Updated: 4/25/11 @ 1:00pm
Added the following:
Revised reclamation plan for Item 1-CUP Kaw Valley Eudora Sand Facility; 2102 N 1500 Rd
Staff memo for Item 2-CUP for Fraternal Order of Police; 768 E 661 Diagonal Rd
Added communications for the following items:
Item 1 - CUP for Kaw Valley Eudora Sand Facility; 2102 N 1500 Rd
Item 2 - CUP for Fraternal Order of Police Shooting Range; 768 E 661 Diagonal Rd
Item 6 - CPA to H2020, Chp 14

4/21/11 @ 3:00pm
Added the following:
Item 2 - CUP for Fraternal Order of Police Shooting Range; 768 E 661 Diagonal Rd
Waiver from access management standards for Dillon’s; 1740 Massachusetts St
Draft March Planning Commission minutes

4/19/11 @ 4:15pm
The following items will be added when available:
Item 2 - CUP for Fraternal Order of Police Shooting Range; 768 E 661 Diagonal Rd
Item 7 - Comprehensive Plan Amendment to H2020, Chp 11, Historic Resources
Draft March Planning Commission minutes

**The Wednesday, April 27th Planning Commission meeting has been canceled**

LAWRENCE-DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION
CITY HALL, 6 EAST 6TH STREET, CITY COMMISSION MEETING ROOM
AGENDA FOR PUBLIC & NON-PUBLIC HEARING ITEMS
APRIL 25 & 27, 2011  6:30 - 10:30 PM

GENERAL BUSINESS:

PLANNING COMMISSION MINUTES

Receive and amend or approve the minutes from the Planning Commission meeting of March 28, 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 to the City Engineer:
   Reporting of City Engineer waiver from access management standards in Section 20-915 of the Development Code, as required in Section 20-915(e)(3)(iv) in association with Site Plan SP-12-62-10 for the redevelopment of Dillon’s at 1740 Massachusetts Street.
The City Engineer approved a waiver from the access management standards regarding driveway spacing for the access points on Massachusetts Street being proposed as part of the Dillon’s redevelopment project (infill) at 1740 Massachusetts based on the following:

1) The proposed spacing is more uniform and an improvement over what currently exists.
2) It is very difficult to meet the access management standards with infill development, such as this project.
3) The Traffic Impact Analysis which showed that the proposed access spacing would be adequate to maintain a safe level of operation along Massachusetts Street.

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 COMMISSIONS DISCRETION

REGULAR AGENDA (April 25, 2011) MEETING
PUBLIC HEARING ITEMS:

Recess LDCMPC
Convene Joint Meeting with Eudora Planning Commission

ITEM NO. 1 CONDITIONAL USE PERMIT; KAW VALLEY EUDORA SAND FACILITY; 2102 N 1500 RD (SLD)


Adjourn Joint Meeting
Reconvene LDCMPC

ITEM NO. 2 CONDITIONAL USE PERMIT FOR FRATERNAL ORDER OF POLICE SHOOTING RANGE; 768 E 661 DIAGONAL RD (MKM)

CUP-12-8-10: Consider Conditional Use Permit for the Fraternal Order of Police shooting range, located at 768 E. 661 Diagonal Road. Submitted by Dan Affalter, for Fraternal Order of Police, property owner of record.

ITEM NO. 3 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; CHP 20, TO ALLOW ACTIVE RECREATION AS A SUP IN IG DISTRICT (SLD)

TA-2-2-11: Consider a Text Amendment to the City of Lawrence Land Development Code, Chapter 20, Article 4, Section 20-403 to allow Active Recreation as a Special Use in the IG (General Industrial) District. Initiated by City Commission on 3/1/11.

ITEM NO. 4 SPECIAL USE PERMIT FOR ACTIVE RECREATION; 940 E 28TH ST (SLD)

SUP-2-1-11: Consider a Special Use Permit for the use of Active Recreation, located at 940 E 28th Street. Submitted by Barber Emerson, L.C., for JDS Kansas, L.C., property owner of record.

ITEM NO. 5 COMPREHENSIVE PLAN ANNUAL REVIEW (MJ L)

Receive the Comprehensive Plan Annual Review and initiate recommended comprehensive plan amendments to be considered at future meetings.
ITEM NO. 6
COMPREHENSIVE PLAN AMENDMENT TO H2020 - CHP 14 (DDW)

CPA-3-1-11: Consider Comprehensive Plan Amendment to Horizon 2020 - Chapter 14 to include the Inverness Park District Plan.

**DEFERRED**

ITEM NO. 7
COMPREHENSIVE PLAN AMENDMENT TO H2020 – CHP 11 (LBZ)

CPA-4-4-10: Consider Comprehensive Plan Amendment to Horizon 2020 – Chapter 11 – Historic Resources. Initiated by Planning Commission on 4/26/10.

**DEFERRED**

ITEM NO. 8
CONDITIONAL USE PERMIT FOR CAMPING; 1478 N 1700 RD (MKM)

CUP-2-1-10: Consider a Conditional Use Permit for camping, approximately 11.79 acres, located at and adjacent to 1478 N. 1700 Road. Submitted by Natalya Lowther, property owner of record. Deferred by Planning Commission on 5/26/10.

MISCELLANEOUS NEW OR OLD BUSINESS

MISC NO. 1
MPO APPOINTMENT

MPO appointment.

Consideration of any other business to come before the Commission.

PUBLIC COMMENT SECTION

ADJOURN

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PCCM Meeting: (Generally 2\textsuperscript{nd} 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
MINUTES
Receive and amend or approve the minutes from the Planning Commission meeting of February 23, 2011.

Commissioner Blaser had a correction, removing the word ‘of’, on page 21 of the minutes.

Motioned by Commissioner Finkeldei, seconded by Commissioner Hird, to approve the February 23, 2011 Planning Commission minutes with the change suggested by Commissioner Blaser.

Approved 9-0-1, with Commissioner Harris 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 Agri-Tourism Committee met and hoped to have recommendations for a Mid-Month meeting before it was heard by Planning Commission. He stated that if anyone was interested in the committee to contact him.

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

Mr. McCullough introduced the new staff attorney, Randy Larkin, and also introduced Matt Kirby from Baldwin Planning Commission. He also stated that Item 5 had been deferred.

No written action of any waiver requests/determinations made to the City Engineer.

EX PARTE / ABSTENTIONS / DEFERRAL REQUEST
- Ex parte:
  Commissioner Liese said he spoke with County Commissioner Nancy Thellman who had a few questions about tonight’s agenda.

- No abstentions.
ITEM NO. 1A  A TO I-1; 41.966 ACRES; [S15-T14-R20]  
SOUTH OF 694 E 1700 ROAD, BALDWIN CITY (SLD)

Z-1-5-11: Consider a request to rezone approximately 41.966 acres from County A (Agricultural) to County I-1 (Light Industrial), located south of 694 E 1700 Road, Baldwin City (S15-T14-R20). Submitted by Landplan Engineering, for Land & Sky, LC., property owner of record. Joint meeting with Baldwin City Planning Commission.

ITEM NO. 1B  PRELIMINARY PLAT FOR VINLAND AIRZONE 2ND PLAT (SLD)

PP-1-1-11: Consider a one-lot Preliminary Plat for Vinland Airzone 2nd Plat, approximately 41.966 acres, located south of 694 E. 1700 Road, Baldwin City (S15-T14-R20). Submitted by Landplan Engineering, for Land & Sky, LC., property owner of record. Joint meeting with Baldwin City Planning Commission.

STAFF PRESENTATION
Ms. Sandra Day presented items 1A & 1B together.

Commissioner Dominguez inquired about an exemption.

Ms. Day said it needed to be a minimum of 40 acres so this would meet that minimum.

Commissioner Dominguez inquired about the type II soils.

Ms. Day said of the 40 acres she estimated, using the GIS area calculator, approximately 30 acres were type II soils.

Commissioner Harris inquired about drainage from the area without a detention pond.

Ms. Day said being able to spread development over a larger surface area and maintaining as much turf as possible would help disperse some of that drainage. She said there was not a lot of drainage coming through the property and that it was not encumbered by any floodplain. She said it had adequate area to be able to address management techniques through site development.

Commissioner Harris inquired about off-site sewage storage.

Ms. Day said there had been discussions about whether or not future buildings could be tied back into existing septic systems or if each building would need its own septic system. She said there needed to be enough area to be able to have that and maintain separation.

Commissioner Harris asked what ‘off-site’ meant.

Ms. Day said within the parcel.

Commissioner Harris asked if sewage would be contained on the property of question.

Ms. Day said yes, that was the intent.

Mr. McCullough said it would either be on this lot or the adjacent lot where the existing facility was today.
Commissioner Harris inquired about the League of Women Voters letter and concern about different kinds of development other than industrial at that location. She wondered if that came up at the Historic Resources Commission meeting.

Ms. Day said this item did not go to the Historic Resources Commission due to it being in the county. It went to the State for an independent review and they indicated that the project may proceed and met their criteria for historic evaluation.

**APPLICANT PRESENTATION**

Mr. Phil Struble, Landplan Engineering, thanked staff for their work. He said each facility would have its own septic tank system. He stated there were four predominant reasons for the larger rezoning size. He said the McFarlane’s were good business people and were looking at the big picture of growing their operation. He said the shape of the property, as it relates to the runway, was the logical piece of property as an airport related piece of property. He stated there needed to be a significant amount of open space for the leach fields and turning movements of the planes. He said they were satisfied with the size of the property to allow for sanitation, traffic, turning movements, and site distances between entrances. He stated the runway took up a significant part of ground due to runway restrictions. He said when combined, the septic field, runway, and location of entrances, the 41 acres was eaten up quickly. He said regarding drainage, he worked with Mr. Keith Browning, Douglas County Public Works Director, on how to deal with it. He said the bulk of the drainage runs to the northwest corner of the property.

Mr. Matt Kirby, Baldwin City Planning Commissioner, asked the applicant to speak to some of the Federal Aviation Administration (FAA) issues about the angle of approach and existing structures.

Mr. Dan McFarlane described how the airspace restrictions relate to the property. He stated any building within a certain perimeter of the airport had to comply with FAA regulations related to airports and airspace. He said it defines a 250’ primary surface that was centered on the center line of runway. He stated it was an imaginary surface that defines the airspace restrictions. He stated 125’ from the center line of the runway there was a 1 to 7 slope that no building could be built that exceeds the plane created by that 1 to 7 slope. That meant somewhere around 250-300’ there could not be a building higher than 20’ tall. He said the farther out from the runway center line the taller the building could be. He stated one of the existing structures on the current Vinland airzone was pushing the margins as close as it could get without exceeding those airspace restrictions.

**PUBLIC HEARING on Item 1A**

Ms. Beth Johnson, Chamber of Commerce, said this was an existing company looking to expand. She said it was a family run and owned company with a family environment. She stated it was a hidden gem in the county. She said the company anticipated an additional 28 new jobs and the average pay would be $48,000 and that most of the jobs (probably 80%) would come from Douglas County.

Mr. Mike Grosdidier, Baldwin City Planning Commissioner, said they were supportive of the business and had no concerns.

**COMMISSION DISCUSSION**

Mr. Kirby agreed with what Mr. Grosdidier said and that Baldwin City Planning Commission unanimously approved it. He said it was a wonderful local business. He stated initially he had some concerns about wastewater but upon talking to Tina with the Baldwin City Public Works they arrived at the belief it was a matter of simple engineering and easily worked out.
ACTION TAKEN
Motioned by Commissioner Rasmussen, seconded by Commissioner Singleton, to approve the rezoning request for 41.966 acres from County A (Agricultural) to I-1 (Limited Industrial) District and forwarding it to the County Commission with a recommendation for approval based on the findings of fact found in the body of the staff report.

Commissioner Harris said she would support the motion but that 30 acres of class II was a lot and she hated to see them taken out of production.

Mr. Dave McFarlane (spoke from his seat in the audience) said he would like to farm some of it. He said they intended to replace the topsoil taken off for construction back in agricultural areas so. He said they also wanted to farm the buffer zone and that most of the land would stay in production as long as possible.

Unanimously approved 10-0. Student Commissioner Davis voted in favor.

Motioned by Commissioner Rasmussen, seconded by Commissioner Liese, to approve the Preliminary Plat of the Vinland Airzone 2nd plat and forwarding it to the Board of County Commissioners for consideration of dedication of easements and rights-of-way subject to the following conditions:

1. Provision of a revised preliminary plat to show the maximum building setback line from the runway for a building 45’ high based on the allowable height of the district and
2. Provision of a revised preliminary plat to include a note that states buildings may be constructed within the transitional zone less than 45’ in height subject to the requirements of 14 CFR Part 77.

Unanimously approved 10-0. Student Commissioner Davis voted in favor.
ITEM NO. 2A  RM32 TO MU; .19 ACRES; 1340 TENNESSEE STREET (MJL)

Z-1-1-11: Consider a request to rezone approximately .19 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), located at 1340 Tennessee Street. Submitted by Paul Werner Architects, for Gremlin Holdings, LLC., property owner of record.

ITEM NO. 2B  RM32 TO MU; .26 ACRES; 1344 TENNESSEE STREET (MJL)

Z-1-2-11: Consider a request to rezone approximately .26 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), including establishing a Bar or Lounge use as an automatic Special Use Permit for Bullwinkle’s, located at 1344 Tennessee Street. Submitted by Paul Werner Architects, for Lynn Investments LLC., property owner of record.

ITEM NO. 2C  RM32 TO MU; .49 ACRES; 1343 TENNESSEE STREET (MJL)

Z-1-3-11: Consider a request to rezone approximately .49 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), located at 1343 Tennessee Street. Submitted by Paul Werner Architects, for TK Property’s LLC., property owner of record.

ITEM NO. 2D  RM32 TO MU; .23 ACRES; 1403 TENNESSEE STREET (MJL)

Z-11-25-09: Consider a request to rezone approximately .23 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), located at 1403 Tennessee Street. Submitted by Paul Werner Architects, for DJC Holdings, LLC, property owner of record.

ITEM NO. 2E  RM32 TO MU; .14 ACRES; 1400 OHIO STREET (MJL)

Z-11-26-09: Consider a request to rezone approximately .14 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), located at 1400 Ohio Street. Submitted by Paul Werner Architects, for Wakarusa Partners, property owner of record.

ITEM NO. 2F  RM32 TO MU; .29 ACRES; 413 W. 14TH STREET (MJL)

Z-11-28-09: Consider a request to rezone approximately .29 acres from RM32 (Multi-Dwelling Residential) to MU (Mixed Use), located at 413 W. 14th Street. Submitted by Paul Werner Architects, for Douglas J. Compton, property owner of record.

STAFF PRESENTATION
Ms. Michelle Leininger presented Items 2A-2F together.

Commissioner Rasmussen asked how they could place a 50,000 square foot retail space restriction on properties that were not advertised.

Ms. Leininger said the restriction already exists in the published ordinance.

Mr. McCullough said it applied to these properties in an expansion of that particular district. He said at the time, there were properties deferred from that rezoning district and the ordinance was worded in a way that if the district expanded, than that condition expanded along with the district. He said they did have to wordsmith the conditions for these properties to meet up with the former condition. He said at the time the thought was that the condition would grow with this. He said there was the
option of bringing a retail market study forward and going through the process to get the condition lifted in the future. He stated if this was approved by City Commission the entire district, including the former MU zonings, would be limited to no more than 50,000 square feet.

Commissioner Rasmussen was concerned about placing a condition on properties that were not part of the application.

Mr. McCullough said it was already there.

Commissioner Rasmussen said it should not say it includes the other properties. He asked how they could put a condition on all properties, including properties that were not included on the application.

Mr. McCullough said that was an appropriate point and that wordsmithing would likely need to be done. He said they could strike the addresses of the previously zoned properties or forward this on to City Commission with direction to work with the Legal Department to wordsmith the appropriate condition.

Commissioner Rasmussen asked how they could say the entire MU district unless that entire MU district was limited to just the six properties that were part of the application.

Mr. McCullough said it was forecasted with the previous zoning that staff would follow up with a rezoning and appropriate language that would expand the district and the restriction of the retail.

Commissioner Rasmussen said he was uncomfortable with it.

Commissioner Finkeldei agreed with Commissioner Rasmussen’s point. He suggested a condition that says the rezoning tonight would be conditioned upon the passage of a valid ordinance that the entire MU district was limited to 50,000 square feet.

APPLICANT PRESENTATION
Ms. Joy Rhea, Paul Werner Architects, said there were no development plans in the works now but that there was great potential for something in the future. She said the MU zoning district was great because it allowed the current density already allowed and in addition gives mixed use for the site. She said regarding the League of Women Voters letter about why not any other zoning request other than primary zone. The density in the secondary zone is 15 dwelling units per acre, like in the RM15 District, was not feasible for the area.

PUBLIC HEARING
Mr. Rick Kupper said he owned property in the area and was trying to get better feel for what this would do to the area. He asked if it meant no more than 50,000 square feet of retail space. He asked if someone could give him an idea of what 50,000 square feet was.

Mr. McCullough said about half the size of Wal Mart at 6th and Wakarusa. He said the 50,000 square feet would likely be interspersed throughout several block ends of the district. He said the primary zone demands mixed use in the structure itself so there would be a mixed use of commercial, office, and residential in every structure.

Mr. Kupper asked how high the structures could be in the primary area.

Ms. Rhea said 48 feet high which would be 3-4 stories.
Mr. Kupper asked if this would increase the amount of apartment space in the area.

Mr. McCullough said the density would be the same. He said it was also important to note that there were no plans to redevelop for any foreseeable time so it would likely remain as is for the foreseeable future. He said if developed then all the MU standards would have to be met.

Mr. Kupper asked if there was a plan yet.

Mr. McCullough said no plan was presented to the Planning office.

Mr. Kupper asked if all of this would take parking into consideration.

Mr. McCullough said yes.

Commissioner Liese thanked Mr. Kupper for his questions.

Mr. McCullough showed the ordinance on the overhead. He said the challenge was to link the new ordinance to the existing ordinance.

**COMMISSION DISCUSSION**

Commissioner Blaser asked if they needed to make six motions.

Mr. McCullough said yes.

Commissioner Finkeldei said the language he was thinking of would condition all the rezonings upon the implementation of a restriction upon the entire MU District that the entire district shall not contain over 50,000 square feet of retail.

Mr. McCullough asked if Planning Commission would be willing to give staff the authority to wordsmith it.

Commissioner Finkeldei said yes.

Commissioner Harris asked staff to show on the overhead map where Bullwinkle’s was in relation to single family homes. She said that was the hanging point for her on the Special Use Permit. She was comfortable with the primary zone there but not comfortable with having a full liquor license and being allowed to operate till 2:00 am since there were single family homes right behind it. She did not feel it was compatible. She said she would be willing to have a Special Use Permit for the beer use and closing at midnight for that property.

Commissioner Dominguez said he lived in the area and most of the single family homes were rentals.

Ms. Rhea confirmed that they were all rental houses.

Commissioner Liese said he drove by and there wasn’t any evidence of single family homes. He said he did not know the assumption of not serving hard liquor really made that much of a difference. He said that if someone wanted to get really drunk in a cereal beverage establishment that it would be possible.
Commissioner Harris said she agreed and said it wasn’t the liquor as much as it was the operating time.

**ACTION TAKEN**

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve all items 2A-2F with the conditions stated in the staff report and with the rewording of retail space limit condition.

Commissioner Harris asked if that included the Special Use Permit.

Commissioner Liese said it was inclusive of the Special Use Permit.

Commissioner Harris said she would prefer to vote on the Special Use Permit separately.

Commissioner Liese amended the motion to exclude the Special Use Permit. Seconded by Commissioner Dominguez.

Commissioner Hird said that item 2B indicated an automatic Special Use Permit so he wondered how they could vote on it separately.

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2A (Z-1-1-11) to rezone 1340 Tennessee Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following condition:

1. The entire MU District shall not contain over 50,000 square feet of retail space.

Unanimously approved 10-0. Student Commissioner Davis voted in the affirmative.

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2C (Z-1-3-11) to rezone 1343 Tennessee Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following condition:

1. The entire MU District shall not contain over 50,000 square feet of retail space.

Unanimously approved 10-0. Student Commissioner Davis voted in the affirmative.

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2D (Z-11-25-09) to rezone 1403 Tennessee Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following condition:

1. The entire MU District shall not contain over 50,000 square feet of retail space.

Unanimously approved 10-0. Student Commissioner Davis voted in the affirmative.

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2E (Z-11-26-09) to rezone 1400 Ohio Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following condition:

1. The entire MU District shall not contain over 50,000 square feet of retail space.

Unanimously approved 10-0. Student Commissioner Davis voted in the affirmative.
Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2F (Z-11-28-09) to rezone 413 W. 14th Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following conditions:

1. The entire MU District shall not contain over 50,000 square feet of retail space.
2. A 16' wide access shall be designated where an alley is currently platted but now vacated along the south side of W. 14th St between Ohio and Tennessee Streets.

Unanimously approved 10-0. Student Commissioner Davis voted in the affirmative.

Motioned by Commissioner Harris to approve item 2B (Z-1-2-11) to rezone 1344 Tennessee Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, including a Special Use Permit for the Bar or Lounge, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following conditions:

1. Restricted to Cereal Malt Beverage License only for purposes of limiting operating hours to midnight.
2. The entire MU District shall not contain over 50,000 square feet of retail space.

Motion died due to lack of second.

Motioned by Commissioner Liese, seconded by Commissioner Dominguez, to approve item 2B (Z-1-2-11) to rezone 1344 Tennessee Street from RM32 (Multi-Dwelling Residential) to MU (Mixed Use) as a Primary Development Zone, including a Special Use Permit for the Bar or Lounge Use, and forwarding it to the City Commission based on the findings presented in the staff report and made with the following condition:

1. The entire MU District shall not contain over 50,000 square feet of retail space.

Commissioner Burger suggested limiting the operating time to midnight and letting Bullwinkle’s apply for any kind of liquor license they wanted.

Mr. McCullough said that would be possible with the Special Use Permit as part of a motion.

Commissioner Hird said he would vote in favor of the motion without the time restriction because it would be inconsistent and unfair since there was another bar a block away without that restriction. He felt it would create a competitive disadvantage.

Commissioner Dominguez agreed with Commissioner Hird.

Commissioner Burger asked if The Wheel was open till 2:00am.

Mr. McCullough said yes, The Wheel and The Hawk both have Drinking Establishment License.

Commissioner Liese agreed with Commissioner Hird.

Commissioner Harris said she disagreed because those properties more to the east were closer to single family homes and single family neighborhoods and felt the midnight was more appropriate.

Motion carried 8-2, with Commissioners Burger and Harris voting in opposition. Student Commissioner Davis voted in favor.
Commissioner Singleton left the meeting at 8:00pm.
TA-6-8-10: Reconsider Text Amendments to the City of Lawrence Land Development Code, Chapter 20, related to the density and development standards in the RM32 (Multi-Dwelling Residential) District including potentially increasing the maximum dwelling units per acre limit in that district. *Initiated by City Commission on 7/13/10. (PC Item 3; approved 6-3 on 12/13/10) Referred back to Planning Commission by City Commission on 1/25/11.*

STAFF PRESENTATION
Ms. Michelle Leininger presented the item.

Commissioner Harris said she read Ms. Marci Francisco’s letter and it got her thinking differently. She said in the past she thought this would give choices for dwelling unit sizes but with the number of people staying the same. She said that did not seem to be the case. She said in Ms. Francisco’s letter it stated there would be two people per bedroom so there could be four people in a two bedroom apartment, potentially doubling the density.

Ms. Leininger said in the Code today there could be up to four unrelated people per unit. She felt that would be the minority situation.

Commissioner Harris asked if it was reasonable to assume a two bedroom apartment could have four people living there.

Ms. Leininger said there was potential for that. She said in certain situations there would be two people per bedroom and one person per bedroom. She said staff did not think every unit would have four people per unit.

Mr. McCullough said that was why they looked at the census data and called the University of Kansas (KU) to understand their perspective on it. He said there would be an increase in intensity under the Text Amendment that had been noted all along. He said what was difficult for staff to accept was that every unit would max out at four people. He said that was not what the data was showing in the census and in discussions with KU Housing. He said there would be some that have the increased intensity but when staff looked at what the density was at 54 units per acre previously, capping it at 48 units per acre was a reasonable conclusion in the discussions.

Commissioner Harris asked if there was a way to know if a single person in a one bedroom chose to be that way or because the Code said they couldn’t have more than one person per bedroom in the unit.

Mr. McCullough said the Code does not restrict the number of people in a bedroom, it restricts the number of people in the unit. He said theoretically every studio apartment could have four people living in it.

Commissioner Harris asked when doing research were they able to say if students in a four bedroom unit, with only one person per bedroom, chose that.

Mr. McCullough said they did not get to that level of detail.
Commissioner Dominguez asked if a four bedroom apartment and a two bedroom apartment could both only have four people living there. He said that was probably not the case if national research showed that each person wanted a bathroom.

Ms. Leininger said KU stated their trend was that people were okay with sharing a room with people but not okay with sharing a bathroom with a lot of people, so having four people in a unit sharing one bathroom was not ideal for most students, according to KU’s findings.

Commissioner Dominguez inquired about a financial analysis.

Ms. Leininger said staff looked at the average appraisal value of blocks in the Oread, which was included in the staff report. She said it was not cheap to buy a lot to pave for parking. She said that was a question maybe the applicant could address.

Mr. McCullough said staff did not do any type of analysis but did analyze the many years that there were 54 units per acre allowed and what kind of incentive that established for the development community. He stated after it was dropped down to 32 units per acre the development community voiced that was too low so the exercise was in looking for the middle ground that would help appropriate redevelopment but not incentivize inappropriate development.

Commissioner Burger asked if these parameters conflicted with what the Housing Authority would suggest for housing standards.

Mr. McCullough said staff did not seek that specific question.

Commissioner Burger was concerned about other populations that could be impacted by this besides college students, such as those seeking affordable housing, allowing four people in a studio and one bedroom apartment.

Ms. Leininger said this would not change the number of people allowed in a housing unit. Currently there can be up to four unrelated people in a dwelling unit.

Commissioner Dominguez asked if this would incentive people to stack up in a small apartment.

Mr. McCullough said the ability to construct studio and one bedroom apartments exists in the Code today. He said there were other factors such as building and accessibility codes that would make it a safe structure. He said they were trying to limit the discussion to the zoning application. He said they should assume it would intensify the use at a site. He said staff was not trying to say that they would not see more people living in a structure because two and three bedroom apartments would likely see the greatest amount of intensity increase because there would be two bedrooms with two people each, equaling four occupants. He felt it was a poor assumption to say that studio and one bedroom apartments would have four people in them. He said two, three, and four bedroom apartments could and would, but it would not be all of them.

Commissioner Rasmussen asked staff if they thought it was possible that some of the four bedroom units in town had more than four people living in them.

Mr. McCullough said that was possible.

Commissioner Harris asked why the area was changed from 54 to 32 units per acre.
Mr. McCullough said it was the culmination of the new Code, committee input, collapsing of certain districts, and the creation of districts. He said he did not have a good reason why the density was reduced.

Commissioner Harris asked if it was because it created too great of an impact on parking or infrastructure.

Mr. McCullough said he could not speak to specifics. He said there was a Code analysis performed for the City and the Comprehensive Plan review.

Commissioner Harris said it would be helpful to have that information.

**APPLICANT PRESENTATION**

Mr. Paul Werner, Paul Werner Architects, said he has worked with a lot of apartment projects, and gave the example of Tuckaway that has one, two, and three bedroom apartments. He said the reason they did a PRD was because they were going to have build four bedrooms since the only conventional zoning that they could get out of that was enough so they wouldn't have to build all four bedrooms. He said most college kids do not want to share a bedroom. He said most landlords would not want four people sharing a bedroom. He said he was a little surprised about staff wanting to put cap on this. He suggested the option of adding to the footnote that it would only apply to vacant lots or existing multi-dwelling structures. He suggested an additional footnote option that it would only apply to vacant or multi-dwelling structures of more than six units. He said he requested two additional Text Amendments.

**PUBLIC HEARING**

Mr. Dennis Brown, Lawrence Preservation Alliance, said the Text Amendment attempts to incentivize the renovation of older apartment complexes, which was a worthy goal, and not just in the Oread neighborhood. He stated the troubling issue identified in the staff report that needed attention was issue 3. Without qualifying language the amendment could also incentivize teardowns of older housing now used for rentals in the Oread neighborhood. He said the goal of the Oread Neighborhood Plan was to preserve existing housing stock. He stated Lawrence Preservation Alliance, Lawrence Association of Neighborhoods, and the League of Women Voters are all on record warning about this very valid concern. He said if the language of the Code could differentiate between apartment complexes and an older house converted to apartments there would be no problem. He said the application for 711 Connecticut makes this concern more real. He was concerned about the threat of lots being combed. He stated staff says parking restrictions would protect older housing but the 711 Connecticut applicant applied to the Board of Zoning Appeals for a parking variance. He said rather than make a decision tonight he felt discussion was needed and direction for staff. He felt establishing a density cap at 40 or 48 might have merit and so might increasing the parking ratio, but he did not feel either were the answer. He felt the footnote should be allowed on infill lots vacant for two or more years. He appreciated staffs thinking that adding the term ‘dangerous structures’ could actually promote demolition by neglect. He said 6,000 square feet as the minimum parcel was definitely too small for this footnote. He said something larger needed to be designated provided the footnote was clear the lot size must be existing, so as not to incentivize combining lots to meet the minimum threshold. He felt the best solution was to give Code language the ability to differentiate between an apartment house and an old house that had been divided into apartments. He said if that was not possible there needed to be several safeguards in the footnote to protect older housing and direct the amendment towards the larger rental structures its advocates seek to help.
Commissioner Rasmussen asked Mr. Brown if he felt a studio apartment and four bedroom apartment were essentially equal.

Mr. Brown said there would be a lot more renters in the four bedroom apartment so they would be a little different in terms of the number of people.

Ms. Carol von Tersch quoted a statement from the staff report: ‘An argument can be made that if the total number of bedroom are contained in the same building form (regulated by setbacks, height, parking, bufferyards, and outdoor space) the total number of units is not relevant.’ She felt that was an absurd statement. She was also concerned about the statement in the staff report ‘Staff has contacted the KU Department of Student Housing for trends they are seeing for housing.’ She stated she worked for the Student Housing Department as an Assistant Director for almost 25 years and was very involved in the design of each one of the major renovations of the residence halls and construction of the Housing Departments new buildings in the last 20 years. She said she was intimately familiar with design concepts in each of the residence halls that had been renovated. She stated the trends that were reported to the staff were obviously all true but that was only one part of the story. She said there were probably around 3,000 Freshman living in the residence halls. She said it used to be quite a bit higher than that and as the demand for the kind of residence halls dropped the department started renovating them to make them more attractive to students. She said KU has about 8,000 Freshman so she wondered where the other 4,000 Freshman were living that weren't in residence halls. She said that when students say they don't want to share a bathroom what they really mean is that they don't want to share a bathroom with 40 others. She said almost all the halls that were renovated had four students in a suite with one bathroom. She said the statement that the total number of units was not relevant was not a true statement. She felt this change created additional development pressures in the neighborhood. She said the driving force for this whole request was Mr. Thomas Fritzel's effort to redevelop 11th and Indiana. She felt the reason he took this approach was because he could get it through Planning staff and Planning Commission quicker. She said she spoke with Mr. Fritzel about this and asked him to investigate other ways to accomplish the same thing. She said he came up with a proposal of the PD district so there was another Text Amendment in the works to reduce the 5 acre minimum for a district so that a project could move forward.

Mr. Kirk McClure, Lawrence Association of Neighborhoods, said they did not support the Text Amendment as written. He said they recommend narrowing the scope of the Text Amendment and increasing the minimum threshold where it takes effect. He stated in terms of scope the Text Amendment applied far too broadly. He said clearly there was a design behind this. He said there may be times when smaller bedrooms may be a desirable design but as written the Text Amendment applies to every RM32 district in the city. He said the design would be a 6,000 square foot threshold, which was one city lot. He stated the way the Text Amendment was written was poorly suited to what has been promised. He said when Commissioner Dominguez asked what was driving this there has been a long term trend of more smaller units occupied better than fewer larger units. He stated four bedroom apartments were not as popular as one bedroom apartments, especially when there is a locational advantage such as being close to the university. He said there was a good deal of confusion going on between the desirability of density and the desirability of infill. He said the Oread Plan called for moderate levels of density in the 7-15 units per acre. He said when looking at the literature on Smart Growth it did not say take the highest density districts and raise them higher, it said the waste and sprawl was found in the half acre and one acre lots in the districts of the city where there were two residences per acre. He said the Text Amendment calls for something that is not in fact what is needed and promotes the consolidation of lots. The Oread Plan does not call for an increase in density and the Text Amendment does. He felt staff confused some of the debate by mixing the definitions. He said the Census Bureau measures persons per room and the way they
count rooms is an apartment minus the kitchen and minus the bathroom. Persons per room is not the same as persons per bedroom. He stated car ownership is and remains about 85% percent. He felt a proposal like this was going to create new development incentives, foster demolition by neglect, encourage people to assemble small parcels so they could meet the minimum parking requirement, and create intense problems in some of the older neighborhoods. He suggested having staff reexamine the Text Amendment in considerable detail and also raise the threshold. He gave the example of 19th & Kentucky as what this might result in.

Commissioner Rasmussen inquired about Mr. McClure’s statement that this was ill-suited for most of the RM32 properties in the city.

Mr. McClure said because a lot of them were not large lots and that the same 6,000 square foot threshold applied to those areas as well.

Commissioner Rasmussen inquired about him characterizing this as an increase in density and asked what he was basing that on.

Mr. McClure said the argument being sold to them was that a building, for example, with ten 4-bedroom units totaling 40 bedrooms. He said that could be changed into 22 bedrooms or 40 one bedrooms in the same footprint. He said that was not the kind of development pressures they were confronting. He said what they were talking about were older properties in the Oread neighborhood that were in areas searching for 7-15 units per acre which would become subject to development pressures for being assembled, demolished, and rebuilt into much higher densities.

Commissioner Harris asked if he would not be in favor of language proposed earlier about applying to vacant land and existing multi-dwelling structures without any further clarification.

Mr. McClure said infill was a good thing but wondered what would be considered multi-family.

Ms. Marci Francisco said every additional occupant would add an additional needed parking space. She was concerned about the Text Amendment affecting her own property. She said she was trying to figure out what vacant lots exist in her neighborhood, other than 1043 Indiana, that initiated this Text Amendment.

COMMISSION DISCUSSION
Commissioner Finkeldei inquired about item 5 on the agenda.

Mr. McCullough said item 5 was going to apply this Text Amendment to their project.

Mr. Werner said 711 Connecticut had a lot of issues. He felt that 711 Connecticut proved that the Text Amendment would not incentivize anything because a lawyer could get past a demolition. He stated there would be something on that lot and if the Text Amendment was approved it would be a 6-plex.

APPLICANT CLOSING COMMENTS
Mr. Werner said he could not believe Mr. McClure compared this to 19th & Kentucky. He said he could not imagine this having that effect. He felt it was a valuable tool.

Commissioner Liese said the Lawrence Association of Neighborhoods letter strongly suggests that the scope of the amendment being narrowed drastically. He asked for Mr. Werner’s thoughts on that.
Mr. Werner said he understood it and suggested several solutions that would help narrow the scope. He said he didn’t understand making the minimum one acre. He didn’t think the land area was an issue at all and felt it was the wrong thing to try and do.

Commissioner Dominguez asked how historical structures could be protected.

Mr. Werner said they could be eliminated from being included in this but if they were already zoned RM32 the house could still be cut up into apartments.

Commissioner Dominguez asked why a variance could not be requested.

Mr. Werner said the Board of Zoning Appeals could not grant a variance for density.

Commissioner Dominguez asked if the Code could be changed to allow a variance for density instead of a Text Amendment.

Mr. McCullough said that could be looked at but there were options to the Text Amendment, such as creating a new zoning district that gives density so its site specific or amending the PD Overlay to establish a framework that may be more conducive. He said the common thread for concern with the Text Amendment was the impact to all properties zoned RM32. He stated there were alternative Code revisions that could be looked at that wouldn’t be so broad in scope and wouldn’t affect every RM32 piece of property. He said he would prefer not to create a footnote that tries to do everything. He said staff supports the Text Amendment because there is an equivalency factor and increasing the intensity in the RM32 district is a factor but not necessarily a harmful factor. He said parking standards could be tweaked if needed. Staff does not think it will foster the consolidation of lots because that exists today and staff is not seeing that. He said there were other Code amendments that could address the issue as well.

Commissioner Rasmussen said when this was first brought to Planning Commission his recollection was that the definition of dwelling unit was based on the number of stoves.

Mr. McCullough said it came forward when looking at the equivalency in the number of bedrooms with all other things held equal. He said most will acknowledge that while the number of bedrooms is equal the number of people has the potential to grow more than what it would be if they were all four bedroom units.

Commissioner Finkeldei inquired about the staff recommendation.

Mr. McCullough said one of the options tonight was to defer and direct staff to look at all three Text Amendments together. He said he did not know that they would want to send it to City Commission knowing that there were two other Text Amendments trying to reach the same or similar goal.

Commissioner Finkeldei asked if it was safe to assume that even if they passed this tonight that City Commission would probably not take it up until the other Text Amendments were before them.

Mr. McCullough said City Commission would be provided the same information.

**ACTION TAKEN**
Motioned by Commissioner Finkeldei, seconded by Commissioner Culver, to defer Text Amendment (TA-6-8-10) to the City of Lawrence Land Development Code, Chapter 20.
Commissioner Dominguez inquired about the need for an increase in density. He said he would like to see occupancy rates for apartments and wished City Commission would look into if more apartments were needed.

Commissioner Hird said he would support the motion to defer so that the Text Amendments could be heard together. He said the PD option was something he would like to see explored further.

Commissioner Harris agreed with Commissioner Hird. She requested staff provide some history about why the density was lowered from 54 to 32. She supported the concept of having more flexibility in the kind of units that can be built within a zoning district but she was concerned about increasing density at the same time.

Motion carried 9-0. Student Commissioner Davis voted in the affirmative.
ITEM NO. 4  IG TO RMO; 3.9 ACRES; 800 BLOCK OF LYNN STREET (MJL)

Z-2-6-11: Consider a request to rezone the 800 block of Lynn Street (bounded by Lynn St, Homewood St, Haskell Ave, and Bullene Ave), approximately 3.9 acres, from the IG (General Industrial) and IL (Limited Industrial) Districts to the RMO (Multi-Dwelling Residential-Office) District to implement recommendations in the adopted Burroughs Creek Corridor Plan. Initiated by Planning Commission on 2/23/11.

STAFF PRESENTATION
Ms. Michelle Leininger presented the item.

Commissioner Rasmussen asked if there was an applicant.

Ms. Leininger said the City was the applicant for implementing the Burroughs Creek Corridor Plan.

Commissioner Harris asked who owned the property.

Ms. Leininger said the Salvation Army.

PUBLIC HEARING
No public comment.

ACTION TAKEN
Motioned by Commissioner Finkeldei, seconded by Commissioner Hird, to approve the rezoning of approximately 3.9 ac, from IG (General Industrial) District and IL (Limited Industrial) to RMO (Multi-Dwelling Residential-Office) District based on the findings presented in the staff report and forwarding it to the City Commission with a recommendation for approval.

Commissioner Rasmussen said the city was losing more industrial property so it was important when doing these area plans to be thinking about making space available for industrial development.

Unanimously approved 9-0. Student Commissioner Davis voted in favor.
ITEM NO. 5
RM24 TO RM32; .13 ACRES; 711 CONNECTICUT STREET (MKM)

Z-1-4-11: Consider a request to rezone approximately .13 acres from RM24 (Multi-Dwelling Residential) to RM32 (Multi-Dwelling Residential), located at 711 Connecticut Street. Submitted by Michael Tubbs, for James and Nancy Dunn, property owner of record.

*Item No. 5 was deferred prior to the meeting.*
Initiate Text Amendment to the City of Lawrence Land Development Code, Chapter 20, Article 4, Section 20-403 to change “Detention” from a use permitted by right in the IG (General Industrial) District to one permitted with Special Use approval.

**STAFF PRESENTATION**

Mr. Scott McCullough presented the item.

Commissioner Finkeldei said as a philosophical matter he would not vote for this because he did not like the idea of finding someone in the city and initiating something to stop it. He gave the example of a proposed mental facility in Jefferson County where a Text Amendment was initiated and changed the rules beforehand.

Mr. McCullough said there was no active application.

Commissioner Finkeldei said he did not like the feeling of initiating something to change it.

Commissioner Hird said he understood Commissioner Finkeldei’s concern but did not necessarily share it. He thought requiring a Special Use Permit did not eliminate it, it just created a different type of proceeding for approval and allowed a lot of input. Unless the Text Amendment was initiated it could be built as a matter of right. He said this was one of those things that the public would have a lot of input in. He felt it was appropriate to allow a Special Use Permit process for this type of application.

Commissioner Rasmussen said he shared Commissioner Finkeldei’s concerns and it made him not feel good. He said if permitted by right to build a detention facility in an IG property in the Burroughs Creek area where there are homes abutting to the IG property he would expect a Special Use Permit. He said he would support the initiation even though it made him feel slimy.

**ACTION TAKEN**

Motioned by Commissioner Harris, seconded by Commissioner Liese, to initiate a Text amendment to the Land Development Code – Code of the City of Lawrence, Kansas to require the Detention use to be approved through the Special Use process in lieu of being permitted by right.

Motion carried 6-3, with Commissioners Culver, Dominguez, and Finkeldei voting in opposition. Student Commissioner Davis voted in favor.

Consideration of any other business to come before the Commission.

Commissioner Blaser said another Planning Commission training volunteer was needed.

Commissioner Finkeldei said he would volunteer.
Commissioner Blaser said for Commissioners Dominguez and Rasmussen to let Ms. Sheila Stogsdill know if they wished to be reappointed when their terms were up in May.

Commissioner Harris said another Planning Commissioner would be needed to serve on the MPO to replace her when her term was up in May.

Commissioner Liese said he would be interested.

PUBLIC COMMENT SECTION

ADJOURN 9:42pm
TRAFFIC IMPACT DATA

For

Dillons #98
On-Site Relocation

COMMERCIAL DEVELOPMENT

1740 Massachusetts Street
Lawrence, KS

Revised April 6, 2011

Prepared by:
Pickering Firm, Inc.
**Introduction**

The project site consists of the existing Dillons grocery located at 1740 Massachusetts Street and two attached retail spaces in Lawrence, Douglas County, KS.

**Methodology**

The Traffic Impact Study Analysis was performed in accordance with Article 11, Requirements For Traffic Impact Study as outlined in the *Code of the City of Lawrence, Kansas*. Based upon the specified minimum traffic impact data requirements, Items 1-7 were conducted for the Traffic Impact Study Analysis.

**Item 1 – Identify Development Plan**

The existing 2.58-acre shopping center site is bounded by Massachusetts Street on the west, New Hampshire Street on the east, commercial uses on the south, and a multi-family residential on the north. The site contains 32,089 SF of existing buildings with a variety of shopping center uses including a 30,295 SF grocery store, a retail shop, and a beauty salon. The existing shopping center building faces toward Massachusetts Street with on-site parking between Massachusetts Street and the buildings and service access from New Hampshire in the rear of the building. See Appendix A for the Existing Conditions Plan.

The proposed development will include the demolition of 32,089 SF of existing building and redevelopment of a new 44,770 SF Dillons grocery store, on the south portion of the site, facing north. The parking field will be located north of the store with delivery access on the rear from both Massachusetts and New Hampshire. See Appendix B for the Proposed Site Plan.

The existing site is accessed from Massachusetts Street on the west by three full-access driveways. Access from New Hampshire Street on the east is by three curb cuts, which provide access to loading areas and include a one-way exit from the parking lot. Even though the only existing access to New Hampshire from the parking lot is a one-way exit drive and is combined with a truck entrance, vehicles often enter the site via that drive, causing an unsafe condition.
The existing site is abutted to the south by a retail store which is situated in the northeast corner of the lot, facing Massachusetts Street. Parking is provided west and south of the store with access to the parking on the project site. To the north of the project site is the Babcock Place apartment building which is situated on the southeast corner of E 17th Street and Massachusetts Street with access from E 17th Street and New Hampshire Street. A parking lot for the property is provided along New Hampshire Street. Across New Hampshire Street, to the east of the project site, is single family residential with access from New Hampshire Street. To the west, across Massachusetts Street are a variety of retail uses and an apartment building with parking and access along Massachusetts Street.

**Items 2 and 3 – Identify Land Use and Functional Classification of Bordering Streets**

The project site will be developed as a Neighborhood Commercial Center as shown in Horizon 2020. The proposed Dillons grocery store facing north will provide a greater aesthetic appeal from the existing layout as a strip development, offering more landscaping within the parking area and around the perimeter of the site. The redevelopment will also provide a safer circulation pattern for car traffic with separation from truck traffic.

The project site is located on Massachusetts Street and north of 19th Street which function as minor arterial roads. The nearest collector streets in the vicinity of project site are Barker Avenue to the east and 15th Street to the north. New Hampshire is classified a street/rural road. The following figure from the City of Lawrence, Horizon 2020 shows the project site and surrounding arterial and collector streets.
Access shall be provided to the project site from Massachusetts Street by two full-access, stop controlled driveways serving the parking lot and one existing driveway at the rear of the store and adjoining the adjacent retail lot. Access from New Hampshire Street is provided by one inbound driveway serving the parking lot, a one-way north-bound pharmacy drive-thru entrance, and a truck unloading area. There will also be a restricted, emergency-only truck access with mountable curbs and grass pavers.

**Item 4 – Identify Allowable Access per Criteria of Adopted Access Management Plans**

The project site does not adjoin arterial or collector streets with Access Management Plans for the City of Lawrence.

**Item 5 – Current Public Street Characteristics**

**Massachusetts Street:** Massachusetts Street is a four lane (two lanes in each direction) minor arterial street running north and south along the west side of the project site. It has an urban cross section with twelve foot wide lanes, curb and gutter, a 9½ foot wide on-street parallel parking lane, and a posted speed of 30 mph in the project vicinity.

**New Hampshire Street:** New Hampshire Street is a two lane (one lane in each direction) street running north-south along the east side of the project site. It has an urban cross section with fifteen foot wide lanes, curb and gutter, and a posted speed of 30 mph in the project vicinity.

**Sight Distance:** Based upon a site visit and field survey data, adequate sight distance exists for all access points.

**Task 6 –Proposed Access and AASHTO Design Comparison**

**Massachusetts Street:** The *City of Lawrence Land Development Code* driveway criteria states:

> All Driveways providing Access to Arterial Streets shall be constructed so that the point of tangency of the curb return radius closest to all nonsignalized Street or Driveway intersections is at least 300 feet from the perpendicular curb face of the intersecting Street or Driveway.
The existing site is accessed at three points, all within 502 feet, along Massachusetts Street frontage. The spacing between the southernmost and the center access point is 306 feet meeting the minimum 300 feet spacing requirement. The southernmost access point to the project site is also spaced 96 feet from the access point to the abutting lot to the south, which does not meet the 300 feet spacing requirement. The spacing between the center and northernmost access point on the project site is 90 feet, which is less than the 300 feet minimum spacing requirement.

The proposed project site will be accessed at three points along the Massachusetts Street frontage. The existing southernmost access point will remain and continue to provide access to the abutting retail to the south. The existing center access point will be removed and a new access point will be installed 169 feet north from the southernmost access point. The existing northernmost access point will be shifted to the north; resulting in a spacing of 202 feet from the center access point. All spacing of the proposed access points is less than the 300 feet minimum spacing requirement. However, the proposed access points and revised parking layout will provide better access for traffic entering and exiting the project site from Massachusetts Street.

The center access point is stop controlled and is 36 feet wide with a 12 foot wide right turn lane, a 12 foot wide left turn lane, and a 12 foot wide lane for inbound traffic. The northernmost access point is stop controlled and is 36 feet wide with a 12 wide right turn lane, a 12 foot wide left turn lane, and a 12 foot wide inbound lane. The existing southernmost access point is 30 feet wide with a 15 foot inbound lane and a 15 outbound lane.

New Hampshire Street:
The existing site is accessed at three points, all within 339 feet, along the New Hampshire Street frontage. The spacing between the southernmost and center access point is 57 feet. The spacing between the center and northernmost access point is 167 feet. The northernmost access point also provides a one-way exit from the parking lot in addition to truck unloading areas. All of the existing access points provide access to the rear of the existing shopping center.

The proposed project site will be accessed at three points along the New Hampshire Street frontage. These access points include a delivery truck driveway, a one-way northbound pharmacy drive-thru entrance, and an inbound access driveway for the parking field. There will also be a restricted, emergency-only truck access with mountable curbs and grass pavers. The
pharmacy drive-thru lane provides for stacking for four cars which is adequate based upon Dillons’ requirements.

The delivery truck access point is the southernmost access point and is spaced 23 feet from the pharmacy entrance. The pharmacy drive-thru entrance is spaced 243 feet from the inbound parking lot access driveway.

The delivery truck driveway is 47.3 feet wide and provides access for two trucks to back into the loading docks of the Dillons grocery store. The drive-thru lane is 10 feet wide. The 9-ft wide inbound access driveway is the northernmost access point. Even though the new access points are less than the 300 feet minimum spacing requirement, the separation of truck traffic from the parking lot traffic and the addition of an entrance-only access point to the parking lot greatly improve safety.

Item 7 – Existing and Proposed Trips Generated
The number of trips generated by the existing and proposed development were calculated for the typical weekday and weekday peak hours using the Trip Generation Manual, 8th Edition, published by the Institute of Transportation Engineers. The “Supermarket” Category 850 was utilized for the PM Peak for the entire development due to the fact that the primary use of the site consists of a Dillons grocery store. However, the Average Vehicle Trip Ends on a Weekday and AM Peak were not calculated due to the “Small Sample Size” of each study.

Based upon the data provided in the Trip Generation Manual, a 44,770 SF supermarket will generate 528 trips in the PM Peak. The definition of the Supermarket Land Use Category includes ancillary services such as pharmacies, banks, and ATMs. See Appendix C for the Trip Generation Manual data. Further analysis was performed to estimate the number of pass-by trips to account for the portion of the site-destined traffic that is already in the adjacent street traffic stream. Based upon the Trip Generation Handbook, 2nd Edition, Figure 5.8, Average Pass-By Trip Percentage for a Supermarket in the Weekday PM Peak, an average of twenty-nine percent of site-destined traffic can be expected from vehicles already on adjacent streets. The following table shows the findings of the Trip Generation analysis:
The Existing and Proposed Trips generated were then distributed throughout the driveways as indicated in Drawing C1.0, Appendix D.

In the existing conditions of 431 total trips, 337 trips (78%) were from Massachusetts and 94 trips (22%) were from New Hampshire. In the proposed conditions, the same percentages were used to distribute the 528 total trips: 412 trips (78%) from Massachusetts and 116 trips (22%) from New Hampshire.

The total number of Massachusetts trips in the PM peak hour increased from 337 in the existing conditions to 412 in the proposed conditions which is a 22% increase. The total number of New Hampshire trips in the PM peak hour increased from 94 in the existing conditions to 116 in the proposed conditions which is a 23% increase.

In response to the concerns of the adjoining neighborhood to the east of the site, the New Hampshire parking lot access drive is designed for entrance only traffic. If the New Hampshire drive were allowed to be utilized as a two-way access point, it is estimated that the percentage of trips accessing New Hampshire would increase from 23% to 30% in the peak hour. Therefore, the total number of trips accessing New Hampshire would increase from 94 in the existing conditions to 158 in the proposed conditions, which equates to a 59% increase.

Because of the Small Sample Size for the “Supermarket” Category, the “Shopping Center” Category 820 was utilized for Weekday and AM Peak for the purposes of comparison. The following table shows the findings of the Trip Generation analysis:

<table>
<thead>
<tr>
<th>Supermarket Category 850 (Total SF)</th>
<th>Trips Generated in PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Development</td>
<td>32,089</td>
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<tr>
<td>Proposed Development</td>
<td>44,770</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
</tr>
<tr>
<td>Pass-By Reduction</td>
<td>29%</td>
</tr>
<tr>
<td>Net New Vehicle Trips</td>
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</tr>
</tbody>
</table>
Parking

Existing:
The existing development has a total of 149 parking spaces to serve the existing 32,089 SF of development. These spaces are designed on 60-degree angles and accessed via a series of one-way drives aisles. This parking pattern is often confusing and results in vehicles going the wrong way on drive aisles. This parking configuration can be seen on the Existing Conditions Plan located in Appendix A.

Proposed:
The redevelopment of the project site will include the redesign/relocation of the parking field. The 60-degree parking spaces and one-way drive aisles will be eliminated. Parking on the site will be 90-degree spaces accessed via two-way drive aisles. A total of 129 parking spaces will be provided for the 44,770 SF Dillons grocery store. The spaces meet the design requirements of Article 9, Section 20-913 of the City of Lawrence Planning & Development Code. Article 9, Section 20-902 of the City of Lawrence Planning & Development Code requires a parking ratio of 1 space per every 300 SF of floor area. The post redevelopment of the site will provide a ratio of 1 space per 347 SF. The reduction in parking spaces provided is based upon the following:

1. **Best Planning**: The “Land Use 850: Supermarkets” category of the publication *Parking Generation 3rd Edition* published by the Institute of Transportation Engineers (p 208) contains studies of similar urban sites showing the average peak period for weekday parking demands. Using the fitted curve equation provided by the source data, the redeveloped 44,770 SF store would require 118 spaces providing a ratio of 1 space per 380 SF.

<table>
<thead>
<tr>
<th>Shopping Center Category 820 (Total SF)</th>
<th>Trips Generated in Typical Weekday</th>
<th>Trips Generated in AM Peak</th>
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<tbody>
<tr>
<td>Existing Development 32,089</td>
<td>3,244</td>
<td>79</td>
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<tr>
<td>Proposed Development 44,770</td>
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</tr>
<tr>
<td><strong>New Vehicle Trips</strong></td>
<td><strong>+784 trips</strong></td>
<td><strong>+17 trips</strong></td>
</tr>
</tbody>
</table>
2. **Pedestrian and Bike Traffic:** Pedestrian and bike linkages are provided to the north and south, and to the adjacent residential areas surrounding the site. Bicycle racks and scooter parking will be provided to accommodate those cycling to the store. Also, the close proximity of single family housing and the Babcock apartments provides the site with ample pedestrian traffic, thus reducing the demand for parking. A safer access route for Babcock residents will be provided through the site from the north. New sidewalks and landscaped buffers along street rights-of-way provide pedestrians with a safe and attractive corridor to and from the site. A wide sidewalk on the west side of the building along Massachusetts Street provides an area for outdoor seating and dining for local residents. These additions encourage more pedestrian traffic and promote the already existing urban environment that Massachusetts Street is recognized for.

3. **Drive-Thru Pharmacy:** A drive-thru will be provided for the Dillons pharmacy. This service will eliminate the need for pharmacy customers to park and go inside the store.

4. **Experience:** Dillons operates hundreds of neighborhood grocery stores across the Midwest and their experience of operating such store provides them with the knowledge that the parking ratio of 1 space per 357 SF will work for this site. Dillons would not make the investment to redevelop the existing site only to be short on parking.

**Truck Traffic**

The existing truck access for the site is from New Hampshire Street and consists of dedicated Dillons delivery trucks along with daily service delivery trucks and trash container pick-up trucks. In the proposed plan, the dedicated Dillons delivery trucks will continue to access the site from New Hampshire along with trash container pick-up trucks. However, the daily service delivery trucks will now access the site from Massachusetts, thereby reducing the amount of truck traffic on New Hampshire by more than half.

The increase in store size will not result in a significant increase in the number of delivery vehicles. Delivery truck-loads typically contain products for more than one store. Therefore, the increase in store size will result in a larger portion of each delivery truck being dedicated to this new store.
The New Hampshire emergency-only truck drive with mountable curbs and grass pavers will be used only in situations where the normal truck delivery routes are not available. In the instance where normal truck delivery routes are not available, typical numbers of delivery trucks will utilize this truck drive.

**Pharmacy Drive-Thru**

The pharmacy will operate generally between the hours of 8 am and 9 pm, Monday through Friday and 9 am to 6 pm Saturday and Sunday. The actual hours have not yet been set; however, it is anticipated that the pharmacy will operate for a total of 78 hours per week. Based upon actual customer sales data at the existing Dillons pharmacy, 320 customers per week are anticipated at the drive-thru which equates to an average of 4 drive-thru customers per hour. In the peak hour, it is estimated that 8 customers will utilize the drive-thru pharmacy. The 70-foot available queue length of the drive-thru lane will allow four vehicles at 17.5 foot average to queue at one time. Eight vehicles in a one-hour period equates to 7.5 minutes per customer. Based upon a three-minute typical turn at the drive-thru window, it is estimated that the four vehicle queue length is adequate.
Traffic Calming

In accordance with the City of Lawrence Traffic Calming Policy dated August 23, 2005, an analysis was performed for New Hampshire and East 17th Terrace utilizing the traffic count data gathered by the City of Lawrence Engineering department, see Appendix E. The Policy includes four criteria for “local” streets. If any one of the criterion is satisfied, traffic-calming devices may be permitted.

A. The 85th percentile speed of traffic is 5 mph or greater over the speed limit, or
B. The 24-hour two-way traffic volume is greater than 1000, or
C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
D. Where no single condition is satisfied, but where any two of A, B, or C above are satisfied to the extent of 80 percent or more of the stated values.

New Hampshire – Posted Speed 30 mph

A. The collected traffic data:
   i. Northbound – 675 total vehicles with 85th percentile speed of 33.29
   ii. Southbound – 219 total vehicles with 85th percentile speed of 36.43
   iii. Northbound – 375 total vehicles with 85th percentile speed of 36.33
   iv. Southbound – 729 total vehicles with 85th percentile speed of 29.20

   The combined 85th percentile speed was calculated to be 32.71, which is 2.71 mph over the posted speed of 30 mph. Therefore, this criterion is not met.

B. The 24-hour two-way traffic volume is greater than 1000:

   The 24-hour two-way traffic volumes were calculated to be 894 and 1,104; therefore, this criterion is met.

C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day:

   The Cut-Through Traffic data collected indicates 105 total vehicles in the peak hour including 21 cut-through vehicles which equates to 20% of the traffic in the peak hour being cut-through traffic; therefore, this criterion is not met.

D. Where no single condition is satisfied, but where any two of A, B, or C above are satisfied to the extent of 80 percent or more of the stated values.
The policy requires only one of the criteria to be satisfied. Because the 24-hour volume criterion is satisfied, traffic calming measures are permitted on New Hampshire.

**East 17th Terrace** – Posted Speed 30 mph

A. The collected traffic data:
   i. Eastbound – 81 total vehicles with 85\textsuperscript{th} percentile speed of 27.65
   ii. Westbound – 128 total vehicles with 85\textsuperscript{th} percentile speed of 27.20

The 85\textsuperscript{th} percentile speeds were less than the posted speed of 30 mph. Therefore, this criterion is not met.

B. The 24-hour two-way traffic volume is greater than 1,000:
   i. The 24-hour two-way traffic volume was calculated to be 209; therefore, this criterion is not met.

C. Cut-through traffic comprises more than 50\% of the traffic during the peak hour of the day:

   The Cut-Through Traffic data collected indicates 15 total vehicles in the peak hour including 10 cut-through vehicles which equates to 66.7\% of the traffic in the peak hour being cut-through traffic; therefore, this criterion is met.

D. Where no single condition is satisfied, but where any two of A, B, or C above are satisfied to the extent of 80 percent or more of the stated values.

The policy requires only one of the criteria to be satisfied. Because the Cut-through traffic criterion is satisfied, traffic calming measures are permitted on East 17\textsuperscript{th} Terrace.
Appendix A

Existing Conditions Plan
Appendix B

Proposed Site Plan
Appendix C

ITE Trip Generation Manual Data
Land Use: 850
Supermarket

Description

Supermarkets are free-standing retail stores selling a complete assortment of food; food preparation and wrapping materials; and household cleaning items. Supermarkets may also contain the following products and services: ATMs, automobile supplies, bakeries, books and magazines, dry cleaning, floral arrangements, greeting cards, limited-service banks, photo centers, pharmacies and video rental areas. Some facilities may be open 24 hours a day. Discount supermarket (Land Use 854) is a related use.

Additional Data

_Caution should be used when applying daily trip generation rates for supermarkets, as the database contains a mixture of facilities with varying hours of operation. Future data submissions should specify a site’s hours of operation._

The sites were surveyed between the 1960s and the 2000s throughout the United States.

Source Numbers

2, 4, 5, 72, 98, 203, 213, 251, 273, 305, 359, 365, 438, 442, 447, 448, 514, 520, 552, 577, 610
Land Use: 850  
Supermarket  
*Independent Variables with One Observation*

The following trip generation data are for independent variables with only one observation. This information is shown in this table only; there are no related plots for these data.

Users are cautioned to use data with care because of the small sample size.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Trip Generation Rate</th>
<th>Size of Independent Variable</th>
<th>Number of Studies</th>
<th>Directional Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees Weekday</td>
<td>87.82</td>
<td>44</td>
<td>1</td>
<td>50% entering, 50% exiting</td>
</tr>
</tbody>
</table>
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 4
Average 1000 Sq. Feet GFA: 39
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>102.24</td>
<td>68.65 - 168.88</td>
<td>31.73</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Caution - Use Carefully - Small Sample Size

Fitted Curve Equation: $T = 66.95(X) + 1391.56$

$R^2 = 0.52$
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 5
Average 1000 Sq. Feet GFA: 30
Directional Distribution: 61% entering, 39% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.59</td>
<td>1.00 - 7.78</td>
<td>3.18</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Caution - Use Carefully - Small Sample Size

Fitted Curve Equation: Not given

\[ R^2 = **** \]
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 40
Average 1000 Sq. Feet GFA: 59
Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.50</td>
<td>5.15 - 20.29</td>
<td>4.97</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Fitted Curve Equation: \( \ln(T) = 0.61 \ln(X) + 3.95 \)
\( R^2 = 0.52 \)
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 4
Average 1000 Sq. Feet GFA: 39
Directional Distribution: 49% entering, 51% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.05</td>
<td>5.94 - 12.67</td>
<td>3.96</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Caution - Use Carefully - Small Sample Size

Fitted Curve Equation: \( T = 12.87(X) - 109.76 \)
\( R^2 = 0.91 \)

Trip Generation, 8th Edition 1577 Institute of Transportation Engineers
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 7
Average 1000 Sq. Feet GFA: 37
Directional Distribution: 53% entering, 47% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.85</td>
<td>6.50 - 18.62</td>
<td>4.72</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Fitted Curve Equation: \( T = 8.84(X) + 111.54 \)

\( R^2 = 0.61 \)
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday

Number of Studies: 2
Average 1000 Sq. Feet GFA: 27
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>177.59</td>
<td>168.41 - 190.43</td>
<td></td>
</tr>
</tbody>
</table>

Data Plot and Equation

Caution - Use Carefully - Small Sample Size

Fitted Curve Equation: Not given

Trip Generation, 8th Edition
1579
Institute of Transportation Engineers
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On: Saturday,
Peak Hour of Generator

Number of Studies: 32
Average 1000 Sq. Feet GFA: 67
Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.85</td>
<td>5.78 - 22.60</td>
<td>4.93</td>
</tr>
</tbody>
</table>

Data Plot and Equation

Fitted Curve Equation: Not given

R² = ****
Supermarket
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Sunday

Number of Studies: 2
Average 1000 Sq. Feet GFA: 27
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>166.44</td>
<td>150.52 - 177.81</td>
<td>*</td>
</tr>
</tbody>
</table>

Data Plot and Equation

\[ T = \text{Average Vehicle Trip Ends} \]

\[ X = 1000 \text{ Sq. Feet Gross Floor Area} \]

\[ \text{Fitted Curve Equation: Not given} \]

\[ R^2 = **** \]

Caution - Use Carefully - Small Sample Size

Trip Generation, 8th Edition 1581 Institute of Transportation Engineers
Supermarket  
(850)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area  
On a:  Sunday,  
Peak Hour of Generator

Number of Studies:  2  
Average 1000 Sq. Feet GFA:  27  
Directional Distribution:  Not available

Trip Generation per 1000 Sq. Feet Gross Floor Area

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.93</td>
<td>17.79 - 19.75</td>
<td></td>
</tr>
</tbody>
</table>

Trip Generation, 8th Edition  
Institute of Transportation Engineers
Appendix D

Distributed Trips
EXISTING SITE
PM PEAK HOUR TRAFFIC VOLUMES
TOTAL TRIPS = 431

TOTAL MASSACHUSETTS TRIPS = 337

PROPOSED SITE
PM PEAK HOUR TRAFFIC VOLUMES
TOTAL TRIPS = 528

TOTAL MASSACHUSETTS TRIPS = 412
TOTAL NEW HAMPSHIRE TRIPS = 116
Appendix E

Traffic Count Data
Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Lawrence
Street: 1700 N H

A study of vehicle traffic was conducted with HI-STAR unit number 1934. The study was done in the NB lane at 1700 N H in Lawrence, Ks in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 675 vehicles passed through the location with a peak volume of 24 on Jan/24/11 at [15:45-16:00] and a minimum volume of 0 on Jan/25/11 at [00:30-00:45]. The AADT count for this study was 675.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 20 - 30 MPH range or lower. The average speed for all classified vehicles was 22 MPH with 4.54% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 2.06 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 20MPH and the 85th percentile was 33.29 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>19</th>
<th>29</th>
<th>39</th>
<th>49</th>
<th>59</th>
<th>69</th>
<th>79</th>
<th>89</th>
<th>99</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>216</td>
<td>78</td>
<td>12</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 384 which represents 79 percent of the total classified vehicles. The number of Vans & Pickups in the study was 95 which represents 20 percent of the total classified vehicles. The number of Busses & Trucks in the study was 3 which represents 1 percent of the total classified vehicles. The number of Tractor Tailers in the study was 3 which represents 1 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>14</th>
<th>24</th>
<th>39</th>
<th>49</th>
<th>69</th>
<th>79</th>
<th>139</th>
<th>&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>384</td>
<td>85</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/24/11 at [15:45-16:00] the average headway between vehicles was 36 seconds. During the slowest traffic period, on Jan/25/11 at [00:30-00:45] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 25.00 and 48.00 degrees F. The HI-STAR determined that the roadway surface was Dry 27.08% of the time.
A study of vehicle traffic was conducted with HI-STAR unit number 8821. The study was done in the SB lane at 1700 N H in Lawrence, Ks in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 219 vehicles passed through the location with a peak volume of 11 on Jan/24/11 at [16:45-17:00] and a minimum volume of 0 on Jan/24/11 at [19:15-19:30]. The AADT count for this study was 219.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 20 - 30 MPH range or lower. The average speed for all classified vehicles was 26 MPH with 9.58% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 4.79 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 20MPH and the 85th percentile was 36.43 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>19</th>
<th>29</th>
<th>39</th>
<th>49</th>
<th>59</th>
<th>69</th>
<th>79</th>
<th>89</th>
<th>99</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>36</td>
<td>87</td>
<td>28</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 120 which represents 72 percent of the total classified vehicles. The number of Vans & Pickups in the study was 45 which represents 27 percent of the total classified vehicles. The number of Busses & Trucks in the study was 2 which represents 1 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>14</th>
<th>24</th>
<th>39</th>
<th>49</th>
<th>69</th>
<th>79</th>
<th>139</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>120</td>
<td>41</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/24/11 at [16:45-17:00] the average headway between vehicles was 75 seconds. During the slowest traffic period, on Jan/24/11 at [19:15-19:30] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 23.00 and 50.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
A study of vehicle traffic was conducted with HI-STAR unit number 1929. The study was done in the NB lane at 1700 N H in Lawrence, Ks in Douglas county. The study began on Jan/25/11 at 15:30 and concluded on Jan/26/11 at 15:30, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 375 vehicles passed through the location with a peak volume of 17 on Jan/25/11 at [18:45-19:00] and a minimum volume of 0 on Jan/25/11 at [20:15-20:30]. The AADT count for this study was 375.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 20 - 30 MPH range or lower. The average speed for all classified vehicles was 26 MPH with 8.49% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 4.80 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 20MPH and the 85th percentile was 36.33 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>&lt; 20</th>
<th>20 to 29</th>
<th>30 to 39</th>
<th>40 to 49</th>
<th>50 to 59</th>
<th>60 to 69</th>
<th>70 to 79</th>
<th>80 to 89</th>
<th>90 to 99</th>
<th>100 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>149</td>
<td>49</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 192 which represents 71 percent of the total classified vehicles. The number of Vans & Pickups in the study was 76 which represents 28 percent of the total classified vehicles. The number of Busses & Trucks in the study was 1 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 2 which represents 1 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>&lt; 15</th>
<th>15 to 24</th>
<th>25 to 39</th>
<th>40 to 49</th>
<th>50 to 69</th>
<th>70 to 79</th>
<th>80 to 139</th>
<th>140 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>192</td>
<td>71</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/25/11 at [18:45-19:00] the average headway between vehicles was 50 seconds. During the slowest traffic period, on Jan/25/11 at [20:15-20:30] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 25.00 and 54.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
A study of vehicle traffic was conducted with HI-STAR unit number 6982. The study was done in the SB lane at 1700 N H in Lawrence, Ks in Douglas county. The study began on Jan/25/11 at 15:30 and concluded on Jan/26/11 at 15:30, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 729 vehicles passed through the location with a peak volume of 29 on Jan/25/11 at [18:45-19:00] and a minimum volume of 0 on Jan/25/11 at [23:30-23:45]. The AADT count for this study was 729.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 20 - 30 MPH range or lower. The average speed for all classified vehicles was 22 MPH with 2.58% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 0.16 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 20MPH and the 85th percentile was 29.20 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>CHART 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20</td>
<td>158</td>
</tr>
<tr>
<td>20 to 29</td>
<td>400</td>
</tr>
<tr>
<td>30 to 39</td>
<td>46</td>
</tr>
<tr>
<td>40 to 49</td>
<td>11</td>
</tr>
<tr>
<td>50 to 59</td>
<td>4</td>
</tr>
<tr>
<td>60 to 69</td>
<td>0</td>
</tr>
<tr>
<td>70 to 79</td>
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<tr>
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</tr>
<tr>
<td>90 to 99</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 100</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 467 which represents 75 percent of the total classified vehicles. The number of Vans & Pickups in the study was 153 which represents 25 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>CHART 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 15</td>
<td>467</td>
</tr>
<tr>
<td>15 to 24</td>
<td>148</td>
</tr>
<tr>
<td>25 to 39</td>
<td>5</td>
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<tr>
<td>40 to 49</td>
<td>0</td>
</tr>
<tr>
<td>50 to 69</td>
<td>0</td>
</tr>
<tr>
<td>70 to 79</td>
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</tr>
<tr>
<td>80 to 139</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 140</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/25/11 at [18:45-19:00] the average headway between vehicles was 30 seconds. During the slowest traffic period, on Jan/25/11 at [23:30-23:45] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 25.00 and 52.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
New Hampshire Street
17th Street to 19th Street
Cut-Through Traffic Study
16 March 2011
1600-1700

<table>
<thead>
<tr>
<th>Time</th>
<th>Destination NB</th>
<th>Destination SB</th>
<th>Cut-Through NB</th>
<th>Cut-Through SB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600-1615</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>1615-1630</td>
<td>9</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>1630-1645</td>
<td>8</td>
<td>15</td>
<td>3</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>1645-1700</td>
<td>15</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>42</td>
<td>10</td>
<td>11</td>
<td>105</td>
</tr>
</tbody>
</table>

% Cut-Through = \( \frac{21}{105} = 20.00\% \)
A study of vehicle traffic was conducted with HI-STAR unit number 6981. The study was done in the EB lane at E 17th Terr in Lawrence, KS in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 81 vehicles passed through the location with a peak volume of 5 on Jan/24/11 at [11:00-11:15] and a minimum volume of 0 on Jan/24/11 at [13:15-13:30]. The AADT count for this study was 81.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 19 MPH range or lower. The average speed for all classified vehicles was 17 MPH with 1.61% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 1.61 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 19 MPH and the 85th percentile was 27.65 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>19</th>
<th>29</th>
<th>39</th>
<th>49</th>
<th>59</th>
<th>69</th>
<th>79</th>
<th>89</th>
<th>99</th>
<th>&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME</td>
<td>39</td>
<td>17</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 51 which represents 82 percent of the total classified vehicles. The number of Vans & Pickups in the study was 11 which represents 18 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>15 to 24</th>
<th>25 to 39</th>
<th>40 to 49</th>
<th>50 to 69</th>
<th>70 to 79</th>
<th>80 to 99</th>
<th>100 to 140</th>
<th>&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME</td>
<td>51</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/24/11 at [11:00-11:15] the average headway between vehicles was 150 seconds. During the slowest traffic period, on Jan/24/11 at [13:15-13:30] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 21.00 and 56.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
A study of vehicle traffic was conducted with HI-STAR unit number 4522. The study was done in the WB lane at E 17th Terr in Lawrence, Ks in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 128 vehicles passed through the location with a peak volume of 8 on Jan/24/11 at [17:00-17:15] and a minimum volume of 0 on Jan/24/11 at [13:00-13:15]. The AADT count for this study was 128.

SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 20 - 30 MPH range or lower. The average speed for all classified vehicles was 18 MPH with 0.00% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 0.00 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 20MPH and the 85th percentile was 27.20 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>19</th>
<th>29</th>
<th>39</th>
<th>49</th>
<th>59</th>
<th>69</th>
<th>79</th>
<th>89</th>
<th>99</th>
<th>&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>50</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

CHART 1

CLASSIFICATION

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 77 which represents 77 percent of the total classified vehicles. The number of Vans & Pickups in the study was 23 which represents 23 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>14</th>
<th>24</th>
<th>34</th>
<th>44</th>
<th>54</th>
<th>64</th>
<th>74</th>
<th>84</th>
<th>94</th>
<th>104</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

CHART 2

HEADWAY

During the peak traffic period, on Jan/24/11 at [17:00-17:15] the average headway between vehicles was 100 seconds. During the slowest traffic period, on Jan/24/11 at [13:00-13:15] the average headway between vehicles was 900 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 23.00 and 52.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
17th Terrace
Barker Avenue to New Hampshire Street
Cut-Through Traffic Study
10 March 2011
1700-1800

<table>
<thead>
<tr>
<th>Time</th>
<th>Destination WB</th>
<th>Destination EB</th>
<th>Cut-Through WB</th>
<th>Cut-Through EB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700-1715</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td></td>
<td>4</td>
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<tr>
<td>1715-1730</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>1730-1745</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1745-1800</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>15</td>
</tr>
</tbody>
</table>

% Cut-Through = \( \frac{10}{15} \) = 0.6667
A study of vehicle traffic was conducted with HI-STAR unit number 8820. The study was done in the EB lane at E 18th in Lawrence, KS in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 131 vehicles passed through the location with a peak volume of 9 on Jan/24/11 at [17:15-17:30] and a minimum volume of 0 on Jan/24/11 at [12:45-13:00]. The AADT count for this study was 131.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 19 MPH range or lower. The average speed for all classified vehicles was 13 MPH with 1.04% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 1.04 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 19 MPH and the 85th percentile was 20.67 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>&lt; 19</th>
<th>20 to 29</th>
<th>30 to 39</th>
<th>40 to 49</th>
<th>50 to 59</th>
<th>60 to 69</th>
<th>70 to 79</th>
<th>80 to 89</th>
<th>90 to 99</th>
<th>100 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 84 which represents 88 percent of the total classified vehicles. The number of Vans & Pickups in the study was 12 which represents 13 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>&lt; 15</th>
<th>25 to 39</th>
<th>40 to 49</th>
<th>50 to 69</th>
<th>70 to 79</th>
<th>80 to 89</th>
<th>140 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/24/11 at [17:15-17:30] the average headway between vehicles was 90 seconds. During the slowest traffic period, on Jan/24/11 at [12:45-13:00] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 21.00 and 48.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
A study of vehicle traffic was conducted with HI-STAR unit number 6895. The study was done in the WB lane at E 18th in Lawrence, KS in Douglas county. The study began on Jan/24/11 at 11:00 and concluded on Jan/25/11 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 137 vehicles passed through the location with a peak volume of 7 on Jan/24/11 at [17:00-17:15] and a minimum volume of 0 on Jan/24/11 at [13:45-14:00]. The AADT count for this study was 137.

**SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 19 MPH range or lower. The average speed for all classified vehicles was 16 MPH with 1.71% vehicles exceeding the posted speed of 30 MPH. The HI-STAR found 0.00 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 19 MPH and the 85th percentile was 27.00 MPH.

<table>
<thead>
<tr>
<th>SPEED</th>
<th>&lt; 20</th>
<th>20 to 39</th>
<th>40 to 59</th>
<th>60 to 79</th>
<th>80 to 99</th>
<th>100 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71</td>
<td>40</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 79 which represents 68 percent of the total classified vehicles. The number of Vans & Pickups in the study was 38 which represents 32 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Tailers in the study was 0 which represents 0 percent of the total classified vehicles.

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>&lt; 15</th>
<th>15 to 24</th>
<th>25 to 39</th>
<th>40 to 49</th>
<th>50 to 69</th>
<th>70 to 99</th>
<th>140 to &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79</td>
<td>34</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HEADWAY**

During the peak traffic period, on Jan/24/11 at [17:00-17:15] the average headway between vehicles was 112.5 seconds. During the slowest traffic period, on Jan/24/11 at [13:45-14:00] the average headway between vehicles was 900 seconds.

**WEATHER**

The roadway surface temperature over the period of the study varied between 23.00 and 48.00 degrees F. The HI-STAR determined that the roadway surface was Dry 100.00% of the time.
## Mid-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>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 12</td>
<td>Housing Trends</td>
<td>Jan 24</td>
</tr>
<tr>
<td>Feb 9</td>
<td>Complete Streets</td>
<td>Jan 26</td>
</tr>
<tr>
<td>Mar 16 - 8AM start</td>
<td>Historic Preservation &amp; H2020 - Chapter 11 Update</td>
<td>---</td>
</tr>
<tr>
<td>Apr 13</td>
<td>Canceled</td>
<td>Feb 23</td>
</tr>
<tr>
<td>May 11</td>
<td>APA Conference follow-up</td>
<td>Mar 28, Mar 30</td>
</tr>
<tr>
<td>Jun 3-4 - Fri/Sat</td>
<td>PC Training – all day Friday (half day Saturday, if needed)</td>
<td>Apr 25, Apr 27</td>
</tr>
<tr>
<td>Jul 13</td>
<td></td>
<td>May 23, May 25</td>
</tr>
<tr>
<td>Aug 10</td>
<td></td>
<td>Jun 20, Jun 22</td>
</tr>
<tr>
<td>Sep 14</td>
<td></td>
<td>Jul 25, Jul 27</td>
</tr>
<tr>
<td>Oct 12</td>
<td></td>
<td>Aug 22, Aug 24</td>
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<tr>
<td>Nov 2</td>
<td></td>
<td>Sep 26, Sep 28</td>
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<tr>
<td>Nov 30</td>
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<td>Oct 24, Oct 26</td>
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<td>Nov 30</td>
<td></td>
<td>Nov 14, Nov 16</td>
</tr>
<tr>
<td>Nov 30</td>
<td></td>
<td>Dec 12, Dec 14</td>
</tr>
</tbody>
</table>

**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.

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

Revised 03/03/11
Memorandum  
City of Lawrence  
Douglas County  
Planning & Development Services  

TO: Lawrence Douglas County Metropolitan Planning Commission  
Eudora Planning Commission  
FROM: Planning Staff  
CC: City of Eudora  
Applicant  
Date: April 11, 2011  

RE: CUP-10-6-10 (Kaw Valley Sand Dredging follow up meeting)  

This memo summarizes information requested by the Planning Commissions at the February meeting and includes a list of possible conditions of approval for the Commission’s consideration. Staff’s recommendation has not been revised from the February edition of the staff report. There are several attachments to this memo including the February 23, 2011 staff report. 

Attachments  
1. Site Plan  
2. Reclamation Plan  
3. Well Report Revised March 31, 2011 (Carl Nuzman)  
4. Memo from County Public Works Director “Existing rock jetties situated within subject property”  
5. Memo from County Public Works Director regarding N 1500 Road improvements  
6. Travel Route Map  
7. Eudora Memo dated April 18, 2011  
9. February 2011 Staff Report  
11. February Planning Commission Minutes  

Summary of Requested Information  
Following the February Planning Commission meeting, staff identified several topics that the Planning Commissions requested additional information about. Staff met with the applicant and a representative of the City of Eudora on March 3, 2011. 

The following topics were discussed: 

- Impact of the proposed use on the wells supplying water to the City of Eudora.  
- Impact of the proposed use on the river and land if the jetties are removed a possible harm to the river bridge.
• Impact of the project on the river/project by establishing an easement (setback) from the Jetties across the property.
• Impact of the project on the roads with detail about specific required improvements.

Wells
The applicant prepared a second well report. This report examines the impact of possible effects of the sand pit operation proposed by Kaw Valley Companies, Inc on the City of Eudora water supply wells. The March 31, 2011 study concludes that the proposed operation will have no effect on the Eudora wells or water supply.

Jetty
This project has been revised to leave the two jetties located on the subject property intact. The impact then is eliminated. The revised plan shows a setback of 100’ centered on the jetty that will protect the structure and the toe of the structure from proposed dredging operations. The site plan also shows an access drive around the perimeter of the site for maintenance access to the jetties. A memo from Keith Browning, County Public Works Director is attached to this memo.

Easement / Setback for Jetty
As noted, a setback is shown on the face of the site plan to protect the structures. The County has an existing “blanket easement” across the entire property. No changes to this easement are proposed with this project. The County will retain the right to access the property for the maintenance of the existing structures. The site plan provides a location and specified access that is generally agreeable to County Staff for access required to continue maintenance of the structures.

Roads
The traffic study indicated that a majority of the traffic will be north bound. Only two trips per day (average) are expected to pass through the City of Eudora and three trips per day are expected to be west bound using County roads. A map is attached to graphically illustrate this concept.

The County Public Works Director has provided a memo (attachment) detailing anticipated costs for required road stabilization to support the truck traffic, if approved.

Conclusion:
Staff has provided a summary of additional information as requested by the Planning Commissions. Staff’s recommendation has not been revised from the February publication of the original staff report. Staff’s recommendation is as follows:

**STAFF RECOMMENDATION:**
Staff recommends the Planning Commissions forward recommendations for denial of this Conditional Use Permit to the Board of County Commissioners based on the findings of fact in the staff report.
Conditions of Approval for Consideration:

Possible conditions of approval that may be considered by the Planning Commission are as follows:

1. Provision of a note on the face of the site plan that states application shall be required to obtain all applicable state and federal permits prior to operation of the dredging activity.
2. Provision of road improvements and financing per the memo prepared by the County Public Works Director dated April 2, 2011 to include the proposed $0.10 per ton royalty provided for ongoing maintenance for this portion of N 1500 Road. Such improvements shall be completed prior to dredging activity that requires off-site hauling of material.
3. Applicant is responsible for dust control between the subject property and the intersection of Co. Road 1061 and N 1500 Road.
4. Provision of a landscape plan to show the species of trees proposed, minimum planting size, total number, and proposed spacing of trees per section 12-319A-4.10 of the County Zoning Regulations per planning staff approval.
   a. Screening trees shall be planted along the public right-of-way
   b. Screening trees shall be planted along south 700 fee of the east property line to screen the processing plant and stockpiles from the adjacent property.
   c. Screening trees shall be planted a minimum of 30’ on center.
Evaluation of Kaw Valley Companies, Inc.,
Proposed Sand Pit Operation on Ground Water
in the Vicinity of Eudora, KS

For

Kaw Valley Companies, Inc.
Alan Teutemacher, General Manager of Sand
5600 Kansas Avenue
Kansas City, Kansas 66106

Sand 913 287 0035
Cell 913 915 7444

By

Carl E. Nuzman, P.E., P.Hg.
Consulting Engineer/Hydrogeologist
3314 NW Huxman Road
Silver Lake, Kansas 66539-9243

Phone 785 224 9929
Fax 785 582 4155

February 11, 2011
Revised
March 31, 2011
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2. GEOLOGIC SITUATION

3. HYDROLOGIC SITUATION

4. SAFE YIELD ANALYSIS

5. AQUIFER PROPERTIES

6. WICHITA SAND PIT STUDY

7. CONCLUSION

EXHIBITS

A. Eudora Sand Facility   Conditional Use permit Site Plan #2
B. Kaw Valley Eudora Sand Facility Eudora City Well Exhibit
C. West to East Geologic Cross-Section along N 1500 Road
D. WWC-5 Water Well Record for City of Eudora Well No. 8
E. Cone of Depression around a Pumping Well
F. Distance-Drawdown Semi-Log Plot of Eudora Wells No’s. 6, 7 & 8
G. Radius of Influence, illustrated
H. Generalized Static Water Table
I. Drawdown at Peak Day Pumpage of 1.4 MGD
J. Groundwater Flow Paths to Eudora Wells at 227.77 MGY Pumpage

APPENDICES

I.    WC-5 Water Well Logs Sections 5 & 6, T-13S, R21E, & Sections 31 & 32, T-2S, R-21E, in Douglas County, KS

II.   KDA, Division of Water Resources, Safe Yield Analysis Data

III.  Carl E. Nuzman, Resume’ and Personal Information
1. INTRODUCTION

In response to a concern by a citizen of the City of Eudora, a study and evaluation of the possible effects of the sand pit operation proposed by Kaw Valley Companies, Inc. on the City of Eudora water supply wells is the subject of this report. Kaw Valley Companies, Inc. proposes to establish a sand mining operation north of the City of Eudora in the SW ¼ of Section 32, Township 12 South, Range 21 East in Douglas County, Kansas, next to the Kansas River as shown in Exhibit A. The site was formerly developed for a 9-hole golf course and currently is not used for agricultural production of crops.

The City of Eudora has a group of four (4) wells westerly of the proposed sand mining site as their primary water supply, and an existing irrigation well exists in the vicinity as shown in Exhibit B.

2. GEOLOGIC SITUATION

The Quaternary Geology and Ground-Water Resources of the Kansas River Valley Between Bonner Springs and Lawrence, Kansas, by Alvin E. Dufford has been studied by the Kansas Geologic Survey, Bulletin 130, Part 1, University of Kansas Publications 1958 located in Lawrence, KS. The valley itself narrows from more than three (3) miles wide to less than two (2) miles wide at Eudora. The Wakarusa River hugs the south boundary of the Kansas River valley in the vicinity of Eudora, while the Kansas River leaves the north side of the valley and meanders across the valley to the south edge at Eudora and then meanders back to the north side east of Eudora. The Kansas River valley has a general eastward slope of about 3 feet per mile with low dissected hills bounding the flood plain on both sides.

The valley alluvium that comprises the aquifer consists principally of sand, but contains lenses of both coarser and finer material. Generally, the saturated thickness of the aquifer is about 40 feet to 50 feet in the vicinity of the City wells, but thins to about 30 feet in saturated thickness, in the vicinity of the proposed sand mining operation. Well logs can be found in Appendix I from the WWC-5 forms filed at the Kansas Geologic Survey water well log file in Lawrence, KS. In Exhibit C, is a geologic west to east, cross-section along North 1500 Road which shows the geology from the well logs obtained.

3. HYDROLOGIC SITUATION

The Eudora area has a humid continental climate. Normally, more than 70% of the annual precipitation of 39 inches falls during the growing season, April through September, precipitation during this period is usually from thunderstorms (high intensity rainfall of brief duration) in the evening and early morning hours. The mean hourly wind speed is about 10 miles per hour, and the sun usually shines more than 60% of the daylight hours.
The Kansas River, which flows in an easterly direction, is the principal stream in the area. The Army Corps of Engineers normally maintains a minimum desirable stream flow of 1,000 cubic feet per second (cfs) at the DeSoto gaging station on the Kansas River. The Wakarusa River is hydrologically an important tributary stream because it is a major source of recharge to the alluvial aquifer.

4. SAFE YIELD ANALYSIS

The safe yield available for appropriation from an unconfined aquifer at a specific location is determined by the amount of average annual precipitation that becomes recharge to the aquifer occurring within the area of consideration by the chief engineer of the Division of Water Resources, Kansas Department of Agriculture. The area of consideration means the portion of the aquifer area that lies within a two-mile radius circle with the proposed point of interest (the sand pit) as the geo-center.

Although a safe yield analysis is not required for a sand pit operation in the Kansas River Basin by the Division of Water Resources, Kansas Department of Agriculture, such an appraisal was made to identify all registered ground water appropriators within a two (2) mile radius of the proposed sand pit operation. There were 15 identified ground water users of which five (5) pertained to the City of Eudora wells. The four (4) Northwest wells are shown on Kaw Valley Eudora Sand Facility, Eudora City Well Exhibit B. These data are given in Appendix II. The City Well No. 6 and the Neis irrigation well are both ½ mile from the Phase 1 planned mining by Kaw Valley Companies, Inc.

Based on established recharge rates by the Division of Water Resources, the safe yield for the 2-mile circle is 2,749.76 acre-feet, using 9.21 inches per year as the average recharge rate to the aquifer in this area. The prior appropriation in the circle is 1,629.50 acre-feet of which 43% (699 ac-ft or 227.77 MGY) is for municipal appropriation including future water use for population growth. The remainder of the 930.5 ac-ft appropriated in this area is for irrigation of which only about ½ is used in any particular year then only for about 6 weeks from July into September. The un-appropriated water available for future use is 40.7% of the total available in this area of consideration.

City of Eudora original well No. 1 has long since been abandoned. Plugging reports have been filed for Wells No. 2, 3 and 4 showing these wells to be abandoned, are included in Appendix I. The status of well No. 5 which is located within the north city limits of Eudora is unknown but believed to be serviceable. The City of Eudora's annual pumpage for the calendar year of 2009 was 186,781 million gallons per year (MGY) or 573.2 acre feet. Eudora well No. 6 has been certified by the Division of Water Resources, file No. 38,063, to a permanent water right for an amount of 69.777 MGY to be diverted at a rate not to exceed 325 gallons per minute. Eudora well No. 7 is covered by File No. 38,064. Well No. 8 is covered by File No. 42,939. Well No. 9 which was placed in service in 2005 is covered by File No. 45,800. The total authorized annual pumpage of all water rights on file for the City of Eudora with the Division of Water Resources of the Kansas Department of Agriculture is 227.77 MGY or 699 acre feet per year.
5. AQUIFER PROPERTIES

You do not get water from a well. A well is a stabilized hole in the ground to gain access to water bearing material called an aquifer. The yield of an aquifer is controlled by the permeability of the geologic formation and the thickness of that permeable formation. The yield of a well can never be greater than that of the aquifer and usually less depending upon the efficiency of well construction and development. A well can decrease in yield due to biological fouling and lack of proper maintenance but unless the static water level has a substantial decline reducing the saturated thickness, the yield available from the aquifer remains constant.

Data from the WWC-5 report for City Well No 8, shown in Exhibit D was used to estimate the properties of the aquifer. The reported drawdown was 4 feet after 11 hours of pumping at 521 gallons per minute (gpm). These values give a well specific capacity of 130 gpm/foot of drawdown when constructed. This value is used to estimate the transmissivity of the aquifer which is 220,000 gpd/ft. Utilizing the 25 feet of well screen installed which is less than the formation thickness, the calculated formation permeability is 8,800 gpd/ft², a very good formation value. Typical average value of formation permeability for the Kansas River valley alluvium is about 5,000 gpd/ft², with a maximum value observed of 10,000 gpd/ft². Additional data was found for City wells No. 6 and No. 7. The original specific capacity for well No. 6 was 101.7 gpm/foot of drawdown. The estimated formation transmissivity of the aquifer at well No. 6 location is 172,900 gpd/ft. The original well specific capacity for well No. 7 was 126.8 gpm/ft which gives an estimated formation transmissivity of 215,600 gpd/ft.

When a well is pumped, the pump energy creates a partial vacuum that causes a cone of depression to develop around the bore hole [Reference exhibit No. E]. The bore hole for the construction of Well No. 8 was reported to be 42 inches which gives a well radius of 1.75 feet. Using the formation transmissivity value of 220,000 gpd/ft, the drawdown per log cycle was calculated to be 1.0 foot for a pumping rate of 325 gpm, which is the maximum authorized pumping rate established for well No. 6. This information was then plotted on a semi-log plot to obtain the radius of influence for well 6, well 7 and well 8, Reference Exhibit F. The zero (0) drawdown for wells 6 & 7 was 2,400 feet and 2,100 feet for well 8 [Reference exhibits F & G]. Drawdown values of less than 1 foot are considered insignificant since annual variations of static water level may vary more than 2 feet in a year due to weather conditions. The 1-foot drawdown occurs at a radius from 130 to 260 feet for each of the wells shown in Exhibit F. The basic assumptions in Exhibit F assume the world is flat and the aquifer conditions are perfect. The approximate 1,000 feet distance between City wells minimizes the mutual interference effects from simultaneous pumping of these wells.

Simple model system was developed using the analytical-element method often used in modeling well-head protection. The State Geological Survey of Kansas had experienced geologists investigate the Kansas River valley geology and ground water resources from Bonner Springs to the vicinity of Manhattan. The reach of special interest is contained in Bulletin 130, Part 1, Quaternary Geology and Ground-Water Resources of Kansas River Valley between Bonner Springs and Lawrence, Kansas. At that time, the Kansas Geological Survey had their own small drilling rig in which to drill test holes. Many of the data points used in the model were from this work dated back to the 1940’s and 1950’s.
Figure 3 in Bulletin 130, Part 1 is the basis for the development of Exhibit H, a generalized static water table of the area of interest. In the 1950's there was no pumpage in this area of interest which gives a good representation of pre-development conditions for the aquifer. Since the measurements upon which Figure 3 was based occurred over a period of years, exact replication of the water level elevations was not possible. Using statistical analysis, a very reasonable simulation of the water table gradient was obtained.

The model was then used to simulate the probable maximum 3-day pumping rate of 1.4 million gallons per day to obtain the area of direct influence of the City of Eudora well field. You will note that the area of 1 foot drawdown for the City of Eudora's peak pumpage is not circular but egg shaped extending more up-gradient to the west than to the east toward the sand pit. In fact the 1.0 foot drawdown, considered the point of significance is still a few hundred feet from the corner of the pit property. Set-back of the pit mining from the property boundaries further extends this distance. Average annual pumping rate is estimated at 60% of peak day rate. Thus the development of the drawdown simulated in Exhibit I is a representation of the maximum drawdown expected in the future.

A feature of the model called particle tracking was then used to plot the movement of water in the aquifer to each of the four wells shown in Exhibit J. Based on the maximum allowable pumpage of 227.77 MGY authorized by the City's water rights on file with the Division of Water Resources, the travel time of water in the aquifer was calculated. The time period selected was 10 years. Each little collar around the straw like flow path lines represents one (1) year of flow. Due to the hydraulic gradient of the valley aquifer system and recharge to the aquifer from rainfall, no water enters the wells from the direction of the proposed sand pit. The City's concern in regard to protecting the future quality of water from their well field must focus on the area west of the wells.

In so far as contaminant in the aquifer, the water movement is from west to east in a down-gradient direction. This means that if any contaminants were to occur at the sand pit, they would move into the Kansas River or remain in the aquifer system down-gradient (Easterly). The estimated travel time in the Kansas River alluvium aquifer, based on the formation transmissivity and land surface gradient is 0.7 feet/day or about 8.4 inches per day.

The static water level elevation in the sand pit will be about the same as the water surface elevation in the Kansas River. Sand pit lakes that are within the effective radius of influence of a water well support the water production from a well during drought conditions due to the increase of lake water storage which is 5 times greater than the water storage yield capacity of the aquifer itself. This storage yield effect is applicable to any unconsolidated aquifer.

Water pumped by the sand dredge is piped to the sand separator, then diverted to a sediment pond, and then returned to the sand pit. Storm water runoff from local precipitation is diverted around the pit to the Kansas River. Berms and a grass swale will be provided on the west and south sides of the sand pit for the diversion of local storm water.
6. WICHITA SAND PIT STUDY

Sedgwick County Department of Environmental Resources organized and conducted much of the efforts to determine which sand pits to study in more detail. The study group obtained assistance from the U.W. Bureau of Reclamation in drilling and installing three (3) monitoring wells around each of six (6) sites selected for study. Funds were obtained for the U.S. Geological Survey to sample and analyze surface water from the pits, ground water from the monitoring wells, and pit bottom sediment at four (4) sites located at the northwest edge of Wichita. The USGS analyzed the water samples for 18 physical and chemical properties, five (5) bacteriological values, 40 inorganic constituents, 118 pesticides and degradate compounds, and 134 organic compounds other than pesticides. The USGS analyzed the bottom sediments for five (5) physical and chemical properties, 45 inorganic constituents, and 32 organic compounds. The four pits in the Phase I sampling were; Barefoot Bay, Ridge Port, Mooring, and Cropland. Later two south pits were sampled which were, Kingston Cove and Pine Bay Estates.

Maize retention pond/ground-water pit is used for storage of storm water runoff. A special sampling of the storm water flow into the pit was made by others within 30 minutes of when flow commenced and within one to two hours following a storm event. The TDS of the storm water flow was very low at 49 to 111 mg/L when compared to the computed values in the analysis of data of 46 to 83 mg/L by the Kansas Geological Survey. Organic compounds found in the runoff water of concern was alachlor at 3.8 μg/L in the first June 2007 runoff sample, alachlor of 3.0 μg/L in the second June 2007 sample. The drinking water MCL for alachlor is 2 μg/L. However, in the October 2007 pond sample alachlor was significantly reduced by sunlight and bacterial activity of the pond. The Maize detention pond appears to be an effective means of removing storm water runoff with high bacteria content from the Big Slough waterway.

Storm water runoff into the sand pits does contribute to ground water recharge. The study showed no significant evidence of contamination of ground water by storm water runoff into the pits. The key word is significant contamination. Trace levels of some organics and mineral constituents such as iron, manganese and the ammonium ion were detected in the down gradient monitoring wells in slightly greater concentrations than the up gradient monitoring wells. On the contrary, most organic contaminants were reduced by the sunlight and bacterial activity existing within the sand pit lakes. Bacterial levels were never greater than the level recommended by KDHE for body contact.

Although some of the pits had piped storm water runoff into the pits from streets, broad width flow ways with grass filtering would capture silt and other contaminants prior to entering the ponds or pits. Road side drainage ditches may have a broad width overflow channels into nearby pits temporarily storing the storm water surge allowing orderly flow to the natural water courses. The long term accumulation of silts, sediments and other solids will eventually restrict the recharge to the ground water system as has occurred at the Sedgwick County Zoo pit.

Residential areas have the greater potential for ground water contamination than rural areas. However, the spring runoff from corn fields with atrazine must be bounded by grass filter strips and flows need to be routed in grass waterways to capture sediments with atrazine attached.
In the area of consideration, the herbicide Alachlor, which is used for the control of annual grasses and broadleaf weeds, may be the most prevalent in the vicinity of the sand pit. Alachlor is reduced by sunlight and bacterial activity in the pit lake. The sand pit will have a minimum of 50 feet wide grass filter strip surrounding the pit area. There will be a gentle slope to the grass filter strip away from the active pit area.

7. CONCLUSION

It was found in this study that the proposed sand pit lake that will eventually be developed in this study area will have no effect on the City of Eudora’s wells or water supply. All activity at the proposed sand pit operation is down-gradient from the City wells and of sufficient distance that the operation of the City wells will not in any way draw any potential contaminants into the area of influence of these wells from the sand pit area.

After extensive study and analysis in the Wichita Study, it was concluded that storm water runoff into sand pit lakes was not a threat to any significant contamination of the ground water system. The benefit of ground water recharge to shallow aquifers has the potential to offset the loss of water from evaporation for the average year.

By using runoff from the adjacent areas and routing the storm water flow through broad and relatively flat natural grass filter areas, sediment and most organic contamination can be reduced to manageable levels. Contaminants will naturally degrade in the sand pit lakes as shown by the Kansas Geological Survey study in Wichita.

With Best Management Practices (BMP’s) sand pit lakes can benefit the management of storm water runoff and substantially add to ground water recharge of shallow aquifers. Storm water is very low in minerals and with proper natural filtration for the removal of sediment and organics, ground water recharge through sand pit lakes can improve the overall quality of ground water that is high in dissolved minerals.

There is not complete agreement between State agencies on routing storm water into or around sand pits. Kaw Valley Companies, Inc. is taking the conservative position of providing diversion of local storm water around the sand pit from west side to the south, then eastward to the Kansas River. The plans and work will be reviewed by the State Conservation Commission Director and staff during reclamation following the sand mining operation.
EXHIBITS

A. Eudora Sand Facility  Conditional Use permit Site Plan #2
B. Kaw Valley Eudora Sand Facility Eudora City Well Exhibit
C. West to East Geologic Cross-Section along N 1500 Road
D. WWC-5 Water Well Record for City of Eudora Well No. 8
E. Cone of Depression around a Pumping Well
F. Distance-Drawdown Semi-Log Plot of Eudora Well No. 8 Data
G. Radius of Influence
H. Generalized Static Water Table
I. Drawdown at Peak Day Pumpage of 1.4 MGD
J. Groundwater Flow Paths to Eudora Wells at 227.77 MGY Pumpage
NOTES:
1. CITY WELL LOCATIONS ARE PER "WELL LOCATIONS AND PLACE OF USE, CITY OF EUDORA, KANSAS WATER APPROPRIATION PERMIT APPLICATION," DATED 12-17-2003, PREPARED BY BURNS & MCDONNELL.
2. THE DIMENSIONS SHOWN ARE BASED ON APPROXIMATE WELL LOCATIONS AND HAVE NOT BEEN VERIFIED BY FIELD SURVEY.
**EXHIBIT D**

**WATER WELL RECORD** Form WWG-KS 82a-1212

**1. LOCATION OF WATER WELL:**
- County: DOUGLAS
- Section Number: 10
- Township Number: T 13 S
- Range Number: R 21 (SW)

**2. WATER WELL OWNER:**
- CITY OF EUDORA

**3. LOCATE WELL’S LOCATION WITH AN “X” IN SECTION BOX:**
- Depth of completed well: 72 ft.
- Elevation: 3 ft.

**WELL’S STATIC WATER LEVEL:**
- Depth below land surface measured on m/d/yr: 18 ft.
- Pump test data: Well water was 20 ft. after 0.5 hours pumping
- Est. Yield: 325 gpm
- Bore Hole Diameter: 42 in.

**WELL WATER TO BE USED AS:**
- Public water supply: 5
- Air conditioning: 8
- Injection well: 11

**4. TYPE OF BLANK CASINGS USED:**
- Steel: 3
- PVC: 4
- ABS: 2

**5. TYPE OF SCREEN OR PERFORATION MATERIAL:**
- Stainless steel: 5
- Fiberglass: 6
- Concrete tile: 9

**6. SCREEN OR PERFORATION OPENINGS:**
- Continuous slot: 1
- Mill slot: 3
- Key punched: 6

**7. SCREEN-PERFORATED INTERVALS:**
- From: 47 ft. to 72 ft.
- From: 22 ft. to 72 ft.
- From: 6 ft. to 20 ft.

**8. GROUT MATERIAL:**
- Neat cement: 1
- Cement grout: 2
- Bemontite: 3

**9. CONTRACTOR’S OR LANDOWNER’S CERTIFICATION:**
- This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on m/d/yr: 1/14/98
- Water Well Contractor’s License No: 162
- This Water Well Record was completed on m/d/yr: 8/15/98

**INSTRUCTIONS:** Use typewriter or ball point pens. PLEASE PRINT CLEARLY and legibly. Please fill in blanks, underline or circle the correct answers. Send three copies to Kansas Department of Health and Environment, Bureau of Water, Topeka, Kansas 66620-0001. Telephone: 913-296-6546. Send one to WATER WELL OWNER and retain one for your records.
The Pump Energy creates a partial vacuum that causes a Drawdown or Cone of Depression that is controlled by the Permeability of the surrounding Geologic Formation.
Radius of Influence

Ground Surface

Original Water Table

Cone of Depression

Confined Aquifer

Confining Layer

Impermeable

$Q$

$r_o$

$2r_w$

$H_o$

$r_o$ - Radius of Influence

$r_w$ - Radius of Well

$H_o$ - Static Water Level
APPENDICES

I  WC-5 Water Well Logs Sections 5 & 6, T-13S, R21E, & Sections 31 & 32, T-12S, R-21E, in Douglas County, KS

II.  KDA, Division of Water Resources, Safe Yield Analysis Data

III  Carl E. Nuzman, Resume' and Personal Information
APPENDIX – I

WC-5 Water Well Logs Sections 5 & 6, T-13S, 21E, & Sections 31 & 32, T-12S, R-21E, in Douglas County, KS
**Well #2**

**LOCATION OF WATER WELL:**

- County: Douglas
- Fraction: ¼ NW ¼ SE ¼
- Section: 5
- Township: 13
- Range: 21
- E/W

**WATER WELL OWNER:**

City of Endura

**RR #, St. Address, Box #:** 191 W S

**City, State, ZIP Code:** Endura, KS 66025

Board of Agriculture, Division of Water Resources

Application Number: 112

**DEPT OF WELL:** 68.7 ft.

**WELL’S STATIC WATER LEVEL:** 29 ft.

**WELL WAS USED AS:**

1. Domestic
2. Irrigation
3. Feeder
4. Industrial
5. Public Water Supply
9. Dewatering
10. Monitoring Well
11. Injection Well
12. Other

- Was a chemical/bacteriological sample submitted to Department? Yes ............ No....

- Water Well Disinfected: Yes........ No....

**TYPE OF BLANK CASING USED:**

- Steel
- 3 RMD (SR)
- PVC
- 4 ABS
- 5 Wrought
- 6 Asbestos-Cement
- 7 Fiberglass
- 8 Concrete Tile
- 9 Other (Specify below)

**Blank casing diameter:** 12 in.

**Was casing pulled?** Yes ............ No........

**Casing height above or below land surface:** 4 ft.

**GROUT PLUG MATERIAL:**

- Neat cement
- 2 Cement grout
- 3 Bentonite
- 4 Other

**Grout Plug Intervals:**

- From GL to 69 ft.
- From 69 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.
- From 4 1/2 ft. to 4 1/2 ft.

**What is the nearest source of possible contamination:**

1. Septic tank
2. Sewer lines
3. Watertight sewer lines
4. Lateral lines
5. Cess pool

**From well:** Wast

**How many feet?** 400'

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>69'</td>
<td>Ground level neat cement</td>
</tr>
<tr>
<td>GL</td>
<td>Top of casing in well house neat cement</td>
</tr>
</tbody>
</table>

**CONTRACTOR’S OF LANDOWNER’S CERTIFICATION:**

This water well was plugged under my jurisdiction and was completed on (mo/day/year) 6/1/01 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor’s License No. 10x.

This Water Well Record was completed on (mo/day/year) 5/1/01 under the business name of Lawrence Western Co.

_by (signature)_

**INSTRUCTIONS:**

Use typewriter or ball point pen. Please press firmly and print clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Ste. 420, Topeka, Kansas 66612-1367. Telephone: 785/296-5522. Send one to Water Well Owner and retain one for your records.
**Well #3 Plugged**

**Location of Water Well:**
- County: **Douglas**
- Section Number: **S**
- Township Number: **T 13 S**
- Range Number: **R 21 W**

**Distance and direction from nearest town or city street address of well if located within city:**
- **5th Street West of Main inside city limits.**

**Water Well Owner:**
- **City of Eudora**
- **Eudora KS 66025**

**Locate Well’s Location with an “X” in section box:**
- **Depth of Completed Well:** 6.6 ft.
- **Elevation:** 1237 ft.

**WELL’S STATIC WATER LEVEL:** 27 ft. below land surface measured on mo/day/yr 10-26-87.

**Pump test data:**
- Well water was... ft. after hours pumping...
- Est. Yield...
- Bore Hole Diameter...

**WELL WATER TO BE USED AS:**
- **5 Public water supply**
- **8 Air conditioning**
- **11 Injection well**
- **12 Other (Specify below)**

**Was a chemical/bacteriological sample submitted to Department? Yes No... If yes, mo/day/yr sample was submitted by:**
- **No**

**Type of Blank Casing Used:**
- **1 Steel**
- **2 PVC**
- **3 RMP (SR)**
- **4 ABS**
- **6 Asbestos-Cement**
- **7 Fiberglass**
- **9 Other (specify below)**

**Blank casing diameter:**
- **8 in. to ft. Dia.**

**Casing height above land surface:**
- **lbs./ft.**

**Type of Screen or Perforation Material:**
- **1 Steel**
- **2 Brass**
- **3 Stainless steel**
- **4 Galvanized steel**
- **5 Fiberglass**
- **6 Concrete tile**
- **7 PVC**
- **8 RMP (SR)**
- **9 ABS**

**Screen or Perforation Openings Are:**
- **1 Continuous slot**
- **2 Louvered shutter**
- **3 Mill slot**
- **4 Key punched**
- **5 Gauzed wrapped**
- **6 Wire wrapped**
- **7 Torch cut**
- **8 Saw cut**
- **9 Drilled holes**
- **10 Other (specify)**
- **11 None (open hole)**

**Screen-Perforated Intervals:**
- **From ft. to ft.**

**Gravel Pack Intervals:**
- **From ft. to ft.**

**GROUT Material:**
- **1 Neat cement**
- **2 Cement grout**
- **3 Bentonite**
- **4 Other**

**GROUT Intervals:**
- **From ft. to ft.**

**Lithologic Log:**
- **FROM**
  - **10 6 Sand & Gravel (17 cu ft)**
  - **6 3 Compacted Clay**

**Contractor’s or Landowner’s Certification:**
This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 10-26-87... and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor’s License No.

**Water Well Record was completed on (mo/day/yr) 10-27-87.**

**INSTRUCTIONS:** Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Office of Oil Field and Environmental Geology, Regulation and Permitting Section, Topeka, Kansas 66620-7500, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.
Well #4

LOCATION OF WATER WELL: Douglas

County:  

Fraction: N/NW SE  

Section Number: 5  

Township Number: 13  

Range Number: 21  

E/W

Distance and direction from nearest town or city street address of well if located within city?

NEAR CITY WATER PLANT FROM CITY BARN 172' N, 36' WEST

WATER WELL OWNER: City of Endura

RR #, St. Address, Box #: 101 W 5

City, State, ZIP Code: Endura, KS 66025

Board of Agriculture, Division of Water Resources

Application Number: N/C

MARK WELL’S LOCATION WITH AN “X” IN SECTION BOX:

N
W
S
SW
NE
X

DEPTH OF WELL: 73 ft.

WELL’S STATIC WATER LEVEL: 24.5 ft.

WELL WAS USED AS:

1. Domestic
2. Irrigation
3. Feedlot
4. Industrial
5. Public Water Supply
6. Oil Field Water Supply
7. Domestic (Lawn & Garden)
8. Air Conditioning
9. Dewatering
10. Monitoring Well
11. Injection Well
12. Other

Was a chemical / bacteriological sample submitted to Department? Yes No

If yes, mo/day/yr sample was submitted

Water Well Disinfected: Yes No

TYPE OF BLANK CASING USED:

1. Steel
2. PVC
3. RMP (SR)
4. ABS
5. Wrought
6. Asbestos-Cement
7. Fiberglass
8. Concrete Tile
9. Other (Specify below)

Blank casing diameter: ...................................... in.

Was casing pulled? Yes No

If yes, how much:

Casing height above or below land surface: ...................................... in.

GROUT PLUG MATERIAL:

1. Neat cement
2. Cement grout
3. Bentonite
4. Other


What is the nearest source of possible contamination:

1. Septic tank
2. Sewer lines
3. Watertight sewer lines
4. Lateral lines
5. Cass pool
6. Septage pit
7. Pit privy
8. Sewage lagoon
9. Feedyard
10. Livestock pens
11. Fuel storage
12. Fertilizer storage
13. Insecticide storage
14. Abandoned water well
15. Oil well/Gas well

City Water Plant

Other (specify below)

Other (specify below)

Direction from well? EAST

How many feet? 200

FROM  | TO  | PLUGGING MATERIALS
--- | --- | ---
73' | 20' | Chlorenated Sand
20' | 3' | NEAT CEMENT
3' | 0' | SURFACE MATERIAL

CONTRACTOR’S OF LANDOWNER’S CERTIFICATION: This water well was plugged under my jurisdiction and was completed on (mo/day/year) 9-9-06, and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 102. This Water Well Record was completed on (mo/day/year) 2-1-07 by (signature) LEE L. WESTON, KANSAS CITIES, KS 66610

INSTRUCTIONS: Use typewriter or ball point pen. Please press firmly and print clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Ste. 420, Topeka, Kansas 66612-1367. Telephone: 785/296-5522. Send one to Water Well Owner and retain one for your records.
WATER WELL RECORD

[Form WWG-5] KSA 82a-1212 ID No.

1 LOCATION OF WATER WELL:
County: Douglas
Fraction: SW 1/4 SW 1/4 SW 1/4
Section Number: 5
Township Number: T 13 S
Range Number: R 21 E W

Distance and direction from nearest town or city street address of well if located within city:
1/8 mile west of Eudora

2 WATER WELL OWNER:
Larry Dalrymple
AR# St. Address, Box #: 2102 N. 1400 Rd
City, State, ZIP Code: Eudora, KS 66025

3 LOCATE WELL’S LOCATION WITH:

DEPTH OF COMPLETED WELL: 140 ft. ELEVATION:

AN "X" IN SECTION BOX:

Depth(s) Groundwater Encountered:
1.                        ft. 2.                        ft. 3.                        ft.

WELL’S STATIC WATER LEVEL:
1.1 ft. below land surface measured on 5-13-08

Est. Yield:
2.2 gpm. Well water was:
3.8 ft. after hours pumping:
4.6 gpm.

WELL WATER TO BE USED AS:
5. Public water supply
6. Oil field water supply
7. Domestic (lawn & garden)
8. Air conditioning
9. Injection well
10. Dewatering
11. Other (Specify below)

Was a chemical/bacteriological sample submitted to Department? Yes No

If yes, mg/dl/yr sample was submitted: Water Well Disinfected? Yes No

Was a chemical/bacteriological sample submitted to Department? Yes No

If yes, mg/dl/yr sample was submitted: Water Well Disinfected? Yes No

4 TYPE OF BLANK CASING USED:
1. Steel
2. PVC
3. RMP (SR)
4. ABS
5. Concrete tile
6. Asbestos-Cement
7. Fiberglass
8. RMP (SR)
9. Other (Specify below)
10. Concrete tile
11. Other (Specify below)
12. None used (open hole)

Blind casing diameter:

Casing height above land surface:

Blank casing diameter:

Casing height above land surface:

Type of blank casing:

Blank casing diameter:

Casing height above land surface:

Style of blank casing:

Casing height above land surface:

5 SCREEN OR PERFORATION MATERIAL:
1. Steel
2. Brass
3. Stainless Steel
4. Galvanized Steel
5. Fiberglass
6. RMP (SR)
7. Other (Specify below)
8. Concrete tile
9. ABS
10. Asbestos-Cement
11. Other (Specify below)
12. None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:
1. Continuous slot
2. Louvered shutter
3. Mill slot
4. Key punched

SCREEN-PERFORATED INTERVALS:
From 40 ft. to 60 ft.
From 24 ft. to 140 ft.
From 12 ft. to 140 ft.
From 12 ft. to 140 ft.
From 12 ft. to 140 ft.

6 GROUTING MATERIAL:
1. Neat cement
2. Cement grout
3. Bentonite
4. Other

Grout Intervals:

What is the nearest source of possible contamination:
1. Septic tank
2. Sewer lines
3. Water system
4. Lateral lines
5. Cess pool
6. Septic or cess pool
7. Pit privy
8. Sewage lagoon
9. Sewer line
10. Livestock pens
11. Fuel storage
12. Fertilizer storage
13. Insecticide storage
14. Abandoned well
15. Oil well/Gas well
16. Other (Specify below)

From:
To:

LITHOLOGIC LOG

FROM:
To:

PLUGGING INTERVALS

How many feet? 24

7 CONTRACTOR’S OR LANDOWNER’S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 5-13-08.

Water Well Contractor’s License No: 182

This Water Well Record was completed on (mo/day/year) 5-29-08.

by (signature)

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY AND PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send to two copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5532. Send one to WATER WELL OWNER and retain one for your records. Fee of $25.00 for each constructed well.
**Scan of WWC5 Form**

**Location of Water Well:**
- County: Douglas
- Section Number: 6
- Township: T 13 S
- Range Number: R 21 E

**Water Well Information:**
- Well Owner: Mark Nels
- Address: 12775 County Line Rd.
- City, State, Zip Code: Eudora, KS 66025

**Depth of Completed Well:**
- Depth to Water Surface: 63 ft.
- Water Level Elevation: -12.14 ft.
- Date of Test: 12-14-2001

**Well Static Water Level:**
- Depth: 12.14 ft.
- Pump Test Data: Well water was tested for 14 hours, producing a rate of 0.10 gpm.

**Well Water to be Used As:**
- Public water supply
- Livestock

**Type of Blank Casing Used:**
- Steel
- PVC
- Fiberglass

**Screen or Perforation Material:**
- Steel
- 3 Stainless steel
- 6 Concrete tile
- 3 Stainless steel
- 6 Concrete tile
- 3 Stainless steel
- 6 Concrete tile

**Grout Material:**
- Cement
- Bentonite
- Other

**Location of Well:**
- Direction from Well:
  - Brown silty clay
  - Brown silt
  - Brown fine sand
  - Blue clay
  - Blue fine sand

**Contractor's Landowner's Certification:**
- This well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (month/year) 12-14-2001.
- This well was a completed borehole on (month/year) 1-2-2002.

**Inquiries:**
-KGS, Water Resources Division, 700 SW Boulevard, Topeka, KS 66621
- Telephone: 785-296-3501
- Fax: 785-296-3503

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Kansas Geological Survey
Comments to webadmin@kgs.ku.edu
URL=http://www.kgs.ku.edu/Magellan/WaterWell/index.html
Display Programs Updated July 29, 2004
Data added continuously.

http://abyss.kgs.ku.edu/pls/abyss/wwc5.wwc5d2.scanpage?well_id=325838

1/13/2011
**WATER WELL RECORD** Form WWc-5  KSA 82a-1212

**LOCATION OF WATER WELL:**
- County: DOUGLAS
- Fraction NW NE NE NE NW NW NW NW
- Section Number: 6
- Township Number: T
- Range Number: R 2 E 0

**Distance and direction from nearest town or city, street address of well if located within city:** 1/2 MILES NW OF EULORA

**WATER WELL OWNER:** CITY OF EULORA

**Board of Agriculture, Division of Water Resources**

**Application Number:**

**DISTANCE OF COMPLETED WELL:** 80.0 ft. ELEVATION:

**WELL'S STATIC WATER LEVEL:** 10.5 ft. below land surface measured on mo/day/yr

**Pump test data:**
- Well water was ft. after hours pumping gpm
- Bore Hole Diameter: ft. in. to ft.
- WELL WATER TO BE USED AS:
  - 1 Domestic
  - 2 Irrigation
  - 3 Feedlot
  - 4 Industrial
  - 5 Public water supply
  - 6 Oil field water supply
  - 7 Lawn and garden only
  - 8 Air conditioning
  - 9 Dewatering
  - 10 Observation well
  - 11 Injection well
  - 12 Other (Specify below)

**If a chemical/bacteriological sample submitted to Department? Yes No X**

**WATER WELL DISINFECTED? Yes No X**

**TYPE OF BLANK CASING USED:**
- 1 Steel
- 2 PVC
- 3 RMP (SR)
- 4 ABS

**Blank casing diameter**: in. to ft.

**Casing height above land surface**: in. to ft.

**TYPE OF SCREEN OR PERFORATION MATERIAL:**
- 1 Steel
- 2 Brass
- 3 Stainless steel
- 4 Galvanized steel
- 5 Fiberglass
- 6 Concrete tile
- 7 Plastic
- 8 RMP (SR)
- 9 ABS

**SCREEN OR PERFORATION OPENINGS ARE:**
- 1 Continuous slot
- 2 Louvered shutter
- 3 Mill slot
- 4 Key punched

**SCREEN-PERFORATED INTERVALS:**
- From ft. to ft.
- From ft. to ft.
- From ft. to ft.
- From ft. to ft.

**GRAVEL PACK INTERVALS:**
- From ft. to ft.
- From ft. to ft.
- From ft. to ft.

**GROUT MATERIAL:**
- 1 Neat cement
- 2 Cement grout
- 3 Bentonite

**GROUT INTERVALS:**
- From ft. to ft.
- From ft. to ft.
- From ft. to ft.
- From ft. to ft.

**What is the nearest source of possible contamination:**
- 1 Septic tank
- 2 Sewer lines
- 3 Water pump
- 4 Lateral lines
- 5 Cess pool
- 6 Septage pit
- 7 Pit privy
- 8 Sewage lagoon
- 9 Feedyard
- 10 Livestock pens
- 11 Fuel storage
- 12 Fertilizer storage
- 13 Insecticide storage
- 14 Abandoned water well
- 15 Oil well/Gas well
- 16 Other (Specify below)

**CONTRACTOR OR LANDOWNERS CERTIFICATION:**
This water well was (X) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 7-6-82.

**CONTRACTOR'S OR LANDOWNER'S LICENCE NO.:** LANE WESTERN

**This Water Well Record was completed on (mo/day/year) 7-6-82 by** (Signature) (Lynn)
## TEST LOG

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>MARSH FUNNEL VISCOSITY SECONDS</th>
<th>MUD PIT LOSS INCHES</th>
<th>FORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0'</td>
<td>5.0'</td>
<td></td>
<td></td>
<td>Brown very silty clay</td>
</tr>
<tr>
<td>5.0'</td>
<td>16.0'</td>
<td></td>
<td></td>
<td>Brown fine to very fine silty sand</td>
</tr>
<tr>
<td>16.0'</td>
<td>26.0'</td>
<td></td>
<td></td>
<td>Brown medium to fine sand, trace coarse sand</td>
</tr>
<tr>
<td>26.0'</td>
<td>31.0'</td>
<td></td>
<td></td>
<td>Brown &amp; gray medium to coarse sand, trace fine sand</td>
</tr>
<tr>
<td>31.0'</td>
<td>34.0'</td>
<td></td>
<td></td>
<td>Gray medium to coarse sand, trace fine sand</td>
</tr>
<tr>
<td>34.0'</td>
<td>39.0'</td>
<td></td>
<td></td>
<td>Gray medium to fine sand, trace clay</td>
</tr>
<tr>
<td>39.0'</td>
<td>42.0'</td>
<td>35</td>
<td>1&quot;</td>
<td>Gray medium to coarse sand, trace fine sand &amp; clay</td>
</tr>
<tr>
<td>42.0'</td>
<td>46.5'</td>
<td></td>
<td></td>
<td>Gray medium to fine sand, trace clay</td>
</tr>
<tr>
<td>46.5'</td>
<td>47.5'</td>
<td></td>
<td></td>
<td>Gray silty sandy clay</td>
</tr>
<tr>
<td>47.5'</td>
<td>57.0'</td>
<td>43</td>
<td>2&quot;</td>
<td>Brown gray medium to coarse sand, trace fine sand &amp; gravel</td>
</tr>
<tr>
<td>57.0'</td>
<td>66.0'</td>
<td></td>
<td></td>
<td>Gray very silty clay, soft</td>
</tr>
<tr>
<td>66.0'</td>
<td>69.0'</td>
<td>43</td>
<td>1&quot;</td>
<td>Brown gray medium to coarse sand, trace fine sand &amp; gravel</td>
</tr>
<tr>
<td>69.0'</td>
<td>79.2'</td>
<td>43</td>
<td>1&quot;</td>
<td>Brown gray medium sand w/coarse &amp; fine sand, trace gravel</td>
</tr>
<tr>
<td>79.2'</td>
<td>81.2'</td>
<td></td>
<td></td>
<td>Olive brown clayey shale</td>
</tr>
<tr>
<td>81.2'</td>
<td>84.0'</td>
<td></td>
<td></td>
<td>Light gray shale</td>
</tr>
<tr>
<td>84.0'</td>
<td></td>
<td></td>
<td></td>
<td>Total depth</td>
</tr>
</tbody>
</table>

### NOTES:
- Size of Pit: Portable
- DEEP
- Set 82' of 2" PVC, left 4' above ground, bottom 20' slotted, gravel packed to 15' bentonite slurry to 5', clay to surface. Blew w/air & obtained water sample.
WATER WELL RECORD
Form WWC-5  KSA 82a-1212

1. LOCATION OF WATER WELL:
   County: DOUGLAS
   Fraction: NE 1/4 NW 1/4 NE 1/4
   Section Number: 1
   Township Number: 13 S
   Range Number: 21 E
   Board of Agriculture, Division of Water Resources
   Application Number:

2. WATER WELL OWNER: CITY OF ELIDORA
   RR#, St. Address, Box #: 4 E 1TH ST
   EULIDORA KS 66025

3. LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

4. DEPTH OF COMPLETED WELL: 68.0 ft.
   ELEVATION: 17 ft.
   Depth(s) Groundwater Encountered 1 ft.
   ft. 2 ft. 3 ft. ft. ft.
   WELL'S STATIC WATER LEVEL: 17 ft. below land surface measured on mo/day/yr
   Pump test data: Well water was ft. after hours pumping gpm
   Est. Yield: ft. ft. ft. ft. ft. ft.
   Bore Hole Diameter: ft. ft. ft. ft.
   WELL WATER TO BE USED AS: 5 Public water supply
   8 Oil field water supply
   11 Injection well
   1 Domestic
   3 Feedlot
   8 Air conditioning
   9 Dewatering
   12 Other (Specify below)
   2 Irrigation
   4 Industrial
   7 Lawn and garden only
   10 Observation well
   Was a chemical/bacteriological sample submitted to Department? Yes...
   No...

5. TYPE OF BLANK CASING USED:
   1 Steel
   3 RMP (SR)
   5 Wrought iron
   6 Concrete tile
   7 Fiberglass
   8 Asbestos-Cement
   9 Other (specify below)
   10 Asbestos-cement
   11 Other (specify)
   12 None used (open hole)
   CASING JOINTS: Glued
   Threaded
   Blank casing diameter: in. in. in. in.
   ft. ft. ft. ft.
   Casing height above land surface: in. in. lbs./ft.
   in. weight.
   Wall thickness or gauge No.:

6. TYPE OF SCREEN OR PERFORATION MATERIAL:
   1 Steel
   3 Stainless steel
   5 Fiberglass
   7 Wire wrapped
   8 RMP (SR)
   9 ABS
   10 Drilled holes
   11 Other (specify)
   12 None used (open hole)
   SCREEN OR PERFORATION OPENINGS ARE:
   1 Continuous slot
   3 Mill slot
   5 Gauzed wrapped
   6 Wire wrapped
   7 Louvered shutter
   9 Key punched
   8 Saw cut
   10 Torch cut
   11 None (open hole)

7. GROUT MATERIAL:
   1 Neat cement
   2 Cement grout
   3 Bentonite
   4 Other
   Grout Intervals: From...
   ft. to...
   ft. From...
   ft. to...
   ft. From...
   ft. to...
   Grout under the business name of LAYNE WESTERN

8. CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was
    (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was
    completed on (mo/day/year) 10-28-88 and this record is true to the best of my knowledge and belief. Kansas
    Water Well Contractor's License No. 82-2
    This Water Well Record was completed on (mo/day/year) 5-16-82

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY AND PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas
Department of Health and Environment, Office of Oil Field and Environmental Geology, Regulation and Permitting Section, Topeka, Kansas 66620-7500, Telephone: 913-862-9360. Send one
to WATER WELL OWNER and retain one for your records.
# TEST HOLE REPORT

**Contract Name:** City of Eudora  
**Job No.:** A-245 F  
**Date:** 10/24/85  
**City:** Eudora  
**State:** Kansas  
**Driller:** J. C. Von Holt

**TEST HOLE**  
**No.:** 6-85

**Test Hole Location:**  
Distance and Direction from Permanent Landmark or Previous Test Hole

## TEST LOG

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>MARSH FUNNEL VISCOITY SECONDS</th>
<th>MUDD PIT LOSS INCHES</th>
<th>FORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0'</td>
<td>7.0'</td>
<td></td>
<td></td>
<td>Brown very silty clay</td>
</tr>
<tr>
<td>7.0'</td>
<td>13.0'</td>
<td></td>
<td></td>
<td>Brown very fine silty sand</td>
</tr>
<tr>
<td>13.0'</td>
<td>19.0'</td>
<td></td>
<td></td>
<td>Brown fine to very fine sand</td>
</tr>
<tr>
<td>19.0'</td>
<td>23.0'</td>
<td></td>
<td></td>
<td>Brown medium to fine sand</td>
</tr>
<tr>
<td>23.0'</td>
<td>27.0'</td>
<td></td>
<td></td>
<td>Brown &amp; gray medium to fine sand, trace coarse sand</td>
</tr>
<tr>
<td>27.0'</td>
<td>31.0'</td>
<td></td>
<td></td>
<td>Gray &amp; trace brown fine to very fine sand</td>
</tr>
<tr>
<td>31.0'</td>
<td>36.0'</td>
<td></td>
<td></td>
<td>Gray medium to fine sand, trace clay</td>
</tr>
<tr>
<td>36.0'</td>
<td>48.0'</td>
<td>40</td>
<td>2''</td>
<td>Gray medium to coarse sand, trace gravel, fine sand &amp; clay</td>
</tr>
<tr>
<td>48.0'</td>
<td>50.0'</td>
<td>40</td>
<td>1''</td>
<td>Brown gray medium to coarse sand, trace fine sand, gravel</td>
</tr>
<tr>
<td>50.0'</td>
<td>51.5'</td>
<td>40</td>
<td>0.9</td>
<td>Same</td>
</tr>
<tr>
<td>51.5'</td>
<td>58.0'</td>
<td>40</td>
<td>1''</td>
<td>Brown gray medium to coarse sand, trace fine sand w/gravel</td>
</tr>
<tr>
<td>58.0'</td>
<td>65.0'</td>
<td>40</td>
<td>2''</td>
<td>Brown gray medium to coarse sand, trace fine sand w/gravel, boulders</td>
</tr>
<tr>
<td>65.0'</td>
<td>70.0'</td>
<td>40</td>
<td>2''</td>
<td>Same</td>
</tr>
<tr>
<td>70.0'</td>
<td>74.5'</td>
<td>40</td>
<td>1''</td>
<td>Brown gray coarse to medium sand, w/boulders, trace gravel &amp; fine sand</td>
</tr>
<tr>
<td>74.5'</td>
<td>76.2'</td>
<td></td>
<td></td>
<td>Brown broken limestone</td>
</tr>
</tbody>
</table>

### Notes:

- Size of Pit: X

---

LW-100
<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>MARSH FUNNEL VISCOSITY SECONDS</th>
<th>MUD PIT LOSS INCHES</th>
<th>Static Water Level</th>
<th>Measured</th>
<th>Hours After Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.2'</td>
<td>80.0'</td>
<td>Light gray shale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80.0'</td>
<td></td>
<td>Total depth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:** Size of Pit Portable \( \times \) \( \times \) \( \times \) DEEP

Set 80' of 2" PVC, left 3' above ground, bottom 30' slotted, gravel packed to 15' bentonite slurry to 5', clay to surface, developed w/air, obtained water sample.
WATER WELL RECORD  Form WW:5  KSA 82a:1212

LOCATION OF WATER WELL:

County: DOUGLAS
SE NE ¼
Section Number: 16
Township Number: T 13 S
Range Number: R 21 W

Distance and direction from nearest town or city street address of well if located within city:
3 MILES NORTHWEST OF EUDORA

WATER WELL OWNER:
5 CITY OF EUDORA
4 EAST SEVENTH STREET
EUDORA, KS 66026

Board of Agriculture, Division of Water Resources
Application Number:

LOCATE WELL & LOCATION WITH AN “X” IN SECTION BOX:

DEPTH OF COMPLETED WELL: 72 ft.
ELEVATION:

Depth(s) Groundwater Encountered: 18 ft. 24 ft.
WELL'S STATIC WATER LEVEL: 18 ft. below land surface measured on 6/19/98
Pump test data: Well water was 20 gpm after 0.5 hours pumping 329 gpm
Est. Yield: 325 gpm
WELL WATER TO BE USED AS:
5 Public water supply
1 Domestic
3 Feedlot
6 Oil field water supply
2 Irrigation
4 Industrial
7 Lawn and garden only
11 Injection well
12 Other (Specify below)
Was a chemical/bacteriological sample submitted to Department? Yes...X...No...

TYPE OF BLANK CASING USED:
1 Steel
3 RMP (SR)
2 PVC
4 ABS
Blank casing diameter: 12 in.
Casing height above land surface: 18 in.

TYPE OF SCREEN OR PERFORATION MATERIAL:
1 Stainless steel
5 Fiberglass
2 Brass
6 Concrete tile
3 Galvanized steel
9 ABS
7 PVC
10 Asbestos-cement
5 Gauzed wrapped
8 Wire wrapped
6 Wire wrapped
11 Other (specify)
Saw cut
9 Drilled holes
10 Other (specify)
Torch cut

SCREEN-PERFORATED INTERVALS:
From 47 ft. to 72 ft.

GRAVEL PACK INTERVALS:
From 22 ft. to 72 ft.

GROUT MATERIAL:
1 Neat cement
2 Cement grout
3 Bentonite
4 Other
Grout Intervals: From 6 ft. to 20 ft.

What is the nearest source of possible contamination:
1 Septic tank
4 Lateral lines
2 Sewer lines
5 Cess pool
3 Watertight sewer lines
6 Septic code
7 Pit privy
8 Sewage lagoon
9 Feedyard
10 Livestock pens
11 Fuel storage
12 Fertilizer storage
13 Insecticide storage
14 Abandoned water well
15 Oil well/Gas well
16 Other (specify below)

GEOLOGIC LOG:

FROM TO LITHOLOGIC LOG FROM TO PLUGGING INTERVALS
0 2 Top soil
2 17 Brown sandy silt
17 23 Brown medium to fine sand
23 38 Gray medium to coarse, some fine
38 55 Gray medium to coarse, some gravel
55 72 Gray coarse to medium

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed (2) reconstructed, (3) plugged under my jurisdiction and was completed on (mo/day/year) 6/19/98, and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 102. This Water Well Record was completed on (mo/day/year) 8/5/98, by (signature)

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRINT CAREFULLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Topeka, Kansas 66620-0001. Telephone: 913-296-5545. Send one to WATER WELL OWNER and retain one for your records.
### WATER WELL RECORD

**Form WWG-5**  
**KSA 82a-1212**

#### Location of Water Well
- **County:** Douglas  
- **Township Number:** T 12 S  
- **Range Number:** R 21 E  
- **Distance and direction from nearest town or city street address of well if located within city:** 3/4 miles N. from NW Eudora

#### Water Well Owner
- **Name:** Eudora Riverview Golf  
- **Board of Agriculture, Division of Water Resources Application Number:** 16646

#### Locate Well's Location With an "X" in Section Box

```
+-----------------+-----------------+-----------------+
|                 |                 |                 |
|                 |                 |                 |
|     W           |     SW          |     NE          |
|                 |                 |                 |
+-----------------+-----------------+-----------------+
```

#### Depth of Completed Well
- **Depth(s) Groundwater Encountered:** 19 ft.  
- **Well's Static Water Level:** 19 ft. below land surface measured on mo/day/yr: 3-29-95
- **Depth:** 5.3 ft.  
- **Elevation:** 5.3 ft.

#### Pump Test Data
- **Well water:** 250 gpm  
- **Hours pumping:** 3-29-95
- **Hours pumping:** 4.0 hr.

#### Bore Hole Diameter
- **1/2 in. to:** 5.3 ft.

#### Well Water to be Used As
- **1 Domestic**  
- **2 Irrigation**  
- **3 Feeder**  
- **4 Industrial**  
- **5 Public water supply**  
- **6 Oil field water supply**  
- **7 Lawn and garden only**  
- **8 Air Conditioning**  
- **9 Dewatering**  
- **10 Monitoring well**  
- **11 Injection well**  
- **12 Other (Specify below)**

#### Was a chemical/bacteriological sample submitted to Department? Yes...No...No...If yes, mo/day/yr sample was submitted Water Well Disinfected? Yes X No

#### Type of Blank Casing Used
- **1 Steel**  
- **2 PVC**  
- **3 RMP (SR)**  
- **4 ABS**  
- **5 Wrought iron**  
- **6 Asbestos-Cement**  
- **7 Fiberglass**  
- **8 Concrete tile**  
- **9 Other (Specify below)**

#### Blank Casing Diameter
- **8 in. to:** 33 ft.

#### Casing Height Above Land Surface
- **30 in.**  
- **30 lbs./ft.**  
- **Wall Thickness or Gauge No.** 200

#### Type of Screen or Perforation Material
- **1 Steel**  
- **2 Brass**  
- **3 Stainless steel**  
- **4 Galvanized steel**  
- **5 Fiber glass**  
- **6 Concrete tile**  
- **7 RMP (SR)**

#### Screen or Perforation Openings Are
- **1 Continuous slot**  
- **2 Louvered shutter**  
- **3 Key punched**

#### Screen-Perforated Intervals
- **From:** 33 ft.  
- **To:** 53 ft.

#### Gravel Pack Intervals
- **From:** 53 ft.  
- **To:** 20 ft.

#### GROUT Material
- **1 Neat cement**  
- **2 Cement grout**  
- **3 Bentonite**  
- **4 Other**

#### GROUT Intervals
- **From:** 20 ft.  
- **To:** 0 ft.

#### What is the nearest source of possible contamination: **NONE AT THE TIME**

#### Work Completed
- **1 Septic tank**  
- **2 Sewer lines**  
- **3 Waterline sewer lines**

#### Direction from Well?
- **From:** 0  
- **To:** 15  
- **15 ft.**

#### Lithologic Log
- **Soil, clay, silt**

#### From
- **To**
- **Plugging Intervals**

#### Contractor's or Landowner's Certification
- This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year): 3-29-95
- This record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No: 561
- This Water Well Record was completed on (mo/day/yr): 4-3-95

#### INSTRUCTIONS
- Use typewriter or ball point pen. PLEASE PRINT CLEARLY and PRINT clearly. Please fill in blanks, underlines or circle the correct answers. Send top three copies to Kansas Department of Health and Environment. Bureau of Water, Topeka, Kansas 66620-0001. Telephone: 913-296-5545. Send one to WATER WELL OWNER and retain one for your records.
4 east of Lawrence

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

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<tr>
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DEPTH OF COMPLETED WELL: 40.0 ft. ELEVATION:

WELL'S STATIC WATER LEVEL: 18' ft. below land surface measured on m/d yr: 11-25-94

Pump test data: Well water was...
hours pumping...
gpm: Est. Yield...
Pump water was...
hours pumping...
gpm: Bore Hole Diameter...
in. to...

WELL WATER TO BE USED AS:

1. Domestic
2. Irrigation
3. Feedlot
4. Industrial
5. Public water supply
6. Oilfield water supply
7. Lawn and garden
8. Air conditioning
9. Dewatering
10. Monitoring well

Was a chemical/bacteriological sample submitted to Department? Yes No... X...

FRACTION: SW 1/4 SW 1/4 SW 1/4
COUNTY: DOUGLAS
WATER WELL OWNER: Gregg Shippe
RR#, St. Address, Box #: 1394 E. 1900 Rd.
City, State, ZIP Code: Lawrence, KS 66044
Application Number: 66044

DISTANCE AND DIRECTION FROM NEAREST TOWN OR CITY STREET ADDRESS OF WELL IF LOCATED WITHIN CITY.

TYPE OF BLANK CASING USED:

1. Steel
2. PVC

Blank casing diameter...
in. to...

Casing height above land surface...
in. weight...
lbs./ft.

TYPE OF SCREEN OR PERFORATION MATERIAL:

1. Steel
2. Brass

SCREEN OR PERFORATION OPENINGS ARE:

1. Continuous slot
2. Louvered shutter

SCREEN-PERFORATED INTERVALS:

1. Gravel pack intervals:

GROUT MATERIAL:

1. Neat cement
2. Cement grout

GROUT INTERVALS:

1. Septic tank
2. Sewer line

What is the nearest source of possible contamination:

1. Livestock pens
2. Abandoned water well

LOCATION OF WATER WELL:

FROM TO LITHOLOGIC LOG FROM TO PLUGGING INTERVALS

FROM TO

0 5 Top Soil
5 20 Clay-Brown
20 26 Clay-Blue
26 34 Fine Sand-Coarse Sand-Blue
34 37 Clay-Blue
37 40 FS-CS-Med Gravel-Grey

CONTRACTOR’S OR LANDOWNER’S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (m/d yr): 11-25-94 and this record is true to the best of my knowledge and belief.

Water Well Contractor's License No.: 182

This Water Well Record was completed on (m/d yr): 12-20-97

under the business name of STRADER DRILLING CO., INC. by (signature) [signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRINT CLEARLY AND PRINT EASILY. Please fill in blanks, underline or circle the correct answers. Send to Kansas Department of Health and Environment, Bureau of Water, Topeka, Kansas 66620-0001. Telephone 913-296-5545. Send one to WATER WELL OWNER and retain one for your records.
LOCATION OF WATER WELL:

- County: Douglas
- Township Number: 31
- Range Number: R 26
- Section Number: SE 
- NE 
- SW 
- SE 

Distance and direction from nearest town or city street address of well if located within city:

1. WEST & Southern Old Hwy 10 1N + 3/4 E northside

WATER WELL OWNER:

- Name: George Shipe
- Address: R.R., St. Address, Box #: 1911
- City, State, Zip Code: Lamphere, KS 66459

DEPT OF COMPLETED WELL:

- Depth(s) Groundwater Encountered: 70 ft.
- Well's Static Water Level: 22.2 ft. below land surface measured on 3/3/84
- Pump test data: Well water was 9.2 gpm after 3 hours pumping 500 gpm
- Est. Yield: 9.2 gpm after 3 hours pumping
- Bore Hole Diameter: 2 ft., and 1 ft.

WELL WATER TO BE USED AS:

- 1. Public water supply
- 2. Air conditioning
- 3. Injection well
- 4. Observation well

Was a chemical/bacterial sample submitted to Department? Yes

5. TYPE OF BLANK CASING USED:

- 1. Steel
- 2. PVC
- 3. RMP (SR)
- 4. ABS

Blank casing diameter: 12 in. to 50 ft.

Casing height above land surface: 16 ft.

6. TYPE OF SCREEN OR PERFORATION MATERIAL:

- 1. Stainless steel
- 2. Brass
- 3. Galvanized steel
- 4. Fiberglass
- 5. Concrete tile
- 6. ABS

Screen or perforation openings:

- 1. Continuous slot
- 2. Mill slot
- 3. Key punched

7. GROUT MATERIAL:

- 1. Neat cement
- 2. Cement grout
- 3. Bentonite
- 4. Other 15.10.2.17.2 CLAY

GROUT INTERVALS:

- From 19 ft. to 21 ft.
- From 21 ft. to 19 ft.
- From 19 ft. to 17 ft.
- From 17 ft. to 0 ft.

WHAT IS THE NEAREST SOURCE OF POTABLE WATER?

- 1. Septic tank
- 2. Lateral lines
- 3. Cess pool
- 4. Sewage lagoon
- 5. Water treatment plant
- 6. Septic tank
- 7. 15.10.2.17.2 CLAY

DIR. FROM WELL:

- 0
- 4
- 8
- 12
- 16
- 20
- 24
- 28
- 32
- 36
- 40
- 44
- 48
- 52
- 56
- 60
- 64
- 68
- 72
- 76
- 80

LITHOLOGIC LOG:

- FROM TO LITHOLOGIC LOG
- FROM TO LITHOLOGIC LOG

CONTRACTORS OR LANDOWNER'S CERTIFICATION:

- This water well was under the name of
- This Water Well Record was completed on
- Water Well Contractor's License No.
- by

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS, firmly and PRINT clearly. PLEASE FILL IN BLANKS, UNDERLINE OR SHOE THE CORRECT ANSWERS. SEND TOP THREE COPIES TO KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT, DIVISION OF ENVIRONMENTAL GEOLgy, TOPEKA, KS 66620. COMPLETE RECORDS.
**WATER WELL RECORD**
Form WW-5  KSA 82a-1212  ID No.

**1 LOCATION OF WATER WELL:**
- County: Douglas
- Section Number: 31
- Township Number: T 12 S
- Range Number: R 21

**2 WATER WELL OWNER:**
- Name: Nunemaker-Ross Inc.
- Address: 1816 North 1700 Road, Lawrence, KS 66044

**3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:**

**4 DEPTH OF COMPLETED WELL:**
- Elevation: 50 ft.
- Groundwater Encountered: ft.
- Static Water Level: ft. below land surface measured on mod/day/yr.
- Pump test data: Well water was ft. after gpm. Hours pumping.
- Est. Yield: gpm. Well water was ft. after gpm. Hours pumping.
- Bore Hole Diameter: 28 in. to 51 in.
- Well Water to be used as:
  1. Public supply
  2. Industrial
  3. Feed lot
  4. Lawn and garden (domestic)
  5. Monitoring well

**5 TYPE OF BLANK CASING USED:**
- Steel
- RMP (SR)
- ABS
- PVC
- Wrought Iron
- Concrete tile
- Asbestos-Cement
- Other (specify below)
- Fiberglass
- Other (specify below)
- Threaded
- Welded
- Other

**6 SCREEN OR PERFORATION MATERIAL:**
- Steel
- Stainless steel
- Galvanized steel
- Fiberglass
- Other (specify below)
- RMP (SR)
- Concrete tile
- ABS
- Other

**7 SCREEN OR PERFORATION OPENINGS:**
- Continuous slot
- Mill slot
- Louvered shutter
- Gauzed wrapped
- Wire wrapped
- Key punched
- torch cut
- Saw cut
- Other

**8 GRAVEL PACK INTERVALS:**

**9 GROUT MATERIAL:**
- Neat cement
- Cement grout
- Bentonite
- Other

**10 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:**
- This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mod/day/yr).
- Date: 5-13-07
- Water Well Contractor's License No.: 554
- This Water Well Record was completed on (mod/day/yr).
- Date: 3-30-07

**INSTRUCTIONS:** Please fill in blanks and circle the correct answers. Send three copies to Kansas Department of Health and Environment, Bureau of Water, 1000 SW Jackson St., Ste. 420, Topeka, Kansas 66612-1387. Telephone: 785-298-6545. Send one to WATER WELL OWNER and retain this for your records.
WATER WELL RECORD

STATE: Kansas
COUNTY: Douglas

LOCATION OF WATER WELL:
Fraction: NE ¼ SW ¼ SW ¼
Section Number: 32
Township Number: T 12 S
Range Number: R 21 E

Distance and direction from nearest town or city street address of well if located within city?

WATER WELL OWNER:
Johnson County Water Dist. 1

Rt#, St. Address, Box #:
7601 Holliday Drive
City, State, ZIP Code:
Kansas City, Kansas 66106

BOARD OF AGRICULTURE, DIVISION OF WATER RESOURCES
Application Number:

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

DEPTH OF COMPLETED WELL:
Depth (s) groundwater encountered:
12 ft.
WELL'S STATIC WATER LEVEL:
12.5 ft. below land surface measured on mo/day/yr.

Pump test data:
Well water was flowing... gpm, Well water was flowing... hours pumping...

Est. Yield: 12 gpm, Well water was flowing... hours pumping...

WELL WATER TO BE USED AS:
1. Public water supply
2. Air conditioning
3. Injection well
4. Other (specify below)

Domestic 3 Feedlot 6 Oil field water supply
1 Domestic (lawn & garden) 7 Monitoring well
2 Irrigation 4 Industrial

Was a chemical/bacteriological sample submitted to Department? No

Water Well Diseinfected? No

TYPE OF BLANK CASING USED:
1. Steel
2. RMP (SR)
3. ABS
4. PVC
5. Wrought iron
6. Asbestos-Cement
7. Other (specify below)

Blank casing diameter:

In., to...

Casing height above land surface:
In., weight...

Casing JOINTS:
1. Glued
2. Threaded
3. Welded
4. Clamped

TYPE OF SCREEN OR PERFORATION MATERIAL:
1. Steel
2. Stainless Steel
3. Galvanized Steel
4. PVC
5. Fiberglass
6. Concrete tile
7. RMP (SR)
8. Other (specify below)

SCREEN OR PERFORATION OPENINGS ARE:
1. Continuous slot
2. Louvered shut
3. Mill slot
4. Key punched

SCREEN-PERFORATED INTERVALS:

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WATER WELL RECORD

1) LOCATION OF WATER WELL:
   County: Douglas
   Township Number: T 12 S
   Range Number: R 21 E
   Section Number: 32
   Fraction: NW 1/4 SW 1/4 SW 1/4
   Distance and direction from nearest town or city street address of well if located within city:
   2102 N. 1500 Rd. Endora, KS 66025

2) WATER WELL OWNER:
   R#, St. Address, Box #: Endora, Riverview Golf
   City, State, ZIP Code: Endora, KS 66025
   Board of Agriculture, Division of Water Resources Application Number:
   54.1

3) LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

4) DEPTH OF COMPLETED WELL: 21.4 ft. ELEVATION: 1.21 - 47 ft.

   Depth(s) Groundwater Encountered:
   1. 21.4 ft.
   2. 21.4 ft.
   3. 21.4 ft.

   Well's Static Water Level: 21.4 ft. below land surface measured in m/d/l/yr 7.19.02
   Pump test data: Well water was ft. after ft. hours pumping gpm.
   Est. Yield: 10.0 gpm. Well water was ft. after ft. hours pumping gpm.
   Bore Hole Diameter: 12.4 in. to 48 ft.
   In. to ft.

   Well Water to Be Used As:
   1. Domestic
   2. Irrigation
   3. Livestock pens
   4. Abandoned water well
   5. Livestock pens
   6. Oil well/Gas well
   7. Fuel storage
   8. 12.15
   9. Fuel storage
   10. Oil well/Gas well
   11. Other (specify below)
   12. Zeke
   13. Septic tank
   14. Septic tank
   15. Septic tank

   Oldest Water Disinfected? Yes
   Yes

   Was a chemical/bacteriological sample submitted to Department? Yes. No.
   X

5) TYPE OF BLANK CASING USED:
   1. Steel
   2. Brass
   3. Stainless steel
   4. Galvanized steel
   5. Wrought iron
   6. Asbestos-Cement
   7. Concrete tile
   8. RMP (SR)
   9. Other (specify below)
   10. Asbestos-cement
   11. Concrete tile
   12. None used (open hole)

   Casing joints: Glued. X. Clamped.

6) TYPE OF SCREEN OR PERFORATION MATERIAL:
   1. Steel
   2. Brass
   3. Stainless steel
   4. Galvanized steel
   5. Fiberglass
   6. Concrete tile
   7. Wire wrapped
   8. RMP (SR)
   9. Asbestos-cement
   10. Other (specify below)
   11. Drilled holes
   12. None used (open hole)

   Screen-Perforation Openings Are:
   1. Continuous slot
   2. Louvered shutter
   3. Mill slot
   4. Key punched

   Screen-Perforated Intervals:
   From: 22 to 47 ft.
   From: 47 to 20 ft.
   From: 20 to 0 ft.

   Gravel Pack Intervals:
   From: 20 to 0 ft.
   From: 0 to 11 ft.
   From: 11 to 48 ft.

   Grout Material:
   1. Cement
   2. Bentonite
   3. Other

   Grout Intervals:
   From: 20 ft.
   From: 0 ft.
   From: 11 ft.
   From: 48 ft.

   What is the nearest source of possible contamination: None

   Septic tank
   4. Lateral lines
   5. Cess pool
   6. Septic tank
   7. Pit privy
   8. Sewage lagoon
   9. Septic tank
   10. Livestock pens
   11. Fuel storage
   12. Septic tank
   13. Septic tank
   14. Septic tank
   15. Septic tank
   16. Septic tank

   How many feet?

   0 to 11 ft.
   11 to 48 ft.

   LITHOLOGIC LOG
   From: 0 ft.
   To: 11 ft.
   Soil + Silt + Sandy
   Sand

   PLUGGING INTERVALS
   From: 0 ft.
   To: 11 ft.
   11 ft.

7) CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This well was constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (m/d/l/yr) and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No.
   54.1. This Water Well Record was completed on (m/d/l/yr) by (signature)

   INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRINT legibly and clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Topeka, Kansas 66620-0001. Telephone 785-296-5264. Send one to WATER WELL OWNER and retain one for your records. Fee of $3.00 for each constructed well.
**WATER WELL RECORD**

**Kansas Department of Health and Environment Division of Environment (Water well Construction)**

**Topeka, Kansas 66620**

---

| 1. Location of well | Leavenworth
|---------------------|------------------|
| County: SE 1/4 NE 1/4 NE 1/4 32 | Township number: T 12 S R 21 Pn
| Section number: 12 NE 1/4 | Range number: 21 Pn

---

2. Distance and direction from nearest town or city: 1/4 mi. North of

---

3. Owner of well: R. E. Pendleton

---

4. Locate with "X" in section below sketch: Leavenworth County Rd. #1

---

5. Type and color of material: Med. brown soil

---

6. Bore hole dia. | 30 in. | Completion dia. | 28-37

---

7. Drill: | Cable | Rotary | Driven | Dug

---

8. Use | Domestic | Public supply | Industry | Reverse rotary

---

9. casing: Material | Transite | Dia. | 16"

---

10. System: | Johnson Well Co. | Transite | Dia. | 16"

---

11. Static water level: | 22 ft. below land surface | Date 5-23-77

---

12. Deepening level below land surface: | 25 ft. below land surface Date 5-23-77

---

13. Water sample submitted: | No

---

14. Well head completion: | Miles above grade

---

15. Well grouted: | Yes

---

16. Water well contractor's certification: | This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

---

17. Pump: | Submersible | Turbine

---

18. Remarks: Leveled for flood irrigation. We do not install pumps.

---

Form WWG-0

---

Forward the white, blue and pink copies to the Department of Health and Environment.
APPENDIX – II

KDA, Division of Water Resources, Safe Yield Analysis Data
Safe Yield Report Sheet
Proposed Water Right Application
Point of Diversion in NWSWSESW 32-128-21E
Analysis Results

-----------------

The selected PD is in an area OPEN to new appropriations.
The safe yield, based on the variables listed below is 2,749.76 AF.
Total prior appropriation in the circle is 1,629.50 AF.
Total quantity of water available for appropriation is 1,120.26 AF.

Safe Yield Variables

-----------------

The area used for the analysis is set at 4777 acres.
Potential annual recharge of the area is estimated to be 9.21 inches.
The percent of recharge available for appropriation is 75%.

Authorized Quantity values are as of 13-JAN-2011 and are based on Appropriated and Vested ground water right and possible stream nodes for GMD #2. Domestic, Term and Temporary water rights have been excluded.

There are 15 water right(s) and 15 point(s) of diversion within the circle.

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CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 41,650
PRIORITY DATE March 1, 1995

WHEREAS, It has been determined by the undersigned that construction of the appropriation diversion works has been completed, that water has been used for beneficial purposes and that the appropriation right has been perfected, all in conformity with the conditions of approval of the application pursuant to the water right referred to above and in conformity with the laws of the State of Kansas.

NOW, THEREFORE, Be It Known that DAVID W. BARFIELD, the duly appointed, qualified and acting Chief Engineer of the Division of Water Resources of the Kansas Department of Agriculture, by authority of the laws of the State of Kansas, and particularly K.S.A. 82a-714, does hereby certify that, subject to vested rights and prior appropriation rights, the appropriator is entitled to make use of groundwater to be withdrawn by means of a well located in Lot 2 of Section 32, more particularly described as being near a point 1,449 feet North and 4,996 feet West of the Southeast corner of said section, in Township 12 South, Range 21 East, Douglas County, Kansas, at a diversion rate not in excess of 200 gallons per minute (0.45 c.f.s.) and a quantity not to exceed 37 acre-feet of water per calendar year for irrigation use on the following described property:

1 acre in the Southwest Quarter of the Northwest Quarter (SW¼ NW¼),
11 acres in Lot 3,
14 acres in the Northwest Quarter of the Southwest Quarter (NW¼ SW¼),
34 acres in Lot 2,
a total of 60 acres in Section 32, Township 12 South, Range 21 East, Douglas County, Kansas.

The maximum authorized acres that were lawfully irrigated in any one calendar year during the perfection period were 20 acres.
All terms, conditions and limitation applicable to the Appropriation of Water not expressly changed or removed by the issuance of the Certificate of Appropriation remain in full force and effect. Failure to comply with those terms, conditions and limitations, and those added or amended by this Certificate, will result in the suspension of this appropriation right or revocation and dismissal of this appropriation right.

This is a final agency action. If you choose to appeal this decision or any finding or part thereof, you must do so by filing a petition for review in the manner prescribed by the Kansas Act for Judicial Review and Civil Enforcement of Agency Actions (KJRA K.S.A. 77-601 et seq.) within 30 days of service of this order. Your appeal must be made with the appropriate district court for the district of Kansas. The Chief Legal Counsel for the Kansas Department of Agriculture, 109 SW 9th Street, 4th Floor, Topeka, Kansas 66612, is the agency officer who will receive service of a petition for judicial review on behalf of the Kansas Department of Agriculture, Division of Water Resources. If you have questions or would like clarification concerning this order, you may contact the Chief Engineer.

IN WITNESS WHEREOF, I have hereunto set my hand at my office at Topeka, Kansas, this 14th day of March, 2008.

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas )
) SS
County of Shawnee )

The foregoing instrument was acknowledged before me this 14th day of March, 2008, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.

Brendylon F. Harmon
Notary Public
December 30, 2009

LOIS M WINDETT-HAMILTON TRUST
LOIS WINDETT-HAMILTON TTE
52 MALAGA WAY
HOT SPRINGS VILLAGE AR 71909

Re: Notice Given Under K.S.A. 82a-718(b)
File No(s). 43,665

According to the Division of Water Resources' records you are the owner of or water use correspondent for the above referenced water right(s) or permit(s) to appropriate water.

The law requires the Division of Water Resources to notify you that:

The records show there has been no use of water as authorized by the referenced file(s) for a minimum of 3 successive years.

This file may be terminated if no lawful, beneficial use is made for a total of 5 successive years unless the beneficial use of the water was prevented or made unnecessary by circumstances that are considered due and sufficient cause for the non-use.

The circumstances considered to be due and sufficient cause for the non-use of water are listed on the back and also can be found in Kansas Administrative Regulation K.A.R. 5-7-1.

The reasons for non-use of water should always be noted on the annual water use report. If you have not reported reasons for non-use, you can provide this information to Division of Water Resources, in writing, at any time.

If you believe the Division of Water Resources' records are incorrect and there has been use of water within the past three years, provide documentation to that effect. It is to your benefit to provide this information as soon as you can.

This notice provides you the opportunity to remedy any abandonment situation that may exist with your project before a total of five years of non-use takes place.

If you have questions concerning this matter, please contact the Division of Water Resources at 785-296-3717. If you would prefer, please call the Topeka field office at 785-862-6300 to arrange for an appointment.

Sincerely,

[Signature]
Lane P. Letourneau, L.G.
Program Manager
Water Appropriation Program

Division of Water Resources • David W. Barfield, Chief Engineer
109 SW 9th St., 2nd Floor; Topeka, KS 66612-1283 • (785) 296-3717 • Fax: (785) 296-1176
KANSAS DEPARTMENT OF AGRICULTURE
Alice A. Devine, Secretary of Agriculture

DIVISION OF WATER RESOURCES
David L. Pope, Chief Engineer

APPROVAL OF APPLICATION
and
PERMIT TO PROCEED
(This is not a Certificate of Appropriation)

This is to certify that I have examined Application File No. 43,665 of the applicant

Mark Neis
40395 West 119th Street
Eudora, Kansas 66025

for a permit to appropriate water for beneficial use, together with the maps, plans and other submitted data, and that the application is hereby approved and the applicant is hereby authorized, subject to vested rights and prior appropriations, to proceed with the construction of the proposed diversion works (except those dams and stream obstructions regulated by K.S.A. 82a-301 through 305a, as amended), and to proceed with all steps necessary for the application of the water to the approved and proposed beneficial use and otherwise perfect the proposed appropriation subject to the following terms, conditions and limitations:

1. That the priority date assigned to such application is February 4, 1999.

2. That the water sought to be appropriated shall be used for irrigation use on land described in the application, as follows:

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3. That the authorized source from which the appropriation shall be made is groundwater from the alluvial aquifer, in the drainage basin of the Kansas River to be withdrawn by means of one (1) well located near the center of the East Half of the Northeast Quarter (E1/2 NE1/4) of Section 6, more particularly described as being near a point 3,950 feet North and 550 feet West of the Southeast corner of said section, in Township 13 South, Range 21 East, Douglas County, Kansas, located substantially as shown on the topographic map accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of 1,200 gallons per minute (2.67 c.f.s.) and to a quantity not to exceed 168 acre-feet of water for any calendar year.

5. That installation of works for diversion of water shall be completed on or before December 31, 2000 or within any authorized extension thereof. The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of $200.00 when construction of the works has been completed. Failure to timely submit the notice and the fee will result in revocation of the permit. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee, which is currently $50.00.

6. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before December 31, 2004 or any authorized extension thereof. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee, which is currently $50.00.

RECEIVED
MAR 17 1999

TOPEKA FIELD OFFICE
DIVISION OF WATER RESOURCES

DWR 1-201 (Revised March 10, 1999)
(OVER)
7. That the applicant shall not be deemed to have acquired a water appropriation for a quantity in excess of the amount approved herein nor in excess of the amount found by the Chief Engineer to have been actually used for the approved purpose during one calendar year subsequent to approval of the application and within the time specified for perfection or any authorized extension thereof.

8. That the use of water herein authorized shall not be made so as to impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.

9. That the right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for the reasonable increase or decrease of the streamflow at the appropriator’s point of diversion.

10. That this permit does not constitute authority under K.S.A. 82a-301 through 305a to construct any dam or other obstruction; nor does it grant any right-of-way, or authorize entry upon or injury to, public or private property.

11. That all diversion works constructed under the authority of this permit into which any type of chemical or other foreign substance will be injected into the water pumped from the diversion works shall be equipped with an in-line, automatic quick-closing, check valve capable of preventing pollution of the source of the water supply. The type of valve installed shall meet specifications adopted by the Chief Engineer and shall be maintained in an operating condition satisfactory to the Chief Engineer.

12. That an acceptable water flow meter shall be installed on the diversion works authorized by this permit in accordance with specifications adopted by the Chief Engineer on February 27, 1985, and shall be maintained in an operating condition satisfactory to the Chief Engineer, and shall be used to provide information required on the annual water use report (including the meter reading at the beginning and ending of the report year).

13. That the applicant shall maintain accurate and complete records from which the quantity of water diverted during each calendar year may be readily determined and the applicant shall file an annual water use report with the Chief Engineer by March 1 following the end of each calendar year. Failure to file the annual water use report by the due date shall cause the applicant to be subject to a civil penalty.

14. That no water user shall engage in nor allow the waste of any water diverted under the authority of this permit.

15. That all wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this permit shall have a tube or other device installed in a manner acceptable to, and in accordance with specifications adopted by, the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

16. That failure without cause to comply with provisions of the permit and its terms, conditions and limitations will result in the forfeiture of the priority date, revocation of the permit and dismissal of the application.

17. That the right to appropriate water under authority of this permit is subject to any minimum desirable streamflow requirements identified and established pursuant to K.S.A. 82a-703c for the source of supply to which this water right applies.

18. That the applicant shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, current form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

19. That the Chief Engineer specifically retains jurisdiction in this matter with authority to make such reasonable reductions in the approved rate of diversion and quantity authorized to be perfected, and such changes in other terms, conditions, and limitations set forth in this approval and permit to proceed as may be deemed to be in the public interest.

Dated this 12th day of March, 1999.

David L. Pope, Chief Engineer, P.E.
Division of Water Resources
Kansas Department of Agriculture
CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 38,063
PRIORITY DATE December 9, 1985

WHEREAS, it has been determined by the undersigned that construction of the appropriation diversion works has been completed, that water has been used for beneficial purposes and that the appropriation right has been perfected, all in conformity with the conditions of approval of the application pursuant to the water right referred to above and in conformity with the laws of the State of Kansas.

NOW, THEREFORE, Be it Known that DAVID L. POPE, the duly appointed, qualified and acting Chief Engineer of the Division of Water Resources of the Kansas Department of Agriculture, by authority of the laws of the State of Kansas, and particularly K.S.A. 82a-714, does hereby certify that, subject to vested rights and prior appropriation rights, the appropriator is entitled to make use of groundwater to be withdrawn by means of a well located in the Northwest Quarter of the Northeast Quarter of the Northeat Quarter (NW¼ NE¼ SW¼) of Section 6, more particularly described as being near a point 5,180 feet North and 1,003 feet West of the Southeast corner of said section, in Township 13 South, Range 21 East, Douglas County, Kansas, at a diversion rate not in excess of 325 gallons per minute (0.72 c.f.s.) and a quantity not to exceed 69.777 million gallons (214.14 acre-feet) of water per calendar year for municipal use in the City of Eudora Kansas and the immediate vicinity.

This appropriation right is further limited to a quantity of water which when combined with the water right set forth in the Certificate of Appropriation issued pursuant to File No.21,420, will provide a total quantity not to exceed 69.777 million gallons (214.14 acre-feet) of water per calendar year for municipal use at the location described herein.
All terms, conditions and limitations applicable to the Appropriation of Water not expressly changed or removed by the issuance of the Certificate of Appropriation remain in full force and effect. Failure to comply with those terms, conditions and limitations, and those added or amended by this Certificate, will result in the suspension of this appropriation right or revocation and dismissal of this appropriation right.

IN WITNESS WHEREOF, I have hereunto set my hand at my office at Topeka, Kansas, this 23rd day of November, 1999.

David L. Pope, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas  )
SS
County of Shawnee  )

The foregoing instrument was acknowledged before me this 23rd day of November, 1999, by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.

Dorothy M. Halloran
Notary Public

My appointment expires:

DOROTHY M. HALLORAN
Notary Public - State of Kansas
My Appt. Expires June 27, 2001
APPENDIX – III

Carl E. Nuzman, Resume’ and Personal Information
RESUME'  
AND 
PERSONAL INFORMATION

Name: Carl E. Nuzman, P.E., P.Hg.  Phone: (785) 582-4054  
3314 NW Huxman Road  Fax: (785) 582-4155  
Silver Lake, KS 66539  Cell: (785) 224 9929  
Email; cyjnzmn@swbell.net

Position: Consulting Engineer/Hydrogeologist

Academic/Professional Certifications:

Master of Science in Water Resources Engineering, Department of Civil Engineering, University of Kansas, 1966

Bachelor of Science in Agricultural Engineering, Kansas State University, 1953

Professional Engineer, first licensed in 1962-Kansas No. 4482, and in the following states: MO-E12525, IA-6334, SC-4099, FL-15102, AL-16858, AZ-23209, IL-062-043392, IN-PE60880547, LA-23209, MS-10041, MI-33050, NE-E-12525, NC-15121, NM-10625, OH-E-51179, OK-15653, TN-018707, VA-0402-018380, and WI-E-25841. Professional Hydrogeologist, Certified in 1986 by the American Institute of Hydrology, PHG-No. 385

Professional Positions:
- Consultant (1997-Present)
- Groundwater Management, Inc., Kansas City, KS Vice President and Chief Hydrogeologist (1985-1988)
- Layne Western Company, Inc., Kansas City, MO Sales Engineer (1967-1970)
- Kansas Water Resources Board, Topeka, KS Hydrogeologist III (1966)
- Kansas State Board of Agriculture, Division of Water Resources, Topeka, KS Assistant Engineer (1957-1965)
Specialized Competence:
- Surface and groundwater hydrology
- Project management and supervision
- Well treatment and rehabilitation/groundwater quality
- Well and well field design and construction
- Modeling of groundwater systems
- Water treatment and distribution piping
- Injection well design and operation
- Water pumps and associated equipment including suction flow control devices

Applicable Experience:

Mr. Nuzman has extensive experience in the areas of groundwater modeling, water well and well field design and construction, water well treatment and rehabilitation, and soil and groundwater remediation. In the groundwater resource area, he has performed hydrological investigations and modeling studies of several large regional groundwater aquifers. He served as technical advisor to the Attorney General and the USGS Analog Model laboratory on the first model work of the Equus Beds in 1961. He was the first to model the Ogallala Aquifer in SW Kansas using the passive element electric analog model technique in 1966.

After joining Layne Western in 1967, he conducted the testing program, aquifer modeling and well field design and construction for the City of Manhattan wells to infiltrate water from the Blue River, the City of Columbia, MO to change water supply source from the deep Ordovician aquifer to the Missouri river alluvium, and develop the ground water supply for the KP&L Hutchinson II power plant.

He has consulted on deep disposal wells and designed a groundwater recharge facility.

He has been involved in the design of dewatering systems for underground construction and has provided expert testimony on a variety of hydrologic related issues. He has served as a principal engineer on several major environmental projects such as underground storage tank and contaminated soil removal in central Illinois, a remedial investigation and feasibility study at an engine manufacturing facility in Indiana, remediation of a municipal well field of TCE, and the closure of an RCRA storage facility.

He has prepared specifications and bidding documents for both municipal and industrial well construction, pumps and controls, and water treatment facilities with connecting piping.
Publications:
- Contributor to the “Handbook of Ground-Water Development”, by the Roscoe Moss Company, Los Angeles, CA, on well rehabilitation, 1990.
- Other technical papers have been published and numerous Client reports of study have been made.

Mr. Nuzman has conducted numerous studies and managed projects on the development, management and remediation of groundwater resources and water supply wells.

Inventions:
- Co-inventor on a filament wound fiber glass well screen;
- Inventor of an In-Situ Groundwater Treatment System assigned to Layne Western Company, Inc.;
- Co-inventor on a patent of a non-vortexting passive pump strainer for boiling water reactor nuclear power plants and water resources applications.

Professional Societies:
- American Society of Agricultural Engineers
- American Society of Civil Engineers
- American Geophysical Union
- American Institute of Hydrology
- American Water Resources Association
- American Water Works Association
- National Ground Water Association
- National Society of Professional Engineers
- Kansas Society of Professional Engineers
MEMORANDUM

To: Scott McCullough, Director, Planning & Development Services
   Sandra Day, Planner

From: Keith A. Browning, P.E., Director of Public Works/County Engineer

Date: April 7, 2011

Re: CUP-10-6-10 Kaw Valley Sand Facility
   Existing rock jetties situated within subject property

It is my understanding the applicant for the referenced CUP has agreed to leave undisturbed each of two existing rock jetties situated within the subject property. The latest site plan shows a setback area 100’ wide (50’ on each side) around each jetty in which no excavation will occur. The site plan also includes means to access each jetty to ensure this department can maintain the jetties. Our current blanket easement on the property to access and maintain the jetties will remain.

This satisfies our earlier concerns over excavating or otherwise disturbing the jetties.

The intended function of the existing jetties, constructed in the early 1950’s, was to promote sedimentation and fill in the early-1950’s channel alignment that had shifted far south, and direct flow through the Route 1061 bridge over the Kansas River, thereby preventing the river from eroding the southern approach to the bridge. I believe the existing jetties will continue to serve their intended purpose even as surrounding ground is excavated, as long as they are not disturbed.
MEMORANDUM

To : Scott McCullough, Director, Planning & Development Services
     Sandra Day, Planner

From : Keith A. Browning, P.E., Director of Public Works/County Engineer

Date : April 7, 2011

Re : CUP-10-6-10 Kaw Valley Sand Facility
     N 1500 Road improvements

The proposed sand facility will result in increased truck traffic on N 1500 Road. The applicant’s traffic analysis report estimates an average fourteen (14) trucks per day will travel east on N 1500 Road to Route 1061, and an estimated three (3) trucks per day will travel west on N 1500 Road.

The current condition of N 1500 Road from Route 1061 west approximately 5,000 feet through the four sharp turns is less than adequate for increased truck traffic. While the limited number of trucks does not justify reconstructing the roadway, some “heavy maintenance” improvements are required to ensure the road will stand up to the increased traffic. In addition, the eastern approximately 250’ of N 1500 Road is on a significant grade and should be surfaced with asphaltic concrete. This will ensure trucks queuing up on the grade approaching the STOP sign at Route 1061 will not tear up the gravel surface when accelerating from a stopped condition.

I recommend the applicant be held responsible for the following actions associated with initial improvements and ongoing maintenance of N 1500 Road:

1. Construct asphaltic concrete surfacing on the eastern approximately 250 feet of N 1500 Road.
   a. Engineered construction plans shall be prepared by the applicant’s engineer, subject to approval by my office.
   b. Applicant shall hire a contractor to construct the improvements, and my office will inspect the construction.

2. Applicant provides all materials necessary for “heavy maintenance” improvements on the rock-surfaced portion of N 1500 Road from Route 1061 through the 4th turn west of Route 1061, a distance of approximately 5,000 feet.
a. Applicant shall have all materials delivered to the site, and shall coordinate delivery with this department.

b. This department will construct the "heavy maintenance" improvements.

c. Applicant will provide easement access to property to facilitate any drainage improvements. This department will work with Applicant to ensure any drainage ways or outlets fit with proposed improvements to the sand facility.

3. Applicant provides $0.10 per ton of material hauled from the sand facility into a fund established by Douglas County for ongoing maintenance of N 1500 Road.

4. Applicant provides permanent drainage easements to allow maintenance of any drainage ways or outlets constructed on Applicant’s property.

As indicated above, I propose the Applicant provide materials and Douglas County construct the "heavy maintenance" improvements on the rock-surfaced portion of N 1500 Road. We currently estimate material costs to be approximately $40,000, as detailed on the attached spreadsheet. The nature of these improvements makes it difficult to adequately convey in a set of plans for use by a contractor. Improvements will include:

- Drainage improvements
  - Raise low areas on the inside of curves
  - Grade-to-drain any areas of ponded water
  - Grade ditches and install culverts as necessary

- Rock surfacing improvements
  - Widen road where necessary
  - Stabilize subgrade on inside of curves and other soft areas
  - Add 4” rock surfacing
  - Stabilize rock surfacing

The proposed $0.10 per ton royalty should provide adequate funds for ongoing maintenance of this portion of N 1500 Road. Assuming the Applicant’s estimate of 100,000 tons per year hauled from the site, this would provide $10,000 per year to cover maintenance costs.

The proposed "heavy maintenance" improvements will not result in a perfect roadway. Drainage will be a continual problem given the flatness of the surrounding floodplain. However, these improvements will result in an adequate road that will handle the increased truck traffic without being a continual maintenance problem for Eudora Township.
N 1500 Road Improvements
Kaw Valley Sand Facility

Date: 4/7/2011
By: KAB

N 1500 Road from Route 1061 to ~ 5000 feet west of Route 1061

Proposal:
1. Applicant provide all material costs for rock road improvements
2. Applicant haul all rock need for rock road improvements
3. Applicant allow access to property to facilitate any drainage improvements
4. Douglas County perform rock road improvements
5. Applicant design and construct HMA surfacing from Route 1061 to ~ 250 feet west
6. Applicant provide $0.10/ton hauled from site for ongoing road maintenance

Drainage Improvements:
- Raise low areas on inside of curves
- Grade to drain areas currently ponding water
- Installation of CMP culverts may be necessary

Rock road improvements:
- Stabilize subgrade on inside of curves and other soft areas
- Add 4" surface rock from Rte 1061 to Sand Facility entrance
- Stabilize rock surfacing (e.g. BaseOne stabilizer)

Estimated material costs--rock road improvements (for information only):

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<td>shot rock</td>
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<tr>
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MEMORANDUM

TO: Douglas County Planning Commission
    City of Eudora Planning Commission

CC: City of Eudora staff and governing body
    Douglas County staff

FROM: Scott Michie, City of Eudora Planning Advisory Consulting Staff

SUBJECT: Staff Findings for Application for Kaw Valley Eudora Sand Facility Conditional Use Permit to Douglas County by Landplan Eng/Kaw Valley Sand & Gravel Co.

DATE: April 18, 2011     County Agenda of 4-25-2011, Sand Pit CUP

The City of Eudora appreciates the County staff listening to the City’s planning policies and facilitating this process to date. This memorandum is the City of Eudora’s follow up staff findings to the first public hearing of February 23rd and staff-applicant meetings of March 3rd and April 4th.

The City remains committed to its recommendation for denial and supports the recommendations for denial from County staff and the City planning commission (February 23rd public hearing). The City’s recommendation for denial remains centered on three findings:

1. The CUP application does not meet long-standing industrial development plans and policies in the City’s planning area.
2. The review and analysis by Terrane Resources Company (February 14, 2011) provided for the February 23rd public hearing lists variables and concerns that merit a remedy before the public can be assured against harm as to long-term potential impacts of the proposed sand pit operation on treatment by the City of Eudora of well water at its treatment plant.
3. The impact on the central jetty and the jetty system: We ask that the Douglas County Engineer’s opinion be reconsidered.

Re #1 – Eudora Standard 1: Whether the proposed use meets City regulations. The subject application does not meet the standards of City of Eudora regulations, because it does not meet the City’s long-standing public policies for Industrial Development. For City Development Policy to be valid it must be applied to all cases. As City Development Policy must be applied to all cases, it must be applied to each individual case, including the CUP application by Kaw Valley Sand & Gravel Co.

The City of Eudora’s long-standing Industrial Development Policies are very clear and very simple. Industrial development in Eudora and its designated planning area must be:

1. Directly accessible to K-10 Highway, and
2. Out of the 100-year floodplain.
This application meets neither of the City’s long-standing industrial development policies.

Over the years the City has considered industrial development in its northern floodplains; and after careful study, has expressly rejected that development option. In the 2008 plan update workshop sessions, citizens a) considered this option for industrial development in the City’s northern floodplains, and b) decided that the City of Eudora should not allow industrial land uses in its northern floodplains. To the contrary, the City decided it should promote industrial development where there is direct access to K-10 Highway, so that industrial traffic does not have to drive through the City on local streets to reach the regional highway. Douglas County approval of industrial development north of the City corporate limits—in the 100-year floodplain, outside of the City’s “three primary target areas for industrial and commercial” growth—would be contrary to the City of Eudora’s current and long-standing development policies. From a strategic policy perspective, Douglas County-approved industrial development in such areas that are not in the City’s planned industrial areas would have the negative potential of diverting limited city resources away from its well-document “primary target areas” for industrial and commercial development.

Each annual Plan update by the City of Eudora that followed the 2008 planning charrettes has shown how the City continues—to this day—implementing its long-standing plans for industrial and commercial development: the 2009 Economic Development Plan and the 2010 Nottingham Development Guidelines and Site Plan (which was jointly adopted by the City and the Eudora School District). Both plans further documented the City’s strategic, public commitment to its three primary non-residential target areas—the areas where it has publicly stated its municipal support for non-residential development—in Downtown Eudora, the Church Street Corridor at K-10 Highway, and the East 10th Street Corridor at K-10 Highway.

**Eudora Standard 2: Whether the proposed use complies with the Comprehensive Plan.**

**Staff Finding:** The application does not comply with the City of Eudora Comprehensive Plan. The prior major plan update (2003) and recent plan updates by the City of Eudora call for preservation of the river floodplains in its planning area, recognizing them as “the most prominent natural features north and west of the City.” Specifically, the 2003 updates consider preservation of environmental and natural resources as a tool that defines the character of the community and greatly contribute to the overall quality of life. The primary natural resources in Eudora are the Wakarusa and Kansas Rivers, the creeks, designated open spaces and floodplains. Requiring specific consideration during the platting and site planning processes should protect these resources. Clearly the application by Kaw Valley Sand and Gravel Co. will adversely affect the preservation of these natural resources.

In addition, the 2003 Comprehensive plan updates support the industrial land use recommendation of the Future Land Use Map:

1. Industrial uses should be on land that is well drained and free from flooding.

2. Industrial development should be concentrated on land currently zoned for industrial and in existing and new industrial parks, promoting the proper mix of light and heavy industrial development, and encouraging employment opportunities for the existing pool of skilled labor.

3. Industrial areas should have reasonable and convenient access to major arterials and
railroad facilities as required. The use of local streets and traffic that cuts through the community off of arterial streets is strongly discouraged as it increases road maintenance and traffic conflicts.

The 2008 Comprehensive Plan update referred to the Wakarusa and Kansas Rivers as “the primary (natural) resources in Eudora.” The plan update went on to define public policy vis-à-vis “Environment/Natural Resources” by stating, “Natural resources help define the character of the community and greatly contribute to the overall quality of life . . . (including) the designated open spaces and floodplains.” Participants in the 2008 Plan update were asked to identify future growth areas in the greater Eudora area where industrial development should be focused (ref. map on page five of this memorandum). The following items received support from participants:

- General-commercial areas, especially along K-10.
- Nottingham School site for future commercial use.
- Promote commercial development along K-10 Highway both to the west and the east; long-term growth into Johnson County.
- Concentrate commercial development on the east interchange to serve future traffic if the I-70/K-10 connector is built at this location; also increase commercial in this area on Future Land Use map.

The majority of workshop participants in 2008 did not support the idea of promoting industrial development in the floodplain of the Kansas River. Plan update participants discussed that, “Development in this area would be made more difficult due to 100-year floodplain restrictions . . . there are other areas that would be more suitable for industrial development, such as west of the Wakarusa River north of K-10 Highway (in the 500-year floodplain).” The maps created in 2008 and selected by the planning commission built on long-standing plans for linear parks and passive recreation in the river floodplains—left undeveloped—and for industrial development in long-standing targeted nodes outside of the 100-year floodplains, with direct access to K-10 Highway.

**Eudora Standard 3: Whether the proposed use and site plan will be objectionable or detrimental to the public welfare of the community under the circumstances of the particular case regarding setback, height, density and similar aspects.**

**Staff Finding:** The application does not meet the following City zoning requirements:

- Exterior Storage: Except as otherwise permitted by these regulations or during permitted construction on any tract, all exterior storage of equipment, raw materials or finished products shall be fully screened from the view of adjacent parcels and streets by a solid screen at least six (6) feet in height.
  1. **Planting Screens.** Planting screens shall consist of trees, bushes or shrubs of a variety and so planted and kept as to be achieved within thirty-six (36) months after occupancy of the premises to be screened.
     - Any two (2) foot square segment of a planting screen shall contain no more than Twenty-five percent (30%) open space affording a direct horizontal view through such screen if such segment is over two (2) feet above grade.
     1. Such screen shall have a minimum height of six (6) feet above grade at any particular point along its length.
(2) Landscaped Berm. Adequate evidence shall be furnished demonstrating that the construction of such berm, along with any necessary culverts and ditching, will not create adverse drainage and flooding conditions on adjacent property.
   
(a) Such berm shall be at least thirty (30) feet in width at the base and at least four (4) feet in height, as measured perpendicular to grade level at any point along its length. Side slopes shall have a gradient no steeper than three to one.
(b) Side slopes of such berm shall be sodded so as to prevent erosion. The top of the berm shall contain a planting screen above except that the minimum height of such planting screen need be no more than three feet above the top of the berm at any particular point along its length. Construction and material of such berm shall be as approved by the Planning Commission.

(3) Fence Screen. A fence screen shall not be less than eight (8) feet, nor more than ten (10) feet in height above grade level, at any particular point along its length. Any two (2) foot square segment of such screen shall contain no more than Twenty-five percent (30%) open space affording a direct horizontal view through such screen. Construction and material of such fence screen shall be as approved by the Planning Commission.

- Improvement guarantees shall be provided to ensure the proper installation of improvements required by the site plan.

- Preservation of Natural Features. Mature trees, vegetative cover, watercourses and other natural site features shall be preserved to the greatest extent possible. Abrupt changes in natural slope shall be avoided. Preservation shall be directed toward:
  (I) enhancing the quality of new development,
  (II) protecting the natural environment, and
  (III) preserving the character of existing neighborhoods

SUMMATION

The subject application does not meet the three standards of City of Eudora zoning regulations, because it does not meet the City’s long-standing, well-documented public policies for industrial development, which clearly state that it must be:

1. Directly accessible to K-10 Highway, and
2. Out of the 100-year floodplain.

The City of Eudora has consistently planned for industrial development in targeted areas of the City and its planning area (including parcels in 500-year floodplain of the planning area) that have direct access to K-10 Highway—which is clearly contrary to Douglas County approving industrial development in Eudora’s planning area on parcels in 100-year floodplain at locations where direct access to the regional highway system cannot be provided.
Comprehensive Plan Update Map—2008
The maps created in 2008 and selected by the planning commission built on long-standing plans for linear parks and passive recreation in the river floodplains—left undeveloped—and for commercial and industrial development to focus in long-standing targeted nodes outside of the 100-year floodplains.

Development in Future Growth Areas Charrette Map—2008

The 2008 Plan update called for 100-year floodplains to be kept open and industrial development to be targeted west of the Wakarusa River in the 500-year floodplain with direct access to K-10 Highway (at CR 1057), and at the long-established Intech Business Park near the East 10th Street interchange with direct access to K-10 Highway.
Re #2 – Public assurance as to long-term potential impacts of the proposed sand pit operation on treatment of the well water by the City of Eudora. Should the County consider conditions of CUP approval in this case, the City recommends the following conditions be considered for City well protection:

1. A **surety bond** with provisions to assure that the City would be made whole should a well water problem result from the proposed sand pit operation, provisions to be worked out with input from the City.
2. **Method for monitoring** untreated and treated well water for timely intervention, in a procedure acceptable to the City and the County.
3. A **building setback** of 100-feet or greater from the property line opposite the main City water line feeding the city of Eudora, parallel to N-1500 Road.

Re #3 – Long-term potential impacts of the proposed sand pit operation on the central jetty and the jetty system. We ask that the Douglas County Engineer’s opinion be reconsidered, and that if any jetty is amended by the dredging, then an engineering solution must be submitted for how the amendment will leave a fully-functioning jetty system.

Attachment: Review by Terrane Resources Company (February 14, 2011)

End of Memorandum
14 February, 2011

Mr. John Harrenstein, City Manager
City of Eudora
Eudora, KS

Re: Kaw Valley, Eudora Sand Facility

Mr. Harrenstein,

This letter and enclosed exhibits are compiled in response to the City of Eudora’s request we review and evaluate a report titled "Evaluation of Kaw Valley Companies, Inc., Proposed Sand Pit Operation on Ground Water in the Vicinity of Eudora”. We have reviewed the data presented in this report, questions answered by the City Staff, and some of the published data for the area. Our findings are based on the presented data and our understanding of how the City operates its well field.

It is our understanding the wells are operated approximately 12 hours per day during the winter, 15 to 18 hours per day during the summer and up to 20 hours a day during drought conditions. Additionally, we understand the wells operate at the same time.

Our comments are as follows:

Section 1 responses

We believe Mr. Nuzman has made a valid attempt to estimate the potential impact of the proposed sand operation on the City's well field. We are still not sure if this is a preliminary report or a final report, as neither the report, the plans or cross section are stamped by either an professional engineer or geologist.

Section 2 responses

The Kansas Geological Survey (KGS) has studied this area; however there is no reference to any specific report by the KGS. KGS Bull. 206, part 2 does show a west to east ground water flow through a portion of this area. Typically, we see the water table surface mimic land surface though more subdued. This regional study would be a good guide re: regional ground water flows. However, a detail
survey would have to be done to better define the area of influence to the City wells.

TRC 1 is a copy of the cross section submitted by Mr. Nuzman. The drawing shows well logs and the text indicates it runs along North 1500 Road. None of the maps we have rec'd shows the transect line for this cross section. Additionally, it is not clear which logs were used for the cross section as none of them are labeled to match the TH id's along the top of the cross section. The scale shown on the cross section is apparently the vertical scale as it would not be a reasonable horizontal scale for the area depicted by the cross section.

We have modified this graphic to show the estimated water level associated with the river compared to the test-hole data. It is important to understand the TH logs are not adjusted for elevation. Therefore, the water table, as depicted, is probably not representative of actual conditions. Elevation adjusted cross-sections for the area could better define the relationship of the City's well field to the sand pit site and Kansas River.

Section 3 responses

Based on our brief data review we do agree the Wakarusa River is an important component to your well field viability. It would take further investigations to better define the impact of the Wakarusa River on the overall ground water aquifer system.

Section 4 responses

Mr. Nuzman has identified the City's wells as being NW of town but appears to misquote the actual number as "three" in the text. One of the maps shows 4 wells and a potential fifth one. Exhibit B does show well #9 as a proposed well. The info we rec'd from your staff indicates Well#9 is online.

It is important to note some of the wells are situated in an east to west configuration. This arrangement puts Well #8 down-gradient of Well #9 and the proposed new well down-gradient of Well #8. Like wise Well #6 is down-gradient of Well #7. Fundamentally we see down-gradient wells being affected by up-gradient wells especially when they are pumped at the same time.

Typically we see an elongation of the cone of depressions in the direction of ground water flow when wells are situated as the City's are. This is important when you look at potential changes to the effective saturated thickness of the aquifer, and additional developments.
Section 5 responses

Mr. Nuzman makes some good comments re: aquifers, well influences on the aquifer and saturated thickness.

He references the 1998 data for City Well #6 (Exhibit D) and has prepared a distance-drawdown graph based upon that data. Mr. Nuzman indicates the data shows there to be little if any negative impact to nearby wells due to distance. We have modified that graph to show what two additional feet of drawdown does for the area of influence. See TRC 2

We have no data that shows that the additional drawdown will happen. Also we have no data which shows it is not occurring already.

The modified graph now shows the one foot draw-down point to be out to approximately 800 feet instead of 450 feet.

The current Kansas River bank is approximately 3,500 feet east of Well #6. The SW corner of the proposed gravel pit (along North 1500 Road) will be approximately 1,250 feet away from Well #6. This is a significant encroachment on the well field.

As discussed in the previous section there are some fundamentals regarding aquifers and the effects of pumping wells we can discuss. Elongation of areas of influence is the most critical with regards to the City's well field. If the wells were situated in a north-south configuration the interference effects would be mitigated. The reason the effects would be limited is due to the ground water flow direction being from west to east. Since some of the wells are situated down-gradient, from each other, the potential for interference is greater. The interference is caused because the up-gradient well partially dewater the aquifer between the wells. This partial dewatering of the aquifer reduces the saturated thickness which limits the recharge to the down-gradient well. See TRC #3 and #4

In order to maintain the same area of influence for each well, if the overlapping cones of depression do cause interference, the pumping rates have to be reduced.

Mr. Nuzman's statement is correct regarding the sand pit lakes being a source of recharge to the aquifer when they are within the area of influence of water wells. Unfortunately, that is not what the City needs. If this sand pit becomes a recharge source for the City Wells then they may get reclassified as ground water wells under the influence of surface waters.

TRC 5 is a copy of Exhibit B from Mr. Nuzman's report. We have modified it to show 500 foot and 1000 foot circles around each of the City wells. It is our
understanding the irrigation well is proposed as a new City well and are showing it with dashed circles.

Mr. Nuzman also states the static water level in the sandpit will be about the same as the water surface elevation of the Kansas River. We believe this to be an accurate representation of what will happen to the water level in the sand pit.

When the pit is dug the water level of the pit will be lower than what is static for the aquifer. This will be a permanent lowering of the water table and will impact the up-gradient aquifer. At this time we would estimate the lowering of the static water level to be 4 to 6 feet at the sand pit site. The lower water level in the pit will result in a permanent lowering of the water level immediately up-gradient of the pit and will migrate towards the well field.

How far the lowering of the static water level will extend up-gradient, from the sandpit would have to be determined.

As we discussed above, any lowering of the water level in the aquifer will increase the area of influence for the pumping wells. This will happen because the saturated thickness of the aquifer will be less. Unless the City reduces it pumping rates the drawdown in the wells will increase.

It will take field studies to verify the actual changes to the static water level.

Again, it is important to understand that surface water will be approximately 2000 feet closed to the well field. If lowering of the water levels in the aquifer result in increases in areas of influence for the well field, the sandpit becomes a recharge boundary and will provide surface water to the aquifer. The reclassification to ground water under the influence of surface water may become a reality.

Section 6 responses

Mr. Nuzman makes some good and relative comments in this section. The Wichita area sandpit studies are relevant in that they are a good guide. However, it is important to understand the only way to understand what will happen in the Kansas River alluvial aquifer will be to study it.

Based upon the information we have there are no housing developments planned for the area immediately around the sandpit. Urban runoff does typically cause more problems than rural runoff.

Mr. Nuzman is correct that natural grass filter strips are important and must be utilized to mitigate ag-chemical runoff from nearby fields.
We do not have enough details for the proposed sandpit runoff controls and structures to comment whether they appear to be sufficient or not.

Mr. Nuzman is correct regarding the effects of sunlight and biological activity degrading and utilizing the contaminants associated with runoff. However, it is the biological activity that may impact the City's classification regarding groundwater under the influence of surface water.

As Mr. Nuzman has commented some of the sandpits tend to silt over with time and limit recharge to the aquifer. This can be a benefit as well as a detraction. The increase in silt can minimize the potential for contamination (chemical or biological) from entering the aquifer by reducing the recharge potential of the site. Conversely, the reduced recharge may limit the recovery of the well field resulting in increased drawdown in the wells.

Section 7 responses

We simply can not come to the same conclusions as Mr. Nuzman. If the proposed sandpit was a ½ mile down-gradient, from the wells, or across the river we would be much less concerned. The proposed sandpit will bring surface water approximately 2000 feet closer to the well field and potentially dewater a portion of the aquifer up-gradient and towards the City wells.

The sandpit studies in the Wichita area are simply that, they are in the Wichita area! The study can be a good guide as how this sandpit might be monitored.

Utilizing Best management Practices (BMP's) around this sandpit will be important. We have no information regarding the processes Kaw Valley has proposed for surface runoff control.

Recommendations

We strongly suggest the City ask Kaw Valley to postpone their meeting with Planning and Zoning until the City can obtain clarification of some of the data and present their concerns directly to Kaw Valley and their consultants. It has been our experience that direct negotiations will be more beneficial and less expensive than trying to negotiate through the Planning and Zoning Process. If a mutual agreement can be reached between the City and Kaw Valley, then the City simply recommends the modified plan be approved by Planning and Zoning.

Historically, it was thought the public should have complete and unrestricted access to a city's data and well field operations. We do not believe going into great detail as to how the City's wells function and the areas which directly impact the viability of the well field need be publicized.
We recommend the City monitor water levels in and around their well field. Either by utilizing existing wells if available or by installing a series of observation wells. From this network a detailed ground water flow regime map can be prepared. Additionally, seasonal variations in ground water flow can be monitored.

Once the City has a detailed Source Water Protection Area (SWPA) delineated then it can be referenced in future planning and zoning determinations.

We suggest requesting Kaw Valley install, monitor and analyze samples and data from no less than three observation wells along the west and southwest portion of the proposed sand pit. It would be beneficial if these wells could be installed before excavation begins. Samples should be collected in the spring and late fall to establish a baseline on quality and water levels should be measured monthly.

The main component as to whether this proposed sandpit will be an issue will depend on the City’s well field has on the aquifer. It is possible the data to make that determination already exists. Much of the data gathered during the construction of the wells should be available. It is important the wells be evaluated as they are operated, not as a single event or pumping well.

John, this is a complex issue, which may be exactly as Mr. Nuzman has described it. It has been our experience it takes detailed analysis of the data to establish areas of influence and develop a meaningful SWPA delineation.

As Always if you or any of your colleagues have any questions do not hesitate to contact us.

Respectfully submitted

Edward “Ned” T. Marks, Geologist
Terrane Resources Co.

Encl.
Figure 9.29. Interference between adjacent wells tapping the same confined aquifer. Composite cone is for both wells pumping simultaneously under the assumed conditions.

through this point a straight line having a Δs, or slope, of the calculated value.

**WELL INTERFERENCE**

The interference or drawdown in another well 300 ft (91.5 m) from the pumped well
Figure 22.5. Mutual interference between two or more wells lowers the water table for dewatering operations.

vertical drainage of all the water from the saturated zone. In practice, this time lag makes it necessary to start pumping from the well-point system a day or more before excavation begins.

As explained above, the maximum drawdown...
PLANNING COMMISSION REPORT
Regular Agenda - Public Hearing Item

PC Staff Report
2/23/11
ITEM NO. 5  CONDITIONAL USE PERMIT FOR KAW VALLEY EUDORA SAND FACILITY; LOCATED AT 2102 N 1500 ROAD (SLD)

CUP-10-6-10: Consider a Conditional Use Permit for Kaw Valley Eudora Sand Facility, located at 2102 N 1500 Road, NE of SW Cor. SW ¼ S32-T12S-R21E, on approximately 196.58 acres. Submitted by Landplan Engineering, P.A., for Kaw Valley Companies, Inc., contract purchaser, for James and Ronda Bigger and Wellsville Bank, property owners of record. Joint meeting with Eudora Planning Commission.

STAFF RECOMMENDATION: Staff recommends the Planning Commissions forward recommendations for denial of this Conditional Use Permit to the Board of County Commissioners based on the findings of fact in the staff report.

Reason for Request: “The owner wishes to conduct sand excavation, extraction and processing operations on the subject property in conjunction with the existing agricultural uses.”

KEY POINTS
• The property is currently in agricultural production during the growing seasons of the year.
• Kansas Geologic Services web site is provided for reference documentation: http://www.kgs.ku.edu/Publications/KR/
• Sand, Gravel and Crushed Stone: Their Production and Use in Kansas: http://www.kgs.ku.edu/Publications/pic6/pic6_1.html

ASSOCIATED CASES/ OTHER ACTION REQUIRED
• State and local permitting required following local approval, if granted.
• Local Floodplain Development Permit will be required from Douglas County.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
See communications attached to report.

ATTACHMENTS
1. Site Plan (including reclamation plan)
2. On line Soils Report form
3. Well Report
4. Staff summary – Eudora Economic Development Plan
I. ZONING AND USES OF PROPERTY NEARBY

GENERAL INFORMATION
Current Zoning and Land Use: VC (Valley Channel) District; existing unmaintained golf course with substantial trees along river bank.

Surrounding Zoning and Land Use: VC (Valley Channel) District to the west and south within Douglas County; crop land with scattered rural residences.

Kansas River to the immediate north and east.

I-3 (Heavy Industrial) District – Leavenworth County Zoning (see inset).

Staff Finding - The property is not actively used for any specific use. The property was, at one time, developed and operated as a golf course but has since fallen to disuse. The area includes Valley Channel zoning within Douglas County and Heavy Industrial zoning in Leavenworth County. Both Douglas and Leavenworth County surrounding properties are predominantly used for agricultural crop production. Leavenworth County includes a railroad line that generally parallels the Kansas River. All land south of the railroad to the County line is zoned for industrial uses in Leavenworth County. The area within Douglas County east and south is zoned VC – Valley Channel and is used for agricultural activities.

II. CHARACTER OF THE AREA

This area is located north of the City of Eudora and within 3 miles of the Eudora City Limits. More specifically, the incorporated Eudora City Limits is located approximately .3 miles mile south of the proposed use. The proposed dredging operation area is also located within the City of Eudora’s Planning Area as found in the Eudora Comprehensive Plan (ECP). This planning area extends north and east to the Douglas County Line boundary lines and generally 3 miles to the west and south of the existing city limits.
The property was originally developed as a public golf course but is currently vacant. The surrounding area includes extensive agricultural fields and scattered rural residential homes found along the County roads.

A dominating characteristic of the area is the floodplain encompassing the subject property and the surrounding land. The floodplains from the Kansas River and the Wakarusa River converge northeast of the City of Eudora. Approximately 141 acres of the proposed sand dredging operation are located within the floodplain. The balance of the subject property is located within the 100 year fringe area.

The encumbrance of floodplain designations tend to hinder development and limit land uses to those compatible with open uses of land.

**Staff Finding** - The character of the area is rural agricultural. The presence of extensive floodplain limits development opportunities in this area. The proximity of the subject property to the City of Eudora is a key factor of this consideration.

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

**Applicant response:** The majority of the subject property will remain open space.

Suitability is reviewed based in the following subjects:

a) Current County zoning VC.
b) General provisions of a Conditional Use Permit.
c) Eudora Industrial Zoning.
d) Soils Classifications for the subject property.
e) Geology

The subject property is restricted to the uses permitted in the Valley Channel zoning district, which includes mining as a conditional use permit.

#### a) Zoning

*The purpose of this district is to prevent, in those areas subject to periodic or potential flooding, such development as would result in a hazard to health or safety, and to insure the general public will not be forced to expand exorbitant funds to remedy flood problems* (per section 12-314-1 of the County Zoning Regulations).

Uses allowed in this district include farms, truck gardens, orchards, nurseries, grazing, hunting and fishing, public or private commercial recreation facilities and structures, preserves, reservations and other similar open uses. Section 12-314-3.08 prohibits “the removal of top soil, or damming or relocating of any water course except with the approval of the Planning Commission.” Mining activities are further defined in Section 12-319-4.05 as a Conditional Use. While the use is potentially allowed, approval is required though a public review process.
The property is also encumbered by the 100 year floodway except for a small area located in the southwest corner and a portion along the west side of N 1500 Road. This designation further limits development options as set out in section 12-328 of the County Zoning Regulations. The Floodplain management regulations are intended to, among other things, “Control grading (fill or excavation), dredging, and development which may unduly increase the potential for flood damage.” It should be further noted that any improvements to the property such as the addition of structures and berms are subject to local, state review with regard to As such, a local Floodplain Development Permit from Douglas County would also be require for this project.

The proposed request will not alter the base zoning. However, if approved, the ultimate result (when the resource is exhausted) will be a permanent alteration to the area by the creation of a 114 acre lake.

It is assumed that areas not actively being mined will remain in unimproved open space or agricultural production. The site plan does not clearly designate this activity.

- If approved, the site plan should be revised to include notes regarding the continued use of property during phases.

b) Conditional Use Permits. Section 12-319 of the County Zoning Regulations states:

Recognizing 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, certain conditional uses listed in Section 12-319-4 below, 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.

Specific uses are listed in the Zoning Code including mining excavation and extraction of minerals. This use is allowed in the district subject to the approval of a Conditional Use Permit. The code states:

12-319-4.05. To assure that the continued development of all natural resources will be made possible through inclusion of known mineral deposits within zones reserved for their development and production, to guarantee that these sources will not be forever lost for the benefit of Douglas County, Kansas:

(a) Mining excavation and extraction of mineral or raw materials including but not limited to stone, sand, gravel or the other building materials and the manufacturing, processing, storage and selling of said minerals and materials shall be permitted to continue in operation in "A" Agricultural District, "VC" Valley Channel District and Floodway and Floodway Fringe Overlay Districts (only on those areas under lease and on record at the time this resolution goes into effect.)

(b) Mining, extraction and excavation of raw materials at new locations within Agricultural, Valley Channel districts, in Douglas County, shall require that an approved plan of restoration of land be submitted to the Planning Board for its recommendation to the Board of County Commissioners. This plan shall show that all excavated material will be returned to a level no higher than the elevation of surrounding land, and that proper drainage is provided. All shafts or tunnels must be left in a safe condition when abandoned.

This use is allowed in the VC zoning district subject to approval of a Conditional Use Permit. Conditions may be placed on the use to assure compatibility and address concerns through mitigation standards if approved. Douglas County does not include any specific use standards for mining activities with the exception of the restoration plan as noted above.
c) **Eudora Industrial Zoning.** While the property is not within the City of Eudora, a review of the applicable base zoning district is included, since the subject property is within the Eudora growth boundary.

**Eudora Industrial Zoning:**

16-308 I - Industrial District

1. **General Description:** The purpose of the Industrial District is to provide for the establishment of warehousing, manufacturing, and administrative office development. The overall character of the industrial district is intended to allow industrial development but to ensure that it is compatible with adjacent land uses, whether they be industrial, business or residential in nature. The method of ensuring such compatibility is by the imposition of performance standards which will lessen any potential detrimental effects of a particular industrial use.

2. **Uses Permitted:** The manufacturing, compounding, assembly, packaging, repair, testing, treatment, wholesaling, or storage of products, materials or equipment, and physical recreation or training facilities (such as, but not limited to, dance studios and health clubs), and administrative office facilities, and sexually oriented businesses, and pawnshops, and facilities necessary to operate public services, are permitted uses in the I District.

Development standards with regard to industrial development state:

**Exterior Storage:** Except as otherwise permitted by these regulations or during permitted construction on any tract, all exterior storage of equipment, raw materials or finished products shall be fully screened from the view of adjacent parcels and streets by a solid screen at least six (6) feet in height. Storage within I - Industrial Districts shall be exempt from screening of exterior storage visible from abutting streets.

Other land use policies included in the Eudora Comprehensive Plan state that industrial development is not suitable in flood prone areas.

d) **Soils Classifications.** In the staff report CUP-12-7-94 the area was described as follows:

*The Soil Survey of Douglas County, Kansas, 1977 identifies the majority of the site as Eudora-Kimo fine sandy loads, overwash; Eudora silt loam; and Sharpy-Eudora complex, overwash which are all classified as highly productive farmland. The northern portion of the property is Riverwash areas, which are classified as low productive potential.*

The southwest corner of the subject property is encumbered by Type Two Soils. Soils are not necessarily limiting other than they are not reported to be highly productive agriculturally. This factor lends its support toward other types of open spaces uses such as recreation uses as previously approved for this site.

e) **Geology.** Sand, like gravel, soil, oil, and other materials are mined from the ground as a marketable resource. Some of resources are renewable with good land management practices; others once mined are not renewable and substantially alter the landscape. Soils associated with rich sand deposits are most commonly found located along rivers.

The Kansas River is the contributor to the deposit of sand and gravel within the river bed and along the river. Changes in Federal and State law restrict accessibility from excavation in the river. These materials are described as low-value, high-bulk commodities. As such they are generally marketed for construction purposes in the immediate vicinity of the extraction facility. As communities develop the accessibility to the resources becomes restricted. A large segment
of the Kansas River is within a regulatory airport zone that prohibits the constriction of ponds as a hazard to the Lawrence Municipal Airport. Other segments of the river are located within designated urban growth areas of Lawrence and Eudora.

“...demand for these materials comes from areas of growing population where new construction and road-building are most common. Because sand, gravel, and other geologic commodities come from the earth, their production often raises a conflict between people’s desire for an undisturbed landscape and the demand for these resources.” Sand, Gravel, and Crushed Stone: Their Production and Use in Kansas by David A. Grisafe Source: http://www.kgs.ku.edu/kgs.html

The proposed request represents a consideration of the balance of co-located resources. Each resource, open space or mineral extraction, includes inherent value. The value of the preservation of agricultural properties and open space uses and soils are articulated in the Communities comprehensive plan, Horizon 2020.

**Staff Finding** - When reviewing the county codes, the property is suited for the proposed use of a sand dredging operation if it can be shown that it is not *incompatible with other uses permitted in a district... and is... found to be in the interest of the public health, safety, morals and general welfare of the community.* The operation of the use will be industrial in nature and will have certain impacts to nearby properties. These impacts can be mitigated if the public good is served by extracting the natural resource.

**IV. LENGTH OF TIME SUBJECT PROPERTY HAS REMAINED VACANT AS ZONED**
This property was developed as a golf course in 1994 with revisions to add the sale of cereal malt beverages in 1997 and a caretakers residence in the clubhouse in 1999 (CUP-12-7-94; CUP-1-1-97, SP-2-11-99). Improvements include an existing two story residence located in the southwest corner on the north side of N. 1500 Road and several accessory structures north of the residence. These buildings are shown on the site plan and will not be removed as part of the proposed use, if approved.

**Staff Finding** - County Zoning Regulations were adopted in 1966; this property has been zoned “VC (Valley Channel)” since that adoption. The property was developed as a golf course but has been unused since 2006. Property improvements include a two story residence with a total of 2,900 Sf.

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

**Applicant Response:** “No detriment to nearby properties will occur. This CUP request maintains existing agricultural uses on the land while adding employment and revenue opportunities in northeast Douglas County.”

Section 12-319 of the County Zoning Regulations recognizes 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...*” The proposed use falls under section 12-319 Count Zoning Regulations) of the County Zoning Regulations. Mining and excavation uses are enumerated in this section 12-319-4.05.

Approval of a Conditional Use Permit does not remove any restrictions imposed by the VC zoning of the property. Approval of this application would allow the applicant to remove top
soil, regrade the property, and extract the sand/gravel material. There are no shafts or tunnels associated with this operation that will require abandonment as are associated with other types of mining activities. The code specifically requires a restoration plan approved by the Planning Commission. As noted, this type of mineral extraction operation will permanently alter the surface contours by creation of a lake. It is unlikely that “restoration” to the pre-extraction conditions is feasible. Therefore a more correct interpretation is that a mitigation/reclamation plan is required to re-establish a productive use of the property. Given the proximity of the floodplain it is unlikely that development such as lake front suburban homes is feasible.

- Key concerns focus on the impact of traffic, water well protection, and structural protection of the Kansas River jetties.

- City and County staff have reviewed the traffic study and a study of the project on the Eudora water wells located to the southwest of the project.

Traffic. The traffic study indicated that the roads are capable of supporting the resulting traffic. The County Engineer noted that some road widening, surface, and subgrade stabilization in some areas may be needed on N 1500 between the entrance and Route 1061. County staff recommended the applicant provide rock for township improvement. The study further indicated that three (3) trucks per day (on average) travel west from the facility on N 1500 Road. Should the number of trips increase to 10 or more vehicle trips per day County staff recommends the applicant provide dust control along the route. Options for this include application by the operator of the facility directly to the roads or funding the township for the application of treatment for dust.

Well. The well report adequately, in staff’s opinion, concludes that the proposed sand pit operation will not contaminate groundwater pumped from the Eudora city wells. The City of Eudora is conducting an independent review of the report. Findings will be provided to the Planning Commission at the public hearing if available.

Rock Jetties. An additional concern identified by staff is the required protection of the Kansas River rock jetties located within the proposed mining area. Plans have been revised to protect the eastern most jetty with a setback that will allow continued protection of the jetty. The northern jetty is located within phases 7 through 9.

The functionality of the northern jetty has been questioned by the applicant. Given changes in the river the applicant generally asserts that this jetty could be safely removed. To date no convincing argument or evidence to that assertion from the Corps of Engineers or the applicant has been provided to County Staff.

The purpose of the jetty is to redirect the river and to limit riverbank erosion. There was a system of three jetties constructed on the south river bank in this vicinity in the 1950’s when the river threatened to cut through Route 1061 south of the Kansas River Bridge. After construction of the jetties, the river moved back to the north and eroded areas filled in. Since in the past the river has shown a tendency to migrate south and threaten the Route 1061 bridge, and since the system of jetties corrected the problem and has worked well, the County Public Works staff feels it unwise to allow removal or disturbance of any jetty. The County Public Works staff is charged with maintenance of the jetties by the Corps of Engineers. If approved no work beyond phase 6 should be allowed until documentation is provided by the Corps of Engineers. Douglas County has a blanket easement on this property to maintain the jetties. No
excavation should be allowed within 50' of the rock jetties to avoid disturbing the jetties and to allow access to the jetties.

Approval of the request introduces an industrial type activity to the north of the City of Eudora. The Community plans this area as future open space since the area is within the floodplain. This would be a substantial deviation from planned land use for the City of Eudora.

**Staff Finding** - Affects to nearby properties include increased truck traffic, including dust, and the industrial aesthetic of the processing plant portion of the site. Noise is not viewed by staff to be a detrimental impact though noise from trucks and machinery will be present. Strict controls are needed to assure protection of the Kansas River structures as well as public infrastructure investments.

**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 Response:** No identifiable gain will result by denial of this request; no identifiable hardship will result from its approval.”

This factor is a test of balance; weighing the relative gain to the public against the hardship imposed upon the property owner/applicant if the application is denied.

**Agricultural Resource.** Portions of the property have been mapped as Class 1 and 2 soils. The initial phase and plant will be located in the south central portion of the site along the west property line. Phase 1 of the dredging operation and the initial improvements area located in a type 2 soils area. The west half of Phase 2-4 appears to be out side of the mapped soils area. Existing residences and buffer areas would also not encroach into the mapped soils areas identified as Class 1 and 2 Soils.

**Traffic Impacts.** The relatively low traffic volume has been reviewed and deemed to be acceptable by County staff. Specific road improvements are needed as noted in the County Public Works review comments.

**Interstate access.** Highway access is important to the project to allow for delivery of the product to the main facility located in Kansas City, Kansas. The most direct route is by using County Road 1061 (Main Street in the City of Eudora) across the Kansas River to County Highway 1 in Leavenworth County for access to I-70. The applicant anticipates that the majority of trips will use this route (70%) the remaining trips would be west bound to and from Lawrence (20%) and south on Co Road 1061 through Eudora (10%). This use will have a presence in the Eudora traffic system.

Approval of the request will result in a change to the maintenance requirements of the existing township roads. As such staff recommends a per ton charge be added to the project if approved. The details of this mitigation tool are discussed later in this report.

**Water Resource.** As stated earlier, the proposed operation will not harm, in staff’s opinion, the existing Eudora wells located to the south and west of the proposed activity.
**Staff Finding** - Approval of the use does not clearly benefit nor harm the public. Approval of the request will alter the physical site by creating a 114 acre lake. Development opportunities are limited because of the presence of floodway. Once the sand is extracted the property will be removed from the agricultural inventory.

**VII. CONFORMANCE WITH THE COMPREHENSIVE PLAN OF DOUGLAS COUNTY AND WITH THE COMPREHENSIVE PLAN OF EUDORA**

**Applicant Response:** "This request complies with H2020. As a prospective industrial/employment-related development, the proposed sand excavation operation meets all 4 general and all 6 specific location criteria set forth in Chapter 7, Policy 2.1."

A review of the applicable comprehensive plans is included in this report. *Horizon 2020* governs the unincorporated areas of Douglas County. The City of Eudora designates an area outside of the existing city limits as part of the City's planning area. The proximity of the request to the Eudora city limits is significant in this evaluation. *Horizon 2020* notes the importance of establishing urban growth areas as stated in Chapter 4 of the plan. The Eudora growth area was updated in 2003 upon Eudora's adoption of a comprehensive plan. This element will be discussed in further detail later in this report.

**HORIZON 2020.** An evaluation of the conformance of a Conditional Use Permit request with *Horizon 2020*’s strategies, goals, policies and recommendations finds that the comprehensive plan does not address special or conditional use permits. The plan identifies several future locations of new industrial areas. These locations are mapped on page 7-24 (Map 7-2) of *Horizon 2020*.

*Horizon 2020* identifies several future new industrial areas including an area described as Eudora North and Eudora South. The plan states:

> Areas have been generally identified on the east side of Eudora both north and south of K 10 Highway that would be appropriate for Industrial Development. It is recommended that Eudora annex both areas prior to development. (page 7)
The plan assumes that these future uses include buildings and parking lots as the primary investment in the property. The proposed use has only limited amount of building structure associated with the activity.

*Horizon 2020* recognizes that various land uses often compete when there are similar land features desirable for a group of uses. To provide balance to the competing concerns for of a health natural environment and a diversified economy a set of location criteria have been established for locating new industrial developments.

**LOCATIONAL CRITERIA FOR INDUSTRIAL DEVELOPMENTS (PAGE 7-4 AND 7-5)**

A given site, whether located within City limits, in the UGA, or in unincorporated areas of Douglas County, should substantially meet the following **general** locational criteria:

- have feasible access to Federal and State transportation networks;
- be of adequate parcel size, generally over forty acres;
- lie primarily outside of the regulatory floodplain;
- have minimal average slopes.

After identifying a general location for potential industrial and employment park development, further site analysis and environmental suitability should be conducted considering site-specific criteria. Sites should substantially meet the following **specific** criteria on a site plan or development plan level:

- preserve environmentally sensitive areas, including vegetative cover and wildlife habitat, to act as buffers and site amenities;
- encourage natural stormwater management, including locations that permit direct discharge to the floodplain;
- have available and adequate utilities, infrastructure and services (i.e. police and fire protection) for the proposed use;
- be compatible with existing and future zoning/land use patterns, including the use of appropriate buffers between land uses;
- be annexed before development if adjacent to municipal boundaries.

Access to state (K-10) (K-32) and federal (I-70) highways require travel of several miles to reach these highways using county roads. Access is feasible but not within the immediate proximity. The requested area clearly exceeds the minimum 40 acre standard listed above. However, the property is fully within the 100 year floodplain and a substantial portion is located in the floodway. The property also includes minimal slope. The proposed request satisfies two of the initial criteria listed in Horizon 2020.

The Plan does address agriculturally zoned/used land. *Horizon 2020* recommends; “Agricultural uses should continue to be the predominant land use within the areas of the county beyond the designated urban growth/service areas (rural area). Uses permitted in the rural area should continue to be limited to those which are compatible with agricultural production and uses.” (page 5-6, *Horizon 2020*).

The Planning Commission approved language for Chapter 16 Environment in August 2010. A section of this chapter addresses “marketable resources.” This proposed chapter recognizes that, “They are essential to sustainable development activity, primarily in the form of low cost raw materials, such as sand, gravel, timber, oil, gas, and stone, etc.” A recommended action item of the chapter is to map the resources to assist in reviewing land use applications. To date the plan does not include a map of marketable mineral deposits in Douglas County.

**Urban Growth Areas.** *Horizon 2020* includes growth areas for the Cities of Baldwin, Eudora, Lawrence and Lecompton. They are shown in the composite map 3-3 of Horizon 2020. The City of Eudora’s designated urban growth area was added in December 2003. The 2009 update expands the plan area for Eudora.
Land uses planned for the area generally north of the Wakarusa river (north Eudora) are identified as continued floodplain with no specific land uses planned for the area.

**Eudora Comprehensive Plan (ECP).** The City of Eudora engaged in an update to the community comprehensive plan in 2009. The plan focuses on three “primary target areas.” The result of the update was the adoption of the Economic Development Plan. The three targeted areas are, Downtown Eudora, Nottingham School Area and East 10th Street Corridor. These three areas each have specific features noted in the plan as beneficial to future economic development. The Downtown area includes access to the I-70 interchange to the north; The Nottingham School Areas is identified as a primary gateway to the community, and the E. 10th Street Corridor features larger tracts with easy access to K-10 highway.
The focus of these areas centers on either the ability to redevelop properties or buildings or accommodate new construction to encourage economic development opportunities. Two of the sites are described in the plan as intended for retail related uses. The E. 10th Street Corridor, however, is designated for large-scale commercial and light-industrial growth.

<table>
<thead>
<tr>
<th>Plan Site</th>
<th>Target Retail Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Eudora</td>
<td>Specialty Retail</td>
</tr>
<tr>
<td>Nottingham School/ N. of K-10</td>
<td>Community Shopping Center</td>
</tr>
<tr>
<td>East 10th Street Corridor.</td>
<td>Highway commercial/ Neighborhood Commercial</td>
</tr>
</tbody>
</table>

The Eudora Plan seeks to position the community to take the best advantage of K-10 access for development opportunities. General land uses targeted for these areas are described in Chapter 2 of the Economic Development Plan (page 2-3).

Transportation:
One action step identified in the ECP (page 3-5) recommends coordination with regional and state partners to support an alignment of the I-70/K10 connector route near east Eudora. Horizon 2020 includes all unincorporated areas of Douglas County. The adopted Transportation 2030, recently adopted as Chapter 8 of Horizon 2020, does not include this street network connection at this time.

This type of connector road would divert traffic flow around the City of Eudora and avoid main thoroughfare through Eudora. This east Eudora connection is listed in Chapter 14 of Transportation 2030 as an illustrative or unfunded project. An I-70/K10 connection east of Lawrence (west of Eudora) is shown in figures 6.9 and 6.10 of T2030.
The plan identifies the north Downtown area as a gateway. This is enhanced by the connection of Main Street to Leavenworth County Highway 1 and connection to I-70 interchange. N 1500 Road intersects this “corridor”. Traffic from the proposed dredging operation is likely to use the Leavenworth County connection to I-70, to haul materials to the main processing center in Kansas City Kansas. At this point that travel route would not enter Eudora City Limits.

The Nottingham and East 10th Street areas likewise are designated as gateways to the community. The plan specifically recommends rezoning of the East 10th Street area to accommodate commercial uses and support of an alignment of the I-70/K10 connector route on the east side of Eudora.

The Eudora Economic Development Plan focuses on three specific areas. A summary prepared by staff is provided as an attachment to this report.

General industrial policies included in the Eudora Comprehensive Plan state:

- Industrial development should be on land that is well drained and free from flooding
- Industrial development should be concentrated on land currently zoned for industrial and in existing and new industrial parks, promoting the proper mix of light and heavy industrial development and encouraging employment opportunities for existing pool of skilled labor.

More specifically the Plan shows Industrial Park and Business Park uses. The narrative suggests that such development would include internal circulation, landscaping, and architecturally pleasing buildings.

Staff Finding - The location criteria outlined in Chapter 7 of Horizon 2020 have been assessed for this site. While some criteria are met, not all are met. The proximity to the City of Eudora is a critical element is assessing the proposed project. As interpreted by the City of Eudora, this requested land use would be a substantial deviation from planned land use for the City of Eudora. The area is clearly encumbered by regulatory floodway. Long range land use for this general area is identified as floodplain in the City of Eudora Comprehensive Plan and as a rural growth area in Horizon 2020. The City of Eudora interprets their plan to exclude industrial type development in this designation. Planning staff believes that Horizon 2020 by recognizing growth areas, places emphasis on how cities desire their growth areas to develop.
If approved the land feature will be permanently altered from “land” to “water”. Areas of restore land (reclamation area) are located on the periphery of the project.

The issuance of special or conditional use permits is not discussed in Horizon 2020. However, the Plan does address agricultural uses and the fact that such uses should be continued as the predominant land use and the preservation of agricultural land.

**STAFF REVIEW**
The subject property includes a total of 169.58 acres. Of this a total of 55.46 acres will be left as open space. This area is generally located immediately adjacent to the river. Open space is also designated as a 50’ perimeter buffer along the west property line and along the adjacent road right of way.

The property is generally located along the north side of N 1500 Road. This road zigzags along the south property line of the subject. The area in the southeast area is designated for the processing and stockpiling activities associated with this use.

Within the boundary of the property are to rock jetties discussed in part V of this report. The site plan shows protection measures for the jetty located at the north end of the processing area. No such protections are provided for the jetty that crosses phases 7, 8 and 9.

The property is substantially encumbered by floodway. This element presents special considerations that have not yet been fully resolved. Any such approval will require both local and state approval for activity in the floodway. Mitigation measures, including the planting of vegetation, will be reviewed by multiple state departments. The dredge ponds or lakes are generally bounded by a type of berm either constructed or resulting from the removal of soil to access the material. These berms will require approval by other agencies.

**Existing Development**
The property includes an existing two story residence. The residence is shown to be located on a part of the property that is generally 150’ by 400’ or 1.3 acres. This would not comply with today’s minimum area requirements as a parcel. At a minimum three acres of undisturbed area should be reserved around this structure, if approved, to accommodate minimum county standards if the parcel is ever divided in the future.

**Site Plan Analysis:**
The following table provides a summary of the use areas of the property including active and open space areas throughout the site.

<table>
<thead>
<tr>
<th>Site Summary: (Acres)</th>
<th>169.58 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buffer / Riparian area</strong></td>
<td>49.03 acres</td>
</tr>
<tr>
<td>Processing Area:</td>
<td>6.43 acres</td>
</tr>
<tr>
<td>Excavation area</td>
<td>114.12 acres</td>
</tr>
<tr>
<td><strong>Total Active Area:</strong></td>
<td><strong>120.55 acres</strong></td>
</tr>
<tr>
<td>Phases</td>
<td>16 phases</td>
</tr>
</tbody>
</table>
Site improvements for the dredging operation include a 2,000 Sf scale house and laboratory space and a processing plant. The processing plant is comprised of a series of movable equipment that separates and directs the material to stockpiles on the site. An interior drive is provided around the processing area for access to the equipment and the stockpiles.

Processing Plants. Photo 1, up to 70’ tall.

Samples of stockpiling. Radial stacker piling finished product. Conveyors up to 50’ tall.

Height:
The plan does not detail the maximum height of the equipment proposed nor does it detail the height of the stockpiles. Section 12-318 of the County Zoning Regulations provides the height area and bulk requirements for the county zoning districts. The VC district is limited to a maximum of 35’ or 2.5 stores. Certain structures may exceed these height limitations and are listed in section 12-321.301 of the County Zoning Regulations. Structures that may exceed the height standard of a district include chimneys, church spires, conveyors, cooling towers, elevator bulkheads, fire towers, flag poles, grain elevators, radio and television antennas, silos etc. The elevators associated with the material processing operations could therefore exceed the maximum height limitation of the district.

Setback:
The location of the processing equipment exceeds the 50’ front yard setback (155’ proposed) and the 15’ side yard setback (200’ west property line and 290’ east property line). The equipment is also setback from the north parcel line (rear yard) by 850’. This setback exceeds the minimum 50’ district required rear yard standards.

The scale house is setback from N 1500 Road (front yard) by 200’. The scale house is located approximately 35’ east of the east property line. The proposed interior drive that circles the site is located approximately 10’ from the property line. This drive does not have a setback and abuts the Neis property to the east. There is no proposed screening along this property line.
The south 900’ is located in the floodway fringe and could potentially be provided with screening.

Traffic and Roads:
As discussed in the body of the staff report, some improvements in the County and Township Roads may be needed depending on the volume of traffic. Any approval of the request would need to include mitigation for dust and for a contribution to the township for necessary road improvements. A per ton change could be used as a method to finance some of the road improvements.

Mitigation Plan:
The resulting land feature of this project, if approved, will be a 114 acre lake. The mitigation plan as proposed provides landscaping only along the road right-of-way. There is no developable land except for that south 6.43 acres that was the processing area. The plan specifically notes that the area will be regraded and reconditioned with top soil and seeded following the *Kansa Conservation Commission surface mining reclamation recommendations*.

It is not clear on the plans if the return water settling basis will also be backfilled and the grade restored. That portion of the site was heavily wooded and if back filled presumable would be an open field as part of the reclamation. The provision of cross sections should be provided to clearly articulate the final site restoration.

**CONCLUSION**
The proposed use in many ways demands adjacency to a river due to the location of sand deposits. A recent application at Midland Junction led to the knowledge that much of the Kansas River in Douglas County precludes this use for FAA reasons, which limits where sand dredging can occur in the county.

Staff believes that *Horizon 2020*, by recognizing growth areas, places emphasis on how cities desire their growth areas to develop. Eudora does not support the request for reasons identified in their report to the commission. The proximity of the project to the Eudora City limits and with the existing industrial policies for Eudora, staff cannot support the proposed request.
Sandra L. Day, AICP
City/County Planner II
Douglas County Planning
Lawrence, Kansas 66044

February 22, 2011

RE: CUP -10-6-10; Kaw Valley Sand Dredging, Condition of Approval

Dear Sandra:

The following are condition of approval for the cup plan referenced above.

Condition of Approval

1. All state and federal permits.
2. Road improvements to N1500 Road along subject property. These improvements have been outlined by Douglas County Public Works.
3. Road improvements to the intersection at Co. Rd 1061 and N1500 Road. These improvements have been outlined by Douglas County Public Works.
4. Application of dust treatment on N1500 Road from the subject property to the intersection of Co. Rd. 1061 and N1500 Road.
5. Provide addition screen along the east property line to screen the proposed scale house from the east property. Revise the landscape schedule with addition landscaping.
6. Provide a minimum of three (3) acres undisturbed area around the existing structures on the west side of the property.
7. Provide additional cross section of the proposed plant and sand pit.
8. Provide a cross section of the area after the processing plant has been removed.
9. A per ton charge for maintenance of the existing N 1500 Road?

Please feel free to contact me at 785-843-7530 with any questions or concerns.

Sincerely,

C.L. Maurer, RLA, ASLA
Landplan Engineering, P.A.
CUP-10-6-10: Consider a Conditional Use Permit for Kaw Valley Eudora Sand Facility, located at 2102 N 1500 Road, NE of SW Cor. SW ¼ S32-T12S-R21E, on approximately 196.58 acres. Submitted by Landplan Engineering, P.A., for Kaw Valley Companies, Inc., contract purchaser, for James and Ronda Bigger and Wellsville Bank, property owners of record. Joint meeting with Eudora Planning Commission.

STAFF PRESENTATION by City of Lawrence
Ms. Sandra Day presented the item.

Mr. Keith Browning, County Public Works Director, displayed plans and aerial photos on the overhead from 1953 and 1954 when the Corps of Engineering constructed three rock jetties in conjunction with Douglas County and Leavenworth County. He showed plans on the overhead of the same area from 1966 which showed movement of the river. He said the jetties work very well and he would be reluctant to disturb them. He felt it was important to look at the whole series of jetties, not just individual jetties, and leave one but not another.

Commissioner Finkeldei asked if there was an easement.

Mr. Browning said yes, there was a blanket easement over the subject property for maintenance.

Commissioner Rasmussen asked if there was an agreement with the Corps of Engineers to maintain the jetties.

Mr. Browning said they were built in the early 1950’s. He said they have searched for the original construction contract and have found the resolution that says Leavenworth County and Douglas County would partner in maintaining the jetties. He said the resolution refers to the Corps of Engineers contract. He said he put a call into the Corps of Engineers today with the specific contract number in order to try and locate the contract. He said his understanding was that the applicant had talked to the Corps of Engineers.

Mr. Kurt von Achen, Eudora Planning Commission Chair, inquired about the Eudora landfill dump area.

Commissioner Dominguez inquired about the jetties.

Mr. Browning said currently the applicant was planning on leaving middle jetty 2 and staying 50’ from the jetty. He said the applicant was proposing to not avoid the northern jetty and mine through it.

Ms. Day said jetty 1 was near the bridge. She said with the proposed request the applicant would explore revising the blanket easement.

Commissioner Dominguez inquired about dust control.

Ms. Day said she believed it would be less than ten trucks. She said in staff’s opinion that if it was more than that threshold there were certainly some things that needed to be done to the roads, specifically those 90 degree turns. She said County Commission had expressed concern about dust control with the last several projects.

Commissioner Dominguez inquired about the traffic increase along the main street of Eudora.

Ms. Day said trucks moving straight through Eudora was an enormous concern to the City of Eudora.
Commissioner Rasmussen said when Ms. Day started her presentation it gave him the impression that there was a general consensus that land dredging operations were preferable to water dredging operations. He stated that when he read through the staff report he had a hard time figuring out what the basis was for denial. He asked staff to walk him through the criteria that was used for recommending denial.

Ms. Day said of all the different Golden Factors outlined in the staff report what really kind of tipped the scale for staff was the proximity to the City of Eudora and the policies in place regarding where industrial activities are recommended in the community and what those land use policies were for the City of Eudora. She said it was really a case of proximity and that other issues could be conditioned or addressed to make the use more acceptable.

Commissioner Blaser asked if the airport would come into play at this location.

Ms. Day said no.

Commissioner Dominguez inquired about the proximity to Eudora.

Ms. Day said it was less than one mile from the city limit of Eudora.

Commissioner Dominguez inquired about the projected growth of Eudora based on past growth and how long it would take until the city would reach the sand facility.

Ms. Day said the Eudora community would need to answer that. She said their plan specifically talks about not developing in floodplain and flood fringe.

Mr. McCullough said throughout the process there was continuous dialogue with the City of Eudora and the applicant. He said the proximity of the request was almost adjacent to the City of Eudora and that weighed heavily in staff’s recommendation for denial of the request. He stated it was within an identified planning area that Eudora has put forth a great deal of effort in their planning exercises.

Commissioner Rasmussen asked how close was too close.

Mr. McCullough said he did not know he could answer that. He said there was a little bit of overlap between the city growth area and the Eudora identified planning area.

**STAFF PRESENTATION by City of Eudora**

Mr. Scott Michie, consultant Planner to the City of Eudora, reviewed the memo that he wrote that was included in the packet. He said the three Eudora standards were not met by the application.

Commissioner Finkeldei asked if he reviewed the traffic study.

Mr. Michie said Eudora does not have any questions of the traffic study that was submitted by the applicant. He said they saw the issue as a bigger policy issue which was that development in the north floodplains would inevitably require travel through the local streets of the city to get to the regional highway system.

Commissioner Dominguez asked if Mr. Michie didn’t have any problems with the traffic study that was presented.

Mr. Michie said that was correct. He referred to the longstanding plan that showed a map of the future traffic study.

Commissioner Dominguez inquired about the traffic from the I-70 interchange.
Mr. Michie said the traffic was about what KDOT expected in terms of north/south traffic. He stated it was general highway traffic coming through the city.

Commissioner Dominguez inquired about ten more trucks increasing traffic.

Mr. Michie said he was not questioning the traffic study or count and that was not the basis for his finding. He said the basis was a larger public policy issue.

Commissioner Blaser inquired about the definition of industrial. He wondered if mining was considered industrial.

Mr. Michie said the City of Eudora does not use the standard industrial classification as a basis for its zoning district classifications, nor does the County. He said it has only one industrial classification, the I District. He said this type of use was dealt with through Conditional Use Permits.

Mr. Ned Marks, geologist and owner of Terrane Resources Company, said he was hired by the City of Eudora to evaluate Mr. Carl Nuzman’s report. He reviewed his findings of this report. He discussed the City of Eudora’s well fields. He said the sand pit would encroach upon city wells considerably with surface water. He displayed wells and water table maps on the overhead. He did not recommend approving the Conditional Use Permit until further studies could be provided.

  Mr. Ned Marks’ letter was added to the Planning Commission packet after the meeting.

Commissioner Liese asked if he felt his studies were inconclusive.

Mr. Marks said they most certainly were because they have not had time and that there was a tremendous amount of information out there and that the information could be better compiled. He felt additional studies were needed.

Commissioner Liese inquired about the discrepancies about what he found and what Mr. Nuzman found.

Mr. Marks said part of that was based on the fact that he did not know what all Mr. Nuzman looked at. He said he made his recommendations based on the information that the city wells operate at the same time.

Commissioner Finkeldei asked if he was saying in his analysis that there was a lot more information out there and more time was needed to do additional studies.

Mr. Marks said that was correct. He said he was confident that there was existing information on the wells. He said as far as his scheduling goes it would be a minimum of six months to gather more information.

Commissioner Liese asked if there was some information that would always be an unknown.

Mr. Marks said there would be some very technical issues that he could counteract and make some generalizations to offset those. He said there would be zones in the aquifer that would yield way more water than other zones.

Commissioner Rasmussen inquired about Mr. Marks’ report where it said ‘when the pit is dug the water level of the pit will be lower than what is static for the aquifer. This will be a permanent lowering of the water table and will impact the upgrading of aquifer.’ He wondered how the pit would permanently lower the aquifer.

Mr. Marks said based on the information he had with the water level in the aquifer, because it is sand and gravel and more remote from the river and drain, retards the flow of the water through the aquifer to the river.
Commissioner Rasmussen asked if the top of the aquifer away from the stream would be higher than the stream elevation.

Mr. Marks said yes.

**APPLICANT PRESENTATION**

Mr. Phil Struble, Landplan Engineering, introduced his team that he brought with him. He recapped the meetings he has had over the year to work his way through the process. He gave a summary of what Kaw Valley Companies does and produces. He said they were a niche market sand producing company. He said they have two drying plants to dry the sand. He displayed on the overhead a list of products and suppliers. He went over the business plan. He stated an average day would result in 16 truck trips a day. He said for the bulk of the year the trucks will go to the site and go on to Road 1061 which is the extension of Main Street in Eudora and go north on either Hwy 32 or I-70. He said that road today, based on the most recent traffic counts, carries about 2,900 trips a day. He said of that number it carries 11% truck traffic which would be 300 trucks today using that road to go north and south. The sand facility would add an average of 16 more truck trips a day. He felt that was an insignificant traffic increase. He said they have worked with Keith Browning to talk about the traffic because they don’t believe there would be no impact whatsoever. He said the extra trucks would cause some problems and inconvenience to some things. He discussed a 200’ paved section of road where up to two trucks would be waiting at the stop sign to turn left. When the trucks accelerate on the gravel road it would be on a paved surface instead which should reduce the maintenance concerns that the County may have. He said he intended to hold a neighborhood meeting to discuss possible improvements, such as drainage and a dust palliative if needed. He stated the buffer between the river and the sand pit was proposed to be a 300’ setback, which was over the required 50’. He said jetty 3 was completely buried and they weren’t exactly sure where it was. He said if Douglas County, who was responsible for maintaining those jetties, says they want a 50’ setback and the jetties protected then that would be done. He said he has had a number of conversations with the Corps of Engineers but can’t seem to find anyone who knows the history or details so it’s still in the investigation phase. He said the pit would mimic the water level of the river. He said there would be some erosion problems but the company had plenty of equipment and experience to deal with any erosion that may occur. He said they were aware of the Eudora dump and that Mr. Browning showed them an aerial photograph with a pile of debris on a ¼ of the property and made sure they were aware they would need to clean it up. He said Kaw Valley Companies was one of the contractors the City of Lawrence hired to clean up Farmland Industries so cleaning a small abandoned dump would be no problem. He said they would like to start providing the unknown answers over wells that were in Mr. Marks letter received tonight. He said during the sand extraction process the top soil is stripped off and preserved onsite to be part of the reclamation plan. He said he would dispute the definition of industry. He said there was industry with a little ‘i’ and industry with a capital ‘I’. He said the sand facility was an industry with a little ‘i’. He said the end product reclamation plan was going to be a great recreational facility for Eudora.

Eudora Commissioner Ken Atkinson inquired about levies to keep the river from coming over during flooding.

Mr. Struble said the sand that’s stocked piled on the north side of the bridge, in Leavenworth County and in the Industrial zoned property, was inventory with Penny’s Concrete. He said he could not speak on their behalf but that Penny’s has a permit to dredge the river through that section.

Eudora Commissioner Ken Atkinson said it was a natural resource and wondered how much of it they wanted to pile up.

Mr. Struble said that was a river permit and every two years that permit was subject to review by the Corps of Engineers. He said there would be a 300’ greenbelt between the sand pit and the river.

Eudora Commissioner Johnny Stewart inquired about the timeframe from first dig to reclamation.

Mr. Struble said the business plan was built around 20 years.
Commissioner Liese inquired about who owned the property and for how long.

Mr. Struble said Kaw Valley Companies has owned the property for less than a year.

Commissioner Liese wondered if the company bought the property without really finding out if the community would support the development.

Mr. Price Banks, attorney for applicant, said the property was in two parcels. One parcel came on the market and the applicant had an option on it and attempted to do exploratory work and due diligence and the seller was pressing the point on the options. He stated the process had begun and initial meetings with some of the folks from Eudora and the County began at the time when they were forced to close on that option on the first piece of property. The two pieces of property were involved in a lawsuit because one had been sold and there was a mix-up in the way the mortgages were filed. He said Wellsville Bank was pressuring the applicant to close on that option. He said there was an initial meeting with the neighbors and more conversations with the City of Eudora and County folks at that point.

Commissioner Liese said his impression was that the predominant attitude in the community was this would not be optimal for them. He was curious if the purchase took place knowing the community was against it.

Mr. Banks said he did not think there was an overwhelming belief that the community was predominately against it. He stated there had been some vocal opposition.

Commissioner Liese asked if there were any community members in favor.

Mr. Banks said yes there had been some support expressed.

Commissioner Rasmussen asked Mr. Struble to verify that he said he reached out to Corps of Engineers but that they had not been able to provide any information yet.

Mr. Struble said that was correct.

Commissioner Rasmussen inquired about the reclamation plan and asked if it would be accessible to the public.

Mr. Struble said he did not know at this point. He said it would be a private pond in 20 years. He said he would love to talk to someone who might want to turn it into a business venture or for the City of Eudora take it over and turn it into a great park.

Commissioner Finkeldei wondered how they should handle the conditions if approved.

Mr. Struble said he would like Planning Commission to vote in favor of approving the Conditional Use Permit and forwarding it on to County Commission for action knowing there weren't any conditions and how that throws a hurdle in things. He said he has a set of proposed Conditional Use Permit conditions that he could give staff tonight. He said he would be okay with the item being deferred for a month if needed.

Commissioner Culver asked why this site was so beneficial for a sand pit.

Mr. Struble said the site was not great because it was 19 miles from where the sand would be processed. He said if they could find a site anywhere closer they would move there. He said the problem was that the site had to have sand, a willing seller, and a relatively small overburden.

Commissioner Blaser asked if this type of sand was along the Missouri river.

Mr. Struble said it was a lot lower quality sand.
Commissioner Liese asked if the sandpit would not require the removal of trees along the river.

Mr. Struble said the sand pit would maintain a minimum of 300' wide buffer of trees between the pit and river.

Commissioner Liese inquired about the environmental impact.

Mr. Struble said 300' was a lot larger than what was typically seen along rivers. He said he did not have an immediate answer about the environmental impact.

Commissioner Liese said Mr. Struble suggested there were people in the Eudora community that were in favor. He asked if any of those people who were in favor were present tonight.

Mr. Struble said no, they were not present tonight. He said this was his 23rd rock quarry/sand pit he has worked on in his career. He said the opposition had been reasonable with great questions and ideas. He said their concerns were real and their ideas were good. He said he would characterize the opposition as thoughtful and engaging.

Commissioner Liese asked for a reason to vote in favor of the project when the community present tonight was unanimously against it as well as the Eudora City Council.

Mr. Struble said their attitude would change if they collectively discover that there would be a negative impact on the City of Eudora wells. He said the reason to vote in favor was because it had been incorrectly characterized by the overall Eudora land use plan as to what this location was because it was not part of a comprehensive plan to be anything, it was part of a comprehensive plan to be nothing. He said this was a request for a sand extraction use in a valley channel that was permitted given an approved Conditional Use Permit. He said it had relatively short access to a well maintained paved road that takes a fairly directly route. He said the entire area was industrial. He said sand plants were not ugly, they represented progress.

Commissioner Liese said he was anticipating the entire community attending tonight would be against it. He asked for any good reason to say yes to the plan.

Mr. Struble said there were very few opportunities to locate an industry that was needed.

Commissioner Liese asked if the applicant was right and everyone present tonight from the community was wrong.

Mr. Struble said that was not what he was saying.

Commissioner Dominguez inquired about the tax revenue for the City of Eudora.

Mr. Struble said it would generate three jobs, some level of property tax, a royalty type situation worked out with the city and county which would generate revenue for the City of Eudora and Douglas County.

Commissioner Blaser asked if there were depletion taxes on minerals in Kansas.

Mr. Struble said he was not sure.

PUBLIC HEARING

Mr. Mark Neis said he farms in the area and worked with the Corps of Engineer on the jetties. He was opposed to the project. He asked if there had ever been a sand pit within 300’ of an active river. He said the sand pits he had seen were ½ to ¼ mile away. He was surprised the Corps of Engineers had not been more involved. He expressed concern about the sand pit being only 50’ from the boundary line. He said a 5’ berm would be washed away leaving a ditch. He said the sand pit was proposed in an old river bed. He also expressed
concern about how deep the sand pit would be. He said the applicant had meetings with the neighbors but
wouldn't allow them to see the site. He said he went to the site for himself and took pictures. He was
concerned about wells being affected as well as land value.

Commissioner Rasmussen asked if the land he farms included the land above the water wells.

Mr. Neis said he farms directly across from the site so the water wells are to the west of his land.

Commissioner Dominguez said the water well concerns could be solved with more research. He said he did not
consider property value to be an issue. He said they could get additional water well studies, as well as the
depth, and knock out two of his concerns. He said the Corps of Engineers did not seem interested in the jetties
so it must not be a big issue to them.

Mr. Neis said he would be satisfied if the Corps of Engineers sent him a letter regarding the jetties.

Ms. Lois Hamilton said she owned the land where the wells were located. She said she received her first letter
wanting to buy her property in 2009 so it has been going on for a few years and they have had plenty of time
to get more well information. She said the road could not stand more trucks because it was in sad shape. She
worried about the river bridge too because it could not withstand all of the truck traffic. She was worried about
the value of her land. She was also concerned about how many people it would employee and felt it would not
be Eudora people. She was worried about swags forming.

Ms. Martha Saunders Skees said she could remember the 1950 flood and that every action in that area has a
reaction. She said the levies were there to hold the land and if some of that was taken out there would be a
reaction and that it would cost millions to rebuild the bridge. She felt they should learn from history.

Mr. Bob Cordry said they should look at the fact that it was located in the floodplain and an old riverbed. He
said it would be a pending ecological disaster if approved. He felt there was inadequate transportation to any
of the highways, let alone loaded with 20 tons of sand. He stated the concept of this being a small ‘i’
compared to a big ‘I’ was untrue because they would be using lots of equipment at the site.

Mr. John Pendleton pointed on the overhead map where his land was located. He said it was only a matter of
days in the 1993 flood that he lost over 20 acres and the neighbor lost 10-15 acres.

Mr. Scott Jackson said he opposed the Conditional Use Permit and that there was no community support. He
said the only people in favor were being paid, such as their attorney Price Banks and Landplan Engineering. He
felt that bottom ground should be farmed and that when the land is mined it would never be used for farming
again. He said when the river comes up it would most likely take more. He said mining operations were ugly.

Mr. Michael Almon displayed a map on the overhead of the area. He was concerned about losing prime
farmland. He discussed hydrology. He said that rivers meander and move. They move toward the outside of
the meander so the meanders get more severe. He said the river moves and has a lot of hydraulic pressure
and the pressure was mostly pronounced during flood stages. He stated that’s what the jetties are there for,
to redirect the force of the water away from the outside part of the meander to direct the channel in a more
benign way. He said the jetties have worked and reclaimed a lot of land since 1951. He said the main concern
was not that it was too close to Eudora but rather too close to the river. He expressed concern about the
health of the river.

Mr. Jason Grimms said he lives about a mile west of the proposed site and that it would affect him by having
to see it, hear it, and smell it. He did not feel the roads would support it. He expressed concern about 20-30
years of contamination. He did not believe the ratio of truck loads in and out. He said he did not want to look
at heavy equipment and a big berm.
Ms. Laura Caldwell, Kansas River Keeper for Friends of the Kaw, said dredging the river significantly impacts the Kansas River. She said she applauded what Kaw Valley was trying to do and would love to be able to support the location but she had concerns. She put maps on the overhead of the river from 1991 and 2010 showing the movement of the river. She displayed a map that showed all the trees that would be removed. She said she respected the valid concerns of the local community but that the Friends of the Kaw did not want to be involved in that.

APPLICANT CLOSING COMMENTS
No closing comments.

COMMISSION DISCUSSION by Eudora Planning Commission
Eudora Commissioner Johnny Stewart said he had not heard any positive comments from the Eudora community. He said he had been approached by several citizens regarding their concerns about the wells. He felt the applicant knew about the infrastructure of the wells when they bought the land so it should not be surprise information tonight.

Eudora Commissioner Richard Campbell expressed concerns about the bridge. He said the Corps of Engineer spent a lot of time and money in the 1950's to redirect the river and protect that side. He said the pictures clearly show what they did worked and it would not make sense to remove the work they did. He said access to the highway and whether it's a little ‘i’ or big ‘I’ was part of the concern but that the most important concerns were the water wells, boundaries of the river, and access to bridge.

Eudora Commissioner Grant Martin said the applicant was trying to focus on whether it was little ‘i’ or big ‘I’, but he hoped both Commissions could focus on the environmental aspect of it because he felt that was where the greatest impact was. He said it would not provide a huge economic gain by employing three people.

Eudora Commissioner Glen Bartlett, agreed with what had been said already.

Eudora Commissioner Chair Kurt von Achen said he agreed with the staff report. He said he firmly believed that zoning ordinances were to protect neighbors. He did not see enough benefit to the community to override the neighbors. He felt the Conditional Use Permit was a flawed vehicle because they do not have enough institutional memory to manage a 20-30 year permit. He said a Conditional Use Permit implies conditions and conditions infer policing powers which aren't available. He said this piece of property could be sold at any time in the future and the future user might not follow the restrictions. He agreed that ten trucks through Eudora was not a big deal but if they sell the property it could have more trucks in the future. He said he would vote in opposition.

Commissioner Blaser asked Mr. McCullough to speak about Conditional Use Permits.

Mr. McCullough said if a Conditional Use Permit does not meet its conditions it could go toward a revocation hearing at any point. He said the enforcement agency in the county was the County Zoning office in coordination with the City Planning office. He said there could be conditions about review and that there was a history of having those sorts of conditions. He said there was a program of inspection of Conditional Use Permits. He said there was a major exercise last year with a quarry in the west part of the county that went to the County Commission that had conditions revised. He said he took a little exception but understood Mr. von Achen’s point that it was difficult to get enforcement. He said in his opinion any time there was a Conditional Use Permit that has an exorbitant amount of conditions to make it right was probably not a good use in the first place. He said there was a program and enforcement mechanisms in the county.

ACTION TAKEN by Eudora Planning Commission
Motioned by Eudora Commissioner Ken Atkinson, seconded by Eudora Commissioner Rose House, to deny the Conditional Use Permit.
Eudora Commissioner Campbell said he wanted to also add that the reasoning was based on the staff report, the danger to water wells, the danger to the Kaw River bridge, and the environmental impact.

Motion carried 7-0.

COMMISSION DISCUSSION by Lawrence Planning Commission
Commissioner Rasmussen said part of their responsibility was to represent the citizens but also felt part of their responsibility was to use their judgment and to help insure proper planning and proper implementation of the Zoning Code. He questioned whether it was appropriate to apply city zoning standards to an area that was outside the city boundary. He felt they needed to look at the County Code which allows for this type of use in the Valley Channel zoning district. He did not think it was appropriate to be applying industrial standards to this type of proposed use. He said it was not an industrial activity, it was a mining activity, and was specifically called out in the Zoning Code as a mining and excavation activity. He said he was disappointed by the city staff analysis recommending denial. He said he had a difficult time finding rationale in the staff report to support that judgment for denial. He said just being told that the reason for denial was proximity to Eudora was something to consider but not a strong reason for denial. He said there had been valid concerns of potential effects to water wells and potential stability of the riverbanks. He felt they had heard from a lot of amateur geologists and civil engineers and he would rather hear from Corps of Engineers on that issue. He said he was not comfortable supporting a Conditional Use Permit but also not comfortable denying based on the information given tonight. He felt this was a low impact use and a use permitted in that zoning district. He said if there was a motion to deny the permit he would vote in opposition and if there was a motion to support the Conditional Use Permit he would recommend it be delayed in order to get more information.

Commissioner Liese asked when it was in the Urban Growth Area if it was considered to be in the county or city.

Mr. McCullough said the weight to provide to it was not as clear in policy. He said there had been some weight given to the fact that there was a joint hearing where the County Commission said they wanted to hear from both the County and City Planning Commissioners. They want to understand what the city and county policies are for the area. He said there was no question that it was under the jurisdiction of the County Zoning Code and that city standards are not trying to be applied. He said the Golden Analysis points to one critical element which was the proximity to the city of Eudora. He said staff attempted to articulate clear Golden Analysis in the report but that there was disagreement in the weight given to the City of Eudora’s position on the matter. He stated staff showed greater weight in deference to the City of Eudora’s position than they would if this were outside of their area of influence.

Commissioner Rasmussen asked where in the staff report it reflected what Mr. McCullough just said that staff gave great deference to the City of Eudora and their decision.

Mr. McCullough read the staff finding from the staff report, ‘The proximity to the City of Eudora is a critical element in assessing the proposed project.’

Commissioner Blaser said he was still struggling with the definition of industrial. He said he does not think of mining as industrial. He felt a 20 ton truck today was not a big truck. He said regarding farming there was no class 1 soil and only a small corner of class 2 soil that hasn’t been farmed for at least 20 years. He did believe farm land needed to be saved for future use but he did not think farm land came into this issue. He said the river was going to change channels at some point. He said the Corps of Engineer studied and will study it because they would have to approve it and make sure the bridge is protected. He said regarding the wells there have been two different reports. He said he wished there were more facts. He said if the motion was for denial he would vote against that. He said he may be in favor of deferral.
Commissioner Rasmussen said in the staff report provided it shows the Urban Growth Area for the City of Eudora and the proposed site was not within that area.

Mr. McCullough said it was not identified as Urban Growth Area in Horizon 2020 but was within Eudora’s planning area and their 3 mile area of influence.

Commissioner Finkeldei asked what happens if there was a motion to defer from Lawrence Planning Commission and a recommendation of denial from Eudora Planning Commission.

Mr. McCullough said it would probably wait for Lawrence Planning Commission to make an action to the County Commission.

Commissioner Finkeldei said he did not think they had enough good solid information to vote in the affirmative. He felt at this point there were more questions that needed to be answered. He said he was concerned about the jetties and wanted to hear from the Corps of Engineer. He agreed that he wouldn’t classify the use as industrial but it was valid planning and the plan Eudora developed in 2008 shows that area to be open agricultural land. He felt they needed more sand dredging operations in Douglas County and hoped they could find locations that would work. He said he would not support to approve this tonight.

Commissioner Liese thanked Mr. Struble and Kaw Valley for their work and time. He said he may be wrong about his continued support for rejecting this project but he would continue to be in favor of the decision that Eudora Planning Commission made. He questioned what an Urban Grown Area really was.

Commissioner Dominguez agreed with everything Commissioner Rasmussen said. He also agreed that mining wasn’t really industry. He didn’t like it being so close to Eudora. He would like more studies to show the road can handle the truck traffic. He said at this point he could not vote for denial. He felt the water issues should be handled before being heard by Planning Commission again.

Commissioner Burger said she appreciated the applicant being willing to do more than required for a Conditional Use Permit. She said she would fall in line with the staff recommendation to deny but that she did not want to discourage the project, she just felt there were more things to be figured out. She said she was predisposed to not give up potential farmland and floodway to this type of use.

Commissioner Blaser asked what would happen if the project was denied.

Mr. McCullough said typically if the item was denied by County Commission the applicant could not come back for 12 months.

Commissioner Culver said he would echo a lot of the discussions the commission has had. He said there were still two areas that had questions and required due diligence; water well impact and the limited information from the Corps of Engineer. He said at this point he could not support the project but he also did not have grounds to deny it.

Commissioner Dominguez asked about clarification from the Corps of Engineers.

Mr. McCullough said he was not sure. He stated the Corps of Engineers does not typically comment on Conditional Use Permits.

Commissioner Dominguez asked about a list of items the applicant would have to go through to operate.

Ms. Day said those would be additional permits they would have to seek. She said typically they could not move forward with State and Federal permits until they pass the local approval first. She stated the Corps of Engineers sometimes provides very generic responses but most times they would not until there was a formal
project before them. She said it was not unusual to see a use like this with a series of conditions that say the applicant has to provide proof of those additional approvals from other agencies prior to them moving the first shovel of ground.

Commissioner Liese said he would be willing to defer the item.

**ACTION TAKEN by Lawrence Planning Commission**
Motioned by Commissioner Liese, seconded by Commissioner Finkeldei, to defer Conditional Use Permit (CUP-10-6-10) for Kaw Valley Eudora Sand Facility, located at 2102 N 1500 Road, for a minimum of 60 days.

Mr. von Achen said he would recommend a 60 day deferral.

Mr. Struble said he was fine with a two month deferral.

Commissioner Rasmussen asked what they were hoping to accomplish with the deferral.

Commissioner Finkeldei said more information on the wells, jetties, and the structural stability of the river.

Commissioner Liese said he would like for the applicant to spend more time with the people of Eudora to see if there was any potential movement there.

Commissioner Finkeldei said he would like to see some sort of agreement that the County was okay with the easements.

Commissioner Burger asked if they would be asking some civic entity to spend money to find the answers to these questions.

Mr. McCullough said everyone would go to work at trying to get meetings with the Corps of Engineers. He said there had already been funds expended on the studies in the packet. He said there would likely be more consultant fees involved.

Commissioner Liese said he would like to see Eudora really try to work with the applicant to see if anything would make this feasible for them.

Commissioner Dominguez said he would like to see something to insure that the public roads can hold the 16 proposed trucks.

Motion carried 6-1, with Commissioner Burger voting in opposition.
Douglas County Planning
Add Development Services
6 East 6th St. Lawrence, KS

February 17, 2011

Dear Planning Commission Members,

As a property owner of farmland south and east of the proposed sand pit, and between the Kaw and the Wakarusa rivers on both the east and west side of K-2172 Road (County road 1061), I am strongly opposed to the location of the sand facility for the following reasons:

1) The proposed site is subject to flooding from the Kaw River on the north and on to the north and east as it has been for many years. Excavation of a sand pit of such huge size would not only facilitate the flow of the flooding Kaw through and east of the location, but would also narrow and weaken the wooden natural barrier to the direct east of the pit, and threaten the south abutment of the bridge on 1061 crossing the Kaw. The land south and east of the proposed site has been flooded many times over the last 20 years, all the way to the point between the Kaw and Wakarusa rivers.

2) The fragile county roads leading south and east to 1061, and both north and south from Eudora would be destroyed by the weight of these huge, heavy trucks, and the bridge would also be in danger, as well as the danger to the heavy north and south bound traffic on County Road 1061.

Thank you for your careful consideration of this matter.

Respectfully yours,

[Handwritten Signature]

Robert Cordry
From: smason@kcp.com [mailto:smason@kcp.com]
Sent: Monday, February 14, 2011 10:26 AM
To: ZO - Davis-Englebert, Kanitha
Subject: Feedback for Zoning & Codes of Douglas County, Kansas

The following feedback was submitted to you through the Douglas County, Kansas feedback form:

Category: Zoning & Codes
Full Name: Shawn Mason
Address: 1202 W 13th Terrace
City: Eudora
State: KS
Zip Code: 66025
Email Address: smason@kcp.com
Phone: 785-542-3219
Comments: In Regards to Up Coming Decision for Permit to Kaw Valley Companies to Build a Sand Pit at Old Eudora Golf Course: After reading the Article in the Journal World and on that information provided only, I do not see any benefit to the City of Eudora, I believe more surveys need to be done (Not by Developer) to determine effect on City Wells. No info was stated about number of Jobs and Revenue to County and City of Eudora. I imagine it is not a significant number. The plan does not fit into the planning policies for industrial business’s for the City of Eudora. Please do not recommend/approve this permit to Kaw Valley Companies
Commissioners,
I was asked by a Eudora resident, Kathleen Chronister, 1204 Main Street, to convey her serious concerns about the Kaw Valley Sand Pit proposal which you will be hearing next week. Ms. Chronister is unable to come to the meeting personally, and asked to pass this message along through me, her County Commissioner. Here are her concerns/comments:

1. Ms. Chronister believes that locating the sand pit operation so close to Eudora's drinking water well will have a serious negative impact on the community's water--both its quality and, possibly, its future availability.

2. Ms. Chronister believes there is no particular benefit to the community of Eudora having this sand pit operation because it will take sand out of the community but will not put anything into the community like new employees/jobs or significant money through taxes.

3. Ms. Chronister states that if Eudora's water quality would be improved by the sand pit mining operation then she could support it, but she's very concerned it will have the opposite effect.

Thanks for your consideration of Ms. Chronister's concern.
Nancy Thellman, County Commissioner, 2nd District
Memorandum
City of Lawrence
Planning & Development Services

TO: Planning Commission

FROM: Mary Miller, Planner

CC: Scott McCullough, Director of Planning and Development Services
Sheila Stogsdill, Assistant Planning Director

Date: For April 25, 2011 Planning Commission meeting

RE: Item 2; Revised conditions for Fraternal Order of Police Conditional
Use Permit (CUP-12-8-10)

After discussing the proposed conditions with the applicant staff proposes revising the
conditions as shown below. New language is shown in bold print and deleted text is
shown as struckthrough.

A brief discussion of the revised condition is provided following the conditions.

Revised Conditions:

1) The provision of a revised site plan with the following changes:
   a) Show and label the backdrops for each firing range. The trap shooting range and
      shooting house are not required to have backdrops
   b) Add a note that the CUP is subject to conditions approved by the Board of County
      Commissioners.

2) Uses which are approved with this CUP include the use of the firing ranges and
   military and other training on the site that does not involve the firing of weapons.

3) Noise abatement measures shall be utilized in order to achieve an ‘acceptable’ sound
   level at the property boundary of 65 dB(A) for up to 8 hours out of 24.
   a) Proposed abatement measures must be submitted and approved prior to release
      of the CUP to Douglas County Zoning and Codes Office.
   b) Noise levels shall be measured at the property boundaries following the approval
      of the CUP and noise abatement measures shall be installed within 3 months of
      the approval of this CUP.

4) Noise levels at the property boundary shall be measured yearly and additional noise
   abatement measures implemented, if necessary. A record of the yearly noise levels
   shall be kept on file for review by the Douglas County Zoning and Codes Office.

5) In addition to ‘no trespassing’, the signs posted around the perimeter of the range
   area shall also note that this is a ‘firing range’. The colors of the sign shall be bold so
   as to be very visible in the wooded areas and they shall be placed at 100 ft intervals
   around the range perimeter.
6) Signs shall be posted at all ranges with the following safety information:
   a) Range master must be present when there is firing on the range. **Organized group or training activities must have a designated range safety officer on site**
   b) Noise protection **Eye and ear protection** must be worn when firing.
   c) Alcoholic beverages are prohibited on the firing ranges.

7) A sign shall be posted on the main gate which identifies the area as a Fraternal Order of Police Firing Range and state that no admittance is restricted to FOP members and their guests. A contact number for a representative of the FOP who is available to respond during the hours of operation of the firing ranges shall be included on the sign. **The police dispatch or 911 number may be included for emergencies.**

8) Hours of Operation: The range shall not be in operation for any of the following holidays (or the days on which such holidays are observed by Kansas state government) New Year’s Day, Easter, Thanksgiving Day, Christmas Eve and Christmas Day. The range may operate at the following times:
   - 8 AM to 8 PM Monday through Thursday;
   - 8:00 AM to 5:00 PM on Friday; and
   - 10:00 AM to 6:00 PM on Saturday and Sundays.
   - Night shooting events may occur up to 3 times a year, with a time limit of 10:00 PM. Neighbors within 1 mile must be notified of night shooting events at least 3 days in advance through either email, letter or phone call.

9) When there are training exercises at the firing ranges, no other outdoor events may occur on the property.

10) The 94 acres included in this CUP shall remain in the Fraternal Order of Police’s ownership to serve as a buffer area. Any reduction in area shall require an amended CUP.

11) The following note shall be added to the CUP “The CUP requires the retention of the 94 acres included in the approval. **Trees may be selectively harvested, or removed to create trails provided the wooded areas included in the parcels surrounding the range areas are to remain intact to serve as buffers; The only removal of trees that may occur are to remove dead or diseased trees, or to create trails through the wooded areas. Any other removal or reduction of trees shall require an amendment to the CUP.”**

12) Military training is restricted to the use of weapons similar to those used by law enforcement agencies. A list of these weapons shall be provided for the file.

13) A lead recycling program shall be put into place. Lead will be reclaimed and recycled when the estimate of rounds fired reaches 100,000 or every 7 years, whichever comes first. If lead has not been reclaimed within the past 7 years, it will be necessary to reclaim the lead within 3 months of the approval of the CUP. Lead reclamation and clean-up will be done by a professional lead recovery company and a report shall be submitted to the Douglas County Zoning and Codes Office.
   - Soil pH levels shall be monitored on an annual basis to insure that the lead management plan is effective. The records shall be kept on file at the FOP office for review by staff of the Douglas County Zoning and Codes Office.
Lime shall be added to the soil annually, if necessary, to maintain the correct pH levels per the following ratios: 50 pounds (for sandy soils) or 100 lbs (for clayey soils) per 1000 sq ft of range will raise the pH approximately one pH unit. The ideal pH should be between 6.5 and 8.5.

- Do not add lime if the pH is above 8.5

14) Crushed limestone shall be spread, and maintained, in front of all backstops

15) Documentation in the form of reports at each range will be kept as to the number of rounds fired and the type of ammunition used as well as the management activities used to prevent lead migration. It will be the responsibility of the range master or property owner to compile this information and keep it on hand for review by the Douglas County Zoning and Codes Office personnel.

All shooting activities at the range will be documented as to usage as follows:
1. Type of firearm used
2. Type of ammunition used
3. Number of rounds fired

All lead management activities shall be documented as follows:
1. Type of management activity
2. Date and time of activity
3. If lead was removed note the quantity, the company that removed the lead, where the lead was taken and what was done with it.

Discussion of Revised Conditions

Condition No 6. This applicant explained that the requirement to have a range master present anytime the ranges are in use would be onerous, as the Fraternal Order of Police members may use the ranges individually. The revision would require a supervisor anytime an organized group or training activity was occurring, but would not require a supervisor for individual use.

The applicant also indicated that they currently require ‘eye and ear protection’ so the condition was revised to meet current practices.

Condition No 7. The applicant indicated that including the name ‘Fraternal Order of Police’ on the sign may make it a target for vandals. This condition has been revised to remove the requirement to identify this as a FOP range, but it must still be identified as a firing range with limited entrance. The FOP has a designated number for people to call and this will be included on the sign. Police dispatch or 911 may be included for emergency calls.

Condition No 11. The intent of this condition was to insure that the wooded areas that serve as a buffer would remain wooded. The applicant indicated that they occasionally harvest trees from their woodlands. This condition has been revised to permit ‘selective harvesting’ but still requires the wooded areas to remain intact.
PC Staff Report
04/25/11

ITEM NO.2 : CONDITIONAL USE PERMIT FOR FRATERNAL ORDER OF POLICE SHOOTING RANGE; 768 E 661 DIAGONAL RD (MKM)

CUP-12-8-10: Consider a Conditional Use Permit for the Fraternal Order of Police shooting range, located at 768 E 661 Diagonal Road. Submitted by Dan Affalter, for Fraternal Order of Police, property owner of record.

STAFF RECOMMENDATION: Staff recommends approval of the Conditional Use Permit for the FOP shooting range subject to the following conditions:

1) The provision of a revised site plan with the following changes:
   a) Show and label the backdrops for each firing range. The trap shooting range and shooting house are not required to have backdrops
   b) Add a note that the CUP is subject to conditions approved by the Board of County Commissioners.

2) Uses which are approved with this CUP include the use of the firing ranges and military and other training on the site that does not involve the firing of weapons.

3) Noise abatement measures shall be utilized in order to achieve an ‘acceptable’ sound level at the property boundary of 65 dB(A) for up to 8 hours out of 24.
   a) Proposed abatement measures must be submitted and approved prior to release of the CUP to Douglas County Zoning and Codes Office.
   b) Noise levels shall be measured at the property boundaries following the approval of the CUP and noise abatement measures shall be installed within 3 months of the approval of this CUP.

4) Noise levels at the property boundary shall be measured yearly and additional noise abatement measures implemented, if necessary. A record of the yearly noise levels shall be kept on file for review by the Douglas County Zoning and Codes Office.

5) In addition to ‘no trespassing’, the signs posted around the perimeter of the range area shall also note that this is a ‘firing range’. The colors of the sign shall be bold so as to be very visible in the wooded areas and they shall be placed at 100 ft intervals around the range perimeter.

6) Signs shall be posted at all ranges with the following safety information:
   a) Range-master must be present when there is firing on the range.
   b) Noise protection must be worn when firing.
   c) Alcoholic beverages are prohibited on the firing ranges.

7) A sign shall be posted on the main gate which identifies the area as a Fraternal Order of Police Firing Range and state that no admittance is restricted to FOP members and their guests. A contact number for a representative of the FOP who is available to respond during the hours of operation of the firing ranges shall be included on the sign.

8) Hours of Operation: The range shall not be in operation for any of the following holidays (or the days on which such holidays are observed by Kansas state government) New Year’s Day, Easter, Thanksgiving Day, Christmas Eve and Christmas Day. The range may operate at the following times:
   • 8 AM to 8 PM Monday through Thursday;
   • 8:00 AM to 5:00 PM on Friday; and
- 10:00 AM to 6:00 PM on Saturday and Sundays.
- Night shooting events may occur up to 3 times a year, with a time limit of 10:00 PM. Neighbors within 1 mile must be notified of night shooting events at least 3 days in advance through either email, letter or phone call.

9) When there are training exercises at the firing ranges, no other outdoor events may occur on the property.

10) The 94 acres included in this CUP shall remain in the Fraternal Order of Police's ownership to serve as a buffer area. Any reduction in area shall require an amended CUP.

11) The following note shall be added to the CUP “The CUP requires the retention of the 94 acres included in the approval. The wooded areas included in the parcels surrounding the range areas are to remain intact to serve as buffers. The only removal of trees that may occur are to remove dead or diseased trees, or to create trails through the wooded areas. Any other removal or reduction of trees shall require an amendment to the CUP.”

12) Military training is restricted to the use of weapons similar to those used by law enforcement agencies. A list of these weapons shall be provided for the file.

13) A lead recycling program shall be put into place. Lead will be reclaimed and recycled when the estimate of rounds fired reaches 100,000 or every 7 years, whichever comes first. If lead has not been reclaimed within the past 7 years, it will be necessary to reclaim the lead within 3 months of the approval of the CUP. Lead reclamation and clean-up will be done by a professional lead recovery company and a report shall be submitted to the Douglas County Zoning and Codes Office.

14) Soil pH levels shall be monitored on an annual basis to insure that the lead management plan is effective. The records shall be kept on file at the FOP office for review by staff of the Douglas County Zoning and Codes Office. Lime shall be added to the soil annually, if necessary, to maintain the correct pH levels per the following ratios:
- 50 pounds (for sandy soils) or 100 lbs (for clayey soils) per 1000 sq ft of range will raise the pH approximately one pH unit. The ideal pH should be between 6.5 and 8.5.
- Do not add lime if the pH is above 8.5

15) Crushed limestone shall be spread, and maintained, in front of all backstops

16) Documentation in the form of reports at each range will be kept as to the number of rounds fired and the type of ammunition used as well as the management activities used to prevent lead migration. It will be the responsibility of the range master or property owner to compile this information and keep it on hand for review by the Douglas County Zoning and Codes Office personnel.

All shooting activities at the range will be documented as to usage as follows:
1. Type of firearm used
2. Type of ammunition used
3. Number of rounds fired

All lead management activities shall be documented as follows:
1. Type of management activity
2. Date and time of activity
3. If lead was removed note the quantity, the company that removed the lead, where the lead was taken and what was done with it.

Reason for Request: “To gain compliance for a shooting range which has been in existence for over 40 years.”
KEY POINTS
- Per Section 12-319-4.11 of the Zoning Regulations for the Unincorporated Territory of Douglas County, a shooting range requires approval through a Conditional Use Permit.
- The shooting range is existing but does not have an approved Conditional Use Permit; therefore, this application has been submitted to bring the range into compliance with the Douglas County Zoning Regulations.
- The area is encumbered with the floodplain, including the regulatory floodway and floodway fringe of Washington Creek.

ATTACHMENTS
- A – Public Communications received prior to printing of this staff report.
- B – Applicant information regarding history of the shooting range
- C – Plans

DESCRIPTION OF USE
Property is owned by the Fraternal Order of Police and contains a lodge and an office building for their use. This CUP has been submitted for approval of the following firing ranges:
- A rifle range with one shooter station that can accommodate multiple shooters;
- A trap range with 5 shooter stations;
- A pistol/rifle range with 8 shooter stations; and
- A ‘shoot house’, a wooden structure that is located within the woods and is used for urban training.
  (The location of these ranges is noted in the plan and Figure)

The ranges are used primarily for training of law enforcement personnel and conducting hunter safety courses. Occasionally, the range will be used for training of military personnel but the applicant indicated that these do not usually involve the firing ranges. The property owner, the Fraternal Order of Police members, and their guests also use the ranges.

ASSOCIATED CASES/OTHER ACTION REQUIRED
- Approval by Board of County Commissioners.
- Noise abatement measures approved and implemented.
- Conditional Use Permit Plan released to the Zoning and Codes Office for CUP permit.
- Lead recycling program initiated and carried out per schedule.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
- Copy of letter sent to landowners in the area by Bill Roth notifying them of the CUP application and providing background information. (Nov 1, 2010)
- Email from nearby property owner, Scott Mesler, recommending restricted hours and expressing concern with the noise generated. (Jan 6, 2011)
- Email from nearby property owner, Lorel Lewis, indicating no concerns with the shooting range operations or the CUP application. (Jan 7, 2011)
- Letter from Bill Roth with list of recommendations for the CUP. (Jan 10, 2011)
- Email from Jim Lock in support of the shooting range.

GENERAL INFORMATION
Current Zoning and Land Use: A (Agricultural), F-W (Floodway Overlay) and F-F (Floodway Fringe Overlay) Districts; shooting range with lodge.
Surrounding Zoning and Land Use: A (County Agricultural) District in all directions. Agriculture, woodlands, and rural residences.

F-W (Floodway Overlay) and F-F (Floodway Fringe Overlay) Districts to the north and south, along the Washington Creek; agriculture and woodlands.

### Site Summary:

<table>
<thead>
<tr>
<th>Subject Property:</th>
<th>94 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Buildings:</td>
<td>No new buildings are being proposed.</td>
</tr>
<tr>
<td>Off Street Parking Required:</td>
<td>1 space per 5 attendees, Section 12-316-1 requirement for recreational area without fixed seating</td>
</tr>
<tr>
<td>Off Street Parking Provided:</td>
<td>30 parking spaces available in the graveled parking lot and overflow parking area on the adjacent grassed area.</td>
</tr>
</tbody>
</table>

### I. ZONING AND USES OF PROPERTY NEARBY

**Staff Finding** - The subject property is located in the northeast quarter of Section 11 in Township 14 South, Range 18 East of Douglas County (southeast of the intersection of N 775 Road and E 661 Diagonal Road). The property is located on the east of, and takes access from, E 661 Diagonal Road approximately 1/2 mile north of Lone Star Lake. The property is within the A (Agriculture) and floodplain overlay zoning districts. The surrounding area is zoned for agricultural uses with floodplain overlay zoning following the path of the Washington Creek to the lake. Agriculture, open space, and rural residences are the principal land uses in the area. The nearest residences are located approximately 1/4 mile from the firing ranges. A map showing the approximate locations of residences in the area is included in Figure 5. A recreational area, Lone Star Lake, is located approximately one-half mile to the south. (Figure 1)

### II. CHARACTER OF THE AREA

The Fraternal Order of Police owns approximately 94 acres which is being included in this CUP request. The property contains the Washington Creek and its associated floodplain. (Figure 2) The parcel containing the shooting ranges slopes from the east to the west. The buffer areas contain very steep grades, which are used as backdrops. (Figure 3) The property is developed with a Fraternal Order of Police lodge and office building and is used for lodge activities as well as a shooting range used primarily for law enforcement training. The remainder of the property consists primarily of wooded hills and open space. The surrounding area consists of woodlands, agricultural uses with scattered rural residences. A recreational area, Lone Star Lake, is located approximately one-half mile to the south.

**Staff Finding** - This is an agricultural area which also contains rural residences and woodlands as well as a recreational area. This range has been in existence for over 40 years and contributes to the character of the area; however, the noise generated by the shooting range could negatively impact the nearby residences. It will be necessary to regulate the hours and provide noise abatement measures to minimize any negative impacts.
III. SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN
RESTRICTED

Applicant’s response:
“The property is ideally suited and has been improved for over 40 years to accommodate the
shooting range.”

While this use has been in place for over 40 years, it is not a ‘grandfathered’ or ‘non-conforming’
use as it was installed after the adoption of the 1966 Zoning Regulations for unincorporated Douglas
County and a CUP was required for a shooting range at that time. In 2006, it came to Zoning and
Code’s attention that the shooting range did not have a CUP and was not a grandfathered use. This
CUP was submitted to bring the shooting range into compliance with the Code. All the shooting
ranges discussed in this report are existing ranges. No new construction is being proposed. Any new
construction would require either a site plan or an amendment to the CUP depending on the degree
of change.

Staff Finding – A Conditional Use Permit (CUP) does not change the base, underlying zoning;
therefore, the suitability of the property for agricultural uses will not be altered. The 52 acre parcel
is developed with a lodge and shooting ranges which are used primarily for law-enforcement
training exercises and hunter safety courses. The property owner also owns 3 other adjacent parcels
totally approximately 49 acres which are intended to buffer surrounding areas from the shooting
range. A ‘shoot house’ is located within this buffering acreage, and is used occasionally for
specialized training operations. The property is heavily wooded and has significant grade changes
(Figure 3). These features may limit the agricultural options for the property.

The large acreage available for this use and the wooded areas serve as a buffer which makes the
property suitable for a use of this type. The topography provides hillsides to use as backstops for
the shooting ranges. The bullets used at the ranges contain lead, and the fact that some of the
shooting occurs within the regulatory floodway or regulatory floodway fringe could present
environmental hazards. Best management practices should be utilized to minimize the potential for
ground or water pollution from the lead. With proper noise and lead management, the property is
suited to the proposed (existing) use.

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

Staff Finding – The property is not vacant. The applicant indicated that the lodge and shooting
ranges were instituted in the 1960s and have been in use since that time.

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

Applicant’s Response:
“The condition already exists; however, there have been complaints about the noise.”

Section 19-01 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 Use 11: Recreation Facility listed in Section 12-319-4.11
Conditional Uses Enumerated, of the Zoning Regulations for the Unincorporated Territory of Douglas
County. This shooting range will not be used as a recreational facility but a shooting range is permitted under this use category. While the purpose of this shooting range is training rather than recreation, the impact would be the same as for a recreational shooting area. The limited scope of this shooting range should provide more compatibility with the surrounding properties as the activity can be more controlled, since the general public is not permitted, and training sessions are usually scheduled in advance.

Approval of the CUP will allow the applicant to continue the current use of the firing ranges. Conditions shall be applied with the Conditional Use Permit to limit the intensity of the use, mitigate the impact of the noise on the neighbors, and address environmental concerns such as lead pollution located within the floodplain and the Washington Creek.

The property is located on a paved road and has access from a continuous network of paved roads. (Figure 4) Dust generated by traffic to this site is not an issue.

Public comment has been provided to the Planning Office and is included with this staff report. Some neighbors indicated they had no issues with the noise generated or the activity itself while others indicated concern with noise, hours of operation, safety (particularly signage), and lead pollution to the Washington Creek.

**Staff Finding** – The shooting range currently negatively impacts nearby properties through noise and possible lead-pollution of the Washington Creek or groundwater. Proper noise abatement measures, restrictions on hours of use and an effective lead management program should minimize these impacts. These measures are discussed in detail in the ‘Staff Review’ portion of this report.

**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 taxpayers of Douglas County are relieved of the financial burden of buying and developing property to be used as a firing range.”

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 the request for a Conditional Use Permit would affect the individual landowner by prohibiting the use of the property for the shooting range which would then create the need for Douglas County law enforcement agencies to find another site for their training. Denial of the CUP request may benefit the area property owners by eliminating the use and the associated noise.

**Staff Finding** – Approval of the Conditional Use Permit would benefit the community by maintaining a training facility for the County's law enforcement personnel. With safeguards to prevent water pollution, it should not harm the public health, safety and welfare; however the noise associated with the shooting facility may have a negative impact on the surrounding residents. Restrictions on the hours and number of the events and appropriate noise mitigation measures should be implemented to minimize any negative impact.

**VII. CONFORMANCE WITH THE COMPREHENSIVE PLAN**

The subject property is not located within an identified urban growth area. The comprehensive plan recommends that agricultural uses continue to be the predominant land use within the areas of the
county beyond the designated urban growth areas. Uses permitted in the rural area should continue to be limited to those which are compatible with agricultural production and uses.

Horizon 2020 does not address Conditional Use Permits as a tool to achieve specific policies.

**Staff Finding -** The Comprehensive Plan encourages uses which provide incentives to retain agricultural land in production in the rural area of the county (outside any Urban Growth Area). A Conditional Use Permit allows development to occur in harmony with the surrounding area. The subject property is not well-suited for agricultural production, given the woodlands and steep slopes, but the CUP will encourage the retention of the natural features and protect the rural character of the area. The shooting range, as conditioned, is consistent with the Comprehensive Plan.

**STAFF REVIEW**

The shooting range provides a valuable community function, the training of law enforcement personnel and hunter safety courses. While this is a necessary and valuable service to the community, the range can create negative impacts on surrounding properties and the environment. The Zoning Regulations are intended to promote the safety, order, convenience, prosperity, and general welfare of the citizens of Douglas County; therefore, the CUP has been reviewed with consideration for the safety of the facility as well as minimizing negative off-site impacts.

The property contains a lodge which has 2 bathrooms and a kitchen. A septic system which was approved when the building was constructed is utilized for wastewater management. Other structures on the property include a garage, five-bay barn, shelter house, trap house, footbridge, low-water bridge, and obstacle course containing 12 obstacles in an approximate one-quarter mile loop. There is also a structure called a ‘shoot house’ that is used for an urban range. The structures and the ranges are shown on the plan. Figures 8 through 14 illustrate the areas of the range.

The applicant indicated that they allow simultaneous use of the shooting ranges and lodge facilities for other activities as long as no safety issues are raised. Staff has concerns that the concurrent use of the facilities for shooting and other activities could result in accidents and recommends that no other outdoor activities occur when the shooting range is in operation.

**PARKING**

A 16,200 sq ft gravel parking area is located adjacent to the garage and lodge building. The applicant indicated that the parking area could accommodate 30 cars and an additional row of vehicles can park in the middle if needed. There is also a grass overflow parking area. The NRA recommends 1.5 parking spaces per firing point. The applicant’s information indicates that the pistol range is limited to 8 persons at a time, the rifle range to 8, trap area to 5 and the urban shooting area to 10. This would equal 31 firing points, or 47 parking spaces. This is not a parking requirement of the Zoning Regulations, but it does appear that the gravel area would be able to accommodate 47 parking spaces. The Zoning Regulations require 1 parking space per 5 seats, or persons, in assembly or amusement type uses without fixed seats or 7 parking spaces (31/5). The location and amount of parking provided is compliant with the Zoning Regulations and recommendations of the NRA.

**SAFETY**

The National Rifle Association Range Source Book contains information on planning and implementing shooting ranges. The book makes the following recommendations:
- Range caution signs should be posted at 100 ft intervals around the range perimeter. Colors should be highly visible.
- A contact number for a representative of the FOP who is available to respond during the hours of operation of the firing ranges should be provided for file and posted on the fence/gate to the FOP facility.
- Natural hill backstop should have a slope of at least 1.5 to 1 (33-34 degrees) and the height should be at least the same as for a manmade backstop
- NRA recommends 1.5 parking space per firing point
- OSHA - the Occupational Safety and Health Administration - has determined that a sound level of 90 dBA is the threshold for hearing conservation programs. Because firearms easily exceed this level of sound, users must wear hearing protection. Hearing protection should be a requirement for all users who are within 50 ft of the firing line. (NRA Range Source Book, Section 3.0-3.10.1)

In addition, no alcohol should be allowed on the firing ranges. Signs prohibiting alcoholic beverages should be posted on each range.

BUFFER
The FOP owns several parcels surrounding the main shooting area that they utilize as buffers. In order to insure that these remain effective buffers, a note should be added to the CUP that the wooded areas on the site are to remain intact to serve as buffers. The only removal of trees that may occur are to remove dead or diseased trees, or to create trails through the wooded areas. Any other removal or reduction of trees would require an amendment to the CUP.

LIGHTING
The applicant's information indicates that there are 5 lights on power poles that are approximately 27 ft high. These lights are located within the interior of the site. Any changes to the existing lights would require a revised site plan which would note the location, wattage and steps taken to prevent glare onto neighboring properties.

USES
The property is owned by the Fraternal Order of Police (FOP) and is used for lodge meetings and various FOP activities that are not related to this CUP such as gatherings, social events and other activities for the members of the FOP. These uses are not being considered with this CUP application. The only uses for which approval has been requested are the activities associated with the shooting ranges. The military training which makes use of the open space areas, but does not involve the firing of weapons is also being considered with this CUP. Uses which are permitted in the A (Agricultural) District may occur on the site; however, it is important that no other outdoor uses occur when the shooting ranges are in operation, for safety considerations. Uses which are not permitted in the A District and are not included in this CUP require approval through the CUP process.

According to information provided by the applicant, Attachment B, the shooting ranges are used for various law enforcement agencies including the Douglas County Sheriff and the Lawrence Police Department, Hunter Safety Courses, as well as training for military, civilian or other groups of individuals with or without the use of the firing ranges. Military training is usually limited to orienteering, map and compass and other activities which require a type of outdoor terrain and facilities which are available at this site. A note should be added to the plan which restricts military training to the use of weapons similar to those used by law enforcement agencies. A list of these
weapons should be provided for the file. The training uses associated with the firing ranges are the only uses which are being considered with this CUP.

ACCESS
The shooting facility is located on a hard-surfaced road which is classified as a collector and has good access from the collector/arterial road network. Traffic to and from the site should not create any negative impacts on surrounding properties.

NOISE
The noise generated by the shooting activities may negatively impact nearby properties. The following information, taken from the National Rifle Association Source Book, explains how to measure the noise level, what levels of noise are acceptable and suggests several noise abatement measures:

“Range owners/operators should implement sound abatement programs into their yearly planning. These noise plans must actively pursue the goal of a sound abatement plan: preventing conflict before it occurs." (NRA Range Source Book, Section 1.02.3)

Many of the recommendations in the Range Source Book are geared toward new sites. I reviewed the information for recommendations which are applicable to an existing site. The first step would be to determine the level of sound which is created by the range.

1. **Measuring the sound level at the property line during a typical firing event**  
   Section 3.03.5 of the Range Book provides the following guidance for a sound measurement:
   a. Take the measurement at the property line and in direct line with the receiver
   b. Select measuring points that are clear of interfering objects (other than naturally occurring ones).
   c. Describe the surface area over which the sound travels. Certain surface area configurations, such as a good grass cover affects the rate of decay for sound.
   d. Intervening distance between a point source and a receiver is also an attenuating factor. As a rule, each time the distance is doubled the sound pressure level is reduced by one-half, or reduced by about 6 dB.
   e. Terrain features are also important, for example a noise source in a depression is provided barriers that will redirect sound and is not as serious as one at a higher elevation. Therefore, a range located in a valley presents less of a problem than one at the same general elevation as the surrounding area. Ranges that are elevated above a receiver will have the advantage of atmospheric attenuation, with addition components attenuated via wind. Wind tends to cause sound waves traveling with the wind to appear louder, and those traveling against the wind to appear quieter. (noise would be less in areas to the south and louder in areas to the north, as a rule given our southern prevailing winds)

Section 3.03.3.1 of the NRA Range Source Book provides the following information as a general guide for noise levels:

A. **Unacceptable**: If the sound level exceeds 90 dB(A) for 1 hour out of 24 or exceeds 85 dB(A) for 8 hours out of 24 and the receiver is less than ¼ mile from the sound source.

B. **Discretionary**: Normally acceptable if the level exceeds 80 dB(A) for 8 hours out of 24 or if there are ‘loud’ impulsive sounds (referring to sonic booms, artillery, etc) on site and the distance from the property boundary and the receiver is one mile or more.

C. **Discretionary**: Normally acceptable if the level does not exceed 75 dB(A) at the property boundary more than 6 hours out of 24 hours and distance from the boundary and the receiver is over 2 miles.
D. **Acceptable:** If the sound levels at the receiver do not exceed 65 dB(A) more than 8 hours out of 24 or activities do not extend into the nighttime hours of 10 pm through 7 am. **Note:** Law Enforcement activities may have exemptions to the above recommendations. Live fire night exercises may be required to maintain the proficiency and update training of police officers.

The map in Figure 5 shows the locations and distances of the nearby residences. It appears there are 2 residences within ¼ mile of the sound source. Figure 6 shows the general elevations of the range and nearby residences.

Noise levels should be taken during a normal firing event to determine if the amount of noise generated is considered acceptable per the info in the Range Book. Given the distance to the nearby residences an acceptable noise level for this range would be: “**If the level does not exceed 65 dB(A) at the property boundary more than 8 hours out of 24 hours.**”

3.03.10.2 Sound abatement shields or barriers should be installed on ranges where neighbors are within ¼ mile of the facility unless significant natural barriers exist. Any fixtures or terrain features must serve either to redirect or capture sound. There are a few neighbors just within the ¼ mile area.

**Lead Management**

Lead pollution is an issue with shooting ranges as the lead can leach into the soil and percolate through to the ground water or flow through runoff into nearby streams. In this case, the proximity of the regulatory floodplain and Washington Creek, which flows to Lone Star Lake, makes proper lead management even more important. Figure 7 shows the general location of each shooting range and the direction of fire.

The Kansas Department of Health and Environment had responded to a complaint regarding the shooting activity within the floodway and determined that if the EPA Best Management Practices are followed, lead pollution should not be an issue with this range (Attachment C). Based on this information, the shooting ranges may remain in their current locations; however, if any new ranges are proposed in the future, staff recommends locating them outside of the floodway to prevent future pollution issues. The following information and recommendations for an effective lead management program were taken from the EPA’s Best Management Practices for Lead at Outdoor Shooting Ranges and the NRA Range Source Book:

1) Control and contain lead bullets and fragments  
2) Prevent migration of lead to the subsurface and surrounding surface water bodies  
3) Remove the lead from the range and recycle  
4) Documenting activities and keeping records

1) **Control and Contain Lead Bullets and Fragments**  
Earthen berms and backstops, such as are used at this range, are one recommendation for controlling and containing bullets. These should be shown and noted on the plan. They should be between 15 and 20 ft high with as steep a slope as possible. The layer (to a depth of one to 2 ft) exposed to the shooting activity should be free of rock and debris. (ricochets and bullet fragmentation)

2) **Prevent Lead Migration**
Soil treatment
- Soil pH levels will be monitored on an annual basis. Lead migration increases in acidic conditions since the acid of the soil contributes to the lead break down. The ideal soil pH level should be between 6.5 and 8.5. Spread lime around the earthen backstops, sand traps, trap and skeet shotfall zones, and any other areas where the bullets/shots or lead fragments/dust accumulate.
- Spreading bags of 50 pounds (at ranges with sandy soils) or 100 lbs (at ranges with clayey soils) per 1000 sq ft of range will raise the pH approximately one pH unit for a period of between 1 and 4 years.
- If the soil pH range is 4.5 or less addition of lime may only raise the pH to about 5. In this case additional measures should be used. If soil pH range is above 8.5 do NOT add lime.
- Also, to avoid lead mobilization from rainwater, crushed limestone will be spread in front of all backstops. The crushed limestone will help trap any lead particles that may migrate from the berm. The spreading of limestone in front of the shooting area and the spreading of lime over the berm area are easy and low cost methods of controlling the migration of lead. It is also a very easy and cost effective method of minimizing the potential for the lead to degrade.

3) Removal of lead
Implementation of a regular lead reclamation program is very important. Ranges with acidic soils or high precipitation may require more frequent reclamation. To insure that lead is not considered ‘discarded’ or ‘abandoned’ on the range (within the meaning of the RCRA statute, i.e. a hazardous waste) periodic lead removal activities should be planned for and conducted.
- Lead will be reclaimed and recycled when the estimate of rounds fired reaches 100,000 or every 7 years, whichever comes first. If lead has not been reclaimed within the past 7 years, it will be necessary to reclaim the lead within 3 months of the approval of the CUP. Lead reclamation and clean up will be done by a professional lead recovery company.

4) Documentation
Documentation in the form of reports at each range will be kept as to the number of rounds fired and the type of ammunition used as well as the management activities used to prevent lead migration. It will be the responsibility of the range master or property owner to compile this information and keep it on hand for review by the Douglas County Zoning and Codes Office personnel.
All shooting activities at the range will be documented as to usage as follows:
4. Name of individual who used the range
5. Date and time of use
6. Type of firearm used
7. Type of ammunition used
8. Number of rounds fired

All lead management activities shall be documented as follows:
4. Type of management activity (lime, phosphate, etc)
5. Date and time of activity
6. If lead was removed and if so, in what quantity
7. Who removed the lead
8. Where was the lead taken and what was done with the lead

HOURS
The applicant proposes the following hours for the shooting range:

Training and Education:
- 7:30 AM to 8:00 PM Monday through Friday,
- 9:00 AM to 7:00 PM on Saturday,
- 11:30 AM to 7:00 PM on Sunday for use by organized groups including Law Enforcement agencies

Individual use by FOP members:
- to operate from 8:00 AM to 9:30 PM every day of the week except for the following holidays: Christmas Eve, Christmas, Thanksgiving, and Easter

Based on concerns from the neighboring property owners, staff recommends one set of hours for the operation of the shooting range. The range should not be in operation for any of the following holidays (or the days on which such holidays are observed by Kansas state government) New Year's Day, Easter, Thanksgiving Day, Christmas Eve and Christmas Day. Times of operation should be limited to the following hours:

The hours should range from 8 AM to 8 PM Monday through Thursday; 8:00 AM to 5:00 PM on Friday; and 10:00 AM to 6:00 PM on Saturday and Sundays. Night shooting events may occur up to 3 times a year, with a time limit of 10:00 PM. Neighbors within 1 mile must be notified of night shooting events at least 3 days in advance through either email, letter or phone call.

**Conclusion**
Approval of a CUP can be tailored to address specific issues such as intensity or frequency of use, include time limitations, and provide screening requirements. The recommended conditions respond to the specific nature of this request. With the conditions regarding hours of operation, sound abatement and lead management, the shooting range should be compatible with the nearby land uses.
Figure 1. Zoning in the area.  
(subject property outlined in red)  
- Blue: A (Agricultural),  
- Bright turquoise: Regulatory Floodway  
- Light turquoise and light blue: Regulatory Floodway Fringe

Land Use in the Area  
(subject property outlined in red)  
Woodland, agriculture and rural residential Recreation area (Lone Star Lake) to the south

Figure 2. Location of floodplain on the subject property.

- The subject property is outlined in red.  
- Regulatory floodway is shown in blue  
- Regulatory floodway fringe is shown in green.  
- Washington Creek is marked with a dashed line within the floodway.
 Parcel where the majority of the shooting occurs is marked with a ○.

- Subject property shown in black
- Blue: Principal arterial/freeway
- Red: Principal arterials
- Green: Minor arterials
- Orange: Collector
- Yellow: Minor Collector
Figure 5. Distance of residences to shooting facility (approximate)
Blue ring is .25 mile radius: 2 residences
Red ring is .5 mile radius: 6 residences (+2 in .25 radius)=8 residences total
Black ring 1 mile radius: 25 residences (+8)=33 residences total
Green ring 2 mile radius: >125 (+33)=>158 residences total
Figure 6. Elevations of shooting ranges and nearby residences
Figure 7. Location of shooting ranges and direction of fire, (dimensions are shown approximately)

1. 100 yard rifle range. Shooting to the east into wooded bank. 8 shooters.
2. 30 yard pistol range. Shooting to the south into wooded bank. 8 shooters.
3. 80 yard rifle/pistol range. Shooting to the north into wooded bank. Extended range ‘2’...no addtl shooters.
4. Trap range. Shooting to the northwest with a 150 yard safe fall zone. 5 shooters—shotgun only
5. 100 yard urban shooting range. Shooting within or into the structure. 10 shooters.
Figure 8 Entrance from E 661 Diagonal Road

Figure 9 Rifle range near road...target in front of very steep hill used as backdrop.
Figure 10 Drive up to the lodge buildings

Figure 11 Trap shooting area.
Figure 12 Shoot house. Firing is usually within the house, or occasionally into the house.

Figure 13 Shoot house detail.
Figure 14 Pistol/rifle range. This range can be 30 or 80 yards. Hill provides backdrop
November 1, 2010

To: Landowners Effected by the Fraternal Order of Policeman’s Firing Ranges

FOP Compliance Update-

Introduction:

The purpose of this e-mail is to make landowners who live in the vicinity of the Fraternal Order of Policeman’s (FOP) shooting ranges, aware of the facts which led to Douglas County filing a lawsuit against the FOP, the results of the lawsuit, and the steps which are now being taken to have FOP come into compliance with the county zoning ordinance.

Background:

As some of you may recall, four years ago it came to the attention of landowners living in the vicinity of the firing ranges owned by the FOP, that the FOP had never complied with the Douglas County Zoning ordinance which requires a Conditional Use Permit (CUP). The County Administrator was asked about this situation and he confirmed that no documentation could be located. When he had queried the FOP, there response was that the County Commissioners had been fully aware of the shooting range and had given tacit approval when the range was originally installed. This did not comply with the zoning ordinance which has a defined set of procedures.

Local Landowners who had successfully prevented an earlier attempt to establish a lake and outboard motorboat operation in the vicinity, met to determine a course of action. There was no consensus on what action should be taken. Some felt that the Police Officers had been helpful to neighbors in the past and that it was comforting to have their presence. Some felt that the noise disturbance was extremely offensive. Shooting was conducted on an increasingly frequent basis, randomly, and at times of day which were objectionable and unreasonable (late at night, on religious holidays and early in the morning, especially on Sundays). The noise created by the frequent shooting was believed to depress property values in the area. There was agreement that the firing late at night, on holidays, and the increasing frequency of usage, and helicopter operations were issues that needed to be addressed. (The minutes from that meeting are included at the end of this write-up)

The County Administrator was asked to meet with the group. He listened to their concerns and suggested a meeting with the FOP. His position was that the ranges provided a public service and it was desirable for them to continue operating. His hope was that some sort of resolution could be reached to ameliorate neighbors’ concerns, which could allow for a successful application for a CUP by the FOP. A meeting with the FOP was requested by the landowner’s attorney through the FOP attorney. After about a four month wait, two members of their executive committee (Special Agent Scott Ferris of the Kansas Bureau of Investigation, who lives in Topeka and Captain Dan Affalter, Lawrence Police Department, who lives in Lawrence) and their attorney met with two members from neighborhood and their attorney. The issues which had been raised in the neighborhood meetings were presented. In addition to the specific issues, other points that were discussed were the increased number of users of the range who were not Douglas County personnel. These included the Franklin County Deputies and the Wyandotte Muzzle Loaders. Not mentioned were the Casino Guards, Hunter Safety Course, or the Concealed Weapons Carry program. In addition the increasing number of users caused by the increased manpower of the different departments, the Helicopter landings, and possible sound suppression actions were brought up.
We did ask if they felt they had a really first class range on which to train personnel. Their answer was "no." They stated that they do not have funds to make major improvements to their ranges. They do everything self help, including their own maintenance. When welding is needed one of their members does it, and so on, to include mowing the lawn. We asked why they didn't apply for a grant to improve their facility. They said they could not apply for a grant because they were not a nonprofit 501.3c. They could not afford to pay for the fees involved in filing for non profit status. The usage fees paid by the city, county, Casino Gaming Commission, KBI, USDA (for hunter safety) and concealed carry classes and others is apparently inadequate to give them an income which would allow significant improvements to be made for their member's usage. Although they call themselves a Country Club, they are exempted from paying real estate taxes on their 97 acre property, because they filed a request for tax exemption based on being an education facility.

When we asked if they could limit the number of organizations using the range they did not think that was feasible. We asked why they were allowing helicopter operations and they said that one of their members had a friend in the Army National Guard and thought it was a convenient place to conduct training.

They listened and stated that they would discuss the issues with their executive committee to see what could be done to address the points presented. There is no record of them making any response, although there have not been any helicopter landing operations recently and when the County 911 operator is asked why they are still conducting firing operations at 9:45 at night, the response has been that they are complying with their rules. These must be the rules that the executive committee unilaterally decided on. There are no rules that the Sheriff or the County Commissioners have signed off on.

The County Commissioners in an effort to help the FOP make their ranges into a truly professional training facility and ameliorate the noise situation, offered to provide significant financial assistance. The county had in mind considerably more than the $25,000 that the FOP thought would be needed (perhaps upward of $200,000). The FOP Executive Committee turned down the offer. No one understood their reasoning. The County Commissioners then were forced to require the FOP to apply for a CUP, but the FOP refused, which forced the County to file a lawsuit against the FOP.

Judge Kittie, who heard the case in 2009, recently announced her decision. The County prevailed and the FOP must now proceed with applying for a Conditional Use Permit. The issue of the validity of the County Zoning ordinance was mutually agreed to not be adjudicated because both parties had agreed before the trial to not have that issue be part of the case.

Current Actions:

- Recently the FOP attorney met with the County Attorney and the Judge to determine the next steps which are to be taken. They are as follows:

1. It was suggested that the FOP personnel (Executive Committee) meet with local landowners and discuss possible actions which would allow for a CUP to be approved by the County Commissioners. Although the County Zoning Ordinance only requires property owners within 1000 feet to be notified, in view of the impact that the FOP activities have on all of the neighbors well outside 1000 feet, it is no doubt appropriate to notify all landowners who are effected, 3000 feet would seem to be a minimum.

In discussions with the FOP it is appropriate to discuss all options, as their CUP should contain provisions which make for a quality of life which is compatible with the country living lifestyle which has been chosen
by those who live in this area. Conditions which might be considered range from ceasing all firing to establishing reasonable operating hours.

2. FOP is to meet with the City/County Planning Committee Staff and present their CUP. Their is to be a public hearing. Anyone may attend and it would be best if there were several locals present. When the case was heard before Judge Kittle, there were a large number of Law Enforcement personnel present to show their support for keeping the range open. There were no locals present, as they were not aware that the case was being heard. It is my understanding that public comments may be made to the planning staff.

3. The Planning Commission Staff then will present their recommendation to the Planning Commission. This will also be a public hearing and again it would be judicious to have local property owners present. Again public comments may be made.

4. The Planning Commission staff will then present their recommendations and the Planning Commission’s recommendations to the County Commissioners who will make the final determination regarding the approval of the FOP’s CUP. Again this is an open public forum and comments may be made by the public.

5. It is my understanding that if the CUP is not acceptable to the County Commissioners, the FOP will take the county to court again on the grounds that the Zoning Ordinance’s for our County are not legal. Of course the County will then be placed in the position of having to pursue this to the State Supreme Court, as it would place all of the zoning actions that have been acted upon in our county subject to becoming invalid.

I have contacted the Planning Staff Administrator (Mary Miller 832-3147) and she is to advise me when the hearings are to be conducted. If you would like her to contact you directly you may call her. I will send out an e-mail when I hear of the date. Dates and Agendas for the Planning Staff are available at [http://lawrencesks.org/pds/pc_agendas_minutes](http://lawrencesks.org/pds/pc_agendas_minutes).

Contact:

If you have any comments about this e-mail or want to speak with a real person, I can be reached at 748-0055. If there is a need for a get together please let me know.

Please advise me if you want to be removed from this e-mail list. If there is anyone that you feel should be added to the list I would also appreciate your advising me.

Minutes from May 2006:

The following are the minutes of the meeting held in May 2006 with some of the concerned residents and their recommendations:

"A meeting of neighbors interested in the operation of the FOP was held on Saturday April 29th in Steve Lewis’s garage. In attendance were:

* Steve Lewis resident of 625 N 775 Rd. 
* Scott Mesler resident of 657 N 775 Rd. 
* Bill Roth resident of 640 N 775 Rd."
Karl Bims resident of 809 E 661 Diagonal Rd.
Charlotte and Harry Knoche resident of 798 E 661 Diagonal Rd.
Bryan Young resident of 813 E 661 Diagonal Rd.
Jim Lock resident of 643 N 750 Rd.
Tim Coldsnow owner of property west of E675 Rd.

Bryan Young, Harry Knoche, and Jim Lock attended the later portion of the meeting.

Besides being an opportunity for neighbors to meet, share, and discuss the concerns we have regarding the activities at the Fraternal Order of Police Lodge, the main goal of this meeting was to develop a list of suggested changes to the operation of the FOP lodge. This list could then be presented to the county administrator, and possibly other parties, as the issue is further considered.

Here are the recommendations.

1. Discontinue use of the lodge and grounds by the military. We agree there must be other locations the military can use for helicopter landings, detonation of ordnance, rifle practice and other such training.

2. Prohibit the detonation of any ordnance at the lodge and grounds.

3. Limit the hours of shooting guns. Here there was diversity of opinion as to what the hours of shooting should be, but all were agreed that a limited schedule of firing weapons is needed.

One recommended schedule was: Weekdays from 8 am to 8 p.m., Saturdays from 9 am to 6 p.m., and Sundays from 10 a.m. to 6 p.m.. This schedule was supported by the majority in attendance. Several variations were suggested: no shooting on Sundays at all, later starting times and earlier ending times for both weekdays and Saturdays, and scheduling one night a week for shooting that could extend until 9 p.m.

4. We request that the FOP inform the neighbors when any special training events will take place, such as night shooting, emergency vehicle operation on the grounds, or other notable special training. The closer the neighbor lives, the stronger the support for this issue.

These were the specific items we agreed on at the end of our meeting. Many issues were discussed and will no doubt be resolved during the application for a conditional use permit. But this is the list that we felt could be presented to the county administrator when the time is right."
Mary Miller;

I want to send you a brief message letting you know that our family supports the FOP being in our community.

My wife and I have lived in our home at 643 N 750 Rd, raising our five kids, since 8-15-1984, and have loved living in this beautiful part of our county and state. I think our home is one of the 3 or 4 closest homes to the FOP Lodge. We can see the FOP directly east of our home.

I can truthfully tell you that we have never been bothered by gun shot noise that comes from the FOP. We know that it is necessary for our police forces to get their training, and we greatly appreciate the work and protection the city, county and state police provide for all of us. We feel that their presence in our Lone Star community provides us added security, and we want to give them our support.

I believe that there are many other families living in our area who feel the same way that we feel, however we have not tried to organize; we just want to be good neighbors with all other families who live out here and also with the FOP.

Since the FOP had its lodge and practice area out here long before most of us who live out here, I think it inappropriate for us to put undue pressure or demands on them. We knew the FOP was here when we chose to move our here. I would like to recommend that the city/county regulation bodies move to give the FOP the legal standing they need to continue their work in our community. And I would like see all who live in our area out here have a good living relationship with the FOP and each other.

Please let me know if there is anything further I can do to help promote the above solution.

Thank you for your help in this area.

Sincerely,

Jim Lock
643 N 750 Rd.
Lawrence, KS 66047
785-748-0809

Subject: FOP CUP Status

Some of you received a letter stating that the City/CountyPlanning Commission would be meeting to discuss the FOP CUP on February 22.

Today I spoke with Mary, who is on the planning staff, and she informed me that a letter would be coming out, probably Monday, stating that the meeting had been delayed until March, because the FOP has not been able to provide all of the information that has been requested
by the staff. This is the concern that I had earlier expressed to the County Commissioners about what I would refer to as "slow rolling."

I stated to Mary that unless there were commitments by the FOP to take positive action regarding the noise pollution, I and I assume others, would have to strongly object to approving the CUP. She said that she would make that one of the issues that the staff would address. While I realize that there are no definitive noise requirements at this time, such as measured decibel levels, to simply ignore the problem and "kick the can on down the road" is imprudent after so many people in the FOP, County, and local neighbors, have gone to so much effort to resolve this matter. There should be definitive actionable requirements stated, with times established for accomplishment. Having spoken to members of the FOP, they are well aware of the kind of actions that can be taken to mitigate range noise. The planning staff also has a copy of what the NRA suggests for noise abatement, so this is not a frivolous requirement.

By the way, I am a candidate for the Lawrence School Board with elections on the 5th of April. Needless to say I would very much appreciate it if you can find time to stop by the polls on that day and cast a vote, especially if its for me. In addition, as you talk with people who live in other parts of Lawrence, if you would mention my name, that would be very helpful. Even if every one in the southwest part of the county voted for me, that would not outweigh the heavy voter concentration in the middle of the city. We are the only remaining rural school in the district and it seems only right that we should be represented.

I will keep everyone informed as new info becomes available.

Thanx--

Bill Roth
SUBJECT: FOP CUP

TO: Mary Miller
City/County Planning Staff
Lawrence, KS

Recommendations for a successful CUP by the FOP:

Although there is general agreement among the neighbors that there may be more appropriate locations for a facility to train the Law enforcement personnel of our County, the following stipulations would make this CUP for a range, somewhat acceptable to many of the neighbors:

1. The CUP must address the desirability of using this location for range operations versus other sites available in the county, such as quarries and other areas which are not in valleys where sound abatement is difficult.

2. Discontinue use of the lodge and grounds by the military. There must be other locations the military can use for helicopter landings, detonation of ordnance, rifle practice and other such training. No helicopter operations are to be conducted at the facility, with the exception of emergencies requiring medivac.

3. Prohibit the detonation of any ordnance at the lodge and grounds.

4. Hours of operations for conducting firing. One possible schedule would be: Weekdays from 8 am to 6 p.m., Saturdays from 9 am to 6 p.m., and Sundays from 12 p.m. to 6 p.m. Night firing to be conducted during two designated months each year. During the designated months, shooting would cease at 9:00 PM, except during the last half of June, July and August; during which periods shooting may be continued until 9:30 PM. No firing range operations to be conducted on those days designated as holidays by Federal or State laws...Christmas, Thanksgiving and Easter shall be included as legal Holidays.

5. The FOP or their designated agency, will inform, via e-mail, when any special training events will take place, such as night shooting, emergency vehicle operations on the grounds, or other notable special training.

6. Guests of the FOP members who are invited to use the range shall be limited to residents of Douglas County.

7. The CUP must state that if the facility is to be used by public or private law enforcement personnel for training, it will comply with Federal (Dept. of Homeland Security and EPA), State and County Safety, Health and Environment Standards. A survey of the facility is to be conducted to assure that the site is not in violation of EPA requirements for lead contamination with particular attention to drainage into Washington Creek.

8. The recommendations outlined in the NRA “The Range Source Handbook” are to be addressed, with specific attention to warning signage on the boundaries of the facility, lead entrapment, and noise abatement procedures.

9. The CUP must include a stated written commitment that noise abatement barriers, and/or other methods, are to be constructed within a set time frame, or the CUP is to be revoked. NRA Range Book, Section One, Chapter 6, Article 3, para 3.04 is provided as a reference, as well as drawings which describe some of the suggested methods.

10. The approval of this CUP for the FOP is predicated on enhancements being made which will provide a first class training facility for our law enforcement personnel who undergo firearms training.
Hello Ms. Miller

Bill Roth has been keeping some of us in the area posted about his concerns regarding the FOP Lodge and especially the firing range. I'm not sure how much "input" you've had, but I did want to give my view of this matter and state that Mr. Roth certainly does not speak for me. He uses the pronoun "we" -- I'm not sure who "we" are -- so I did want to give my own view of this matter, since Bill writes that you are taking public comment.

I have lived up the hill from the FOP and firing range for 26 years. Our home is about .7 mile from the lodge grounds. Yes, we DO hear gunfire on occasion. I've not noticed increased traffic on the roads when the police of sheriff's office have mandatory qualification trials. The noise is noticeable if I am in the yard, but not if I am in my house. The noise occurs during reasonable hours -- business hours, you might say -- and the night shoots take place in the late fall when it gets dark early and it's too cold (and dark) for me to be outside entertaining or doing gardening or yard work. I have also been aware of the black powder muzzle loaders camp outs (one or two a year) and I know that Hunter Safety is taught from time to time on random Saturdays. Works for me!

I would like to make two points.

1. **Life and work are noisy.** I have heard gunfire, it is true. But I have also heard my neighbor weaning cows and calves (poor things, they cry for each other all night!); the sound of chainsaws, bulldozers, and tractors in use; geese flying overhead; coyotes howling to each other; and neighbor's dogs barking at night. One family nearby comes out to run 4 wheelers 'round about their land. I have even owned roosters! Yet I have not been annoyed by these sounds. Ninety three percent of the time (an undocumented, but honest number from me!) these random sounds do NOT occur and my country life is quiet and peaceful. I realize that people live, work, and play near me and I give them my consideration and respect. I don't feel it is my place to dictate what noises I will tolerate...whether or not people park boats in their driveways...what color they paint their homes or whether or not they may own and use a clothesline. This is agricultural land, not a gated community, and it is zoned as such. It is part of the charm of the countryside.

2. **I don't feel unsafe.** Bill alludes to having concerns for "our safety." I have visited the range and note that the targets are against a large hillside, away from the road or any homes or buildings. The range is locked and available only to members and law enforcement personnel. As my husband once remarked, "Hey, it's the GOOD GUYS practicing!" That's all right with me. Deer season concerns me more than target practice! Those folks have high powered rifles and they are prowling around in the woods. They are not supervised and are not "working." But it is part of the deal when one lives in the country. One copes and accommodates.

I note on Bill's email list several parties who have since moved away from the neighborhood and sold their property. I don't see on his list several neighbors who have since moved in. I fear there is a bit of "ax-grinding" with a few neighbors who have been denied access to the FOP or had bad luck developing farmland into home sites. And some folks just like a good argument. Perhaps they should run for office???. In any event, I'm not sure it is a complete and unified opinion list, and I hope it is not being put forth as such.

I appreciate Bill's work and community spirit, but I am not on the same page. I bristle at the implication that "THEY" won't give "US" what we want. This is not Kosovo -- this is Kansas! Chalk me up as one concerned party who is NOT concerned, but is just asking for neighborly cooperation from ALL the neighbors.

Thanks for listening!

Lorel Lewis
625 N 775 Road
Lawrence, KS  66047
748-0890
Mary Miller

From: Mesler657@aol.com
Sent: Thursday, January 06, 2011 9:34 AM
To: Mary Miller
Subject: FOP's CUP permit application

Dear Mary,

We own the property directly across 661 diagonal from the FOP property. We have lived up on the hill across from them since 1989. I have known of their lodge since I was a kid and was in the inaugural class of hunter safety in 1973. A lot has changed just since we moved out here. We have 8 new neighbors soon to be 10 within 1/2-3/4 miles of us. Just as the neighborhood has grown, so has the members of the FOP and departments which use the facility. About 4 years ago, a number of us neighbors met at Sergeant Steve Lewis’ home @ 625 N 775 road (Mr. Lewis is in the Douglas County Sheriffs Department) to discuss requesting the FOP to adopt hours of operation which took into consideration the growing population of the surrounding area. Mr. Lewis took our written request with suggested limited hours of operation to the FOP during a regular meeting. He was met with a very negative response and was basically shunned by fellow members. The rest leading up to where we are now is public knowledge.

My wife and I have only the highest regard for the members of the law enforcement community and do not wish to negatively impact their training at the FOP facility, however the time has come for restrictive hours of operation to be placed on the FOP facility. In their CUP application, the requested hours of 7:00 am to 10:00 pm 7 days a week is basically status quo and will not be accepted.

I would be in favor and supportive of the following: For the summer months, June, July & August, 7:00 am to 8:00 pm Monday thru Friday. 8:00 am to 8:00 pm on Saturday and 12:00 noon to 6:00 pm on Sunday. For the remainder of the year 8:00 am to 5:30 pm with the same hours as June, July & August for Saturday & Sunday. No hours of operation for holidays with the exception of Memorial Day, The 4th of July and Labor Day. As for the night or "dark shooting practice", I ask that those practices be limited to two months of the year, one possibly in the spring and one in the fall.

One fact which is over looked when considering their location and the noise which is created. The direction in which they are shooting is east towards the hillside. The hillside creates a natural amphitheater and the noise is magnified back through the valley and to the west. Their "buffer" amounts to a visual buffer only. When the foliage is gone during the winter months, are windows can literally rattle.

Feel free to contact me any time if you wish to visit our home if you would like to see and hear for yourself. I can be contacted by e-mail or better yet on my cell phone @ 865-6231.

Thank You,
Scott Mesler
FIRST AMENDED FRATERNAL ORDER OF POLICE CONDITIONAL USE PERMIT

HISTORY

1. The FOP has used portions of the property as a firing range for forty years. Douglas County helped construct the pistol range on the property. The City of Lawrence and Douglas County helped in the development of the property because of the benefits to their respective law enforcement agencies. Various law enforcement agencies including the Douglas County Sheriff and the Lawrence Police Department use the ranges. Hunter Safety courses use the property. The FOP uses the property for lodge meetings and various activities that are not related to the use of the firing ranges.

A dispute over zoning of the property between the FOP Lodge No. 2, and Douglas County, began in April of 2006. After several meetings with the county, and attempts to resolve a dispute over the zoning issue of the firing ranges [the only dispute the FOP is aware of that has ever occurred regarding the use of the property is the use of the firing ranges] the FOP and the county decided the best thing to do was to have a friendly suit and have the judge decide the issue. The parties took depositions of a number of people, including Rex Johnson, former Sheriff, and county officials, both current and former. A partial motion for summary judgment was filed by both parties. The judge in the case ruled in favor of the County on the partial motion for summary judgment; however, made very favorable findings of fact in favor of the Fraternal Order of Police. A copy of the opinion is attached to this application. The FOP, at the urging of the county, decided to go through this CUP process. If the CUP process is not acceptable to the FOP, it still has the option of filing another motion for summary judgment that would completely resolve the case, and if another adverse ruling is given by the court appealing that decision to the Court of Appeals and then possibly the Kansas Supreme Court. If the FOP
receives a CUP that it is satisfied with, it will terminate the litigation and operate under the CUP. If the FOP is not satisfied with the CUP issued by the county, then it is free to resume the litigation. The FOP believes it is in everyone’s interest if an appropriate CUP can be issued by the county in this case.

**CURRENT USES**

2. The FOP uses the property for meetings, gatherings, social events, and other activities that its members may engage in. The use includes training for military, police, civilian, or other groups of individuals with or without the use of the firing ranges. The FOP supports the Hunter Education Program of the Kansas Department Wildlife and Parks. Training for this program is done on the property.

   The lodge, on the property, has two bathrooms. These bathrooms are connected to rural water, as is the kitchen facility. The bathroom and sinks go into a septic system which was approved by the county when the construction occurred. The septic system is adequate and no problems have been encountered with the septic system.

   The existing structures on the property include a lodge building, garage, five-bay barn, shelter house, trap house, footbridge, low-water bridge and obstacle course containing 12 obstacles in an approximate one-quarter mile loop. There is also a structure that is used for an urban range.

   The FOP does not prohibit other uses of the property while the ranges are being operated, so long as no safety issue is raised.

   The main parking area is gravel which is 40 yards x 45 yards, or 120' x 135'. Parking on two sides and in front of the garage, in this area, can accommodate 30 cars. If needed, but
seldom used, a single file row of cars can be used down the middle of the property. As an over-
flow area the mowed grass is available between the driveway and the shelter house. This area is
approximately double the area of the parking lot. The drive from the county road to the lodge
building is approximately 15' wide and is a gravel driveway.

**FIRING RANGES**

3. The FOP currently has four firearm ranges in use on the property. These are shown
highlighted on Exhibit A, attached hereto. This CUP is for those existing uses. Any additional
firing range will require a separate CUP to be approved.

**BUFFERS**

4. Exhibit A shows property the FOP owns which provide buffer zones for neighboring
properties. The FOP will be required to maintain ownership of these properties to continue the
buffer zone.

**RESTRICTIONS ON OPERATIONS**

5. The FOP does not allow shooting on its ranges on the following holidays: Christmas
Eve, Christmas, Thanksgiving, and Easter. On the remaining days of the year, the FOP shall
allow shooting on the firing ranges as set forth below:

**Any organized group including Law Enforcement agencies:**

Monday through Friday 7:30 a.m. to 8:00 p.m.

Saturday 9:00 a.m. to 7:00 p.m.

Sunday 11:30 a.m. to 7:00 pm.

Night shooting is limited to 10 days a year with notification as set forth below.

**Individual use by FOP members:**
8:00 a.m. to 9:30 p.m. Every day of the week except for the holidays listed above.

USE

6. The use of the FOP ranges shall be limited to FOP members and their guests. The FOP requires that a member be on site when the firing ranges are in use. **No public use of the firing ranges shall be allowed.**

The FOP allows pistols, rifles, shotguns and muzzleloaders. Equipment used by law enforcement agencies does not typically differ significantly from sporting firearms except occasionally the rate of fire.

No more than 8 people are allowed to use the pistol range at one time. No more than 8 are allowed to use the rifle range at one time. No more than 5 are allowed to use the trap range at one time. No more than 10 people are allowed to use the urban range at one time.

The FOP is proud to support the men and women of our Armed Forces. The FOP does allow, with a member on site, military organizations to use the property. Typically, this use does not include the use of the firing ranges. Instead, these activities involve orienteering, map and compass and other activities which require a type of outdoor terrain and facilities which the FOP has to offer.

SAFETY

7. The N.R.A. Safety Rules shall be posted on all firing ranges and followed by any person using the firing ranges. The FOP owns approximately 95 acres, most of which is steep hills. Topographical maps of the area obtained from the U.S. Geological Survey show the elevation of the impact areas of the pistol range, rifle range, and urban range of approximately 150 feet of backstop. Additionally, the area is covered in heavy timber which is a natural buffer
for noise. In 40 years of operation there has never been a ricochet reported.

PROPERTY DESCRIPTION

8. The property, which is affected by this CUP, is described as follows:

51.188A 11-14-18 S 1/2 OF NE 1/4 NE 1/4; ALSO W 30A OF SE 1/4 NE 1/4, LESS 5A IN A SQ IN SW COR THEREOF; ALSO N 5.5A OF E 10A OF SE 1/4 NE 1/4; ALSO BEG AT PT 1820 FT S OF NE COR W 1/2 NE 1/4 TH W 578.8 FT TO CEN CO RD #20 TH SWLY ALONG CEN SD RDS 12.76 FT TH E 595.7 FT TO E LINE SD W 1/2 TH N 50 FT TO PT BEG; ALSO S 20 FT OF FOLLOWING DESC TR: BEG AT NE COR W 1/2 NE 1/4 TH W 248 FT TH S0D20’W 770.7 FT TH E 319.6 FT TH N 767.4 FT TO PT BEG COL WW35 (CORRECTED DESC 1990 D 254/477 & 479)

PROPERTY SECURITY

9. The property is posted “No Trespassing” and the gate shall be shut and locked when no member is on the property.

ORGANIZATIONAL PURPOSE

10. The Fraternal Order of Police (FOP) is an organization dedicated toward the advancement and development of law enforcement officers. Membership is restricted as set forth in the Constitution and Bylaws of the Fraternal Order of Police Lodge #2.

The FOP receives its support from membership dues. To be a member of the Fraternal Order of Police, the individual must be a full-time law enforcement officer with powers to arrest in Douglas County. FOP membership includes representatives from all agencies in Douglas County, Lawrence Police Department, Douglas County Sheriff’s Office, Eudora and Baldwin City Police Departments, Kansas University Police Department as well as state and federal
agencies. The Fraternal Order of Police offers an associate membership, which is available to people, who support the mission of the FOP. Associate members must be sponsored by regular members, and undergo an application process. A membership vote is required for either an associate member or a regular member before that individual is allowed to join. Membership is not granted to individuals for the sole purpose of using the firing range. Most associate members are in closely related fields, which come from the District Attorneys Office, U.S. Attorneys Office, dispatchers, correction officers and other related areas.

NEIGHBOR INVOLVEMENT

11. The FOP held a meeting with the surrounding neighbors of the property to discuss issues on November 14, 2010. The property including the shooting ranges and the lodge was available for neighbors to view. The FOP invited comments from neighbors regarding their concerns and what the FOP can do to be a good neighbor. The FOP has attempted to incorporate some of the suggestions in this CUP.

The FOP understands that one of the main concerns of the neighbors deals with the noise from the firing ranges. The FOP intends to approach the county and the City of Lawrence for funds to be used for improvements to the ranges that will reduce the noise that the current ranges produce. The FOP is in the process of touring other ranges in the area for ideas on how to make noise improvements on the ranges. The Lawrence Police Department and the Douglas County Sheriff's Office account for a substantial use of the ranges. The FOP believes that both the county and city will help contribute to a facility that will bring about substantial noise reduction. The FOP does not want to commit funds or resources for these improvements until it knows that
a CUP can be granted, or that it receives a favorable court ruling that qualifies as a final order that cannot be appealed by any party.

**FIRING RANGES ON PROPERTY**

12. The firing ranges were developed over the last forty years, with the help and support of the City of Lawrence and Douglas County. The pistol range was constructed in part with the assistance of Douglas County. The FOP has a long history of use of the firing ranges. The four ranges have not been changed significantly in the last ten years.

The various ranges are shown on the attached map.

A. The pistol range has 8 shooter stations with an impact area into a steep hill.

B. The trap range has 5 shooter stations with a minimum of 150 yards of safe fall zone.

C. The rifle range has one shooter station but can accommodate multiple shooters. The impact area is in a very steep hill.

D. The shooter station at the maximum of 100 yards is within 100 feet of neighboring property but the impact area is not within 100 feet of neighboring property. The owner of the adjoining property has expressed support for the FOP in the use of the range.

The FOP takes the issue of safety very seriously. Anytime an agency is using the property it must, in addition to having a member of the FOP present on site, have a range master/range safety officer on site. Each individual using the range is responsible for the safety of all participants and guests. All of the ranges have been constructed to shoot in the direction that offers the most safety for everyone.
The FOP has been providing Hunter Safety classes since 1971. The Hunter Education Program is the highest volume of range usage in a single day. Typically, enrollment is limited to no more than 100 students in each class. With parents and instructors the total number of people on the property is approximately 120 people.

The FOP does informal testing of the stream to check for any lead pollution. So far, no unusual levels have been found in the water. The water in the stream that flows out of Lone Star Lake contains the same level of lead as that flowing downstream from the FOP property. The FOP does intend to address additional property management issues when it does improvements to the range. These improvements will be consistent with the EPA best practices manual.

The FOP has outdoor lighting on the property. This consists of a yard light on a power pole in the parking lot, which is on a light sensor; a porch light on the lodge building which is on the front porch; two power poles with lights on them on the trap range approximately 27 feet high, but aimed so they do not project light past the trees that border the property [night shooting on this range is a rare occurrence]; and two power poles with lights on the range facing Southward into a hill. These lights do not shine on anything but the hill.

**EMERGENCY NUMBER**

13. The FOP shall provide the Douglas County Dispatch with an emergency number for individuals to be contacted in the event of safety concerns on the range. If anyone has a question about the use of the range that person can call the Douglas County Communication Center at 785-832-7509. In addition, whenever any law enforcement agency is using the property for training, which involves the ranges, they shall notify the Douglas County Communication Center of the
fact that the ranges are going to be in use and the name and phone number of the individual on the range who will be contacted in the event there are questions about the range operation.

NOTIFICATION OF NIGHT SHOOTING

14. The FOP has compiled a list of e-mail addresses for neighbors. The FOP shall attempt, when practical, to notify the neighbors at least one week in advance of any shooting that will occur by a law enforcement agency after sundown. The FOP shall maintain a way on its website for any neighbor who is interested in being contacted to add their e-mail address to the notification list.

IMPROVEMENTS

15. The only proposed improvements to the firing ranges would focus on noise reduction and allow for improved environmental practices.
DOUGLAS COUNTY DISTRICT COURT
Seventh Judicial District

Judicial and Law Enforcement Center
111 E. 11th Street
Lawrence, Kansas
66044-2966
785/832-5144
785/838-2455

Peggy Carr Kittel
Judge, Division 6

Yvonne Pappworth
Court Reporter

Lucinda Bermudez
Administrative Assistant

Fraternal Order of Police,
Lawrence Lodge No. 2, Inc., Plaintiff

v.

Case no. 2007CV 570

Douglas County,
Board of Douglas County
Commissioners for Douglas County, Defendant

MEMORANDUM DECISION

This matter is before the court on cross motions for summary judgment. Plaintiff appeared by counsel Michael E. Rilling. Defendants appeared by counsel Christopher F. Burger and Evan H. Ice. The parties made arguments and filed memoranda in support of their positions and the court is now ready to rule on the motions.

Statement of Uncontroverted Facts

1. The Board of County Commissioners ("County") adopted county-wide zoning regulations on September 23, 1966, which regulate the use of land in all unincorporated areas of Douglas County, Kansas.

2. The Fraternal Order of Police Lawrence Lodge No. 2 (FOP) purchased a tract of property in Douglas County Kansas and a deed was recorded on October 26, 1967. When deciding where to purchase property the FOP looked for a place where they could shoot firearms. The property purchased was 17 miles outside the city limits of Lawrence.

3. The subject property acquired by the FOP consists of approximately 95 acres of land at 768 East 661 Diagonal Road in an unincorporated area of Douglas County, Kansas. From the time of purchase to the present this property has been zoned "A-Agricultural District".
4. When the subject property was purchased, it did not have a road or any structures on it. The FOP built a bridge and a road to gain access to the land where a building would be constructed. Employees of the City of Lawrence and employees of the County assisted the FOP in hauling gravel for the road and provided heavy equipment to spread the gravel and blade the road. The County agreed to blade the road and furnish rock, and the City agreed to haul rock from a close-by quarry.

5. The County furnished grader equipment and other materials to help build a pistol range on the FOP property.

6. In 1970 Wayne Kellum was Douglas County Zoning's Administrator, whose job it was to enforce zoning regulations in Douglas County. Kellum received no training for this job.

7. In 1970, when the FOP applied for its building permit to build a building on the property, the County did not have an Administrator. The County Counselor in 1970 was Dan Young, who is now deceased.

8. A construction permit, issued by the County to the FOP on February 12, 1970, was for "construction of clubhouse". The indicated use was listed as "police club". There was no mention of a firing range. The application for the permit stated "The undersigned, hereby certifies that the information given herein is correct and that he will comply with the zoning resolutions of Douglas County, Kansas." This permit request was signed by FOP member Don Dalquest. (See Exhibit Clark-15).

9. Dalquest testified at deposition that the acquisition of the subject land was for the purpose of shooting, and that he was advised by the FOP's attorney Jack Maxwell that they had to put "police club" on all their permit applications. No one from the County ever questioned the "police club" designation.

10. Kellum issued a building permit for the FOP property on May 8, 1975, for the construction of a 24' x 24' garage to be used as a storage shed. The area on the permit to designate the intended use of the property was left blank. (See Exhibit Clark-17). Part of Kellum's job when issuing the building permit, was to ensure that the County zoning ordinances permitted the property's proposed use. Kellum could not remember whether he was aware that there was a firing range on the FOP property at the time he issued this permit.

11. In 1971, the County Commissioners approved the FOP's use of the County fairgrounds for a charity benefit horse show. The benefit was to raise money for the pistol range to be used at the FOP property. An article was published in the Journal World discussing this event.

12. When the County and City constructed a new law enforcement center, the plans included a firing range in the basement. In 1976, the Lawrence Police Department along with the Douglas County Sheriff's Department moved into the Law Enforcement Center (LEC). The firing range was built in the LEC but could not be used due to the ventilation system pumping lead into the offices.
13. Rex Johnson served as Douglas County Sheriff from 1965 through 1989. Sheriff Johnson had several discussions with the County Commissioners about the fact that the range at the new LEC was unusable due to the ventilation problem.

14. Because the LEC firing range did not work, the Sheriff's Department was forced to use the FOP range. Rex Johnson would not have used the FOP range if he was not sure that it was legal for the officers.

15. While Rex Johnson was Sheriff and his department was using the range on the FOP property, no County Commissioner ever expressed to him a concern that the range was not in compliance with zoning ordinances.

16. The County issued a building permit for the FOP on April 11, 1979, for an "addition for the FOP Club building." The area on the permit to designate the intended use was left blank. (See Exhibit Crossfield-22).

17. Sometime between 1993 and 1996, Sheriff Loren Anderson, Sheriff Johnson's predecessor, contacted the FOP regarding a noise complaint made by neighbors of the subject property. Sheriff Anderson asked the FOP if they would limit the firing after 10:00 p.m. A gentlemen's agreement occurred, and no mention was made about the property being used illegally for shooting.

18. According to the FOP Lodge #2 Constitution and By-Laws, Amendment to Article 7 52, non-members may use the FOP property with permission of the FOP President, as long as at least one member of the FOP Lodge is present and a fee paid. An exception to the requirement of a member's presence is the use by other law enforcement agencies or U.S. Military organizations.

19. Over the years many County Commissioners have been on the property, and have actually taken part in shooting on the range. Bev Bradley, a former County Commissioner, wrote a note to the FOP dated June 30, 1982, in which she thanked the FOP for having her up to the property, and stated she looked forward to the completion of the rifle range. (See Exhibit Clark-6).

20. Many individuals involved in the development of the ranges on the FOP property including the attorneys Jack Maxwell, Wes Norwood, and Gene Rilling who helped with establishing the property are now deceased, and the FOP has been unable to locate their files.

21. The FOP would not have continued to improve the property and develop the shooting ranges if there was any question regarding the legality of that use. The FOP relied upon the fact that Douglas County was aware of the use of the property and, had its own law enforcement officers use the property as a firing range.

22. On October 20, 1970 the FOP applied to the Board of Tax Appeals to have a tract of its land declared as tax exempt. The application requested information as to the specific use of the property. The FOP provided a
written explanation that: "F.O.P. is a non-profit organization designed for the betterment of law enforcement, for use by members for firearms practice, and lodge meetings. F.O.P. property is also open for use by the Lawrence Police Department for firearms training." The County Assessor signed off on the application, supporting the tax abatement. (See Exhibit Dabney-2).

23. The FOP stated in regard to its 1991 request for exemption from ad valorem taxes (on additional parcels of the subject land acquired after 1970) that "the predominant use of the FOP property is a training facility to local law enforcement agencies for the use of firearms training and practical exercise training so that people can become and remain law enforcement officers.

24. Kenneth Harmon served as a deputy sheriff part-time from 1990 through 1995. He fired on the range at the FOP property as part of his Deputy Sheriff’s duties and training at the direction of his supervisor, Don Dalquest, to fulfill his firearms qualification requirement. During this time there were no other ranges in the Douglas County area that could be used to qualify. The County paid Harmon by the hour to fire on the FOP range. No one ever told Harmon that the shooting range was in violation of county zoning ordinances.

25. Lyle Sutton became a member of the Douglas County Sheriff’s Department in 1987. The Sheriff required him to qualify on the FOP range as part of his job. He was required to do this every year for 14 years.

26. The Sheriff’s Department continues to use the property for qualifications which require them to shoot their guns on the range.

27. Keith Dabney is the current Director of the Zoning and Codes Department for Douglas County. Dabney agrees that it is a fair statement to say that the records kept by the County back in the 70s were a lot less formal than they are today.

28. The FOP uses its property for at least two separate purposes, a lodge house and a shooting area. The FOP purchases separate insurance for its shooting area. There are approximately six recognized shooting areas on the FOP property, two for shotguns, a lighted area for pistols, two for rifles, and one used as a confidence course, although firearms could be involved virtually anywhere on the property.

29. The shooting areas are used for a variety of purposes, including law enforcement training, hunter safety and other uses which are open to the public, if a member is also present.

30. Firearm and police training at the FOP property includes but is not limited to: handgun practice and qualifications; rifle practice and qualifications; automatic weapons practice and qualifications; Crisis Response Team use of confidence course and shooter shack every other week; recruit academies; tear gas training; week long survival schools; crime scene investigations; and other uses of firearms on the shooting areas that generally measure the use of bullets by the pallet. Some of the training is
designed to put law enforcement trainees under tremendous stress by making a lot of noise. Not all training involves firearms.

31. The FOP has charged the Douglas County Sheriff $21,966.00 for the use of the FOP training facilities since 2000. The FOP has also collected fees from the Kansas State Gaming Commission, the Lawrence Police Department, the State Securities Commission and others for the use of the FOP training facilities located at the subject property.

32. In 2006 at least one neighbor on behalf of himself and other neighbors complained to the County about the gunfire and activity on the FOP property. (See Defendant's Ex. "S")

33. The first time the County raised an issue with the FOP that its use of the property was possibly a zoning ordinance violation was in 2006.

Standard of Review

In deciding a motion for summary judgment, the Court must consider K.S.A. 60-256(c) which states in part:

"The judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law."

"The trial court is required to resolve all facts and inferences which may reasonably be drawn from the evidence in favor of the party against whom the ruling is sought. When opposing a motion for summary judgment, an adverse party must come forward with evidence to establish a dispute as to a material fact. In order to preclude summary judgment, the facts subject to the dispute must be material to the conclusive issues in the case." Scott v. Hughes, 281 Kan. 642, 644, 132 P.3d 889 (2006).

Any disputed fact must be a material fact to preclude summary judgment.

"[I]f the disputed fact, however resolved, could not affect the judgment, it does not present a genuine issue of material fact." Ruebke v. Globe Communications Corp., 241 Kan. 595, 605, 738 P. 2d 1246 (1987).

A non-moving party must come forward with facts evidentiary value that show essential elements of their case are met in order to avoid summary judgment. The movant is entitled to prevail if he can establish that there is an absence of evidence to support the opposing party's case. Crooks v. Greene, 12 Kan. App. 2d 62, 64, 736 P.2d 78 (1987). When a non-moving party has failed to make a showing sufficient to establish the existence of an element essential to that party's case, however, there can be no genuine issue as to any material fact, because a "complete failure of proof concerning an essential element of the non-moving party's case necessarily renders all other facts immaterial." Celotex Corp. v. Catrett, 477 U.S. 317, 322-23, 106 S. Ct. 2548 (1986).
Issue to be Decided

The question posed in this case is whether the FOP has the legal right to the continued use of its property (zoned "A-Agricultural District") in the manner which has evolved over the last forty years: a police club, as well as a place where law enforcement and FOP guests may train and practice handgun, rifle and automatic weapon use, and conduct other law enforcement training. The FOP contends that under the Douglas County Zoning Regulations, it qualifies as a "country club" which would then permit the use of pistol ranges and other firearms usage. Alternatively, the FOP argues that the County, through its acts or omissions over the last several decades, approved the current use, and is therefore estopped from requiring the FOP to obtain a Conditional Use Permit ("CUP") to continue firearms and law enforcement training on the property. The County contends that firearms usage is not a common use under a "country club" designation. Further, the County argues that the FOP should be required to apply for the appropriate CUP, that the FOP was never given any express authorization to operate a shooting area on the property and that any implicit authorization, through silence, cooperation or informal conversation, does not make the County's Zoning Regulations unenforceable.

Conclusions of Law

The basic purpose of zoning laws in this state is the protection of the public health, safety and welfare, K.S.A. 12-741. Specifically, the Zoning Regulations for Douglas County provide that the purpose of the regulations is to "promote, in accordance with present and future needs, the safety, morals, order, convenience, prosperity, and general welfare of the citizens of Douglas County, Kansas...." The regulations have been made "with reasonable consideration, among other things, to the character of the district and its peculiar suitability for particular uses ..." Douglas Co. Zoning Reg., Article 2.

With those purposes in mind, this memorandum will address the various ways in which the FOP could be permitted to legally operate a firing range on their land, and why none apply under the facts of this case.

1. Nonconforming use.

The Kansas Supreme Court defined "Nonconforming Use" as:

"[a] use which lawfully existed prior to the enactment of a zoning ordinance, and which is maintained after the effective date of the ordinance, although it does not comply with the zoning restrictions applicable to the district in which it is situated." Johnson County Memorial Gardens, Inc. v. City of Overland Park, 239 Kan. 221, 224, 718 P. 2d 1302 (1986).

A nonconforming use is frequently not compatible with other allowed uses for a given zoning district. Nonconforming uses are often restricted, with the goal of gradual elimination. Consistent with this policy, courts have ruled that the right to a nonconforming use is to be strictly construed and that the burden of proof is on the party claiming the nonconforming use. "Most importantly, such a party must
establish that the nonconforming use commenced prior to the enactment of the ordinances restricting such use.\textsuperscript{2} \textit{Crumbaker v. Hunt Midwest Mining Inc.}, 275 Kan. 872, 881-882, 69 P. 3d 601 (2003).

The FOP use of this property as a firing range does not qualify as a nonconforming use. The County enacted the zoning regulations in September, 1966 prior to the purchase and use of the land by the FOP in October, 1967. Additionally, [(a)] nonconforming use may not be established through a use which from its inception violated a zoning ordinance. Such use has no lawful right to continue. See, \textit{Hudson v. Paradise}, 101 N.H. 389, 143 A. 2d 421 (1958); 1 Anderson, American Law of Zoning §§ 6.10-6.14.\textsuperscript{3} \textit{Goodwin v. City of Kansas City}, 244 Kan. 28, 33, 766 P. 2d 177 (1988).

2. Use as Country Club under "A" Agricultural zoning regulations

The FOP argues that the use of the FOP property falls under the category of "country club", a permitted use for the "A" Agricultural zone. The Douglas County Zoning Regulations do not define "country club". Merriam-Webster Dictionary defines "country club" as: "a suburban club for social life and recreation; especially one having a golf course."

The country club designation was never used by the FOP on any applications made to the County for various improvement projects, nor in its request for tax abatements. A permit issued to the FOP in 1970 was for the construction of a building to be used as a "police club" although there is no such category in the zoning regulations. The building permit issued in 1975 to the FOP for the construction of a storage shed had the use of the property left blank. On its two Board of Tax Appeal applications, the FOP explained the property was used for the betterment of law enforcement and for use by its members for fire arms practice, practical exercise training and lodge meetings, and that the property was also available for the Lawrence Police Department's firearms training.

The FOP argues that a typical and expected use of a country club is the shooting of firearms, such as skeet shooting. The FOP, however, does not reconcile its contention that the firearms shooting done at the FOP property is done in a recreational manner similar to skeet shooting at a country club. At the onset of the FOP's acquisition of the property, one of the anticipated uses of the property was to allow local law enforcement officers to have a place for firearms training and qualification. The FOP on more than one occasion stated the actual and acknowledged use of the firing ranges was for law enforcement training. The firearms training taking place on the property as evolved, expanded and intensified over the years as the FOP added new firearms ranges and a confidence course. Training now occurs at night as well as during the day. Training with automatic weapons, during the day and in the night, along with training involving tear gas is in no way similar to recreational skeet or trapshooting at a country club.

For the sake of argument, if the FOP is considered a country club, and if the firearms usage at the property can be considered in the same category as skeet shooting one might find at some country clubs, Article 23 of the Zoning Regulations comes into play. Under Section 23-3, special use exceptions are permitted if the Board of Zoning Appeals finds such exception will not substantially affect adversely the uses of neighboring property. Included in those special exceptions are, under
23-3.10(5) "Rifle or pistol range, trap, or skeet shooting." These special use permits, if granted, are for a two year period. Had the FOP, as a country club, received all the proper approval in the 1970s to operate a pistol range, it would have been under a special use exception, and its permit would have been effective for two years. The zoning regulations specifically refer to these permits as "temporary and conditional". The FOP would fall under the requirement to renew the conditional use permit ("CUP") every two years. Although it is uncontroverted that county record keeping may have been more lax decades ago, it is significant that not a single CUP for the range has been produced for the time period of the 1970s up to the present.

Under the use claimed by the FOP in its Board of Tax Appeal applications, and evidence of both the original and the historical use, this court concludes the FOP property cannot be considered similar in use to that common with a country club. Even if one assumes the FOP is correctly categorized itself as a country club, a CUP would have been required for the FOP to lawfully operate any kind of shooting range on the property, whether for skeet shooting or a pistol range, and there is no evidence that any CUP was issued to allow firearms use.

3. Equitable Estoppel

The FOP believes the County is estopped from enforcing the zoning regulations in regard to the use of the property, due to the County's knowledge and condoning of firearms training taking place there. Based on the County's tacit approval, the FOP spent money, time and effort over the years improving the grounds and adding firing ranges and a confidence course. The FOP argues that it is unreasonable to now require any special use permit when the County knew all along of the activities at the FOP property. The County contends that estoppel in general is inapplicable to municipalities.

"Equitable estoppel is the effect of the voluntary conduct of a party whereby it is precluded, both at law and in equity, from asserting rights against another person relying on such conduct." Gillespie v. Seymour, 250 Kan. 123, 129, 823 P.2d 782 (1991). In Tucker v. Hugoton Energy Corp., 253 Kan. 373, 383, 855 P.2d 929 (1993), our Supreme Court set forth the doctrine of equitable estoppel as follows: "A party seeking to invoke equitable estoppel must show that the acts, representations, admissions, or silence of another party (when it had a duty to speak) induced the first party to believe certain facts existed. There must also be a showing the first party rightfully relied and acted upon such belief and would now be prejudiced if the other party were permitted to deny the existence of such facts." A party must show both misrepresentation and detrimental reliance to invoke the doctrine of equitable estoppel. Mutual Life Ins. Co. v. Bernasek, 235 Kan. 725, 730, 682 P.2d 667 (1984).

A. Equitable Estoppel Generally Not Applicable to Municipalities.

The County correctly states in its memorandum that estoppel does not generally apply to municipalities. See, Board of Comm's of Douglas County v. City of Lawrence, 102 Kan. 636, 171 P. 610 (1918). The leading case in Kansas on this issue is Blevins v. Board of Douglas County Comm'ms, 251 Kan. 374, 834 P. 2d 1344 (1992), in which the Kansas Supreme Court held estoppel would apply to a municipality only when justice and equity require it and such application will not interfere with the proper exercise of government functions. 251 at 374. One of the
main government functions is to ensure public safety, and zoning laws are enacted to protect public health, safety and welfare.

B. Municipalities must follow prescribed procedures.

There are instances when estoppel may be applied where the municipality acts improperly and unreasonably. See, *Bell v. City of Topeka*, 224 Kan. 147, 577 P. 2d 1193 (1978) (city was found to have improperly and unlawfully created a benefit district). A municipality may be estopped from acting illegally. This is not the situation under the facts of the present case. No one contends the County has acted illegally.

The FOP believes that the issuance of building permits reflects governmental approval of the use of the property for firearms training. The permits were for the construction of buildings, not for a specific use of the property. Had the permits allowed the firearms use, the permits would have been issued in violation of the zoning ordinances, and therefore illegal. "Approval by city officials of a use which is prohibited by the ordinances, without the issuance of a special permit, is without effect. *Building Inspector of Lancaster v. Sanderson*, 372 Mass. 157, 167; 360 N.E.2d 1051 (1977); 1 Anderson, American Law of Zoning § 6:15." *Goodwin v. City of Kansas City*, 244 Kan. 28, 33-34, 766 P. 2d 177 (1988). See also, *Blevins v. Bd. of Do. Co. Comm'rs*, 251 Kan. 374 Syl.¶ 8, 834 P. 2d 1344 (1992).

In *Goodwin*, the Plaintiffs bought land with the intent to use it to supply fill dirt for construction. Before the purchase, Plaintiffs asked the chief building inspector what city restrictions applied. The Inspector in error said they only needed a hauling permit. One year later the Plaintiffs were told by the city they were in violation of city zoning ordinances and needed a special permit. Plaintiffs sued for damages resulting from their inability to continue their business. The Supreme Court considered the zoning ordinance at the time Plaintiffs' use commenced. The land was zoned "A-1", one-family residential. Dirt excavation was not listed as a permitted use, "[t]hus the use was not permitted, since it did not conform and was not preexisting." 244 Kan. at 31. A special permit would be required, and Plaintiffs had a specific procedure to follow for lawful excavation which they failed to follow.

"It is not uncommon for municipal officers to erroneously advise landowners they may use land for a purpose which violates zoning ordinances. The general rule applied by the courts in such instances is that a nonconforming use of land may not be established through such statements as the officer is without authority to violate the zoning ordinances." *Goodwin*, 244 Kan. 28 at 33. Under the rationale set out in *Goodwin*, in the present case had the building permit applications stated the proposed use of the subject property was law enforcement firearms training, and the building inspector issued the permits, he would have done so in error, as he was without authority to make such a property use exception.

"From a practical standpoint a citizen should be able to rely on a citizen's governing body, its ordinances, its properly designated officials and the requirements established by such officials under the proper exercise of their authority so when such citizen strictly complies with the law, ordinances, and the requirements of such officials he is not acting at his peril." *Skaggs v. City of Pratt*, 183 Kan. 424, 429, 327 P. 2d 1083 (1958). *Skaggs* is distinguished, however, from the present factual situation. In *Skaggs*, the city engineer was also the building inspector who issued
the building permit. Skaggs should have been able to rely on him when receiving the permit. In the present case, the building inspector who issued the permits for the original building and later on a permit for the shed and the addition to the main building did not have the authority to ignore the zoning ordinances. Additionally the permits were for the construction of the buildings, and not for the construction of shooting ranges or confidence courses.

C. Building code is subservient to zoning ordinances.

A municipality may not nullify its ordinances without following prescribed procedures dictated by due process, because landowners have the right to rely on strict compliance with those ordinances. See, City of Belleville v. Hallowell, 41 Kan. 192, 21 P. 105 (1889). Benson v. City of DeSoto, 212 Kan. 415, 510 P.2d 1281 (1973), cited by the FOP in support of their estoppel argument, is not persuasive. In Benson, the City was estopped from asserting the invalidity of its own ordinance enacted to rezone a property. In the present case, there is no assertion by the County that the County's zoning regulations are invalid. To the contrary, the County is asserting its authority to enforce the valid regulations.

As pointed out in DeSoto v. Centurion Homes, Inc., 1 Kan. App. 2d 634, 573 P. 2d 1081 (1977), there are two distinct principles to consider: "(1) The city may be estopped from revoking a validly issued building permit, as where e.g. the zoning is changed after issuance of the permit and the city seeks a retroactive enforcement (82 Am. Jur. 2d, Zoning and Planning § 237, p. 752); and (2) a building permit issued in violation of law or under a mistake of fact confers no right, may be revoked at any time, and does not estop the city from doing so (82 Am. Jur. 2d, Zoning and Planning § 244, pp. 776-777)." 1 Kan. App. 2d at 640. The court in DeSoto held if a permit is issued to a project which does not comply with zoning ordinances, then the permit is not issued within the city's authority. The building permits in the present case were for building use only, not in any way providing approval of the general property use.

The FOP cannot rely on the issuance of building permits to support its claim that the permits provided it a vested right to use of the property as a firing range/law enforcement training facility. The building permits granted were for a police club, a storage shed, and an addition to the clubhouse. Nothing inherent in those building descriptions would lead one to believe that extensive firearms use would occur on the property. The permits were issued for the buildings, not for the use of the grounds for firearms training or the building of a range or a confidence course. Had the permits purported to provide such approval, under the DeSoto ruling, the County would not be estopped from revoking them, as the permits would have been issued in violation of the zoning regulations.

D. Passage of Time with County's Knowledge of Property Use.

Although various county employees were aware of and actually participated in firearms training at the FOP property over several decades, "[e]stoppeal cannot be asserted against a governmental entity based on mistaken statements of law, nor should a public officer's failure to enforce a statute correctly inhibit correct enforcement of the statute or estop more diligent enforcement." 28 Am. Jur. 2d, Estoppel & Waiver § 142.
"[A] use unlawful from its inception could not be claimed as a valid nonconforming use exempt from zoning restrictions, despite previous acquiescence by the City." Goodwin, 244 Kan. at 34. Even when a substantial amount of time has passed, estoppel may not apply. In Lelgh v. City of Wichita, 148 Kan. 607, 83 P.2d 644 (1938), at Syll. ¶ 2 the Supreme Court held: "In an action to enforce a zoning ordinance, the fact that certain city officials had permitted the ordinance to be violated for a number of years did not estop the city from bringing an action to enforce the ordinance." The Supreme Court noted in State ex rel. Veale v. Paul et al, 113 Kan. 412, 214 P. 425 (1923) "[B]eginning with Wood v. M.K. & T. Railway Co., 11 Kan. 323, 349, there is a long and undeviating line of decisions down to and including In re Moseley's Estate, 100 Kan. 495, 164 P. 1073, and The State, ex rel., v. Piper, 103 Kan. 794, 798, 176 P. 626, which hold that laches and estoppel do not operate against the state, that no procrastination of public officials prejudices the state and that their tardiness neither bars nor defeats the state from vindicating its sovereign rights, except where positive statutes so provide". 113 Kan. at 412. See also, State ex rel. State Bd. of Healing Arts v. Beylfe, 269 Kan. 616, 7 P. 3d 1194 (2000).

E. Economic reliance on actions by Municipalities insufficient to invoke equitable estoppel.

The FOP's argument that it expended a large amount of money and effort improving its property for law enforcement training is not persuasive to support its request for the application of equitable estoppel. In Genesis Health Club v. City of Wichita, 265 Kan. 1021, 181 P. 3d 549 (2008), the plaintiff spent more than one million dollars in reliance of a purported contract with the city, believing that industrial revenue bonds would be issued and tax abatements granted. The city failed to issue the bonds or grant the tax abatements. Even under those circumstances, the court held that estoppel could not provide the health club relief when it was found no binding contract existed. The city could not be held liable for the club's economic loss where it had no capacity to make the contract or where it was made in express violation of the law. 265 Kan. at 1022.

In Tingle v. City of Wichita, 211 Kan. 119, 505 P. 2d 717 (1973), the city caused Plaintiff's structure to be razed and removed after Plaintiff received a building permit and started renovation. Plaintiff claimed reliance on government action, due to the city issuing building permits, permitting plaintiff to repair the structure and placing him in a position of reliance upon that conduct, but based on the facts of that case and the statute, estoppel was not applicable.

Although the FOP in the present case spent money and effort over time to improve the subject property to accommodate the training needs of local law enforcement, financial expenditures made in reliance of an informal understanding are insufficient to estop the county from enforcing its ordinances.
CONCLUSION

The FOP's use of the subject property is neither a nonconforming use as defined by the Kansas Supreme Court, or does it come under a "country club" classification in the County Zoning Regulations. Had it qualified as a country club, a CUP would still be required in order for firearms use under Section 23-3 of the Zoning Regulations.

Procedural requirements are considered by courts to be safeguards against the arbitrary exercise of power. That is why everyone must follow the procedures as laid out in the zoning regulations. Governmental employees must also follow the ordinances and regulations. This includes County Commissioners, building inspectors and zoning officers. When county employees ignore county regulations and ordinances, even done with good intentions, their actions are void.

Equitable Estoppel does not generally apply to municipalities, and it cannot be invoked when it would interfere with the governmental function of protecting public health, safety and welfare. Certainly heavy firearms and law enforcement training exercises referred to in the statement of facts are by their nature the types of activities municipalities seek to regulate for public safety. Under the Douglas County Zoning Ordinances, a Conditional Use Permit must be acquired to allow that type of activity. And while the FOP's purpose in developing the subject property for law enforcement training is laudable, the same standards under the law apply to the FOP as it would a private citizen or any other organization. Likewise, the County may not ignore its own zoning ordinances and is duty bound to apply its rules equitably.

The important reasons given by the FOP concerning the necessity of its facility in order for law enforcement officers to obtain their mandatory firearms qualifications are arguments to be made before the Board of Zoning Appeals in support of any request for a Conditional Use Permit.

Based on the foregoing, Plaintiff FOP's motion for summary judgment is denied and Defendant Board of County Commissioner's motion for summary judgment is granted. Counsel are directed to contact the court within ten days of the date of this decision to schedule a chambers conference regarding the Plaintiff's statement in its Response to Defendant's Motion for Summary Judgment that the "the parties have agreed to hold in abeyance the issue of whether the zoning regulations were valid from 1966 through 1984", and whether the zoning ordinances were validly adopted and published.

This memorandum decision constitutes a journal entry and judgment is entered in accordance with the findings hereinafore made.

Dated and effective this 19th day of August, 2010.

Peggy Carr Kittel
District Judge

cc: Michael E. Rilling, attorney for Plaintiff
    Christopher F. Berger, Evan H. Ice, attorneys for Defendant
The Fraternal Order of Police owns and operates an active shooting range at the address above. The complainant is concerned about lead leaching into Washington Creek which runs through the property where the shooting range is located.

TO BE COMPLETED BY DISTRICT

Referred To: Julie Coleman for referral

Response:

On 08/25/08, a site visit was made to visually assess the potential for impact to the creek through range activities. The pistol range backstop (berm) is located in an area that is adjacent to an intermittent drainage ditch that feeds Washington creek. The berm is of sufficient height that impact to drainage is unlikely from normal range activity. The Other potential area of concern is the shotgun range where clay pigeons are thrown over a field in the direction of the creek. The sector that the pigeons are thrown is located where the separation from the creek is at a minimum of over 400 feet with the center of the range at over 800 feet. The ballistics of a #8 load shotgun shell (most commonly used for shooting clay pigeons) indicates that the shot would not travel that far under normal conditions (see attached ballistics table).

The Washington Creek channel is carved into native limestone in several areas. This would tend to restrict any tendency for the water to have a low enough pH to take elemental lead into solution in the event that shot should enter the creek.

Information about the Environmental Protection Agency’s best practice guidelines for operation of gun ranges was left at the facility. At this time, no follow up has been planned.
Mary: In August of 2008, the agency received a complaint about this issue. I visited the facility to assess whether the general layout of the range was such that normal use would pose an unacceptable risk to the creek. I have attached the documents that reside in the agency's complaint file. Generally, it is the agency's position that if the facility complies with the "Best Management Practices" as detailed in the document provided, the risk to the creek from lead shot is not an issue.

Please feel free to contact me if you have any questions.

Tom Winn
Kansas Department of Health & Environment
Bureau of Environmental Field Services
800 W 24th Street
Lawrence, KS 66046
Phone: 785-842-4600
Fax: 785-842-3537
Outdoor Shooting Range

Questions About Shooting Ranges: For a copy of the USEPA Best Management Practices for Lead at Outdoor Ranges, please contact the Information Center. For more information, call 1-242-227-2010.

Contact the USEPA Information Center:

Phone: 1-242-227-2010
Address: 135 Potomac Street, SW, Washington, DC 20460
Name: John Doe

The National Lead Program is designed to protect against exposure to lead and its health effects in children. The program focuses on lead-based paint and other lead hazards in residential properties. It also includes efforts to educate the public about the potential risks associated with lead and its health effects. The program is funded through the Environmental Protection Agency (EPA) and is administered by the USEPA. For more information, visit the EPA's website at www.epa.gov/lead. For additional information, contact the USEPA Information Center at 1-800-424-9343.

DO YOU USE BEST MANAGEMENT PRACTICES FOR LEAD AT YOUR OUTDOOR RANGE?
What is a Best Management Practice and How Does It Apply to Shooting Ranges?

A Best Management Practice (BMP) is usually based on an approach or technology that has been shown to work and to be effective for the purpose intended. The United States Environmental Protection Agency (EPA) uses BMPs to specify standards of practice where a regulation may not be descriptive enough to do so. A BMP should also be as inexpensive as possible and the equipment or technology should be readily available. A BMP may be adopted based on a survey of practices (shooting ranges in this case) that have had successful experiences with an approach or technology.

BMPs for outdoor shooting ranges are actions that range owners/operators can take to minimize the impact of lead on the environment. Lead at outdoor shooting ranges may pose, in certain situations, a threat to the environment if BMPs, including reclamation and recycling, are not implemented in a timely manner.

What is the EPA Best Management Practices for Lead at Outdoor Shooting Ranges manual?

The Best Management Practices for Lead at Outdoor Shooting Ranges manual provides owners and operators of outdoor rifle, pistol, trap, skeet and sporting clay ranges with information on lead management at their ranges. The manual explains how environmental laws are applicable to lead management and presents successful BMPs available to the shooting range community. These practices have been proven to effectively reduce lead contamination. Since each range is unique in both the type of shooting activity and its environmental setting, site-specific solutions are not provided in the manual. Rather, range owners or operators may use the manual to identify and select the most appropriate BMP(s) for a range. The manual does not address range layout or design to meet range safety or competition requirements. It is also not intended for closing ranges. Range owners/operators are directed to other comprehensive reference materials available on that subject, from the National Rifle Association of America, National Shooting Sports Foundation and other shooting associations.

Owners/operators of ranges may want to assign the implementation of this BMP Manual to a specific team or committee if possible. Delegating this responsibility to a specific team or committee helps to assure that the work gets accomplished.

The manual is organized as follows:

Chapter I provides the background on why lead is of concern to human health and the environment. It includes a discussion of how environmental laws impact shooting ranges and the importance of an integrated BMP program to manage lead;

Chapter II discusses range physical and operational characteristics to be considered when selecting a successful BMP program;

Chapter III addresses BMPs for rifle/pistol ranges, trap and skeet ranges, and sporting clay ranges. In this chapter, the manual explores possible solutions to prevent, reduce and/or remove lead contamination for each type of range;

The Appendix provides current (as of May 2000) contacts for lead reclamation and recycling companies, other sources of information on lead management, bullet trap manufacturers and key RCRA regulatory interpretations.

How Is Lead Shot Regulated Under the Resource Conservation and Recovery Act (RCRA)?

Lead shot is not considered a hazardous waste subject to RCRA at the time it is discharged from a firearm because it is used for its intended purpose. As such, a RCRA permit is not required to operate a shooting range. However, spent lead shot (or bullets) are subject to the broader definition of solid waste written by Congress and contained in the statute itself. As such, spent shot and bullets are potentially subject to RCRA statutory authority including section 7002 and 7003.

In general, the following points should serve as guidance in understanding RCRA and how it applies to your range.

1. The lead, if recycled, is considered a scrap metal pursuant to 40 Code of Federal Regulations (CFR) 261.6(a)(3)(ii) and is therefore exempt from RCRA regulation.

2. After the removal contractor or reclamer applies standard BMPs to separate the lead from soil, the soil may be placed back on the range without further treatment.

3. The collected lead shot or bullets are excluded from RCRA regulation, and need not be manifested, nor
CUP-12-08-10: Conditional Use Permit for the Fraternal Order of Police shooting range
768 E 661 Diagonal Road

Lawrence-Douglas County Planning Office
April 2011

Scale: 1 Inch = 2000 Feet
I will not be able to be at the Planning Commission meeting Monday, Apr. 25, however I wanted to send you a brief message letting you know that our family supports the FOP being in our community.

My wife and I have lived in our home at 643 N 750 Rd, raising our five kids, since 8-15-1984, over 25 years, and have loved living in this beautiful part of our county and state. I think our home is one of the 3 or 4 closest homes to the FOP Lodge. We can see the FOP directly east of our home.

I can truthfully tell you that we have never been bothered by gun shot noise that comes from the FOP. We know that it is necessary for our police forces to get their training, and we greatly appreciate the work and protection the city, county and state police provide for all of us. We feel that their presence in our Lone Star community provides us added security, and we want to give them our support.

I believe that there are many other families living in our area who feel the same way that we feel, however we have not tried to organize; we just want to be good neighbors with all other families who live out here and also with the FOP.

Since the FOP had its lodge and practice area out here long before most of us who live out here, I think it inappropriate for us to put undue pressure or demands on them. We knew the FOP was here when we chose to move our here. I would like to recommend that the city/county regulation bodies move to give the FOP the legal standing they need to continue their work in our community. And I would like see all who live in our area out here have a good living relationship with the FOP and each other.

Please feel free to use the above letter as you see fit, and let me know if there is anything further I can do to help promote the above solution.

Thank you for your help in this area.

Sincerely,

Jim Lock
643 N 750 Rd.
Lawrence, KS 66047
785-748-0809
Mary-

I tried to contact you yesterday, but you must have been busy. If you have any questions please give me a call on 660 334 1955.

Bill Roth

This CUP requested by the FOP, to be acceptable needs the following issues to be addressed and corrected.

The use of this area for training law enforcement personnel who are authorized to carry firearms in Douglas County, has been viewed in many different ways. The question is “What is this range and what is the FOP?” On one hand it is viewed by the Law enforcement personnel when they are training, as a firearms training facility. On the other hand it is viewed by the members as a fraternal order to be enjoyed by members as a social club where personnel who are engaged in law enforcement activities can socialize and network with their compatriots. One activity gets in the way of the other. Equipment which would make this range resemble the NRA layouts which are standard for professional training operations are not provided for our personnel, because the funds that could be made available cannot be provided to a non government or non-profit organization. The grants, similar to the $385,000 which have been obtained by the Lawrence Police Department, cannot be applied for by the FOP. They are not a 501.3c non-profit, nor are they a county or city owned range, they are a fraternal order established and maintained for the social use of law enforcement personnel. The organization has an ancillary use of being a firearms shooting range, which different organizations use to conduct firearms training.

From a strictly land development planning perspective, It becomes obvious that the proper location for a firearms training facility would be either the Sunflower Army Ammunition Plant, which is a large area which because of its previous use, has limited potential for most commercial applications, or the City property on the north east part of the county that slopes away from the city into a mainly flat agricultural area with limited population due to flooding potential. (As a point of reference, it would take 24 minutes to drive to Sunflower from the County Sherriff’s office verse 25 minutes to the CUP FOP site.)

If a Lodge for socializing is desired by the Law enforcement personnel, then continuing to use their current facility would be addressed from a different view. Hours of operation for shooting could be adjusted to cause minimum impact on the neighbors, sound suppression could be constructed to minimize the noise created by having a firing range in a valley, and limiting the use of the facility to only those personnel who were integral to the social relations of the County Law enforcement personnel. Organizations such as the KBI, Wyandotte Muzzle Loaders, State Highway Troopers, and Casino Guards, would not need to use this facility.

CURRENT USE The current users of the facility in this paragraph and those listed in paragraph 6 appear to be inconsistent. The use of the range by local law enforcement personnel may be a major disturbance to the local residents, but for the local residents to accommodate the addition of numerous organizations outside the county, when other counties and cities should be providing shooting ranges, is not a necessary sacrifice for the county residences to make. The military does not require special mention as a requirement. There are facilities provided for them on which to train and there is no need for Douglas County to be required to provide a training facility for them.

BUFFERS

The buffer zones that are referred to are not used as the ranges are located in proximity to the highway and in one case firing is actually conducted across land that is not part of the FOP property. This is the case when the rifle range is used for distances greater than 100 yards. (The shooter must move down the entrance driveway and the line of sight is across the corner of the neighbor property.)

REstrictIONS ON OPERATIONS:
Firing on the range should be limited to 8:00 to 7:00 on all days, except Saturdays when it would be 9:00 to 7:00, and Sundays 12:00 PM till 6:00 PM. The range operations should not be different for individuals versus Groups.

USE

See Section 2.

SAFETY

The timber referred to does not provide any sound deadening, even in the summer months when there is foliage.

PROPERTY SECURITY

There are no fence signs as recommended in the NRA manual. It suggests “no trespassing” signs every 50 feet.

ORGANIZATIONAL PURPOSE

Financial support also comes from fees charged to Douglas County Sheriff, LPD, KU Security, Casino Guards, etc.

How about Casino guards, other county deputies, KBI, WMLA.

The issue here is that the membership and therefore the usage has increased significantly over the years. To allow the local personnel to have a range is one thing, but to support the state and federal training without the Local governments being part of the consideration, is inappropriate.

NEIGHBOR INVOLVEMENT

Since noise is a major problem, then what are they going to do about it? Their CUP makes no commitment. If that is the case, then there is no reason to approve this CUP until that issue is addressed and resolved. If the FOP executive committee is not willing to make a commitment, then the neighbors should not be asked to approve this CUP. The Executive Committee is well aware of actions that can be taken, either through their own knowledge, reference to the NRA Range handbook, or range knowlegable architects. If the decision is made to have this shooting range in a residential area, then a commitment must be made to accomplish actual definitive positive actions within a specified time frame.

RANGES ON PROPERTY:

Who is this neighbor? The actual firing is over non FOP property.

Hunter safety is not high volume, pistol practice is the highest noise volume.

Stream testing has indicated that there are high quantities of lead.

EMERGENCY NUMBER

Have new procedures been put in place?

NIGHT SHOOTING

The limitations on night shooting should stipulate that it would be terminated not later than 9:30 PM.
PLANNING COMMISSION REPORT
Regular Agenda -- Public Hearing Item

PC Staff Report 4/25/11

ITEM NO. 3 TEXT AMENDMENT TO CITY OF LAWRENCE DEVELOPMENT CODE; TO ALLOW ACTIVE RECREATION AS A SPECIAL USE IN THE IG DISTRICT (SLD)

TA-2-2-11: Consider a Text Amendment to the City of Lawrence Land Development Code, Chapter 20, Article 4, Section 20-403 to allow Active Recreation as a Special Use in the IG (General Industrial) District. Initiated by City Commission on 3/1/11.

RECOMMENDATION: Staff Recommendation
Staff recommends approval of the amendment to Section 20-403 of the Land Development Code to add Active Recreation as a Special Use in the IG (General Industrial) District.

Reason for Request: To allow active recreation uses in the IG district. This use is currently allowed in the IL and IBP districts.

RELEVANT FACTOR:
• Conformance with the Comprehensive Plan.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
• None to date.

ATTACHMENTS
• Industrial Zoning Map
• Industrial Uses Table
• Indoor Fieldhouse floor plan (municipal)

OVERVIEW OF PROPOSED AMENDMENT
• The purpose of the IG district is listed in section 20-216 of the Land Development Code states: "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. This district is generally incompatible with residential areas and low-intensity commercial areas."
• The City Commission initiated consideration of a request to allow active recreation uses in the IG district with a Special Use Permit on March 1, 2011.

CONFORMANCE WITH THE COMPREHENSIVE PLAN
• This change is generally in conformance with the comprehensive plan by providing the opportunity to create a mix of uses in industrial areas (buildings) that may otherwise be vacant or underutilized.

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
Applicant Response

Although not permitted in the IG district, “Active Recreation” is a permitted use in both the IL and IBP industrial zoning districts. The proposed text amendment to allow Active Recreation as a special use in the IG district reconciles the inconsistency between industrial zoning districts, while preserving the City’s ability to review and limit Active Recreation in an IG District through the special use permit application and review process.

Staff Response

The development code has been designed with separate districts and distinct purposes. Not all uses are allowed in all districts; however, some uses can be found or located in more than one district and some uses are permitted with the Special Use Permit process in order to review specific site elements. The purpose of the Development Code is intended to implement Horizon 2020 “in a manner that protects, enhances, and promotes the health, safety, and general welfare of the citizens of Lawrence” (20-104 Land Development Code).

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

Applicant Response

The text amendment is consistent with Horizon 2020. Allowing Active Recreation as a special use, as opposed to requiring the property owner to down-zone the property, is aligned with general strategies and goals of Chapter 7 of Horizon 2020, as follows:

a. Strategy: Protect, enhance, and retain existing industrial-related land use areas serving the community.

b. Strategy: Encourage site availability, site improvements, and community amenities which best respond to the market demands for industrial and business development while maintaining the community objectives for the type and quality of such development.

c. Goal 1: Encourage the retention, redevelopment and expansion of established industrial and employment-related areas.

d. Policy 1.1: Retain Established Development and Encourage New Development in Existing industrial and Employment-Related areas.

The use of IG property for Active Recreation pursuant to a special use permit is an opportunity to provide additional transition area between industrial centers and surrounding properties, consistent with Goal 3 of Chapter 7.

Staff Response

Horizon 2020 supports a mix of uses as well as appropriate land use transitions between residential uses and intensive non-residential uses. A key strategy identified in Horizon 2020 is the preservation and retention of industrial related land use areas. Approval of this text amendment allows for the more intensive base district to remain and provides a public process for the consideration of the benefits of allowing a specific use within an industrial area. The primary drawback of this text amendment is the erosion of distinction between the Limited Industrial (IL) and the General Industrial (IG) zoning districts.

STAFF DISCUSSION

Zoning Districts

The Development Code includes three industrial zoning districts, IBP, IL and IG. These districts are summarized in the following table.
INDUSTRIAL DISTRICT COMPARISON

<table>
<thead>
<tr>
<th>Purpose</th>
<th>20-214 IBP, Industrial/Business Park District</th>
<th>20-215 IL, Limited Industrial District</th>
<th>20-216 IG, General Industrial District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The IBP, Industrial/Business Park District, is intended to provide space in attractive and appropriate locations for certain low-impact employment and manufacturing uses in a planned industrial/business park setting.</td>
<td>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.</td>
<td>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.</td>
</tr>
</tbody>
</table>

There are numerous industrial buildings located in the community that are vacant or underutilized. A detailed inventory of industrial land and improvements is not currently available. Industrial buildings are associated with large floor plans, high ceiling clearance and do not necessarily require high interior finish. Older buildings may be more difficult to remodel to accommodate current manufacturing technology or equipment making it more difficult the buildings to remain in industrial service. Additionally, remodels to provide additional exits or restrooms can be easily accommodated because of the openness of floor plans. It is these building characteristics that make these types of buildings desirable for indoor recreation uses.

The “Active Recreation” use is currently allowed in the IBP and IL zoning districts subject to site plan approval. Approval of this text amendment would allow the “Active Recreation” use in the IG district subject to a Special Use Review.

**Special Use Review**

Special Use Review provides a “discretionary approval process for uses with unique or widely varying operating characteristics or unusual site development features” (20-1306).

The Development Code currently requires “Active Recreation” uses to be approved through a Special Use Review in the CN1, CO, CD, and OS zoning districts. They are allowed in the GPI district as an accessory use with a Special Use Review. The “Active Recreation” use is most typically associated with community recreation buildings and gymnasiums. An example of an active recreation use in the GPI district would be the Indoor Aquatic Center or the Natatorium. Both facilities are an accessory use and represent a city/school district partnership. “Active Recreation” use is allowed in more intensive commercial zoning districts as well as the IBP and IL zoning district without a special use permit subject to site plan approval only. If approved, this text amendment would revise table 20-403 of the Development Code to allow “Active Recreation” in the IG district subject to a Special Use Review.

**Use History**

Prior to 2006 recreation uses were listed in Use Group 15 Amusement, Recreational and Cultural Facilities. These uses were generally defined as uses similar in nature and traffic-generating capacities that appeal to large groups of people or that provide uses with high density (people to space) ratios whose primary intent is one of amusement or recreational pursuits or cultural enrichment. These uses included:

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These uses were restricted to the commercial districts. However, Use Group 7 Community Facilities Uses (1966 Code) were allowed in all industrial zoning districts. This use group allowed the traditional community facilities as well as commercial oriented uses.

<table>
<thead>
<tr>
<th>Use Group 15 Amusement, Recreational and Cultural Facilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Recreational Amusement/ Cultural Facilities</td>
<td>Outdoor Amusement Recreational or Cultural Facilities</td>
</tr>
<tr>
<td>• athletic clubs</td>
<td>• baseball park or batting cages</td>
</tr>
<tr>
<td>• auditorium</td>
<td>• golf driving range or miniature golf (20-709, 1966 code)</td>
</tr>
<tr>
<td>• bowling alley</td>
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<tr>
<td>• field house</td>
<td>•</td>
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<tr>
<td>• game arcade</td>
<td>•</td>
</tr>
<tr>
<td>• physical cultural center and heath services including spas, gymnasiums, reducing salons, masseur/masseuse, or hot tubs</td>
<td>•</td>
</tr>
<tr>
<td>• skating rinks</td>
<td>•</td>
</tr>
<tr>
<td>• commercial swimming pools and indoor theaters</td>
<td>•</td>
</tr>
</tbody>
</table>

Land uses and use categories were reorganized with the adoption of the 2006 Development Code. Uses that had been allowed in an industrial district by right or a use such as private recreational facilities with a special permit prior to 2006 are not allowed under the 2006 Development Code. Approval of this text amendment would restore some of the permitted recreation uses previously allowed with the same provision, that a special use review be required.

Recreation Uses
Active Recreation is one of four types of recreation uses defined in Section 20-1755 of the Development Code. A summary of the recreation related land uses are defined in the following table.

<table>
<thead>
<tr>
<th>20-1755 RECREATIONAL FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational, social, or multi-purpose uses typically associated with parks, play fields, golf courses, or community recreation Buildings.</td>
</tr>
</tbody>
</table>

(1) Active Recreation
Areas and facilities used or designed for active or group sports and recreational activities, including spectator areas associated with such facilities. Such areas include but are not limited to:
(i) athletic fields and courts, playgrounds and play apparatus;
(ii) skating rinks and swimming pools;
(iii) boat docks and launches;
(iv) zoos;
(v) community recreation Buildings, including but not limited to meeting rooms, class or lecture rooms, band shelters or gazebos, and gymnasiums; and
(vi) Structures accessory to community recreation uses, such as public restrooms, refreshment stands, concession shops selling sporting goods, and miniature golf.

(2) Passive Recreation
Areas used or designed for passive and individual sports and recreational activities. Such areas include but are not limited to:
(i) greens and commons;
(ii) gardens, arboreta, and conservatories;
(iii) pedestrian, Bicycle, and equestrian paths, trails and walkways;
(iv) benches, plaza or seating areas, and picnic areas; and
(v) golf courses.

(3) Nature Preserve/Undeveloped
Areas generally or predominantly remaining in a natural or undeveloped State, including natural wildlife and plant habitat areas. Such areas may include:
(i) hiking, bicycling, and equestrian trails; and
(ii) sitting and picnic areas.

(4) Private Recreational Area
Areas provided or set aside as open or recreational uses as part of a residential development, including but not limited to Common Open Space.

20-1762 SPORTS AND RECREATION, PARTICIPANT
Provision of sports or recreation primarily by and for participants. (Spectators would be incidental and on a nonrecurring basis). The following are participant sports and recreation use types (for either general or personal use):

(1) Indoor
Those uses conducted within an enclosed Building. Typical uses include bowling alleys, billiard parlors, swimming pools and physical fitness centers.

(2) Outdoor
Those uses conducted in open facilities. Typical uses include driving ranges, miniature golf courses and swimming pools.

20-1725 ENTERTAINMENT AND SPECTATOR SPORTS
Provision of cultural, entertainment, athletic, and other events to spectators. Also includes events involving social or fraternal gatherings. For participant sports, see Section 20-1762. The following are spectator sports and entertainment use types:

(1) Limited
Those uses conducted within an enclosed Building with a capacity of 500 or less people. Typical uses include small theaters and meeting halls.

(2) General
Those uses generating an attendance of 501 or more people such as theaters (movie or legitimate), large exhibition halls, field houses, stadiums and sports complexes.

The City has a number of public and private recreation facilities providing a wide range of activities. This combination of public and private facilities allows the citizen access to various activities that support public health policies. “Active Recreation” in the Development Code includes community buildings and gymnasiums. While this use is more often associated with civic buildings, privately operated facilities would be allowed if this text amendment is approved. This request is intended to address only the “Active Recreation” use.

Location of IG zoning
Much of the existing IG zoning was established when the Development Code was adopted in 2006. The following table shows the conversion of the 1966 industrial districts to the 2006 designations.

<table>
<thead>
<tr>
<th>Previous Map Designation</th>
<th>New Map Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, Industrial Districts</td>
<td></td>
</tr>
<tr>
<td>M-1 (Research Industrial District)</td>
<td>IBP (Industrial Business Park)</td>
</tr>
<tr>
<td>M-1A (Light Industrial)</td>
<td>IL (Limited Industrial)</td>
</tr>
<tr>
<td>M-2 (General Industrial)</td>
<td>IG (General Industrial)</td>
</tr>
<tr>
<td>M-3 (Intensive Industrial)</td>
<td>IG (General Industrial)</td>
</tr>
<tr>
<td>M-4 (Limited intensive Industrial)²</td>
<td>IG (General Industrial)</td>
</tr>
</tbody>
</table>

This conversion has resulted in changes in uses allowed to occur on various properties between the old and new codes. Many M-2 properties could be described as having similar characteristics to the new IL district. At the time of the adoption of the Development Code an analysis of the industrial properties

² Only one property in Lawrence was zoned M-4; 2001 E. 19th Street; existing automotive salvage operation.
had not been completed. Since 2006 additional study of the industrial districts have resulted in zoning changes on a per parcel basis as requested by property owners. A complete study of all industrial property has not been conducted to date. This text amendment would impact all land zoned IG. An example of the old and new zoning district boundary is provided for review.

<table>
<thead>
<tr>
<th>Zoning prior to 2006</th>
<th>Current Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-1A provide an industrial park type environment to accommodate a wide range of modern administrative facilities, research institutions, manufacturing plants, warehousing and wholesaling activities…</td>
<td>IL 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.</td>
</tr>
<tr>
<td>M-2 designed to accommodate a wide range of manufacturing, wholesaling, warehousing, and other industrial activities of a medium intensity…</td>
<td>IG 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.</td>
</tr>
<tr>
<td>M-3 designed to accommodate manufacturing and industrial activities which involve more objectionable influences and hazards. The M-3 district regulations are designed to encourage the use of this district by such industries, subject to the minimum regulations necessary for mutual protection of the permitted uses.</td>
<td></td>
</tr>
</tbody>
</table>

**Impact on Industrial Inventory**
The community has engaged in dialogue regarding industrial inventory and the need to protect and preserve that inventory as well as to identify new properties for employment-related uses. Each property and situation will include unique characteristics. This text amendment, by allowing “Active Recreation” uses subject to a special use review, allows for that individual assessment. Reuse of existing buildings for this use should take precedent over development of raw land. Priority should still be given to industrial tenants versus recreation oriented uses in consideration of a request for “Active Recreation” use. Applications that undermine the industrial land inventory should be critically evaluated. Such application may be appropriately limited for a certain amount of time so that reuse of a building or property can be reintegrated into the industrial land use inventory.

**Impact on Community Health**
There are many sources and efforts regarding community and public health. The Livewell Lawrence is one such initiative in the community. These efforts seek to bring more opportunities for physical activity to the community. A joint feasibility study (PLAY Study)³ in 2007 was presented to the city

³ Go to [http://www.lawrenceks.org/play_feasibility_study](http://www.lawrenceks.org/play_feasibility_study) for full study of PLAY report.
commission that included an “indoor fieldhouse”. A concept plan of the fieldhouse included in the PLAY study is attached to this report for reference.

The fieldhouse was identified as the second highest rated venue identified in the PLAY survey. A fieldhouse facility is also included in the City’s Capital Improvement Plan.\(^4\) This facility need was identified as an indoor gym space to expand (Parks and Recreation) programs. The facility would include 3-4 gyms/multiuse spaces. This need was justified to provide additional programs since a number of private gyms have closed or been sold in the community. Approval of the request would allow more opportunities for public/private partnerships for programs.

**Economic Impacts**
The PLAY study indicated that economic benefits occur with recreation activity venues and include taxes and salaries as well as activity fees, event fees, rental fees related to parties and practice times, instruction and similar fees as well as tournaments and leagues that capture tourist dollars.

Any such activity for a specific property should be evaluated with regard to its position in the industrial inventory. Prime industrial properties should not be diverted to non-industrial uses. Such properties should be reserved for manufacturing, warehousing and employment related uses consistent with the primary purpose of the base district.

**Standards associated with individual requests**
It is not inconceivable that a request could be made for raw greenfield development and new construction; however, this activity is a secondary use within an industrial district and more suitable for reuse of the existing building inventory as infill or transitional uses between operating industrial uses and less intense uses in an industrially zoned area. Access, parking and vehicular circulation, as well as separation from truck traffic, should be a significant consideration when evaluating a special use request. This text amendment does not propose to alter Article 5 to add specific standards. Specific conditions are generally site specific and would be reviewed as part of the physical analysis of a site.

**Staff Recommendation**
Staff recommends approval of the amendment to Section 20-403 of the Land Development Code to add “Active Recreation” as a special use in the IG District.

### 20-403 NONRESIDENTIAL DISTRICT USE TABLE

**Key:**
- A = Accessory
- P = Permitted
- S = Special Use
- * = Standard Applies
- - = Use not allowed

#### RESIDENTIAL USE GROUP

<table>
<thead>
<tr>
<th>Use</th>
<th>CN1</th>
<th>CN2</th>
<th>MU</th>
<th>CO</th>
<th>CD</th>
<th>CC</th>
<th>CR</th>
<th>CS</th>
<th>IBP</th>
<th>IL</th>
<th>IG</th>
<th>OS</th>
<th>GPI</th>
<th>H</th>
<th>Use-Specific Standards (Sec. 20.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessory Dwelling</td>
<td>P*</td>
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<td>P*</td>
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<tr>
<td>Attached Dwelling</td>
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<td>Cluster Dwelling</td>
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<td>Multi-Dwelling Structure</td>
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<td>P*</td>
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<td>P*/S*</td>
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<td>Work/Live Unit</td>
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#### Group Living

<table>
<thead>
<tr>
<th>Use</th>
<th>CN1</th>
<th>CN2</th>
<th>MU</th>
<th>CO</th>
<th>CD</th>
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<th>IBP</th>
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<th>Use-Specific Standards (Sec. 20.4)</th>
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<tbody>
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<td>Assisted Living</td>
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<td>Boarding Houses &amp; Cooperatives</td>
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<tr>
<td>Fraternity or Sorority House</td>
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</table>

#### PUBLIC AND CIVIC USE GROUP

<table>
<thead>
<tr>
<th>Use</th>
<th>CN1</th>
<th>CN2</th>
<th>MU</th>
<th>CO</th>
<th>CD</th>
<th>CC</th>
<th>CR</th>
<th>CS</th>
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**Key:**
- A = Accessory
- P = Permitted
- S = Special Use
- * = Standard Applies
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### OTHER USES GROUP

| Adaptive Reuse | Designated Historic Property | S* S* S* S* S* S* S* S* S* S* S* S* S* S* | 501 |
| Greek Housing Unit | - - - - - - - - - - - - - |                                      |

| Agriculture | Agricultural Sales | - - - - - P P P - P P |                                  |
| Agriculture | Agriculture, Animal | - - - - - - - - - - - - |                                  |
| Agriculture | Agriculture, Crop | P P P P P P P P P P |                                  |

| Communications Service Establishment | Broadcasting Tower | - - - - S - - - - P P P - - A | |
| Communications Service Establishment | Communications Service | P P P P P P P P P P P | - P A |
| Telecommunications Tower | S* S* S* S* S* S* S* S* S* S* S* A* A* | 529 |

| Mining | Mining | - - - - - - - - - - - - - S* - - - | 515 |

| Recycling Facilities | Large Collection | - - - - - P P P - P P |                                  |
| Recycling Facilities | Small Collection | P P P P P P P P P P | - A A | 540 |
| Recycling Facilities | Processing Center | - - - - - - - - - P P | - - - |
Map shows all Industrial districts except recent approved 55 acres on south side of Farmer's Turnpike.
### INDUSTRIAL USES - DEFINITIONS

#### 20-1726 EXPLOSIVE STORAGE
Storage of any quantity of explosives. Typical uses include storage in the course of manufacturing, selling, or transporting explosives, or in the course of blasting operations.

#### 20-1735 INDUSTRIAL, GENERAL
Production, processing, assembling, packaging or treatment of food and non-food products; or manufacturing and/or assembly of electronic instruments and equipment and electrical devices. General Industrial uses may require Federal air quality discharge permits, but do not have nuisance conditions that are detectable from the boundaries of the subject property. Nuisance conditions can result from any of the following:
- continuous, frequent, or repetitive noises or vibrations;
- noxious or toxic fumes, odors, or emissions;
- electrical disturbances; or
- night illumination into residential areas.

Exceptions: Noise and vibrations from temporary construction; noise from vehicles or trains entering or leaving the site; noise and vibrations occurring less than 15 minutes per day; an odor detected for less than 15 minutes per day; noise detectable only as part of a composite of sounds from various off-site sources.

**Sample uses:**
- Pur-O-Zone
- Hallmark
- Allen Press

#### 20-1736 INDUSTRIAL, INTENSIVE
Manufacturing, processing, or assembling of materials (for uses described above in the "General Industrial" use type classification) in a manner that would create any of the commonly recognized nuisance conditions or characteristics.

**Sample uses:**
- Penny Ready Mix
- Hamm
- Midwest Concrete (formerly LRM)

#### 20-1739 MANUFACTURING AND PRODUCTION, LIMITED
Establishments generally employing fewer than 20 persons, do not involve outside storage of materials, do not require Federal air quality discharge permits, are compatible with nearby residential uses because there are few or no offensive external effects, and are primarily engaged in one of the following:

1. **On-site production of goods by hand manufacturing involving use of hand tools or light mechanical equipment.** Products may be finished or semi-finished and are generally made for the wholesale market, for transfer to other plants, or to order for customers or firms. Goods are generally not displayed or sold on-site, but if so, this is a subordinate part of total sales. Typical uses include instruction studios, ceramic studios, woodworking and cabinet shops, custom jewelry manufacturing, and similar types of arts and crafts or small-scale manufacturing; or
2. **Manufacturing or assembling of electronic components, medical and dental supplies, computers, computer components, or other manufacturing establishments with similar characteristics.** Goods generally are not displayed or sold on-site, but if so, this is a subordinate part of total sales.
3. **Manufacturing, processing, or packaging of small-scale food production operations with limited on-site retail sales.** Typical uses include caterers, bakeries, bottling and beverage manufacturing operations.

**Sample uses:**
- Martin Logan
- Freestate Brewing Facility
### 20-1740  MANUFACTURING AND PRODUCTION, TECHNOLOGICAL

Production, processing, assembling, or packaging of products that rely upon research and technological innovation. Typical uses include manufacturing research instruments, electronic products, and surgical and medical instruments. This use type does not include uses that require Federal air quality discharge permits.

**Sample uses:**
- Microtech
- Scanning America

### 20-1756  RESEARCH SERVICES

Research of an industrial or scientific nature generally provided as a service or conducted by a public agency or private firm. Typical uses include electronics research laboratories, environmental research and development firms, agricultural and forestry research labs, and pharmaceutical research labs.

### 20-1742  MINING

Mining or extraction of mineral or aggregate resources from the ground for off-site use. Examples include quarrying or dredging for sand, gravel or other aggregate materials; mining; and oil and gas drilling.

### 20-1760  SCRAP AND SALVAGE OPERATIONS

Storage, sale, dismantling, or other processing of used, source-separated, or waste materials not intended for reuse in their original form. Typical uses include automotive wrecking yards, junk yards, and salvage yards, but not including “Recycling Facilities.”

### 20-1767  WHOLESALE, STORAGE, AND DISTRIBUTION

Wholesaling, storage, distribution, and handling of materials and equipment other than live animals and plants. The following are wholesaling, storage and distribution use types:

1. **Mini-Warehouses**
   - Storage or warehousing service within a Building for individuals to store personal effects. Incidental uses in a mini-warehouse may include the repair and maintenance of stored materials by the tenant; but in no case shall storage spaces in a mini-warehouse facility function as an independent retail, wholesale, business, or service use. Spaces shall not be used for workshops, hobby shops, manufacturing, retail sales or similar uses. Human occupancy shall be limited to that required to transport, arrange and maintain stored materials.

2. **Light**
   - Wholesaling, storage, and warehousing services within enclosed Structures. Typical uses include wholesale distributors, storage warehouses and moving and storage firms.

3. **Heavy**
   - Open-air storage, distribution, the handling of materials and equipment or bulk storage of fuel. Typical uses include monument or stone yards, train yards, grain elevators and large-scale fuel storage.
#2-Indoor Fieldhouse
PLANNING COMMISSION REPORT
Regular Agenda - Public Hearing Item

PC Staff Report
4/25/11

ITEM NO. 4: SPECIAL USE PERMIT FOR AN ACTIVE RECREATION FACILITY, 940 E. 28TH STREET (SLD)

SUP-2-1-11: Consider a Special Use Permit for the use of Active Recreation, located at 940 E 28th Street. Submitted by Barber Emerson, L.C., for JDS Kansas, L.C., property owner of record.

STAFF RECOMMENDATION: Planning Staff recommends approval of the Special Use Permit for an Active Recreation Use at 940 E. 28th Street and forwarding the request to the City Commission with a recommendation of approval and the ordinance for adoption on first reading, subject to the following conditions:

1. Installation of landscape plantings per the approved landscape plan prior to release of the Special Use Permit for issuance of occupancy permits for the proposed use.
2. Approval and publication of a text amendment TA-2-2-11; An amendment to Chapter 20, Article 4, Section 20-403 to allow Active Recreation as a Special Use in the IG (General Industrial) District.
3. Provision of a revised site plan to show the following changes and notes:
   a. Provision of a landscape plan per section 20-1001 of the Development Code to include a total of 6 street trees along Haskell Avenue and 5 trees along E. 28th Street.
   b. Provision of a note on the face of the plan that states all required landscaping shall be installed prior to release of the Special Use Permit for occupancy of the building.
   c. Provision of a note on the face of the plan that states changes to exterior site lighting shall require submission and approval of a photometric plan per Section 20-1103 of the Development Code.
   d. Provision of a note on the face of the plan to state the date of approval and that approval is granted for a period of three years from the date of the City Commission approval. Any extension of the Special Use would require a new public hearing by the Planning Commission.
4. Execution of a new Site Plan Performance Agreement.
5. Publication of an ordinance per Section 20-1306(j).

Applicant’s Reason for Request: “This is a generic SUP request by the property owner/landlord to permit the use of a vacant industrial building as a basketball training and instruction facility under the special use category of “Active Recreation.”

The applicant proposes that the SUP have a three-year term.”

KEY POINTS
- Applicant is voluntarily proposing a limited approval of 3 years.
- Proposed use depends on approval and publication of text amendment (TA-2-2-11).
- Proposed use would occupy existing vacant industrial building.
- No exterior changes to the site are proposed.
FACTORS TO CONSIDER

CHARACTER OF THE AREA
• The area is part of the Burroughs Creek Corridor including industrial land.

CONFORMANCE WITH HORIZON 2020
• The proposed use conforms with several recommendations and policies of Horizon 2020.

PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
• None to date.

ATTACHMENTS
• Area Map
• Site plan

GENERAL INFORMATION

Current Zoning and Land Use: IG (Industrial General); existing vacant 10,000 SF building and surface parking lot.

Surrounding Zoning and Land Use: IG (Industrial General); to the north, west and south. Developed properties to the north and east. Vacant land to the south. RM12 and RM24 (Multi-Dwelling Residential) Districts to the east. East side of Haskell Avenue is developed with detached and duplex residences.

Site Summary
Lot Size: 45,000 (1.033 ac)
Building: 10,000 (.229 ac)
Impervious Cover: 21,755 SF (.499 ac)
Pervious Cover: 23,245 SF (.534 ac)

Summary of Request
While not currently an allowed use in the IG district, this application presumes the approval and publication of a text amendment to allow “Active Recreation” as a Special Use in the IG district. This staff review separates the text amendment and the Special Use request and assumes the text amendment has been approved for review purposes. As such applicable Development Code provisions addressing site planning, landscaping, and parking have been assessed. There are no exterior physical changes proposed for this site.

This request is for the use of an existing building for a facility for basketball related coaching and training. Some general public access may also be allowed for this building, if approved.

Review and Decision-Making Criteria (Land Development Code Section 20-1306(i))

1. WHETHER THE PROPOSED USE COMPLIES WITH ALL APPLICABLE PROVISIONS OF THIS DEVELOPMENT CODE

Applicant’s Response: “This application is submitted concurrently with a text amendment to permit Active Recreation as a special use in the IG zoning district.”
Based on parking standards, the proposed “Active Recreation” use has a higher off-street parking requirement than the previous use as a “Wholesale, Storage, Distribution” use. Additionally, the proposed use is expected to generate more passenger vehicle traffic rather than truck traffic.

The site does not comply with current parking lot design and landscape standards of the Development Code. Requirements to comply with these provisions of the Development Code are discussed in the review section of this report as it applies to the site plan elements of this request.

**Staff Finding** – The proposed use is not an allowed use in the IG District unless the text amendment is approved. The site, as developed, does not comply with current development standards with specific regard to landscaping and parking lot design and parking lot setback. No exterior physical changes are proposed for this site.

2. WHETHER THE PROPOSED USE IS COMPATIBLE WITH ADJACENT USES IN TERMS OF SCALE, SITE DESIGN, AND OPERATING CHARACTERISTICS, INCLUDING HOURS OF OPERATION, TRAFFIC GENERATION, LIGHTING, NOISE, ODOR, DUST AND OTHER EXTERNAL IMPACTS

Applicant’s Response: “Yes, the property is adjacent to other IG zoned properties. Hours of operation, traffic, light, noise, etc. will be compatible to adjacent properties.”

Approval of this request will not change the base zoning district. Exterior elements of the site including the single-bay loading dock, overhead doors and building entrances are not proposed to be altered. The physical appearance of the building will remain consistent with the surrounding industrial development in the immediate area. There are no external impacts that will result from this use such as noise, odor, or dust. The applicant states the hours of operation will be compatible with the surrounding uses. All activity is proposed indoor.

Haskell Avenue, a major arterial street, separates the residential neighborhood from the industrial uses to the west. These land uses are currently developed in a back to back or back to side orientation with a 50’ setback for the existing industrial building. Activity sides of the building including doors and overhead doors located on the north and south sides of the building. This orientation provides a maximum separation of activity between the industrial uses to the west and the residential uses to the east.

The proposed use is associated with passenger vehicles rather than truck traffic. The overall impact anticipated is less intensive traffic to this site. This is considered by staff to be a transition use between the residential development to the east and the industrial uses to the west. The location of the property as a corner lot rather than an interior lot to the surrounding industrial development is seen as beneficial in encouraging separation of vehicular and truck traffic. It should be noted that employee and customer access to this larger industrial area is likely occurring in passenger vehicles so that there is not complete separation of these two forms of transportation.

**Staff Finding** - This use is intended as an indoor activity with no physical exterior changes to the building or property. Depending on the success of the business passenger vehicle traffic may increase to this area but is restricted (because of destination) to the periphery of the industrial area. The physical development of the subject property together with the orientation of surrounding development results in an activity that will be compatible with the surrounding area. Hours of operation are expected to be compatible with the surrounding area and may provide evening
opportunities for coaching and training that will not conflict with business traffic in the area during regular workday hours. As an indoor operation, external impacts should not exist.

3. WHETHER THE PROPOSED USE WILL CAUSE SUBSTANTIAL DIMINUITION IN VALUE OF OTHER PROPERTY IN THE NEIGHBORHOOD IN WHICH IT IS TO BE LOCATED

Applicant’s Response: “No. The proposed use will have no affect on other property in the vicinity.”

This property is located between the Prairie Park Neighborhood to the east and Haskell Indian Nations University to the west. The property is part of an industrial corridor know as the Burroughs Creek Corridor. The building is currently vacant. Occupancy of a building provides more stability to a surrounding area than vacant buildings. The proposed use has the potential to generate enough demand that other property improvements could be made in the future such as improved parking lot and interior landscaping.

Staff Finding - Approval of this request will allow for occupancy of a currently vacant building with little or no impact on the surrounding area. Occupancy of the building will result in more activity to the area and stabilization to the surrounding residential and industrial neighborhood. Substantial diminution of other property values in the area is not anticipated.

4. WHETHER PUBLIC SAFETY, TRANSPORTATION AND UTILITY FACILITIES AND SERVICES WILL BE AVAILABLE TO SERVE THE SUBJECT PROPERTY WHILE MAINTAINING SUFFICIENT LEVELS OF SERVICE FOR EXISTING DEVELOPMENT

This area is developed with existing public and private utility services. The addition of a recreation use will not diminish public services and existing infrastructure.

Staff Finding - Services are already available to this property. There is no anticipated change in service levels for the surrounding area.

5. WHETHER ADEQUATE ASSURANCES OF CONTINUING MAINTENANCE HAVE BEEN PROVIDED

The building is currently vacant. The proposed request would add occupancy to the area that does not currently exist. The activity is intended as an indoor use with no exterior storage commonly found in an industrial district. As a Special Use Permit, a site plan is also required to ensure minimum site design standards are addressed. This document, together with any conditions of approval, becomes the enforcement tool to ensure continued maintenance of the property. The applicant has voluntarily proposed a three year limit to this request. Any future extension then would require a new public hearing by the Planning Commission. The property and the land use could easily be evaluated for compliance with maintenance standards.

Staff Finding - The Development Code includes a mechanism for review of a Special Use that demonstrates a lack of compliance with any conditions of approval of the related site plan. The short time limit makes any compliance review much easier. The fact that the activity is intended to be conducted indoors means that exterior activity is limited. There is no exterior storage associated with this use; a common compliance concern in industrial areas. Adequate assurances of continued maintenance are inherent in the use and the Special Use approval process.
6. ** WHETHER THE USE WILL CAUSE SIGNIFICANT ADVERSE IMPACTS ON THE NATURAL ENVIRONMENT**

Applicant’s Response: “No. The SUP will not have any negative impact on the natural environment. The SUP is required to allow the use of the property for basketball-related coaching and training. There will be virtually no change or impact compared to the existing permitted industrial use of the property.”

**Staff Finding** – No new development is proposed with the subject application. Thus, the natural environment will not be impacted with renewal of this SUP.

7. ** WHETHER IT IS APPROPRIATE TO PLACE A TIME LIMIT ON THE PERIOD OF TIME THE PROPOSED USE IS TO BE ALLOWED BY SPECIAL USE PERMIT AND, IF SO, WHAT THAT TIME PERIOD SHOULD BE**

This request has been made for a three year period. This time limit allows for a short term analysis of impacts. It also allows the community to evaluate the industrial inventory in three years to determine if this use should remain or if a more viable industrial use is appropriate for this location.

**Staff Finding** – A time limit has been proposed for this use by the applicant limited to three years. Staff concurs that this is a reasonable amount of time to assess the success of the use in the IG District (at this location) and whether or not this use is impinging on the industrial land inventory.

**STAFF REVIEW**

**Site Plan Review**

This request is for a change of use from a vacant industrial building (formerly a Federal Express office/warehouse/distribution center). The building and parking lot are existing improvements with no changes proposed. A specific parking calculation is not provided of this use (per schedule D). The applicant has used a similar category for estimation.

**Parking Summary**

<table>
<thead>
<tr>
<th>Use</th>
<th>Parking Requirements</th>
<th>Spaces Required</th>
<th>Spaces Provided</th>
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<tbody>
<tr>
<td>Active Recreation</td>
<td>Schedule D</td>
<td>Per Director determination</td>
<td>19</td>
</tr>
<tr>
<td>Surrogate use:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant Sports and Indoor</td>
<td>1 space per 500 SF</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assuming that the parking standard for a Participant Sports/Indoor Recreation use is the same as an Active Recreation use, the site as developed includes four excess parking spaces based on the current Development Code parking standard for this use. Access to the site is provided via a driveway entrance from E. 28th Street. A second curb cut is provided on the east side of the lot from E. 28th Street providing access to an overhead door/loading dock. No changes to the parking lot access are proposed with this request.

This site was designed with parking adjacent to the south property line. The Development Code requires a 15’ setback of a parking lot from street right-of-way. The plan shows four total spaces encroaching into the parking lot setback. The plan, as proposed, does not show removal of these parking spaces. As a potentially “temporary use”, significant parking lot modifications are not
reasonable at this time. Any screening of the parking spaces from the public street would occur within the right-of-way.

Landscaping and Screening
The site plan as proposed does not include a landscape plan. The property was originally developed in 1980 (SP-6-23-80). The 1980 plan included trees along 28th Street and screening around portions of the parking lot areas.

Street Trees
This property has frontage on Haskell Avenue and E. 28th Street. There are only two street trees located at the corner along the Haskell Avenue. A total of six street trees would be required along Haskell (two are provided). E. 28th Street frontage would require a total of five street trees to be made compliant with today’s landscape standards. No improvements are proposed with this request. The 1980 site plan included three trees along E. 28th Street. These trees were setback to allow for adequate separation from water and sanitary sewer line. Staff recommends that additional trees be added along both public streets per the requirements of the Development Code.

Interior Landscaping
The site includes a front and rear parking area. Interior landscape would be required at 40 SF per parking space or 760 SF. The site does not include any vegetation other than the lawns surrounding the building and perimeter of the site and the trees along the south end of Haskell Avenue. The 1980 plan included screening on the north side of the parking lot. This screening was specifically for the trash enclosure. The proposed site plan shows the dumpster and screening fence on the west end of the parking lot. The area along the west side of the loading space is approximately 766 SF.
Landscaping of this area would partially satisfy this standard. The 1980 site plan included foundation plantings and three upright junipers.

**Perimeter**
Perimeter landscaping is applicable to those areas adjacent to public streets.

This site was designed with minimum screening along the east side of the north parking lot and an area between the south parking lot and the front loading dock. At a minimum, landscaping should be planted per the original 1980 approval.

**Mechanical Equipment**
Ground mounted equipment is not shown on the site plan. Any such equipment should be screened.

**Alternative Compliance**
A request for alternative compliance was not made for this application.

**Lighting**
The plan does not indicate if there are any proposed changes to existing exterior lighting. Any lighting changes are subject to approval of a photometric plan prepared in conformance with section 20-1103. Staff recommends the plan be revised to include a note that states any lighting changes shall require submission and approval of a photometric plan.

**Industrial Design Standards**
No exterior changes are proposed for this site. As such, no recommendations are made regarding compliance with the Industrial Design Guidelines.

**Access**
As discussed above there are no changes or modifications to the existing access. The location on the corner is expected to limit the amount of passenger vehicle traffic in the broader area.
**Floodplain**
This property is not located within any regulatory floodplain.

**Conclusion**
Staff recommends approval of the proposed Special Use for an Active Recreation Use (basketball training facility) pending approval of a text amendment allowing this use in the IG District. The applicant has suggested a limited time approval of three years. If approved, staff recommends a note be added to the face of the plan to state the date of approval and that approval is granted for a period of three years from the date of the City Commission approval. Any extension of the Special Use would require a new public hearing by the Planning commission. Several conditions of approval are recommended to address compliance with current development standards.
ITEM NO. 5 COMPREHENSIVE PLAN ANNUAL REVIEW (MJL)

Receive the comprehensive plan annual review and initiate recommended comprehensive plan amendments (CPA).

SUMMARY

This review is an annual review of the comprehensive plan, Horizon 2020 for 2010-2011. The review examines Horizon 2020 for consistency and viability of the comprehensive plan adopted by the Planning Commission as a tool for making land use decisions. K.S.A. 12-747(d) states, “At least once each year, the planning commission shall review or reconsider the plan or any part thereof and may propose amendments, extensions or additions to the same.”

The comprehensive plan is not a static document; the planning process must be continuous. The Plan should be monitored and updated on a regular basis. The need for plan amendments is the result of many community influences. Most frequently these are brought about by changes in attitudes, assumptions, or emerging needs not foreseen at the time of plan adoption.

STAFF REVIEW

I. SUMMARY OF CHAPTER UPDATES

Horizon 2020 states that a substantial plan review and update should occur at least once every five years. This process was started in 2001 with the update of Chapter 2 - Summary of Background Studies. Below is a summary of the updates since the last annual review in April 2010.

Chapter updates in process
- Chapter 10 - Community Facilities
- Chapter 11 - Historic Resources
- Chapter 16 - Environment - New chapter

Future chapter updates
- Chapter 17 - Implementation

II. SUMMARY OF PLAN AMENDMENTS

In addition to entire chapter updates, chapter amendments have been made to the plan. These amendments include changes to maps, additions of text, and updates to existing text. Below is a summary of the completed and initiated amendments to the plan since the last annual review.

Completed Amendments
- Amendment to Chapter 14 - Oread Neighborhood Plan; October 2010
- Update to Chapter 14 to change Chapter 13 references to Chapter 17; November 2010
- Amendment to Chapter 7 to reference the K-10 & Farmer’s Turnpike Plan; November 2010
- Chapter 8 - Transportation - update chapter to reflect T2030; February 2011

Initiated Amendments
- Amend Map 3-3 - Change identified UGAs to Planning areas around incorporated cities except for Lawrence; on hold until the Lawrence UGA is revised.
- Amend Map 3-1 Lawrence Urban Growth Area: Service Areas and Future Land Use (review of UGA); on hold for Waste Water Master Plan update
- Environment chapter; in process, approved at County Commission on 4/13 and before the City Commission in April-May
- Chapter 11 - Historic Resources; in process, PC in May
- Northeast Sector Plan; in process at City and County Commissions
- Amend Southeast Area Plan to reflect the adopted 31st Street Alignment Study; to PC this spring
- Inverness Park District Plan; in process; at PC in May

III. LONG-RANGE PLANS
Sector planning has played a larger role in the planning process in implementing Horizon 2020. Below is a summary the long-range planning since the last annual review.

Long-range plans in process
- Northeast Sector Plan; in process at City and County Commissions
- Inverness Park District Plan; in process, to PC in May

Identified long-range plans to be initiated
- South of the Wakarusa

Long-range plans due for review
- Burroughs Creek Corridor Plan, Adopted January 7, 2008;
  The Burroughs Creek Corridor Plan planning area includes the abandoned railroad corridor in East Lawrence and the adjacent areas. This plan was drafted with a task force that included representatives from various groups including the East Lawrence, Barker and Brook Creek Neighborhood Associations, the Bicycle Advisory Committee and a representative from the industrial businesses in the area. The recommendations of the plan were to develop a linear trail where the abandoned railroad tracks were and rezone the first tier of the identified properties to be rezoned. The first phase of the trail was completed this fall which included the construction of the actual trail and some trail amenities. All but one of the rezonings has been completed. The remaining property (Salvation Army property along Haskell) is in process to be rezoned. This plan is well on its way to being implemented. This plan remains valid and does not need any updates at this time.
IV. IDENTIFIED AMENDMENTS

Below are amendments identified to be initiated:

- Chapter 2 – Background Studies; The US Census was completed in 2010 and this chapter has information analyzing growth trends and population projections based on the 2000 census information.
- Map 3-2 Lawrence Future Land Use Map; This map is difficult to read and does not incorporate the future land uses from the long-range plans that have been approved since adoption of the plan.
- Map 4-1 and Map 4-2 relating to the road classifications; Douglas County has adopted new road classification for some of the roads. These maps need to be updated to reflect these changes.
- Chapter 6 – Commercial Land Use; There are currently no policies for the Auto-Related Commercial Center designation.
- Map 9-2 for Future Park Zones in the UGA. This map includes the preliminary flood hazard areas and FEMA updated the flood maps in August 2010. This map should reflect the current floodplain.

*Horizon 2020* was written and approved in the late 1990’s and has been updated continuously since. The format of the plan is somewhat out of date. Since the plan has had the majority of the chapters updated in the past 7 years, staff is going to work this next year at updating the format of the entire plan. No Comprehensive Plan Amendment is needed for the format update but staff will bring the reformatted document to the Planning Commission, City Commission and Board of County Commission once the reformat is complete.

**STAFF RECOMMENDATION**

Staff recommends initiation of CPAs for the identified amendments for Planning Commission consideration at future public hearings.
PLANNING COMMISSION REPORT
Regular Agenda - Public Hearing Item

PC Staff Report
4/25/11

ITEM NO. 6: CPA-3-1-11 (DDW)

CPA-6-5-09 Amend Horizon 2020, Chapter 14 list of specific plans, to include the Inverness Park District Plan.

STAFF RECOMMENDATION: Provide direction to staff concerning the draft plan and the future land use options for the plan. Staff will bring back a revised plan for consideration for approval at a future meeting.

SUMMARY

This comprehensive plan amendment (CPA) to Horizon 2020, Chapter 14, list of specific plans, to add the reference to the Inverness Park District Plan was initiated by the Lawrence City Commission on November 9, 2010. This CPA will approve the plan and add to Horizon 2020, Chapter 14 the title of the plan, a description of the approximate planning area boundaries, approval dates, and the future review date.

BACKGROUND

The Inverness Park area is primarily developed with urban residential and open space uses with some land remaining undeveloped. The residential mixture is one of single-family, two-family, and multi-family residential uses. The purpose of the Inverness Park District Plan is to plan for the urban development of the remaining undeveloped property within the planning area. Concerns have been raised by residents in the area about the proliferation of multi-family uses and the impact they are having on the area.

STAFF REVIEW

The Inverness Park District Plan is a district plan for the Inverness Park area in the southwest portion of Lawrence south of Clinton Parkway between Inverness and Crossgate Drives south to K-10 Highway, containing approximately 303 acres. Most of the planning area is part of Lawrence although a portion of the planning area south of W. 27th Street is located within unincorporated Douglas County. This plan will primarily act as the City's official land use guide for development of the remaining undeveloped land in the Inverness Park District Plan planning area. The plan will also help the public to visualize how the area may develop in the future.

The Inverness Park District Plan process kicked off with a public meeting on February 3, 2011. Property owners and other stakeholders were invited to attend the meeting. The participants in the kick-off meeting were asked to provide their input on the area's strengths, weaknesses, opportunities and threats (SWOT exercise). They also participated in a future land use exercise. Approximately 35 people attended the kick-off meeting.

The second public meeting was held on March 3, 2011. Participants were asked to review the SWOT exercise results and the draft goals and policies and were also asked to provide comments on future land use options. The group also heard a presentation from developers.
interested in developing the Inverness and Clinton Parkway corner commercially. Approximately 15 people attended the second public meeting.

The first draft of the plan was released on March 24, 2011. The first draft of the plan is the draft that is under consideration.

All property owners in the area, along with additional stakeholders, were invited to participate in the planning process. Public meetings were well attended. Written comments were received throughout the process.

The draft plan includes six sections:

- The **introduction** section states the purpose of the plan, a description of the planning area, and a list of the policy framework.
- The **existing conditions** section describes the existing land uses, zoning patterns, infrastructure, environmental conditions, and community facilities within the planning area.
- The **goals and guiding principles** were derived from public meeting input.
- The **future land use** section includes three future land use options and future land use category descriptions.
- The **Clinton Parkway** section discusses access management recommendations for Clinton Parkway.
- Finally, the **implementation** section includes implementation actions.

The main neighborhood concern expressed in recent rezoning efforts is related to the future use of the properties along Clinton Parkway. The existing zoning, RSO (Single-Dwelling Residential-Office) District, permits detached, attached (with Special Use Permit), and duplex residences along with office uses. The market appears to favor multi-family development over office development and the neighborhood has issues with the amount of multi-family development that has developed in the area.

The three future land use options for the planning area presented for consideration are:

**Option 1**: is a status quo option that shows the existing zoning for the land near Clinton Parkway and future residential and open space uses for the property south of 27th Street.

**Option 2**: provides for commercial uses on the Inverness and Crossgate corners of Clinton Parkway and future residential and open space uses south of 27th Street but shows the remaining undeveloped property as status quo.

**Option 3**: provides for commercial on the two corners, higher density for the Remington Square property and future residential and open space uses for the property south of 27th Street.

Included at the end of this staff report is the proposed amendment to Chapter 14 – list of specific plans. This amendment is intended to add the reference to the Inverness Park District Plan to the list of specific plans. Staff reviewed this amendment based upon the comprehensive plan amendment review criteria listed below which are identified in Chapter 17, Implementation, of Horizon 2020.
COMPREHENSIVE PLAN AMENDMENT REVIEW

A. Does the proposed amendment result from changed circumstances or unforeseen conditions not understood or addressed at the time the Plan was adopted?

The proposed amendment is a result of the changing circumstances that have occurred since the original development plan for the Inverness Park area was approved. The original development plan for the Inverness Park area was approved in 1999 and included various residential use intensities, but did not contemplate the large amount of multi-family that ended up being developed. The Inverness Park District Plan will provide more detailed policy for the future land use of the remaining undeveloped land. At the time Horizon 2020 was written, Chapter 14, Specific Plans and other ancillary land use plans did not exist. This is a new plan that provides more clarity regarding the recommended future land use designations of the area and policies in the plan, the specific plans are recommended to be adopted as a part of the comprehensive plan. The plan is listed with a description of the approximate planning area boundaries, approval dates, and the future review date.

B. Does the proposed amendment advance a clear public purpose and is it consistent with the long-range goals and policies of the plan?

The proposed amendment is an advancement of a clear public purpose and is consistent with the long-range planning goals and policies of the community. The proposed amendment helps further the goals and policies by guiding development in the planning area while staying consistent with the overall intent of Horizon 2020 and the goals and policies relating to residential land use, transportation, parks and recreation, and the various other components of the comprehensive plan. The amendment helps to provide a framework for future development and is more specific regarding policies for the planning area.

Designating commercial at the corners Inverness and Crossgate corners of Clinton Parkway is not consistent with policies in Horizon 2020 Chapter 6 – Commercial Land Use. However, this planning process may produce a desire for commercial in these locations. Should an approved land use option include future commercial uses along Clinton Parkway, Chapter 6 would have to be amended to reflect the new location for commercial land uses that are not identified in Chapter 6 currently.

C. Is the proposed amendment a result of a clear change in public policy?

The Inverness Park area has developed in a manner that deviated from the original development plan for the area. Land remains to be developed and there are questions as to the future use of those properties. A District Plan is intended to refine the land use policy for a specific area and clear guidance needs to be incorporated into the comprehensive plan which supports the community’s goals. Chapter 14, Specific Plans, was a clear change to the comprehensive plan and to keep it up to date, the newly adopted land use plans need to be referenced to establish clear direction for the planning areas.

PROFESSIONAL STAFF RECOMMENDATION

Provide direction to staff concerning the draft plan and the future land use options for the plan. Staff will take that direction and bring back a revised plan for consideration for approval at a future meeting.
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. 1500 Road (Haskell Avenue).
  Adoption Date: December 18, 2007 by Lawrence City Commission
  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  
  **Adoption Date:** January 28, 2008 by the 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  
  **Adoption Date:** 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  
  **Adoption Date:** 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  
  **Adoption Date:** 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  
  **Adoption Date:** May 6, 2009 by Douglas County Board of Commissioners  
  **Review Date:** 2019

• **Oread Neighborhood Plan**  
  **Location:** Generally located between W. 9th Street and W. 17th Street and between the KU campus and Massachusetts Street.  
  **Adoption Date:** September 28, 2010 by Lawrence City Commission  
  **Review Date:** 2020

• **Inverness Park District Plan**  
  **Location:** Located south of Clinton Parkway, between Inverness Drive and Crossgate Drive, south to K-10 Highway.
Inverness Park District Plan
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**DRAFT**

Lawrence-Douglass County Planning Department

3/24/2011

i
I. Introduction and Purpose

Location

The Inverness Park planning area is located south of Clinton Parkway between Inverness and Crossgate Drives south to K-10 Highway.

Setting

The area is primarily urban in nature with most of the planning area within the city of Lawrence, but there is a rural residence and undeveloped county farm land in the southern portion of the planning area. Clinton Parkway, a principle arterial roadway, is the northern boundary of the planning area. There are public and private schools west and north of the planning area and park land in the southeastern portion of the planning area.

Background

The Inverness Park area began developing when an annexation request for 163.46 acres was approved in 1999. The development application for the area included multiple rezoning requests. Large tracts were platted along Clinton Parkway and zoned RO-1B for the most intensive part of the development of the 163 acres. The area south of W. 24th Place, but north of the open space/drainage area was designated as the transition area to the lower density, detached residential home lots to the south. The area south of W. 24th Place was zoned PRD-2 with a maximum density of 12 dwelling units per acre. W. 24th Place was designed to provide access to all lots in the area with restrictions prohibiting access to Clinton Parkway as well as access limitations placed on Inverness Drive and Crossgate Drive.

The preliminary plat for the entire 163 acres was approved in October 1999 and later revised in February 2001. The revisions reduced the lot size of the single-family area and created more lots than the original approval. The large lot configuration along Clinton Parkway and W. 24th Place did not change. The preliminary plat served as the master plan for the development of the site. It provided the basic boundary of the various zoning districts planned for the 163 acres.

Much of the original land use discussion focused on the need to provide adequate public facilities such as improved streets and other infrastructure as well as the land use pattern and transition of land uses throughout the entire acreage included in the Inverness Park Addition.
Multiple land use decisions made since 1999 have resulted in a land use pattern that has deviated from the original 163-acre plan with more apartments being developed than originally planned.

**Purpose**

The purpose of the Inverness Park District Plan is to plan for the urban development of the remaining undeveloped property within the planning area. Concerns have been raised by residents in the area about the proliferation of multi-family uses and the impact they are having on the area. This Plan will primarily act as the City’s official land use guide for development of the remaining undeveloped land in the Inverness Park District Plan planning area. Development on the property in the unincorporated area is not anticipated until annexed into the city.

**Relation to Other Plans**

This Plan constitutes an amendment to Horizon 2020. The Plan deviates from some elements of Horizon 2020. Additional policy guidance has foundation in the following plans:


**Process**

The Lawrence City Commission initiated the Inverness Park District Plan on November 9, 2010. A kick-off meeting for the Inverness Park District Plan was held on February 3, 2011. Stakeholders were asked to provide their thoughts on the Strengths, Weaknesses, Opportunities, and Threats (SWOT exercise) for the planning area and participate in a small group future land use exercise. The 2nd public meeting for the plan was held on March 3, 2011. Those that attended the meeting reviewed the SWOT exercise results and the draft goals and policies and were also asked to provide comments on future land use options. The group also heard a presentation from developers interested in the Inverness and Clinton Parkway corner. Planning Staff developed the 1st draft of the Plan with input from property owners within the planning area and other stakeholders.
II. Existing Conditions

A. Current Land Use

The planning area consists of approximately 303 acres of land. The primary land use in the planning area is residential, with single family, duplex and multi-family uses having been developed in the past decade. The majority of the planning area is urbanized and within Lawrence, but there is approximately 70 acres which is located within unincorporated Douglas County south of 27th Street that contains a rural residential and agriculture use. Existing and future parks are also uses within the planning area. See Map 2-1.

Undeveloped Property

The Inverness Park District Plan is focusing on providing future land use guidance for the remaining undeveloped property within the planning area. Those properties are described below (each is numbered and labeled on Map 2-1 and Map 2-1a):

No. 1: The southeast corner of Clinton Parkway and Inverness Drive is an approximately 11 acre parcel currently zoned RSO. The property lies at the signalized intersection of Clinton Parkway and Inverness Drive. The access management in place along Clinton Parkway (described in Section V) prohibits direct access to Clinton Parkway for this property. Access to Inverness Drive is also restricted by plat, meaning this property would take access from W. 24th Place. There is an existing round-a-bout at W. 24th Place and Inverness Drive.

Issues:

- This is a larger parcel capable of accommodating neighborhood scale commercial and multi-family residential.
- Landscape buffer to buffer the higher intensity uses from the residential neighborhood to the west.
- Neighbor interest in park vs. feasibility of development potential due to location.

No. 2: The Remington Square property contains approximately 5 acres (out of a total of 15 acres) that is undeveloped and east of the existing apartments. The existing use of the property is multi-family residential. The property is zoned RM15, and contains 40 1-bedroom units, which represents the maximum density permitted on the entire 15 acres parcel. The property owner has expressed an interest in rezing the property to allow a higher density so that he can develop the remaining 5 acres with multi-family structures. The property contains regulatory flood hazard area along the eastern edge that will limit development.

Issues:

- The property is at maximum density, yet it is 1 bedroom development. More intensity is possible through renovation to add more bedrooms.
- Owner plans to maintain 1 bedroom development.

No. 3: The property on the southwest corner of Clinton Parkway and Crossgate Drive is approximately 3 acres and is zoned RSO. This property has regulatory
flood hazard area along the west property line. Access management along Clinton Parkway and plat restrictions along Crossgate Drive meaning this property would take access from W. 24th Place. There is an existing round-a-bout at W. 24th Place and Crossgate Drive.

Issues:
- The Lawrence-Douglas County Planning Commission supported commercial zoning for a Walgreens at this location in 2008.

No. 4: The property on the southwest corner of Crossgate Drive and W. 24th Place is approximately 1 acre and is also zoned RSO. Access is restricted along Crossgate Drive by plat meaning this property would take access from W. 24th Place. This property also has regulatory flood hazard area along the west property line.

Issues:
- 1 acre size of property is challenging for development.

No. 5: There are two properties south of W. 27th Street that are within unincorporated Douglas County. The two parcels total approximately 70 acres. One parcel is a rural residential use and the other is an agriculture use. A large portion of the property contains regulatory flood hazard area, which will impact the developable area of the properties. This property has low density urban development to the north, west and east. The property is close to schools and parks, which makes it desirable for future urban low density development.

No. 6: Finally, there is another property within unincorporated Douglas County that is immediately south of the Pat Dawson Billings Nature Area that contains approximately 22 acres. This property is entirely encumbered by regulatory flood hazard area.

B. Current Zoning

The City of Lawrence Land Development Code and the Douglas County Zoning Regulations are intended to implement the goals and policies in Horizon 2020 in a manner that protects the health, safety, and general welfare of the citizens. The Land Development Code and the Douglas County Zoning Regulations establish zoning regulations for each land use category which development must follow.

The planning area is primarily located in the city and partially within the county. Map 2-2 shows the current zoning designations and Tables 2-1 and 2-2 below describe the map designations.
### Table 2-1

<table>
<thead>
<tr>
<th>City Zoning</th>
<th>District Name</th>
<th>Comprehensive Plan Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS7</td>
<td>Single-Dwelling Residential (7,000 sq. ft. per dwelling unit)</td>
<td>Low-Density Residential</td>
</tr>
<tr>
<td>RSO</td>
<td>Single-Dwelling Residential-Office (2,500 sq. ft. per dwelling unit)</td>
<td>Low or Medium-Density Residential</td>
</tr>
<tr>
<td>RM12D</td>
<td>Multi-Dwelling Residential (12 dwelling units per acre)</td>
<td>Medium-Density Residential</td>
</tr>
<tr>
<td>RM15</td>
<td>Multi-Dwelling Residential 15 dwelling units per acre</td>
<td>Medium-Density Residential</td>
</tr>
<tr>
<td>PRD</td>
<td>Planned Residential Development</td>
<td>N/A</td>
</tr>
<tr>
<td>OS</td>
<td>Open Space</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Table 2-2

<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>VC</td>
<td>Valley Channel</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Map 2-1 Existing Land Use

Inverness Park District Plan
Existing Land Use

Legend
- Existing_Land_Use
- PlanCode
  - Single Family Residential
  - Duplex
  - Multiple Family
  - Parks/Rec/Open Space
  - Farm
  - Vacant
  - Plan Boundary
  - Water Bodies
  - City Limits

1 inch = 600 feet
Date: 3/23/2011
Lawrence-Douglas Co Planning

DRAFT

Lawrence-Douglas County Planning Department
3/24/2011
6
Map 2-2 Existing Zoning

Inverness Park District Plan
Existing Zoning

Legend
- Zoning, City
- Zoning, County
ZONECLASS
- A
- VC
- Plan Boundary
- Water Bodies
- City Limits

Pat Dawson Billings Nature Area

1 inch = 600 feet
Date: 3/23/2011 Lawrence-Douglas Co Planning

DRAFT

Lawrence-Douglas County Planning Department
3/24/2011
C. Flood Hazard Area

There is Federal Emergency Management Agency (FEMA) designated floodplain and floodway located within the planning area. See Map 2-3. 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 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.

D. Parks and Recreational Facilities

There are currently existing parks or park properties located in the planning area. The Pat Dawson Billings Nature Area is located south of 27th Street in the southeastern portion of the planning area. A future linear park is located south of the Legends at KU and The Grove properties, which are south of W. 24th Place. See Map 2-4.

E. Transportation

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 2-5. The classification system can be described as a hierarchy from the lowest order, (local streets) that serve to provide direct access to adjacent property, to (collector streets) that carry traffic from local streets, to major thoroughfares (arterial streets) that carry traffic across the entire city. 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. Clinton Parkway is designated as a principle arterial. Inverness Drive, Crossgate Drive and W 27th Street are designated as collectors. The remaining streets within the planning area are local streets.

There currently are transit routes that travel to or through the planning area.

The planning area includes existing and future bike routes, lanes, and recreational paths identified by T2030 and these are shown on Map 2-6. Bike lanes are a separate space designated with striping, signage or pavement markings for exclusive use by bicycles with a street or road. Bike routes are a network of streets to enable direct, convenient, and safe access for bicyclists. A recreational path is a separate path adjacent to and independent of the street and is intended solely for non-motorized travel.
Different types of bicycle facilities are linked to a certain street classification. Recreational Paths are part of Arterials, Bike Lanes are part of Collectors, and Bike Routes are also part of Collectors. Clinton Parkway, Inverness Drive, and W. 27th Street are designated as shared use paths. Crossgate Drive is designated as a bike route.

Map 2-3 Flood Hazard Area

Inverness Park District Plan
Flood Hazard Area
Map 2-4 Parks and Recreation Facilities

Inverness Park District Plan
Existing and Future Parks and Recreation Facilities

Legend
City Parks
Classification
- Neighborhood
- Future
- Plan Boundary
- Water Bodies
- City Limits

Pat Dawson Billings Nature Area

1 inch = 600 feet
Date: 3/21/2011 Lawrence-Douglas Co Planning
Map 2-5 Future Thoroughfares

Inverness Park District Plan
Future Thoroughfares

Legend
- City Limits
- future arterial
- future local
- future minor arterial
- future collector/rural major collector
- future freeway
- rural minor collector
- collector/rural major collector
- principal arterial
- freeway
- minor arterial
- Plan Boundary

Date: 3/23/2011
Lawrence-Douglas Co Planning

1 inch = 600 feet
Map 2-6 Bicycle Facilities

Inverness Park District Plan
Bicycle Facilities

Legend
Bikeways - T2030
STAT_TYPE
- existing Bike Lane
- existing Bike Route
- existing Shared Use Path
- future Bike Lane
- future Bike Route
- future Shared Use Path

Plan Boundary
City Limits

1 inch = 600 feet
Date: 3/21/2011   Lawrence-Douglas Co Planning
F. Schools

School Districts
The planning area is located entirely within the Lawrence USD 497 school district.

School Locations
Public schools Sunflower Elementary and Southwest Jr. High are located just west of the planning area across Inverness Drive. Private schools are also located near the planning area. Bishop Seabury is located north of the planning area across Clinton Parkway and Raintree Montessori School is located west of the planning area along Clinton Parkway.
III. Goals and Guiding Principles

The following policy statements in Sections III - V are for the development of the remaining undeveloped property in the Inverness Park District Plan planning area.

Revisions to the goals and policies that were released at the 2nd public meeting on March 3, 2011 are shown with strikethroughs for deleted language and underlines for new language.

Goals
Encourage nonresidential land uses at the Inverness and Crossgate corners of Clinton Parkway that are compatible with the residential uses in the planning area.

Develop a strong park/trail system.

Develop single-family residential uses south of 27th Street at densities compatible with adjacent densities.

Protect the regulatory flood hazard areas from development.

Policies
Allow for neighborhood-level commercial, office, civic, institutional and recreation activities on the Inverness and Crossgate corners of Clinton Parkway.

Encourage mixed use development (i.e. residential and non-residential uses) along Clinton Parkway.

Limit additional multi-family uses in the Planning Area.

Develop single-family residential uses south of 27th Street.

Encourage a creative mixture of development in the area south of 27th Street that includes small lots, but also large lots that can use the regulatory flood hazard areas as an amenity that is protected from development.

Ensure that adequate public facilities are available prior to developing the area south of 27th Street, the remaining undeveloped property within the planning area.

Develop a pedestrian trail on the future park land south of the Legends at KU and The Grove developments.

Maintain the integrity of Clinton Parkway as an access restricted thoroughfare.
IV. Future Land Use

The Inverness Park District Plan Future Land Use Section illustrates conceptual guides for future development of the remaining undeveloped properties within the planning area that embody the vision and goals presented in Section III. The future land use maps in this Section are conceptual and should not be used to determine precise zoning boundaries. The following land uses, zoning districts, and densities are the “maximum recommended” and assume less intensive land uses, zoning districts, or densities are appropriate.

Future Land Use Options
Three future land use options for the planning area are presented for consideration:

Option 1: is a status quo option that shows the existing zoning for the land near Clinton Parkway and future use for the property south of 27th Street.

Option 2: provides for commercial uses on the Inverness and Crossgate corners of Clinton Parkway and future uses south of 27th Street but shows the remaining undeveloped property as status quo.

Option 3: provides for commercial on the two corners, higher density for the Remington Square property and future uses for the property south of 27th Street. Each of the land use options is discussed more thoroughly below.

Open Space
In all of the future land use options, the property currently encumbered by regulatory flood hazard area is designated as open space.
Future Land Use Option 1
This option leaves the existing zoning in place along Clinton Parkway while allowing for the urban development of the property south of 27th Street. Maintaining the existing zoning in place for the properties along Clinton Parkway means those development proposals that meet the existing zoning of the RSO (Single-Dwelling Residential-Office) District can be developed on these properties with the appropriate approvals. The RSO District permits detached homes, duplexes and office uses.

The Remington Square property is currently developed to the maximum density allowed by the RM15 zoning, which is classified as medium density. The Medium Density classification means this option does not support higher density for the property. Since the property has maxed out the available density on the property it could not develop more multi-family units, though existing structures could be converted to add bedrooms. Other accessory uses or structures like a fitness center for the existing complex could be developed though.

The property south of 27th Street will have to follow the urban development process of annexation, rezoning and subdivision in order to seek approvals to develop according to this plan.
**Future Land Use Option 2**

Option 2 classifies the properties on the corners of Inverness and Crossgate Drives and Clinton Parkway as Neighborhood Commercial. This option maintains the existing zoning of the Remington Square property and the property on the southwest corner of W. 24th Place and Crossgate Drive. This option also allows for the urban development of the property south of 27th Street.

The Neighborhood Commercial classification means those two properties will have to be rezoned from their existing RSO District to a commercial district. Development that complies with the new commercial zoning could be built with an administratively approved site plan. The buffer designation that is part of the property at Inverness and Clinton Parkway is meant to provide additional buffering between the commercial development and the residential properties to the west and is a detail that must be complied with in site planning approval.

The property on the Inverness corner is approximately 11 acres and could support a commercial strip center or one large anchor with a smaller center. This intensification would lead to more activity, traffic, noise, and light while providing the benefit of additional commercial services within walking distance for residents in the area. The Neighborhood Commercial classification would allow retail uses, along with other uses like service oriented businesses. The property on the Crossgate corner is approximately 3 acres and likely would be developed with a stand-alone commercial use. This smaller property likely would have less negative impact with regards to traffic, noise, and light while still providing commercial services within a walkable distance for neighborhood residents.

This option will require a Comprehensive Plan Amendment to *Horizon 2020 Chapter 6 – Commercial Land Use* to include the southeast corner of Inverness Drive and Clinton Parkway and the southwest corner of Crossgate Drive and Clinton Parkway as Neighborhood Commercial Centers. A Comprehensive Plan Amendment is necessary because those corners are not currently identified in *Horizon 2020 Chapter 6 as Neighborhood Commercial Centers*. The corners also fail some of the location criteria for Neighborhood Commercial Centers, one of which is that new centers must be at least 1 mile from other centers. These two corners are less than 1 mile from the Clinton Parkway and Kasold center, as well as the Clinton Parkway and Wakarusa center.

Designating the Remington Square property as Medium Density maintains the existing zoning for the property and means the property could not develop more multi-family units because the property is currently developed to the medium density allowed by the RM15 zoning. The southwest corner of W. 24th Place and Crossgate Drive could develop with the appropriate administrative approvals.

The property south of 27th Street will have to follow the urban development process of annexation, rezoning and subdivision in order to seek approvals to develop according to this plan.
Future Land Use Option 3
Option 3 classifies the properties on the corners of Inverness and Crossgate Drives and Clinton Parkway as Neighborhood Commercial. This option also supports rezoning the Remington Square property to increase the allowed density on the property. This option maintains the existing zoning at the southwest corner of W. 24th Place and Crossgate Drive. This option also allows for the urban development of the property south of 27th Street.

Option 3 is primarily the same as Option 2. The key difference between the two options is the treatment of the Remington Square property. Option 2 designates the Remington Square property as Medium Density Residential while Option 3 designates it as High Density Residential.

A High Density Residential designation for the Remington Square property would provide support for a rezoning of the property. This would permit the development of the remaining 5 acres of vacant ground on the east side of the property for additional multi-family structures.
Inverness Park District Plan
Future Land Use - Option 3

Legend
- Fu_land_use
- Fulanduse
- Low-Density Residential
- High Density Residential
- Residential/Office
- Neighborhood Commercial
- Buffer
- Open Space
- Plan Boundary
- Water Bodies
- City Limits

1 inch = 600 feet
Date: 3/21/2011 Lawrence-Douglas Co Planning

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Lawrence-Douglas County Planning Department
3/24/2011
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A. Future Land Use
The following future land use categories are found in one of the three future land use options presented previously. These categories are not necessarily represented on each of the future land use options.

Land Use Categories

Residential – Low Density
The intent of the low-density residential use is to allow for single-dwelling, duplex, and attached dwellings but emphasis is placed on residential type uses. Development in this area should be compatible with single-family character, which could include such uses as churches, small-scale daycares and institutional uses.

**Primary Uses:** Detached dwellings, attached dwellings, duplex dwellings, group home, public and civic uses

**Zoning Districts:** RS10 (Single-Dwelling Residential), RS7 (Single-Dwelling Residential), RS5 (Single-Dwelling Residential), PD (Planned Development Overlay)

**Density:** 6 or fewer dwelling units/acre

Residential – Medium Density
The intent of the medium-density residential category is to allow for multi-family development at a greater density than the Low Density Residential category.

**Primary Uses:** Multi-dwelling structures

**Zoning Districts:** RM12 (Multiple-Dwelling Residential), RM15 (Multi-Dwelling Residential), PD (Planned Development Overlay)

**Density:** 7-15 dwelling units/acre

Residential – High Density
The intent of the high-density residential category is to allow for compact residential development. These developments are primarily located at the intersection of two major roads or adjacent to commercial or employment uses.

**Primary Uses:** Multi-dwelling structures, group home, civic and public uses

**Zoning Districts:** RM24 (Multi-Dwelling Residential), RM32 (Multi-Dwelling Residential), and PD (Planned Development Overlay)

**Density:** 16+ dwelling units/acre

Residential Office
The intent of the residential/office use is to accommodate mixed use development of administrative and professional offices with medium density residential. This category can serve as a buffer between higher intensity uses and major roads to lower intensity/density land uses.

**Primary Uses:** office, detached dwellings, duplex dwellings

**Zoning Districts:** RSO (Single Dwelling Residential-Office)

**Density/Intensity:** 7-15 dwelling units/acre/medium
**Commercial – Neighborhood Center**
The intent of the commercial use is to allow for retail and service uses. A Neighborhood Commercial Center provides for the sale of goods and services at the neighborhood level and may include mixed use structures to accommodate commercial and residential uses in one location.

**Primary Uses:** eating and drinking establishments, general office, retail sales and services, fuel sales, car wash, civic and public uses, medical facilities, Non-ground floor dwellings, multi-dwelling structures, work-live

**Zoning Districts:** CN1 (Inner Neighborhood Commercial District), CN2 (Neighborhood Commercial Center District), and PD (Planned Development Overlay)

**Intensity:** medium-high

**Open Space**
The intent of the open space use is to provide space for opportunities for public and private recreational facilities and natural area preservation. This category primarily includes the regulatory flood hazard areas within the planning area.

**Primary Uses:** Park and open space

**Zoning Districts:** GPI (General Public and Institutional District), OS (Open Space), UR (Urban Reserve)

**Intensity:** light

**Buffer**
This designation is provided on the property that is on the corner of Inverness Drive and Clinton Parkway. It is to provide a landscape buffer for the low density residential uses that are west of the property across Inverness Drive. This area should be designed in a way to provide an effective buffer from the light and noise issues associated with commercial development. Compliance with the buffer will be required with site plan approval.

**Primary Uses:** Open Space/Landscaping

**Zoning Districts:** Same as the entire property is zoned

**Intensity:** light
V. Clinton Parkway

Access Management
The City of Lawrence and the Board of County Commissioners of Douglas County approved a Resolution in October of 1970 concerning access management along Clinton Parkway. The Resolution said this about Clinton Parkway:

WHEREAS, the Governing Body of the City of Lawrence, Kansas, and the Board of Commissioners of Douglas County, Kansas, recognize that the area within the boundaries of the City of Lawrence and within the growth pattern of the City is one urbanizing area, and

WHEREAS, it is the mutual desire and express intention of the abovemenioned governing bodies that the aforementioned area should develop in an orderly manner that will provide a safe, efficient, convenient, and comfortable living environment for residents of said area and

WHEREAS, both bodies realize the importance of the proposed Clinton Reservoir to the economy and general welfare of Lawrence and Douglas County, and

WHEREAS, it is expressly understood and agreed that Clinton Parkway (that portion of 23rd Street west of Iowa Street to the proposed Jayhawk Park) will be the main access to Clinton Reservoir for residents and visitors to the community, and

WHEREAS, preliminary engineering plans have been prepared, showing limited access for Clinton Parkway at approximately every quarter mile along said roadway;

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LAWRENCE, KANSAS, AND THE BOARD OF COMMISSIONERS OF DOUGLAS COUNTY, KANSAS:

That it is the mutual desire and intention of the Governing Body of the City of Lawrence, Kansas, and the Board of Commissioners of Douglas County, Kansas, that Clinton Parkway shall be a limited access road with no direct access except for intersecting collector roads and streets.

PASSED AND APPROVED this 6th day of October, 1970, by the Governing Body of the City of Lawrence.

THE CITY OF LAWRENCE, KANSAS

by

Donald E. Meisler
Mayor

ATTEST:

Vera Mercer, City Clerk

PASSED AND APPROVED this 6th day of October, 1970, by the Governing Body of Douglas County, Kansas.

THE BOARD OF COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

Travis E. Glass, Chairman

Attest:

Raymond L. Heck

ATTEST:

Delbert Mathis, County Clerk
Clinton Parkway ultimately was constructed with limited access in a manner agreed to by the governing bodies with no direct access except at collector street intersections. Any action to seek relief from this access management decision will require appropriate governing body approval.

The result of the access management put in place has created a highly functioning roadway. This Plan does not support additional access to Clinton Parkway that will degrade the functionality of Clinton Parkway.

However, if the property at the southeast corner of Inverness Drive and Clinton Parkway is designated for commercial uses, consideration may be given to providing some limited access to Clinton Parkway. This could help to limit the impact to Inverness Drive that could result from the traffic generated by the property that would have to use Inverness Drive (and the round-a-bout) to get to W. 24th Place in order to access the property. Any consideration for limited access should only be given after a careful and detailed study of a land use proposed. The impact to the traffic signal synchronization along Clinton Parkway should also be part of that study.
VI. Implementation

The purpose of this section is to provide actions that should happen as this Plan is adopted and urban development starts to occur in the planning area. Each implementation action is assigned a group or groups ultimately responsible for completing or approving the action.

- Amend Horizon 2020 Chapter 14, Specific Plans, to include the Inverness Park District Plan by reference.  
  **Who:** Planning Commission, City Commission, County Commission

- Amend Horizon 2020 Chapter 6, Commercial, to designate the southeast corner of Inverness Drive and Clinton Parkway and the southwest corner of Crossgate Drive and Clinton Parkway as Neighborhood Commercial Centers.  
  **Who:** Planning Commission, City Commission, County Commission
Dear Dan,

I have attended the two earlier neighborhood meetings regarding the Inverness Park District Plan. I really appreciate the opportunity to be able to comment on this plan.

I've read through the document and would like to thank you for hearing neighbor concerns at the last meeting. I see that your plan includes an option (Option 2) which effectively would not allow more multi-family development on the remaining undeveloped parcels.

I also commend you on your inclusion of a buffer zone between future development and the existing neighborhood. A good landscaping plan for that zone will really help to minimize concerns about lights and noise that may come from future commercial development on that corner.

I believe that Option 2 represents the encouragement of mixed used development that many of the home owners in the area expected when they purchased their homes. I also believe that this option will provide increased walkability and convenient services for all the residents of the area.

Please contact me on my cell at 785-917-9582 if you would like to discuss my comments or have any questions.

Thanks,

Davis Loupe

Davis P. Loupe
2205 Riviera Drive
Lawrence, KS 66047
(785) 832-0316
Dan,

My name is Jarvis Stirn and my wife, daughter(5) and I live at 4404 Gretchen, Ct., Lawrence, KS 66047.

From the quick look that I took at the plan and hearing the grocery store wasn't an option, I like option 2. You say that option 2 will cause increased traffic, but so will option 1 and 3. I wish I would get notified earlier on these plans. I would really like to give better feedback.

Later. Jarvis

Jarvis Stirn, ME II
Mechanisms Engineering
National Nuclear Security Administration's Kansas City Plant
Operated by Honeywell FM&T
Office: (816)997-3027
Pager: (816) 458-1122
Text Message: 8164581122@myairmail.com
Email: jstirn@kcp.com

Regarding - 1st Draft - Inverness Park District Plan
Just a reminder that comments are due tomorrow, Wed. 4/17.
Directions for how to comment are in the email from Dan Warner, below.

Please note that there are 3 draft options being proposed.

Option 1 – Pg 19/20
Option 2 – Pg 21/22
Option 3 – Pg 23/24 – increases density for Remington Place from current RM 15 to RM 24 (24 multi-family units/acre)

Page 9 shows an aerial of the Inverness Park District. Option 3 would add 4-5 more apartment buildings on the east side of Lot 2. There are a number of pages to the draft, but most are maps. Appreciate you taking the time to review and comment!!!

Grocery Store Update: The grocery store has cancelled their contract to purchase the lot at the corner of Inverness & Clinton Parkway.
Dear Stakeholder,

The Lawrence-Douglas County Planning Office is working on a district plan, a long-range future land use plan, which has been named the Inverness Park District Plan. This planning process will identify future land uses for the remaining undeveloped property within the planning area. The end result of this process is a document that the Planning Commission, City Commission, and County Commission will use to guide development, when and if development occurs. The document will also allow existing and potential property owners to see what the long-range plan is for the area.

The first draft of the Inverness Park District Plan has been released for review and comment. The 1st draft can be found at http://www.lawrenceks.org/pds/draft_plans. The first draft is rather large so you may find it easier to download it by "Right clicking" on the link for the plan and selecting "Save Target As" to save the file to a location on your hard drive. You can then access the file from your hard drive after it has downloaded.

Written comments are due on April 7, 2011. You can email comments to me at dwarner@lawrenceks.org.

Visit our website at http://www.lawrenceks.org/pds/draft_plans or contact the Planning Office for information and to sign up to receive email updates. If you have any questions or comments regarding the plan, please contact me by phone at 785-832-3162 or email comments to dwarner@lawrenceks.org.

Thanks.

Dan Warner, Long-Range Planner, AICP - dwarner@lawrenceks.org
Planning and Development Services Department | http://www.lawrenceks.org/pds/
City Hall, East 6th Street, PO Box 708
Lawrence, Kansas 66044-0708
785-832-3162. phone
785-832-3160. fax

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Version: 10.0.1204 / Virus Database: 1498/3526 - Release Date: 03/24/11
Dan

A couple brief remarks concerning the three proposals...

- Option 1 - ie "LEAVE IT ALONE" has my support. We (the City) has screwed this entire property enough... let’s not make it any worse.
- Option 2 - Remington Place request to rezone the 5 acres SHOULD NOT BE APPROVED. They conscientiously developed the land at high-density leaving the 5 acres undeveloped... with the intent of trying to get the city to dis-regard the existing zoning (which the city has a long history of doing)... and re-zone the property to high-density so they can continue building more units. We have to say NO.
- Option 3 and Option 2 -- back to first comment... making anything commercial makes the situation even worse.

What we should do is create an option 4 that is basically option1 with a buffer that is shown in option 2.... which will help minimize the impact to property values once that corner is developed.

Thank you.

--Scott Myers
4440 W 24th Place
785.841.0976
April 7, 2011

VIA E-MAIL AND HAND DELIVERY
Lawrence/Douglas County
Planning and Development Services Department
Attn: Dan Warner
City Hall - 6 E. 6th Street
Lawrence, KS 66044-0708

Re: Comments to Proposed Inverness Park District Plan (the “Plan”)

Dear Dan:

I am writing on behalf of Remington Square, L.C. (“Remington”), the owner of approximately 15 acres located at 4100 W. 24th Place (the “Property”). The Property has frontage on Clinton Parkway and is specifically referenced in the Plan. As you know, on or about August 12, 2010 Remington submitted rezoning application Z-8-12-10 (the “Application”), to rezone the Property from RM15 to RM24. Remington submitted the Application to enable the construction of additional one-bedroom apartment units on the undeveloped portion of the Property, consisting of approximately five (5) acres. The Planning Staff, in its report dated October 27, 2010 (the “Staff Report”), recommended approval of the rezoning. A copy of the Staff Report is attached to this letter. The Application remains active, albeit deferred indefinitely pending the adoption of the Plan.

Remington is deeply concerned about the inconsistency between the Plan and the Staff Report. Two of the three potential options described in the Plan (i.e., Options 1 and 2) enforce the “status quo” and create a moratorium on additional multi-family development on the Property. The latest version of the Plan also features a policy to “limit additional multi-family uses in the Planning Area.” Those elements of the Plan are totally contradictory to the Staff Report. Moreover, those aspects of the Plan are also patently unfair to Remington. In addition to the well reasoned Staff Report that recommends approval of RM24 zoning, consideration must also be given to the huge investment in the Property, which was approved by the City in the form of special assessments that are presently being paid for by Remington.
Since year 2002 the City has approved $762,339.97 of special assessments for public improvements, including storm drainage, sidewalks and curbing, box culverts and grading on the Property. With interest, the total cost of special assessments will be approximately $980,295.96. Of that amount, approximately $334,621.40 will be paid from year 2011 to maturity of the special assessments. These assessments apply to the entirety of the Property, not just the portion that has already been developed. The elements of the proposed Plan which now attempt to limit further development of the Property is inconsistent with the City’s previous approval of special assessments, and is not good planning.

When developing area plans, consideration is frequently given to the expectations of those who purchased property within the planning area. There is no clearer expression of expectation for development than the imposition of special assessments designed to enable development. If the use of the Property is to be limited to less than all of its acreage, an area plan should have been adopted ten years ago, before approving infrastructure necessary as a condition precedent to development. In the last fifteen years, apartment complexes of all sizes and densities have proliferated along Clinton Parkway. The Plan is unfair to Remington because it attempts, by planning after-the-fact, to disallow development to real estate which the City has imposed special assessment upon.

As noted in the Staff Report, the Property is surrounded by multi-family residences or vacant ground zoned for residential offices (or potentially commercial applications, under Options 2 and 3 of the Plan). The Staff Report also recognizes, consistent with Horizon 2020, that “[h]igh density development is typically found along major arterial streets [such as Clinton Parkway] and in proximity to high intensity activity areas.” The rezoning of the Property to RM24 represents infill development that is also aligned with the goals of Horizon 2020. The Property is not located within an established “neighborhood boundary,” but is adjacent to multi-family university-related housing and along Clinton Parkway, where other “intensive” uses are concentrated. The Staff Report found that “[a]pproval of the proposed rezoning will not substantially alter the existing neighborhood makeup.” Most importantly, the Staff concludes that notwithstanding public comment opposing additional apartments in the general area, approval of the rezoning will “. . . allow additional housing options in the area but should not negatively affect the Single family residences to the south and southwest,” nor will the development alter existing public health, safety and welfare.
In light of the specific findings of the Staff Report, which remain sound findings today, how can the Plan recommend anything other than high-density residential for the Property? Remington is aware that owners of single-family residences in the planning area oppose the additional development of multi-family units on the Property and within the area covered by the Plan. Their motivations appear to be tethered to an unsubstantiated concern about declining values of their own properties. However, in this tug-of-war of competing interests and viewpoints, the Staff Report represents a neutral opinion, rendered without bias or undue influence by project opponents or proponents, and objectively recommends that the Property be rezoned to RM24. The Staff unequivocally found that Remington’s proposed development does not negatively affect the surrounding residences. There is no reason to reverse course from the Staff Report.

The Plan expressly states that it is an amendment to Horizon 2020. As such, the Plan must advance a clear public purpose and be consistent with the long-range goals and policies of Horizon 2020. See Chapter 17 - Comprehensive Plan Review and Amendment Process. Permitting high-density residential uses of the Property is consistent with our long-range goals and policies. Development of the Property is infill development at a location with available infrastructure. The Property is surrounded by other multi-family properties and fronts a major arterial roadway. Unlike many other “high-density” apartment complexes that feature 2, 3 and 4 bedroom units, Remington plans to build more one-bedroom units. The Staff Report acknowledges that apartments with two or more units create more mass and bulk than a development with buildings including only one bedroom units, creating a smaller overall building footprint. Staff concludes that approval of Remington’s proposed RM24 zoning would allow the project to retain its existing character and add additional units on the east side of the Property. The Staff Report notes the apparent demand for small units in the community, and that Remington’s plan will allow additional development on the site in keeping with development patterns in terms of building coverage. The long-range goals and policies of Horizon 2020 are only met if the Staff Report’s recommendation is incorporated into, and adopted as part of, the Plan.

Based upon the Staff Report’s opinion supporting RM24 zoning of the Property, Remington obviously favors “Option 3” of the Plan. The problem with Option 3, however, is that it also recommends commercial uses for the two adjacent properties to the east and west of the Property, which are at the corners of Crossgate Drive and Clinton Parkway (to the east) and Inverness Drive and Clinton Parkway (to the west). Although Remington supports the commercial use of those properties, the Plan’s alternatives should not be so “black and white.”
The Plan needs an “Option 4” that recommends high-density apartments for the Property and the “status quo” for the two adjacent properties (or a combination of uses for the adjacent parcels). In other words, a decision about the use of Remington’s Property should not depend upon the classification of the adjacent parcels. If the Property, viewed in isolation as it was in the Staff Report, is best suited for high-density residential, that use should not be denied merely because commercial uses are deemed inappropriate for the adjacent properties.

The Plan’s recommendation for high-density apartments, if adopted, does not circumvent the review process that accompanies the Application, and all interested parties will have the opportunity in at least two public hearings to voice their concerns. Allowing that process to proceed is only fair, given the recommendation of the Staff Report and the fact that the Property is subject to special assessments. Remington purchased the Property with the reasonable expectation of being able fully utilize the Property, subject to the approval of RM24 zoning. Prudent planning and fairness dictates that Plan encourage high-density residential use of the Property. Remington is supportive of “Option 3” of the Plan, but requests that an “Option 4” also be considered so that the fate of the Property is not tied to a decision about the commercial use of adjacent properties. In no event, however, is the “status quo” an acceptable outcome.

Very truly yours,

BARBER EMERSON, L.C.

[Signature]

Matthew S. Gough

MSG:plh

cc: Remington Square, L.C.
PLANNING COMMISSION REPORT
Regular Agenda – Public Hearing Item

PC Staff Report
10/27/10

ITEM NO. 5: RM15 to RM24; 15.171 ACRES; 4000 W 24TH PLACE (SLD)

Z-8-12-10: Consider a request to rezone approximately 15 acres from RM15 (Multi-Dwelling Residential) to RM24 (Multi-Dwelling Residential), located at 4100 W. 24th Place. Submitted by BG Consultants, Inc., for Remington Square LC, property owner of record.

STAFF RECOMMENDATION: Staff recommends approval of the rezoning request [Z-8-12-10] for 15.171 acres from RM15 (Multi-Dwelling Residential) to RM24 (Multi-Dwelling Residential) and forwarding it to the City Commission with a recommendation for approval based on the findings of fact found in the body of the staff report.

Applicant's reason for request: "The rezoning is requested because the Owner desires to build additional buildings on the property. The apartment complex is fully leased with a waiting list for available units. The property has room for additional buildings."

KEY POINTS
- Property has a history of multi-dwelling type development.
- Property was included in original 160 acre development known as the Getto property (Inverness Park Addition) and zoned RO-1B per the 1966 Zoning Code. A district allowing multi-dwelling development up to 12 dwelling units per acre.
- A previous application for a retirement center included this property (UPR-09-04-07) but was not completed.
- This property was rezoned to RM15 to facilitate multi-dwelling residential development (Z-10-26-07) allowing multi-dwelling development up to 15 dwelling units per acre.
- Property is developed as an apartment complex with 224 1-bedroom units.

GOLDEN FACTORS TO CONSIDER
CHARACTER OF THE AREA
- Property is located within an area planned for multi-dwelling residential development.

CONFORMANCE WITH HORIZON 2020
- The proposed request is consistent with the general principles of Horizon 2020 as identified.

ASSOCIATED CASES/OTHER ACTION REQUIRED
- Z-10-26-07; RSO to RM15 for only that part of the subject property known as Lot 1.
- MS-06-09-08; minor subdivision to amend interior lot line.
- SP-6-38-08; approved for multi-dwelling development (Remington Square Apartments)
- FP-06-11-08, a local floodplain development permit for the development of Lot 1 of the subject property.

ATTACHMENTS
- Area map
- Residential Use Tables
- Development history summary
PUBLIC COMMENT RECEIVED PRIOR TO PRINTING
- No public comment has been received prior to the printing of this staff report.

GENERAL INFORMATION
Current Zoning and Land Use: RM15 (Multi-Dwelling Residential); existing multi-dwelling residential development.

Surrounding Zoning and Land Use:
To the north; RM12 (Multi-Dwelling Residential) District; Bishop Seabury Academy and apartment development.

To the east and west; RSO (single-dwelling Residential Office) District; undeveloped land.

To the South; PRD [The Legends, Phase 1 and Phase 2 The Grove]; existing multi-family residential development, university oriented housing.

Project Summary:
The property is located on the north side of 24th Place. It is bounded on the north by Clinton Parkway. The property is developed with 224 1-bedroom apartments. The proposed request is intended to change in the base density to allow additional apartment development on the east side of the property. This would allow up to an additional 136 units (360 units total). A summary of the development history is attached to this report.

I. CONFORMANCE WITH THE COMPREHENSIVE PLAN
Applicant’s Response: "Horizon 2020 supports infill development. The proposed project is an infill development which will provide a consistent and compatible land use with the surrounding area. The proposed project will be a similar land use to the existing adjacent properties. The proposed units will be one bedroom units.

The existing zoning is RM15 and the existing density is 14.93 units per acre with 14.93 bedrooms per acre. The proposed zoning is 24 units per acre with 24 bedrooms per acre. Medium density residential zoning should be located along major roadways. This project is located along Clinton Parkway. The proposed project will consist of 16 and 24 unit apartment buildings. The proposed buildings will be consistent with the existing buildings on the property."

Residential development is addressed in Horizon 2020 - Chapter 5. The plan recognizes the need to provide a variety of housing opportunities. A key residential strategy states: "Infill residential development should be considered prior to annexation of new residential areas."

The Plan further strives to encourage the enhancement of neighborhoods with compatible densities and housing types. Architectural styles are recommended to reflect qualities and styles of an existing neighborhood.

The proposed request is considered to be high-density as defined in Horizon 2020 and in the Land Development Code. High density development is typically found along major arterial streets and in proximity to high intensity activity areas. Medium and high density residential land use includes the following policy: "Policy 2.7(b): Encourage the use of a variety of housing types, including town homes, patio homes, zero lot line homes, cluster housing, garden apartments and retirement housing."
Additional policies address compatibility with surrounding land uses and adequate vehicular circulation within developments.

High-density residential development is characterized as density occurring between 16 to 21 dwelling units per acre. The Development Code includes zoning districts that allow up to 32 dwelling units per acre. Several areas in the community can be found with this type of density. Typically, high density areas are located near university property.

**Staff Finding** – The Land Development Code provides for zoning districts that exceed the definition of high density found in Horizon 2020. Approval of the request will allow infill development in an area currently built with multi-story apartments. If the Commission determines the requested density is too high for the area, an option to address both density and overconcentration of a specific housing type would include limiting the density, if approved, to something less than the requested 24 dwelling units per acre.

**II. ZONING AND USE OF NEARBY PROPERTY, INCLUDING OVERLAY ZONING**

This property is surrounded by a variety of land uses and zoning districts. The area to the east was proposed for neighborhood commercial zoning for a Walgreens and later withdrawn by the applicant in 2008 (Z-5-12-08). The property to the west was proposed for multi-dwelling residential development in 2009 which was denied by the City Commission (Z-7-11-09). Both properties immediately east and west remain undeveloped.

The area located along the south side of 24th Place is developed with apartments (Legends at KU and The Grove). These apartments include 2, 3 and 4 bedroom units. Another apartment complex is located southeast of this request. That development (Wyndam Place), along Crossgate Drive, includes 1 and 2 bedroom units. It is designed for residents 55 years and older. An additional apartment development is proposed on the currently vacant PRD property north of Wyndam Place.

The area located on the north side of Clinton Parkway includes a variety of uses including Bishop Seabury Academy, a private school, apartments and condominiums.

Detached residential uses are located on the east side of Crossgate Drive and the west side of Inverness Drive. An existing drainage easement south of the apartment development, on the south side of 24th Place is designated as a future park. The area is intended to include trails for passive recreation within the area. The area south of the future park (south of 24th Place) is also zoned and developed with detached residential housing.

The east side of the subject property is encumbered by a drainage easement. The drainage features of the site are natural boundaries to development.

**Staff Finding** -- There are a variety of zoning districts and uses in this area. The subject property is zoned RM15 and developed with apartments. Surrounding land uses include a school, vacant land, and other multi-dwelling residential uses. The development pattern of the area is defined by the existing streets, drainage and built structures of the surrounding area.
III. CHARACTER OF THE AREA

Applicant’s Response: "The property to the east and west is currently vacant. The properties to the south consist of medium density multi-family residential. The property to the north consists of mixed uses including medium density multi-family residential (RM12 zoning)."

The subject property is located on the south side of Clinton Parkway (a designated arterial street) and on the north side of 24th Place (a designated local street). Inverness Drive to the west and Crossgate Drive to the east are both collector streets. The property is not located within an established “neighborhood boundary” but is located near Sunflower Elementary School and Southwest Junior High School to the southwest. The area to the immediate south is developed with multi-family university-related housing.

The broader neighborhood includes a range of uses found throughout the area. Intensive uses are concentrated along Clinton Parkway. Detached and duplex housing is found east of Crossgate Drive, west of Inverness and south of the park property (south of 24th Place). Lowest intensity uses (detached homes and open space) are found on the interior portion of the neighborhood.

There are 4 existing multi-dwelling projects in the immediate area (south of Clinton Parkway). The following table provides a summary of existing and proposed development.

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<tr>
<th>Multi-Dwelling Development</th>
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<tr>
<td><strong>Existing Development</strong></td>
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<tr>
<td>Density</td>
</tr>
<tr>
<td>Remington</td>
</tr>
<tr>
<td>Legends</td>
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<tr>
<td>The Grove</td>
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<tr>
<td>Wyndam</td>
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<table>
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<tr>
<th><strong>Proposed Development</strong></th>
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<tbody>
<tr>
<td>Density</td>
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<td>Remington</td>
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<tr>
<td>The Grove</td>
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<tr>
<td>Wyndam</td>
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</table>

Density is equal to the number of dwelling units per acre regardless of the number of bedrooms.

**Staff Finding** -- The subject property is located in proximity to several developed apartment complexes and existing residential subdivisions. The area has a mixed character. Higher-intensity residential development is located along the arterial streets. Lower intensity, attached town homes and detached single family dwellings are located interior to the overall neighborhood area.

IV. PLANS FOR THE AREA OR NEIGHBORHOOD, AS REFLECTED IN ADOPTED AREA AND/OR SECTOR PLANS INCLUDING THE PROPERTY OR ADJOINING PROPERTY

This area is not currently included in a designated neighborhood. Horizon 2020 and Transportation 2030 are the adopted plans applicable to this request. General neighborhood features reviewed for
this application include: land use, open space, and proximity of public and commercial uses serving the area. There are a number of undeveloped parcels within the neighborhood. The area would benefit from development of a neighborhood plan to address the form and type of development for the undeveloped areas and identification of neighborhood needs to serve the area. Approval of the proposed rezoning will not substantially alter the existing neighborhood makeup.

Staff Finding -- The subject property is not part of a designated neighborhood for which there is an adopted area or sector plan. The guiding document for this property is Horizon 2020. The property abuts an arterial street to the north and the general area is between two collector streets. Access to the property will be limited to the local street on the south side.

V. SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN RESTRICTED UNDER THE EXISTING ZONING REGULATIONS

Applicant’s response: "The use of the subject property for multi-family residential is suitable."

The RM districts are intended to accommodate multi-dwelling housing. These districts allow the creation and maintenance of higher density housing opportunities in areas with good transportation access.

- The RM15 district has a corresponding Horizon 2020 designation of “medium density” limited to 15 dwelling units per acre.
- The proposed RM24 district has a corresponding Horizon 2020 Designation of “high density” designation limited to 24 dwelling units per acre.

The property has been developed, as zoned, to its maximum potential with regard to density. The property includes roughly 4 acres on the east side that is currently open space. If approved this open space area could accommodate additional development. Infill development maximizes the building potential without creating sprawl. This type of activity is considered infill development.

The Remington project was developed as a complex with 1-bedroom units. Comparatively, other projects in the immediate area include 2, 3 or 4 bedroom units. The density calculation is “dwelling unit” regardless of the number of bedrooms in an individual dwelling unit. The number of bedrooms impacts the building size. Buildings that include units with 2, 3 or more bedrooms are larger creating more mass and bulk than a development with buildings including only 1 bedroom units. It is for this reason that the Remington Square project has a smaller overall footprint of buildings compared to the two developments on the south side of W. 24th Place. If the Remington project
was renovated, consolidating some of the 1 bedroom units into multi-bedroom units, additional construction could be added to the site without changing the same base density.

**Staff Finding** – The existing buildings could be remodeled combining units and adding bedrooms thus allowing construction of more buildings at the same base density. Approval of the proposed rezoning would allow the project to retain its existing character and add additional units on the east side of the property.

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

Applicant’s Response: “*The property was developed in 2008 under the RM15 zoning.*”

The property is developed with 1-bedroom apartments and surface parking. This property has been rezoned a number of times in the recent past.

- RO-1B zoned approved as part of the Getto development project.
- RSO zoned in 2006 per the adoption of the Development Code.
- RM15 zoned in 2007 as part of the Remington Square development project.

**Staff Finding** – The subject property is developed. It was zoned for multi-dwelling residential use in 2007. A site plan was approved in 2008 for multi-dwelling residential development.

**VII. EXTENT TO WHICH APPROVING THE REZONING WILL DETRIMENTALLY AFFECT NEARBY PROPERTIES**

Applicant’s response: “*The proposed rezoning will not detrimentally affect nearby properties. The properties to the west and east are currently undeveloped. The properties to the south have multi-family apartments on them. The Legends development has an existing density of 11.85 units per acre and 37.4 bedrooms per acre. The Grove development has an existing density of 13.71 units per acre and 39.8 bedrooms per acre. The proposed development will have only 24 bedrooms per acre.*”

The applicant is requesting that 15.171 acres of land be rezoned to RM24. The subject property abuts an existing arterial street (Clinton Parkway) and is located across from an existing multi-dwelling residential development. Approval of the request will allow development of additional buildings on the east side of the property. Staff acknowledges that units with more bedrooms directly correlate to more people per unit. Multi-dwelling zoning districts allow a maximum of 4 unrelated individuals per unit (includes RMO, RM12, RM12 D, RM15, RM24, RM32 and RMG zoning districts).

A key consideration of this review is the impact on the appearance and scale of development and the relationship to the surrounding area. As a measure of development impact staff compared the building and open space land coverage of four developments in the area. Developments with more building coverage and less open space appear more dense and intrusive than developments with less building coverage and more open space. All four developments are consistent with medium density descriptions found in *Horizon 2020*, (density 7 to 15 dwelling units per acre). See table in part III of this report.
The following charts show the amount of area within the four projects dedicated to buildings and improvements (Impervious Surface Coverage) as a measure of intensity (building scale and mass).

<table>
<thead>
<tr>
<th><strong>Existing Conditions</strong></th>
<th><strong>Proposed Conditions</strong>¹</th>
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<tbody>
<tr>
<td><strong>Impervious Surface Coverage</strong></td>
<td><strong>Impervious Surface Coverage</strong></td>
</tr>
<tr>
<td>Total Building and Pavement Coverage</td>
<td>Total Building and Pavement Coverage</td>
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<tr>
<td>29.71%</td>
<td>29.89%</td>
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<td>70.83%</td>
<td>70.83%</td>
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<td>■ Remington</td>
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<td>■ Legends</td>
<td>■ Legends</td>
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<td>■ Grove</td>
<td>■ Grove</td>
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<td>■ Wyndam</td>
<td>■ Wyndam</td>
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Both Remington Square and Wyndam Place, as built, include a substantially less built area. This directly correlates to their building type with only 1 or 2 bedrooms. The Grove and the Legends include larger buildings include 2, 3 or 4 bedrooms per unit². Correspondingly, the developments with larger building have less open space.

Approval of this request should not anticipate additional density increase of the remaining undeveloped lots.

With recent multi-family rezoning requests, concerns have been raised regarding the potential to over building in the apartment market. The City has:

- 1,436.8 acres (2.24 sq. miles) zoned for medium density development (RSO, RM12, RM12D).
- 75.7 acres (.118 sq. miles) zoned for medium density development (RM15).
- 657.7 acres (1.03 sq. miles) zoned for high density development (RMO, RM24, RM32).
- 21,845 acres (34.12 sq. miles) total city (all zoning districts).
- 20,602 acres (32.19 sq. miles) total city less island areas (all zoning districts).

As noted in the September 29, 2010 Journal World the City’s current vacancy rate is 8.1%. This includes all types of housing not just those limited to multi-dwelling units. Both Remington Square and Wyndam Place have reported they are fully leased while Legends has indicated that they do have vacancies. Staff was not able to contact The Grove to confirm vacant units. There appears to be a demand in the community for smaller units based on anecdotal evidence.

**Staff Finding** – A concern noted in public comment regarding a previous development application for the south east corner of Clinton Parkway and Inverness (just west of subject property) included statements related to overbuilding of apartments in this general area. Not all multi-dwelling units function the same or serve the same market. Approval will allow additional development on this site in keeping with development pattern in terms of building coverage. Approval will also allow additional housing options in the area but should not negatively affect the Single family residences to the south and southwest.

¹ Based on proposed site plan for Remington Square.
² Wyndam Place is targeted to Seniors 55 years and older. The project includes 28 one-bedroom units and 36 two-bedroom units. Remington Square includes all one-bedroom units.
VIII. 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: "If this application is approved it will allow the Developer to construct 136 residential units which will increase the property tax base of the City of Lawrence. The public infrastructure is in place and around the development so the impact to the public system is minimal. The hardship imposed upon the landowner if the application is denied is such that the additional units will not be built at this time."

Existing services are available to the property for development purposes. Additional detail is needed regarding specific to the development including a downstream sanitary sewer study. Approval of the request as infill development is preferable to fringe development with regard to extension of municipal services. Adjustments may be needed with regard to land use to assure system capacity remains available as undeveloped land is proposed for development.

While unlikely, if denied the applicant could remodel the recently completed project to add additional bedrooms without altering the base density. This would likely displace current residents of the development.

**Staff Finding** -- Approving the rezoning request would allow additional 1 bedroom residential housing choices in the community. Existing infrastructure is available to serve this property. Development will not alter existing public health, safety and welfare.

**STAFF REVIEW**

The subject property is a portion of a larger 160 acre tract originally annexed and zoned in 1999. The property was later platted with large tracts along Clinton Parkway. The area along Clinton Parkway was zoned for the most intensive development as part of the consideration of the 160 acres in 1999. The area south of 24th Place but north of the open space/drainage area was designated as the transition area to the lower density, detached residential home lots south of the open space/drainage area. Approval of this request increases the base density on the north side of 24th Place. The developed properties on the south side of 24th Place would continue to function as transitional uses between Clinton Parkway at the north end and single-dwelling residences at the south end of the original 160 acre parcel.

In 2004 the subject property was part of a development request known as the Fountains Retirement Center; a multi-lot, multi-phased development intended to provide a variety of housing options (independent and assisted living, skilled nursing, dementia care, and two-unit villas) for senior citizens in Lawrence (UPR-09-09-04). Development was anticipated for this project to be phased and completed by 2011. A final plat was also associated with this proposed development that was not recorded but established lots based on the phases of the development. The total development area of the project was approximately 22 acres. The subject property of this request represents the central portion of that previous development request. The area along Clinton Parkway has historically been associated with higher intensity land use.

In 2008 the Planning Commission voted unanimously to recommend rezoning the property from RSO to RM15. The base density did not change with the zoning approval at that time. The change did modify the allowable building type and prohibit office uses allowed in the RSO district.
CONCLUSION
The area immediately south of the subject property is developed with multi-story units with multiple bedrooms. The units on the south side of 24th Place (The Grove and Legends at KU) are marketed to college age occupants, the units located along Crossgate (Wyndam Place) are marketed to adult residents 55 years and older. This development (Remington Square) is not specifically designed or marketed to a particular age group.

Development of the property will require site plan approval and compliance with the current Land Development Code, if approved.
Site History Attachment:

ANNEXATION
- A-4-4-99; 163.46 acres

REZONING
- Z-4-10-99; A to RO-1B; 17.738 acres of original tract
- Adoption of 2006 Zoning Code converted the RO-1B to RSO.
- Z-10-26-07; RSO to RM15 for only that part of the subject property known as Lot 1

PLATTING
- Inverness Park Plaza Addition No. 1
- PF-09-29-04, a Final Plat for Inverness Park Plaza Addition No. 5, a replat of Lot 2 and Lot 3, Block One, Inverness Park Plaza Addition No. 1. [Expired, conditions not met, document not recorded]
- MS-06-09-08; minor subdivision to amend interior lot line.

DEVELOPMENT
- UPR-09-09-04; The Fountains [Expired, conditions not met]
- B-09-25-04; variance from building height and required parking associated with UPR.
- SP-6-38-08; approved for multi-dwelling development (Remington Square Apartments)
- FP-06-11-08, a local floodplain development permit for the development of Lot 1 of the subject property.
Dan –

Based on comments made at the two meetings, and conversations I’ve had with neighbors regarding the meetings and the 1st Draft, it’s clear that there is much confusion, and a wide variance in neighbor knowledge/understanding of the process and the options presented. I would guess you haven’t received many comments because no one knows how to respond. Twenty-nine pages is a lot to read when you understand the subject matter. Twenty-nine pages feels like an overwhelmingly huge mountain when you don’t understand the subject matter. Most people don’t have even a basic understanding of zoning and planning, and even if they attempted to read the 1st Draft, the feedback I’ve received is they got lost and didn’t understand all that they were reading, and definitely didn’t know how to respond to communicate that they don’t want any more apartment complexes.

What I do know...

- The City Commissioners and several Planning Commissioners have agreed that the Inverness Park District (IPD) area does not need any additional multi-family apartment complexes, and directed Planning Staff to work with property owners and neighbors to come up with a plan that neighbors could support and would create a mixed use.
- The IPD area currently has more multi-family apartment complexes than any other area in the city of Lawrence other than the area directly surrounding KU campus.
- Adjacent property owners do not want any additional multi-family apartment complexes built in IPD – so neighbors have asked me which option they should support to accomplish that.
- All proposed options still allow multi-family apartment complexes.
- Option 3 proposes an increase in the number of MF units, at double the density allowed when the property was originally annexed into the city. This directly opposes the intent of creating the district plan.
- Under Option 1 Pg 19 – “The RSO District permits detached homes, duplexes and office uses.” This page does not state anywhere that under RSO zoning, apartment complexes could be built.

I support –

- RSO with buffer – Clinton Pkwy & Inverness (would support light commercial if there were restrictions because of close proximity to 4 schools)
- No increase in density or change in zoning – Remington Place
- Light Commercial – Clinton Pkwy & Crossgate
- RSO – Crossgate & W. 24th Place
- SF Residential with open space – south of W. 27th

What zoning would eliminate the possibility of any additional multi-family being built in this area? Would an overlay district accomplish this? Or is the only option to have a deed restriction in place?

Sincerely,

Jamie Hulse
4403 Gretchen Ct.
Dear Mr. Warner -

I have read over the Inverness Park District Plan and have to be honest that I am a bit overwhelmed with all the information. I am a fish out of water when it comes to all of the zoning regulations and have tried to understand all of this the best I can. I appreciate the work you and your office have done to put all this information together and I hope the end result is a better vision for our neighborhood.

After reading the three options I first want to point out that I am absolutely not in favor of increasing the density for Remington Place.

My main concern is more apartments in this area - we all agree that this area is already inundated with apartments and increasing the density for Remington Place would just add to the apartment problem.

It is my understanding that the Neighborhood Commercial zoning allows for apartments to be built as well. Is this correct? If so, what is the density of those apartments? Is it higher than the current RSO zoning we currently have? If it is, then I favor option one. If the neighborhood commercial zoning does not allow for apartments, then I would favor option two. Again, my main concern is with the number of medium to high density apartments in our area.

Thank you -

Marci Leuschen

4153 Blackjack Oak Drive
Lawrence, KS 66047
leuschen@gmail.com
785-856-9037
Inverness Park District Plan

2nd Public Meeting – March 3, 2011

6:30pm – 8:00pm

Agenda

1. Introduction
2. SWOT Exercise Review
3. Review Future Land Use Exercise
4. Review Draft Goals and Policies
5. Review Future Land Use Options
6. Inverness and Clinton Parkway Presentation
7. Next Steps

Questions or comments?
Contact:
Dan Warner, Long-Range Planner
Lawrence-Douglas County Planning Office
785-832-3162
dwarner@lawrenceks.org
http://www.lawrenceks.org/pds/
Inverness Park District Plan

What is a District Plan?

• Specific future land use plan for a specific area

• Guides future development for properties included in the planning area

• Anticipates development over a relatively short period of time

• What the plan does:
  – Identifies future land uses
  – Outlines goals and policies

• Plan does not annex property and does not change zoning upon adoption

• General steps to process:
  – define planning area boundaries
  – inventory of existing conditions & data analysis
  – public meetings
  – draft plan
  – adoption process (PC, CC, BCC)
**Draft Goals and Policies**

**Goals**  
Encourage nonresidential land uses at the Inverness and Crossgate corners of Clinton Parkway that are compatible with the residential uses in the planning area.

Develop a strong park/trail system.

Develop single-family residential uses south of 27th Street at densities compatible with adjacent densities.

Protect the regulatory flood hazard areas from development.

**Policies**  
Allow for neighborhood-level commercial, office, civic, institutional and recreation activities on the Inverness and Crossgate corners of Clinton Parkway.

Encourage mixed use development (i.e. residential and non-residential uses) along Clinton Parkway.

Develop single-family uses south of 27th Street.

Encourage a creative mixture of development that includes small lots, but also large lots that can use the regulatory flood hazard areas as an amenity that is protected from development.

Ensure adequate public facilities are available prior to developing the area south of 27th Street.

Develop a pedestrian trail on the future park land south of the Legends at KU development.

Maintain the integrity of Clinton Parkway as an access restricted thoroughfare.
Future Land Use Options

Option 1

Inverness Park District Plan
Future Land Use

Legend

- Fu_land_use

- FuLanduse

- Low-Density Residential
- Medium Density Residential
- High Density Residential
- Civic
- Neighborhood Commercial
- Open Space
- Plan Boundary
- Water Bodies
- City Limits

1 inch = 634 feet

Date: 3/1/2011
Lawrence-Douglas Co Planning
Option 2

Inverness Park District Plan
Future Land Use

Legend
Fu_land_use
Fulanduse
Low-Density Residential
High Density Residential
Neighborhood Commercial
Open Space
Plan Boundary
Water Bodies
City Limits

1 inch = 634 feet

Date: 3/1/2011 Lawrence-Douglas Co Planning
Inverness Park District Plan
Future Land Use

Legend

Fu_land_use
Fulanduse

Low-Density Residential
High Density Residential
Neighborhood Commercial
Open Space
Plan Boundary
Water Bodies
City Limits

Pat Dawson Billings Nature Area

6 ac
5 ac
5 ac
2.7 ac
1 ac
25 ac

1 inch = 634 feet

Date: 3/1/2011 Lawrence-Douglas Co Planning

Option 3
Option 4

Inverness Park District Plan
Future Land Use

Legend
Low-Density Residential
High Density Residential
Civic
Neighborhood Commercial
Open Space
Plan Boundary
Water Bodies
City Limits

1 inch = 634 feet
Date: 3/1/2011  Lawrence-Douglas Co Planning
Option 5

Inverness Park District Plan
Future Land Use

Legend

- Fu_land_use
- Fulanduse
- Low-Density Residential
- High Density Residential
- Civic
- Neighborhood Commercial
- Open Space
- Plan Boundary
- Water Bodies
- City Limits

Pat Dawson Billings Nature Area

1 inch = 634 feet
Date: 3/1/2011  Lawrence-Douglas Co Planning
Future Land Use Option 1
On the large parcel south of 27th Street, are there really only 25 acres that are out of the flood plain?

Future Land Use Option 2
Same comment as above

Future Land Use Option 3
Same comment as above

Future Land Use Option 4
Same comment as above

Future Land Use Option 5
Same comment as above

Contact Info (optional): CharlesGettoLaw.com

cgetto@mvp

For more information visit: www.lawrenceks.org/pds/draft_plans
Future Land Use Option 1

The 2.7A parcel on the SEC of Clinton & Crossgate should be commercial.

Future Land Use Option 2

This is a good plan.

Future Land Use Option 3

The 0.85A parcels should be:

11 A of commercial & the SA parcel should NOT be commercial.

Future Land Use Option 4

Does the city have a plan for 2.7A of Civic?

Future Land Use Option 5

This is a good plan.

Contact Info (optional):

For more information visit: www.lawrenceks.org/pds/draft_plans
Inverness Park District Plan Meeting
Thursday, March 3, 2011
Written Comment Sheet

Future Land Use Option 1
Commercial at Clinton/Inverness is a bad idea.
Should be open space. All else looks good.

Future Land Use Option 2
Commercial at Clinton/Inverness is a bad idea.
Why do all options have to include it atClinton/Inverness commercial. There has to be more to consider for this area, or why are we

Future Land Use Option 3
Same except 5 more acres even considering a district plan? It should of high density is exactly what no one wants from.
not be a foregone conclusion that it should be commercial.

Future Land Use Option 4
Same as 1 & 2

Future Land Use Option 5
Same as 1 & 2

Contact Info (optional): Luke Sinclair 5incluke@gmail.com 785 865-3784

For more information visit: www.lawrenceks.org/pds/draft_plans
Inverness Park District Plan Meeting
Thursday, March 3, 2011
Written Comment Sheet

Future Land Use Option 1
No commercial on Inverness/Clinton

Future Land Use Option 2
No commercial on Inverness/Clinton

Future Land Use Option 3
No commercial on Inverness/Clinton
Really do not like the sac of high density residential

Future Land Use Option 4
No commercial on Inverness/Clinton

Future Land Use Option 5
No commercial on Inverness/Clinton

Contact Info (optional):
Lori Sinclair lucy333@yahoo.com

For more information visit: www.lawrenceks.org/pds/draft_plans
Future Land Use Option 1

No additional density for multi-family

Future Land Use Option 2

No additional density for multi-family

Future Land Use Option 3

No additional density for multi-family

Future Land Use Option 4

No additional density for multi-family

Future Land Use Option 5

No additional density for multi-family

Contact Info (optional):

Davis Loupe
785 832-0316 dloupeco@yahoo.com

For more information visit: www.lawrenceks.org/pds/draft_plans
Future Land Use Option 1
I worry about having medium-density residential right off of the roundabout. Traffic is already slow because of the fact that so many IU students speed around.

Future Land Use Option 2
Similar concerns as those I raised above with respect to traffic congestion at the roundabout just south of Clinton Pike/Crossgate.

Future Land Use Option 3
This strikes me as the most problematic plan, given my concern about traffic flow at the roundabout south of Clinton Pike/Crossgate. This and Option 2 are the least attractive, in my view.

Future Land Use Option 4
I suspect I like this plan the best (although 'like' may be too strong a word). I can say this though, assuming that 'civic' would not entail development that would generate much

Future Land Use Option 5
Here, too, I have concerns about traffic flow & congestion.

General comments: I am frustrated to see that all of the plans have areas designated for high-density residential where the #1 threat that came up at our first meeting was 'oversaturation' of multi-family. At the same time, I am really pleased to see this land south of 29th designated as low-density residential. That strikes me as being the most appropriate designation for that land.

Contact Info (optional):
For more information visit: www.lawrenceks.org/pds/draft_plans
and from the student apartments. I think that having residential right off of the roundabout would not only enhance the congestion but also pose some danger.

More traffic. If I am wrong about that, then (as you might expect) I would have the same concerns as those voiced above.

I am dismayed by the fact that these plans don't seem to mean much. I guess I wonder why you are investing all of this time & money on this process, when it's the case that the plans aren't at all binding.
Future Land Use Option 1

No high density Residential!
I would like to see more open space.
I am fine w/ Neighborhood commercial

Future Land Use Option 2

No high density Residential!
I like low density Residential south of 27th
More open space
I am fine w/ Neighborhood commercial

Future Land Use Option 3

No high density Residential!
I like low density Residential south of 27th
More open space
I am fine w/ Neighborhood commercial

Future Land Use Option 4

No high density Residential!
I like low density Residential south of 27th
More open space
Not sure if civic will work
I am fine w/ Neighborhood commercial

Future Land Use Option 5

No high density Residential!
I like low density Residential south of 27th
More open space
My favorite - still don't like 5 acres of high density!

Contact Info (optional):
Andrew Cooper 393-4392 decouge7@gmail.com

For more information visit: www.lawrenceks.org/pds/draft_plans
I am very interested in what was presented (Grocery Store Strip Mall) for the Inverness & Clinton Parkway.
Dan, 
In the last century a talented developer from Kansas City proposed a new urbanist plan for this entire 160 acres. In the middle of the tract facing Clinton Parkway was proposed a movie theater, a dry cleaner, a bank and several small shops such as Ann Taylor. The intersection with Crossgate was proposed as a restaurant and the intersection with Inverness was proposed as a day care center. The residential portion, behind the retail and service areas included apartments, townhomes and single family. The creek was donated to the City as part of a nature trail and pedestrian access from the residential to commercial areas was well planned. Unfortunately, the staff and planning commission was so opposed to any retail or restaurant that they insisted on more dense residential and residential/office (under the old Zoning Code) throughout the project. The more dense residential and residential/office was not opposed by the existing neighbors along Crossgate and Inverness. We missed an opportunity to have a true new urbanist development and now must try to salvage some of what we did insist on. I wish you good luck in trying to improve on what is there and getting an economically viable project. Thanks for the notice of what you are doing. Jane

Jane M. Eldredge  
Barber Emerson, L.C.  
1211 Massachusetts  
P.O. Box 667  
Lawrence, Kansas 66044  
(785) 843-6600  
(785) 843-8405 (facsimile)  
www.barberemerson.com  
jeldredge@barberemerson.com

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The Lawrence-Douglas County Planning Office is working on a district plan, a long-range future land use plan, which has been named the Inverness Park District Plan. A planning area boundary map is attached for your reference. This planning process will identify future land uses for the remaining undeveloped property within the planning area. The end result of this process is a document that the Planning Commission, City Commission, and County Commission will use to guide development when and if development occurs. The document will also allow existing and potential property owners to see what the long-range plan is for the area.

Information about this process, including a link to subscribe to future email notices about the plan, can be found at [http://www.lawrenceks.org/pds/draft_plans](http://www.lawrenceks.org/pds/draft_plans). As a stakeholder, your input is very important to the planning process and this is an opportunity for you to provide input on the plan. A public meeting to kick off the planning process will be held on **Thursday, January 20th from 6:30-8:00 p.m. at Southwest Jr. High School located at 2511 Inverness Drive**.

Visit our website at [http://www.lawrenceks.org/pds/draft_plans](http://www.lawrenceks.org/pds/draft_plans) or contact the Planning Office for information and to sign up to receive email updates. If you have any questions or comments regarding the plan, please contact me by phone at 785-832-3162 or email comments to dwarner@lawrenceks.org.

Thanks.

**Dan Warner, Long-Range Planner, AICP** - dwarner@ci.lawrence.ks.us
Planning and Development Services Department | [http://www.lawrenceks.org/pds/](http://www.lawrenceks.org/pds/)
City Hall, East 6th Street, PO Box 708
Lawrence, Kansas 66044-0708
785-832-3162. phone
785-832-3160. fax
Hello, Mr. Warner:

I am writing in response to your form letter of January 4, addressed to me as a "stakeholder" regarding the Inverness Park District Plan. I am sure that I have no stake in whatever mess the planning and development department is involved around my neighborhood.

I think I can speak for most, if not all, the homeowners on the Teal Drive cul de sac, when I say whatever the city is going to do, we fully believe that you could not give two craps about what we think. You ass clowns are just going to keep allowing substandard "student" housing to be constructed wherever. Much to the detriment of the young families in the neighborhood and then just move on to another open parcel of land you can ruin and so on and so on and so on. My teenage daughter has been accosted by the young men living in the new apartments off Inverness (by the school), so she no longer walks our dog because she feels unsafe. Hell, we rarely see the police (don't get me started about that).

Soon, my family and I will sell our home, at a huge loss, move to another area away from a city we love but from a city government we loathe.

So save the stupid letter which you only send because you are required by law and continue kissing the behinds of developers. So very sad.

My name is Jeffrey Alderman and I live at 4121 Teal Drive...now just delete this e-mail and move on with the rest of your pathetic job.
Dan Warner

From: Charles Getto [cgetto@mvplaw.com]
Sent: Monday, January 17, 2011 10:37 AM
To: Dan Warner
Cc: Jane Getto
Subject: Inverness Park District Plan

Dan,

Thank you for speaking with me last week. I greatly appreciate your time and helpful information.

As I mentioned, the Winifred and Paul Getto Limited Partnership intends to develop the property that it owns south of West 27th Street, either as a community of single family dwellings or for some use or uses.

Please let me know if you have any questions, comments or suggestions.

Thank you

Charles A. Getto
Attorney at Law
McAnany, Van Cleave & Phillips, P.A.
10 E. Cambridge Circle Drive, Suite 300
Kansas City, KS 66103
Direct Line: 913-573-3328
Main: 913-371-3838
Fax: 913-371-4722
cgetto@mvplaw.com

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Scott & Dan,
Thank you for taking time to meet with Tim Stultz and I last week to discuss the Inverness District Plan. Tim and I will be unable to attend the meeting Thursday night so he asked that I provide written comments to you for inclusion into the District Plan.
Tim recently requested a rezoning of the property located at 4100 W. 24th Place from RM15 to RM24. He believes that the RM24 zoning is an appropriate use of the property. His proposed plan is to add additional one-bedroom units to the property which will provide the 24 units per acre density. The proposed expansion will match the existing buildings on his property.
He asks that City Staff support this in the District Plan as the rezoning request currently has City Planning Staff support and a recommendation for approval. Additional reasoning was provided in the rezoning application that was submitted with the rezoning request.
If you have any questions or need additional information please let me know. Thank you.

David Hamby, P.E.
BG Consultants | Engineers, Architects & Surveyors
Phone: 785.749.4474 ext. 106
Cell: 785.331.5938
Fax: 785.749.7340
visit: www.bgcons.com
From: Brad Remington [bradrwsp@yahoo.com]
Sent: Tuesday, January 11, 2011 4:13 PM
To: Dan Warner
Subject: My neighborhood

Mr. Warner, I just wanted to drop a line letting you know my family and I are against any further multi-unit development south of Clinton Parkway between Crossgate and Inverness. We were told in the beginning this is not what this land was for and yet here we go. Time after time we have to fight these plans and shouldn't have to. How many apartments are enough? I am pretty in on the pulse of the complexes around town and know they are well below capacity as a whole. So, why more? On my way home from work, I pass several existing units that are not full, kids weaving in and out of traffic and tailgaiting me, not to mention the additional traffic to a school zone. Instead of building more have the owners update the ones that are existing to be more appealing.

A nice park, green area etc.. would be a great addition to that area. Please do not let this area be yet another mulit-unit complex, thanks for your ear.

Brad Remington, President
Wave the Wheat Pizza, LLC
Lawrence, Baldwin, Emporia, Overbrook
785-865-2323 (o)
785-550-1819 (c)
Dear Dan,

We are writing in reference to the Inverness Park District Plan, which is set for a kickoff meeting for the planning process tonight. We are sorry we are unable to attend the meeting, but we wanted to make our concerns known somehow. We have lived at 4400 W. 24th Place for a little over two years. Our home is on the northwest corner of the roundabout at Inverness and 24th Place. We are directly across Inverness from one of the open spaces that are a part of the potential district plan.

Our chief concern is for our property value and the appearances of our neighborhood. Whatever happens in terms of the plan, we desire to see that the land directly across the street from our home not be developed with either 1) commercial buildings (especially restaurants), or 2) high-density apartments like Remington Square, the Legends, and the Grove, all of which currently loom between Crossgate and Inverness, south of Clinton Parkway. We do not necessarily support or object to a district plan, but we prefer, for the sake of our and our neighborhood’s property values, that any development or district plan provide for something residential and something less extreme and dense than the apartment complexes which litter the land between Crossgate and Inverness from Clinton to 27th.

Thank you for your time and consideration, Dan, and we look forward to being involved in the future.

Luke & Lori Sinclair
4400 W. 24th Pl.
Lawrence, KS 66047
To the Planning Commission:

We are opposed to rezoning the Remington Place property to allow more apartments in this area. The property owners received a zoning change and built apartments with the foreknowledge that they would come back and request a higher density to build more apartments on this property. If they wanted RM24 zoning, why didn't they request it in the first place? The developers seem to be operating in bad faith asking forgiveness now instead of permission earlier, which sets an unfavorable precedent for future planning commission/development negotiations.

If there is one message the surrounding neighborhood has consistently and adamantly sent to the Planning Commission and the City Council it is, "No more apartments in the Inverness Park District."

Regarding the land between Clinton Pkwy and West 24th Place and between Crossgate and Inverness we support:

- RSO with buffer at Clinton & Inverness
- No increase in density or change in zoning for Remington Place
- Light commercial at Clinton and Crossgate
- RSO Crossgate and W 24th Pl
- SF Residential with open space south of W 27th Pl

Sincerely,
Craig and Terri McLaughlin
4431 Gretchen Ct.
Dear Planning Commissioners –
Please encourage Planning Staff to investigate Commercial Office zoning as a solution for the remaining vacant lots in the Inverness Park District Plan area, excluding the land south of W. 27th Street. Commercial Office does not allow multi-family development, and would provide a mixed use for the area. See email exchange for examples below...

Sincerely,
Jamie Hulse
4403 Gretchen Ct.

From: Jamie Hulse [mailto:jamiehulse@att.net]
Sent: Sunday, April 24, 2011 11:34 PM
To: lharris1540@gmail.com; cblaser@sunflower.com; bradfink@stevensbrand.com; larplancomm@sunflower.com; bculver@bankingunusual.com; rhird@pihhlawyers.com; charlie.dominguez@therenewgroup.com; MontanaStan62@gmail.com; kenziesingleton@hotmail.com; bruce@kansascitysailing.com; samd16@ku.edu
Cc: Dan Warner; Scott McCullough
Subject: Comments - Inverness Park District Plan

From: Dan Warner [mailto:dwarner@lawrenceks.org]
Sent: Monday, April 18, 2011 3:29 PM
To: 'Jamie Hulse'
Subject: RE: Comments - Inverness Park District Plan

PD is one of the zoning districts in the Neighborhood Commercial category description in the 1st draft. I haven’t talked to Scott and Sheila about the CO yet.

Dan Warner, Long-Range Planner, AICP

From: Jamie Hulse [mailto:jamiehulse@att.net]
Sent: Friday, April 15, 2011 7:41 AM
To: Dan Warner
Subject: RE: Comments - Inverness Park District Plan

Thank you for the information. Is there any reason why CO or a commercial PD restricting residential use would NOT make sense for the remaining vacant lots in IPD (excluding land south of 27th)?

From: Dan Warner [mailto:dwarner@lawrenceks.org]
Sent: Wednesday, April 13, 2011 3:26 PM
To: Jamie Hulse
Subject: RE: Comments - Inverness Park District Plan

Jamie,
There is some CO zoning around town. Not all of it is developed. The office building on the south side of 6th street just west of Folks is zoned CO. The medical building and credit union at 6th and Maine are zoned CO.

There are also office buildings around town that would fit the CO District. The office buildings on the southeast corner of Clinton Parkway and Kasold are examples. There is a medical office building on the west side of Kasold, a little farther south of Clinton Parkway that would fit. So would the office buildings along the west side of Wakarusa Drive between Harvard Road and Bob Billings Parkway.

I checked around and I don’t think we have any built commercial PD’s that restrict residential uses.

Thanks.

Dan Warner, Long-Range Planner, AICP
Great. Thanks.

The CO purpose in the development code states that the district allows freestanding office buildings as well as office parks.

CO allows some retail uses that aren’t allowed at all in the RSO. However, those retail uses are generally pretty limited – such as a restaurant can’t occupy more than 10% of the overall office development. At present I’m not sure we have anything zoned CO, so that is also something I’ll have to ask around about to see if anyone has an idea what would fit.

Dan Warner, Long-Range Planner, AICP

To save me a few minutes reading the code book – is CO large office buildings? Could you name some CO examples in Lawrence? It seems like that would be more neighborhood friendly, and similar to the current RSO.

Jamie,

I’m not sure how well the CO District fits with Neighborhood Commercial, but we’ll take a look at it.

I’ll have to do some checking on the PD question. I’ll hit up some of my co-workers to see if they know of any developments that compare.

Dan Warner, Long-Range Planner, AICP

Is there some reason CO wasn’t presented as an option as part of the district plan? I appreciate you adding in “Option 1 - Keeping things the same” as one of the 3 options, by the way.

Are there any examples in Lawrence of a PD with restrictions that would be comparable to the Inverness Park District area?
Jamie,
The RS (single-family) Districts, CO (Commercial Office) District, CR (regional commercial) District, OS (open space), and the IBP and IL industrial districts do not permit multi-family.

All other districts permit some level of multi-family, either outright or as part of a mixed use of nonresidential and residential uses in a particular development.

The PD (planned districts) can, through the rezoning process, restrict certain uses. City Commission approved conditional zoning also can do that, again through the rezoning process.

The city doesn’t have anything to do with deed restrictions so I’m not sure how effective that would be.

Dan Warner, Long-Range Planner, AICP

Thanks Dan. Could you answer these questions please?

What zoning would eliminate the possibility of any additional multi-family being built in this area? Would an overlay district accomplish this? Or is the only option to have a deed restriction in place?

Jamie,
Thanks for your comments.

We are going to present this draft to the Planning Commission on April 25th. In addition to presenting the draft, staff will present information at the meeting to help educate the Planning Commission, along with the public that attends the meeting, on the current zoning issues and future land use implications. Hopefully that will help makes things a little more clear for everyone.

Folks that still want to comment on the plan can do so by 10:00am on April 25th. They can email me those comments but they should address them to the Planning Commission. I’ll send a listserv message regarding the Planning Commission meeting today. I’ll also post on the web written comments received so far. Folks that have already commented are welcome to comment again.

Thanks.
Dan Warner, Long-Range Planner, AICP
Mr. Warner and Community Leaders,

Thank you for your work on this serious concern for our neighborhood. The overbuilding of apartments has caused several negative consequences for our family and neighbors. The increased noise, trash, traffic, reduced home value and a feeling of lack of security has put our family in a difficult position. The lawyer who wrote that the home values are not impacted by these items evidently has another agenda than the facts. Do we flee to our home as some of our neighbors have or do we let community leaders know our concerns? Thus far I have chosen to have our voice heard. I have attended several meetings and even brought my children to the planning meeting at Southwest Junior High. They ask why would any adult think it is okay to have even more apartments in such a small area, it is hard to give them reasons other than money for the owners. The same owners who do not clean up after their tenants leave litter around their property. When my children ask why there are beer bottles along the sidewalk it leaves a very negative impression of young people living in the various apartments. When my children ask what happened to the walking path planned along the creek bed, I realize they know we have been lied to again.

Please do they right thing and help get the word out to the community leaders.

Sincerely,

Dave & Heather Olson and children
4427 Gretchen Court
Lawrence, KS 66047
785)727-0525