Agenda
Work Session

BASEHOR CITY COUNCIL
February 1, 2010
7:00 p.m.
Basehor City Hall

1. Request from property owner at 14600 State Ave to allow archery deer hunting.
2. Emergency Snow Route Ordinance
3. Basehor Athletic Association – Field of Dreams
4. Time Clock Resolution
5. Amendment to Standard Traffic Ordinance (STO) – Drivers License Laws
6. Uniform Speed Limits
7. Executive Session (if needed)

MEMO

Date: January 14, 2010

To: Mark Loughry

From: Chief Lloyd Martley

Ref: Urban Deer Management Program

I have put together a package that if approved would allow for deer hunting with bow and arrow in our City Limits with certain restrictions.

The package contains a letter from the Kansas Department of Wildlife and Parks who are in favor of an Urban Deer Management program for our City, a Deer Hunting Information Packet that outlines what is required by a hunter and landowner for bow hunting to be allowed. There is also an ordinance, certificate of archery proficiency, deer hunting permit, release for the city and a release for the land owner. I have also included a copy of a manual for Deer Management programs from the Kansas Department of Wildlife and Parks which cover specific information about the advantages of these types of programs. There is also a flyer from the Kansas Hunters Feeding the Hungry with information about the advantages of deer management.

Patrick has prepared a new ordinance should this be approved.

If approved we will host an archery proficiency class and give a written test over our ordinance sometime during the summer. When hunting season rolls around land owners with a minimum of three acres will fall under the restricted rules and requirements for hunters they want to allow on their property.

I feel if adopted this plan would be safe and allow the Urban Deer Management program to help keep the population of deer at a safe limit and help reduce vehicle deer accidents along our roadways.

KANSAS
DEPARTMENT OF WILDLIFE AND PARKS

Mark Parkinson, Governor
J. Michael Hayden, Secretary

www.kdwp.state.ks.us

To: City of Basehor
2620 N. 155th
Basehor, KS 66007

From: Andrew Friesen
District Wildlife Biologist

Subject: Urban Deer Management

Date: January 6, 2010

Due the prolific nature of White-tailed deer (Odocoileus virginianus) and their potential destructive habit of feeding on plants and woody vegetation, it is essential that measures be taken to keep the abundance of this species in check. This is of specific concern in urban settings where the requirements of the deer, such as food, cover, and shelter, are readily met and where there are very few natural predators to keep the populations in balance. The competition for these easily available resources with in a city/refuge setting can often elevate deer numbers. Therefore, it is well within the biological framework to allow regulated hunting seasons for deer to help maintain their environmental carrying capacity, and work towards achieving a "social carrying capacity". By taking proactive measures to control the deer herd populations an effort can be made to reduce the occurrence of deer vehicle related accidents as well as decrease the damaging effects they can cause to ornamental and natural foliage.

Based upon my knowledge of your city property, it is my contention that an urban deer management plan would be appropriate for your situation. Trees and commercial crops are being damaged by browsing and rubbing. There is also damage to agricultural crop production adjacent to the immediate city boundaries. Kansas Department of Wildlife & Parks supports the development of an Urban Deer Management Plan for the City of Basehor Kansas that would allow for hunter harvest of this resource concern.

To most effectively manage deer numbers, it is recommended that harvest be concentrated on antlerless deer (does and fawns). The hunting activity would need to conform with state regulations and guidelines. However, your city can implement more restrictive requirements for management purposes. Individuals hunting with this potential program would need to possess a current hunting license (unless exempt by law) and proper deer permits, valid for this geographic area. Another stipulation of this program could be the submission of deer head samples to Kansas Dept. of Wildlife & Parks (KDWP) for CWD Testing.

KANSAS CITY DISTRICT OFFICE
8304 Hedge Lane Terr. Shawnee, KS 66227
(913) 422-1314 • Fax: (913) 422-1439

I'm looking forward to working with the City of Basehor to address your deer management concerns. Our office is located at 8304 Hedge Lane Terrace, Shawnee KS 66227 and my office phone number is 913-422-1314 Ext. 110.

Thank you for your interest in wildlife management and let me know how I can be of assistance to your city.

Sincerely,

Andrew Friesen

Andrew Friesen
District Wildlife Biologist
Kansas Dept. of Wildlife & Parks

POLICE DEPARTMENT

CITY OF BASEHOR

2620 North 155th Street, PO Box 420 Basehor, Ks 66007

DEER HUNTER INFORMATION PACKET

Thank you for your interest in the City of Basehor's controlled bow-hunting program. In this packet, you should find a copy of the City's bow-hunting ordinance, two legal releases and a copy of the deer-hunting permit. ***Please make sure you have read the material thoroughly.***

Next, you will need to attend one of the certification sessions. ***The certification sessions will be held in August (date, time and location TBA).*** At the certification sessions, you will be given a written test over the ordinance and an archery proficiency test. If you pass both tests and already have an approved property to hunt, you can obtain a city permit at the certification session as long as you have previously contacted the property owner and discussed hunting on their property and bring the following documents:

- Driver's License
- State Hunting License
- Kansas Deer Permit
- Completed Hunting Permit form including the property owner's signature
- Completed Archery Proficiency Form
- Release Form with your notarized signature
- Legal Release with your notarized signature
- Check or money order in the amount of $10.00

Additionally, these items can be mailed after the certification session to:
City of Basehor, Police Clerk, 2620 N. 155th Street, Basehor, Ks 66007

Items mailed must be notarized.

If you have any questions, please contact Lt. Robert Pierce at (913) 724-3397 or via e-mail at lt@basehorpolice.org. All of this information is available at the City's website, http://www.cityofbasehor.org

ORDINANCE NO. _____

AN ORDINANCE MODIFYING THE UNIFORM PUBLIC OFFENSE CODE TO ALLOW THE DISCHARGE OF A BOW AND ARROW FOR PURPOSES OF HUNTING DEER WITHIN THE CITY

WHEREAS, Section 10.6 of Article 10 of the Uniform Public Offense Code, adopted annually by the City, prohibits the discharge of any firearm within the City, including a bow and arrow; and

WHEREAS, the City has received requests from residents requesting that the hunting of deer with a bow and arrow be permitted on their property within the City to minimize damage to the property from an excessive deer population; and

WHEREAS, the Governing Body believes it is in the public's interest that an exception be made to Section 10.6 of Article 10 of the Uniform Public Offense Code so that property owners, under certain circumstances, be permitted to allow the hunting of deer on their property with a bow and arrow.

NOW THEREFORE, BE IT ORDAINED by the Governing Body of the City of Basehor, Kansas:

Section 1. The Governing Body hereby amends Article 2 of Chapter XI of the City Code to include a modification to the Uniform Public Offense Code to allow an exception to the prohibition against discharging a bow and arrow within the City:

ARTICLE 2. LOCAL REGULATIONS

11-206. EXCEPTION TO PROHIBITION AGAINST DISCHARGING BOW AND ARROW WITHIN THE CITY. There is hereby created an exception to the prohibition of Section 10.6 of Article 10 of the Uniform Public Offense Code that a bow and arrow not be discharged within the city, but such exception shall only allow the discharge of a bow and arrow for the purpose of target practice and/or the hunting of deer on specified property and upon issuance of a permit from the City of Basehor Police Department upon the following conditions and/or submissions:

(a) A Kansas Deer Hunting License and Kansas Deer Tag issued by the State of Kansas (the "State Permit").

(b) Only the owner of the designated property or persons with the owner's written permission shall be eligible to receive a City Permit to bow hunt or target practice.

(c) The application for a City Permit shall be accompanied by a copy of the State License, Deer Tag and an application fee of $10.00.

(d) Hunting and/or target practice shall only be by the person listed on the City Permit.

(e) No person shall make any payment to any person for the right to hunt or to be listed on the State License and City Permit.

(f) Persons shall at all times when hunting or target practicing, pursuant to the City Permit, carry a valid photo identification and a copy of the City Permit and State License.

(g) No arrow or other object used to hunt deer or target practice pursuant to the City Permit may be discharged or projected at such an angle or distance as to land on public or private property not described in the Permit. No hunting shall be allowed closer than 500 feet to the property boundary of school property which contains a school building. School for the purposes of this ordinance means a public school or an accredited non-public school during periods when students are in attendance or participating in school activities.

(h) Issuance of the City Permit may be limited to a time and area more restrictive than the State License allows.

(i) Any activity performed in conjunction with the issuance of the Permit, including but not limited to field dressing or other handling of carcass, must occur on the property specified in the City Permit. Entrails shall not be left on the property where the deer is killed.

(j) The transportation of a carcass along any public right-of-way, is prohibited, unless it is covered or hidden from public view.

(k) All hunting shall be conducted from an elevated tree stand that is at least 10 feet in height and faces the interior of the property. The tree stands and shooting lanes will be located in such a way as to direct arrows to the interior of the property and prevent any arrow from landing closer than fifty (50) yards to any property line. No hunting is authorized on parcels under 3 acres without a waiver approved by the City Administrator.

(l) No bow hunting will be allowed if any person that has been granted a State License and City Permit has consumed cereal

malt beverages, alcoholic liquor or any controlled substances two hours prior to hunting or during hunting activities.

(m) Bow hunting will be allowed one half hour before sunrise to one half hour after sunset.

(n) No City Permit will be issued to any person under the age of eighteen (18).

(o) It shall be the responsibility of a bow hunter to inform the Police Department by telephone that a wounded deer has left the property and to inform the Police Department of the deer's probable location. The hunter shall make an attempt to contact the property owner of any adjacent properties prior to entering that property to search for a wounded deer. It shall ultimately be the responsibility of the hunter to find and remove any deer that leave the property.

(p) An antlerless deer must be harvested before an antlered deer can be harvested.

(q) City Permits are not transferable.

(r) Failing to comply with the requirements or this Section may result in the denial of future permits.

(s) Each hunter who successfully harvests a deer will report the hunter's name, the sex of the animal and the location where harvested to the Basehor Police. This information can either be reported via telephone by calling (913) 724-3397 during normal duty hours Monday through Friday or by personally reporting to the Police Department.

11-207. FAILURE TO COMPLY; PENALTY. A violation of any of the requirements imposed by the foregoing Section 11-206 shall subject the permit to be immediately revoked by the Basehor Police Department, with an appeal to the City Administrator if requested by the permittee within 3 days of the revocation, and the landowner and/or person discharging, or intending to discharge, the bow and arrow to being cited in Municipal Court for violation of this Article, which violation shall subject the landowner and/or person discharging, or intending to discharge, the bow and arrow to a fine not exceeding $500 or be imprisoned not to exceed 180 days or be both fined and imprisoned. Each day during or on which a violation occurs or continues after notice has been served shall constitute an additional or separate offense. Violation of Section 11-206 is a Class C Public Offense.

Section 2. This Ordinance shall take effect upon its adoption by the City Council, approval by the Mayor and publication in the City's official newspaper.

Section 3. All Ordinances or sections thereof in conflict with the provisions of this Ordinance are hereby repealed.

Passed by the governing body this _____day of _____, 2010.

_____
Terry L. Hill, Mayor

Attest:

_____
Mary A. Mogle, City Clerk

APPROVED AS TO FORM:

_____
Patrick G. Reavey, City Attorney

POLICE DEPARTMENT

CITY OF BASEHOR

2620 North 155th Street, PO Box 420 Basehor Ks 66007

CERTIFICATE OF ARCHERY PROFICIENCY

Name of Applicant/Hunter (Please Print) _____ Date _____

Address _____ City _____ State _____ Zip Code _____

This certifies that the above named individual has successfully passed both the written examination and the archery proficiency test on the date listed above.

Signature of Archery Proficiency Staff _____ Date _____

Signature of Written Proficiency Staff _____ Date _____

Signature of Basehor Police Department _____ Date _____

POLICE DEPARTMENT

CITY OF BASEHOR

2620 North 155th Street, PO Box 420 Basehor Ks 66007

DEER HUNTING PERMIT

Name of Applicant/Hunter (Please print) _____ Date _____

Address _____ City _____ State _____ Zip Code _____

Age _____ Date of Birth _____

Signature of Applicant/Hunter _____ Date _____

Property Owner Name, Address, Phone number _____

Signature of Property Owner _____ Date _____

City of Basehor – Authorized Signature _____ Date _____

Fee Collected $10.00

Attach copy of:

1. Kansas State Hunting License
2. Kansas Deer Permit
3. Certificate of Archery Proficiency issued by Basehor Police Department

POLICE DEPARTMENT

CITY OF BASEHOR

2620 North 155th Street, PO Box 420 Basehor Ks 66007

RELEASE

WHEREAS, the City of Basehor, Kansas has adopted an Ordinance to provide for deer hunting in the City of Basehor with a bow and arrow; and

WHEREAS, the Ordinance provides regulations, restrictions and a permit requirement to be authorized to hunt deer in the city; and

WHEREAS, prior to being permitted to hunt deer with a bow and arrow the Governing Body requires a hold harmless agreement from each permittee to protect the City of Basehor from Liability claims.

NOW, THEREFORE, the undersigned permittee, in consideration of the premises recited herein agrees as follows:

1. The undersigned permittee agrees to hold the City of Basehor harmless from any claims arising out of all activities in connection with deer hunting in the City of Basehor for any and all injuries and damage that may be incurred by the permittee from any and all causes whatsoever.

2. The undersigned permittee further agrees to hold the City of Basehor harmless from any claims, demands, actions, causes of action or suits of any kind or nature whatsoever for any and all damages that may be made against the City of Basehor as a result of or arising out of the deer hunting activity in the City of Basehor by the permittee.

The undersigned further declares that he has read this release, also referred to as a hold harmless agreement and fully understand the execution of this agreement is condition to be eligible to obtain a deer hunting permit.

IN WITNESS WHEREOF, I have executed this agreement this_____day of _____20___.

_____
Signature of Permittee (Hunter)

STATE OF KANSAS)
) SS
COUNTY OF LEAVENWORTH)

BE IT REMEMBERED, that on this _____day of _____20_____ before me, the undersigned, a Notary Public in and for the county and state aforesaid came _____, who is personally known to me to be the same person who executed the foregoing agreement and such person duly acknowledged the execution of the same.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, the day and year last above written.

_____
Notary Public

My Appointment expires: _____

POLICE DEPARTMENT

CITY OF BASEHOR

2620 North 155th Street, PO Box 420 Basehor Ks 66007

HOLD HARMLESS AGREEMENT

WHEREAS, the City of Basehor, Kansas has adopted an Ordinance to provide for deer hunting in the City of Basehor with a bow and arrow; and

WHEREAS, the Ordinance provides regulations, restrictions and a permit requirement to be authorized to hunt deer in the city; and

WHEREAS, prior to being permitted to hunt deer with a bow and arrow the Governing Body requires a hold harmless agreement from each permittee to protect the City of Basehor from Liability claims.

WHEREAS, the permittee in return for permission to hunt on the landowner's property desires to protect the landowner from liability.

NOW, THEREFORE, the undersigned permittee, in consideration of the premises recited herein agrees as follows:

1. The undersigned permittee agrees to hold the landowner harmless from any claims arising out of all activities in connection with deer hunting on the landowner's property for any and all injuries and damage that may be incurred by the permittee from any and all causes whatsoever.

2. The undersigned permittee further agrees to hold the landowner harmless from any claims, demands, actions, causes of action or suits of any kind or nature whatsoever for any and all damages that may be made against the landowner as a result of or arising out of the deer hunting activity on the landowner's property by the permittee.

3. The property is commonly known as _____ and the landowner to be held harmless,
   (Address)
   i.e., free from any liability claims as a result of the permittee hunting deer on the property is

   _____
   (Owner /tenant/occupant)

IN WITNESS WHEREOF, I have executed this agreement this_____day of _____20___.

_____
Signature of Permittee (Hunter)

STATE OF KANSAS)
) SS
COUNTY OF LEAVENWORTH)

BE IT REMEMBERED, that on this _____day of _____20_____ before me, the undersigned, a Notary Public in and for the county and state aforesaid came _____, who is personally known to me to be the same person who executed the foregoing agreement and such person duly acknowledged the execution of the same.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, the day and year last above written.

_____
Notary Public

My Appointment expires: _____

A MANUAL FOR DEER MANAGEMENT IN URBAN AND SUBURBAN AREAS OF KANSAS

KANSAS DEPARTMENT OF WILDLIFE & PARKS

Steve Williams
Secretary

Prepared by:
Lloyd Fox
Big Game Program Coordinator

Jim Kramer, Director
Fisheries & Wildlife Division

Keith Sexson, Asst. Secretary
Operations

January 2002

Deer are a common wildlife species widely distributed throughout the state and Nation. None of the species or subspecies of deer that occur in Kansas are endangered. Deer are not at risk of being over harvested, but there are problems developing as a result of overabundance.

Two species of deer occur in Kansas. The white-tailed deer is found throughout the state, but occurs in greater numbers in the eastern portion of the state. It is a species with a broad tolerance for habitat conditions. Mule deer occur primarily in the western third of Kansas. They are adapted to open spaces, frequently being found in shortgrass prairies, but have been known to inhabit urban areas in states north and west of Kansas. At this time mule deer do not pose a problem in Kansas communities.

White-tailed deer are an adaptable animal capable of living in a variety of locations and using a variety of plants. They prosper in remote forests, swamps, grasslands, and areas dominated by agriculture. While once absent from suburban areas, deer were not prevented from using these areas because of habitat requirements or because suburban areas lacked sufficient forage for deer.

Deer adapt their activities so that they are able to obtain the resources they need with a minimum of exposure to danger. Their home range requirements may be satisfied within areas as small as a quarter of a square mile. Biologists frequently describe portions of a deer's home range as the "core" activity center, and these areas may be as small as 10 acres in suburban areas (Kilpatrick and Spohr 2000). Deer adjust their activity periods with an emphasis on using low light time periods. In Kansas there is a peak in deer related vehicle accidents approximately ½ hour before sunrise and ½ hour after sunset.

Deer populations at this latitude and under the soil fertility characteristics of the Midwest are capable of rapid increases in abundance. White-tailed deer have a higher reproductive potential than mule deer. Female white-tailed deer (does) can conceive at six months of age. Generally less than half of the deer of that age give birth, and frequently they have only a single fawn. By the time a doe is 1 ½ years old or older the reproductive rate increases with 90% or more of the does producing fawns with many having twins or triplets. The reproductive rates of mule deer are generally lower and they tend to reach maturity at an older age.

The increase in the deer population is a predictable consequence of policies and actions taken by people. In urban areas, people have established greenways and parks in their cities. They have planted trees, shrubs and herbaceous cover (including small agricultural fields within some city limits), which are highly attractive to deer. People have eliminated the deer's natural predators. People have limited the potential impact of their domestic predators (dogs) through leash regulations and control of stray dogs. People in urban areas have also enacted ordinances prohibiting the discharge of firearms and archery equipment, the typical means used to control deer in rural areas. The habitats people provide and the protection and sanctuaries people create

have been ideal for the growth of deer populations.

The deer populations in urban and suburban areas of Kansas have increased dramatically since the 1970's. The result of this population increase has been a marked increase in deer-vehicle accidents and public discontent over deer. The deer herd in Kansas is far below its potential. Therefore, unless action is taken, the deer population will continue to grow and the damage and negative aspects caused by deer will increase.

Deer Population Dynamics

Population dynamics for deer herds is the process of change in numbers of deer through time. There are annual changes and longer term trends. Each year in May and June female deer give birth to 1-3 fawns. After this birth season the deer population reaches its highest point of the year. As the year progresses, animals die and just prior to birth season the next year's population will be at the low point in the annual cycle. The change in number of deer present at the same time in subsequent years is a reflection of the population growth rate.

White-tailed deer can be a long-lived species with some individuals living more than 12-15 years. Under suburban situations an annual survival rate may range from 0.80 to 0.90 (Swihart et al. 1995). These high survival rates ensure that a deer herd will remain high for a long period of time even if it could somehow be limited from recruiting new members.

Citizens frequently gauge the deer population on a small number of deer that they see at one time. People have difficulties comparing their observations to population trends. People who observe deer that have been killed in vehicle accidents in the autumn may think that the deer herd suddenly increased. They may not realize that the increase in the accidents is a function of deer movement and behavior during the fall breeding season. They may not recognize that the young deer have been in the population since the previous June and the older deer have been there from previous years. People who observe deer in winter feeding groups may believe that deer suddenly immigrated to their area or a sudden increase in deer numbers has occurred. People may have difficulties understanding that these concentrations of deer represent the same animals they saw the previous summer that were scattered in small groups over a wide area. These changes in deer concentration and their visibility by people cause difficulties in explaining the true trends in the deer population.

Birth and death rates must be balanced or the population will increase or decrease depending on which factor dominates. In a natural setting the population would reach biological carrying capacity (BCC) at a point where the deer herd consumed so much of the vegetation that the members of the population would be unable to obtain enough energy to grow and reproduce at their potential. In areas with high soil fertility, the deer density could be extremely high before BCC is reached. That density might be as high as 150 deer per square mile.

The number of deer in an area can also increase in a short period of time. Studies of deer populations within large areas fenced to prevent immigration and emigration have shown that deer populations may grow from a few pairs of animals to densities more than 100 deer per square mile in five to six years. For example, at the George Reserve, a 1,146 acre fenced area in Michigan the deer population increased from 6 deer in 1928 to a minimum estimate of 160 animals that were counted at one time in 1933. The actual number of deer present inside the fence at that time was probably closer to 220 animals (McCullough 1979). That population growth pattern was not unusual. In 1975 the deer population inside the fenced area was reduced to 10 deer. By 1980 the population had grown to 212 deer (Halls 1984).

Deer habitat potentials in much of Kansas are superior to those in Michigan. Therefore the number of deer that may develop in a population is potentially greater in Kansas than in the Michigan example. Long before those densities are reached, a cultural carrying capacity (CCC) will undoubtedly be reached in most urban areas. This is the number of deer that can compatibly coexist with a local human population.

Ecologists theorize various relationships between deer populations and plant and animal communities (including diseases). The concept of BCC has been modified to include multiple possible levels (alternate stable states (Stromayer and Warren 1997) as a result of deer modifying their environment or the influence of predators, and alternate prey (Mech and Karns 1977)). These theories are complicated, and their empirical base is weak, yet these types of complications may dominate public discussion on how to handle a deer population problem in a city.

Community administrators should understand that neither BCC nor CCC is a static point. Environmental conditions change, for example when natural vegetation is removed in a suburban area, as when residences, factories or commercial properties are developed, the resulting BCC may be lowered. A foreign disease may be introduced that resets the BCC to a new level. Community tolerance also changes through time. The values people place on the deer population change with the benefits and liabilities people encounter, and with the experiences people have with deer.

Population stability will occur naturally at some deer density. This is when the birth rate is equal to the death rate and the population growth rate becomes zero. The number of deer present at that time is considered the BCC. The exact deer density where this would occur naturally in urban areas of Kansas is unknown. Undoubtedly it is many times higher than our current population. We therefore cannot expect the deer herd to remain at a stable level or decline from its current level unless mortality or natality (birth) rates are changed.

A frequent question raised by concerned citizens is the adequacy of our current data on deer populations. Many people wish to have an exact census of the deer herd, and a precise description of where they are, their association with other deer, how many offspring they produce, where they travel, what they eat, etc. While these items are interesting, they may be impossible to obtain given the scale of most urban deer projects, and their budget and time

constraints. Focusing at this level of deer management can detract attention from other issues, such as the effect of the deer population on human safety, economic impacts on people, and ecological effects on vegetation and assembly of other wildlife species dependant upon that vegetation.

Local models to monitor population dynamics of deer can be cost prohibitive to develop. Data requirements involve a substantial investment in staffing with skilled technicians. The process is also time consuming. Generalized data are frequently used in preliminary models.

Deer Mortality Factors

The major factors contributing to deer mortality in North America are regulated hunting, weather (generally severe winter weather in northern parts of the United States and Canada), predation, poaching, accidents (deer getting caught in fences, hit by vehicles, etc.), and diseases. Winter weather is seldom a significant mortality factor at the latitude of Kansas. Natural predation on adult deer in urban areas is almost nonexistent. Releasing large efficient predators like wolves, mountain lions and bears in a suburban area is an option few urban residents or wildlife managers would support. Medium sized predators like coyotes and bobcats occasionally occur in Kansas suburban areas, but their predation is mostly on fawns and seldom sufficient to control deer populations.

Illegal hunting activities occur even in cities. This inappropriate human behavior is unacceptable, but not a significant influence on most urban deer populations.

Diseases can have a significant impact on deer populations at times, but diseases are unpredictable and almost never a long-term control factor for populationsl. Relying on disease to maintain deer populations will result in numerous years where the deer population will be substantially higher than public tolerance will allow and will give many people the impression that no action is being taken to alleviate their problems. Opinion polling shows that the health of a deer herd is one of the public's concerns (Stout et al. 1997). Relying on disease to control deer populations, even if it were effective, would not be an acceptable approach that most people would support.

Vehicle accidents with deer are a significant source of mortality in herds within urban and suburban areas. These accidents will not maintain a deer herd below carrying capacity. Road designs, speed limits and traffic volumes coupled with available deer habitats may influence the number of vehicle accidents. However, under no circumstance should vehicle accidents be considered a method for controlling deer numbers. An objective of most urban deer management plans should be to minimize vehicle accidents with deer.

Wildlife related vehicle accidents will always be a problem as long as there are free ranging large animals that have access to public highways. The magnitude of this problem has increased

dramatically throughout North America in the last 50 years. Nationally there have been over 500,000 accidents that resulted in $1.2 billion/year in property damage and human injuries in recent years. The situation in Kansas is typical of this region of the country, however, the rate at which deer related vehicle accidents have increased in Kansas has caused a great deal of attention to be focused on deer related accidents.

Kansas Department of Transportation has maintained consistent accident reporting efforts through the years. During the period from 1990 through 1999 there have been 69,913 deer related vehicle accidents in Kansas. The vast majority of these accidents occur without fatalities to people (99.98%) or injury to people (99.84%). However, there have been 14 accidents during that period that resulted in human fatalities and 2,223 accidents where people have been injured. Using values obtained from the U.S. Department of Transportation, it is estimated that these accidents resulted in an average cost of nearly $29 million per year during that 10-year period.

Suburban counties in Kansas suffer a higher number of deer related vehicle accidents than rural counties. Trends in these accident statistics suggest that greater damage and expenses will occur in the suburban areas unless action is taken to reduce deer related vehicle accidents. KDWP and KDOT have prepared a plan to reduce deer related accidents. The implementation of the plan will require cooperation from municipalities in deer management and traffic safety issues.

Regulated deer hunting allows people to use the meat of the harvested animals. Hunting can be highly regulated and even used in areas with a high human population. For example, on Fort Leavenworth deer hunting is allowed only by a select group of people, and these people are assigned specific treestands from which they must conduct their hunting. In other settings, the equipment may be highly regulated. For example, in Bismarck, North Dakota the urban deer hunters are restricted to only archery equipment.

Regulated hunting offers the most cost-effective method of deer population management. The cost of equipment is paid by the participating hunters. The time, effort, and motivation are supplied by the participant's desire to harvest a deer, not wages or contract obligations. Deer hunting has an excellent safety record. It is an efficient means of reducing deer numbers either in a localized area or in a broad geographic region. The intensity of the hunting activity can easily be modified by changing the number of people authorized to hunt, or the number of days when the activity is allowed. Hunting has an advantage of being able to apply pressure to the deer population at sites where problems occur.

Regulated hunting has been conducted in KS since 1965. In recent years the deer population has increased and the Department has modified the hunting programs to address this situation in a proactive manner. However, to understand where we may need to go with urban deer management in Kansas, it will be helpful to examine some of the programs and mistakes that have been made in deer management Nationwide.

The major emphasis of most regulated deer hunting programs in most states has been directed at

deer populations in rural areas. Historically, hunting systems were omitted or excluded from urban areas because few deer existed in or even near urban centers. That is not the case today. Historically hunting systems focused on the male component of the population (bucks were the only legally hunted deer in most states from 1900 to 1960). This lead to deer population expansion but difficulties in obtaining public acceptance for the harvest of female deer even after the herd exceeded public tolerance levels. There is a tendency for some people to think that because public hunting has not been conducted in an area for many years that it cannot be instituted now. The history of excluding deer hunting from certain areas, including large National Parks and suburban areas, has lead to difficulties in applying the most cost-effective and efficient management tool.

The deer management program in Kansas has avoided the problem of establishing buck only hunting seasons as the norm. It has been much easier to control deer populations in Kansas than in many other states. There are few public areas in the state where sanctuaries were developed for deer. Thus, we avoided another potential source of entrenched deer population centers that could create local difficulties. However, we have yet to address management issues that could develop in suburban areas.

Urban leaders contemplating a regulated hunting program should realize that their actions are part of a larger program in Kansas to control deer populations. KDWP recognized the trends in deer population growth and has already taken substantial steps to address the situation. The total number of permits to hunt deer has been increased from 81,693 in 1994 to 135,497 in 1998. Not only has the total harvest been increased dramatically, but the effect of the harvest to the deer herd has been changed to increase its impact on future deer population growth. This is done primarily by encouraging hunters to take more antlerless deer. Only 11,055 antlerless only permits were issued in 1994. By 1998 those classes of permits had been increased to 48,432. Coupled with the increase in the number of permits there has been an extension in the length of the season, greater flexibility given to hunters on the use of their permits, greater convenience in obtaining a permit, and economic incentives for hunters to take antlerless deer.

Different equipment and hunting techniques allow hunters to have different efficiencies. That influences the effect of the hunting in shaping the resulting deer herd. Knowledge of these factors helps in designing a deer management program for a specific area or group of people. The most effective hunting equipment authorized for Kansas deer hunters are center-fire rifles. Approximately 65% of the permits that allow a hunter to use a center-fire rifle are successfully filled. In comparison, about 50% of the permits that restrict the hunter to muzzleloader equipment, and 35% of the permits that restrict the hunter to archery equipment are filled. One of the techniques used by KDWP to increase the efficiency of deer hunters in rural areas of the state in recent years has been to change regulations and allow hunters with permits for these less efficient equipment types to use center-fire rifles during an extension in the season when only antlerless white-tailed deer may be taken.

Hunter convenience is an important consideration in recruiting and maintaining deer hunters. As

the deer herd in Kansas grew, changes were made in the procedures that hunters followed to obtain a permit. From 1965 to 1987 all hunters were required to obtain a permit through an application process and lottery drawing system. The application deadline was set in mid July. Today there are numerous permit types that are unlimited in total number and also conveniently available at over-the-counter locations until the day before the end of the season.

Permit price influences hunter participation. Most hunters want a permit that will allow them to harvest an adult buck deer. They prefer a permit that gives them the flexibility to take a buck but also harvest an antlerless deer if they cannot find a buck in their hunting area. This permit type is called an "Any Deer Permit" or a "White-tailed Deer, Either Sex Permit" in the Kansas system. The least preferred permit type is one that restricts the hunter to only antlerless deer, or an antlerless white-tailed deer. Those permit types are the ones that are most effective in controlling the deer herd and its growth rate. To encourage hunters to take these deer instead of adult bucks, or in addition to an adult buck, KDWP created Game Tags. Game Tags restrict the hunter to take only an antlerless white-tailed deer, but they are available over-the-counter, can be used during any season with the equipment authorized during that season, and at 1/3 of the price of a regular permit to hunt deer.

Manipulating the age structure and the gender composition of a deer herd to ensure that trophy class deer occur in a local population is one means of increasing hunter participation. However, that type of management sends mixed signals to the non-hunters in the community. Many people may not appreciate the balance between attracting hunters to remove sufficient deer from an area to meet the community's established levels for tolerance for deer and producing "trophy" deer for those hunters. For this reason deer hunters in urban and suburban areas should be encouraged to participate because of season dates, permitting conveniences and tag prices designed to recruit and retain hunters without the enticement of the area being managed for trophy deer.

Until recently, suburban deer herds contributed little to the statewide deer population and posed only minor safety problems. It was not necessary to consider urban areas in the management prescription for statewide herd control.

Legal Considerations

A generalized, and Nationwide framework of legal considerations for managing deer in an urban setting is presented by Messmer et al. (1997). This reference is useful in understanding legal implications of proposed plans. However, variations in laws and regulations between states and within a particular municipality will require an individual review process. People occasionally seek financial compensation for damages caused by deer and other wildlife. Courts have generally ruled that wildlife is owned by the public, but government agencies hold and manage the deer in public trust and therefore, are not liable for damages they may cause (Musgrave and Stein 1993).

Kansas law recognizes public ownership of wildlife. K.S.A. 32-1002 states that:

> "Unless and except as permitted by law or rules and regulations adopted by the secretary in accordance with K.S.A. 32-805 and amendments thereto, it is unlawful for any person to hunt, fish, furharvest or take any wildlife in this state by any means or manner."

Kansas statutes established that management of deer in Kansas is the responsibility of the KDW&P. K.S.A. 32-702 states that:

> "It shall be the policy of the state of Kansas to protect, provide and improve outdoor recreation and natural resources in this state and to plan and provide for the wise management and use of the state's natural resources, thus contributing to and benefiting the public's health and its cultural, recreational and economic life. For these purposes, the secretary, the commission and the department are hereby vested with duties and powers hereinafter set forth."

These are broad powers that invariably require cooperation between municipalities and the KDWP for most urban deer management. Most deer management plans that involve lethal control or harassment of deer will require permits, and some experimental techniques may require additional regulatory authority. However, many options for deer population control are covered under existing regulations. In many case, people have been issued permits that would allow them to participate in deer control programs, even in urban and suburban portions of the state.

K.S.A. 32-937 establishes the framework and definitions used in the big game permit system. A series of regulations is established for each big game species. For example, K.A.R. 115-4-5 establishes the equipment and methods of take that are authorized for deer. K.A.R. 115-4-6 establishes the deer management unit boundaries. Eighteen major deer management units encompass the state. Three additional subunits pertain to military areas. Season dates, bag limits and permit application dates and procedures are established in K.A.R. 115-25-9. Actual permit numbers by permit type and deer management unit are revised annually and established by Secretary's Orders. This system of laws, regulations and procedures, and their predecessors, contributed to a successful big game management program. Special seasons established under K.A.R. 115-25-10, are set separately from the regular deer season, with the intent to achieve additional harvest of antlerless deer above that obtained during the regular season. Special seasons have been used in the Reno-Harvey county area and in the Chautauqua Hills Management Unit.

The Kansas Wildlife and Parks Commission enacted regulation K.A.R. 115-16-4, which authorizes the secretary to issue big game control permits. Thus providing landowners with a legal means of controlling deer that are found destroying property or creating a public safety hazard. The regulation also allows the Department to authorize a permittee to possess and use the carcass of deer killed in defense of property.

Aggressive deer management measures have been adopted in response to public concerns about

the extent and growth of deer populations in Kansas. The primary initiative has been focused on reducing the number of white-tailed does in the population, and shifting the characteristics of the female component of the population to a younger age structure.

Local Ordinances on Weapons

Public ownership of wildlife and wildlife management authority established at the state level of government does not prevent municipal governments from enacting ordinances prohibiting the use of certain weapons commonly used to kill deer. Messmer et al. (1997) pointed out in their Nationwide review of legal considerations that, "no state (referring to the state's wildlife management agency) has pushed the hunting option when communities opposed it. In all cases, the decision to implement a lethal, population reduction program in an urban area was entirely the community's."

The KDWP administers a variety of permit types that could be used to control deer populations. These permits are provided in an environment free of barriers that would prevent incorporated areas from addressing deer problems. The KDWP will also provide advice to cities to create an effective deer management program.

Hunting by private citizens is the most cost effective means of controlling deer populations. Activities that involve citizens in the actual control process also generate and maintain support for the management. Citizen hunters generally use their own equipment and volunteer their time in the efforts. In return they are rewarded by such things as the deer meat, which supplements the family's meat supply. Citizen hunters also participate in urban and suburban deer population control because they feel rewarded from helping to solve a community problem.

Local ordinances prohibiting the use of weapons in urban, and suburban areas and large publicly owned natural parks and watersheds that are protected from hunting frequently create sanctuaries for deer. This in turn allows deer populations to increase above the level that would occur if hunting was permitted and regulated.

Ordinances prohibiting the use of weapons commonly used in deer hunting are generally supported in urban areas for public safety purposes. They were frequently written during periods when deer population control was unnecessary. Generally they do not have provisions to allow the use of weapons under special circumstances. Most municipalities would need to modify their ordinances before they could authorize various deer management options.

Public safety may necessitate additional restrictions on the use of weapons in urban and suburban areas that may be unnecessary in rural area. Safety issues may be addressed through restrictions on equipment itself or with special requirements on the techniques that may be used. For example, some urban areas have changed their ordinances to allow archery equipment to be used in certain parts of a city during the archery deer season, or a portion of it. Other options might

include provisions to authorize specific individuals to use a specified weapon type during KDWP permitted control activities. For examples, local ordinances could create a city permit for the use of specific weapons that would be issued to individual landowners of contracted sharpshooters after they had obtained a permit from KDWP for deer control activities. A weapons permit might also specify a specific shooting blind site and field of fire, i.e., it specifies where the person must stand, the equipment they may use and even the limits where shots at deer may be taken.

Some of the concepts that should be considered in these ordinances are:

1) The issuance of deer permits would be under the authority of the KDWP, but the issuance of a weapons permit within the city jurisdiction would be under the authority of the city.

a) The local law enforcement agency should have authority to review and approve weapons permits, if they are not responsible for issuing them.

b) The local law enforcement agency should have authority to revoke a weapons permit for public safety concerns.

2) Weapons permits authorizing people to use specified equipment for deer control purposes should designate the equipment restrictions, time and dates of possible use, and other limitations placed on the permittee.

3) The ordinance should specify that all state laws and regulations pertaining to the taking of deer shall be followed.

4) If a fee is required for the weapons permit, it should be low enough that it does not hinder participation in deer control activities. For example, deer control permits issued to rural landowners who are suffering damage, have been provided at no cost to the permittee, while hunting permits vary from $10.50 to $30.50. We suggest that fees be commensurate with administrative costs.

5) If citizens are authorized to participate in deer hunting or control activities, it is important to include incentives that will maintain their effort. For example, many people will harvest a deer if they are allowed to keep the meat from the deer for their own use. Requirements that the meat of these harvested deer be donated to food banks or civic organizations may decrease citizen participation. Some organizations may be unable to accept meat from wild animals that has not been certified by a health inspector.

6) Sufficient flexibility should be written into the ordinance to allow the permittee to use more effective techniques if the desired population control cannot be obtained with the restrictions on equipment and periods initially attempted. It is generally easier and

quicker to change the restrictions on the weapons permit than it is to rewrite the local ordinance.

One of the pitfalls in urban deer management using citizen hunters as the control agents is that the focus of the activity may shift through time. This approach is initiated as a means of controlling deer numbers. Through time there may be pressure to change the emphasis of the program to recreation or even quality hunting opportunities.

KDWP personnel are available to provide city administrators with a review of deer population levels and to confirm deer damage. KDWP personnel are also available to review and provide guidance on the development of local ordinances.

Public Perception of the Deer Population in 1996

Public perceptions will drive most deer management decisions in urban areas. Like their rural counterparts, most urban residents want some deer in their surroundings. Conover (1997) conducted a Nationwide survey of metropolitan residents and obtained a comparative rating of the population level these people desired for various species of wildlife. Deer fell in the middle of the list of species. Species like hummingbirds, cardinals and American robins were highly desired with more than 50% of the people wanting more of these animals. Species like mice, moles, pigeons, and skunks received little support from people for higher populations. Less than 5% of the people wanted more of these species and 35-60% wanted fewer of them. Deer were the top mammalian species with 27% of the people wanting more of them, 63% wanting the same number as they currently had, and 10% wanting fewer deer (Conover 1997).

Perception of the deer population and the damage it causes depends on a person's connection with the deer resource. Typically the people who benefit from deer, like hunters, observers, guides, etc. want more deer, while the people who have been damaged by deer, like gardeners, farmers and motorists involved in accidents with deer want fewer deer. Since 1964 the KDWP has monitored rural landowner opinions about deer populations. Landowners with damage they believe to be caused by deer want fewer deer than landowners who do not have that damage.

Public misunderstandings about deer are common. Texans boast that they have the largest population of deer in North America, yet surveys of Texas third-graders revealed that 60% of those students believed that deer were an endangered species (Higginbotham 1994). That level of misunderstanding can lead to substantial difficulties when programs to reduce or control deer populations are discussed.

An integral part of urban deer management will be obtaining and maintaining the informed consent of the constituents. Deer are a favorite species for urban residents. Management plans that people perceive as detrimental to deer and the values they enjoy with deer, may meet strong opposition.

DEER MANAGEMENT OPTIONS

Frequently people think of deer management options as either nonlethal influences on the population or environment, lethal controls on the existing members of the population, or cultural practices to change the human tolerance for the current deer population. In this manual we will discuss techniques following that outline. Occasionally these options are thought of as mutually exclusive approaches. However, a full management plan for an urban area may incorporate aspects of many types of options and approaches.

Management alternatives need to be examined not only from the emotional level, but also from their place on a scale of practicality. Techniques with a history of success and effectiveness under operational conditions should receive higher consideration for incorporation into a plan than unproven techniques, no matter how appealing the unproven technique may appear. Testing the effectiveness of techniques is a subject of research, not part of an application.

Assessment of management alternatives varies depending on the number of deer that will be handled in a certain operation or area. There are economies of scale factors to consider. One technique may be adequate in one situation but impractical in another. The amount of effort required to remove each animal should also be considered. The total cost of a project must include the cost of the continual population maintenance after the desired level is reached. It may be necessary to consider not only the initial cost of a technique but also the incremental costs. Frequently the first animals removed from a population, or treated in some manner, are much easier to handle than subsequent animals. However, unless the necessary total number of deer are handled in a prescribed time period, the whole project may fail. These time and cost aspects of options will have a major influence on deer management options.

The following sections are narratives of options for deer management. Appendix A contains an outline information about the techniques that may aid in direct comparisons.

Nonlethal Influence on the Population

This set of practices is generally the first choice of urban citizens. They are selected because the public frequently places a high importance on minimizing the suffering of deer. People that have had few negative interactions or have not experienced high deer densities, generally place a higher importance on minimizing suffering of the deer than people with personal experience of a negative nature with deer. People who have had negative interactions with deer, for example a vehicle accident with a deer, or have suffered damage to their ornamental plantings, tend to support techniques that are rapid and efficient. People who have been involved in deer hunting in rural areas tend to support harvest techniques to control deer numbers in urban areas.

All nonlethal control measures have no immediate impact on the existing population size and

thus provide no immediate remedy to the potential destructive aspects of a deer population. Nonlethal means may transfer the problems to other locations, delay the negative effects of the deer population on people, or change the future growth potential of the deer herd.

Some manuals on management of suburban deer populations include trap and translocate among the nonlethal techniques. We have not included it as a nonlethal method because of the high mortality associated with the technique. That mortality occurs as a result of accidents during the capture event, deaths shortly after capture due to a stress induced problem called capture myopathy, and deaths at the release site as a result of the deer being unfamiliar with site factors. Problems associated with relocation efforts could include difficulties in finding suitable locations to release deer at a time when available deer range is already occupied and population controls are being intensified statewide. There are also uncertainties about the potential of spreading disease as a result of moving deer from one location to another.

In the broadest sense this technique includes a variety of trapping methods from small single deer net traps and wooden box traps to large rocket nets that are propelled with rockets over a herd of deer. It may include specially designed guns that propel a net around a deer. That technique is generally associated with helicopters and a ground crew to wrangle the deer. Trap and translocate has also been used to include chemical immobilization of deer with chemicals delivered with a drug gun.

Trapping of deer will be briefly covered as a lethal means to lower deer densities under the section on paid control agents.

The four nonlethal control techniques most frequently suggested are as follows: 1) a mechanical means of separating deer from places people use; 2) repellents; 3) habitat manipulations; including supplemental feeding; and 4) fertility control agents.

Mechanical Methods

People are much more tolerant of deer if the deer can be restricted to areas where they will have a minimal opportunity to adversely effect people. Mechanical devices are frequently suggested. For example, if vehicle accidents with deer are the main problem, and accidents are occurring in established corridors, fencing may be used to keep the deer from crossing the roads in those areas, or to direct the deer movements to underpasses or other safe crossing sites. A summary of deer - vehicle collisions and various attempts to mitigate these problems are covered by Romin and Bissonette (1996) and in a 65 page unpublished project prepared in 1995 for the Michigan Department of Transportation.

There are no inexpensive and effective mechanical techniques currently available to reduce deer vehicle collisions. Devices such as warning whistles attached to vehicles, and reflectors placed along roads have proven ineffective (Romin and Dalton 1992, and Gilbert 1982). Deer crossing signs, including animated and lighted signs (Pojar et al. 1975) have been unsuccessful in

maintaining driver vigilance at known deer crossings.

Electric fences are frequently used in rural areas to reduce deer use on an area. They have an advantage over high woven wire fences, as they are relatively cheap and easy to install. Many urban and suburban areas have ordinances against the use of electric fences. However, small areas like a vegetable or flower garden or specific items like an ornamental tree may be effectively protected with woven wire fencing or a collar if the fencing materials are sufficiently strong and high.

Fences along highways have an advantage of limiting deer access to the road. However, deer occasionally get inside these fences and then become trapped in an area of danger for both the deer and motorist. One-way gates have been installed in highway fences to create escape routes for deer. Unfortunately, these gates add to the cost of the project and frequently deer are unable to find these exits.

Repellents

Repellents are frequently suggested when the offending deer behavior is their foraging. Repellents are most applicable in treating specific plants. They are seldom effective in treating large fields and certainly not an answer to a community wide effort to reduce damage. They may be part of an educational program for citizen and as a short term answer at a specific site. Many repellents must be reapplied after rains and periodically as the plants grow.

Repellents are generally classified into four groups based on the way they affect deer. They can elicit fear, conditioned aversion, pain or taste reactions Mason 1997). Fear inducting substances frequently resemble the odor of predators. Conditioned aversion substances, such as thiram, cause the deer to become sick if they eat plants treated with the substance. Some substances that contain capsaicin, the active ingredient in some hot sauces, cause pain when they come in contact with the mucous membranes of the eyes, mouth or nose of a deer. Deer learn to avoid plants treated with these substances. Other substances simply make the treated plant taste bitter or unpalatable to deer.

There is a substantial volume of scientific literature on the use of repellents to keep deer from affecting various plants, and this will undoubtedly be updated as new substances enter the market. Many substances have been tested, and many of them have provided partial or temporary relief from the effects of deer foraging on plants. Products like Deer Away® (Int-Agra, Inc., Minneapolis, MN), Deer Stopper (Messina, Long Valley, NJ) and Plantskydd™ (Tree World, Secchett, BC Can.) have been tested by USDA (Fagerstone and Clay 1997, DeNicola et al 2000). The cost of these applications can be substantial. Costs ranging from $70 to $396 per acre have been reported (Conover 1984).

Some nonlethal influences, like fences and repellents, will not change the resulting population growth. Deer frequently influence people in a number of ways. Fences and repellents may solve

the initial problem in one location, only to have new problems develop nearby. By that time the deer population may be larger and the cost and effort needed for control may be higher than it would have been if other techniques had been used from the start.

Habitat Modifications

Habitat modifications could theoretically address deer population problems in urban areas. Habitat conditions at BCC provide insufficient energy for additional population growth. If habitats could be further modified in a negative manner for deer, the population could be reduced.

Existing habitats would need to be modified to simulate the conditions at or beyond BCC. For example, at BCC there is a distinct browse line on trees and shrubs where the low branches have been pruned by the foraging of deer. Trees and shrubs could be artificially pruned to eliminate this potential source of food for deer. Other sources of food for deer would also need to be reduced or eliminated. In the agricultural portion of the Midwest, with its high productivity, this would require an intense maintenance program.

Travel corridors for deer could be established that would direct the majority of movements by dispersal deer away from urban areas as opposed to leading them into urban areas. A system of travel corridors around cities might keep dispersal deer away from the sensitive parts of cities. Most Kansas cities are at the edges of streams and rivers. The riparian habitat that develops in these areas forms a natural travel corridor for deer, and thus directs dispersal of deer through parts of our cities. The floodplain near most cities provides excellent habitat for deer. Redirecting those travel corridors would be a significant task, highly expensive, and possibly counter to public desires.

Negative habitat management specifically designed to lower deer populations in urban areas has not been documented in the wildlife management literature. It is therefore unproven. In practice, this technique would find much opposition from the residents of an area where it was attempted. People chose to surround themselves with much of the same habitat that deer need. People frequently demand that public parks and open spaces be managed in an esthetically pleasing manner. Some of these parks and public open spaces become the core areas for an urban deer population. We water and fertilize these areas to keep them green and rigorous. That is coincidentally the habitat condition that are beneficial to deer.

Habitat features that benefit deer also benefit other species of wildlife. In some areas of North America the effect of deer on habitat is detrimental to other species of wildlife, such as Neotropical song birds that use the shrub layer for nesting. Ecologists argue for reduced deer populations to allow that habitat to recover for the benefit of other wildlife. Negatively managing that habitat in an effort to reduce deer will create further habitat deficiencies for those highly desired species.

Lowering the habitat condition of an area would result in the existing deer population having an unthrifty appearance. Deer living under poor habitat conditions would be prone to diseases and much more susceptible to harsh weather or other stress factors than the current deer herd. Deer living in poor habitats would not be as esthetically pleasing for people to observe as deer living in good habitats.

Knowledge of the plant species preferences of deer could aid in managing parks and green spaces. Plantings could be restricted to species not preferred by deer. This would reduce the continual maintenance problems caused by the damage deer do to certain species of plants. However, habitat management alone could result in deer herd health problems and the shifting of deer population problems to other areas without a solution to the underlying problem.

Supplemental feeding of deer could theoretically be designed to encourage deer use in one area and thus attract the deer away from sensitive areas. People enjoy seeing deer in particular settings. Feeding allows people to observe deer in a predictable manner. A supplemental feeding program may fail to reduce damage caused by deer and yet become popular with people and therefore extremely difficult to stop once it is begun.

Supplemental feeding of deer can have numerous unforseen and adverse effects. A deer population that is supplementally fed will have an artificially high BCC. This may create a cycle that results in higher deer populations, which cost more to artificially feed. Feeding deer concentrates them into a small area, which can influence their health. Some diseases of deer, such as bovine tuberculosis, have been exacerbated by concentrating deer at feeding sites. Bovine tuberculosis currently does not exist in wild deer herds in Kansas and all efforts should be made to keep it from becoming established locally. The long-term effects of supplementally feeding deer are great. Education and regulations should be used to discourage this practice before it becomes popularly practiced.

Fertility Control and Immunocontraception

Lowering the fertility level of deer can be a popular notion for controlling deer populations in urban areas. Part of the attraction of this technique among urban residents is that it appears to serve the health and safety of individual animals. Prior to 1990, most scientists working in this field of study were working with chemosterilants or surgical sterilization of deer. USDA Technical Bulletin No. 1853 (Kreeger 1997) provides a 272-page reference for this subject.

A new technology, immunocontraception, uses an animal's immune response to disrupt or prohibit reproductive function. One approach being investigated includes a vaccine that results in atrophy of the gonads and infertility of both sexes. Another vaccine causes antibodies to form that block sperm penetration of the egg.

The long-term consequences of a drug induced fertility control is unknown. Some techniques, like immunocontraception, have been questioned for their safety, not only for deer, but possible

having spillover effects with other species. One concern is that immunocontraceptives are most effective on animals with strong immune function. By eliminating these individuals from the breeding population the resulting future population may be less genetically adaptive to other diseases and challenges to the immune system.

Of particular concern are the behavioral consequences these vaccines may have on deer. For example, deer are seasonal breeders. They mate only once in a year. This is a period of time referred to as the rut, and is the time period most frequently associated with a peak in deer movements and resulting deer - vehicle accidents. The porcine zona pellucida (PZP) vaccine may cause females to fail to conceive, but to recycle and come into heat in 28 days. In effect the rut would continue indefinitely, or at least all of the months bucks were in a breeding condition. The main negative consequence of this could be that peak rutting behavior (when deer - vehicle collisions are most common) would be extended and repeated.

Research is underway to develop means of introducing the vaccine by using live organisms (a vector organism like a virus) to distribute it to the target species. For example, in Australia control of rabbit populations is being suggested that would incorporate the immunocontraceptive antigen into a particular virus that normally infects rabbits. This would make immunocontraception a foreign reproductive disease. Once released in the wild, there would be no means of controlling where this new disease would go or which animals it might infect.

Currently the only means of delivery of the available vaccines to wild free-ranging deer is with a conventional dart system or biobullet (Turner et al. 1992). As Fagerstone and Clay (1997) stated; "While this may be effective where deer are confined to small sites, it is impractical for populations in larger areas." Large scale applications of fertility control chemicals require that a substantial percentage of the deer population must be treated. In small populations, individual deer may be recognized and thus those animals will not be treated more than once. However, when a large population of deer needs to be treated it becomes necessary to mark the treated animals to prevent multiple inoculations. Where deer control is need in an unconfined area, the cost of this technique makes this technique unattractive.

Antifertility substances for deer are not registered and available on a commercial basis. Only experimental drugs are produced at this time. The Food and Drug Administration (FDA) has guidelines for research projects that use these substances. Because of the concerns that FDA has about the safety for people who eat deer treated with these substances, each free-ranging deer treated in these studies must be marked with warning tags.

This technique is not recommended by KDWP because of the combined aspects of its cost, the uncertainty about its effectiveness and ecological consequences, and the probable difficulties of marking and treating a significant portion of the population. As DeNicola et al. (2000) summarized: "To put fertility control technology in perspective, after four decades of research, effective antifertility programs for controlling populations of free-ranging wildlife simply do not exist. It is unlikely that a safe and cost-effective fertility control method will be available for

managing deer populations in areas larger than a few square miles within the next five to ten years."

Lethal Means of Lowering Deer Density

Natural Predators

Deer populations are frequently kept below BCC by increasing the mortality rate on the herd. This has generally been done by humans, a natural predator of deer for thousands of years. In some environments, other large natural predators such as mountain lions, wolves and bears, can lower deer populations below BCC and maintain the population at the lower level. Smaller and less efficient predators like coyotes, bobcats and free-ranging dogs can influence populations, but generally they are not an efficient population control factor. None of the wildlife predators are effective in urban areas. Their potential to conflict with people and their pets are too high for community leaders to recommend natural predators as deer population control. KDWP has not released large predators, and the department would not authorize the necessary permits to allow others to do so.

Controlled Public Hunting

Regulated hunting has a history of being the most effective means of controlling deer populations while at the same time ensuring the long-term security of deer species. Modern wildlife management has relied on this technique throughout much of the range of deer in North America, and it has repeatedly been shown to be the most efficient and least expensive technique to control deer populations at a predetermined population level. The system works because it relies on the motivation of individual hunters to harvest a portion of the herd at regular intervals. Hunters are motivated by various factors, which may include the benefit of the meat, hunting experience and traditions, and recreational opportunities associated with deer hunting. The motivation of these hunters allows the harvest to be conducted without public expenditures to pay for the control. In addition to the direct economic advantage, nonhunters benefit by providing goods and services to the hunters.

Urban areas of Kansas have frequently been excluded from deer hunting by community ordinances prohibiting the discharge of firearms or archery equipment. These ordinances have created sanctuaries for deer in urban and suburban settings, which partially explains why deer populations and resulting conflicts with people have grown faster in the urban areas than any other part of the state. Repeatedly it has been shown that where sanctuaries are provided for deer, the resulting local deer population reaches levels much higher than on adjacent land. Mitchell et al. (1997) estimated that deer densities in state parks where hunting was prohibited were 4 to 8 times higher than on adjacent National forest lands where hunting was allowed.

The distribution of deer is influenced to some extent by the history of established land tenure of

groups of deer (McNulty et al. 1997). This is both a key to urban deer management and one of the obstacles. The patterns of deer densities are not uniform through the available area, but rather the herds' distribution is clumped through the available habitats. Some of this distribution is the result of habitat preference of deer. Part of this pattern may be due the herd's history of use of the area. Part of the pattern may be influenced by the security the herd receives in particular portions of the area (Hansen et al. 1997). This is true of deer behavior even in wilderness area where deer tend to use area between established wolf home ranges more than they use the core areas of the wolves' home range.

Safety is a key issue of concern where new controlled hunting programs are initiated. This is particularly true in locations where local ordinances prohibiting the discharge of firearms or archery equipment have been in effect for many years and people are unfamiliar with deer hunting. Hunting is a relatively safe activity. The international hunter education safety association compiles statistics from each state and province. There were 245 deer hunting accidents during 1999 with 36 fatalities (http://www.ihea.com/incidents/ihea1999.pdf). Few accidents have occurred during controlled hunting programs and this hunting activity has not been have been identified as a category to monitor when accident statistics are collected.

Some forms of deer hunting use equipment and techniques that further lower the potential for injuries. Archery equipment has been selected for controlled public hunts in some suburban because of these features. Archery equipment has a limited range. Most shots at deer are taken at distances less than 30 yards. The hunter is generally in a tree stand and therefore the arrow is directed toward the ground. Thus a miss by the hunter results in the arrow hitting the ground and stopping. The majority of injuries occur to bowhunters as a result of climbing accidents as the enter or leave their treestand. Archery has an accident rate of 92 accidents per 100,000 participants compared to baseball that has had 2,155 accidents per 100,000 participants (Richter and Reed 1999).

Additional requirements may be added to a controlled hunting programs to address peoples concerns about safety. Communities in other states have initiated special education requirements and tests to measure the skills of participating hunters.

If hunting is to be an effective means of controlling deer populations, hunters must have adequate access to specific areas where control is needed. In an urban and suburban environment with multiple small land holdings (relative to a deer's movement pattern) there can be multiple sanctuaries within the control area. Cooperation by the community members is essential for the hunting approach to be at peak efficiency. Historically there have been times when communities worked together to affect both the harvest of wildlife, and the resulting distribution and use of the resource.

Paid Control Agents / Sharpshooters

Two forms of deer population control are practiced using paid control agents. The techniques

used by paid control agents include trapping and euthanizing the deer, or using sharpshooters to kill the deer directly at a site. Both of these techniques require considerable funding. Costs of any of these projects vary depending on the level of control needed, climate, topography and various social factors. It was reported that it cost $400 per animal to trap deer at one project, while reports from sharpshooter projects have ranged between $75 and $800 for each animal they remove (Ishmael and Ronstad 1984, DeNicola et al. 1997).

An advantage of paid control agents is that they are under the direct control of the hiring authority. A precise contract can be arranged and standards for handling the animals can be set. The effectiveness of sharpshooters may be enhanced by allowing them to use spotlights and shoot at night, to bait areas and shoot from established blinds, and to continue hunting or change tactics based on the behavior of the deer.

Sharpshooters have been shown to be less efficient in controlling deer populations than controlled hunting (Palmer et al. 1980). The comparative efficiency of sharpshooters versus citizen hunters will be influenced by the size of the area where control is needed. Sharpshooters will be most effective on small areas. The involvement of numerous citizens in a controlled hunt will be more effective if the area needing control is large. Sharpshooters might be appropriate and efficient if the deer problems are recognized early in the deer population growth for an area. Those same sharpshooters could be completely inadequate once the problem has become widespread.

Sharpshooters have been used to harvest deer as a control activity, making the meat from those animals available to public and private organizations and to needy persons. This practice can facilitate public acceptance of a program. Use of sharpshooters in situations where regulated hunting could be conducted can become controversial, as some people will view the sharpshooters' activities as denying citizens access to a renewable public resource.

Trapping might be conducted as part of a lethal control program with contracted control agents where the captured deer would be humanely euthanized. Trapping of deer can be traumatic for the captured deer. High post release mortality has been associated with some projects. For example, 29 deer were trapped in one project in California. Two deer died during the capture. Of the 27 deer translocated to a new location, 23 died within one year (Mayer et al. 1995). KDWP currently has not endorsed this technique as a nonlethal means of controlling urban deer populations.

Damage Control Permits

The KDWP has a program to issue and administer damage control permits. These permits are issued under the authority of K.A.R. 115-16-4, on a property-by-property basis to a person who is suffering damages caused by deer. A district wildlife biologist or conservation officer for KDWP may issue these permits after reviewing the field situation. These permits are generally issued from mid January through September when normal firearms hunting seasons are closed.

These permits have limited applicability to suburban areas. Occasionally deer get into situations where they pose a significant hazard to the public, for example, deer occasionally get on runways at airports. Damage control permits can be issued to allow local authorities to humanely euthanize these animals. Occasionally property owners in a suburban area could have a situation where a damage control permit could be authorized. However, the permits would not be issued unless city ordinances allowed a person to use the authorized equipment.

The damage control permit system was designed to handle individual problems at the property owner level. The system is not designed to have an influence on regional deer population levels and therefore is not a complete answer to the needs of an urban deer manager.

Changing Human Tolerances for Deer and Deer Management

Deer management in urban and suburban areas is dominated by human opinions. No plan will succeed over a long period of time unless it incorporates the human component. A segment of society will argue for total tolerance for deer populations, letting nature take its course on the population, while another segment will argue for zero tolerance of deer, and extremely low populations or no deer. The majority of people in most urban areas will hold opinions between these extremes, but their opinions can be swayed depending on the tone and content of the debate. Often the majority of the people have no strong opinion on this subject. A study conducted in 1996 in Missouri found that one-third of the respondents from St. Louis and Kansas City were not interested at all in deer (Stout 1997).

Deer densities vary considerably across the country, and even across the state of Kansas. However, people's tolerance for deer and the damage they cause is not proportional to those densities. In areas where deer have traditionally been a component of the environment, people tend to adjust to their presence and tolerate higher density and more damage than in areas where a recent expansion to the deer population has occurred and people have not adjusted to their presence. This would suggest that people's tolerance for deer change with experience and might be changed through exposure to information. However, there have been no programs specifically designed to change people's tolerance for deer. Changing human perception of the problems or resetting the tolerance level people will not address the fact that at some deer population level the problems will recur and addressing those problems at the high population level will be more expense and time consuming than they would be if they were addressed today.

SUMMARY

Deer management has undergone substantial change through the years. Research and practical experience during the last century has provided a sound basis for managing most deer populations. Urban and suburban settings remain a challenge for deer managers. Understanding the human dimensions of deer management in an urban area may pose an even greater challenge than the environmental or population dynamics questions. Shifting in public opinion and changing human tolerance for deer will present a challenge for community leaders.

Problems with deer populations do not develop overnight. Deer populations grow at predictable rates. Social tolerance also changes in somewhat predictable ways, although it may be changed in some large increments as a result of media coverage or special interest group activism. When deer population levels and human tolerance meet critical levels, there may be a rush to action. When decisions are based on a quick assessment of facts and cursory review of the various solutions, there may be serious consequences.

Management of the deer populations is the only solution for urban officials. Deer populations will continue to increase if they are not periodically controlled by man. The most effective management will emphasize the need for continual maintenance. Management plans that incorporate incentives for people to control deer populations on their property will be beneficial.

Differences between Kansas communities require independent development of deer management plans. Cooperation and consistency among Kansas communities would simplify the process, but this ideal may not be possible. No single technique or combination of techniques may work for all communities.

Citizen hunters have been the most cost effective and efficient means of regulating deer populations throughout North America. The primary reasons for not adapting this technique frequently center around perceptions of unsafe conditions for participants and citizens, and conflicts that arise between people with opposing social attitudes. Both of the problems have been accentuated by years without experience with citizen hunting in a particular area. The magnitude of the perceived problems and conflicts have frequently been overestimated in communities that have opted to reinstate hunting within their jurisdiction. Where this approach is not applicable, the alternative techniques become expensive, logistically complicated, often technically unproven, and ineffective.

Time is a critical factor in most deer management plans. Delays in implementing plans often make the original plan ineffective. Their cost and size will increase. New problems will develop and opposition to the plan will solidify.

KANSAS PROGRAM HELPS FEED THE HUNGRY

Hunters can help feed the hungry.

That's the premise of a program which began in Kansas in 2001. The kansas program provides venison for over 100,000 meals each year through several hundred donated deer. Beginning with 180 deer in 2001 and growing to 798 in 2007. With growing success, the program has expanded to cover most of the state helping feed our neighbors along the way.

One deer can feed 200 meals

1 in 5 children go to bed hungry

KSHFH invites you to donate any legally harvested deer or elk to our participating meat processors. There is no cost to donate your deer or elk as long as KSHFH has sufficient funding to cover the processing expense. Donated game must be field dressed and legally tagged. If you would like, you may also donate a portion of the meat you are having processed for yourself.

Just ONE deer can feed over 200 hungry people in the state of Kansas. With nearly 800 deer and elk donated in 2007, over 150,000 people were able to enjoy a meal they may have otherwise missed.

Deer populations are at record numbers

The Kansas program's biggest challenge is raising the funds to pay for the processing cost of the deer donated to the program. Your donations and support for the program are very much appreciated.

Information on Emergency Snow Routes

Date: January 20, 2010

To: Mark Loughry

From: Lloyd Martley

Ref: Emergency Snow Routes

It has been suggested that we look at the possibility of adopting an Emergency Snow Route Ordinance to assist with the problems of getting our streets cleared due to extreme snow fall.

I checked with eight surrounding cities to see what kind of emergency snow removal ordinances they had in place. The results are as follows:

City of Bonner Springs	No emergency snow removal policies
City of Eudora	No emergency snow removal policies
City of Edwardsville	No emergency snow removal policies
City of Desoto	No emergency snow removal policies

City of Kansas City Kansas – When snow, sleet or freezing rain is causing slippery or hazardous conditions which might lead to serious traffic congestion, the director of public works or a designated representative may declare a traffic emergency and, until such emergency is terminated, no person shall operate a motor vehicle on any street in such manner or in such condition as to allow or permit such vehicle to become stalled by reason of the fact that the driving wheels of such vehicle are not equipped with effective tire chains, snow tires or radial tires.

Whenever snow has accumulated or there is a possibility that snow will accumulate to such a depth that snow removal operations will be required, the director of public works or a designated representative may declare a parking emergency and, until such an emergency is terminated, no vehicles shall be parked on any streets designated as snow routes by appropriate signs. All vehicles parked on such streets must be removed within two hours after declaration of an emergency or be considered in violation of this section.

City of Lansing – Whenever snow has accumulated or there is a possibility that snow will accumulate to such a depth that snow removal operations will be required, the mayor, the city administrator or in their absence, the chief of police may declare a traffic emergency and until such traffic emergency is terminated it shall be unlawful: to park a vehicle on any street designated an emergency snow route; to operate a motor vehicle on any emergency snow route in such a manner or condition that such motor vehicle stalls and is unable to proceed by reason of the fact that the driving wheels are not equipped with tire chains or adequate all weather tires; the chief of police, during a traffic emergency, is empowered to waive or suspend enforcement of parking restrictions.

Upon declaring a traffic emergency the mayor, the city administrator, or chief of police shall forthwith cause appropriate notice thereof to be given though the local press, radio, and other media. The traffic emergency shall be terminated by notice given substantially in the same manner as the traffic emergency was declared.

All vehicles parked on emergency snow routes must be removed with one hour after notice of traffic emergency had been given. Any vehicle parked on an emergency snow route after such period of time may be removed by a police officer to the nearest garage or other place of safety and the vehicle may not be recovered until the towing and storage charges are paid by or for the owner.

Established routes will be clearly marked with posted signs establishing emergency snow routes.

City of Tonganoxie – States that there shall be no parking from 1:00 am to 6:00 am on Fourth Street from Green Street to Pleasant Street. Parking during the aforesaid times is prohibited to allow for street cleaning and snow removal, when necessary. Two street signs designating the prohibition against parks shall be posted in each block.

City of Shawnee – Public works strives to provide effective snow and ice removal from public streets to allow motorist to travel safely within the City during winter weather conditions. The snow and ice removal policy is intended to keep vehicular traffic moving at a safe and constant speed.

The City of Shawnee divides their streets into two sections, Primary Streets and Local Streets. The primary roadways are heavily traveled north to south, east to west. These roads are cleared first and are kept clear at all times. This stage of removal begins when the snow stops falling or at the discretion of the supervisor. Local streets are low traffic areas and are plowed after all priority streets have been cleared and treated.

There are no designated snow routes where parking is not allowed. However, it is recommended that citizens park their vehicles in their driveways. If street parking is absolutely necessary they do not want vehicles parking directly across from another parked car because the trucks are large and need room to maneuver.

Proposed Emergency Snow Routes and Policy

Whenever snow has accumulated or there is a possibility that snow will accumulate to such a depth that snow removal operations will be required, the mayor, the city administrator or in their absence, the chief of police may declare a traffic emergency and until such traffic emergency is terminated it shall be unlawful:

1. To park a vehicle on any street designated an emergency snow route.

2. To operate a motor vehicle on any emergency snow route in such a manner or condition that such motor vehicle stalls and is unable to proceed by reason of the fact that the driving wheels are not equipped with tire chains or adequate all weather tires.

3. The chief of police, during a traffic emergency, is empowered to waive or suspend enforcement of parking restrictions.

Upon declaring a traffic emergency the mayor, the city administrator, or chief of police shall forthwith cause appropriate notice thereof to be given though the local press, radio, and other media. The traffic emergency shall be terminated by notice given substantially in the same manner as the traffic emergency was declared.

All vehicles parked on emergency snow routes must be removed with two hours after notice of traffic emergency has been given. Any vehicle parked on an emergency snow route after such period of time may be removed by a police officer to the nearest garage or other place of safety and the vehicle may not be recovered until the towing and storage charges are paid by or for the owner.

Established routes will be clearly marked with posted signs establishing emergency snow routes.

Emergency snow removal routes will be divided into two priorities:

- **Priority Streets** – Primary roadways that are heavily traveled and marked as designated emergency snow routes.
- **Local Streets** – Low volume traffic areas and non-designated emergency snow routes. These areas are plowed after all priority streets have been plowed and treated.

Snow plowing and ice removal policy and procedures

- **Priority Streets** – plowing and treating will start for accumulations of 1" or more. Edge of pavement to edge of pavement plowing.
- **Local Streets** – plowing and treating will start for accumulations of 2" to 4" and will be one pass (both directions) only.
- **Accumulations greater than 4"** - plowing of priority streets first. Then one pass on local streets.
- **Day following storm** – Cleaning as required preventing refreezing of pavement surface.

The following streets are hereby established as emergency snow routes within the city:

(see attached map)

Memo

Date: 1/26/2010

To: Basehor City Council

Cc: Mayor, Terry Hill

From: Mark Loughry, City Administrator MEL

RE: Field of Dreams Acquisition

At the direction of Council city staff has been working with the Basehor Athletic Association (BAA) on the possibility of the City acquiring the Field of Dreams and leasing it back to them for management purposes. After meeting with BAA representatives and reviewing their proposed budget (attached) and historical finances staff would submit the following options for consideration.

The first option is to simply do nothing and allow the BAA to continue operating as they always have.

- Pros
  - There would be no increased budget impact to the City of Basehor.
  - Provides a quick resolution and answer for the BAA.
- Cons
  - The BAA will likely sell the Field of Dreams to another entity thus losing the ability for kids to participate in local sports currently offered.
  - It will never be cheaper for the City to acquire this type of facility if we miss this opportunity.
  - If BAA keeps the property the facility will continue to deteriorate or fees charged to play will have to be increased drastically. Currently the fees are already substantially higher than surrounding communities and any increase will probably prevent some kids from participating.

The second option would be for the City of Basehor to purchase the Field of Dreams from the BAA and then lease it back to them to continue operating.

- Pros
    - This group has an established program that is working.
    - This would allow for a reduction in fees for kids who live inside the city limits and participate in programming at Field of Dreams.
    - The City of Basehor would not need to invest additional staff time and overhead for the daily operations.
    - BAA would not have the financial obligations allowing them to focus on the programming and reducing fees to play.
    - There would be no threat of an outside group purchasing Field of Dreams and eliminating the local programs.
    - It will allow the City to acquire land and facilities at basically the current debt level. The price will likely be much higher if the City tried to acquire these facilities in the future or build new ones.
    - It would ensure that the youth in Basehor would have facilities to continue to participate locally rather than travel to other cities for programming. This would help to maintain the excellent quality of life the City currently has.
    - Maintenance on the facility would be taken over by the City hopefully extending the life of the infrastructure.
    - If a Recreation Commission is established in the future this would secure facilities for programming.
- Cons
    - This will increase City expenditures somewhere around $66,000 requiring an increase in property taxes.
    - This is not a budgeted item so staff would have to find a way to absorb at least half of this increase in the 2010 budget.
    - The City would have limited control over the operations of a city owned facility.
    - There would be some duplication of expenditures because a private organization would not be covered under the city insurance.
    - A comprehensive agreement between BAA and the City of Basehor would have to be put in place to address operations, revenues, expenditures and capital improvements.
    - There is no guarantee that the BAA would remain viable even with the City assuming the debt thus forcing the City to take over all operations or close the facility.
    - This would be an expansion of government that might be better served as a school district wide Recreation Commission.

The third option would be for the City of Basehor to purchase the Field of Dreams and assume daily operations of the programming from BAA.

- Pros
    - This would give the city the most control over both the facility and the operations.
    - This would allow for a reduction in fees for kids who live inside the city limits and participate in programming at Field of Dreams.
    - It would eliminate the need for an agreement with a private group.
    - It would eliminate the duplication of expenditures.
    - It would accomplish the long term goal of BAA which is passing the facility and operations off to a governmental entity of some type.
    - It would go the furthest towards ensuring the viability of the Field of Dreams long term.
    - There would be no threat of an outside group purchasing Field of Dreams and eliminating the local programs.
    - It will allow the City to acquire land and facilities at basically the current debt level. The price will likely be much higher if the City tried to acquire these facilities in the future or build new ones.
    - It would ensure that the youth in Basehor would have facilities to continue to participate locally rather than travel to other cities for programming. This would help to maintain the excellent quality of life the City currently has.
    - Maintenance on the facility would be taken over by the City hopefully extending the life of the infrastructure.
    - If a Recreation Commission is established in the future this would secure facilities for programming.
    - The impact on the budget would be less than just purchasing the land as the revenue would come straight to the City so any increase over the projected budget would be kept.
    - Staff and equipment used to maintain the Field of Dreams could also be utilized to maintain other city green space and park area.
    - The bulk purchasing power of the City could be used to help reduce expenses.
- Cons
    - This will increase City expenditures requiring an increase in property taxes.
    - This is not a budgeted item so staff would have to find a way to absorb any increase in the 2010 budget.

- This would be an expansion of government that might be better served as a school district wide Recreation Commission.

In my opinion option three is the best solution for the City. It is the only option that gives the City full control of operations and ensures that long term Field of Dreams and the programming out there continues for the benefit of the youth in our community. I do feel that this will have the lowest total cost between the two options with the City acquiring the land and it allows the most financial and operational control. I am confident that we can find sufficient funding in the 2010 budget to cover the expenses we will have this year and we can address 2011 as part of the budget process. I would intend to handle this as a division of the public works department for operational purposes. Once direction is received from Council staff will take the appropriate next steps and bring a formal proposal back to the Council for action.

If you have questions or require further discussion please let me know.

2010 Projected Financials

Current Assets

Fixed Assets	**City Figures**
Property/Buildings	**$ 416,000.00**

Liabilities as of January 2010 Estimated	
FSB LOC balance	$ 23,000.00
BB/SB Fields Loan	$ 165,000.00
Football field loan	$ 135,000.00
Mower Loan	$ 650.00
Short Term Loan	$ 11,500.00
Sewer Connection Loan	$ 25,000.00
Payment to investors	$ 11,500.00
Total Liabilities	**$ 371,650.00**

2010 Projected Income	
Complex Rental - MSP	$ 19,000.00
Concession Income	$ 45,000.00
Field Signs/Advertising	$ 1,900.00
Rec League Fees	$ 34,000.00
Football Lease 2010	$ 23,000.00
BLHS Field Lease	$ 2,500.00
Pepsi Income	$ 2,960.00
Lease to third party	$ -
Lease paid to city	$ 15,000.00
Total Income	**$ 143,360.00**

2010 Projected Expenses	
Salaries	$ 27,000.00
Wages	$ 33,000.00
Utilities	$ 14,500.00
Concession Expenses	$ 25,000.00
Maint. & Supplies	$ 18,000.00
Trophies	$ 3,000.00
Complex Insurance	$ 5,957.00
Football Improvements	$ 1,000.00
BAA Lease paid to city	$ 15,000.00
Rec Fee Subsidies	$ 5,000.00
Cities payment to bank	$ 66,000.00
Total Expenses	**$ 213,457.00**
Net Income/Loss	**$ (70,097.00)**

MEMO

Date: January 19, 2010

To: Mark Loughry

From: Chief Lloyd Martley

Ref: Time Clock Policy

Attached is a copy of the standard operations and procedures along with a resolution for adopting the time clock policy. Would like to have this on the work session for February 1, 2010 with requested approval for the February 15, 2010 council meeting.

City of Basehor

Standard Operations and Procedures

SUBJECT:	EFFECTIVE DATE:
Time Clock Procedures	February 15, 2010

Article E-16 Time Clock Policy

(a) All non-exempt employees are required to use the time clock system to record their hours worked. The time clock will be used for payroll and attendance purposes.

Each department has an assigned time clock. Employees are required to clock in/out at the time clock located in their department using their Easy Choice Time and Attendance badge. If necessary an employee can clock in/out from another department's clock. If there is a problem with the time clock, the employee should notify the supervisor and the supervisor will direct the employee how to time in/out.

(b) Employees should clock in no sooner than 3 minutes before/after the scheduled shift and clock out no later than 3 minutes before/after the scheduled shift. Employees must also clock in/out for lunch breaks or when leaving work for personal reasons unless otherwise directed.

(c) If the employee misses an entry into the timekeeping system, the employee will notify the supervisor as soon as possible. The supervisor will manually enter the employee's work hours via the manager time clock portal. If corrections or modifications are made to the time record, both the employee and the supervisor must verify, in writing, the accuracy of the changes. Employees who consistently miss time clock entries will be subject to disciplinary action.

(d) Nonexempt employees are permitted to work overtime with prior authorization from their supervisor. Overtime includes clocking in early, late or working through the scheduled lunch period. Nonexempt employees who work overtime without prior authorization will be subject to disciplinary procedures.

(e) Employees may not use another employee's badge to clock in or clock in for another employee. Tampering, altering, or falsifying time records or recording time on another employee's time record may result in disciplinary action, including discharge. Employees who have lost a badge will report the lost badge to their supervisor and payroll departments. The employee will be issued a new badge with the same employee and department numbers.

(f) Supervisors are free to use discretion in disciplinary actions when employees have various, albeit repeated offenses to the time keeping policy and/or procedure. This could include situations where employees may have clocked in, but are repeatedly absent from their work station during work hours or have missed time clock entries in addition to working unscheduled overtime.

RESOLUTION NO. _____

A RESOLUTION AMENDING UNIFORM PERSONNEL POLICIES AND GUIDELINES FOR THE CITY OF BASEHOR PERTAINING TO USE OF TIME CLOCK

WHEREAS, based on recommendation by City Staff, it is the desire of the Governing Body to amend the Uniform Personnel Policies and Guidelines for the City of Basehor by including a new Article on use of the time clock.

THEREFORE, BE IT RESOLVED THAT the Governing Body of the city of Basehor adopts the following Article Z of the Uniform Personnel Policies and Guidelines for the City of Basehor:

ARTICLE E-16. TIME CLOCK POLICY

(a) All non-exempt employees are required to use the time clock system to record their hours worked. The time clock will be used for payroll and attendance purposes.

Each department has an assigned time clock. Employees are required to clock in/out at the time clock located in their department using their Easy Choice Time and Attendance badge. If necessary, an employee can clock in/out from another department's clock. If there is a problem with the time clock, the employee should notify the supervisor and the supervisor will direct the employee how to time in/out.

(b) Employees should clock in no sooner than 3 minutes before/after the scheduled shift and clock out no later than 3 minutes before/after the scheduled shift. Employees must also clock in/out for lunch breaks or when leaving work for personal reasons unless otherwise directed.

(c) If the employee misses an entry into the timekeeping system, the employee will notify the supervisor as soon as possible. The supervisor will manually enter the employee's work hours via the manager time clock portal. If corrections or modifications are made to the time record, both the employee and the supervisor must verify, in writing, the accuracy of the changes. Employees who consistently miss time clock entries will be subject to disciplinary action.

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(e) Employees may not use another employee's badge to clock in or clock in for another employee. Tampering, altering, or falsifying time records or recording time on another employee's time record may result in disciplinary action, including discharge. Employees who have lost a badge will report the lost badge to their supervisor and payroll departments. The employee will be issued a new badge with the same employee and department numbers.

(f) Supervisors are free to use discretion in disciplinary actions when employees have various, albeit repeated offenses to the time keeping policy and/or procedure. This could include situations where employees may have clocked in, but are repeatedly absent from their work station during work hours or have missed time clock entries in addition to working unscheduled overtime.

Passed by the Governing Body of the City of Basehor, Kansas this ____ day of January ____, 2010.

_____
Mayor Terry Hill

ATTEST:

_____
Mary A. Mogle, City Clerk

APPROVED AS TO FORM:

_____
Patrick G. Reavey, City Attorney

MEMO

Date: January 19, 2010

To: Mark Loughry

From: Chief Lloyd Martley

Ref: Amended Ordinance

Attached is an amended Ordinance to the STO book for the new driver's licensing laws that took effect January 1, 2010. Would like to have this item on the work session for February 1, 2010 with requested approval on the February 15, 2010 council meeting.

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE 2009 STANDARD TRAFFIC ORDINANCE TO INCLUDE A VIOLATION OF AMENDED K.S.A 8-291 AS A MUNICIPAL VIOLATION PROSECUTABLE IN THE MUNICIPAL COURT OF BASEHOR, KANSAS

WHEREAS, K.S.A. 8-291 was amended by the Kansas Legislature after the publication of the Standard Traffic Ordinance but the amendments took effect on January 1, 2010; and

WHEREAS, the City desires to adopt the amended K.S.A. 8-291 as a City Ordinance, and prosecute violations of the same in the Basehor Municipal Court.

NOW THEREFORE, BE IT ORDAINED by the Governing Body of the City of Basehor, Kansas:

Section 1. The Governing Body hereby amends Section 195 of the 2009 Standard Traffic Ordinance to state the following:

(a) It is a misdemeanor for any person to operate a motor vehicle in violation of the restrictions on any driver's license or permit imposed pursuant to any statute.

(b)(1) Any person guilty of violating this section, upon the first conviction, shall be fined not to exceed $250, and the court shall suspend such person's privilege to operate a motor vehicle for not less than 30 days and not more than two years.

(2) Any person guilty of violating this section, upon a second or subsequent conviction, shall be fined not to exceed $500, and the court shall suspend such person's privilege to operate a motor vehicle for not less than 90 days and not more than two years.

(c) In addition to the penalties provided by subsections (b)(1) and (2), if the conviction is for a violation of this section committed after June 30, 1994, and before July 1, 1996, and committed while the person's driving privileges are restricted pursuant to K.S.A. 8-1014 and amendments thereto, the division upon completion of the period of suspension provided by this section, shall restrict the person's driving privileges for an additional 120 days to driving only a motor vehicle equipped with an ignition interlock device, as defined by K.S.A. 8-1013 and amendments thereto, approved by the division and obtained, installed and maintained at the person's expense.

On or before February 1, 1996, the division shall report to the legislature regarding the use of the provisions of this subsection and making recommendations concerning continuation or modification of such provisions.

(d) Nothing in this section shall limit a court in imposing penalties, conditions or restrictions authorized by any other statute arising from the same occurrence in addition to penalties and suspensions imposed under this section. (K.S.A. 8-291, as amended)

Section 2. This Ordinance shall take effect upon its adoption by the City Council, approval by the Mayor and publication in the City's official newspaper.

Section 3. All Ordinances or sections thereof in conflict with the provisions of this Ordinance are hereby repealed.

Passed by the governing body this _____day of _____, 2010.

Terry L. Hill, Mayor

Attest:

Mary A. Mogle, City Clerk

APPROVED AS TO FORM:

Patrick G. Reavey, City Attorney

GDL-JANUARY 1, 2010	RESTRICTIONS	CHARGING
FARM PERMIT **KSA 8-296** Ages: 14-17 • Minimum age 14 • Must reside on a farm (parcel of land larger than 20 acres used in agricultural operations), or be employed for compensation on a farm • Written application of parent/guardian required • Must pass vision, written and driving examinations	**If under age 16, may drive at any time:** • To/from or in connection with any farm job, employment or other farm-related work • Over the most direct and accessible route between home and school for the purpose of attendance • When accompanied by an adult* who holds a valid driver's license • NO non-sibling minor passengers are allowed • NO wireless communication device while driving except to report illegal activity or to summon emergency help **If over age 16, first 6 months, may drive at any time:** • From 5 a.m. to 9 p.m. • To/from or in connection with any farm job, employment or other farm-related work • To/from authorized school activities • When accompanied by an adult* who holds a valid driver's license • One non-immediate family member minor passenger (less than 18 years old) is allowed • NO wireless communication device while driving except to report illegal activity or to summon emergency help	Penalties apply to all teen drivers KSA 8-291 subject to suspension or revocation as any other driver's license Farm Permit shall be suspended for any violation of restrictions and/or two or more crashes chargeable to the holder
INSTRUCTION PERMIT **KSA 8-239** Ages: 14-15 *Duration: 12 months* • Minimum age 14; valid for one year • If under age 16, written application of parent/guardian required • Must pass vision and written examinations	• Must be accompanied by adult* in front seat who holds a valid driver's license with at least one year of driving experience • NO person except supervising driver can be in front seat • NO wireless communication device while driving except to report illegal activity or to summon emergency help	Penalties apply to all teen drivers KSA 8-291 subject to suspension or revocation as any other driver's license Shall be suspended for any violation of restrictions • **1st Offense** – 30-day suspension • **2nd Offense** – 90-day suspension • **3rd Offense** – One-year suspension
RESTRICTED LICENSE **KSA 8-237** Ages: 15-16 *Duration: 12 months* • Minimum age 15 • Written application of parent/guardian required • Must have held instruction permit for at least one year and completed at least 25 hours of supervised driving • Must have successfully completed an approved Driver Education course (not required if applying at age 16)	**If under age 16, may drive at any time:** ◦ To/from or in connection with any job, employment or farm-related work ◦ Over the most direct and accessible route between home and school for the purpose of attendance ◦ When accompanied by an adult* in front seat who holds a valid driver's license **During this time:** ◦ Must complete additional 25 hours of supervised driving (10 of the 50 hours total must be at night) ◦ NO non-sibling minor passengers are allowed ◦ NO wireless communication device while driving except to report illegal activity or to summon emergency help **If over age 16, first 6 months, may drive at any time:** ◦ From 5 a.m. to 9 p.m. ◦ To/from or in connection with any job, employment or farm-related work ◦ To/from authorized school activities ◦ When accompanied by an adult* in front seat who holds a valid driver's license **During this time:** ◦ One non-immediate family member minor passenger (less than 18 years old) is allowed ◦ NO wireless communication device while driving except to report illegal activity or to summon emergency help	Penalties apply to all teen drivers KSA 8-291 subject to suspension or revocation as any other driver's license Under 16 – Two or more crashes – no license until age 17 • **1st Offense** – 30-day suspension • **2nd Offense** – 90-day suspension • **3rd Offense** – One-year suspension
FULL LICENSE **KSA 8-235d** Age: 17	**Age 17 – if applying as a first-time applicant** • Must pass vision, written, and driving exams with appropriate license in hand • Must provide proof of age and identification • Signed affidavit of parent or guardian, stating applicant has legally completed at least 50 hours of adult*-supervised driving with at least 10 of those hours being at night *** at least age 21**	Subject to all penalties under KSA 8-291

Memo

Date: January 25, 2010

To: Mayor and City Council

From: Mark Loughry, City Administrator

Re: City Administrator's Report

Items included in the City Administrator's Report are as follows:

1. February 2010 Calendar of Events
    a. February 15, 2010 regular meeting moved to Monday, February 22 due to the President's Day holiday.

2. Neighborhood Revitalization Participants and Update

Please feel free to contact me if you have any questions.

City of Basehor
2010 ANNUAL CALENDAR OF EVENTS

		FEBRUARY	
MONTH/DAY	**TIME**	**EVENT**	**LOCATION**
1	7:00 p.m.	City Council Work Session	City Hall Meeting Room
2	7:00 p.m.	Planning Commission Meeting	City Hall Meeting Room
9	1:00 p.m.	Municipal Court	City Hall Meeting Room
10	4:00 p.m.	Park Advisory Board meeting *(canceled due to lack of agenda items)*	City Hall Meeting Room
22	7:00 p.m.	City Council Meeting *(moved from 2/15/2010 due to holiday)*	City Hall Meeting Room

Next Meetings:

March 1, 2010 Work Session
March 15, 2010 Regular Meeting

Memorandum

To: Mark Loughry

CC: Mary Mogle, Mr. Mayor and City Council

From: Mark Lee, Building Official

Date: 1/26/10

Re: Neighborhood Revitalization Participants and Update

Ending the year 2009 on a good note was of the utmost importance for the housing market and the potential growth of the City of Basehor. We tried to accomplish this in a very positive manner with the implementation and passage of the 2010 edition of the Property Tax Rebate Neighborhood Revitalization Program. We did not see the influx of new construction that we had hoped for but we did have some newly constructed homes that qualified for the program, that list follows:

16812 Juniper Drive, Estimated value of $118,536.00, Estimated Rebates of $7,556.37

3016 N. 158th Street, Estimated value of $149,234.00, Estimated Rebates of $9,514.23

15101 Lake View Drive, Estimated value of $273,958.00, Estimated Rebates of $17,465.91

1311 N. 151st Terrace, Estimated value of $300016.00, Estimated Rebates of $19,127.19

16750 Hidden Ridge Pkwy, Estimated value of $262,066.00, Estimated Rebates of $16,707.75

1904 N. 162nd Street, Estimated value of $123,515.00, Estimated Rebates of $7,874.61

16739 Ruby Way, Estimated value of $148,370.00, Estimated Rebates of $9,459.15

15632, 15634, 15636 Landauer Circle, Estimated value of $314,378.00, Estimated Rebates of $20,042.79 divided between the 3 units $6,680.93

These values and estimated rebates are derived from construction cost not from actual assessments done by the county appraiser. No appraisals had been done on the properties as of 1/27.

With the announcement of the Cerner Business Park project at Village West, estimated to bring in close to 5,000 jobs over the next five years and the building of the new Wizards Soccer Stadium in the same area, I believe that the City of Basehor is poised to see another much needed growth spurt in the near future. The implementation of the Neighborhood Revitalization Program has put us in a great position to capture these new individuals arriving in our area.

Respectfully,
Mark Lee

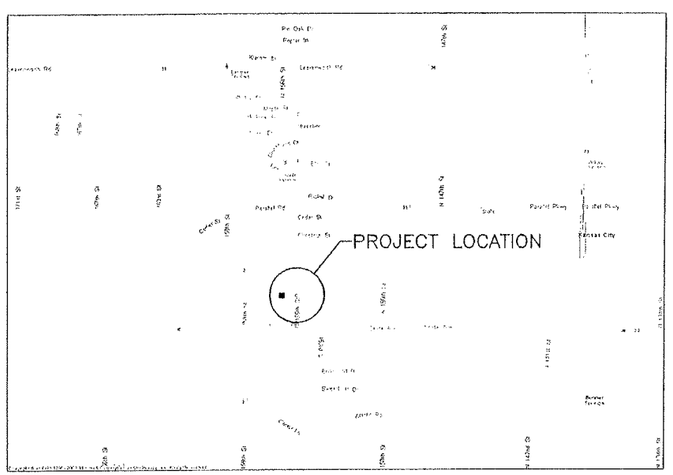
CONSOLIDATED RURAL WATER DISTRICT NO. 1

LEAVENWORTH COUNTY, KANSAS

ELEVATED WATER STORAGE TANK

DRAWING INDEX

- COVER SHEET
1 SITE PLAN
2 TANK ELEVATION DISPLAY



LOCATION MAP
N.T.S.

2009

CONSOLIDATED RURAL WATER DISTRICT NO. 1
LEAVENWORTH COUNTY, KANSAS

ELEVATED WATER STORAGE TANK

COVER SHEET

py
PONZER-YOUNGQUIST, P.A.
Consulting Engineers & Land Surveyors
227 E. Dennis Avenue
Olathe, Kansas 66061

Phone: (913)-782-0541
Fax: (913)-782-0109
Email: py@pyengineers.com

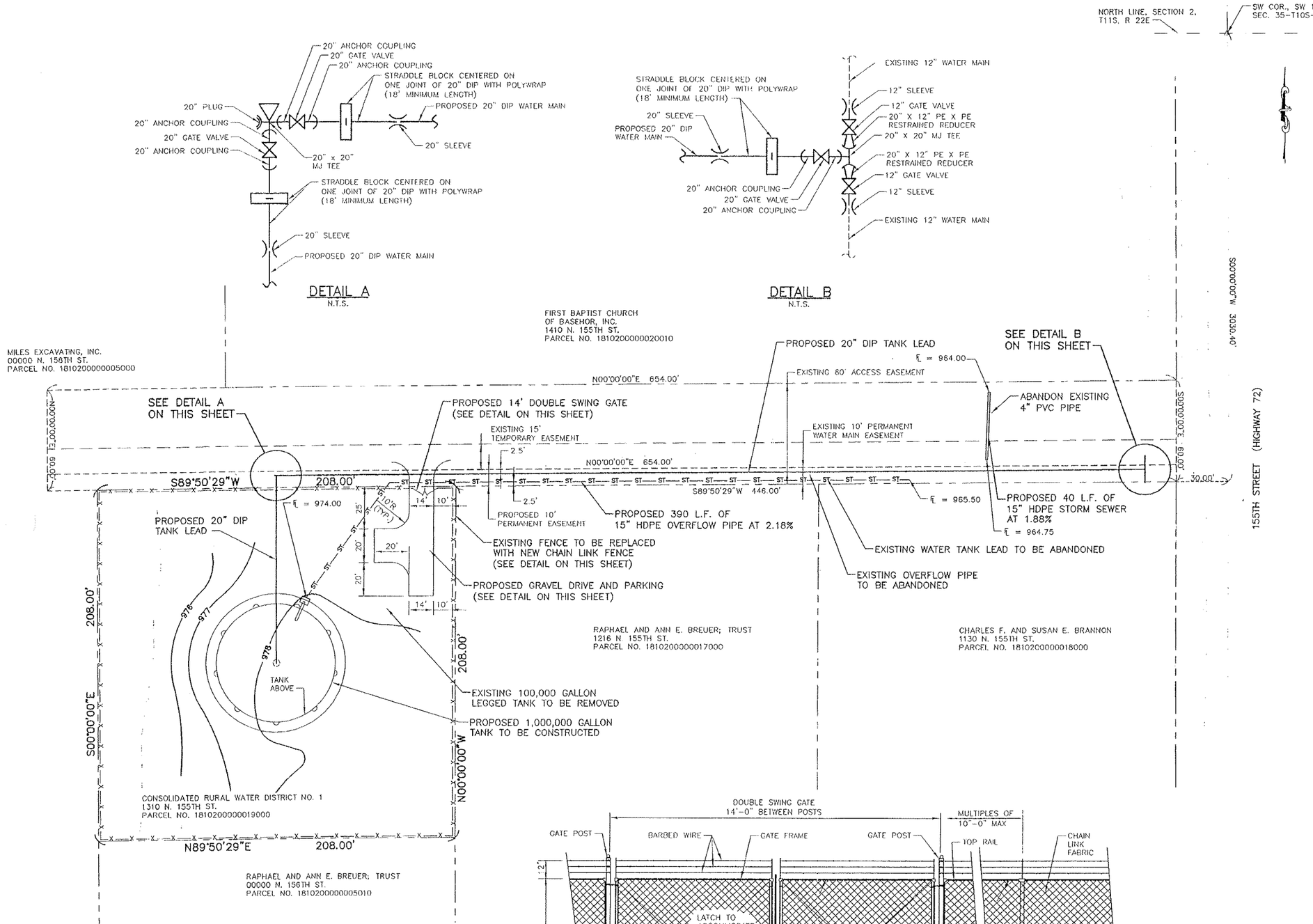
Designed By: JWC
Drawn By: MER
Checked By: JWB
Date: NOV./2009
Dwg File: COVER/COVER

No.	Date	Revision	By

JAMES W. CHALLIS
LICENSED
8312
KANSAS
PROFESSIONAL ENGINEER

DETAIL A
N.T.S.

DETAIL B
N.T.S.



Legal Description

A tract of land in the Southwest ¼ of Section 2, Township 11 South, Range 22 East in the City of Basehor, Leavenworth County, Kansas, more fully described as follows:

Beginning at a point 3,030.40 feet South and (S89°50'29"W) 446.00 feet from a point where the center line of Highway #72 intersects the North line of said Section 2, thence (S89°50'29"W) 208.00 feet; thence (South) 208.00 feet; thence (N89°50'29"E) 208.00 feet; thence (North) 208.00 feet to the point of beginning. Contains 1 acre more or less.

AND also easement for construction, operation, and maintenance of water line, and access road to tower site above described, which easement is described as follows to wit:

A tract of land in the Southwest Quarter of Section Two, Township Eleven South, Range Twenty-two East, described as follows:

Beginning at a point 3,030.40 feet South and 30.00 feet West from a point where the center line of Highway #72 (155th Street) intersects the North line of Section Two, this point also being the Southwest corner of the Southwest Quarter of Section Thirty-five, Township Ten South, Range Twenty-two East, the said point of beginning also being on the West right-of-way line of Highway #72; thence West 654 feet on the North line of properties conveyed to Robert Brock, Ray Breuer and Rural Water District No. 4, Leavenworth County, Kansas; thence North 60 feet; thence East 654 feet to West line of 155th Street, former Highway #72; thence South along the West line of said highway to place of beginning, together with right of ingress and egress over Grantors' adjacent lands for the purposes for which the above mentioned rights are granted. The easement hereby granted shall not exceed 60 feet in width, with water line construction restricted to the South 10 feet of above described permanent easement with an additional 15 feet adjacent thereto on the North side for temporary easement for construction of water line. Easement on North 50 feet shall terminate if the property is dedicated and becomes public street

OWNER

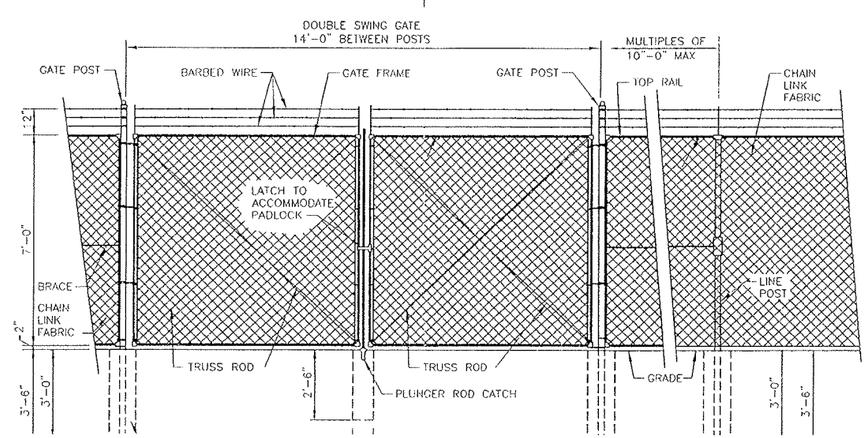
CONSOLIDATED RURAL WATER DISTRICT
NO. 1, LEAVENWORTH, COUNTY
15520 CRESTWOOD DR
P.O. BOX 419
BASEHOR, KS. 66007
PHONE: (913) 724-7000
FAX: (913) 724-1310
MIKE FULKERSON - MANAGER

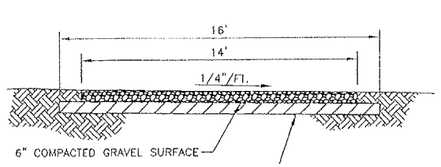
ENGINEER

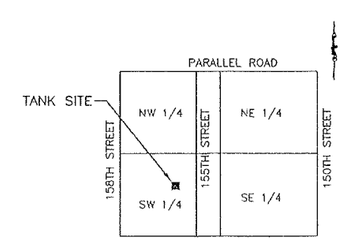
PONZER-YOUNGQUIST, P.A.
CONSULTING ENGINEERS & LAND SURVEYORS
227 E. DENNIS AVE
OLATHE, KS. 66061
PHONE: (913) 782-0541
FAX. (913) 782-0109

LEGEND

	EXISTING PROPERTY LINE
	EXISTING PERMANENT EASEMENT
	EXISTING UNDERGROUND ELECTRIC
	EXISTING POWER PEDESTAL
	EXISTING GUY WIRE
	EXISTING POWER POLE
	EXISTING LIGHT POLE
	EXISTING WATER VALVE
⋈	PROPOSED WATER VALVE
	EXISTING WATER LINE
	PROPOSED WATER MAIN
	EXISTING FENCE LINE
X	PROPOSED FENCE LINE
	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
976	PROPOSED MINOR CONTOUR
ST	PROPOSED STORM SEWER







CONSOLIDATED RURAL WATER DISTRICT NO. 1
LEAVENWORTH COUNTY, KANSAS

ELEVATED WATER STORAGE TANK

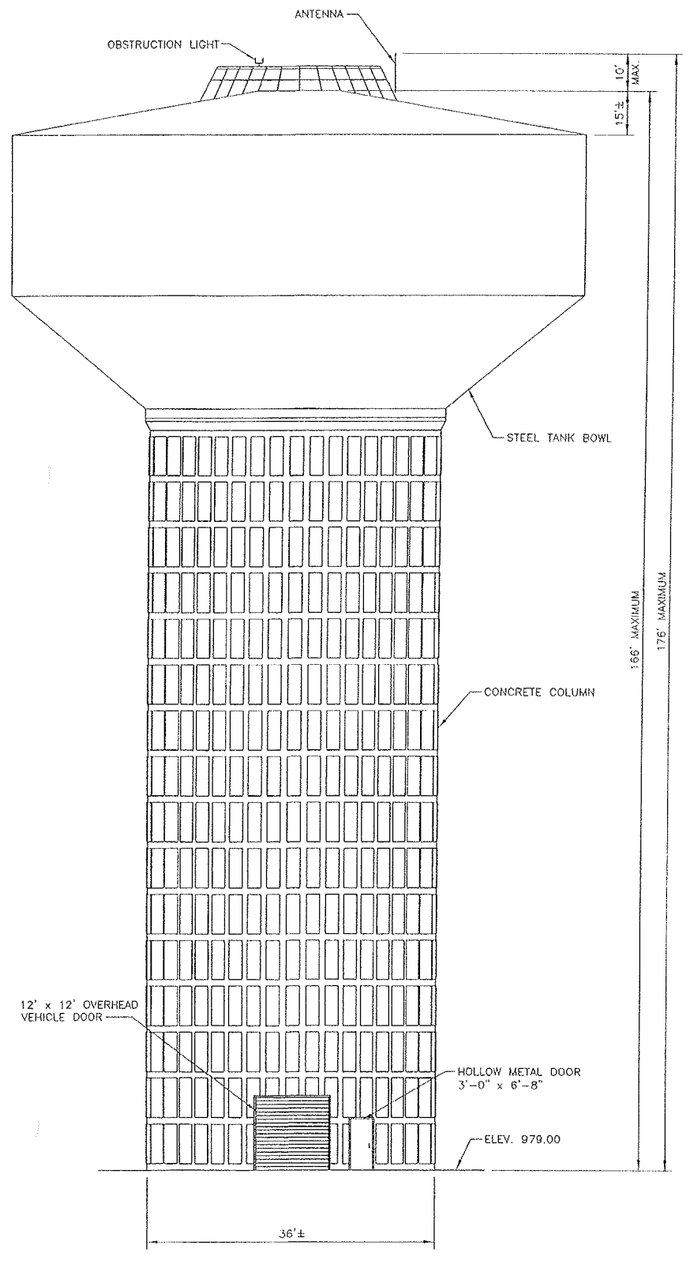
SITE PLAN

PONZER-YOUNGQUIST, P.A.
Consulting Engineers & Land Surveyors
227 E. Dennis Avenue
Olathe, Kansas 66061
Phone: (913)-782-0541
Fax: (913)-782-0109
Email: py@pyengineers.com

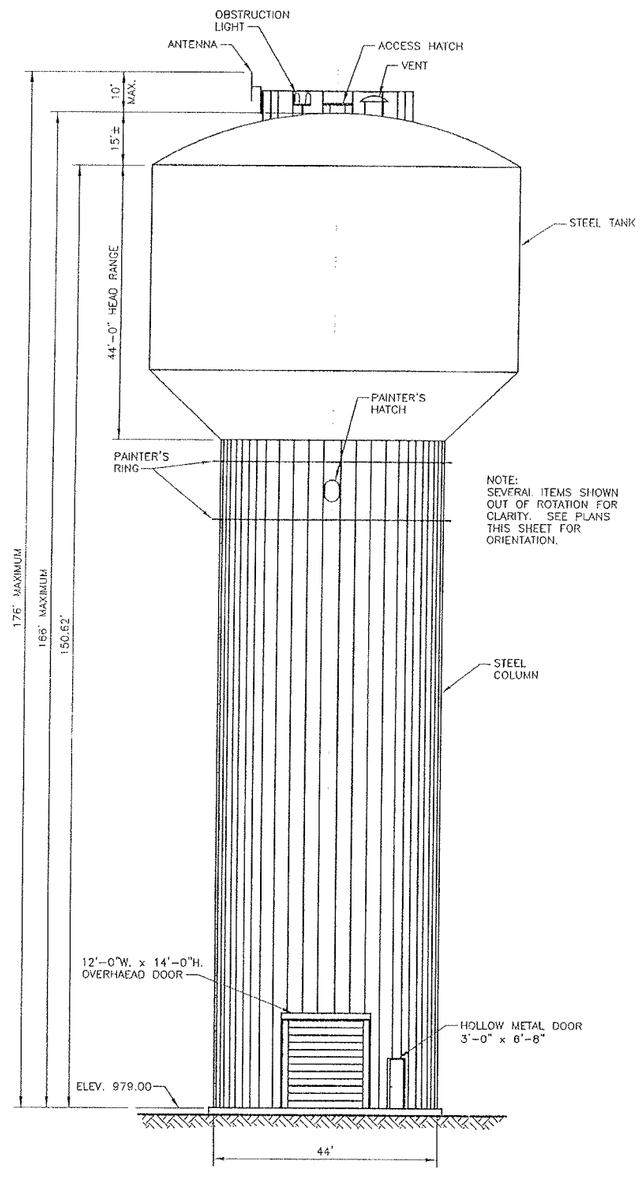
No.	Date	Revision	By

Designed By: JMB
Drawn By: MER
Checked By: JWC
Date: NOV./2009
Dwg File: TANK SITE/C PLAN

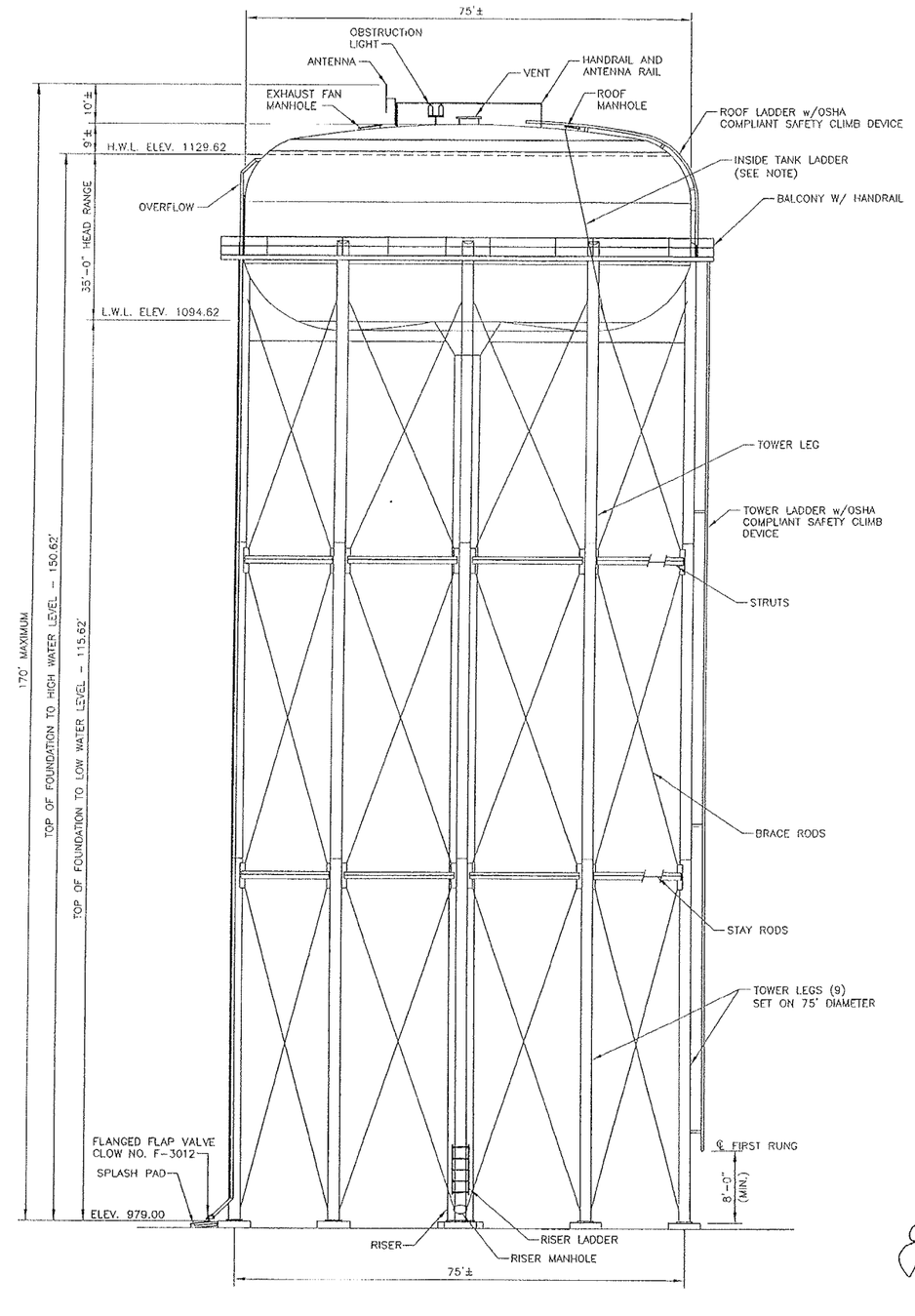
JAMES W. CHALLIS
LICENSED
8312
KANSAS
PROFESSIONAL ENGINEER



COMPOSITE TANK



STEEL FLUTED COLUMN TANK



CONSOLIDATED RURAL WATER DISTRICT NO. 1
LEAVENWORTH COUNTY, KANSAS

ELEVATED WATER STORAGE TANK

TANK ELEVATION DISPLAY

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Phone: (913)-782-0541
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Email: py@pyengineers.com

No	Date	Revision	By

Designed By: JWC
Drawn By: MER
Checked By: JWB
Date: NOV/2009
Dwg File: TANK-DISPLAY/DISPLAY

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