lots.

(iv) Accurate dimensions for all lines, angles, and curves used to describe boundaries, streets, easements and areas to be reserved for public use. Data for all curves shall include radius, arc length, chord length, and central angle;

(v) For land located in a Floodplain, as defined and regulated under Chapter 20, Article 12 of the City Code and the comparable provisions adopted by resolution in Section 12-328 of the Zoning Regulations for the Unincorporated Area of Douglas County, the following:

a. The total area of each Lot located in the designated Floodplain;

b. The Minimum Building Elevation and Minimum Elevation of Building Opening, as determined from Chapter 20, Article 12 of the City Code or the applicable County Floodplain regulations. Section 12-328 of the Zoning Regulations for the Unincorporated Area of Douglas County.

(vi) On Lots adjacent to all drainage easements and on drainageways that are designated by the Director of Public Works or his or her designee, the Final Plat shall indicate:

a. The required minimum habitable floor elevations for structures on Lots; or,

b. The minimum elevation for a foundation opening(s) which shall be certified by a licensed Land Surveyor or Engineer.

c. A note that states: [If a basement is built on a Lot where a minimum elevation has been established, the building design is encouraged to incorporate a sump pump.]

(vii) For any Lot including or adjacent to a Lot including environmentally sensitive lands (see Section 20-1101(c)(iii)), as defined in Section 20-810(1)(k) [County Code Section 11-1101(1)(k)] designation of a Building Envelope within which a building may be built after compliance with all applicable setback, Floodplain and sensitive land standards;
For any Lot including or adjacent to a lot including sensitive lands (see Section 20-1101(c)(iii)), as identified in Section 20-810(i)(i), designation of a Building Envelope within which a building may be built after compliance with all applicable setback, floodplain and sensitive land standards;

The dated signature and seal of the licensed Land Surveyor responsible for the survey and the Final Plat shall contain a note stating: “This survey conforms to the Kansas Minimum Standards for Boundary Surveys”;

Acknowledged certifications on the face of the Final Plat as listed below (may be combined where appropriate):

a. A certificate signed by all parties having any record, title or interest of record in the land subdivided, showing their consent to the preparation and recording of the Plat;

b. A certificate, signed by the Owner or Owners, dedicating all Parcels of land which are intended for public use;

The endorsement of the Planning Commission as evidenced by the signature of its Chairperson;

Acceptance of Dedication by the appropriate Governing Body, as indicated by the signature of the Chairperson of the Board of County Commissioners, the Mayor or another Person authorized to sign on behalf of either;

As a separate document, a certificate that all taxes and special assessments due and payable have been paid.

a. In the case of unpaid special assessments, a proposed redistribution of such unpaid special assessments which meets the county or city’s requirements and is acceptable to the County or City Clerk and County or City’s Public Works Director.

A note shall be placed on the Final Plat indicating that additional information concerning drainage and structural elevations are placed on the Preliminary Plat, if such requirement has been placed on the Preliminary Plat.

A line shall be provided on the Plat for the review date and signature of the County Surveyor beneath a note stating: “Reviewed in compliance with K.S.A. 58-2005”.

A reference line shall be provided on the plat indicating the book and page where the Master Street Tree Plan is recorded at the Register of Deeds.

A note shall be placed on the Final Plat designating any Lots Abutting a Half-Street and that take sole Access from that Public Right-of-Way as non-buildable in accordance with Section 20-810(e)(9)(ii).
Evidence shall be submitted with the Final Plat showing compliance with the requirements for public improvements in Section 20-811 providing one or more of the means of ensuring completion of required Public Improvements identified in Section 20-811(h).

Final Plat - Review and Action by Planning Director

1. After approval or approval with conditions of a Preliminary Plat by the Planning Commission and prior to final approval of Public Improvement Plans, the Subdivider shall have prepared for recording a Final Plat, which is consistent with the action of the Planning Commission and with the formatting and content requirements of Section 20-812(b). After approval or approval with conditions of a Preliminary Plat by the Planning Commission and prior to final approval of Public Improvement Plans, the Planning Director shall review the Final Plat for incorporation of the Planning Commission’s recommendations and comments and to insure that the Final Plat is in the required format.

2. If the Planning Director finds that the submitted Final Plat conforms with the content requirements of Section 20-812(b) and is consistent in substantial compliance with the Preliminary Plat approved by the Planning Commission, including satisfying any conditions incorporated in that approval, the Planning Director shall approve the Final Plat and attach to it a formal certification that the submitted Final Plat:

   i. Conforms to is in substantial compliance with the Preliminary Plat previously approved by the Planning Commission. The Final Plat shall be deemed to be in substantial compliance with the previously approved Preliminary Plat if one or more of the following criteria are met, as applicable:

      a. No change.

      b. Increase or reduction, less than or equal to ten percent, of the number of proposed approved Lots, Parcels or Tracts shown within the equivalent portion(s) approved phase of the Preliminary Plat.

      c. Minor adjustments to Rights-of-Way lines, Easement lines and/or property lines to account for technical changes related to the proposed Public Improvement Plans— in accord with applicable street classification standards, easement width and location criteria, the Subdivision Regulations, dimensional and lot area requirements, density requirements, and with variances and/or waivers which may have been granted with previous approval of the equivalent portion(s) of the Preliminary Plat.

      d. Modifications to Easements and Rights-of-Way when Preservation—of the general form of the approved Preliminary Plat with regard to overall layout, public and/or private vehicular and pedestrian connection, area set aside...
for public space and/or open space, and required utility corridors is maintained.

e. Determination by the Planning Director as to whether above-described changes, if applicable, are required to be retroactively included in a revised Preliminary Plat for Planning Office records.

(ii) Satisfies any conditions of approval imposed by the Planning Commission;

(iii) Includes the same proposed Dedications accepted by the Governing Body, subject only to minor technical adjustments as described in Section 20-809(m)(2)(i)(a) through (d e), above;

(iv) Satisfies any conditions of acceptance of Dedications imposed by the Governing Body;

(iv) Represents a Plat for which all required Public Improvements have been completed, or for which adequate Guarantee of Improvements has been provided as identified in Section 20-811(h); and

(v) Is otherwise consistent with the requirements of this Article for a Final Plat.

(3) If the Planning Director finds that the submitted Final Plat is deficient as to format or content or otherwise technically deficient, the Planning Director shall notify the Subdivider of the deficiency(ies) within 5 working days.

(4) If the Planning Director finds that the submitted Final Plat does not substantially comply with the approved Preliminary Plat, including any conditions incorporated in such approval, and with the proposed Dedications shown on the Preliminary Plat and accepted by the appropriate Governing Body, subject to Section 20-809(m)(2)(i)(a) through (d), above, the Planning Director shall place the Final Plat on the agenda of the next Planning Commission meeting following the notice provisions of Section 20-802(d), for further consideration in accordance with the Preliminary Plat review and action provisions of Section 20-804(e)(2).

(5) The Planning Commission approval of the Preliminary Plat combined with the Planning Director's approval as to form and consistency substantial compliance with the approved Preliminary Plat shall constitute Planning Commission approval of the Final Plat. No further action by the Planning Commission shall be necessary or required.

(o) Final Plat – Review and Action by Governing Body

(1) A Final Plat that has been approved by the Planning Director shall be submitted to the Governing Body, as applicable, for its consideration of acceptance of the Dedication of Street/Roads and other public Rights-of-Ways, service, and utility Easements and any land dedicated for public purposes.
2. The Governing Body shall accept or refuse the Dedication of land for public purposes within 30 days after the first meeting of the Governing Body following the date of the Final Plat’s submission to the Clerk of the appropriate Governing Body. The Governing Body may defer action for an additional 30 days for the purpose of allowing for modifications to comply with the requirements established by the Governing Body. No additional review and recording fees shall be assessed during that period.

3. If the Governing Body defers or refuses these Dedications, it shall advise the Planning Commission Director of the reasons thereof.

4. Failure of the Governing Body of the city or of the county to accept affirmatively a Dedication shown on the Final Plat shall be deemed to be a refusal of the proposed Dedication.

5. The respective Governing Bodies maintain full legislative discretion to reject any proposed Dedication, regardless of the approval of the Final Plat. If the Governing Body rejects part or all of a proposed Dedication, the Subdivider may amend the Final Plat and resubmit it for consideration by the Planning Director without the rejected Dedication; if the Subdivider takes no action within 60 days of the rejection of any proposed Dedication, it shall constitute failure of a material condition of the approval of the Final Plat and the Final Plat shall be deemed to have been rejected.

(p) Signatures on Final Plat

If the Planning Director has approved and certified the Final Plat in accordance with Section 20-809(l), the Planning Director within 5 working days of receipt of the recordable copies of the Final Plat, shall submit the Final Plat to the Chair of the Planning Commission and to the Mayor or Chairperson of the Board of County Commissioners, as applicable, for signatures. Each of these persons shall, if he or she accepts the certification of the Planning Director, sign the Final Plat, including the “Acceptance of Dedications” certificate; if any of these persons refuse to sign the Final Plat, he or she shall refer the Final Plat to the Planning Commission for consideration at its next meeting in accordance with the requirements of Section 20-809(e), together with a memorandum explaining the reasons why such person refused to sign it.

(q) Processing after Approval of Final Plat

1. After all signatures have been obtained and all other requirements of this Article have been completed, the Planning Director shall forward the recordable copy of the Final Plat to the Register of Deeds for recording. The recorded version of the plat shall bear the endorsements herein provided in Section 20-812(b)(2) Section 20-809(l) including the endorsement by the Governing Body accepting the Dedications.

2. Upon approval and acceptance of all Final Plats that create new Street/Roads or other Public Improvements, if a Major Non-Residential Subdivision in the Unincorporated Area of Douglas County, Kansas, detailed Street/Road and/ or utility plans shall be submitted to and approved by either the County Engineer or City Engineer, as applicable, and, if the Major
Subdivision is in the City, detailed Street/Road plans shall be submitted to and approved by the City Engineer for approval prior to filing recording of the Final Plat, and these plans shall include the following:

(i) Plan, profile, ditch grades, and cross-sections of all Street/Roads, Alleys and other public ways; and,

(ii) Drainage areas and size and length of cross-road drainage structures.

(3) Prior to the Final Plat being recorded with the Register of Deeds, a digital version of the Plat shall be submitted to the Planning Director in a format approved by the Director of Planning Director. The digital file shall be registered to the State Plane Coordinate Grid System used by the city and county. Any Final Plat not submitted in a digital format will be converted by the City or County, and the cost for conversion will be paid by the Applicant before the Plat can be recorded at the Register of Deeds.

(4) Errors found in closure or internal dimensions shall be corrected prior to filing recording the Final Plat at the Register of Deeds.

(5) Approval of a Final Plat by the Planning Director Commission and acceptance of Dedications by the appropriate Governing Body shall be effective for no more than 18 24 months from the date of acceptance unless all conditions of approval have been completed, unless an extension has been granted by the Planning Director for good cause. Such request for extension must be submitted prior to the expiration of the original approval.

(r) Final Plat Expiration

(1) Approval of a Final Plat by the Planning Director Commission and acceptance of Dedications by the appropriate Governing Body shall be effective for no more than 18 24 months from the date of acceptance unless all conditions of approval have been completed, unless an extension has been granted by the Planning Director for good cause.

(2) Such request for extension must be submitted to the Planning Director prior to the expiration of the original 24 month approval period.
20-810 Subdivision Design Standards

(a) General

(1) Applicability

All Subdivisions shall comply with the Design and Improvement Standards of this Section and the Public Improvement Standards of Section 20-810(j).

(2) Design of Lots

(i) Lots shall be laid-out and designed to comply with all applicable zoning district regulations. The size, width, depth, shape, and orientation of each Lot in a Subdivision shall also take into consideration Topography (steepness of slope and gradient), physical features, type of use contemplated and effect on adjacent Lots.

(ii) Lots for commercial and industrial use shall be of size and arrangement to allow for off-street/road parking and loading facilities.

(iii) Double-Frontage and Reverse-Frontage Lots shall be avoided except where they are necessary to provide for the separation of residential development from Collector and Arterial Street/Roads or to overcome or take advantage of specific disadvantages challenges of steep Topography and orientation.

a. A planting screen Easement of a minimum 20 feet, with or without a berm, shall be provided along the portion of the Lots Abutting such an Arterial Street/Road if required by the Planning Commission.

(iv) Corner Lots shall be a minimum of 20% wider than the minimum Lot Width required in the applicable zoning district interior Lots to allow for appropriate building setbacks and sufficient yard space.

(v) Any Lot that is not rectangular or that has a single dimension of less than 55 feet shall show the Building Envelope permitted under the current Zoning District regulations; a note to such Building Envelope filed on a separate document in the Planning Department shall identify the applicable Zoning District and the date of the Zoning provisions on which the preparer has relied in designating the Building Envelope.

(vi) Lawrence Residential lots shall not be created where the width at the street Right-of-Way line is less than 75% of the depth of the lot except where the established neighborhood pattern would support a lesser percentage or the lot front onto a cul-de-sac.

(3) Plans for Resubdivision

(i) Whenever an area is divided into residential Lots with a Lot area of one acre or greater, and there is a possibility that such Lots may eventually be re-subdivided into smaller Lots, consideration shall be given to the Street,
and Lot arrangement of the original Subdivision so that additional Streets can be opened later to permit a logical arrangement of smaller Lots.

(ii) Provision of Easements or Right-of-Way for the future opening and extension of such Streets and for gravity sewerage and stormwater drainage shall, upon recommendation of the Planning Commission and approval of the Governing Body, be made a condition of Preliminary Plat approval.

(b) Frontage and Access

All Lots shall have Frontage on a public Street except that:

(1) Private Streets may only be approved as part of a Planned Developments and are not allowed in the unincorporated area of the County; and,

All Lots shall have Frontage on a public Street unless Lot Frontage is approved on a Private Street as part of a Planned Development.

(c) Access

(1) City of Lawrence

For Lots located within the City, Access shall be provided directly from a Street or as follows:

(i) An Alley may provide the primary vehicular Access to one or more Lots in a Subdivision, provided that each such Lot shall have Street Frontage on a public Street unless designed as part of a Planned Development.

(ii) Alley Access is particularly appropriate where the Street Frontage for the Lot is on a Collector or Arterial Street.

(iii) Residential shared Driveways are permitted when a recorded Access Easement is provided.

(iv) Joint-Use Driveways in Lawrence with a minimum paved width of 24 feet may be approved as part of the Subdivision approval process for campus-like commercial or industrial non-residential developments (e.g., shopping centers, industrial/business parks), if there is a city approved Easement of record ensuring perpetual Access to the Joint-Use Driveway by all Lots with Street Frontage and providing for the perpetual ownership, continuance and maintenance of the Joint-Use Driveway.

(v) Joint-Use Driveways shall not be considered as parking or loading space or as an aisle for access to individual parking spaces in computing conformance with the parking requirements of the Zoning Ordinance Development Code.

(vi) Joint use Access points may be approved within Lawrence or the unincorporated area of the County when located wholly within the dedicated public Street Right-of-Way or public road easement.
(2) **Unincorporated Area of the County**

For Lots located within the Unincorporated Areas of the County, Access shall be directly from a Road or as follows:

(i) **Joint-Use Driveways** are not permitted in the Unincorporated Area of the County.

(ii) **Joint-Use Shared Driveway Approaches** serving residential uses may only be approved with the filing of an instrument for joint maintenance of the Driveway Approach area and only when individual Driveways are separately maintained beyond the Street Road Easement or Right-of-Way line.

(iii) Joint use Access points may be approved within Lawrence or the unincorporated area of the County when located wholly within the dedicated public street Right-of-Way or public Road Easement.

(1) **Joint-Use Driveways** in Lawrence with a minimum paved width of 24 feet may be approved as part of the Subdivision approval process for campus-like commercial or industrial Developments (e.g., shopping centers, industrial/business parks), if there is a city approved easement of record ensuring perpetual access to the Joint-Use Driveway by all Lots with Street Frontage and providing for the perpetual ownership, continuance and maintenance of the Joint-Use Driveway.

(2) **Joint-Use Driveway approaches** serving residential uses may only be approved with the filing of an instrument for joint maintenance of the driveway approach area and only when individual driveways are separately maintained beyond the Street Right-of-Way line.

(3) **Joint-Use Driveways** are not permitted in the unincorporated area of the County.

(4) **Joint-Use Driveways** shall not be considered as parking or loading space or as an aisle for access to individual parking spaces in computing conformance with the parking requirements of the Zoning Ordinance.

(5) An alley may provide the primary vehicular access to one or more Lots in a subdivision, provided that each such Lot shall have Street Frontage on a Public Street. Alley access is particularly appropriate where the Street Frontage for the Lot is on a Collector Street.

(6) Joint-use access points may be approved within Lawrence or the unincorporated area of the County when located wholly within the dedicated public street Right-of-Way or public road easement.
(d) **Blocks**

(1) **General**

The lengths, widths, and shapes of Blocks shall be determined with due regard to:

(i) Limitations and opportunities of Topography and other physical features such as utilities, Floodplains, Jurisdictional Wetlands and natural storm drainage patterns;

(ii) Provision of building sites adequate for the special needs of the type of uses contemplated and adequate storm drainage from each lot, such as provisions of swales between lots;

(iii) Zoning requirements as to Lot sizes and dimensions; and

(iv) Need for convenient Access, circulation, and control of Street traffic for safety.

(2) **Length**

(i) **City of Lawrence**

Block length for Local Streets within the City of Lawrence shall not exceed 800 feet in length (centerline to centerline of Streets) unless the Subdivider demonstrates to the satisfaction of the Decision Making Body Planning Commission that:

   a. There are Pedestrian Ways connections at intervals of 700 feet or less, replacing the connection that would exist as a Sidewalk along the Street; and

   b. The proposed Block must be greater than 800 feet in length because physical conditions preclude a Block length of less than 800 feet. Such conditions may include, but are not be limited to, Topography or the existence of natural resource areas such as Jurisdictional Wetlands, Floodplains, wildlife habitat areas, steep slopes or Woodlands.

(ii) **Rural Area** Unincorporated Area of the County [Reserved]

(3) **Width**

A residential Block shall have sufficient width to allow for two tiers of Lots of appropriate depth unless it adjoins a limited-access, Street, Collector Street, or Arterial Street, railroad or other nonresidential use, in which case it may have a single tier of Lots that exceed the minimum Lot width area required in the zoning district.

(4) **Shape**

Blocks may be irregular in shape, provided their design meets the requirements of Lot standards, traffic flow and control considerations and any adopted watershed/ sub-basin plans, Sector or Neighborhood Plan.
(e) Streets

(1) General

(i) Local Streets within the City of Lawrence should be less than 1,320 feet in length.
   a. Local Streets exceeding 800 feet in length shall include Traffic Calming Devices, shown in an adopted City of Lawrence Traffic Calming Policy document as maintained by the Public Works Director at intervals not exceeding 400 feet.

(ii) All Streets within Subdivisions shall be laid-out, arranged and designed in accordance with any adopted watershed/sub-basin plans, Sector or Neighborhood Plan or, in the absence of such a plan, with all applicable Street Layout and Design standards of this Article.

(iii) Arterial and Collector Streets shall be laid-out, arranged and designed in accordance with any adopted Major Thoroughfares Plan Map or corridor plan.

(iv) Subdivisions shall provide a logical Street layout in relation to topographical conditions, public convenience, safety and the proposed use of the land to be served by such Streets.

(v) At time of Preliminary Plat approval, the full Right-of-Way for all boundary line and Full Maintenance Roads under the applicant’s ownership control shall be annexed to the City.

(2) Connections

(i) Street connections shall provide Access to adjoining lands, existing and proposed Streets.

(ii) Every Subdivision shall provide for at least one Street connection to each adjacent Subdivision or future adjacent Subdivision.
   a. Any existing or Platted Street that terminates at the boundary line of a proposed Subdivision shall be continued into the subject proposed Subdivision in such a manner as to provide Street connections to adjoining lands and Streets within the subject proposed Subdivision or,
   b. in the case of a Local Streets, may be terminated in a Cul-de-sac if an existing environmental feature dictates the design.

(iii) Streets shall provide for Street connections to adjacent undeveloped land in accordance with the adopted Major Thoroughfares Plan Map.

(iv) No new Subdivision shall be approved in which more than 35 residential Lots or potential residential dwelling units, or more than 25,000 square feet of nonresidential space will have access to the public road system via a Single Outlet to the arterial and collector Street system as shown on the adopted Major Thoroughfares Plan Map must comply with the currently adopted International Fire Code. IFC requirements may limit the total number of Lots or residential Dwelling units permitted; total amount of square feet constructed; or the type of construction allowed.
(v) **Residential Collector Streets** shall provide connections to nonresidential uses within the neighborhood and shall not typically intersect with **Arterial Streets**.
   
a. Bicycle & pedestrian facilities are strongly recommended for Residential Collectors.
   
b. Various traffic-calming treatments may be used to reduce travel speeds.
   
c. **Residential Collector Streets** with adjacent residential land uses should, in most cases, be limited to two lanes.
   
d. **Residential Collector Streets** that connect neighborhoods to shopping areas shall be designed to have indirect connections to **Arterial Streets**.

(vi) Streets longer than one Lot that terminate at the property boundaries of undeveloped land shall provide an improved temporary Turn-around.

(3) **Intersecting Streets**

(i) **Local Streets** generally should not intersect **Arterial Streets**. The Planning Commission, with the advice of the City Engineer’s **recommendation**, may approve a new connection of a **Local Street** to an **Arterial Street**:
   
a. Where it finds that such connection is part of the best traffic solution for the new **Subdivision**; and
   
b. Where the **Subdivider** will add turn lanes or other **Improvements** recommended by the City Engineer to the **Arterial Street** to minimize the impact of the connection on the functioning of the **Arterial Street**.

(ii) **Local Streets** intersecting opposite sides of another **Local** or **Collector Street** when offset shall be offset 300 feet or more.

(iii) **Streets** shall intersect as nearly as possible at right angles.

(iv) Not more than two **Streets** shall intersect at any one point.

(v) **Residential connector Streets** shall be designed within neighborhoods to connect to these neighborhoods’ service areas. These **Residential connector Streets** shall have sidewalks on both sides.

(4) **Requirements When Access Barriers Exist**

Wherever a proposed **Subdivision** contains or is adjacent to a **limited Marginal Access Street or Road**; an **Arterial Street**; or a railroad Right-of-Way; the appropriate **Governing Body** Planning Commission, as part of the Preliminary Plat approval, shall require the following for the protection for the integrity and subsequent safety, efficiency and economy of the **limited Marginal Access**, **Arterial**, or railroad **Right-of-Way**:
(i) Dedication of a Local Street or Road to provide ingress and egress to and from such Blocks or Lots;

(ii) A Street or Road approximately parallel to and on each side (where applicable) of such Limited Marginal Access Street or Road, Arterial Street; or railroad Right-of-Way at a distance suitable for the appropriate use of the land between such Streets or Roads;

(iii) Reverse Frontage Lots with Access Control provisions along the rear property line; or

(iv) Adequate distance between such parallel Streets or Roads and the Arterial, limited Marginal Access Street or Road, or railroad so as to provide for proper approach grades and future grade separation.

(5) Cross-Sections

(i) City of Lawrence

All Platted Subdivisions lying within the City of Lawrence shall comply with the following cross-section standards:

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Right-of-Way</th>
<th>Roadway</th>
<th>Sidewalks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min. Width</td>
<td>Min. Width</td>
<td>Paving</td>
</tr>
<tr>
<td>[1] Measured from back of curb to back of curb.</td>
<td>(feet)</td>
<td>(feet)</td>
<td></td>
</tr>
<tr>
<td>[2] Includes limited access routes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Arterial</td>
<td>150</td>
<td>*</td>
<td>Required</td>
</tr>
<tr>
<td>Minor Arterial (3 lane)</td>
<td>100</td>
<td>40</td>
<td>Required</td>
</tr>
<tr>
<td>Collector</td>
<td>80**</td>
<td>36</td>
<td>Required</td>
</tr>
<tr>
<td>Local or Residential Collector</td>
<td>60</td>
<td>30</td>
<td>Required</td>
</tr>
<tr>
<td>Local</td>
<td>60</td>
<td>27</td>
<td>Required</td>
</tr>
<tr>
<td>Limited Local</td>
<td>50</td>
<td>22</td>
<td>Required</td>
</tr>
<tr>
<td>Cul-de-sac [***]</td>
<td>60**</td>
<td>22</td>
<td>Required</td>
</tr>
<tr>
<td>Marginal Access (Frontage Road)</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* As directed by the City Engineer
** Additional r-o-w may be necessary at intersections
*** Paved bulb with 50’ radius is required

a. Street Width - Pavement width constructed according to City standards.
b. Additional r-o-w may be necessary at intersections.
c. Paved bulb with 50’ radius is required/60’ minimum r-o-w radius required.
(ii) **Rural Area Unincorporated Area of the County**

All residential developments and nonresidential Subdivisions within the Rural Unincorporated Area shall comply with the following minimum cross-section standards:

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Right-of-Way</th>
<th>Roadway</th>
<th>Sidewalks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min. Width</td>
<td>Traveled</td>
<td>Min. Shoulder Paving</td>
</tr>
<tr>
<td></td>
<td>(feet)</td>
<td>Way</td>
<td>Width</td>
</tr>
<tr>
<td>Principal Arterial (w/ median)</td>
<td>150 [2]</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Principal Arterial (w/o median)</td>
<td>120</td>
<td>Required</td>
<td>8</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>100</td>
<td>Required</td>
<td>6</td>
</tr>
<tr>
<td>Major Collector</td>
<td>80</td>
<td>Not Required</td>
<td>4</td>
</tr>
<tr>
<td>Minor Collector</td>
<td>70</td>
<td>Not Required</td>
<td>2</td>
</tr>
<tr>
<td>Local</td>
<td>70</td>
<td>Not Required</td>
<td>2</td>
</tr>
</tbody>
</table>

* Right-of-Way shall be sufficient to include top of ditch back slopes; may be variable
** Shall meet latest AASHTO geometric tabular design standards or tabular standards, whichever is greater.
*** Shoulder surface type shall match traveled way surface type, unless otherwise approved by the County Engineer.

a. Right-of-Way shall be sufficient to include top of ditch back slopes; may be variable
b. Road design shall meet design standards contained in KDOT’s “Project development Manual for Non-National Highway System Local Government Road and Street Projects” and/or AASHTO Green Book standards.

(6) **Grades**

The finished grade for all Streets and Roads shall be at or above the base flood elevation. The grades of Streets and Roads shall comply with the following standards:

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Maximum Grade (%)</th>
<th>Minimum Grade (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterials (Principal and Minor):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City or Urban Growth Area</td>
<td>** 5 **</td>
<td>** 1.0 **</td>
</tr>
<tr>
<td>Rural Area</td>
<td>** 5 **</td>
<td>** 1.0 **</td>
</tr>
<tr>
<td>Collector (Major or Minor)</td>
<td>** 9 **</td>
<td>** 1.0 **</td>
</tr>
<tr>
<td>Marginal Access</td>
<td>** 10 **</td>
<td>** 1.0 **</td>
</tr>
<tr>
<td>Local</td>
<td>** 10 **</td>
<td>** 1.0 **</td>
</tr>
</tbody>
</table>

Note:

(i) The City or County Engineer, as applicable, shall be authorized to approve minor deviations for short distances from these grade standards when it is determined that compliance with these standards is impracticable.

(ii) Within the City of Lawrence, maximum grade of Streets serving industrial areas shall be 5% regardless of Street classification.
(7) **Radii of Curvature**

The minimum radius of curvature of the centerline of Arterial and Collector Street shall **meet design standards contained in KDOT’s “Project development Manual for Non-National Highway System Local Government Road and Street Projects” and/or AASHTO Green Book standards.** be as follows:

<table>
<thead>
<tr>
<th>Design Speed (MPH)*</th>
<th>Minimum Curvature Radius (feet)*</th>
<th>Minimum Tangent Length (feet)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>125</td>
<td>75</td>
</tr>
<tr>
<td>25</td>
<td>205</td>
<td>100</td>
</tr>
<tr>
<td>30</td>
<td>300</td>
<td>150</td>
</tr>
<tr>
<td>35</td>
<td>420</td>
<td>200</td>
</tr>
<tr>
<td>40</td>
<td>565</td>
<td>250</td>
</tr>
<tr>
<td>45</td>
<td>730</td>
<td>250</td>
</tr>
<tr>
<td>50</td>
<td>930</td>
<td>250</td>
</tr>
<tr>
<td>55</td>
<td>1,200</td>
<td>250</td>
</tr>
</tbody>
</table>

* The information in this Table assumes a 4% super-elevation.

(8) **Cul-de-sacs**

(i) Cul-de-sac lengths shall not exceed 10 times the required minimum Lot Width of the base zoning district or 1,000 feet (1,320 feet if rural—In Unincorporated Area), whichever is less.

   a. A Cul-de-sac's length shall be measured from the center point of the Cul-de-sac bulb or Turn-around to the centerline of the Right-of-Way of the nearest intersecting through Street.

(ii) Maximum Cul-de-sac length may be increased by up to 25% above the maximum allowed by Section 20-810(e)(7)(i) during the Subdivision Preliminary Plat approval process if the Decision Making Body Planning Commission determines that the proposal meets all of the following criteria:

   a. It is impracticable to connect the Street to another Street or to provide a looped Street or other means of Access that would avoid the Cul-de-sac or allow the Cul-de-sac to meet the Cul-de-sac length limit because:

      1. The area is separated from other parts of the Subdivision or a possible Street connection by Floodplains, Jurisdictional Wetlands, or steep slopes greater than 10% or other natural resource areas; making it impracticable to provide the area a second means of access that would avoid the Cul-de-sac or allow the Cul-de-sac to comply with the maximum Cul-de-sac length limit (e.g., by providing a loop Street into the area instead of the Cul-de-sac, or extending the Cul-de-sac to connect to another Street); and
2. Other properties adjoining the area have already been subvided or developed in a manner that precludes connecting the Cul-de-sac to an existing or proposed Street, or the area is so separated from adjoining properties providing potential access by Floodplains, wetlands, steep slopes or other natural resource areas thereby making it impracticable to extend or connect the Cul-de-sac to the adjoining properties; and

b. Use of Cluster Housing provisions of this Development Code would not reasonably allow compliance with the Cul-de-sac length limit of Section 20-810(d)(7)(e)(8) and realization of at least 75% of the maximum Lot density allowed by the site's base zoning; and

c. The degree of increase in allowable Cul-de-sac length is the minimum necessary to allow the above findings.

d. The Subdivider bears the burden of demonstrating that all criteria have been met.

(iii) All Cul-de-sacs shall have a minimum Right-of-Way radius of 60 feet.

(iv) In Subdivisions with Cul-de-sacs, Easements may be required to ensure that the water supply system is looped.

(v) If a Cul-de-sac is longer than 600 feet, the subdivision shall include Pedestrian Right-of-Way Easements at the terminus of the Cul-de-sac to provide pedestrian connections to and from the Cul-de-sac, in accordance with 20-810(f)(h)(4)(iii).

(vi) Streets longer than one Lot that terminate at the property boundaries of undeveloped land shall provide an improved temporary Turn-around.

(9) Half-Streets

(i) Whenever Right-of-Way for one-half of a Street has been dedicated to bring that Street to then-current standards, regardless of whether that half of the Street has been improved, and a Subdivision of land adjoining the other half of the Street is proposed, the remainder of the Right-of-Way shall be dedicated and improved by the Subdivider.

(ii) New Half-Streets are prohibited, except when the Decision-Making Body Planning Commission determines that a Half-Street is the only means of accommodating reasonable Development of the proposed Subdivision and adequate assurances in accordance with Section 20-811(h)(2) are provided that the remaining portion of the Half-Street will be dedicated and improved.

(iii) Lots Abutting on a Half-Street that take sole access from that public Right-of-Way shall be designated as non-buildable (on the Final Plat) until the remainder of the Street is dedicated and improved. No building permits shall be issued for Lots with Access only to a Half-Street until the entire remainder of the Street Right-of-Way between the two nearest intersecting Streets and passing in front of the subject Lot(s) is dedicated and improved.
(10) **Private Streets and Roads**

(i) **Unincorporated Area of the County**

a. **Private Roads** are prohibited in the **Unincorporated Area** of Douglas County, except for those that were approved prior to December 15, 1998.

b. Before Douglas County will consider a request to assume maintenance of any existing **Private Street/Road**, by **Dedication** or otherwise, the **Street or Road** must be brought into compliance with all applicable **Road and Right-of-Way** standards.

(ii) **City of Lawrence**

a. New **Private Streets** in the City are permitted only in Planned Developments approved by the **Planning Commission** and City Commission.

b. **Private Streets shall be built to City Street construction standards and maintained by the Landowner.**

(11) **Alleys**

(i) **Alleys** shall be provided in commercial and industrial districts, except that the **Governing Body Planning Director** may waive this requirement where other definite or assured provisions are made for service **Access**, off-street loading and unloading and parking spaces consistent with and adequate for the uses proposed.

(ii) **Alleys** shall have a minimum **unobstructed Right-of-Way** width of 20 feet.

(iii) **Alleys** shall comply with the construction standards of the city and/or county, as provided in these regulations as determined by the **City or County Engineer**.

(iv) Intersecting **Alleys** shall be prohibited except when no feasible alternative exists. When **Alley Intersections** are unavoidable, a turning radius shall be provided to permit safe vehicular movement.

(v) **Dead-End Alleys** shall be prohibited. When such **Alleys** are necessary to serve dock areas, they shall be designed with adequate turn-around facilities.

(f) **Street and Road Names and Lot and Block Numbering**

(1) **City of Lawrence**

(i) **Street** names shall be proposed by the **Subdivider**, reviewed by the Public Works Department **Director**, and approved by the City Commission. The approval of **Street** names shall be within the legislative discretion of City Commission, subject to the following standards:

a. Compass directions shall not be used as part of **Street** names;
b. The identifiers “Street”, “Avenue”, “Court”, and “Circle”, “Terrace,” and “Place” shall be used only in accordance with the respective definitions of those terms, as follows:

1. A Court identifies a Dead-End or Cul-de-sac; and
2. A Circle identifies a Street where both ends terminate at the same Roadway.

c. Streets that run in an east - west direction shall be named as numbered Streets;

   (ii) Existing Street names shall be used where the Street to be named is, or would be, a logical extension of an existing Street even though separated by undeveloped land, natural physical barriers or man-made obstructions; and

   (iii) Where a proposed Street is shown on an adopted Major Thoroughfares Plan Map and such plan map indicates a name for that Street, that name shall be used; and.

2) Unincorporated Area of the County Road names in the unincorporated County shall be named in accordance with the E911 Emergency Management System.

(g) Lot and Block Numbering

Lot numbers shall be assigned by starting in the northeast corner of each Block and proceeding in a counterclockwise direction. When a Street or Road separates a group of Lots, a new Block shall be identified, and the Lots within the new Block shall be numbered as herein specified.

(h) Easements

1) Permanent Utility Easements

Permanent utility Easements shall be provided where necessary to accommodate utilities that will serve the Subdivision. Permanent utility Easements shall be provided where necessary to allow for utility service in and through the proposed Subdivision. Where such an Easement is necessary, it shall be centered on rear or side Lot Lines, as applicable, and shall be at least 30 feet and 10 15 feet wide respectively, except that Easements for Street lighting purposes only need not exceed 10 feet in width.

2) Temporary Utility Easements

Temporary utility Easements shall be provided where necessary to accommodate the installation of utilities that will serve the Subdivision. Temporary utility Easements shall be centered on rear or side Lot Lines and shall be at least 30 feet and 25 feet wide respectively. The temporary utility Easement shall expire after the initial installation of the required utilities. After the expiration of a temporary utility Easement, the permanent utility Easement will govern.
(3) **Drainage Easements**

Drainage Easements for water courses, drainage Swales or streams which traverse a Subdivision may be required. Drainage Easements shall be exclusively for that use and separate from the Dedication of other utility Easements. Upon the request of the Planning Commission Director, the City or County Engineer, as applicable, shall make recommendation to the Planning Commission regarding the desired width of the Drainage Easement. Such study and report shall be based on the 100-year flood depth (if known), or the regulatory flood elevation when provided by the Federal Insurance Administration.

(4) **Pedestrian Right-of-Way Easements**

(i) It is the goal of the City to ensure that the pedestrian circulation system within the City and within the Urban Growth Area forms a complete and effective network that includes, but is not limited, to sidewalks along Streets. In particular, it is the goal of the City to ensure that people have efficient and relatively direct pedestrian access between their places of residence and:

   a. Nearby elementary schools;
   b. Nearby parks and recreation facilities;
   c. Other public facilities, such as libraries and community centers;
   d. Adjoining neighborhoods or subdivisions, regardless of whether there are direct Street connections between the neighborhoods and/or subdivisions;
   e. Any nearby shopping or service centers;
   f. Places of employment;
   g. The nearest Arterial or Collector Street with a bus route; and,
   h. Any nearby access point to a trail or greenway system.

   In furtherance of that purpose, Pedestrian Right-of-Way Easements shall be required when Block lengths for Local Streets exceed 800 feet in length. Such Easements shall extend entirely across the width of the Block at approximately the midpoint of the Block. Pedestrian Right-of-Way Easements shall have a minimum width of 12 feet. The Planning Commission may waive this requirement where, due to topography or physical barriers, the Pedestrian Right-of-Way would not form a logical part of the larger pedestrian circulation system.

(ii) Also in furtherance of that purpose, Additional Pedestrian Right-of-Way Easements should be required within the City and Urban Growth Area to provide pedestrian connections from a Subdivision to schools, parks, shopping, employment or other nearby uses and to link pedestrian routes in adjacent Subdivisions or neighborhoods, including a pedestrian connection at the terminus of each Cul-de-sac. Pedestrian Right-of-Way Easements shall have a minimum width of 12 feet.
(iii) **Pedestrian–Way Easements for Pedestrian Ways** shall have a minimum width of 12 feet.

(iv) The Planning Commission may waive this requirement where, due to Topography or physical barriers, the Pedestrian Right-of-Way Easement would not form a logical part of the larger pedestrian circulation system through the approval of the Preliminary Plat.

(v) The responsibility for paving the pedestrian way shall be the developer’s, and these pedestrian ways shall be constructed concurrent with the paving of the most adjacent Roadway, unless otherwise provided by the Planning Director in acting on the final plat. The responsibility for maintenance of the pedestrian way shall be that of adjacent property owners or the homeowners association for the subdivision.

(vi) Variances from these standards may be granted by the Governing Body when requested following Planning Commission consideration of the Preliminary Plat according to the standards of 20-813(f).(g).

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(i) **Parks, Open Space Schools and Other Public Facilities**

The Planning Commission shall encourage or require the donation, reservation, or Dedication of sites for parks, open space, schools and other public facilities in accordance with the Comprehensive Plan for Parks and Recreation Lawrence Parks and Recreation Comprehensive Master Plan. in the amount of 5% of the total land area of a residential subdivision plus $600 per lot for each single family dwelling Lot.

(j) **Land In Floodplain Overlay Districts**

Land within a Floodplain Overlay District shall be subject to the Flood Protection Standards of Article 12, Chapter 20, City Code and to the comparable provisions adopted by the Board of County Commissioners the Flood Protection Standards of Section 12-328 of the Zoning Regulations for the Unincorporated Area of Douglas County.

(k) **Resource Preservation - City of Lawrence**

(1) Subdivisions shall be designed to preserve natural resources and environmentally sensitive areas, such as streams, wetlands, prominent natural geographic features, and stands of mature trees. See Section 20-1101(c) (2)(iii) b., which requires that development of lands containing more than 5% defined sensitive lands can be developed only through a Cluster Development or a Planned Development. Section 1101(c) (3) requires that certain sensitive lands be dedicated, included in private open space or otherwise preserved through development design. Note also that Section 1101(c)(4) may limit the achievable density of developments containing specified sensitive lands.
Subdivisions shall be designed to preserve archaeological and historical sites. See Section 20-1101(c)(2)(iii)b, which requires that development of lands containing more than 5% defined lands, which include archaeological and historic sites, can be developed only through a Cluster Development or a Planned Development. Section 20-1101(c) requires that certain archaeological and historic lands be included in private open space or otherwise preserved through development design. Note also that Section 20-1101(c)(4) may limit the achievable density of developments containing archaeological and historic sites.

Resource Conservation - Unincorporated Area of the County

Residential Developments and non-residential Subdivisions in the unincorporated area of the County shall be designed in a way that protects and conserves the natural resources and environmentally sensitive areas through the filing of a Temporary Set Aside Agreement or the filing of a permanent Conservation Easement, with the Register of Deeds. These natural areas and environmentally sensitive areas shall include Floodways, based on the FEMA’s one hundred year storm; Floodplains, based on the FEMA’s one hundred year storm; jurisdictional wetlands; stream corridors; prominent natural geographic features with rocky outcroppings; and, stands of mature trees or individually significant mature trees.

Residential Developments and non-residential Subdivisions shall be designed to protect and conserve archaeological and historical sites through the filing of a Temporary Set Aside Agreement or the filing of a permanent Conservation Easement, with the Register of Deeds.

Protection of Environmentally Sensitive Lands

Definition of Environmentally Sensitive Lands

Certificates of Survey land divisions and Platted Subdivisions shall be designed to protect environmentally sensitive lands which contain natural resources and environmentally sensitive areas. Environmentally sensitive lands are listed below in a priority order for protection:

(i) Regulatory floodway, designated on the FEMA Flood Insurance Rate Map for Douglas County and identified on the GIS Baseline Environmentally Sensitive Lands Map;

(ii) Regulatory floodway fringe, designated on the FEMA Flood Insurance Rate Map for Douglas County based on the 100 year storm and identified on the GIS Baseline Environmentally Sensitive Lands Map;

(iii) Jurisdictional Wetlands, as determined by the Army Corps of Engineers;

(iv) Stream corridors as defined in these regulations and identified on the GIS Baseline Environmentally Sensitive Lands Map;

(v) Stands of Mature Trees, as defined in these Regulations and identified on the GIS Baseline Environmentally Sensitive Lands Map; and

(vi) Archaeological or historic sites listed on local, state, or federal registers and identified on the GIS Baseline Environmentally Sensitive Lands Map.
(2) **Determination of environmentally sensitive lands.**

The presence of environmentally sensitive lands shall be determined from an examination of the site and the following resources:

(i) FEMA Flood Insurance Rate Map for Douglas County, most current adopted map;

(ii) US Fish and Wildlife Service National Wetland Inventory Maps;

(iii) GIS Baseline Environmentally Sensitive Lands Map;

(iv) Kansas State Historical Society Archeological and Historic Resources Inventory; and

(v) Other resources which may be appropriate.

(3) **Protection Standards for Environmentally Sensitive Lands – City of Lawrence**

(i) Section 20-1101(d)(2)(i) of the Land Development Code limits the required protection of environmentally sensitive lands to a maximum protection area of 20% of the total land area of residentially zoned property.

(ii) Section 20-1101(d)(2)(ii)(b) requires that when Platting, environmentally sensitive lands to be protected shall be placed within Tracts or Easements and information regarding ownership and maintenance responsibility of the Tract or Easement, as well as protection measures, shall be included on the Preliminary and Final Plat.

(iii) Section 20-1101(e) contains information on density bonuses which may be possible when environmentally sensitive lands are protected in greater amounts than required.

(iv) Section 20-1101(d)(2)(ii)(a) requires that a Sensitive Areas Site Plan be submitted prior to, or concurrent with, all Subdivision applications for properties containing environmentally sensitive lands. The requirements of a Sensitive Areas Site Plan are found in Section 20-1101(f).

(4) **Protection Standards for Environmentally Sensitive Lands – Unincorporated Area of the County**

(i) Per Sections 20-804(c)(3) (ii) and 20-805(c)(2)(ii) [County Code Sections 11-104(c)(3) (2)(ii) and 11-105(c)(2)(iii)], Certificates of Survey land divisions within the UGA shall protect environmentally sensitive lands through the filing of a Temporary Set Aside Agreement or a permanent Conservation Easement with the Register of Deeds.

(ii) Per Section 20-806(d)(2)(vii) [County Code Section 11-106(d)(2)(vii)] Certificates of Survey outside the UGA for properties which contain environmentally sensitive lands shall designate Building Envelopes which exclude the protected environmentally sensitive lands.

(iii) All Plats which include environmentally sensitive lands shall protect them through one of the following methods:
a. The filing of a Temporary Set Aside Agreement or permanent Conservation Easement with the Register of Deeds.

(iv) Placement of the environmentally sensitive lands within Tracts or Easements. Information regarding ownership and maintenance responsibility of the Tract or Easement, as well as protection measures shall be included on the Preliminary and Final Plat.

(v) Protection of environmentally sensitive lands is encouraged to the maximum amount possible, but required protection is limited to 40% of the site included in the Certificate of Survey and 20% of the total site for Platted properties.

(n) **Soils and Soil Testing – City of Lawrence**

Soils shall be identified based on the Soil Conservation Survey soils categories and characteristics. Soils test shall be obtained to verify sub-surface soil characteristics for rocky or unstable soil types, when requested by the City Engineer, for areas proposed to be dedicated for City of Lawrence public Rights-of-Way and public Easements.

(o) **Soils and Soil Testing – Unincorporated Area of the County**

Soils shall be identified based on the Soil Conservation Survey soils categories and characteristics. Soils test holes shall be conducted in accordance with the Douglas County Sanitary Code.
20-811 Public Improvements Standards

(a) General Public Improvement Construction Standards

(1) Standards

All Public Improvements, including but not limited to water, sanitary sewer, Streets, curbs, gutters, storm sewers and storm drainage, roundabouts, pedestrian facilities, Traffic Calming Devices or traffic control devices shall comply with the construction standards established by the City Engineer or County Engineer, as applicable. Such standards are incorporated herein by reference.

(2) Administration and Fees

   (i) Compliance with the items listed above in Section 20-811(a)(1) and use of appropriate construction methods shall be determined by the County or City Engineer, as applicable.

   (ii) A permit shall be issued by the County or City Engineer, as applicable for the construction of a future Public Improvement prior to commencement of any work activity associated with the improvement.

   (iii) A fee in an amount determined by resolution of the Governing Body shall be charged for the permit.

(3) Pre-Pinning in the Unincorporated Area of the County

In the Unincorporated Area of Douglas County, at or before the time of construction of Public Improvements, sufficient grade and alignment stakes shall be set by a licensed Land Surveyor, engaged by the Subdivider to assure compliance with plan, profile and drainage of Streets and such other Public Improvements as are proposed and submitted with the Final Plat and approved by the County Engineer.

   (i) Compliance with the items listed above and use of appropriate construction methods shall be determined by the County Engineer.

   (ii) A permit shall be issued by the County Engineer for the construction of a future Public Improvement prior to commencement of any work activity associated with the improvement.

   (iii) A fee in an amount set by Resolution of the County Commission shall be charged for the permit.

   (iv) This sub-section shall apply only to subdivisions in which the complete Lot pinning required by Section 20-811(g)(8)(k) has not been completed at the time that the first Public Improvements are installed.
(b) Streets or Roads

(1) City of Lawrence
   Subdivision Streets located within the incorporated city limits shall be constructed to comply with standards adopted by the City of Lawrence.

(2) Urban Growth Areas
   Subdivision Streets and Roads located within the Urban Growth Areas shall be constructed to the Street and Road standards of the City that established the Urban Growth Area.

(3) Rural Area
   Subdivision Roads located within the Rural Area shall be constructed to the higher of the following standards:
   (i) Road standards adopted by the Township(s) in which the Road is located;
   (ii) Standards for the Road classification specified on an adopted Major Thoroughfare Map; on Exhibit 9-506 of the County’s Access Management Regulations, Chapter IX of the County Code.
   (iii) Other adopted County standards applicable to a Road of the classification and/or location of the proposed Road; or
   (iv) At a minimum, adopted Douglas County Rock Roadway Standard.

(4) Requirements When Access Barriers Exist
   Wherever a proposed Subdivision contains or is adjacent to a limited access Street or Road; an Arterial Street; or a railroad Right-of-Way; the appropriate Governing Body shall require the following for the protection for the integrity and subsequent safety, efficiency and economy of the access, Arterial, or railroad Right-of-Way:
   (i) Dedication of a Local Street or Road to provide Ingress and Egress to and from such Blocks or Lots;
   (ii) A Street or Road approximately parallel to and on each side (where applicable) of such limited access Street or Road, Arterial Street, or railroad Right-of-Way at a distance suitable for the appropriate use of the land between such Streets or Roads;
   (iii) Reverse Frontage Lots with Access Control provisions along the rear property line; or
   (iv) Adequate distance between such parallel Streets or Roads and the Arterial, limited access Street or Road, or railroad so as to provide for proper approach grades and future grade separation.
(c) **Sidewalks and Pedestrian Ways**

(1) **City of Lawrence and Urban Growth Areas**

Sidewalks and Pedestrian Ways shall be provided in the City of Lawrence and in platted subdivisions in the Urban Growth Areas in accordance with the standards of this sub-section (for Lawrence and the Lawrence UGA) or the applicable UGA city’s (Baldwin City, Eudora, or Lecompton) standards:

(i) Public Sidewalks shall be installed on both sides of all Streets, as follows:

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Minimum Sidewalk Width (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>5; Minimum width of 4 feet allowed in the Original Townsite Area</td>
</tr>
<tr>
<td>Collector</td>
<td>5</td>
</tr>
<tr>
<td>Arterial</td>
<td>6; A designated 10’ Bicycle/Recreation Path on one side of the Street and a 6’ Sidewalk on the other side</td>
</tr>
</tbody>
</table>

(ii) Sidewalks shall be constructed in accordance with standards and specifications adopted by the applicable Governing Body.

(iii) Waivers or Variances

a. The applicant for a Subdivision may request a waiver of the requirement to install Sidewalks in the Subdivision as part of the Preliminary Plat review in accordance with the Variance procedures outlined in Section 20-813(g). The Planning Commission may make a recommendation on such waiver request, but final action on the waiver request shall be by the Governing Body, with a request placed on the Governing Body’s agenda concurrent with the Governing Body’s acceptance of Easements and rights-of-way on the Final Plan following the Planning Commission’s consideration as part of the Preliminary Plat review.

b. If the applicable Governing Body the Planning Commission takes no specific action on a proposed waiver of part or all of a Sidewalk requirement, the waiver shall be deemed to be denied. In reviewing waiver requests from the standard Sidewalk width, special consideration shall be given to walks adjacent to Collector or Arterial Roads located in historic districts and areas with severe site Topography which would make it impractical or difficult to build a Sidewalk in accordance with the above standards.

(iv) Sidewalks required to be constructed within the same Right-of-Way as the Street being paved shall be constructed concurrently with the paving of the adjacent Roadway or with the first phase of development of a multiple Lot Subdivision, adjacent to any improved Street.


(v) **Pedestrian Ways**

a. Where an approved **Preliminary Plat** (including a condition to such Plat) shows a **Pedestrian Way** other than a **Sidewalk**, an improved **Pedestrian Way** not less than eight five (improved) feet wide in the **Easement** space dedicated for that purpose shall be provided by the **Subdivider**.

b. **Pedestrian Way Right-of-Way Easements** shall be improved in accordance with adopted City construction standards for **Sidewalks** to a width of 12 feet and shall conform to all accessibility requirements of the Americans with Disabilities Act.

c. Completion of the improvement for any segment of such **Easements** shall not be required under the earlier of three years after approval of the Final Plat or three months after the issuance of the last Building Permit for a lot adjoining the segment;

c. Completion of such improvements shall be guaranteed in accordance with Section 20-811(g)(8)(h)(2); or subject to site plan review or non-residential development standards.

d. **The responsibility for paving the Pedestrian Way shall be the Developer's, and these Pedestrian Ways shall be constructed concurrent with the paving of the most adjacent Roadway, unless otherwise provided by the Planning Director in acting on the Final Plat.**

e. **The responsibility for maintenance of the Pedestrian Way shall be that of adjacent property Owners or the Home Owners Association for the Subdivision.**

(vi) **Public Improvement Petitions** shall include the construction of **Sidewalks** or **Pedestrian Ways**, except where the appropriate **Governing Body Planning Commission** has specifically waived the installation as provided in Section 20-810(f)(4)(ii) above. The total cost of all **Sidewalks** or **Pedestrian Way Improvements** shall be borne by the property benefited in the improvement district.

(2) **Urban Growth Areas**

**An Agreement Not to Protest the Formation of a Future Benefit District for the construction of Sidewalks may be required as a condition of approval for Platted Subdivisions in the Urban Growth Areas in accordance with the standards of Section 20-811(c)(1) for the Lawrence UGA or the standards of the applicable city’s UGA.**

(3) **Rural Area**

The **Planning Commission** may recommend and the Board of County Commissioners shall be authorized to require **Sidewalks** in other **Major Subdivisions** when deemed necessary to provide for safe pedestrian connections to nearby schools, parks, shopping, employment or other uses or activities. **See also the Pedestrian Way Easement provisions of Section 20-810(f)(4).**
(d) **Wastewater Disposal Systems**

(1) **City of Lawrence and Urban Growth Areas**

(i) The approval of any **Subdivision** requiring connection to the City of Lawrence wastewater system is contingent upon the availability and adequacy of the City to provide wastewater services to the area being subdivided.

a. It is the applicant's responsibility to ensure their proposed development takes into consideration the City's long-range plans, studies, reports, and similar documents for wastewater services, including submission of a Downstream Sanitary Sewer Study in accordance with Administrative Policy No. 76.

b. Failure to conform to these provisions warrant denial of the Subdivision Plat.

(ii) **On-Site Sewage Management Systems** are prohibited on any land which is Platted under these regulations and is located in the City of Lawrence or in Service Area 1 of the Urban Growth Area of Lawrence.

(2) **Urban Growth Area and Rural Area**

(i) **On-Site Sewage Management Systems** may be permitted in **Subdivisions** in Service Areas 2-4 of Lawrence's Urban Growth Area, other City's Urban Growth Areas, or in **Subdivisions** in the Rural Area, subject to the following minimum Lot area standards:

a. For **Lots** that use well water as the primary Potable Water source, the minimum Lot area for an On-Site Sewage Management System is 5 acres. Any land located within the Floodplain shall not be counted in calculating Lot area for the purpose of meeting minimum Lot area requirements for On-site Sewage Management System use;

b. For all other Lots, the minimum Lot area requirement for an On-Site Sewage Management System is 3 acres. Any land located within the Floodplain shall not be counted in calculating Lot area for the purpose of meeting minimum Lot area requirements On-Site Sewage Management System;

c. No portion of an On-Site Sewage Management System shall be located within the FEMA designated Floodplain; and,

d. Calculation shall not include land dedicated for Rights-of-Way or exclusive Easements.

(ii) Community Sewage collection and treatment facilities (including lagoons) may be provided for Subdivided or newly created Lots or Parcels in the Urban Growth Areas or for any other newly created Lots not suitable for an On-Site Sewage Management System.
a. Such systems shall be subject to approval by the Kansas Department of Health and Environment and shall be designed to allow for future connection to a public sewer system.

b. Maintenance of such facilities shall be provided by a Home or Property Owners Association, benefit district (if then permitted under Kansas law), or other appropriate entity. Evidence shall be submitted at the time of Subdivision approval showing the establishment of such an entity to be responsible for maintenance and management of the system.

(iii) In situations in which an On-Site Sewage Management System has been proposed, no Subdivision shall receive final approval until the Subdivider has presented evidence that the On-Site Sewage Management System, as a method of Sewage disposal for the Subdivision, has been approved by the Director of the Lawrence-Douglas County Health Department.

(3) Where On-Site Sewage Management Systems are allowed under these regulations, they must be approved by the County Health Officer.


(e) Water Supply

(1) City of Lawrence and Urban Growth Areas

(i) The approval of any Subdivision requiring connection to the City of Lawrence municipal water system is contingent upon the availability and adequacy of the City to provide water services to the area being subdivided.

a. It is the applicant’s responsibility to ensure their proposed development takes into consideration the City’s long-range plans, studies, reports, and similar documents for water services in accordance with Administrative Policy No. 52.

b. Failure to conform to these provisions warrant denial of the Subdivision Plat.

(ii) Before approval of a Final Plat or Certificate of Survey within Lawrence’s Urban Growth Area that will not be served by the City of Lawrence utilities, the Subdivider shall provide written documentation to the Lawrence-Douglas County Health Department Director and the Lawrence-Douglas County Metropolitan Planning Department Director that Publicly Treated Water, delivered through a water meter is available to and will be provided for all Lots or Residential Development Parcels.

(iii) Upon Before approval of a Final Plat approval for land located within the City of Lawrence or Lawrence's Urban Growth Area, the Subdivider must sign an agreement to connect to a Municipal Water...
system when public water lines are within 1,000 feet of any planned improvements development on the property and such connection is feasible.

(2) **Urban Growth Area and Rural Area**

(i) In the Unincorporated County, Subdividers are required to consult with the applicable Fire Department and Rural Water District to determine if the provision of fire hydrants as part of the Public Water Supply system is feasible.

(ii) In those cases where the provision of Fire Hydrants as part of the Public Water supply system is determined by the Fire Department and Rural Water District to be feasible, fire hydrants must be provided.

(iii) Where existing water pressure is insufficient for fire hydrants as part of the Public Water Supply, or where there is no Publicly Treated Water supply, the Subdivider must install dry hydrants adjacent to a pond or other water storage device with sufficient capacity, and in an appropriate location, to support firefighting needs as determined by the applicable Fire Department.

(3) Evidence shall be submitted with the Final Plat showing compliance with the requirements of this section.

(f) **Telephone, Cable Television Electrical Lines**

(1) Telephone, cable television and electrical lines must be located underground when located in the City of Lawrence or Subdivisions in Lawrence’s Urban Growth Area. This requirement shall be noted on the face of the Preliminary Plat. This provision shall not apply to high voltage electrical lines.

(2) The Developer is responsible for the cost of any relocation of existing utilities, if necessary to serve the proposed Subdivision.
(g) **Street Trees**

All Subdivisions within the City of Lawrence or Lawrence's Urban Growth Area shall be required to provide a Master Street Tree Plan that meets the standards of this sub-section.

(1) **Minimum Tree Requirements**

Street trees shall consist of canopy shade and/or ornamental trees, as defined below and meeting the following minimum requirements:

(i) **Size**

Medium or large trees, as defined by Section 18-103(e) of the Code of the City of Lawrence, Kansas, and amendments thereto, which can reach a mature height of 45 feet or greater are required except that ornamental trees planted pursuant to Section 21-708.2 \[20-811(g)(2)(iv)\] are not subject to the 45 feet height requirement. The minimum trunk Caliper of street trees, at the time of planting, measured six inches above the ground in accordance with the American Nurseryman Standards shall be as follows:

<table>
<thead>
<tr>
<th>Street Tree Type</th>
<th>Minimum (inches)</th>
<th>Trunk Caliper</th>
<th>Mature Height (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy Shade</td>
<td>2 (ball and burlap or equivalent)</td>
<td>At least 45</td>
<td></td>
</tr>
<tr>
<td>Ornamental</td>
<td>1.5-2 (ball and burlap or equivalent)</td>
<td>No more than 20</td>
<td></td>
</tr>
</tbody>
</table>

(ii) **Number**

One tree shall be provided for every 40 feet of Street Frontage. The City Planning Director may approve a Master Street Tree Plan that varies from this requirement to allow for Driveways, utilities, and Intersection visibility requirements.

(iii) **Minimum Species Diversity**

The following minimum requirements shall apply to all Master Street Tree Plans. To prevent uniform insect or disease susceptibility, a mix of species shall be provided. The City Parks and Recreation Department Director shall, upon request, provide a list of trees that are acceptable to satisfy the requirements for Master Street Tree Plans. To promote diversity in the urban forest, the number of trees required to be planted shall be in accordance with the following requirements:

<table>
<thead>
<tr>
<th>Number of Trees per Plat</th>
<th>Minimum Number of Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>1</td>
</tr>
<tr>
<td>11-20</td>
<td>2</td>
</tr>
<tr>
<td>21-30</td>
<td>3</td>
</tr>
<tr>
<td>31-40</td>
<td>4</td>
</tr>
<tr>
<td>41+</td>
<td>6</td>
</tr>
</tbody>
</table>
(2) **Planting Location and Clustering Spacing**

(i) **Location in RS and RM12D Zoning Districts**

a. Street trees shall be located in the front yard, building setback and/or adjacent to the Right-of-Way at a distance not greater than 10 feet from the boundary line of the Right-of-Way; where practical.

b. Street trees shall not be planted until after planned utilities have been installed.

c. Trees shall be planted no closer than 8 feet from existing underground utility lines, where practical and approved by the Planning Director.

d. On corner Lots, no tree shall be planted nearer than 50 feet from the intersecting curb lines of the two Streets.

e. No tree shall be planted between the curb and the Sidewalk if the clear space is less than 3 feet wide.

(ii) **Location in all Other Zoning Districts**

Street trees shall be located either within the Street Right-of-Way or within the required front yard building setback, PROVIDED,

a. No tree is located farther than 30 feet from the back of the curb, with the exception of Lots on the radius of a Cul-de-sac which shall be located not greater than 45 feet from the back of the curb, where practical.

b. Street trees shall not be planted until after planned utilities have been installed.

c. Trees shall be planted no closer than 8 feet from existing utility lines, where practical and approved by the Planning Director.

d. On corner Lots, no tree shall be planted nearer than 50 feet from the intersecting curb lines of the two Streets.

e. No tree shall be planted between the curb and the Sidewalk if the clear space is less than 3 feet wide. [RE: Chapter XVIII of the City Code]

(iii) **Clustering Spacing**

a. Street trees shall be evenly spaced along the Street Frontage.

b. As an alternative, street trees may be clustered, if based on Planning Director evaluation, conditions exist which dictate building location and Driveway placement which interrupts the even spacing of street trees. Such conditions include:

1. The Lot is on a corner;
2. The presence of existing trees, which qualify for credit under Section 20-811(g)(5); and/or
3. Topographic conditions (i.e. steep gradient, rock outcroppings).

Street trees shall be evenly spaced along the Street Frontage unless based on Planning Staff Director evaluation, dictate building location and Driveway placement which interrupts the even spacing of Street trees if one or more of the following conditions exist:

a. The Lot is on a corner;

b. The presence of existing trees, which qualify for credit under Section 20-811(g)(5), interrupt the even spacing of trees; and/or

c. Topographic conditions (i.e. steep gradient, rock outcroppings), based on Planning Staff Director evaluation, dictate building location and Driveway placement which interrupts the even spacing of Street trees.

(iv) **Overhead Lines and Fixtures**

If the planting site will prevent the growth of canopy shade trees due to overhead utility lines, ornamental trees shall be permitted as a substitution for the canopy shade trees in accordance with the Location and Clustering Spacing requirements of this Section and shall be subject to the following requirements:

a. The canopy of the ornamental tree(s) shall be no closer than 10 feet from the overhead lines and its mature height shall not exceed 20 feet; and

b. The ornamental tree(s) shall be planted at least 15 feet away from any Street light.

(v) **Cul-de-sac Lots**

Lots on Cul-de-sacs that have a Street Frontage of 45’ or less shall be required to provide only one Street tree per Lot.

(3) **Master Street Tree Plan**

(i) A proposed written and graphic Master Street Tree Plan shall be submitted at the time a Final Plat is submitted to the Planning Department for review.

(ii) Prior to recording the Final Plat with the Register of Deeds, the applicant shall provide a Master Street Tree Plan that is signed and properly acknowledged by the property Owner(s). The Master Street Tree Plan shall be written to be binding on present and future property Owners. A reference line shall be provided on the Final Plat indicating the book and page where the Master Street Tree Plan is filed which shall be completed by Planning Staff at the time the Final Plat is filed recorded at the Register of Deeds.
(iii) The Master Street Tree Plan shall be prepared in a format established by the Planning Department Director and shall include the following information:

a. A list of acceptable Street tree types;
b. **The number of trees to be provided for each Lot**;
c. The number, location and size of existing trees proposed to be saved and applied to the fulfillment of this requirement;
d. The provisions to be taken pursuant to Section 18-107 of the Code of the City of Lawrence, Kansas during construction for the protection of existing trees to be saved (if any);
e. If trees are proposed in Street medians, provisions for maintenance (including how water line extensions will be paid); and
f. The identification of power line locations.

(4) **Provision of Right of Entry**

(i) Each Final Plat filed on and after January 1, 2003, for detached or attached single family **Dwelling** residential structures to be built on individual platted Lots in a City residential Subdivision in RS and RM12D zoning districts shall contain the following note on the face of the Final Plat: “The City is hereby granted a temporary right of entry to plant the required Street trees pursuant to Section 20-811(g) of the City Subdivision Regulations.”

(ii) For Final Plats filed before January 1, 2003, for detached or attached single family **Dwelling** residential structures to be built on individual Platted Lots in a City residential **Subdivision** in RS and RM12D zoning districts, the property **Owner** of undeveloped Lots for which a city building permit has not been issued shall sign a consent form and submit it with the building permit application granting the City of Lawrence temporary right of entry to plant the required Street trees pursuant Section 20-811(g) of the City Subdivision Regulations.

(5) **Credits for Existing Trees**

Existing trees may be applied toward the fulfillment of this Street tree requirement when:

(i) **All of the following conditions exist:**

   a. The tree is healthy and of a species the Director of the Parks and Recreation Department or his/her designee determines to be desirable as a Street tree;
   b. The existing tree is within the Street Right-of-Way or within 30 feet of the back of the curb or proposed curb line;
   c. The tree(s) **Caliper** of a canopy shade tree is at least four inches measured six inches from the ground, or in the case of an ornamental tree, the tree **Caliper** is at least two inches, measured
six inches from the ground, in accordance with the American Nurseryman Standards;

d. The applicant has submitted a tree protection plan that conforms with the requirements of Section 18-107 of the Code of the City of Lawrence, Kansas, and amendments thereto, and

e. The existing or proposed location of overhead utility lines along the Street Right(s)-of-Way will not prevent the full growth of the Street tree.

(ii) The existing or proposed location of overhead utility lines along the Street Right(s)-of-Way will not prevent the full growth of the Street tree.

(6) Timing of Landscape Placement

(i) The timing of, and manner in which the Street trees shall be planted for detached or attached single family Dwelling residential structures to be built on individual Platted Lots in city residential subdivisions final platted in RS and RM12D Zoning Districts filed on and after January 1, 2003, shall be in accordance with City Administrative Policy No. 83.

(ii) The timing of, and manner in which the Street trees shall be installed on those undeveloped Lots for which the City has not issued a building permit for detached or attached single-family dwelling residential Structures on individual Lots within existing Platted Subdivisions in the RS and RM12D zoning districts filed before January 1, 2003, shall be in accordance with City Administrative Policy No. 83.

(ii) For all other required Street trees not covered by (i) and (iii) above, and/or developments requiring a site plan or development plan:

a. Trees shall be installed, after other Public Improvements, if water is available for their care and maintenance. The property Owner or his designee shall be required to guarantee planting of the tree at the time a building permit application is submitted.

b. Street trees shall be planted prior to final building inspection or the issuance of an occupancy permit. Consideration shall be given to seasons of the year and adverse weather conditions in requiring completion of tree planting PROVIDED, the guarantee for planting is extended to the date of completion of tree planting.

c. Guarantee shall be provided in the following form:

1. A cash escrow deposit in a federally insured commercial bank or savings and loan financial institution authorized to do business in Kansas in an amount set forth in the City of Lawrence Administrative Policy No. 83. This escrow deposit shall be invested and reinvested by such bank or savings and loan, the interest or discount from which shall be paid to the Subdivider upon final release of such escrow deposit as determined by Section 20-811(i). Money will be withdrawn to pay the Developer or a designated nursery after the installation of said trees and prior to the issuance of a final certificate of inspection; or
2. The appropriate Governing Body, at its discretion, may accept an irrevocable letter of credit from a financial institution or a corporate surety performance bond in lieu of a cash escrow deposit to insure the planting of the required Street trees.

(7) Continuing Maintenance

(i) Continuing maintenance of trees planted by the City shall be in accordance with the maintenance provisions set forth in City of Lawrence Administrative Policy No. 83.

(ii) For all other required Street trees not covered by Section 20-811(g) and/or developments requiring a site plan or development plan, the on-going maintenance of trees, once planted, shall be the responsibility of the property Owner adjacent to the public Right-of-Way or Private Street. If a Street tree dies or fails to be planted within one calendar year of issuance of an occupancy permit, the City shall notify the property Owner of the need to plant or replace the tree(s) as applicable. Should the property Owner fail to plant or replace the tree within 30 days of notification, the City shall reserve the right to cause the required trees to be installed and the cost of the tree(s), plus the cost of installation of the tree(s), shall be assessed to the property Owner.

(8) Lot-Pinning

(i) Pins for all corners of the Subdivision and for all Lot corners shall be set and the completion of the setting certified by the responsible Surveyor before a Plat is recorded.

(ii) A Major Subdivision can be pinned or staked in phases that are coincident with:
   a. The Street construction and Development phase;
   b. The placement of utilities within the designated utility Easements phase; and
   c. The pouring of building foundations for slabs for building construction (issuance of a building permit phase).

(iii) Before the filing of a Plat or Replat with the Register of Deeds, the Developer or Owner shall provide certification to the Planning Director that the Subdivision’s boundaries are pinned and there is a contract with a licensed Land Surveyor to pin the Lots after completion of Street and Public Improvements.

(iv) At the time the Street plans are submitted to the public works department for approval, the center lines of Right(s)-of-Way shall be identified by establishing the following control points:
   a. Points of Intersection (PI);
   b. Points of Tangency (PT); and,
   c. Points of Curvature (PC).
Simultaneously with the construction of public improvements, staking or pinning of the Subdivision boundary corners and key points along the Easement(s) shall be completed to provide the following information:

a. The Intersection of four or more Lots;
b. Points of curvature; and
c. Points of Intersection with other Easements.

At the time of application for a building permit, the Developer or builder of the Lot shall present certification (letter stamped by a licensed Land Surveyor) to the building inspector to assure Lot corners are pinned and pins are found or set.

Completion of Public Improvements

Before a Final Plat or replat Minor Subdivision/Replat may be recorded, the Subdivider shall:

(1) Provide written certification from the City or County Engineer, as applicable, that all required Public Improvements in that portion of a Subdivision authorized for development have been completed in accordance with applicable Design and Public Improvement Standards of this Article; or

(2) Provide for one or more of the following means of ensuring completion of required Public Improvements:

(i) A Public Improvement Petition for construction and installation of all or a portion of the required Public Improvements. However, property within the Regulatory Floodplain is not eligible for this option;

(ii) A cash escrow deposit in an amount estimated by the appropriate Engineer to be sufficient to assure the appropriate Governing Body of the construction and installation of the uncompleted portion of the required Public Improvements in accordance with applicable improvement standards;

(iii) An irrevocable letter of credit from a financial institution qualified to do business in Kansas, in a form satisfactory to the appropriate Governing Body, in an amount estimated by the appropriate Engineer to be sufficient to assure the appropriate Governing Body of the construction and installation of required Public Improvements in accordance with applicable improvement standards; or

(iv) Approval subject to conditions:

   a. The appropriate Governing Body Planning Director may approve the Final Plat subject to the condition that it not be recorded until the City Engineer or County Engineer, as applicable, has determined that all required Public Improvements have been completed in accordance with the standards of this Article and related design standards of the applicable local government.
b. If the required improvements are not timely completed, the City Engineer or County Engineer with the Planning Director may submit the Final Plat to the appropriate Governing Body for further consideration; after giving the Subdivider an opportunity to be heard, the appropriate Governing Body may:

1. Authorize the Planning Director to rescind the approval of the plat, require additional assurance for completion of the Public Improvements,

2. Authorize the recording of the Final Plat without further improvements, or

3. Extend the timeline for completion of the Public Improvements.

(v) The appropriate Governing Body may, at its discretion, determine which of such methods for ensuring completion of required Public Improvements shall be required.

(i) Escrow Deposit

1. The amount of the cash escrow deposit determined in accordance with Section 20-811(h)(2)(ii) shall be deposited by the appropriate Governing Body in a special escrow account in the commercial bank in which the funds of such appropriate Governing Body are then deposited.

2. This escrow deposit shall be invested and reinvested by such bank in short-term government securities, the interest or discount from which shall be paid to the Subdivider upon final release of such escrow deposit as hereinafter provided.

3. Upon written certification from the City or County Engineer, as applicable, that the required Improvements have been 30% completed, the appropriate Governing Body shall release 30% of such escrow deposit to the Subdivider.

4. Upon a like certification that the required Public Improvements have been 50% and thereafter, 75% completed, the appropriate Governing Body shall release 20% and 25% respectively, of the original escrow deposit to the Subdivider.

5. Upon written certification from the appropriate Engineer that the required Public Improvements have been completed in accordance with applicable improvement standards, the balance of such escrow deposit, together with all earnings accrued thereon, shall be released to the Subdivider.

(j) Irrevocable Letter of Credit

1. The amount of an irrevocable letter of credit determined in accordance with Section 20-811(h)(2)(iii) shall be submitted by the Subdivider to the City or County Engineer, City or County Public Works Director or other designated representative.
(2) By the 10th of each month, the City or County Engineer or other designated representative shall certify to an agent of the financial institution, estimates of the amount of work completed by the contractor.

(3) The financial institution may submit a new letter of credit, which would reflect the balance of work remaining to be completed as determined by the City or County Engineer to replace the previous letter of credit.

(4) Ten percent of the total project cost shall be retained until the City Engineer or County Engineer, whichever is appropriate, has accepted all of the Public Improvements in that phase of the Subdivision.

(k) **Lot Pinning**

(1) Pins for all corners of the Subdivision and for all Lot corners shall be set and the completion of the setting certified by the responsible Land Surveyor before a Final Plat or Replat is recorded.

(2) As an alternative to Section 20-811(k)(1), before the filing—recording—of a Final Plat or Minor Subdivision/Replat with the Register of Deeds, the Developer or Owner shall provide certification to the Planning Director that the Subdivision’s boundaries are pinned and there is a contract with a licensed Land Surveyor to pin the Lots after completion of Street and Public Improvements.

(3) A Major Subdivision can be pinned or staked in phases that are coincident with:

   (i) The Street construction and development phase;
   (ii) The placement of utilities within the designated utility Easements phase; and
   (iii) The pouring of building foundations for slabs for building construction (issuance of a building permit phase).

(4) At the time the Street Public Improvement Plans are submitted to the Public Works department Director for approval, the center lines of Right(s)-of-Way shall be identified by establishing the following control points:

   (i) Points of Intersection (PI);
   (ii) Points of Tangency (PT); and,
   (iii) Points of Curvature (PC).

(5) Simultaneously with the construction of Public Improvements, staking or pinning of the Subdivision boundary corners and key points along the Easement(s) shall be completed to provide the following information:

   (i) The intersection of four or more Lots;
   (ii) Points of curvature; and
   (iii) Points of intersection with other Easements.

(6) At the time of application for a building permit, the Developer or builder of the Lot shall present certification (letter stamped by a licensed Land Surveyor) to the Building Safety Manager to assure Lot corners are pinned and pins are found or set.
20-812 Contents of Plats (Reserved)

(a) Preliminary Plat

(1) The Preliminary Plat shall be drawn to a scale where all features presented are readable.

(2) Materials to be Included

The Preliminary Plat shall:

(i) State the name of the proposed Subdivision;

(ii) List names and addresses of the Subdivider, the land planner or Subdivision designer (if any) and the licensed land Surveyor;

(iii) Show date of preparation, north arrow and graphic scale;

(iv) Identify the Plat as a Preliminary Plat;

(v) Give a legal description of the proposed Subdivision complete with section, township, range, principal meridian, county, and acreage. Show the location of the nearest section and/or quarter-section corner on the Plat, with a description tying it to the point of beginning for the Subdivision.

a. A Replat shall not be required to be referenced to a section and/or quarter-section corner, provided the original Plat for the subject Replat is tied to at least one of these corner monuments;

(vi) Include location, description and elevation of all benchmarks established or source used for vertical control. There must be at least one established vertical control point as the basis for the topographic survey included with the application;

(vii) Show names of adjoining Subdivisions or, in the case of unplatted land, the names of the Owner or Owners of adjoining property;

(viii) Show topography (contour interval not greater than 2 (feet) of the site. Topography shall be consistent with City of Lawrence and/or Douglas County aerial topography. Where land disturbance, grading or development has occurred on a site or within 100 feet of the subject site since the date the City of Lawrence and/or Douglas County, whichever is applicable, obtained aerial topography, an actual field survey shall be required;

(ix) Show on the face of the Plat or on a separate sheet, a general location of the proposed Subdivision. The general location map shall be drawn to an appropriate scale and shall show the relationship of the proposed Subdivision to the following:

a. The nearest Intersection of public Streets;

b. If not in the City, any state highway located within one-half mile of the property;
c. If in the City, any public school or park located within one-quarter mile of the property; If in the County, any public school located within one mile of the property;

d. If in the Urban Growth Area, the nearest City Limits, and the nearest boundary of the Urban Growth Area;

e. The zoning of the property and any other Zoning Districts located within one-quarter mile (if in the City or within the Urban Growth Area) or within one-half mile (if in the Rural Area).

(2) **Existing-Conditions**

The **Preliminary Plat** shall also show the following existing conditions:

(i) Location of any area designated as Floodplain or Regulatory Floodplain, location and direction of the flow of existing water courses; and the surface elevation of the Regulatory Flood;

(ii) Location of any area zoned “Floodplain” in the Floodplain Overlay District, location and direction of flow of all water courses; and Base Flood Elevation at water course entrances to and exits from the proposed Subdivision;

(iii) Location of section lines, private or public Streets, Alleys, Easements, and city boundaries within and immediately adjacent to the proposed Subdivision;

(iv) Location of natural features such as rock outcroppings, unique topographic features, lakes, individually significant stands of mature trees, and insofar as can reasonably be shown, natural features to be removed;

(v) Boundaries of significant stands of mature trees, Jurisdictional Wetlands, historic sites and Archaeological Sites on the property proposed for subdivision;

(vi) Natural features and environmentally sensitive lands within the unincorporated portions of the County:

a. Location of natural features such as rock outcroppings, unique topographic features, lakes, individually significant mature trees, and water bodies and insofar as can reasonably be shown, natural features to be removed;

b. Boundaries of significant stands of mature trees, Jurisdictional Wetlands, historic sites and Archaeological Sites on the property proposed for subdivision; Location of features which are listed in Section 20-810(i) [County Code Section 11-110(i)] as environmentally sensitive lands;

c. The plat shall delineate the environmentally sensitive lands which are to be protected and provide for protection in one of the following ways: note that they will be protected with a temporary set aside agreement or permanent conservation easement which will be recorded prior to the final plat; or place the protected areas
Article 8  Subdivision Design and Improvements

Section 20-812 [Reserved]

within tracts or Easements and note the ownership, maintenance responsibility and protection measures on the plat.

d.  Designation of a building envelope which excludes the environmentally-sensitive lands.

(vii) Boundaries of significant stands of mature trees, jurisdictional wetlands, historic sites and Archaeological Sites on the property proposed for subdivision. Natural features and environmentally-sensitive lands within the City:

a. Location of natural features such as rock outcroppings, unique topographic features, lakes, individually significant mature trees, and water bodies, and insofar as can reasonably be shown, natural features to be removed;

b. Location of environmentally-sensitive lands including those which were identified on a Sensitive Areas Site Plan for protection and those which will be altered with the development.

c. Article 11 of the Development Code requires that a Sensitive Area Site Plan be submitted with, or prior to, any development proposal for lands containing environmentally-sensitive lands. The Sensitive Area Site Plan is to be incorporated into the plats and other plans.

d. Protected Environmentally Sensitive Lands are to be located within a tract or easement.

e. Information regarding ownership and maintenance of the tract or easement as well as the protection measures for the environmentally-sensitive lands.

(viii) Existing use of the property, including the location of all existing buildings, indicating those that will be removed and those that will remain on the property after the Final Plat is recorded;

(ix) Horizontal location and vertical elevation (if available) of existing sanitary sewers, storm water sewers, and culverts within and adjacent to the proposed Subdivision, and the location of existing water mains, underground wiring, pipelines, and gas lines;

(x) Zoning of all land within and adjacent to the tract;

(xi) Location, description and elevation of all benchmarks established or source used for vertical control;

(xii) Types of soil, with the soil types generally indicated on the Preliminary Plat or a supplemental sheet; and,
(xiii) For a Subdivision that will rely on the use of On-Site Sewage Management Systems, a summary of available information on the subsurface Water Table, including the depth of the Water Table at the highest, lowest and typical locations within the Subdivision.

(3) **Streets; Sites**

The **Preliminary Plat** shall further show the following:

(i) Proposed **Streets** (including location, width, names, approximate grades), and their relation to Platted **Streets** or to proposed **Streets** as shown on any Watershed/Sub-basin Plan, Sector or Neighborhood Plan of adjacent property;

(ii) **Easements**, showing width and general purpose;

(iii) Blocks and Lots, showing approximate dimensions and proposed Block and Lot numbers;

(iv) Sites designated for other than single-family use by the adopted comprehensive or appropriately adopted Watershed/Sub-basin Plan, Sector or Neighborhood Plan. (Such plan shall be referenced on the face of the Plat);

(v) Sites proposed for Dedication as drainageway, park, school, or other public purposes;

(vi) Sites proposed by the Applicant for land uses not in conformance with adopted comprehensive or neighborhood plans accompanied by a note on the face of the Plat stating that approval of the **Preliminary Plat** does not certify approval of these proposed land uses.

(vii) If requested by Planning Staff, the **Building Envelope** for proposed Lots.

   a. Any **Lot** that is not rectangular or that has a single dimension of less than 55 feet shall show the **Building Envelope** permitted under the current Zoning District regulations;

   b. A note referring to such **Building Envelope** shall be included on the face of the Preliminary and Final Plats regarding filed on a separate document in the Planning Department shall identify the applicable Zoning District and the date of the Zoning provisions on which the preparer has relied in designating the **Building Envelope**.

(4) **Supplemental Data**

The following supplementary data and information shall be submitted with the **Preliminary Plat** or be included thereon:

(i) A table, shown on the face of the Plat, including this data:

   a. Gross acreage of the Subdivision;

   b. Acreage within each Zoning District;
Article 8    Subdivision Design and Improvements

Section 20-812  [Reserved]

c. Acreage to be dedicated for Streets or Roads, if any;
d. Acreage to be dedicated for public uses other than Roads, if any;
e. Total number of building Lots;
f. Maximum, minimum, and average Lot size; and
g. Phasing schedule if proposing phasing of final platting.

(ii) A statement on the face of the Plat, stating the method to be used for financing Public Improvements in the Subdivision and providing references to statutes, covenants or other sources for further information on the details of such financing. Such statement shall contain a heading in at least 24-point type saying “Provision and Financing of Roads, Sewer, Water and Other Public Services.” The rest of the statement shall be set out in at least 12-point type. At a minimum such statement shall indicate:

a. Whether the Subdivision will have public Streets and Roads, Private Streets and Roads or a combination thereof;
b. Whether the Subdivision will provide connections to a Public Water source (naming the source);
c. Whether the Subdivision will provide connections to a public system for wastewater treatment (naming the system) or will rely on On-Site Sewage Management Systems or other on-site wastewater treatment systems;
d. Whether purchasers of Lots in the Subdivision will be subject to special assessments or other costs or fees specific to the Subdivision to pay for the capital costs of Streets, Roads, water lines and treatment, and/or wastewater lines and treatment; and
e. Whether the provision of improved Roads, water service and/or wastewater service will depend in any way on a vote, petition or other collective action of property Owners in the Subdivision.

(iii) A separate narrative, explaining in detail the general nature and type of Public Improvements proposed for the Subdivision, and the manner by which the Subdivider intends to provide for their installation, as for example, by Public Improvement Petition, actual construction, escrow deposit, or performance bond. If other than by Public Improvement Petition, the approximate time for completion of such improvements should be indicated.

(5) **Stormwater Drainage—City of Lawrence**

(i) **Supplemental Data**

The Preliminary Plat shall contain data, information and supplemental maps of surrounding property in sufficient detail regarding storm water drainage issues, as determined by the Staff of the Planning Department Planning Director or the Planning Commission. The Staff of the Planning Department Planning Director or the Planning Commission may request additional data, information and supplemental maps from the Applicant regarding storm water drainage, as appropriate.

(ii) **Minimum Floor Elevations**
On lots adjacent to all Drainage Easements and on drainageways that are designated by the Director of Public Works or his or her designee, the Preliminary Plat and Final Plat shall indicate:

(a) The required minimum habitable floor elevations for Structures on Lots; or,

(b) The minimum elevation for a foundation opening(s) which shall be certified by a licensed land Surveyor or Engineer.

(c) [If a Basement is built on a Lot where a minimum elevation has been established, the building design is encouraged to incorporate a sump pump.]

(b) Final Plat

(1) Format

The Final Plat shall be prepared by a licensed Land Surveyor with black ink on permanent reproducible material meeting the current standards provided by the Register of Deeds. All drawings and signatures of certification shall be in waterproof ink. The overall sheet size shall be 24 inches by 36 inches. The scale shall be one inch equals 100 feet or less.

(2) Material to be Included

The Final Plat shall show:

Name under which the Subdivision is to be recorded;

(i) Descriptive information, which shall:

a. State the name of the proposed Subdivision;

b. Show date of preparation, north arrow and graphic scale;

c. Give a legal description of the proposed Subdivision complete with section, township, range, principal meridian, county, and acreage. Show the location of the nearest section and/or quarter-section corner on the Plat, with a description tying it to the point of beginning for the Subdivision.

(1) A Replat shall not be required to be referenced to a section and/or quarter-section corner, provided the original Plat for the subject Replat is tied to at least one of these corner monuments;

d. Show names of adjoining Subdivisions or, in the case of unplatted land, the names of the Owner or Owners of adjoining property;

e. Easements, showing width and general purpose;

f. Sites proposed for Dedication as drainageway, park, school, or other public purposes;

(ii) In addition, the following information is required which is similarly required on the Preliminary Plat:
a. Location of any area-zoned Floodplain or within a Floodplain Overlay District zoning district;

b. Boundaries of significant stands of mature trees, Jurisdictional Wetlands, historic sites and Archaeological Sites on the property proposed for subdivision; protected environmentally sensitive lands as shown on the preliminary plat;

c. For properties within the City, the environmentally sensitive lands shall be located within a tract or easement and the plat shall contain information regarding ownership and maintenance of the tract or easement as well as the protection measures for the environmentally sensitive lands;

d. For properties within the unincorporated portions of the County, the plat shall include a building envelope which excludes the environmentally sensitive lands and one of the following: a note that a Temporary Set Aside Agreement or permanent Conservation Easement which contains use restrictions and maintenance and protection measures has been recorded for the environmentally sensitive lands and the Book and Page Number for the recorded Temporary Set Aside Agreement or permanent Conservation Easement; or the protected environmentally sensitive lands shall be placed within Easements or tracts and the plat shall note the ownership, maintenance responsibility and protection measures of the protected lands;

e. Proposed Streets (including location and proposed names), and their relation to Platted Streets or to proposed Streets as shown on any adopted general Development plan of adjacent property; and,

f. Block and Lot numbers and dimensions of Blocks and Lots.

(iii) In addition, the following information is required which is similarly required on the Preliminary Plat:

a. Location of any area-zoned Floodplain or within a Floodplain Overlay District zoning district;

b. Boundaries of significant stands of mature trees, Jurisdictional Wetlands, historic sites and Archaeological Sites on the property proposed for subdivision;

c. Proposed Streets (including location and proposed names), and their relation to Platted Streets or to proposed Streets as shown on any adopted general Development plan of adjacent property; and,

d. Block and Lot numbers and dimensions of Blocks and Lots.

(iv) Accurate dimensions for all lines, angles, and curves used to describe boundaries, Streets, Easements and areas to be reserved for public use.
Data for all curves shall include radius, arc length, chord length, and central angle.

(v) For land located in a Floodplain, as defined and regulated under Chapter 20, Article 12 of the City Code and the comparable provisions adopted by resolution in Section 12-328 of the Zoning Regulations for the Unincorporated Area of Douglas County, the following:

a. The total area of each Lot located in the designated Floodplain;

b. The Minimum Building Elevation and Minimum Elevation of Building Opening, as determined from Chapter 20, Article 12 or the applicable County Floodplain regulations, Section 12-328 of the Zoning Regulations for the Unincorporated Area of Douglas County.

(vi) For any Lot including or adjacent to a lot including environmentally sensitive lands (see Section 20-1101(c)(iii)), as defined in Section 20-810(i) [County Code Section 11-110(i)] designation of a Building Envelope within which a building may be built after compliance with all applicable setback, floodplain and sensitive land standards;

(vii) For any Lot including or adjacent to a lot including sensitive lands (see Section 20-1101(c)(iii)), as identified in Section 20-810(i)& (j), designation of a Building Envelope within which a building may be built after compliance with all applicable setback, floodplain and sensitive land standards;

(viii) The dated signature and seal of the licensed Land Surveyor responsible for the survey and the Final Plat shall contain a note stating: “This survey conforms to the Kansas Minimum Standards for Boundary Surveys”;

(ix) Acknowledged certifications on the face of the Final Plat as listed below (may be combined where appropriate):

a. A certificate signed by all parties having any record, title or interest of record in the land subdivided, showing their consent to the preparation and recording of the Plat;

b. A certificate, signed by the Owner or Owners, dedicating all Parcels of land which are intended for public use;

(x) The endorsement of the Planning Commission as evidenced by the signature of its Chairperson;

(xi) Acceptance of Dedication by the appropriate Governing Body, as indicated by the signature of the Chairperson of the Board of County Commissioners, the Mayor or another Person authorized to sign on behalf of either;

(xii) As a separate document, a certificate that all taxes and special assessments due and payable have been paid:

a. In the case of unpaid special assessments, a proposed redistribution of such unpaid special assessments which meets the county or city’s requirements and is acceptable to the County or City Clerk and County or City’s Public Works Director.
(xiii) A note shall be placed on the Final Plat indicating that additional information concerning drainage and structural elevations are placed on the Preliminary Plat, if such requirement has been placed on the Preliminary Plat.

(xiv) A line shall be provided on the plat for the review date and signature of the County Surveyor beneath a note stating: “Reviewed in compliance with K.S.A. 58-2005”.
20-813 Administration and Enforcement

(a) Planning Department Director Powers and Duties

The Planning Department Director shall have the following powers and duties under this Article:

1. Maintain permanent and current records with respect to these regulations, including amendments thereto;
2. Receive all pre-applications together with other necessary information;
3. Distribute copies of applications and other necessary information to other appropriate governmental agencies and departments for their review and recommendations;
4. Review applications of Subdivision land division for compliance with these regulations;
5. Present reports and recommendations to the Planning Commission and Governing Bodies;
6. File approved Final Plats, Minor Subdivision/Replats, and Certificates of Surveys with the Register of Deeds;
7. Make such other determinations and decisions as may be required by these regulations or by the Planning Commission.

(b) Planning Commission Powers and Duties

The Planning Commission shall have the following powers and duties under this Article:

1. Review and approve, conditionally approve, or disapprove Preliminary Plats, and unless disapproved, transmit the same to the Lawrence City Commission for acceptance of Dedication of Rights-of-Way, and Easements;
2. Grant or deny Variances to the Design Standards of this Article as per Section 20-813(f)(g);
3. Make such other determinations and decisions as may from time to time be required by these regulations, or by applicable state law.

(c) Dedications or Vacations

The applicable Governing Bodies shall be responsible for accepting the Dedication or approving the Vacation of Rights-of-Way for public Streets, Roads and public Easements.

(d) Building Permits in the Unincorporated Area of Douglas County

No building permit shall be issued for any building or structure in the Unincorporated Area of the County unless the Douglas County Zoning & Codes Director finds that:
(1) The proposed building or structure shall be located:

(i) On a **platted** Lot shown on an approved and recorded **Final Plat** for a Subdivision or on a **Residential Development Parcel** shown on an approved and recorded **Certificate of Survey**;

(ii) On a platted Lot or land division in existence on the effective date **Effective Date** of these regulations that has a vested right under these requirements pursuant to Section 20-801(e) (2);

(iii) On a platted Lot or land division, created through a valid Exemption to these regulations or to the **Subdivision Regulations** that were in effect at the time when the Lot or land division was created as identified in **Section 20-801(d)** or pursuant to an approved **Certificate of Survey**; or

(iv) On a **recorded** Land Combination, created pursuant to Section 20-801(f).

(2) A building permit may be issued for improvement of an existing residential building in the **Unincorporated Area** of the County if the Douglas County **Zoning & Codes Director** finds that the existing residential building:

(i) Was built on the site prior to the **Effective Date** of these regulations; and,

(ii) Is located on a land Parcel of sufficient size to meet the County’s **Sanitary Code** requirements.

(3) All Public Improvements required as a condition of approval of the **Final Plat** on which the Lot is shown have been completed or the Subdivider has provided security for the completion of such Improvements, in accordance with Section 20-811(h)(2);

(4) A certification, signed by a licensed Land Surveyor, has been presented as proof of pinning for each of the Lots for which building permits are requested; and,

(5) There has been compliance with any conditions of **Final Plat** or **Certificate of Survey** approval.

(e) **Building Permits in the City of Lawrence**

No building permit shall be issued for any building or structure in the City of Lawrence unless the **Planning Director** finds that:

(1) All Public Improvements required as a condition of approval of the **Final Plat** on which the Lot is shown have been completed or the Subdivider has provided security for the completion of such Improvements, in accordance with Section 20-811(h)(2);

(2) A certification, signed by a licensed Land Surveyor, has been presented as proof of pinning for each of the Lots for which building permits are requested; and
(3) There has been compliance with:
   (i) All applicable Design Standards and Public Improvement requirements of this Article;
   (ii) All applicable Review and Approval Procedures of Section 20-802; and
   (iii) Any conditions of Final Plat approval.

(4) The property is determined by the Planning Director to be a Lot of Record or a nonconforming Lot as defined in Section 20-1504 of the Land Development Code.

(f) Appeals

(1) From Decision of the Planning Director
   Unless otherwise provided, a person aggrieved by a decision of the Planning Director under these Subdivision Regulations may appeal the decision to the Lawrence Board of Zoning Appeals in accordance with Section 20-1311 of the City Code or the Douglas County Board of Zoning Appeals in accordance with Section 12-323 of the County Code, as applicable. Such appeal shall be filed within 30 days of the date of the letter, memo, staff report or other written representation of the decision of the Planning Director which was reasonably available to the person aggrieved. An appeal not timely filed is barred.

(2) From Decision of the Douglas County Zoning and Codes Director
   Unless otherwise provided, a person aggrieved by a decision of the Douglas County Zoning & Codes Director under these Subdivision Regulations may appeal the decision to the Douglas County Board of Zoning Appeals in accordance with Section 23-2 12-323 of the Douglas County Zoning Regulations. Such appeal shall be filed within 30 days of the date of the letter, memo, staff report or other written representation of the decision of the Planning Zoning and Codes Director which was reasonably available to the person aggrieved. An appeal not timely filed is barred.

(3) From Decision of Planning Commission
   A person aggrieved by a decision of the Planning Commission under these Subdivision Regulations may appeal the decision to the City Commission (in the case of a matter involving land in the City) or to the Board of County Commissioners (in the case of a matter involving land in an unincorporated part of the County). Such appeal shall be filed within 30 days of the date of the meeting of the Planning Commission at which the action appealed from was taken. An appeal not timely filed is barred.

(4) From Decision of Governing Body
   A person aggrieved by a decision of the Board of County Commissioners or the Lawrence City Commission under these Subdivision Regulations may pursue any available cause of action in a court of competent jurisdiction, subject to the rules of civil procedure then in effect and subject to any limitations imposed by Kansas law.
(g) **Variances**

In cases where there is hardship in carrying out the literal provisions of the Design Standards of these regulations (such as Design Standards for Lot Width, Lot depth area, Block depth, etc.) or Public Improvement Standards of these regulations, the Planning Commission may grant a Variance from such provisions, except that in cases where there is hardship in carrying out the literal provisions found in Section 20-811(d) (regarding wastewater disposal systems,) the appropriate Governing Body may grant a Variance from such provisions.

1. An application for a Variance shall be made to the Planning Department Director. The Planning Commission shall give the applicant and any other interested persons an opportunity to be heard with respect to the proposed application for a Variance from the provisions of the regulations, except that the Governing Body shall receive the Planning Commission’s recommendation and provide an opportunity to be heard with respect to the proposed application for a variance from the provisions dealing with Sidewalks, Pedestrian Rights-of-Way Easements or pedestrian ways.

2. A Variance shall not be granted unless all of the following apply:
   
   (i) Strict application of these regulations will create an unnecessary hardship upon the Subdivider;
   
   (ii) The proposed Variance is in harmony with the intended purpose of these regulations; and,
   
   (iii) The public health, safety and welfare will be protected.

(h) **Design Variances for Planned Development**

When a plat is presented which includes land for which a Planned Development plan has been approved, the Planning Commission may vary the Design Standards in these regulations as necessary to conform to such finally approved Planned Preliminary and Final Development Plans.

(i) **Enforcement and Penalties**

It shall be the duty of the Douglas County Zoning & Codes Director, the City Codes Enforcement Manager, and the Planning Director to enforce the Subdivision Regulations of this Article.

(j) **Violations**

The following shall constitute violations of these Subdivision Regulations:

1. To submit for recording, any Subdivision Plat, land division or other Development Plan that has not been approved in accordance with the procedures of these Subdivision Regulations or that does not qualify for an exemption under these Subdivision Regulations;
(2) To engage in the construction of a building or development or division of land, requiring one or more approvals under these Subdivision Regulations without obtaining all such required approvals;

(3) To engage in the construction of a building or development or division of land, requiring one or more approvals under these Subdivision Regulations in any way inconsistent with any such approval or any conditions imposed thereon;

(4) To violate the terms of any approval granted under these Subdivision Regulations or any condition imposed on such approval; or

(5) To violate any lawful order issued by any person or entity under these Subdivision Regulations.

(k) Penalties; Remedies

The following penalties and remedies shall be available to the City and County in enforcing these Subdivision Regulations:

(1) The City or County may seek an injunction or other equitable relief in the District Court to stop any violation of these Subdivision Regulations or of a permit, certificate or other form of authorization granted hereunder.

(2) The City or County may seek a Court order from the District Court in the nature of mandamus, abatement or other action or proceeding to abate or remove a violation or to restore otherwise the premises in question to the condition in which they existed prior to the violation.

(3) The City or County may seek such criminal or civil penalties as are provided by Kansas law, City or County Code. For purposes of these penalties, each day's violation shall constitute a separate offense.

(4) The City's Codes Enforcement Manager, Building Safety Manager or the Douglas County Zoning & Codes Director may deny or withhold all permits, certificates or other forms of authorization on any land, or structure or Improvements thereon:

   (i) Which has been divided or Subdivided other than in accordance with the requirements of these Subdivision Regulations; or

   (ii) On which there is an uncorrected violation of these Subdivision Regulations.

(5) Any permit or other form of authorization required under these Subdivision Regulations may be revoked by the City's Codes Enforcement Manager, Building Safety Manager, the Douglas County Zoning & Codes Director, the Planning Director, or by any City or County official with authority to issue such permit when the official determines:

   (i) That there is departure from the plans, specifications, or conditions as required under terms of the Subdivision approval;

   (ii) That the Subdivision approval was procured by false representation or was issued by mistake; or
(iii) That any of the provisions of these Subdivision Regulations are being violated.

(6) Written notice of revocation shall be served upon the Owner, the Owner’s Agent or contractor, or upon any person employed on the building or structure for which such permit was issued, or shall be posted in a prominent location, and thereafter construction shall stop.

(7) Whenever a building or part thereof is being constructed, reconstructed, altered or repaired in violation of these Subdivision Regulations, the City’s Codes Enforcement Manager, Building Safety Manager or the Douglas County Zoning & Codes Director may order the work to be immediately stopped.

(i) The stop-work order shall be in writing and directed to the person doing the work. The stop-work order shall state the specific work to be stopped, the specific reasons for the stoppage, and the conditions under which the work may be resumed.

(ii) Violation of a stop-work order constitutes a misdemeanor.

(8) Where a violation of these Subdivision Regulations involves a failure to comply with approved plans, or conditions to which the approval of such plans was made subject, the Planning Commission may, upon notice to the applicant and other known parties in interest (including any holders of building permits affected): 

(i) Revoke the plan or other approval or

(ii) Condition its continuance on:

   a. Strict compliance with these Subdivision Regulations,

   b. The provision of financial security to ensure that construction is completed in compliance with approved plans, or

   c. Such other conditions as the city may reasonably impose.

(iii) Any required financial security shall be in a form approved by the City or County, as applicable.
20-814 Building Setbacks, Enforcement, Exceptions

(a) Building or Setback Lines On Major Streets or Highways

(1) Purpose
As part of the Comprehensive Plan, the City and County have identified major entrances or gateways to the City and the Urban Growth Area around it. To enhance the appearance of those gateways, it is the intent of the City and the County to create a greenway effect along the major corridors through those gateways.

(2) Building and parking Setback Lines are hereby established on certain major Streets or highways as follows:
   (i) West Sixth Street from K10 (South Lawrence Trafficway) to Wakarusa Drive and West Sixth Street from Monterey Way to Folks Road: a Setback Line of 50 feet.

(3) Building and parking setback limits on West Sixth Street from Wakarusa Drive to Folks Road shall be based on the approved zoning for each Tract of land.

(b) Exceptions

(1) In the event that a governmental taking or acquisition for Right-of-Way, easement or other governmental use would reduce a setback that previously complied with this Section, that reduction in setback shall not be deemed to constitute a violation of this Section.

(2) Any non-conforming residential building or structure located within the 50 foot building and parking setback, which is damaged by fire, flood, explosion, wind, earthquake, war, riot, or other calamity or Act of God, may be restored or reconstructed provided; said restoration or reconstruction occurs on the original foundation. The building or structure may not be rebuilt to a greater density or intensity than existed before the damage.

(c) Appeal - Setback
Notwithstanding Section 20-813, any appeal of the building and parking Setback Line established for major Streets or highways shall be to the Board of Zoning Appeals of the applicable jurisdiction, provided that no appeal shall be required in the instance of the reduction in a setback resulting from a governmental taking or acquisition for Right-of-Way, Easement, or other governmental use, as provided in Section 20-814(b) (1). The Board of Zoning Appeals shall have the power to modify or vary the building and parking Setback Line in specific cases in order that unwarranted hardship, which constitutes a complete deprivation of use as distinguished from merely granting a privilege, may be avoided. In the absence of such a hardship, the intended purpose of the building and parking Setback Line shall be strictly observed.
(d) **Enforcement**

No building or occupancy permit shall be issued for any new building within the Plat approval jurisdiction of the City of Lawrence, or the Unincorporated Area of Douglas County, which fails to comply with the requirements of this Section 20-814.

(e) **Interpretation**

The provisions of this section Section 20-814 shall not be interpreted to deprive the Owner of any existing property or of its use or maintenance for the purpose to which such property is then lawfully devoted.
20-815 Interpretations, Rules of Construction and Definitions

(a) Interpretation and Rules of Construction

(1) Where the conditions imposed by the provisions of these regulations are either more restrictive or less restrictive than comparable conditions imposed by any other provisions of any other applicable law, ordinance, resolution, rule, or regulation of any kind, the regulations which are more restrictive and impose higher standards or requirements shall govern.

(2) The provisions of these regulations are not intended to abrogate any Easement, covenant, or other private agreement; provided, that where the requirements of these regulations are more restrictive or impose higher standards or regulations than such Easement, covenant, or other private agreement, the requirements of these regulations shall govern.

(3) A Subdivision division of land, which was not lawful at the time of the adoption of these regulations on December 31, 2006, shall not become or be made lawful solely by reason of adoption of these regulations.

(4) The provisions of these regulations are cumulative and are additional limitations upon all other laws and ordinances heretofore passed or which may be passed hereafter governing any subject matter in the provisions of these regulations.

(b) Definitions

(1) Words used in this Article have the standard dictionary definition unless they are defined in this section. Words defined in this section shall have the specific meaning assigned, unless the context expressly indicates another meaning.

(2) Words or terms that are specifically defined in the Subdivision Regulations, and specifically used in the context of these regulations, are distinguished by being in Title Case and in Blue Text in the original code document.

(3) The words “shall”, “will”, “shall not”, and “may not” are mandatory.

(4) The word “may” is permissive.

(5) The word “and” indicates that all connected items or provisions apply.

(6) The word “or” indicates that the connected items or provisions may apply singularly and in combination.

(7) Floodplain terms referenced in this Article are defined in Section 20-1205 of the Land Development Code of the City of Lawrence and Section 12-303 of the Zoning Regulations for Douglas County.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abut</td>
<td>To physically touch or border upon; or to share a common property line.</td>
</tr>
<tr>
<td>Access</td>
<td>A way or means of approach to provide vehicular or pedestrian physical entrance to a property.</td>
</tr>
<tr>
<td>Acceleration Lane</td>
<td>An added roadway lane which permits integration and merging of slower moving vehicles into the main vehicular stream.</td>
</tr>
<tr>
<td>Access Control</td>
<td>Access Control is the limitation of public access rights to and from properties abutting streets or highways. Access Control is used on arterial streets and higher functional classes of streets to preserve traffic service levels and safety.</td>
</tr>
<tr>
<td>Access Easement</td>
<td>An easement created for the purpose of providing vehicular or pedestrian access to a property.</td>
</tr>
<tr>
<td>Adequate Assurances</td>
<td>A written and executed agreement or contract supplemented by one of the means of ensuring completion of public improvements set forth in Section 20-811(h)(2).</td>
</tr>
<tr>
<td>Agency</td>
<td>For floodplain management purposes, means the Federal Emergency Management Agency (FEMA).</td>
</tr>
<tr>
<td>Agent (of Owner or Applicant)</td>
<td>Any person who can show certified written proof that he or she is acting for the Landowner or applicant.</td>
</tr>
<tr>
<td>Agricultural Purposes</td>
<td>A purpose that is directly related to the agricultural activity on the land which shall include:</td>
</tr>
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<td></td>
<td>(a) the cultivation and tillage of the soil;</td>
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<td></td>
<td>(b) dairying;</td>
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<tr>
<td></td>
<td>(c) the production, cultivation, growing or harvesting of any agricultural or horticultural commodity;</td>
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<tr>
<td></td>
<td>(d) the raising or training of livestock, bees, fur-bearing animals, or poultry; or</td>
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<tr>
<td></td>
<td>(e) any practices performed by a farmer or on a farm, incident to or in connection with such farming operations.</td>
</tr>
<tr>
<td></td>
<td>The term &quot;agriculture purpose&quot; does not mean the processing for sale or handling for sale a commodity or product grown or produced by a person other than the farmer or the farmer’s employees. In all cases, an agricultural purpose does not include a structure used as a residential Dwelling or an On-Site Sewage Management System.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Alley</td>
<td>A minor Right-of-Way dedicated to public use which gives secondary means of vehicular access to the rear or side of properties otherwise Abutting a Street and which may be used or public utility purposes.</td>
</tr>
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<td></td>
<td><strong>A public or private way not more than 20 feet wide primarily designed to serve as a secondary means of Access to Abutting property.</strong></td>
</tr>
<tr>
<td>Appeal</td>
<td>For floodplain management purposes, means a request for the review of the Floodplain Administrator’s interpretation of any provision of the Flood Protection Standards or a request for a variance.</td>
</tr>
<tr>
<td>-Applicant</td>
<td>A Person submitting an application for approval.</td>
</tr>
<tr>
<td>-Areas of Special Flood</td>
<td>Hazard</td>
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<tr>
<td></td>
<td>Is the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year.</td>
</tr>
<tr>
<td>-Base Flood</td>
<td>A flood having a 1% chance of being equaled or exceeded in any given year. See “Regulatory Flood”.</td>
</tr>
<tr>
<td>-Base Flood Elevation</td>
<td>Water surface elevation of the base flood as determined by the Flood Insurance Study or by an approved Hydrologic and Hydraulic Study, whichever is higher.</td>
</tr>
<tr>
<td>Basement</td>
<td>Any area of the structure having its floor sub-grade (below ground level) on all sides.</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Surveying mark made in some object which is permanently fixed in the ground, showing the height of that point in relation to National Geodetic Vertical Datum (NGVD) and City or County Datum.</td>
</tr>
<tr>
<td>Block</td>
<td>A Parcel of land entirely surrounded by public Streets, highways, railroad rights-of-way, public walks, parks or green strips, or drainage Channels or a combination thereof.</td>
</tr>
<tr>
<td>Bore Hole or Soil Boring</td>
<td>Soil test(s) conducted by drilling or auguring a hole through the native soil and logging the descriptions of the soil stratification, characteristics, moisture content, presence of Groundwater, and other relevant observations in accordance with the Unified Soil Classification System, USDA's Soil Textural Triangle, or other professional soil description system as approved by the applicable local health department.</td>
</tr>
<tr>
<td>-Boulevard</td>
<td>A tree lined roadway or a multi lane street with a landscaped median.</td>
</tr>
<tr>
<td>Boundary Line Adjustment</td>
<td>A change in the boundary between adjoining lands that does not create an additional building site and that, when completed, will result in Tracts/Parcels of land that meet minimum Road frontage requirements or Lots that comply with the Lot Design Standards of Section 20-801 20-810(a)(2) and with the Zoning District regulations that apply to the subject property.</td>
</tr>
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<td>Term</td>
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<tr>
<td><strong>Term</strong></td>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td><strong>Boundary Line Street (or Road)</strong></td>
<td>A Street or Road that forms a part of the boundary line of a City.</td>
</tr>
<tr>
<td><strong>Build Out Plan</strong></td>
<td>A future subdivision layout that has been planned and designed to the Urban Street and Block level based on existing Topography and the Design Standards in the subdivision regulations of the city associated with the Urban Growth Area. The Build Out Plan shall identifies an internal Street network that has connectivity to existing and planned Collector and/or Arterial Streets, including Blocks for future Urban development, and the general location of utility and drainage Easements.</td>
</tr>
<tr>
<td><strong>Buildable Lot</strong></td>
<td>A lot for which a building permit can be obtained. Property that is designated as a “Tract” of land is not a buildable lot, unless the Tract is identified for specific uses, such as signs, area markers or public utilities, as part of the Subdivision process.</td>
</tr>
<tr>
<td><strong>Building, Principal</strong></td>
<td>A building in which is conducted the Principal Use of the building site on which the building is situated. In A 1 (Suburban Home Residential) and R 1 (Single Family Residential), or in any residential District in Lawrence, any Dwelling shall be deemed to be the Principal Building on the lot, parcel or division on which the Dwelling is located.</td>
</tr>
<tr>
<td><strong>Building Envelope</strong></td>
<td>The buildable area of a Lot or a Residential Development Parcel defined by the minimum required setbacks of the applicable Zoning Regulations and excluding lands identified to be protected per Section 20-810(i-k) [County Code Section 11-110(i-k)]. identified in Section 20-810(j).</td>
</tr>
<tr>
<td><strong>Caliper</strong></td>
<td>The American Association of Nurserymen standard for trunk measurement of nursery stock, as measured at 6 inches above the ground for trees up to and including 4 inch Caliper size, and as measured at 12 inches above the ground for larger sizes.</td>
</tr>
<tr>
<td><strong>Catch Basin</strong></td>
<td>An inlet designed to intercept and redirect surface waters.</td>
</tr>
<tr>
<td><strong>Certificate of Survey</strong></td>
<td>A legal instrument approved pursuant to Section 20-807; this is a narrowly used term and this instrument shall not be considered a “Plat” or a “Subdivision” as defined herein.</td>
</tr>
<tr>
<td><strong>Channel</strong></td>
<td>A watercourse with a definite bed and banks which confine and conduct the normal continuous or intermittent flow of water.</td>
</tr>
<tr>
<td><strong>Channelization</strong></td>
<td>(1) The straightening and deepening of Channels and/or the surfacing thereof to permit water to move rapidly and/or directly. (2) A traffic control device which forces vehicles into certain traffic flows or turning movements.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Circle</td>
<td>A Street naming suffix designating a Street with a single common Ingress and Egress (Cul-de-sac). The “Circle” suffix is used as a part of a Street name when the Cul-de-sac is a logical extension or continuation of a Street e.g., 14th Circle.</td>
</tr>
<tr>
<td>City Engineer</td>
<td>The person designated by the City Manager as the City Engineer. If no person has been so designated, then this term shall refer to the head Director of the City Public Works Department. If no person has been designated to fill either such position, then this term shall refer to the head of the department or operating unit primarily responsible for the maintenance of City Streets.</td>
</tr>
<tr>
<td>Cluster Development Subdivision</td>
<td>A form of Development for single family detached dwelling residential Subdivisions that permits a reduction in Lot area and bulk requirements, provided that there is no increase in the number of Lots that would be permitted under a conventional Subdivision and the resultant land area is devoted to open space. The clustering design technique concentrates buildings in specific areas on the site to allow the remaining land to be set aside for recreation, meaningful Common Open Space and preservation of environmentally and geographically sensitive areas or historical features. A form of residential development permitted in the Urban Growth Areas that requires Residential Development Parcels to take access from a common Cross Access Easement and to set aside common areas and to plan for the conservation of natural resources.</td>
</tr>
<tr>
<td>Comprehensive Plan</td>
<td>The Comprehensive Plan for the city or county, officially approved or adopted to provide long-range Development policies, and which may include, among other things, the plan for land use, land subdivision, circulation, and community facilities.</td>
</tr>
<tr>
<td>Community</td>
<td>Any State or area or political subdivision thereof, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.</td>
</tr>
<tr>
<td>Conservation Easement</td>
<td>See “Easement, Conservation”</td>
</tr>
<tr>
<td>County’s Access Management Standards</td>
<td>Access and minimum frontage standards in the Douglas County Code, Chapter I X, Article 5.</td>
</tr>
<tr>
<td>County Engineer</td>
<td>The person designated by the County Administrator or Board of County Commissioners as the County Engineer. If no person has been so designated, then this term shall refer to the head Director of the County Public Works Department. If no person has been designated to fill either such position, then this term shall refer to the head of the department or operating unit primarily responsible for the maintenance of County Roads and infrastructure.</td>
</tr>
<tr>
<td>County’s Rock Road Standard</td>
<td>Standards as delineated in Chapter I X, Section 203 of the Douglas County Code.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>-Court</td>
<td>A Street naming suffix designating a Street with a single common Ingress and Egress (Cul-de-sac). The “Court” suffix is used as a part of a Street name when the Cul-de-sac emanates from a Street at a near right angle, e.g., 14th Court.</td>
</tr>
<tr>
<td>-Cross Access Easement</td>
<td>See “Easement, Cross Access”</td>
</tr>
<tr>
<td>-Crosswalk</td>
<td>A strip of land dedicated for public use which is established across a Block for the purpose of providing pedestrian access to adjacent areas.</td>
</tr>
<tr>
<td>Cul-de-sac</td>
<td>A Street that has one outlet and is permanently terminated by a vehicle turn-around at the other end. This is a sub-category of Streets with a Single Outlet.</td>
</tr>
<tr>
<td>Culvert</td>
<td>A drain, ditch or conduit not incorporated in a closed system, which carries drainage water under a Driveway, Roadway, railroad, pedestrian walk or public way.</td>
</tr>
<tr>
<td>Curb Cut</td>
<td>The opening along the curb line at which point vehicles may enter or leave a Roadway.</td>
</tr>
<tr>
<td>-Curb Return</td>
<td>The connecting link between the Street curb and the ramp (Driveway) curb.</td>
</tr>
<tr>
<td>Datum, City</td>
<td>A reference point from which heights or depths are calculated within the City of Lawrence. All reference marks using City Datum <strong>are required to</strong> shall also denote NGVD elevation.</td>
</tr>
<tr>
<td>-Deceleration Lane</td>
<td>An added Roadway lane that permits cars to slow down and leave the main vehicle stream.</td>
</tr>
<tr>
<td>Dedication</td>
<td>Gift or donation of property by the Owner to a governmental unit. The transfer is conveyed by a Plat or a written separate instrument. The act of dedicating is completed with a formal acceptance by the Governing Body.</td>
</tr>
<tr>
<td>Design Standards, Subdivision</td>
<td>All requirements and regulations relating to design and layout of Subdivisions contained in Section 20-810.</td>
</tr>
<tr>
<td>Detention Pond</td>
<td>A storage facility for the temporary storage of stormwater runoff. The stormwater may be released to downstream facilities at a designed rate of flow.</td>
</tr>
<tr>
<td>Developer</td>
<td>The legal or beneficial Owner or Owners of a Lot or of land proposed to be subdivided including the holder of an option or contract to purchase, or other person having enforceable proprietary interests in the land.</td>
</tr>
<tr>
<td>-Development</td>
<td>Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, levees, levee systems, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td><strong>Double Frontage Lot (or Through Lot)</strong></td>
<td>A Lot with two opposite Lot Lines Abutting upon Streets or Roads which are substantially parallel.</td>
</tr>
<tr>
<td><strong>Douglas County Zoning &amp; Codes Director</strong></td>
<td>The director of the Douglas County Zoning and Codes Department or such Person’s designee with primary responsibility for enforcement and administration of the Zoning and Building Code Regulations of Douglas County.</td>
</tr>
<tr>
<td><strong>Drainage System</strong></td>
<td>Pipes, Waterways, natural features and man-made Improvements designed to carry stormwater drainage.</td>
</tr>
<tr>
<td><strong>Drive</strong></td>
<td>A private roadway providing access for vehicles to a parking space, garage, dwelling or other structure. Also referred to as a driveway.</td>
</tr>
<tr>
<td><strong>Driveway</strong></td>
<td>A privately owned means of providing direct vehicle Access to Streets.</td>
</tr>
<tr>
<td><strong>Driveway Apron or Driveway Approach</strong></td>
<td>A paved area between the sidewalk and the street curb used by the property owner for vehicular access.</td>
</tr>
<tr>
<td><strong>For property within the City of Lawrence:</strong></td>
<td>The Driveway area or approach located between the Sidewalk and the curb. When there is no Sidewalk, the apron or approach shall be defined as extending a minimum of six (6) feet from the back of the curb toward the Lot Line.</td>
</tr>
<tr>
<td><strong>For property in the Unincorporated Areas:</strong></td>
<td>The improved surface located between existing edge of Road surface and the existing right-of-way line and installed in accordance with Douglas County Public Works Department standards.</td>
</tr>
<tr>
<td><strong>Driveway, Joint-Use</strong></td>
<td>A privately owned Driveway that provides Access to 2 or more Lots in a commercial or industrial non-residential Development, such as in a shopping center (with out Lots outlots) or a business or industrial park.</td>
</tr>
<tr>
<td><strong>Dwelling</strong></td>
<td>A building or portion thereof designed or used exclusively as the residence or sleeping place of one or more persons, but not including a tent, trailer or Mobile Home recreational vehicle.</td>
</tr>
<tr>
<td><strong>Easement</strong></td>
<td>A grant of one or more of the property rights by the property Owner to and/or for the use by the public, a corporation or another Person or entity.</td>
</tr>
<tr>
<td><strong>A grant by a property Owner to the public, a corporation, or persons for the use of land for specific purposes.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Easement, Access</strong></td>
<td>An easement created for the purpose of providing vehicular or pedestrian Access to a property.</td>
</tr>
<tr>
<td><strong>Term</strong></td>
<td><strong>Definition</strong></td>
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</tr>
<tr>
<td><strong>Easement, Conservation</strong></td>
<td>A non-possessory interest of a holder in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic or open-space values of real property, assuring its availability for agricultural, forest, recreational or open-space use, protecting natural resources, maintaining or enhancing air or water quality or preserving the historical, architectural, archaeological or cultural aspects of real property. In case of any conflict between this definition and K.S.A. 58-3810, as it may be amended from time to time, the amended statute shall control and shall be used in the construction and interpretation of these regulations.</td>
</tr>
<tr>
<td><strong>Easement, Cross Access</strong></td>
<td>An easement between two or more adjacent Parcels creating rights to utilize a service drive providing vehicular Access among those Parcels so the driver need not enter the public Street system, except at a limited Access point. When established as part of a Cluster Development in Lawrence's UGA, the service drive constructed within the Cross Access Easement shall be constructed, at a minimum, to meet the County's rock road standard, and the minimum width of traveled way plus shoulder shall be 20 feet.</td>
</tr>
<tr>
<td><strong>Easement, Drainage</strong></td>
<td>An Easement required for the installation of stormwater sewers or, Waterways and/or required for the preservation or maintenance of a natural stream or water course or other drainage facility.</td>
</tr>
<tr>
<td><strong>Easement, Private</strong></td>
<td>A Right of Way granted for limited use of land for a private purpose.</td>
</tr>
<tr>
<td><strong>Effective Date</strong></td>
<td>December 31, 2006, the date Joint Ordinance No. 8064/ Resolution No. 06-41 adopting this Article 8, Chapter 20, Code of the City of Lawrence and Chapter 11, of the Douglas County Code took effect.</td>
</tr>
<tr>
<td><strong>Egress</strong></td>
<td>An exit.</td>
</tr>
<tr>
<td><strong>“Eligible Community” or “Participating Community”</strong></td>
<td>A community for which the Administrator has authorized the sale of flood insurance under the National Flood Insurance Program (NFIP).</td>
</tr>
<tr>
<td><strong>Encroachment</strong></td>
<td>Any obstruction in a delineated Floodway, Right-of-Way, Easement, building setback or adjacent land.</td>
</tr>
<tr>
<td><strong>Encumber</strong></td>
<td>To place a legal claim or restriction upon a tract or parcel of land.</td>
</tr>
<tr>
<td><strong>Engineer</strong></td>
<td>A professional Engineer licensed by the State of Kansas or licensed to practice in the State of Kansas.</td>
</tr>
<tr>
<td><strong>Exception</strong></td>
<td>Permission to depart from or request relief from the design standards. Exceptions often refer to standards such as: length of cul-de-sac, location and type of improvements, or landscaping requirements. They are dictated by the circumstances related to the specific application that makes the design requirements for which the exception is requested unnecessary or unreasonable.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td><strong>Existing Construction</strong></td>
<td>Structures for which the “start of construction” commenced before the effective date of the FIRM (March 2, 1981); “existing construction” may also be referred to as “existing structures.”</td>
</tr>
<tr>
<td><strong>Existing Mobile Home Park</strong></td>
<td>A mobile home park or subdivision for which the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including, at a minimum, the installation of utilities, the construction of Streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.</td>
</tr>
<tr>
<td><strong>Final Plat</strong></td>
<td>A map of a land Subdivision prepared in a form suitable for filing of record with necessary affidavits, dedications, restrictions, and acceptances, and with complete bearings and dimensions of all lines defining Lots and Blocks, Streets, Alleys, public areas and other dimensions of land.</td>
</tr>
<tr>
<td><strong>Fire Hydrant</strong></td>
<td>An outdoor water supply outlet with wrench-actuated valve and a connection for a fire hose.</td>
</tr>
<tr>
<td><strong>Flag Lot</strong></td>
<td><em>City meaning:</em> A lot not fronting or abutting a public Right-of-Way except for a narrow strip of land providing access to the lot from the public Right-of-Way. <em>County meaning:</em> A lot or a Residential Development Parcel that has a minimum lot or Residential Development Parcel width of less than 90% of the minimum lot or Residential Development Parcel’s required frontage at the road Right-of-Way or road easement line.</td>
</tr>
<tr>
<td><strong>“Flood” or “Flooding”</strong></td>
<td>Means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of inland waters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood, or by some similarly unusual and unforeseeable event which results in flooding as defined above in item (1).</td>
</tr>
<tr>
<td><strong>Flood Insurance Rate Map</strong></td>
<td>An official map of a community, on which the Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community.</td>
</tr>
<tr>
<td><strong>Flood Insurance Study</strong></td>
<td>An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.</td>
</tr>
<tr>
<td><strong>Floodplain</strong></td>
<td>The land area inundated by a flood of a given magnitude as determined by the Flood Insurance Study or Governing Body based on an approved Hydrologic and Hydraulic Study.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Floodplain or Floodplain District</td>
<td>That area designated by the Governing Body as susceptible to flooding including but not limited to the Regulatory Floodplain designated by the Federal Insurance Administrator.</td>
</tr>
<tr>
<td>Floodplain Management</td>
<td>The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.</td>
</tr>
<tr>
<td>Floodplain Management Regulations</td>
<td>Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain and grading ordinances) and other applications of police power. The term describes such State or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.</td>
</tr>
<tr>
<td>Floodproofing</td>
<td>Any combination of structural and nonstructural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, or structures and their contents.</td>
</tr>
<tr>
<td>“Floodway” or “Regulatory Floodway”</td>
<td>The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.</td>
</tr>
<tr>
<td>Floodway Encroachment Lines</td>
<td>The lines marking the limits of floodways on Federal, State and local floodplain maps.</td>
</tr>
<tr>
<td>Floodway Fringe or Regulatory Floodway Fringe</td>
<td>The area outside the floodway encroachment lines, but still subject to inundation by the regulatory flood.</td>
</tr>
<tr>
<td>Force Main</td>
<td>A sanitary sewer line through which wastewater is pumped rather than carried by gravity flow.</td>
</tr>
<tr>
<td>Freeboard</td>
<td>A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as bridge openings and the hydrological effect of urbanization of the watershed.</td>
</tr>
<tr>
<td>Frontage Road</td>
<td>A “Street, Marginal Access” located in front of the properties that it Abuts.</td>
</tr>
<tr>
<td>Frontage</td>
<td>The boundary of a Lot or Residential Development Parcel that Abuts a Street or a Road Right-of-Way.</td>
</tr>
<tr>
<td>Full Maintenance Road</td>
<td>A road in the Unincorporated Area of the County that receives maintenance on a regular basis in accordance with its road classification and traffic counts.</td>
</tr>
<tr>
<td>Governing Body</td>
<td>The respective City Commission or City Council within the incorporated limits of the City of Lawrence, Baldwin City, Eudora, or Lecompton and the Board of County Commissioners within the Unincorporated Area of Douglas County.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Grading</td>
<td>The act of excavation or filling or a combination of both or any leveling to a smooth horizontal or sloping surface on a property, but not including normal cultivation associated with an agricultural operation. For grading in FEMA designated floodplains the definition in the Floodplain Management Regulations shall take precedence.</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Any subsurface water in the zone of saturation, including but not limited to spring water, perched Water Tables, seasonal Water Tables and aquifers.</td>
</tr>
<tr>
<td>Half-Street</td>
<td>The Right-of-Way for a Street bordering one or more property lines of a Subdivision Tract to which the Subdivider has allocated only a portion of the required Street Right-of-Way width.</td>
</tr>
<tr>
<td>Hard Surfaced Road</td>
<td>A properly constructed and maintained road surface with asphaltic concrete, Portland cement concrete or with chip sealed aggregate base.</td>
</tr>
<tr>
<td>Highest Adjacent Grade</td>
<td>The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.</td>
</tr>
<tr>
<td>Historic Landmark</td>
<td>Any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) individually listed on the Register of Historic Kansas Places; or (d) individually listed the Lawrence Register of Historic Places.</td>
</tr>
<tr>
<td>Home Owners Association</td>
<td>A community association, other than a condominium association, which is organized in a Development in which individual Owners share common interests in open space or facilities. The Home Owners Association usually holds title to reserves, manages and maintains the common property, and enforces certain covenants and restrictions. Condominium associations differ from Home Owners Associations in that condominium associations do not have title to the common property.</td>
</tr>
<tr>
<td>Homestead Exemption Survey</td>
<td>A boundary survey creating a new Parcel from the division of a vested Parcel, for a residence that existed on the vested Parcel on 12/31/2006, which was made in accordance with Section 20-801(d)(2)(ix). The vested rights from the original Parcel remain with the existing residence, transferring to the new residential Parcel when the survey is recorded at the Register of Deeds.</td>
</tr>
<tr>
<td>Hydrologic and Hydraulic Study</td>
<td>An engineering study that is done in accordance with the Lawrence Development Code 20-1204(c).</td>
</tr>
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<td>Term</td>
<td>Definition</td>
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<tr>
<td>Improvements</td>
<td>All facilities constructed or erected by a Subdivider to permit and facilitate the use of Lots and Blocks for residential, institutional, business or manufacturing purpose. Improvements shall include all facilities listed in Section 20-810(j)–20-811.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facilities and services under the control of a governmental agency needed to sustain manufacturing, residential, commercial and all other land uses or activities in a community, under the control of a governmental agency. Infrastructure includes water lines, sewer lines, and other utilities, Streets and Roads, communications, and public facilities, such as fire stations, parks, schools, and other similar type uses.</td>
</tr>
<tr>
<td>Ingress</td>
<td>An entrance.</td>
</tr>
<tr>
<td>Intersection</td>
<td>Where two or more Streets cross at-grade.</td>
</tr>
<tr>
<td>Jurisdictional Wetland</td>
<td>Wetlands which are regulated by Section 404 of the Clean Water Act and are under the regulatory jurisdiction of the Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA).</td>
</tr>
<tr>
<td>Land Combination</td>
<td>The combination of a vested division of land in the Unincorporated Area with additional acreage to increase the overall acreage of an individual residential Parcel. A Land Combination does not increase the number of building permits a of land has a vested right to receive.</td>
</tr>
<tr>
<td>Land Disturbance</td>
<td>Any activity involving the clearing, cutting, excavating, filling, or Grading of land or any other activity that alters land Topography or vegetative cover.</td>
</tr>
<tr>
<td>Land Surveyor</td>
<td>One who is licensed by the State of Kansas as a Land Surveyor and is qualified to make accurate field measurements and to mark, describe, and define land boundaries.</td>
</tr>
<tr>
<td>Lot</td>
<td>A designated parcel or area of land established by Plat or Subdivision to be used, transferred, developed or built upon as a unit.</td>
</tr>
<tr>
<td>Lot, Reverse Frontage</td>
<td>A Through Lot that is not accessible from one of the parallel or non-intersecting Streets upon which it fronts.</td>
</tr>
<tr>
<td>Lot Depth</td>
<td>The distance between the midpoint of the front Lot Line and the mid-point of the rear Lot Line.</td>
</tr>
<tr>
<td>Lot Line, “or Residential Development Parcel Line”</td>
<td>The perimeter of a Lot or a Residential Development Parcel.</td>
</tr>
<tr>
<td>Lot Width, “or Residential Development Parcel Width”</td>
<td>The distance between the side Lot Lines of a Lot, or the side lines of a Residential Development Parcel measured at the required front Setback Line.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Lot, Frontage “or Residential Development Parcel Frontage”</td>
<td>That portion of the Lot or a Residential Development Parcel which lies between the side Lot Lines and is adjacent to the Street or Road serving the Lot or the Residential Development Parcel.</td>
</tr>
<tr>
<td>Lot of Record</td>
<td>A legally created Lot recorded at the Register of Deeds as part of a Plat or Subdivision.</td>
</tr>
<tr>
<td>Lowest Floor</td>
<td>The lowest floor of the lowest enclosed area, including a Basement; an unfinished or flood resistant enclosure, usable solely for parking of vehicles; Building access, or storage, in an area other than a Basement area, is not considered a Building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable floodproofing design requirements of the Flood Protection Standards.</td>
</tr>
<tr>
<td>Major Thoroughfares Map(s)</td>
<td>A plan adopted by the Metropolitan Planning Organization, the Planning Commission and the Governing Body(ies) identifying and classifying the major Streets and Roads in the community. The Major Thoroughfares Plan Map in effect on the date of adoption of this Article is incorporated in “Transportation 2020, 2030, the Lawrence/Douglas County Long Range Transportation Plan”, but it may be amended or superseded from time to time.</td>
</tr>
<tr>
<td>Market Value</td>
<td>An estimate of what is fair, economic, just and equitable value under normal local market conditions and for regulatory purposes, typically represented by the current value listed in the Douglas County Appraiser's records.</td>
</tr>
<tr>
<td>Mean Sea Level</td>
<td>For purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.</td>
</tr>
<tr>
<td>Metes And Bounds</td>
<td>A method of describing the boundaries of land by directions and distances from a known point of reference.</td>
</tr>
<tr>
<td>Minimum Elevation of Building Opening</td>
<td>The minimum elevation above sea level at which a building located in the Floodplain may have a door, window, or other opening.</td>
</tr>
<tr>
<td>Minor Subdivision</td>
<td>See “Subdivision, Minor”/Replat</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>A structure, transportable in one or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term &quot;mobile home&quot; does not include a &quot;recreational vehicle.&quot;</td>
</tr>
<tr>
<td>Mobile Home Subdivision or Park</td>
<td>A parcel (or contiguous Parcels) of land divided into two or more mobile home lots for rent or sale.</td>
</tr>
<tr>
<td>Minimum Elevation for Building</td>
<td>The finished floor elevation of the lowest floor.</td>
</tr>
<tr>
<td>Term</td>
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<tr>
<td>Neighborhood Development Plan</td>
<td>See “Sector Plan”</td>
</tr>
<tr>
<td>New Construction</td>
<td>For the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM (March 2, 1981) and includes any subsequent improvements to such structures; for floodplain management purposes, ”new construction” means structures for which the “start of construction” commenced on or after the effective date of the floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.</td>
</tr>
<tr>
<td>Off-Site Improvements</td>
<td>Improvements located on property outside the perimeter of the Subdivision that are determined by the Planning Commission to be necessary because of the proposed Subdivision, e.g., construction of Streets, signalization of Intersections intersections, drainage Channels, extension of public utilities, etc.</td>
</tr>
<tr>
<td>On-Site Sewage Management System</td>
<td>An individual Sewage disposal system involving a water tight receptacle that receives the discharge of Sewage from a building and is designed and constructed to permit settling of solids from this liquid, digestion of the organic matter (sludge), and discharge of the liquid portion into an underground lateral disposal area. The sludge is pumped out of the tanks, usually by commercial FIRM firms, at regular intervals. On Site Sewage Management Systems are used for domestic wastes when a sanitary sewer line is not available to carry the wastes to a wastewater treatment plant. Approval of a site for use of a On-site sewage management system involves establishing a minimum Lot area to provide for the system’s operation, determining that the soil has an acceptable Percolation rate and ensuring separation of the system from Groundwater. A conventional, alternative, experimental, or innovative Sewage disposal system which serves a single family residential building or a single non-residential building.</td>
</tr>
<tr>
<td>On-Site</td>
<td>Located within the perimeter of the property that is subject to an application for Subdivision or a Residential Development Parcel Certificate of Survey approval.</td>
</tr>
<tr>
<td>Open Space, Common</td>
<td>Land within or related to a Development a subdivision, not individually owned or dedicated for use, which is designed and intended for the common use or enjoyment of the residents of the Development and may include such complementary structures and Improvements as are necessary and appropriate. Common Open Space may be Platted as a reserve of Tract and which is owned and maintained by a Home Owners Association or a property owners association.</td>
</tr>
<tr>
<td>Original Townsite Area</td>
<td>The original Townsite of the City of Lawrence, as shown on the “Original Townsite Map” available for public inspection from the Planning Director.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td><strong>Original Tract</strong></td>
<td>A <em>Parcel</em> or a combination of all adjacent <em>Parcels</em> under a single ownership [not separated by public Right(s)-of-Way] that share common boundary lines or two separate ownerships that share a common boundary line, from which for the purpose of creating a Parent Parcel is created.</td>
</tr>
<tr>
<td><strong>Outlet, Single</strong></td>
<td>A single connection between the Street or Road system in a particular Subdivision or other development and the Street system shown on the Major Thoroughfare Map; a Cul-de-sac is a sub-category of Streets with Single Outlets, but a loop road or more complex system within a development may also have a Access to the Street system through a Single Outlet.</td>
</tr>
<tr>
<td><strong>Overlay District</strong></td>
<td>A special zoning district that has been &quot;overlaid&quot; on a base zoning classification to alter some or all the base district zoning regulations.</td>
</tr>
<tr>
<td><strong>Owner</strong></td>
<td>Any Person or Persons, Firm or Firms, corporation or corporations, or any other legal entity having legal title to land being subdivided under these regulations. Also any legal entity having legal title to land for which a building permit application is made. An individual, association, partnership or corporation having legal or equitable title to land other than legal title held only for the purpose of security. For the purpose of notice, the Owner may be determined using the latest Douglas County Appraiser’s assessment roll.</td>
</tr>
<tr>
<td><strong>Package Plant</strong></td>
<td>A prefabricated or pre-built wastewater treatment plant.</td>
</tr>
<tr>
<td><strong>Parcel</strong></td>
<td>A contiguous area of land under the same ownership.  This is an inclusive term that includes Lot, Residential Development Parcel and other terms. Unlike “Lot,” the term “Parcel” or “Residential Development Parcel” does not mean a division of land created through a plat or Subdivision process. A Lot or contiguous Tracts owned and recorded as the property of the same persons or controlled by a single entity.</td>
</tr>
<tr>
<td><strong>Parent Parcel</strong></td>
<td>The recorded and legally defined parcel of land from which one or two further divisions can be made for the purpose of conveying a Residually Development Parcel within the Unincorporated Area of the County, outside the Lawrence Urban Growth Area or other Cities’ Urban Growth Areas, to an individual. An area of 20 acres or more surveyed solely for the purpose of a residential Development action creating one or more Residential Development Parcels.</td>
</tr>
<tr>
<td><strong>Parkway</strong></td>
<td>A Street that includes a landscaped median. A parkway may run in any direction.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Participating Community</td>
<td>Also known as an &quot;eligible community,&quot; means a community in which the Administrator has authorized the sale of flood insurance.</td>
</tr>
<tr>
<td>Peak Hour Traffic</td>
<td>The largest number of vehicles passing over a designated section of a Street during the busiest one-hour period during a 24-hour period.</td>
</tr>
<tr>
<td>Pedestrian Right-of-Way Easement</td>
<td>A strip of land dedicated for public use which is Reserved dedicated across a Block for the purpose of providing pedestrian access to adjacent areas.</td>
</tr>
<tr>
<td>Pedestrian Way</td>
<td>A public walk dedicated entirely through a Block, from Street to Street, or providing access to a school, park, recreation area, or employment or shopping center.</td>
</tr>
<tr>
<td>Percolation Test</td>
<td>A test designed to determine the ability of ground to absorb water and used in determining the suitability of a soil for drainage or for the use of a septic system.</td>
</tr>
<tr>
<td>Percolation</td>
<td>Downward flow or infiltration of water through the pores or spaces of rock or soil.</td>
</tr>
<tr>
<td>Person</td>
<td>Any individual or group of individuals, corporation, partnership, association, or any other entity, including Federal, State, and local governments and agencies.</td>
</tr>
<tr>
<td>Petition, Public Improvement</td>
<td>A legal instrument which serves as the basis for initiation of a public improvement project by the Governing Body. A Public Improvement Petition is frequently used during the Platting process to guarantee the construction of certain improvements that are required as conditions of Plat approval, such as Street paving, sidewalks, water and sewer lines, and stormwater and drainage improvements.</td>
</tr>
<tr>
<td>Planning Area</td>
<td>The area considered in the development of a Comprehensive Plan for cities in Douglas County.</td>
</tr>
<tr>
<td>Planning Commission</td>
<td>The Lawrence/Douglas County Metropolitan Planning Commission.</td>
</tr>
<tr>
<td>Planning Director</td>
<td>The Lawrence/Douglas County Metropolitan Planning Director.</td>
</tr>
<tr>
<td>Plat (or Subdivision Plat)</td>
<td>A Subdivision as it is represented as a formal document by drawing and writing and which is presented to the Planning Commission for review and approval in accordance with these Subdivision Regulations and to the Governing Body for the acceptance of Easements and Dedications. A complete and exact map representing a tract of land, showing the boundaries and location of individual lots, easements, and streets which has been approved by the Planning Commission and recorded in the office of the County Register of Deeds. The term includes a Replat. (To Plat as an action) - To Subdivide a property in accordance with these regulations.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Plat, Preliminary</td>
<td>A map of proposed land Subdivision showing the character and proposed layout of the tract Parcel in sufficient detail to indicate its suitability for the proposed Subdivision.</td>
</tr>
<tr>
<td>Plat, Final</td>
<td>A map of a land Subdivision prepared in a form suitable for filing of record with necessary affidavits, Dedications, restrictions, and acceptances, and with complete bearings and dimensions of all lines defining Lots and Blocks, Streets, Alleys, Easements, public areas and other dimensions of land.</td>
</tr>
<tr>
<td>Platting Binder</td>
<td>A report issued by a title insurance company setting forth the conditions to be met for certain property to be Platted, e.g., Easements filed for record, mortgages, fee title Owners, etc.</td>
</tr>
<tr>
<td>Potable Water</td>
<td>Water suitable for drinking or cooking purposes.</td>
</tr>
<tr>
<td>Preliminary Plat</td>
<td>A map of proposed land Subdivision showing the character and proposed layout of the tract parcel in sufficient detail to indicate its suitability for the proposed Subdivision.</td>
</tr>
<tr>
<td>Principal Building</td>
<td>See ‘Building, Principal’.</td>
</tr>
<tr>
<td>Principal Use</td>
<td>The primary purpose, for which land or a Structure is utilized, based in part on the amount of Floor Area devoted to each identifiable use. The main use of the land or Structures as distinguished from a secondary or Accessory Use.</td>
</tr>
<tr>
<td>Principally Above Ground</td>
<td>At least 51% of the actual cash value of the structure, less land value, is above ground.</td>
</tr>
<tr>
<td>Private Drive</td>
<td>A use platted for a Reserve or Tract in order to provide access to Lots from either a public or Private Street system. A Reserve for Private Drive purposes is the means to access Lots within a comprehensive group Development for townhouses or apartment units or for commercial complexes and office park Developments. A new Private Drive may be established under this Article only in a Planned Development.</td>
</tr>
<tr>
<td>Public Improvement Petition</td>
<td>A legal instrument which serves as the basis for initiation of a Public Improvement project by the Governing Body. A Public Improvement Petition is frequently used during the Subdivision Platting process to guarantee the construction of certain Improvements that are required as conditions of Plat approval, such as Street paving, Sidewalks, water and sewer lines, and stormwater and drainage Improvements.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tbody>
</table>
| **Public Improvements**          | All public facilities constructed or erected by a Subdivider within a Subdivision to permit and facilitate the use of Lots or Blocks for a principal residential, business or manufacturing purposes.  

Any Infrastructure constructed for which a municipality may ultimately assume responsibility for maintenance and operation or which may affect an improvement for which a municipality is responsible. |
<p>| <strong>Public Improvement Plans</strong>     | The engineering plans and specifications necessary to construct all Infrastructure Improvements needed to serve a proposed Subdivision or development.                                                                 |
| <strong>Public Utility Facilities</strong>    | Telephone, electric and cable television lines, poles, equipment and structures; water lines, holding towers or gas pipes, mains, valves or structures; sewer pipes, valves or structures; Pumping Stations; telephone exchanges and repeater stations; and all other facilities, equipment and Structures necessary for conducting a service by a government, or a public or private utility provider. |
| <strong>Public Water Supply</strong>          | A system outside of incorporated cities for delivery to the public of piped water for human consumption that has at least 10 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. This term includes any source, treatment, storage, or distribution facilities used in connection with the system. |
| <strong>Publicly Treated Water</strong>       | Water supplied for domestic purposes by a municipality or by a Rural Water District and approved by the Kansas State Department of Health.                                                                 |
| <strong>Pumping Station</strong>              | A pumping facility that transports wastewater between two gravity flow sewer lines. A Pumping Station is used when topographic conditions do not allow a continuous gravity flow system. |
| <strong>-Raw Sewage</strong>                  | Untreated domestic or commercial wastewater.                                                                                                                                                              |
| <strong>-Recreational Vehicle</strong>        | A vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (c) designed to be self-propelled or permanently able to be towed by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions. |
| <strong>-Regulatory Flood</strong>            | The Flood determined by the Federal Insurance Administration as having a 1% chance of being equaled or exceeded in any given year.                                                                         |
| <strong>-Regulatory Flood Elevation</strong>  | The elevation at which the Regulatory Flood is determined to occur.                                                                                                                                         |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Floodplain</td>
<td>Land included within the Regulatory Floodway and Floodway Fringe areas as determined by the Federal Insurance Administration.</td>
</tr>
<tr>
<td>Replat (or Resubdivision)</td>
<td>Same as “Resubdivision”.—The further Subdivision division of a Tract of land which has previously been lawfully subdivided and for which a Plat of such prior Subdivision has been duly recorded. <strong>A Replat is processed as an administrative review</strong> in accordance with the Minor Subdivision/Replat procedures in Section 20-808.</td>
</tr>
<tr>
<td>Reserve</td>
<td>An area of property within a Subdivision which is P-platted for specific uses, e.g., open space, landscaping, entry monuments, recreational facilities, utilities and drainage, Floodway, Private Street, etc. Typically, future Ownership and maintenance responsibilities for a Reserve is set forth by a Restrictive Covenant which provides that a Home Owners or Lot Owners association will hold title to the Reserve and therefore be responsible for the Reserve’s maintenance. The Restrictive Covenant may provide for ownership and maintenance to be tied to the Ownership of an adjacent Lot. Ownership and maintenance is not assigned to an individual, partnership or corporation except in the case of a Reserve platted for possible future sales to a public body for a public facility.</td>
</tr>
<tr>
<td>Residential Development Parcel</td>
<td>A Parcel created from the Parent Parcel through the administrative Certificate of Survey review process to make the new land division eligible for a residential building permit. for the purpose of construction of one single-family residential Dwelling unit and permitted accessory uses, buildings and structures.</td>
</tr>
<tr>
<td>Restrictive Covenant</td>
<td>A restriction on the use of land traditionally set forth in a deed. Restrictions are also placed of record by separate instruments including Home Owners association agreements. The Restrictive Covenant usually runs with the land.</td>
</tr>
<tr>
<td>Resubdivision</td>
<td>The further Subdivision of a tract of land which has previously been lawfully subdivided and for which a Plat of such prior Subdivision has been duly recorded.</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>An area dedicated to public use for pedestrian and vehicular movement, which may also accommodate public utilities.</td>
</tr>
<tr>
<td>Road or Roads</td>
<td>Same as “Street” or “Streets”.</td>
</tr>
<tr>
<td>Road, Stub</td>
<td>A short section of public Road or Road Easement dedicated to provide future Access to an adjacent unplatted Tract of property.</td>
</tr>
<tr>
<td>Roadway</td>
<td>The paved or improved area of a Street Right-of-Way, exclusive of Sidewalks, Driveways, or related uses.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td><strong>Rural Area</strong></td>
<td>All of the Unincorporated Area of Douglas County lying outside of an Urban Growth Area.</td>
</tr>
<tr>
<td></td>
<td>The area of the <strong>Unincorporated Douglas</strong> County lying outside the Urban Growth Areas of Lawrence, Baldwin City, Eudora and Lecompton.</td>
</tr>
<tr>
<td><strong>Sanitary Sewers</strong></td>
<td>Pipes that carry only domestic, industrial or commercial Sewage and into which storm, surface and ground waters are not intentionally admitted.</td>
</tr>
<tr>
<td><strong>Sector Plans</strong></td>
<td>Plans that encompass one or more sections of land with the purpose being to use geographic and demographic information to develop a detailed land use vision of future development or redevelopment of a study area.</td>
</tr>
<tr>
<td><strong>Setback Line (Front) or Building Line</strong></td>
<td>A line nearest the front of and across a Lot or parcel of land establishing the minimum open space to be provided between the front line of a building or Structure and the line of the fronting Street Right-of-Way.</td>
</tr>
<tr>
<td><strong>Setback Line</strong></td>
<td>That <strong>The</strong> line that is the required minimum distance from the Street right-of-way line or any other Lot Line that establishes the area within which the principal Structure must be erected or placed.</td>
</tr>
<tr>
<td><strong>Sewage Lagoon</strong></td>
<td>A shallow, artificial pond where sunlight, bacterial action and oxygen interact to restore wastewater to a reasonable state of purity.</td>
</tr>
<tr>
<td></td>
<td><strong>An artificial pond designed to exclude surface water and receive raw Sewage through a submerged sewer for biological decomposition.</strong></td>
</tr>
<tr>
<td><strong>Sewage</strong></td>
<td>The total of organic waste and waste water generated by residential, industrial and commercial establishments.</td>
</tr>
<tr>
<td><strong>Sewerage</strong></td>
<td>(1) All effluent carried by sewers whether it is sanitary Sewage, industrial waste or storm water runoff; (2) The entire system of Sewage collection, treatment and disposal.</td>
</tr>
<tr>
<td><strong>Sidewalk</strong></td>
<td>A paved, surfaced, or leveled area, paralleling and usually separated from the Street, used as a pedestrian walkway.</td>
</tr>
<tr>
<td><strong>Slope</strong></td>
<td>Degree of deviation of a surface from the horizontal, measured as a numerical ratio, percent, or in degrees. Expressed as a ratio, the first number is the horizontal distance (run), and the second is the vertical distance (rise), as two to one. A two to one slope is a 50% slope.</td>
</tr>
<tr>
<td></td>
<td>Expressed in degrees, the slope is the angle from the horizontal plane, with a 90° slope being vertical (maximum) and 45° being a 1:1 or 100% slope.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Staff</td>
<td>The technical and professional Staff of the Lawrence/Douglas County Metropolitan Area Planning Director.</td>
</tr>
<tr>
<td>Stand of Mature Trees</td>
<td>An area of ½ acre (21,780 sq ft) or more located on the ‘development land area’ or on other contiguous properties containing trees that are 25 feet or more in height, or are greater than 8” Caliper, in an amount adequate to form a continuous or nearly continuous canopy. (Canopy may be determined from resources such as, but not limited to, NAIP: National Agricultural Imaging Program; City/County GIS aerials; and field surveys.)</td>
</tr>
<tr>
<td>Start of Construction</td>
<td>Includes substantial improvements, and means the date the Building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvements were within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, any work beyond the stage of excavation, or the placement of a mobile home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, the installation of Streets and/or walkways, excavation for a Basement, footings, piers, foundations, the erection of temporary forms, nor installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a Building, whether or not that alteration affects the external dimensions of the Building.</td>
</tr>
<tr>
<td>State Coordinating Agency</td>
<td>The Division of Water Resources, Kansas Department of Agriculture, or other office designated by the governor of the State or by State Statute at the request of the Administrator to assist in the implementation of the National Flood Insurance Program (NFIP) in that State.</td>
</tr>
<tr>
<td>Stormwater Detention</td>
<td>Any storm drainage technique that retards or detains runoff, such as a detention or retention basin.</td>
</tr>
<tr>
<td>Stream Corridor</td>
<td>A strip of land 100 feet wide, of which the centerline shall be the centerline of a stream that is not an ephemeral stream: a stream where flow occurs for only a short time after extreme storms and does not have a well-defined channel, similar to a drainage way.</td>
</tr>
</tbody>
</table>
| Street or Streets (or Roads) | Any vehicular way(s) which:  
(1) is an existing state, county or municipal Roadway; or  
(2) is shown upon a Plat approved pursuant to law; or  
(3) is approved by other official action.  
The Street Right of Way is all land located between the Street lines, whether improved or unimproved.                                                                 |
<p>| Street Width             | The amount of Street Right of Way Abutting a Lot’s property lines.                                                                                                                                                         |</p>
<table>
<thead>
<tr>
<th>Term</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Street, Arterial</td>
<td>Arterial Streets are the highest level of Street classification, generally providing for longer distance trips with relatively high traffic volumes and high speeds for the context. Principal Arterials permit traffic flow through the Urban area and between major destinations. Minor Arterials collect and distribute traffic from principal Arterials and expressways to Streets of lower classification, and, in some cases, allow traffic to directly access destinations.</td>
</tr>
<tr>
<td>Street, Collector</td>
<td>A Collector Street provides for land access and traffic circulation within and between residential neighborhoods and commercial and industrial areas. They distribute traffic movements from these areas to the Arterial Streets. Collectors do not typically accommodate long through trips and are not continuous for long distances.</td>
</tr>
<tr>
<td>Street, Cul-de-sac</td>
<td>A Street having only one outlet and being permanently terminated by a vehicle Turn-around at the other end.</td>
</tr>
<tr>
<td>Street, Dead-End</td>
<td>A Street having only one outlet and which does not benefit from a Turn-around at its end.</td>
</tr>
<tr>
<td>Street, Expressway</td>
<td>Any divided Street or highway with no access from Abutting property and which has either separated or at-grade access from other Public Streets and highways.</td>
</tr>
<tr>
<td>Street, Freeway</td>
<td>Any divided Street or highway with complete Access Control and grade separated interchanges with all other Public Streets and highways.</td>
</tr>
<tr>
<td>Street, Limited Local</td>
<td>A Local Street providing access to not more than eight Abutting single-family residential Lots.</td>
</tr>
<tr>
<td>Street, Local</td>
<td>Local Streets provide direct access to adjacent land uses. Direct access from a Local Street to an Arterial Street should be discouraged.</td>
</tr>
<tr>
<td>Street, Marginal Access</td>
<td>A Street that is generally parallel and adjacent to an Arterial Street or other limited-access Street and that is designated to provide direct access to adjacent property. Marginal Access Streets are commonly known as “Frontage Roads”.</td>
</tr>
<tr>
<td>Street, Private</td>
<td>A Street that is not dedicated for public use. Private Streets are not permitted in the Unincorporated Area of the County and only permitted within Planned Developments in the City of Lawrence. Any Tract of land or Access Easement set aside to provide vehicular Access within a Planned Development that is not dedicated or intended to be dedicated to the City and is not maintained by the City. Owners of a Private Street may choose to gate access to this type of street from the general public.</td>
</tr>
</tbody>
</table>

Private Roads in the Unincorporated County are Roads not dedicated for public use that were approved by the County Commission prior to December 15, 1998.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street, Public</td>
<td>A way for vehicular traffic, whether designated as a Local, Collector, Arterial, Freeway or other designation, which is improved to City standards, dedicated for general public use, and maintained by the City. The term shall also include Alleys.</td>
</tr>
<tr>
<td>Street, Residential</td>
<td>Same as “Local Street”.</td>
</tr>
<tr>
<td>Street, Residential Collector (or Residential Collector)</td>
<td>Residential collector is a special category of Collector Street characterized by lower speeds &amp; the residential nature of land uses along the corridor. These Streets are designed to connect residential areas in neighborhoods to non-residential uses but do not connect to Arterial Streets. Bicycle &amp; pedestrian facilities are strongly recommended for residential collectors. Various traffic-calming treatments may be used to reduce travel speeds. Residential collector Streets with adjacent residential land uses should be limited to two lanes. These Streets can serve as a connector street between local Streets and the thoroughfare system.</td>
</tr>
<tr>
<td>Structure</td>
<td>For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a mobile home. “Structure” for insurance purposes, means a walled and roofed building, other than a gas or liquid storage tank that is principally above ground and affixed to a permanent site, as well as a mobile home on a permanent foundation. For the latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises.</td>
</tr>
<tr>
<td>Street, Stub</td>
<td>A short section of Street Right-of-Way platted to provide future access to an adjacent unplatted Tract of property.</td>
</tr>
<tr>
<td>Subdivide</td>
<td>The act or process of creating a Subdivision.</td>
</tr>
<tr>
<td>Subdivider</td>
<td>The Owner, or any other person, firm or corporation, authorized by the Owner, undertaking proceedings under the provisions of these regulations for the purpose of subdividing and platting land.</td>
</tr>
<tr>
<td>Subdivision (Plat)</td>
<td>The division of a Lot, Tract or Parcel of Any land, vacant or improved, which is divided or proposed to be divided into two or more parts Lots, Parcels, or Tracts for the purpose, whether immediate or future, of sale or building development, including Resubdivision, but not including property described through the a “Certificate of Survey” Administrative Procedure as is separately defined.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Subdivision, Major</td>
<td>A Subdivision that includes 5 or more lots. [See section 20-809]. A two-step review process including Planning Commission approval of a Preliminary Plat and administrative approval of a Final Plat to create a subdivision in accordance with Section 20-809.</td>
</tr>
<tr>
<td>Subdivision, Minor</td>
<td>A Subdivision that satisfies one of the criteria set forth in Section 20-808. A one-step administrative review process that provides for Resubdivision of previously platted property where little or no expansion of Public Infrastructure is involved. The Minor Subdivision/Replat is completed in accordance with Section 20-808.</td>
</tr>
<tr>
<td>Subdivision Regulations</td>
<td>For the City of Lawrence, Article 8 in Chapter 20 of the City Code, as adopted and amended from time to time by Ordinance adopted by the City Commission. For Douglas County, Chapter 11 XI in the County Code, as adopted and amended from time to time by Resolution adopted by the Board of County Commissioners.</td>
</tr>
<tr>
<td>Substantial–Damage</td>
<td>Damage of any origin sustained by a structure whereby the cost of restoring the structure to pre-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.</td>
</tr>
<tr>
<td>Substantial–Improvement</td>
<td>Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before “start of construction” of the improvement. This term includes structures, which have incurred “substantial–damage,” regardless of the actual repair work performed. The term does not, however, include either (1) any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.”</td>
</tr>
<tr>
<td>Surveyor</td>
<td>A professional Land Surveyor licensed by the State of Kansas.</td>
</tr>
<tr>
<td>Swale</td>
<td>A shallow ditch lined with grass or other vegetation for the purpose of carrying stormwater from one location to another and filtering sediments and other pollutants from stormwater runoff.</td>
</tr>
</tbody>
</table>
| Temporary Set Aside Agreement | An agreement relating to land located within the Urban Growth Area that contains the resources identified in Section 20-810(k) that, as reasonably practicable, requires the retention of the environmental, geographical, or historical characteristics of the land and prohibits any use or activity that will significantly impair, interfere with, or destroy these characteristics. A Temporary Set Aside Agreement shall: (i) be between the Owner of the land and the County and City; (ii) provide that the County has regulatory }
<table>
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<tr>
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<tbody>
<tr>
<td>authority under the agreement until the land is annexed into the City and, thereafter, the City acquires regulatory authority, (iii) provide that the agreement expires 2 years after the date of annexation unless further action is taken by the City and the Owner, and (iv) be approved by the County Counselor, the City Manager, or their designees.</td>
<td></td>
</tr>
<tr>
<td>Terracing</td>
<td>An erosion control method that uses small hills and contours on the land surface to control flooding and runoff.</td>
</tr>
<tr>
<td>Topography</td>
<td>The configuration of a surface area showing National Geodetic Vertical Datum (NGVD).</td>
</tr>
<tr>
<td>Tract</td>
<td>A non-buildable, platted <strong>When part of a platted Subdivision, a Tract is a</strong> Parcel reserved for open space, storm drainage, or easement purposes or an otherwise specified and restricted use.</td>
</tr>
<tr>
<td>Traffic Calming Device</td>
<td>Physical traffic control or intervention measures designed to reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized Street users.</td>
</tr>
<tr>
<td>Turn-around</td>
<td>An area at the closed end of a Street with a single common ingress and egress within which vehicles may reverse their direction.</td>
</tr>
<tr>
<td>Unnecessary Hardship</td>
<td>The condition resulting from application of these regulations when viewing the property in its environment that is so unreasonable as to become an arbitrary and capricious interference with the basic right of private property ownership, or convincing proof exists that it is impossible to use the property for a conforming use, or sufficient factors exist to constitute a hardship that would in effect deprive the Owner of their property without compensation. Mere financial loss or the loss of a potential financial advantage does not constitute Unnecessary Hardship.</td>
</tr>
<tr>
<td>Unincorporated Area</td>
<td>That portion of Douglas County lying outside any incorporated municipality.</td>
</tr>
<tr>
<td>Urban</td>
<td>An area generally characterized by medium and higher density residential, development (i.e., 3 or more dwelling units per acre), commercial development, and industrial development, as well as the availability of public services required for that development, specifically a municipal water and sewer system, an extensive network of Streets, public transit and other such services (such as municipal fire protection or senior services). Development not providing such services may be considered non-urban or rural.</td>
</tr>
<tr>
<td>Urban Density</td>
<td>A residential density that resembles the built and developed density of the city for which an Urban Growth Area was projected and adopted. [See definition of “Urban”]</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td><strong>Urban Growth Area - Lawrence</strong></td>
<td>That area designated as the Lawrence Urban Growth Area (UGA) on the most recent (adopted) version of the Comprehensive Plan. The Comprehensive Plan, Horizon 2020, distinguishes four service areas within the UGA based on the city’s adopted Wastewater Master Plan and projected ability to provide sanitary sewer service to those areas. Solely for the purpose of interpretation of the exemption section of these regulations, a property shall be considered to be located within the Urban Growth Area of Lawrence (UGA) if 100% of the tract or Ownership parcel as shown on the 1998 Property Ownership Map, Douglas County (which was prepared by York Publications in 1998) is within the UGA boundary shown on Figure 9 in HORIZON 2020. An Ownership tract or parcel having less than 100% of its land area within the UGA as shown on Figure 9 shall not be construed to be within the Urban Growth Area of Lawrence. The area that is defined in the City and County Comprehensive Land Use Plan as the Urban Growth Area (UGA) surrounding the City of Lawrence.</td>
</tr>
<tr>
<td><strong>Urban Growth Area - [other cities in the County]</strong></td>
<td>The area defined by a city’s master plan as land that will be annexed into the city within the land use planning period to accommodate the future growth and development of neighborhoods, businesses and industries by the extension of city Infrastructure and services.</td>
</tr>
<tr>
<td><strong>Vacation</strong></td>
<td>The termination of, or termination of an interest in, an easement, right-of-way or public dedication of land.</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td>Permission to depart from the Design Standards (20-810) or Public Improvement Standards (20-811) of the regulations when the application of a specific standard is so unreasonable that it would prevent the logical subdivision of the property.</td>
</tr>
<tr>
<td><strong>Waiver</strong></td>
<td>Permission to depart from the requirements of an ordinance or Resolution with respect to the submission of required documents. Note: The terms “waiver” and “exception” are often used interchangeably, however there are differences. Refer to ‘Exception’ for its meaning.</td>
</tr>
<tr>
<td><strong>Water Surface Elevation</strong></td>
<td>The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum where specified) of floods of various magnitudes and frequencies in the floodplain.</td>
</tr>
<tr>
<td><strong>Water Table</strong></td>
<td>The upper surface of Groundwater, or that level below which the soil is seasonally saturated with water.</td>
</tr>
<tr>
<td><strong>Waterway</strong></td>
<td>Any natural or artificial stream, river, creek, ditch, Channel, canal, conduit, Culvert, drain, Waterway, gully, ravine or wash in which water flows in a definite direction or course, either continuously or intermittently, and has a definite Channel, bed and banks, and includes any area adjacent thereto subject to inundation by reason of overflow or Flood water.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td><strong>Wetlands</strong></td>
<td>Those areas that are 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.</td>
</tr>
<tr>
<td>Woodlands</td>
<td>Natural hardwood forests, whether or not actively forested.</td>
</tr>
<tr>
<td><strong>Zone A</strong></td>
<td>Special flood hazard areas inundated by 100-year flood where no base flood elevations have been determined.</td>
</tr>
<tr>
<td><strong>Zone AE</strong></td>
<td>Special flood hazard areas inundated by 100-year flood where base flood elevations have been determined.</td>
</tr>
<tr>
<td><strong>Zone AH</strong></td>
<td>Special flood hazard areas inundated by 100-year flood with flood depths of 1 to 3 feet (usually areas of ponding), where base flood elevations have been determined.</td>
</tr>
<tr>
<td><strong>Zone AO</strong></td>
<td>Special flood hazard areas inundated by 100-year flood with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain), where average depths have been determined. For areas of alluvial fan flooding velocities have also been determined.</td>
</tr>
<tr>
<td>Zoning Regulations</td>
<td>The rest <strong>remainder</strong> of Chapter 20 of the City Code or <strong>Chapter 12 of the Douglas County Code.</strong> the current Zoning Regulations in effect in Douglas County, as adopted from time to time by resolution of the Board of County Commissioners.</td>
</tr>
</tbody>
</table>
Memorandum
City of Lawrence
Douglas County
Planning & Development Services

TO: Planning Commission
FROM: Sheila M. Stogsdill, Assistant Director
CC: Scott McCullough, Director
Date: For July 25, 2011 Commission Meeting
RE: Item No. 3 - TA-3-3-10: Text Amendment to City/County Subdivision Regulations Update

In 2010, Staff began work on revisions to the City/County Subdivision Regulations to address issues requested by the Chamber of Commerce regarding processing steps between Preliminary and Final Plats. That work continues and has expanded to include consistency issues throughout Article 8. Staff held a work session with development consultants in June to review and discuss the proposed changes. A very productive meeting and several written comments have resulted in more revisions to address specific issues. Proposed revisions include ‘housekeeping’ items as well as more substantive changes.

The attached DRAFT is still a working document. A number of specific issues related to divisions of property in the Unincorporated Areas of the County have been identified and staff has begun to work through them. In this DRAFT, Sections 20-804, 805, 806 & 807 have been highlighted in grey with an indication that they are still under construction.

The majority of changes are listed in the overview below. The document still requires more formatting and defined terms need to be shown in Blue Font. Proposed text changes are shown in green or red font (bolding is not necessarily significant). Staff has identified several issues that are still outstanding through the comments in the right margins. We appreciate additional public comment and Planning Commission direction. At the meeting this month, Staff will walk through the proposed amendments and ask for comment. Action will occur at a future public hearing.
The following is an overview of the proposed revisions:

**Housekeeping**

1. Identified all defined terms in Blue Font
2. Readability - reformatted long paragraphs into outline list form
3. Addressed subdivision regulations applicability to non-conforming lots (still needs work)
4. Updated application materials to include electronic submission
5. Changed processing time to be consistent with number of days in Development Code
6. Updated terms to be consistent with the recent Sensitive Lands text amendment
7. Moved regulatory language in some definitions into relevant sections
8. Updated process/application info to reflect current practice (certificate of mailing not from Post Office)
9. Provided format and content consistency in Certificate of Survey sections by putting similar info in similar sections and moving application requirements to 807 rather than repeating in each section
10. Changed reference to Major Thoroughfares Plan to Major Thoroughfares Map
11. Added in notice requirements in 802 similar to what is in Article 13 in the Development Code
12. Provided the introductory language for the definitions section in 815 that is similar to Development Code and County Zoning Regulations text

**Substantive Changes**

1. Based on County Staff input, revised the parcel size allowed for Cluster Developments in 803 and either eliminate or restrict Large Parcel Property Divisions in 804 (this section has not been used in 5 years and requires direct access to county roads contrary to the adopted Access Management Policy) (still needs work)
2. Permit Replats through Minor Subdivision process, so all of them do not need to go back through 2-step process
3. Permit dedication or vacation of easements and r/ws by placing a Replat on a Governing Body agenda for acceptance/vacation
4. Require dedication of all perimeter r/w for a Preliminary Plat with the first Final Plat, if phased in 809(h) [in place of all easements and r/ws dedicated with Preliminary Plat]
5. Created provision for new ‘file’ copy of a revised Preliminary Plat [809(k)(4)] when revisions proposed on Final Plat are in substantial conformance with the approved Preliminary Plat [809(m)(2)(i)] and created criteria for determining substantial conformance
6. Added in step to take Final Plat to Governing Body for acceptance of easements and r/ws in overall process (rather than at Preliminary Plat stage)
7. Moved all of the Plat Contents to 809 so that the list is located with plat process rather than referring back to 812
8. Separated the Design Standards [810] from the Public Improvement Standards [811]
9. Modified process for annexation of r/w for boundary line roads through annexation agreements where full r/w is not under owner's control
10. Identified where definitions are not consistent with definitions in the Development Code or County Zoning Regulations
11. Eliminated numerous terms defined in the definitions section but not used in the Article (several terms are listed with standard dictionary definitions and do not seem to be necessary)

**RECOMMENDATION:** Staff recommends that the Planning Commission receive public comment on the draft amendments and provide direction to Staff. Action on the proposed amendments will occur at a future public hearing.
7/01/2009

Scott McCollough, Director
Lawrence-Douglas County Metropolitan Planning Office
City of Lawrence
Lawrence, Kansas 66044

RE: Code Modifications

Dear Scott,

As you are aware, the developer committee of the Chamber has been meeting to discuss zoning code and subdivision regulations that we think directly affect the ability to develop or redevelop land in Lawrence and in Douglas County. You and your staff have taken on a similar effort that has already produced positive results in code modifications that will benefit future development proposals.

To that extent, we have several ideas that we would like to offer for consideration. These ideas all surround the topic of platting property. In general, we realize this is a significant issue to tackle; however, there are several smaller steps that could be addressed in the near term that may make land development easier while we are waiting on the opportunity to examine platting in a broader context.

The following language revisions to the Subdivision Regulations is an idea that would give the Planning Director more latitude in allowing final plats to proceed even though they do not identically mirror the approved preliminary plat. We believe the language also addresses changes to the preliminary plat as a means to “dedicate” easements and rights-of-way even with modifications to the final plat as submitted.

The first idea is the relationship of the preliminary plat to the final plat. As currently written, the Code equips neither the applicant, nor the City Planning Director, with the ability to produce/approve a Final Plat that is not literally identical to the associated, previously
approved Preliminary Plat. Acknowledging the fact that a Preliminary Plat is by definition a “preliminary” document, it is normal and reasonable to expect minor differences between an approved concept (Preliminary Plat) and the legally binding instrument that formally subdivides property (Final Plat).

Per today’s Code, the Planning Director alone has the power to administratively approve a Final Plat. However, today’s Code also implies that any difference between the Preliminary Plat and Final Plat will result in re-submittal and re-hearing of the previously approved Preliminary Plat, prior to approval of the Final Plat. This process is further complicated by the “dedication” of easements and rights-of-way at the Preliminary Plat stage. Also, while the Code uses terms such as “consistent with the Preliminary Plat”, “conforms to the Preliminary Plat” and “substantially comply with the Preliminary Plat” as the basis upon which the Planning Director shall approve the Final Plat, no definition of these terms is provided.

We propose to amend Sec. 20-809(l) for the purpose of defining acceptable variations between the Preliminary and Final plats which include reasonable changes to easements and/or rights-of-way. Additionally, this report proposes consistent, defined terminology as a basis for the Planning Director’s approval of a Final Plat. Deleted items are shown with struck text and proposed amendments in bold red.

(1) **Final Plat – Review by Planning Director**

   (1) After approval or approval with conditions of a Preliminary Plat by the Planning Commission and prior to approval of public improvement plans, the Subdivider shall have prepared for recording a Final Plat, which is consistent with the action of the Planning Commission and with the formatting and content requirements of Section 20-812(b). The Planning Director shall review the Final Plat for incorporation of the Planning Commission’s recommendations and comments and to insure that the Final Plat is in the required format.

   (2) If the Planning Director finds that the submitted Final Plat conforms with the content requirements of Section 20-812(b) and is consistent in substantial compliance with the Preliminary Plat approved by the Planning Commission, including satisfying any conditions incorporated in that approval, the Planning Director shall approve the Final Plat and attach to it a formal certification that the submitted Final Plat:

   (i) Conforms to Is in substantial compliance with the Preliminary Plat previously approved by the Planning Commission;

   The Final Plat shall be deemed to be in substantial compliance with the previously approved Preliminary Plat if one or more of the following criteria are met, as applicable:
a) No change.
b) Increase or reduction, less than or equal to ten percent, of the number of proposed lots, parcels or tracts shown within the equivalent portion(s) of the Preliminary Plat.
c) Adjustments to rights-of-way lines, easement lines and/or property lines in accord with applicable street classification standards, easement width and location criteria, the Subdivision Regulations, dimensional and lot area requirements, density requirements, and with variances and/or waivers which may have been granted with previous approval of the equivalent portion(s) of the Preliminary Plat.
d) Preservation of the general form of the approved Preliminary Plat with regard to overall layout, public and/or private vehicular and pedestrian connection, area set aside for public space and/or open space, and required utility corridors.
e) Determination by the Planning Director as to whether above-described changes, if applicable, are required to be retroactively included in a revised Preliminary Plat for Planning Office records.

(ii) Satisfies any conditions of approval imposed by the Planning Commission;

(iii) Includes the same Dedications accepted by the Governing Body, subject only to minor technical adjustments as described in (l)(2)(i)(a) through (e), above;

(iv) Satisfies any conditions of acceptance of Dedications imposed by the Governing Body;

(v) Represents a plat for which all required Public Improvements have been completed, or for which adequate Guarantee of Improvements has been provided; and

(vi) Is otherwise consistent with the requirements of this Article for a Final Plat.

(3) If the Planning Director finds that the submitted Final Plat is deficient as to format or content or otherwise technically deficient, the Planning Director shall notify the Subdivider of the deficiency(ies) within 5 working days.

(4) If the Planning Director finds that the submitted Final Plat does not substantially comply with the approved Preliminary Plat, including any conditions incorporated in such approval, and with the Dedications shown on the Preliminary Plat and accepted by the appropriate Governing Body, subject to (l)(2)(i)(a) through (d), above, the Planning Director shall place the Final Plat on the agenda of the next Planning Commission meeting for further consideration in accordance with the Preliminary Plat review and action provisions of Section 20-804(e)(2).
The Planning Commission approval of the Preliminary Plat combined with the Planning Director’s approval as to form and consistency substantial compliance with the approved Preliminary Plat shall constitute Planning Commission approval of the Final Plat. No further action by the Planning Commission shall be necessary or required.

A second idea is to remove entirely the concept of dedication of easements and rights-of-way in the Preliminary Platting stage and simply have the final plat, upon review and approval of the Planning Director, only go before the City commission as a non-public hearing item. This could be accomplished by removing Section 20-809 (h) (iv) and Section 20-809 (i) from the Subdivision Regulations and modify Section 20-809 (l) (as written above) to simply include the submittal requirements, Planning Director review and the process to take the final plat to the City Commission.

Finally, we request the site plan review process have a defined time schedule. Nearly all parties interested in developing or redeveloping in Lawrence and Douglas County are primarily concerned with time. Article 13 of the Land Development Code clearly states the Planning Director is to promulgate processing cycles for applications to the Planning Office. I believe this is manifested in the Meeting and Submittal Deadlines schedule produced annually by the Planning Office. We suggest this schedule include a comment regarding the time commitment by the City of Lawrence for all site plans. Suggested language could be:

“Site plans can be submitted weekly. Review comments shall be returned within 15 calendar days and final comments/approval within 15 calendar days following submittal of revised plans per original review comments.”

Thank you for your consideration.

Sincerely,

Tom Kern
President/CEO
Lawrence Chamber of Commerce

Cc Mayor Rob Chestnut
City Manager Dave Corliss
October 23, 2011

Mr. Richard Hird, Chairman
Members
Lawrence-Douglas County Metropolitan Planning Commission
City Hall
Lawrence, Kansas 66044

RE: ITEM NO. 7: TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE & DOUGLAS COUNTY CODE; SUBDIVISION REGULATIONS (SMS)

Dear Chairman Hird and Planning Commissioners:

We would like to commend the staff for the amount of work and care exercised in producing this draft of text corrections in the Subdivision Regulations. We hope that it will make them more clear and easier to use.

In reviewing these proposed amendments, however, we do have some corrections that we hope you will adopt. Attached as Appendix A is our list of comments and proposed changes to these amendments, which we believe are self-explanatory. We ask that you adopt our suggestions for changes.

Thank you for considering our letter.

Sincerely yours,

Caleb Morse                   Alan Black
Board Member and Secretary   Chairman

Attachment: Appendix A
The following are changes that have been suggested by our planning staff as text amendments to the Land Development Code Article 8, Subdivision Regulations for Lawrence and the Unincorporated Areas of Douglas County, KS. that have been selected for comments by the Land Use Committee. These staff-suggested changes are quoted at the beginning of each paragraph below in black face type. In response, the Land Use Committee comments are shown in red face type.

Page 60. (a) “Whether the Subdivision will have public Streets and Roads, Private Streets and Roads or a combination thereof;” Note: Private streets are not permitted in either the county or city outside of Planned Developments. In the case of a Planned Development, the Preliminary Plat is also the Development Plan and is reviewed under a separate process. Explanation: It is important to make this distinction in order to avoid confusion between driveways and streets! Although this is made clear in other sections of these regulations, please also include this distinction here, as well.

Page 61. Preliminary Plats (5) Stormwater Drainage - city of Lawrence. (ii)(c) “A note that states: {If a basement is built on a lot where a minimum elevation has been established, the building design is encouraged to incorporate a sump pump}.” Note: Sump pumps are designed to drain away water collecting around foundations. In a case where the ground water is apt to be high and/or the building has been built in a drainageway, this is a transgression of good subdivision design. No buildings should be located in such areas. Where they are, no basements should be allowed. Certainly, no residential housing should be built in such areas that would require sump pumps to drain away excess storm water or water from high water tables. COMMENT: Lawrence needs you to adopt storm water management standards for individual lots, especially residential lots.

Page 67. Final Plats: (vi)(e) “A note that states: {If a basement is built on a Lot where a minimum elevation has been established, the building design is encouraged to incorporate a sump pump}.” Note: In a case where the ground water is apt to be high or the building has been built in a drainageway, this is a transgression of good subdivision design. No buildings should be located in such areas. Where they are, no basements should be allowed. Certainly, no residential housing should be built in such areas. (Please see above comments regarding the same issue as stated in Preliminary Plats.

Page 69. (m) Final Plat - Review and Action by Planning Director (2)(i)(b) “Substantial Compliance” means “Increase or reduction, less than or equal to ten percent of the number of approved Lots, Parcels or Tracts shown within the approved phase of the Preliminary Plat.” Note: This flexibility could negatively affect the number of required accesses to the Subdivision, or other requirements. We ask that you add a conditional statement indicating that any modifications will not affect the compliance of the Final Plat with other provisions of the Subdivision regulations.

Page 74. (b) Frontage. “Frontage shall be provided to all Lots on a public street unless Lot Frontage is approved on a Private Street as part of a Planned Development.” Please note: the way this correction reads sounds as though if a lot is on a public street it shall be provided frontage (but that lots can exist that are not on public streets). Please do not change this statement from what exists now: “(1) All lots shall have Frontage on a Public Street unless Lot Frontage is approved on a Private Street as part of a Planned Development.” In other sections the regulations allow cases where access can also be to an alley (see below).
Page 77. (e) Streets (2) Connections (iv) "Proposed Subdivisions that have access to the public road system via a Single Outlet must comply with the currently adopted International Fire Code. IFC requirements may limit the total number of Lots or residential Dwelling units permitted; total amount of square feet constructed; or the type of construction allowed." **Note:** Please attach as an appendix to these Subdivision Regulations any regulations that also apply here that are not directly stated in this Article so as to make them readily accessible to the reader and/or user. **Explanation:** These regulations should be accessible to the public as well as to professional planners and architects.

Page 78. (v) "Residential Collector Streets shall provide connections to non-residential uses within the neighborhood." **Note:** Please consider incorporating "Connector Streets" into the street system. These streets do not serve to direct traffic to arterials as do collectors, but rather, are designed to connect residential areas in neighborhoods to non-residential uses such as suggested here, but do not connect to arterials and therefore do not increase traffic within neighborhoods. They are "complete streets" in that they have sidewalks and bicycle paths on both sides.

Page 78. (3) Intersecting Streets (v). "Residential Connector Streets...etc." Please note: This is proposed to be eliminated. We ask that you not eliminate this section. The function of connector streets has not been adequately substituted here by the added statement above "(v) Residential Collector Streets..." **Explanation:** By definition, a collector street connects a local street to an arterial street. Connector streets are specifically designed not to do this. When connector streets connect to shopping centers, their connection to an arterial street is designed to be indirect. Please do not eliminate the category here of "connector streets," and please do encourage developers to design them into neighborhoods.

Submitted by the Land Use Committee,
League of Women Voters of Lawrence-Douglas County
December 11, 2011

Mr. Richard Hird, Chairman
Members
Lawrence-Douglas County Metropolitan Planning Commission
City Hall
Lawrence, Kansas 66044

RE: ITEM NO. 6: TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE & DOUGLAS COUNTY CODE; SUBDIVISION REGULATIONS (SMS)

Dear Chairman Hird and Planning Commissioners:

The following text amendment to the Subdivision Regulations is being proposed for Section 20-806 Property Divisions in the Rural Area (Outside the UGAs). The proposed modifications are shown in green font.

(b) Definitions
When used in this Section 20-806, the following terms have the following meanings:

1. Original Tract – shall be composed of a Parcel or a combination of all adjacent Parcels under a single ownership [not separated by public Right(s)-of-Way] that share common boundary lines or two separate ownerships that share a common boundary line, from which the purpose of creating a Parent Parcel is created.

We are concerned about this proposed new wording because it changes the original purpose of creating parent parcels in cases where contiguous land under single ownership had been subdivided into separate parcels. Under these circumstances the boundary shifts or eliminations are for the purpose of creating a larger tract under the original ownership. The purpose of creating these parent parcels originally was to preserve farmland in large tracts while at the same time allow some subdivision (generally two smaller parcels, sometimes three) for residential use.

By allowing neighboring landowners to “shift boundaries” this opens up an entirely different situation. If limits are not placed on how often, how much, or how many of these so-called boundary shifts are allowed, the whole intention of allowing the residential subdivision within twenty-acre parcels will be subverted. It should be recognized that these boundary changes are actually subdivisions and property transfers for future residential development.

We ask that this definition be corrected to place limits on these boundary shifts between separate landowners, if in fact it is to be permitted to create parent parcels for the purpose of further subdivision for residential parcels.

This is a difficult issue to understand and we hope that you will not approve this change as it has been proposed in this text amendment.

Thank you for considering this issue. We also thank the staff for their changes to these regulations in response to our previous letter on this text amendment.

Sincerely yours,

Caleb Morse
Secretary and Board Member

Alan Black, Chairman
Land Use Committee
Memorandum
City of Lawrence
Douglas County
Planning & Development Services

TO: Planning Commission
FROM: Planning Staff
CC: Scott McCullough, Director

Date: Item No. 7 – For December 12, 2011 Commission Meeting

RE: Long-Range Planning Work Program

This memo is provided to outline the recommended long-range planning work program. An update of recent efforts is presented, along with a list of future work projects, of which some will begin in 2012. Staff is seeking input from the Lawrence-Douglas County Planning Commission, Lawrence City Commission and Douglas County Board of County Commissioners on the work program to help set priorities for 2012. Staff’s recommended priorities for 2012 are shown below. Other projects will be worked on as resources allow.

**Major Projects Completed or in Process - 2011**

1. Horizon 2020 – Chapter 16 *Environment Chapter* - COMPLETE
2. Industrial Design Guidelines implementation -
   - Dev Code TAs adopted - COMPLETE
3. Annual Comprehensive Plan Review - COMPLETE
4. *Inverness Park District Plan* - COMPLETE
5. *Southeast Area Plan* -
   - Overall update & amendments related to 31st Street alignment - COMPLETE
6. *Burroughs Creek Corridor Plan* implementation -
   - Rezoning of the 800 block of Lynn Street - COMPLETE
7. *Northeast Sector Plan* -
   - PC Approved, BCC & CC comments returned to PC 12/12/11
8. US-40 and K-10 Plan -
   - Background work with KDOT in 2011, completion expected in 2012
9. Complete Streets -
   - Background work in 2011, completion expected in 2012
**Major Projects – 2012**

1. Innoprise implementation – new software to better coordinate development applications – anticipate going live in second quarter 2012

2. 2010 Census
   - Analysis
   - Reports/Challenge
   - Comprehensive Plan amendments

3. *Environment Chapter* implementation
   - *Potential Regulations*
     - Stream Setback Ordinance for Lawrence
     - Review Development Code /prepare text amendments regarding community gardens and markets
   - *Inventories*
     - Woodland/Tree Inventory for County – work underway
     - Wetlands/Riparian Areas
     - Document & Map existing quarries

4. Update Retail Market Study – biannual survey

5. Horizon 2020 Annual Review, including Sector Plan reviews/updates

6. Review requirements/process for Comprehensive Plan Amendments for rezoning cases and Applicant requested CPAs

7. Urban Growth Area and Service Areas review –
   - Map 3-1 (after Census analysis and water/wastewater master plan updates)
   - Horizon 2020 – Map 3-3 – Douglas County Growth Areas

8. Sector Plan Implementation Items
   - *Oread Neighborhood Plan*
     - Develop Overlay districts as identified in the plan –
       - RFP for consultant services for Design Guidelines in process – grant funding through Sept 2012
     - Development Code text amendments
       - Congregate living
       - Detached dwellings permitted by right in multi-dwelling districts
   - *Farmland Industries Redevelopment Plan*
     - Master planning – RFP for consultant services in process
     - Property platting
     - Rezoning
   - *Inverness Park District Plan*
     - Update Chapter 6 to reflect new commercial centers
   - *Northeast Sector Plan*
     - Amend Urban Growth Area as appropriate
     - Additional implementation steps as directed
Major Projects - Beyond 2012

1. Environment Chapter implementation
   - Potential Regulations
     o Wetlands protections
     o Woodland and Urban Forest protections
   - Inventories
     o Groundwater
     o Mineral Deposits
     o Agricultural Soils

2. Identify appropriate locations within County for sand dredging operations

3. Commercial Design Standards Review

4. Horizon 2020 – Chapter 10 Community Facilities update

5. Horizon 2020 - Chapter 17 Implementation update

6. West of K-10 Plan implementation
   o Update the West 6th Street/K-10 Nodal Plan to reflect adopted Future Land Use designations of the West of K-10 Plan

7. South of Wakarusa Sector Plan