

Members of the Governing Body will participate by video call-in only due to the COVID-19 pandemic. The public will be able to view the meeting at <https://www.facebook.com/CityofPrairieVillage>

**COUNCIL MEETING AGENDA
CITY OF PRAIRIE VILLAGE
Council Chambers
Monday, July 20, 2020
6:00 PM**

I. CALL TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF THE AGENDA

V. PRESENTATIONS

Northeast Johnson County Chamber of Commerce update
Deb Settle

VI. PUBLIC PARTICIPATION

All comments must be submitted in writing to cityclerk@pvkansas.com prior to 3 p.m. on July 20 to be shared with Councilmembers prior to the meeting.

VII. CONSENT AGENDA

All items listed below are considered to be routine by the Governing Body and will be enacted by one motion (Roll Call Vote). There will be no separate discussion of these items unless a Council member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the regular agenda.

By Staff

1. Approval of regular City Council meeting minutes - July 6, 2020
2. Approval of Expenditure Ordinance #2992
3. Consider appointment to Prairie Village Arts Council

VIII. EXECUTIVE SESSION

IX. COMMITTEE REPORTS

Planning Commission

PC2020-106: Consider Ordinance 2422 to rezone 7631 Reinhardt Street from R-1A to R-1B
Jamie Robichaud

X. **MAYOR'S REPORT**

XI. **STAFF REPORTS**

XII. **OLD BUSINESS**

XIII. **NEW BUSINESS**

COU2020-33 Recommend the Governing Body adopt Charter Ordinance No. 29,
which repeals Charter Ordinance No. 27
Lisa Santa Maria

COU2020-34 Consider amendments to Chapter 1 (Article 13 - Emergency
Assistance and National Emergency Situations) of the Municipal
Code
David Waters

XIV. **COUNCIL COMMITTEE OF THE WHOLE** (Council President presiding)

Consider approval of agreement with Energy Solution Professionals
for an investment grade energy audit
Jamie Robichaud

XV. **ANNOUNCEMENTS**

XVI. **ADJOURNMENT**

If any individual requires special accommodations - for example, qualified interpreter, large print, reader, hearing assistance - in order to attend the meeting, please notify the City Clerk at 385-4616, no later than 48 hours prior to the beginning of the meeting. If you are unable to attend this meeting, comments may be received by e-mail at cityclerk@pvkansas.com



**CITY COUNCIL
CITY OF PRAIRIE VILLAGE
JULY 6, 2020**

The City Council of Prairie Village, Kansas, met in regular session on Monday, July 6, 2020, at 6:00 p.m. Due to the COVID-19 pandemic, Councilmembers attended a virtual meeting via the Zoom software platform. Mayor Mikkelson presided.

ROLL CALL

Roll was called by the City Clerk with the following Council Members in attendance remotely via Zoom: Chad Herring, Jori Nelson, Inga Selders, Ron Nelson, Tucker Poling, Bonnie Limbird, Sheila Myers, Piper Reimer, Dan Runion, Courtney McFadden, Ian Graves and Terrence Gallagher. Staff present via Zoom: Major Byron Roberson and Captain Eric McCullough, Police Department; Melissa Prenger, Public Works; City Attorney David Waters, attorney with Lathrop & Gage; Chris Brewster, Gould Evans; Wes Jordan, City Administrator; Jamie Robichaud, Deputy City Administrator; Lisa Santa Maria, Finance Director; Meghan Boom, Assistant City Administrator; Ashley Freburg, Deputy City Clerk/Public Information Officer; Adam Geffert, City Clerk.

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

Mr. Nelson made a motion to approve the agenda for July 6, 2020 as presented. Ms. Nelson seconded the motion. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 11-0, with Mr. Poling in abstention.

PRESENTATIONS

Kristy Baughman, Director of Education and Planning for United Community Services of Johnson County, gave a presentation on the Johnson County municipalities community housing study. She stated that the study was an effort to determine what connections existed between housing and health in the community. A link to a survey for county residents was included in the meeting packet.

Ms. Limbird introduced Michael Poppa, Executive Director of the Mainstream Coalition, and John Pauldine of the Mainstream Foundation, to present the Voter-to-Voter city challenge. The Voter-to-Voter Network, a non-partisan project, was created to increase voter turnout in the state of Kansas. The city challenge, in which cities in Northeast Johnson County compete for the highest voter turnout, will begin the second week of August 2020. Ms. Limbird will coordinate the City's participation.



CONSENT AGENDA

Mayor Mikkelson asked if there were any items to remove from the consent agenda for discussion.

1. Approval of regular City Council meeting minutes - June 15, 2020
2. Request permission to publish 2021 proposed budget

Ms. Limbird asked that the meeting minutes be removed from the agenda for comment.

Mrs. Myers made a motion to approve item #2 on the consent agenda as presented. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

Ms. Limbird clarified that when she voted in favor of Mr. Runion's motion to adopt the 2021 solid waste budget (found on page 7 of the minutes), she was unaware that the motion included the development of an environmental policy on sustainability. She noted that she did not have an opinion regarding the creation of such a policy at the present time.

Mrs. Myers made a motion to approve the consent agenda as presented. Ms. Limbird seconded the motion. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

COMMITTEE REPORTS

- **Planning Commission - PC2020-106: Consider Ordinance 2422 to rezone 7631 Reinhardt Street from R-1A to R-1B**

Mr. Brewster provided background on the application, stating that the property was located on a block with many non-conforming lots. Most of the lots were zoned R-1A, but the Planning Commission had approved a similar rezoning and lot split on the north end of the street to R-1B in 2018.

Mr. Brewster stated that a rezoning required the City Council to evaluate facts, weigh evidence, and consider the "Golden Factors" outlined in the zoning ordinance:

1. The character of the neighborhood
2. The zoning and uses of property nearby
3. The suitability of the property for the uses to which it has been restricted under its existing zoning
4. The extent that a change will detrimentally affect neighboring property
5. The length of time of any vacancy of the property
6. The relative gain to public health, safety and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners



7. City staff recommendations
8. Conformance with the Comprehensive Plan

Mr. Brewster stated that the Planning Commission voted to recommend approval of the rezoning to Council at its June 2, 2020 meeting.

Mr. Waters said that the Council would need to act in a quasi-judicial and impartial role, and make its determination based on the eight factors listed above. He asked Councilmembers if they had interacted with the applicant prior to the meeting. Several Councilmembers indicated they had received information packets from the applicant.

Mr. Waters asked whether Councilmembers felt they could consider the application in an impartial manner, free of pre-judgement. A roll call vote was taken with the following Councilmembers voting “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher.

Mr. Graves asked for additional information about the previous rezoning on the block that was approved by Council in 2018. Mr. Brewster said the request was very similar to the current one. He noted that staff would not normally have recommended an individual property be rezoned in such a fashion, but recognized the non-conformity of the lots in the area and that many properties on the street were aging and needed reinvestment. At the time, staff recommended to the Planning Commission that a rezoning should only be considered if there were also a broader strategy for reinvestment in the area.

Ms. Nelson asked how the character of the neighborhood, as described in Factor 1, could be quantified. She also shared concern regarding the expected sale price of the new properties, and how it differed from the goal of affordable housing advanced in the Comprehensive Plan. Mr. Brewster said that staff considered lot size, the age of structures, the consistency of home style, and the location of homes relative to the street. He added that the Comprehensive Plan spoke about neighborhoods with a wide variety of housing stock, and that newer construction would generally be more expensive than existing homes.

Mr. Gallagher asked if the proposed new homes would conform to R-1B building guidelines. Mr. Brewster said that the current design proposal did meet setback and building height requirements, but would also need to meet all other guidelines in order to be issued a building permit.

After further discussion, Mr. Poling made a motion to return the application to the Planning Commission with the guidance that City Council would like the Commission to review the issue of diversity of housing stock, consider a broader approach to planning in the area with significant public engagement and to review Golden Factors 1, 2, 4, 5 and 8. A roll call vote was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher, Mikkelson. The motion passed 13-0.



- Ms. Limbird said that the Art of Photography show could be viewed at <http://arts.pv.org>. Artwork displayed was also available for purchase on the website.
- Mr. Gallagher stated the Statuary Committee met on June 18. Paul Benson, with whom the City has a contract to repair statuary, gave a presentation on the condition of the over 200 pieces in Prairie Village, and discussed the continuation of annual repair work and an appraisal of all pieces.
- Mrs. McFadden provided a recap of the “VillageFest to Go” event on July 4, and thanked those involved in its planning.

MAYOR’S REPORT

- Mayor Mikkelson provided an update on the COVID-19 pandemic, noting that there had been an increase in new cases, with approximately 7% testing positive in Johnson County. County health officials stated that there could be a future increase in hospitalizations and deaths as a result. However, cases in Brighton Gardens had slowed dramatically.
- The Governor’s statewide mask requirement (Executive Order 20-52) went into effect on July 3, and the Johnson County Board of County Commissioners voted to uphold the plan. The City will make 20,000 masks available to local businesses.
- The Mayor spoke about the City’s racial justice and diversity initiatives, noting that the internal implicit bias training program would be made available to Councilmembers.
- The Mayor accepted an appointment as co-chair of the Mid-America Regional Council’s First Suburbs Coalition.
- The Mayor will serve as host and moderator of the second Climate Action KC webinar on August 13. The topic will be private-sector sustainability initiatives.
- Detective Jason Wakefield retired from the Prairie Village Police Department after 20 years of service.
- The Mayor shared sympathy for two Kansas City Missouri Police Officers that had been shot in the line of duty on July 2.
- The Mayor attended a groundbreaking for the new Sharp Law Office building the prior week.

STAFF REPORTS

Administration

- Ms. Freburg gave a demonstration of the City’s updated website, which went live July 1.
- Ms. Buum stated that the dedication for the new sculpture at 71st and Mission Road would be delayed based on the wishes of the artist and donor until the Coronavirus pandemic was better contained.



Skateboarding 101 classes have been tentatively scheduled for September and October.

The Johnson County Library will begin a “Walk and Read” program in City parks.

- Mrs. Santa Maria provided an update on sales tax revenues in the City. Revenues in April were only down 2%, which was much better than expected. A quarterly report will be given at the July 20 meeting.
- Mr. Jordan stated that the July Plan of Action was included in the meeting packet. He added that staff had not yet had an opportunity to begin the energy audit that was approved in the 2020 budget, but had met with the team that performed the audit previously. An update will be provided at the next Council meeting.

Mr. Herring asked whether there were any plans to modify large-item trash pickup in 2021 to address delays that occurred in 2020. Ms. Robichaud stated that Republic reported that they collected twice the amount of waste than the previous year. She added that staff would work with the Environmental Committee to make residents aware that all materials set out for large-item pickup go to the landfill. Ms. Nelson added that the Environmental Committee was considering holding an electronic recycling event prior to next year’s large-item pickup.

Public Safety

- Major Roberson discussed issues the Police Department had been addressing over the past several months, including the pandemic and protests over the death of George Floyd. He added that no complaints had been received about the mask ordinance since it went into effect July 3. Additionally, staff recently met with citizens who felt they had been racially profiled in the City, and that the Department continued to review policies and ensure officers were given diversity and implicit bias training.

OLD BUSINESS

Facemask Update - Mayor Mikkelson stated that he and staff had been considering how to address the Governor’s facemask order if the Johnson County Board of Commissioners had voted to opt out. He noted that the City’s current emergency order did not contain a statement on masks, and suggested that adding language giving the Mayor authority to enforce any county, state or federal health orders would help eliminate the time gap between Council approval of an Ordinance and its publication.

Mrs. McFadden made a motion for the City Attorney to amend the emergency declaration to give the Mayor the authority to enforce county, state and federal health orders and call an emergency meeting, if necessary, to discuss with City Council. Mr. Graves seconded the motion. A roll call vote was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.



NEW BUSINESS

COU2020-27

Consider an amendment to Chapter II (Animal Ordinance) of the Municipal Code

Mr. Waters provided an updated version of the Ordinance, noting that the biggest change was to the section defining “public slaughter” of chickens. State statutes prohibit the slaughter of animals on private property under the animal cruelty act. Mr. Waters recommended keeping language in the Ordinance prohibiting the killing of chickens. An additional change was a clarification on the size of chicken coops based on the number of chickens kept by a resident.

Mr. Herring asked whether the Ordinance should be voted on at the meeting, or if it should wait until zoning changes allowing chickens were made by the Planning Commission in August and brought to Council. Mr. Waters stated that the Ordinance could be approved during the meeting, but would not be published until the rezoning is also approved.

Ms. Selders made a motion to approve Ordinance 2421, amending Chapter II of the Municipal Code as presented. Mr. Poling seconded the motion. A roll call vote was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, Poling, Limbird, Reimer, McFadden, Graves; “nay”: R. Nelson, Myers, Runion, Gallagher. The motion passed 8-4.

COU2020-30

Consider the purchase and programming of new public safety radios for the Police Department

Captain McCullough shared information about the new radios, noting that the purchase and programming were necessary to remain compliant with the Metropolitan Area Regional Radio System (MARRS). \$450,000 had been set aside in the Police Department’s equipment reserve fund over several years in anticipation of the upgrade.

Mr. Herring made a motion to approve the purchase of new radios and radio programming required to be compliant with Metropolitan Area Regional Radio System (MARRS) Management Council requirements for the amount of \$395,535.80. The motion was seconded by Mr. Nelson. A roll call vote was taken with the following votes cast “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

COU2020-31

Consider Amendment No. 4 with McCownGordon for the guaranteed maximum price for construction of the Public Works facility (BG700002)

Ms. Prenger provided a presentation on the new Public Works facility. She stated that this would be the last amendment, setting the guaranteed maximum price at \$8,486,253.



The total amount included the three previous amendments approved by Council, and would ensure the building met LEED Platinum requirements. The total project cost was \$9,925,000.

Mr. Poling made a motion to approve amendment #4 as presented. The motion was seconded by Ms. Nelson. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

COU2020-32 Consider Project DRAIN-19X storm drainage program construction contract with Kansas Heavy Construction, LLC

Ms. Prenger stated that the project was budgeted in 2019 but was delayed due to other projects. Repairs would be made in three locations around the City:

- State Line Road (71st Street to 74th Street) – Storm sewer replacement and sidewalk addition
- 87th Terrace (near Catalina Street) – Storm sewer replacement with storm system additions for added capacity
- 75th Place (near Norwood Drive) – Repair of storm sewer pipe failure

Mr. Graves made a motion to approve the contract with Kansas Heavy Construction LLC in the amount of \$968,998.15. The motion was seconded by Mr. Herring. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

Mrs. Myers made a motion that the City Council move to the Council Committee of the Whole portion of the meeting. The motion was seconded by Mr. Poling. A roll call vote was taken with the following votes cast: "aye": Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

COUNCIL COMMITTEE OF THE WHOLE

Discussion of current noise ordinance(s) regulating construction

Major Roberson stated that noise regulations were referenced in both Chapter 8 and Chapter 11 of the Municipal Code:

- 8-504. BUILDING USE DISTURBING PEACE PROHIBITED. No person owning or in possession or control of any building or premises shall use the same, permit the use of the same or rent the same to be used for any business or employment or residential nature, disturb or destroy the peace of the neighborhood in which such



building or premises is situated or be dangerous or detrimental to health. (a) It is unlawful in any area of the city zoned R-1, R-2, R-3, R-4, RP1, RP2, RP3 or RP4 to operate a radio, phonograph, loud speaker, stereo, amplifier or musical instrument, in such a manner or with such volume that the same shall be audible at the property line of the building or premises from which the sound emanates between the hours of 11:00 p.m. on Sundays, Mondays, Tuesdays, Wednesdays and Thursdays or 12:00 midnight on Fridays and Saturdays and 7: 00 a.m. on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays or 9:00 a.m. on Saturdays and Sundays.

- 8-505. MECHANICAL APPARTUS USE RESTRICTIONS. It is unlawful for any person to use any pile driver, shovel, hammer derrick, hoist tractor, roller or other mechanical apparatus operated by fuel or electric power in building or construction operations between the hours of 9:00 p.m. and 7: 00 a.m. within 600 feet of any building used for residential or hospital purposes, except for emergency work on public improvements and emergency work of public and private service utilities.
- 11-201. DISTURBING THE PEACE. It shall be prima facie evidence of a violation of this section for the operation of any tool, equipment, vehicle, electronic device, instrument, television, phonograph, machine or other noise or sound device at any time in such a manner as to be plainly audible at any adjacent property line, or for 50 or more feet in the case of a multiple family dwelling, to start before or continue after the following hours: Weekdays: 7:00 a.m. until 10:00 p.m. (except Fridays, which will be until midnight.) Weekends: 8:00 a.m. until midnight (except Sundays, which will be until 10:00 p.m.)

Major Roberson reviewed the Mission Hills Ordinance, which stated that general noise (excluding construction) was allowed from 9:00 a.m. until 11:00 p.m. Construction noise was allowed from 8:00 a.m. to 8:00 p.m. Monday through Thursday, and 8:00 a.m. to 6:00 p.m. on Fridays and Saturdays. No construction noise was allowed on Sundays or holidays.

Mr. Gallagher asked if noise generated by professional contractors was treated differently than noise made by residents. Major Roberson said no distinction was made in the Prairie Village Code. He added that 157 complaints were received in 2019 for all types of noise violations. He added that most complaints were received for construction work beginning too early in the morning.

Ms. Nelson shared information about construction noise in Ward 1, and made a motion for Prairie Village to use the construction noise ordinance set forth in Mission Hills Municipal Code. The motion was seconded by Ms. Selders.

Mr. Waters noted that attempting to separate types of construction noises, such as those made by contractors versus those made by homeowners could be problematic. Mayor



Mikkelson added that both residents and the construction industry be given the opportunity to weigh in on the proposal before any changes are made.

After further discussion, Ms. Nelson amended her motion to “use the Mission Hills noise ordinance as a template and have staff apply what would be applicable for Prairie Village to protect residents from excessive construction noise.” Ms. Selders agreed to the changes and seconded the amended motion. A roll call vote on the original motion was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Graves, Gallagher; “nay”: Runion, McFadden. The motion passed 10-2.

Mr. Poling moved that the City Council end the Council Committee of the Whole portion of the meeting. The motion was seconded by Ms. Limbird. A roll call vote on the original motion as amended was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, Runion, McFadden, Graves, Gallagher. The motion passed 12-0.

ANNOUNCEMENTS

Announcements were included in the Council meeting packet.

ADJOURNMENT

Mr. Poling made a motion to adjourn the meeting. The motion was seconded by Mrs. Myers. A roll call vote was taken with the following votes cast: “aye”: Herring, J. Nelson, Selders, R. Nelson, Poling, Limbird, Myers, Reimer, McFadden, Graves, Gallagher. The motion passed 11-0.

Mayor Mikkelson declared the meeting adjourned at 10:56 p.m.

Adam Geffert
City Clerk

CITY TREASURER'S WARRANT REGISTER

DATE WARRANTS ISSUED:

Warrant Register Page No. 1

July 6, 2020

Copy of Ordinance
2992

Ordinance Page No. _____

An Ordinance Making Appropriate for the Payment of Certain Claims.

Be it ordained by the governing body of the City of Prairie Village, Kansas.

Section 1. That in order to pay the claims hereinafter stated which have been properly audited and approved, there is hereby appropriated out of funds in the City treasury the sum required for each claim.

NAME	DATE	AMOUNT	TOTAL
EXPENDITURES:			
Accounts Payable			
22062-22069	6/5/2020	10,508.17	✓
22070-22134	6/12/2020	531,238.02	✓
22135-22143	6/19/2020	8,441.08	✓
22144-22210	6/26/2020	144,772.41	✓
Payroll Expenditures			
6/5/2020		312,570.10	✓
6/19/2020		324,958.00	✓
Electronic Payments			
Electronic Pmnts			
	6/1/2020	998.80	✓
	6/3/2020	44.59	✓
	6/5/2020	\$ 5,098.48	✓
	6/8/2020	1,496.09	✓
	6/9/2020	12,679.67	✓
	6/12/2020	1,011.60	✓
	6/18/2020	5,010.58	✓
	6/25/2020	172.92	✓
	6/26/2020	18,307.93	✓
TOTAL EXPENDITURES:			1,377,308.44 ✓
Voided Checks	Check #	(Amount)	
TOTAL VOIDED CHECKS:			
GRAND TOTAL CLAIMS ORDINANCE			1,377,308.44

Section 2. That this ordinance shall take effect and be in force from and after its passage.

Passed this 6th day of July 2020.

Signed or Approved this 6th day of July 2020.

(SEAL)
ATTEST: Courtney Kramer 07.13.2020
City Treasurer

ATTEST: Lin [Signature] 7.6.20
Finance Director



MAYOR

**Council Meeting Date: July 20, 2020
Consent Agenda**

Consent Agenda: Consider Appointment to Prairie Village Arts Council

BACKGROUND

Mayor Mikkelson requests ratification of his appointment of Maddie Kamphaus to fill a vacancy on the Arts Council. Maddie's application is attached for review. Maddie's appointment will fill an unexpired term and will be up for reappointment in 2022.

PREPARED BY

Jamie Robichaud
Deputy City Administrator
Date: July 15, 2020



City of Prairie Village
APPLICATION TO VOLUNTEER

Please complete this form and return it to the City Clerk's Office, 7700 Mission Road, Prairie Village, Kansas 66208. If you have any questions, please contact the City Clerk's Office at 913-381-6464 or send an e-mail to cityclerk@pvkansas.com.

Name Maddie Kamphaus Spouse's Name _____
Address 5405 W 73rd Street Zip 66208 Ward 4
Telephone: Home 816-405-4054 Work _____ Fax _____
E-mail malkd2@gmail.com Other Number(s): _____
Business Affiliation Wheelhaus Marketing Co.
Business Address online
What Committee(s) interests you? Arts Committee

Please tell us about yourself, listing any special skills or experiences you have which would qualify you for a volunteer with the City of Prairie Village.

I am a marketing & design professional who also happens to hold a Fine Arts degree from the Kansas City Art Institute. I have experience in a wide variety of areas, but work most commonly as a freelance/outsourced marketer for small and medium-sized businesses

As heard on a recent City Council livestreamed meeting, the Arts Council was seeking help with marketing. Given my experience and a desire to be active in our community, I have decided to apply for this opportunity.

Thank you for your interest in serving our community.



PC2020-106: Consider Ordinance 2422 to rezone 7631 Reinhardt St from R-1A to R-1B

RECOMMENDATION

Make a motion to accept the Planning Commission's recommendation and approve PC2020-106, rezoning 7631 Reinhardt St from R-1A (Single-Family Residential) to R-1B (Single-Family Residential). According to Section 19.52.040 of the Zoning Regulations, the Governing Body can now adopt or amend the Planning Commission's recommendation with a simple majority vote (7 votes including the Mayor), or choose to take no further action.

BACKGROUND

At the July 6 City Council meeting, the City Council voted unanimously to send this rezoning request back to the Planning Commission for further consideration. The Council asked the Planning Commission consider a broader, more holistic approach to planning in this area with significant public engagement and to specifically review Golden Factors 1, 2, 4, 5, and 8, as shown below. The Council also asked the Planning Commission to consider the diversity of the housing stock in Prairie Village in determining whether this rezoning request should be approved or denied.

At the July 7 Planning Commission meeting, the Planning Commission took up this item for consideration again based on the Council's direction. After a discussion on the council's request as well as specifically discussing Golden Factors 1, 2, 4, 5, and 8, the Planning Commission voted unanimously 6-0 to send their original recommendation of approval back to the City Council for final consideration. An excerpt of the Planning Commission minutes are attached for the Council's review, and the full discussion by the Planning Commission at their July 7 meeting can be viewed at the following link: <https://www.facebook.com/86771817084/videos/1115054565548431>.

A rezoning application requires the City Council to act in its quasi-judicial role. When acting in this capacity, rather than a legislative capacity, the governing body must set aside personal opinions and, like a judge, apply the law to facts presented in the public record. The City Council cannot prejudge an application. In considering a residential rezoning, the Council must consider the overall use of the land/lot itself, and not the design of the structures that are being proposed. The following criteria, commonly referred to as the "Golden" factors, must be used in determining the reason as to why the application should be approved or denied:

1. The character of the neighborhood.
2. The zoning and uses of property nearby.
3. The suitability of the property for the uses to which it has been restricted under its existing zoning.
4. The extent that a change will detrimentally affect neighboring property.
5. The length of time of any vacancy of the property.
6. The relative gain to public health, safety, and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners.
7. City staff recommendations.
8. Conformance with the Comprehensive Plan.

An analysis of all of these factors is provided in the attached Planning Commission staff report. Additional materials related to this application are also attached for the Council's review.

Chris Brewster, the City's Planning Consultant, will be present at the meeting to provide a short presentation and answer any associated questions. The applicant will also be present at the meeting to answer any questions the Council may have.

ATTACHMENTS

Ordinance 2422

Planning Commission Staff Report

Excerpt from the July 7, 2020 Planning Commission Minutes

Agenda Cover provided to Planning Commission at July 7, 2020 meeting

Correspondence from Doug Patterson, attorney for estate of 7631 Reinhardt

Rezoning Application

Excerpt from June 2, 2020 Planning Commission Minutes

PREPARED BY

Jamie Robichaud

Deputy City Administrator

Date: July 15, 2020

ORDINANCE 2422

AN ORDINANCE REZONING PROPERTY LOCATED AT 7631 REINHARDT STREET, PRAIRIE VILLAGE, KANSAS FROM R1-A (SINGLE-FAMILY RESIDENTIAL) TO R-1B (SINGLE-FAMILY RESIDENTIAL), DIRECTING THE AMENDMENT OF THE OFFICIAL ZONING MAP OF THE CITY OF PRAIRIE VILLAGE, KANSAS; AND REINCORPORATING SAID ZONING MAP BY REFERENCE.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF PRAIRIE VILLAGE, KANSAS:

Section I. Planning Commission Recommendation. That having received a recommendation from the Planning Commission; having found favorably on the findings of fact, proper notice having been given and hearing held as provided by law and under the authority of and subject to the provisions of the Zoning Regulations of the City of Prairie Village, Kansas, the zoning classification or districts of the lands hereinafter legally described are changed from R-1A (Single-Family Residential) to R-1B (Single-Family Residential) as set forth in Section II.

Section II. Rezoning of Property. That the real estate located at 4820 W 75th Street, Prairie Village, Kansas, and hereinafter described to Wit: Sunset Hill Acres Lot 9 PVC-11544.

7631 Reinhardt Street, Prairie Village, Kansas 66208

is hereby rezoned in its entirety from R-1A (Single-Family Residential) to R-1B (Single-Family Residential).

Section III. Reincorporation by Reference of Prairie Village, Kansas Zoning District Map as Amended. The official Zoning District Map of the City is hereby amended in accordance with Section II of this Ordinance and is hereby reincorporated by reference and declared to be the Official Zoning District Map of the City as provided for and adopted pursuant to the provisions of Section 19.04.010 of the Prairie Village Zoning Regulations.

Section IV. Take Effect. That this ordinance shall take effect and be in full force from and after its publication in the official City newspaper as provided by law.

PASSED AND APPROVED THIS 6TH DAY OF JULY, 2020.

Mayor Eric Mikkelson

ATTEST:

APPROVED AS TO FORM:

Adam Geffert, City Clerk

David E. Waters, City Attorney



PC2020-106: Consider Ordinance 2422 to rezone 7631 Reinhardt St from R-1A to R-1B

BACKGROUND

At the June 2, 2020 Planning Commission meeting, the Planning Commission voted to unanimously recommend approval of the rezoning request for 7631 Reinhardt Street. The City Council considered the recommendation at their July 6, 2020 Council meeting and voted unanimously to send the request back to the Planning Commission for further consideration.

The Council asked that the Planning Commission consider a broader, more holistic approach to planning in this area with significant public engagement and to specifically review Golden Factors 1, 2, 4, 5, and 8, as shown below. The Council also asked the Planning Commission to consider the diversity of the housing stock in Prairie Village in determining whether this rezoning request should be approved or denied. The full discussion by the City Council can be viewed at the following link beginning at the 45:00 mark: <https://www.facebook.com/CityofPrairieVillage/videos/892886997869787/>.

The Golden Factors that should be used in consideration of a rezoning application include, but are not limited to, the following: 1) the character of the neighborhood; 2) the zoning and uses of property nearby; 3) the suitability of the property for the uses to which it has been restricted under its existing zoning; 4) the extent that a change will detrimentally affect neighboring property; 5) the length of time of any vacancy of the property; 6) the relative gain to public health, safety, and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners; 7) city staff recommendations; and 8) conformance with the Comprehensive Plan.

According to Section 19.52.040 of the Zoning Regulations, the Governing Body can take the following actions on a rezoning recommendation from the Planning Commission:

1. Adopt the Planning Commission's recommendation by a simple majority (7 votes including the Mayor)
2. Override the Planning Commission's recommendation by a 2/3 majority vote of the entire Governing Body (9 votes including the Mayor)
3. Return the recommendation to the Planning Commission with a statement specifying the basis for the Governing Body's failure to approve or disapprove by a simple majority. The Planning Commission can then submit the original recommendation or submit a new and amended recommendation. The Governing Body then can adopt or amend the recommendation by a simple majority (7 votes) or take no further action.

ACTION REQUIRED

In considering the guidance of the City Council above, the Planning Commission must make a motion to either submit the original recommendation for approval or submit a new and amended recommendation to the City Council.

PREPARED BY

Jamie Robichaud
Deputy City Administrator
Date: July 7, 2020

**EXCERPT OF PLANNING COMMISSION MINUTES
JULY 7, 2020**

**PC2020-106 Rezoning and Request for Lot Split
7631 Reinhardt Street
Current Zoning: R-1A
Requested Zoning: R-1B
Applicant: Mojo Built, LLC**

Ms. Robichaud stated that at its June 2, 2020 meeting, the Planning Commission voted to unanimously recommend approval of the rezoning request for 7631 Reinhardt Street. The City Council considered the recommendation at its July 6, 2020 meeting and voted unanimously to send the request back to the Planning Commission for further consideration. The Council asked that the Planning Commission consider a broader, more holistic approach to planning in the area with significant public engagement, and to specifically review Golden Factors 1, 2, 4, 5, and 8. The Council also asked the Planning Commission to consider the diversity of the housing stock in Prairie Village in determining whether this rezoning request should be approved or denied.

Ms. Robichaud explained that the Commission would need to make a motion to either submit the original recommendation for approval or submit a new and amended recommendation to the City Council.

Mr. Wolf asked Commission members if they felt the decision should be revisited and whether a different conclusion might be reached.

Mrs. Wallerstein stated that she had previously asked how the setbacks of the proposed homes would align with the homes that had previously been approved in 2018, and added that there was little consistency on the street.

Mr. Lenahan said that his interpretation of what the Council was asking the Commission to consider was either (A) All rezoning and lot split applications should be put on hold, and instead institute a process on rezoning of the entire neighborhood between Mission, Belinder, 75th Street and 77th Street where many non-conforming lots exist, or (B) that the City is not supportive of piecemeal rezoning, and all rezoning and lot split applications should be rejected.

Ms. Robichaud stated that the Council requested robust public engagement on how the neighborhood should look based on Village Vision 2.0, diversity of housing stock, whether there were ways to address affordable housing, and whether new housing fit the character of the neighborhood. She added that she believed there were three options to consider based on the Council's direction to the Planning Commission:

1. The Planning Commission could decide to take a more holistic approach and recommend denying the rezoning of individual parcels in the area until a more robust public engagement and study is done of this area;

2. The Planning Commission could recommend approval of rezoning individual parcels in the area if considered to be part of a broader strategy for the area, which the Planning Commission may find would more appropriately be zoned R-1B; or
3. The Planning Commission could recommend approval of rezoning individual parcels in the area in conjunction with undertaking a broader strategy for the neighborhood once Village Vision 2.0 is completed.

Mr. Lenahan added that he felt it would be inappropriate for the City to deny rezonings in the area for a significant period of time while a more holistic process is established, even though it may likely be needed for the area. A piecemeal approach could function as an intermediary step until the process is in place, which in and of itself already requires robust public engagement from the neighborhood through neighborhood meetings and public hearings. Mr. Birkel and Mr. Breneman agreed.

Mrs. Wallerstein noted that she felt this type of home construction was not significantly different than redevelopment in other parts of the City, with the exception of the lot sizes. Ms. Brown said that she lived in the neighborhood, and stated that there were “pockets” of redevelopment in certain areas, so it would not be possible to use the rezoning and lot split process for many entire blocks in the neighborhood because most of the lots in the area were smaller and not capable of being split. She did not feel a long study of this area was needed before re-zonings could be approved due to the number of similar applications that could come before the Planning Commission are already limited due to the existing sizes of lots in the area.

Ms. Brown made a motion to resubmit the original recommendation back to the City Council. Mr. Breneman seconded the motion.

Mr. Lenahan added that the Planning Commission should make specific statements on how their recommendation is consistent with the Golden Factors the Council specifically asked them to address. The Planning Commission shared the following thoughts regarding Golden Factors 1, 2, 4, 5, and 8:

1. The Character of Neighborhood - Mr. Lenahan stated that the neighborhood was generally composed of smaller houses on smaller lots with occasional smaller houses on larger lots. The block itself was hard to characterize due to the difference in lot size, house style, and the position of homes on the lots. Ms. Brown added that these types of lot splits actually work to strengthen the character of the street by bringing the houses up to the same setback line and providing consistency. She added that what could be built under R-1A standards would more negatively impact the character of the neighborhood than the smaller home that would be required to be built under R-1B if the property is rezoned and the lots are split.
2. The Zoning and Uses of Property Nearby - Mr. Lenahan said that most lots were zoned R-1A, but were of many different sizes and not conforming to the

requirements of R-1A lots due to the properties being platted before the City's subdivision regulations were adopted.

4. The Extent that a Change Will Detrimentally Affect Neighboring Property - Mr. Lenehan suggested that a zoning change would not affect neighboring property negatively, but discouraging reinvestment by denying the rezoning request could result in deteriorating properties. Ms. Brown added that leaving the property zoned R-1A may cause the construction of a much larger home that would not fit the neighborhood.
5. The Length of Time of any Vacancy on the Property - Mr. Lenehan asked if the current residence on the property was vacant. The applicant, John Moffitt, stated that the home was currently occupied but would be vacant in a week. He added that it was really not currently a habitable residence.
8. Conformance with the Comprehensive Plan - Mr. Lenehan noted that the Village Vision described the incentivizing of redevelopment and reinvestment in neighborhoods and this application is consistent with that.

The motion to resubmit the original recommendation back to Council passed 6-0.

PROPERTY LAW FIRM, LLC

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July 15, 2020

Mayor Eric Mikkelson
Members of the Prairie Village, Kansas City Council
City Hall
7700 Mission Road
Prairie Village, Kansas 66208

Re: PC2020-106 and PC2020-110, 7631 Reinhardt and 7632 Reinhardt.

Dear Mayor and Council Members:

This letter is written in connection with your consideration of Case # PC2020-106 concerning 7631 Reinhardt, Prairie Village. I represent the owner of 7631 Reinhardt, the Estate of Rita Esry, Johnson County Probate Case No. 20 PR 00438. The issue before you is that of a rezoning from R-1A to R-1B and a lot split.

I also represent the owner of a similarly situated property (directly across the street) addressed 7632 Reinhardt, Prairie Village, Emily E. Patterson, PC2020-110. That rezoning from R-1A to R-1B and a lot split will be before you on August 3, 2020. I hesitated to address 7632 Reinhardt, in this letter, but have done so in order to explain and expand on the Class of One Equal Protection issues which the City now faces.

Of legal significance here is case PC2018-03 and Ordinance # 2380, a 2018 zoning matter involving a rezoning and lot split application concerning 7540 Reinhardt. The Prairie Village Planning Commission recommended approval of case PC2018-03 and referred the matter to the City Council. The City Council at the time was comprised of eight of the twelve of you sitting today. The Council's vote on Case PC2018-03 and Ordinance # 2380 was eight to four. Four of the present members of the Council were sitting in 2018 and voted in favor of PC2018-03 and Ordinance # 2380.

Two houses were constructed on the resulting two lots from PC2018-03 and Ordinance # 2380. Thereafter, this Council took up a consideration of the type of housing that would be appropriate to be built upon resulting split lots. The result of that consideration was the Council's adoption of § 19.06.025 of the PV Zoning Regulations for R-1A zoned property (basically addressing tear-downs or flipped properties all on a non-rezoned not involving a split lot) and § 19.08.025 of the PV Zoning Regulations for resulting R-1B zoned property involving a lot split. These two sections, both entitled "Neighborhood Design Standards" are good public policy seeking to assure that compatible new housing is constructed in adjoining and existing neighborhoods. However, these Neighborhood Design Standards come into play as part of the plan review processes for new house construction after, in the case of PC2020-106 – Ordinance 2422, the lot has been rezoned and split.

There exist material and substantial similarities between the 2018 case, Case PC2018-03 - Ordinance # 2380, and the applications before you concerning 7631 and 7632 Reinhardt:

1. 7540 Reinhardt is approximately 800 feet north of 7631 and 7632 Reinhardt.
2. All three properties had and have a 120-foot frontage along Reinhardt.
3. Both the original 7540 Reinhardt house and the 7632 Reinhardt house currently were/are non-conforming uses. 7540 Reinhardt had a non-compliant rear yard and 7632 Reinhardt has, at best, a three-foot rear yard.
4. The 7540 Reinhardt house was very small, and 7632 Reinhardt has 1321 square feet. 7632 Reinhardt has a building coverage (first floor footprint) of 945 sq. ft. 7540 Reinhardt was substantially identical. The building coverage of 7632 Reinhardt in its current condition is 5.7%. 7540 Reinhardt was substantially identical. The zoning for R-1A and R-1B provide a building coverage of 30%.
5. Both of these houses (7540 and 7632) were built near 1900 = 120 years ago, when this area represented rural cabin housing next to a lake.
6. 7631 Reinhardt has suffered blighted conditions and all three properties represent prime redevelopment opportunities pursuant to the 2007 Village Vision.
7. All three of these properties were (as to 7540 Reinhardt) and now are (as to 7631 Reinhardt and 7632 Reinhardt) wholly incompatible with the remainder of the Reinhardt neighborhood.

8. With the adoption of the Neighborhood Design Standards following a rezoning from R-1A, to R-1B and a lot split for 7631 and 7632 Reinhardt, housing compatible with the neighboring homes will result.

9. The approval by the City of PC2018-03 with the adoption of Ordinance # 2380 and the current rezoning and lot split applications for 7631 and 7632 Reinhardt are, essentially within two years from each other with the only planning or ordinance changes during this time being the inclusion of the Neighborhood Design Standards which *now* protect the immediate neighborhood from incompatible land uses.

In fact, it is difficult to think of one material and substantial difference between 7540 Reinhardt, rezoned and lot split two years ago and to 7631 and 7632 Reinhardt which appear to be a challenge today. Different members of the Council do not represent a valid distinction between the City's consideration between 7540 Reinhardt two years ago and to 7631 and 7632 Reinhardt today. In fact the adoption of the design review criteria of the Neighborhood Design Standards has added protections concerning the type of housing that can be built on a the resulting rezoning and lot splits of 7631 and 7632 Reinhardt - more protection than existed in 2018 in the 7540 Reinhardt matter approved by this very governing body. Least we forget, consideration of the Neighborhood Design Standards occurs after the rezone and lot split are approved in order to consider these standards applicable to the resulting re-zoned and lot split parcels. Pursuant to § 19.06.025 and § 19.08.025 of the PV Zoning Regulations, you do not now have before you an application for determination of what can be built under these sections - just the rezoning and lot split applications.

Based upon the Neighborhood Design Standards, a denial of rezoning and lot splits for 7631 and 7632 Reinhardt will result in the very type of replacement housing that the Neighborhood Design Standards seek to avoid.

In the case of the 7631 Reinhardt lot, the dimensions are 120'x'140', with R-1A, would allow a house footprint of about 5,000 square feet on the main floor/garage (based on 30% lot coverage). At 2-1/2 stories maximum, the structure could achieve 12,500 +/- square feet; as opposed to - with R1-B - about 2,500 square feet on main floor/garage (based on 30% lot coverage), and at 2 stories, the limit is 5,000 +/- square feet. A copy of a sketch plan of a house which could be built on 7631 Reinhardt without the rezoning or lot split is attached. This is not in keeping with the character of the neighborhood but would be an option if the rezoning and lot split are not allowed.

Both zoning classes (R-1A and R-1B) include provisions that the side yard setbacks must equal 20% of the total lot width, with a minimum of 7'-0" or 6'-0", respectively, based on zoning class. That said, if the lot is forced to remain R-1A, the house would stand a chance to be 106'-0" in total width, if hitting both setbacks (12'-0" each side to total 24'-0" total width of side yard

setbacks). As compared to if the lot is allowed to be split to a R-1B zoning, two 60'-0" lots are created, with a maximum of 48'-0" wide houses, for a total of 96'-0" of house frontage; 10'-0" less in bulk width of wall at the building line.

The same analysis holds true also for 7632 Reinhardt.

Prairie Village has made compliance with the mandatory but not exclusive eight items of zoning criteria established in *Golden v. City of Overland Park*, 584 P.2d 130 (Kan., 1978) an important part of zoning application consideration. State and federal courts have wrestled with the requirements of *Golden* when dealing with zoning cases. While a city need not specifically address all eight items in a sophisticated record (as Prairie Village does), consideration of these eight items must be contained in the record of the City's consideration of zoning cases. *Landau v. City Council of City of Overland Park*, 244 Kan. 257, 263, 767 P.2d 1290, 1294-95 (1989), *holding modified by Davis v. City of Leavenworth*, 247 Kan. 486, 802 P.2d 494 (1990). And while the adoption of broad and generalized overlay zoning or new zoning designations for areas of a city are typically seen as legislative decisions (*Zimmerman v. Bd. of Cty. Comm'rs*, 289 Kan. 926, 947-50, 218 P.3d 400, 415-16 (2009), where the standard of review is one of reasonableness, Kansas cases hold that a city's consideration of specific zoning issues dealing with a specific property remain quasi-judicial decisions in nature which require enhanced substantive and procedural rights and closer judicial scrutiny. *Neis v. Bd. of Cty. Comm'rs of Douglas Cty.*, 293 P.3d 168 (Kan. Ct. App. 2013).

In PC2020-106 concerning 7631 Reinhardt – Ordinance 2422 (as well as PC2020-110 - 7632 Reinhardt), your professional staff and the planning commission have undertaken comprehensive studies and fact findings to support a recommendation of approval based upon favorable and positive decisions on all eight applicable *Golden* criteria. On July 6, 2020, you remanded PC2020-106 back to the Planning Commission for further findings and clarification with respect to various *Golden* criteria. On July 7, 2020, the Planning Commission again considered PC2020-106 concerning 7631 Reinhardt – Ordinance 2422, made a record of the *Golden* criteria for which the City Council sought clarification and again recommended approval of PC2020-106 unanimously. On that date, the Planning Commission also unanimously recommended approval of PC2020-110 - 7632 Reinhardt to you. That case will be considered by you on August 3, 2020. A denial of the rezoning and lot split on either case will represent a quasi-judicial decision abuse inconsistent with *Golden*, against the weight of the evidence and will not go unchallenged.

But apart from the planning considerations, a denial of the current two requests for rezoning and lot splits will result in a denial of Equal Protection under the law for my clients under the Fourteenth Amendment to the United States Constitution as made enforceable under 42 U.S.C. Sec. 1983. I hesitate to threaten litigation. None is warranted if the City makes the correct decision in these zoning cases. However [municipalities are liable under § 1983 to be

sued as 'persons' within the meaning of that statute, when the alleged unlawful action was implemented or was executed pursuant to a governmental policy or custom. *Komondy v. Gioco*, 253 F. Supp. 3d 430, 441 (D. Conn. 2017).

The Equal Protection Clause of the Fourteenth Amendment requires the government to treat similarly situated persons alike. See *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 439, 105 S.Ct. 3249, 87 L.Ed.2d 313 (1985). A plaintiff who does not claim to be a member of a constitutionally protected class may bring an Equal Protection claim on one of two theories: selective enforcement or Class of One. *Missere v. Gross*, 826 F. Supp. 2d 542, 560 (S.D.N.Y. 2011). Here, in a zoning case, the property owners and zoning applicant would be considered as aggrieved parties under consideration as a Class of One. Class-of-One plaintiffs must show an extremely high degree of similarity between themselves and the persons to whom they compare themselves. Accordingly, to succeed on a Class-of-One claim, a plaintiff must establish that (i) no rational person could regard the circumstances of the plaintiff to differ from those of a comparator to a degree that would justify the differential treatment on the basis of a legitimate government policy; and (ii) the similarity in circumstances and difference in treatment are sufficient to exclude the possibility that the defendants acted on the basis of a mistake. *Missere v. Gross*, 826 F. Supp. 2d 542, 561 (S.D.N.Y. 2011). The burden here is a high bar given that generally comparisons of zoning cases involving zoning granted in one area under specific circumstances often involve different considerations to the zoning decision under challenge.

But not here.

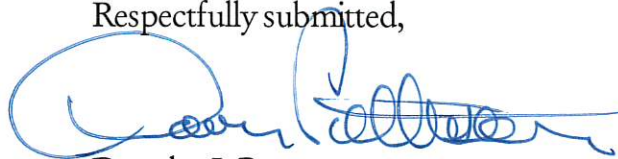
As can be seen from the above discussion, in Case PC2018-03 - Ordinance # 2380, the City approved a R-1B zoning and lot split to 7540 Reinhardt with an extremely high degree of land use, land planning and similarity (if not identical) with 7540 Reinhardt and 7631 and 7632 Reinhardt in comparison. As found in *Jacobs, Visconsi & Jacobs, Co. v. City of Lawrence, Kan.*, 927 F.2d 1111, 1118-19 (10th Cir. 1991), only the location of the proposed development created any differences to the prior and precedential zoning cases which the plaintiff used as comparisons. While the *Jacobs* court did uphold the dismissal of that plaintiff's case, the law established there is clear. There is absolutely no difference between what the City considered in the 7540 Reinhardt zoning case and the 7631 Reinhardt/7632 Reinhardt zoning cases other than two years, during which the City's only reaction was to adopt the Neighborhood Design Standards which added an additional regulatory precaution to calm the issues which for some reason the City Council continues to make an issue. There is no such issue.

The facts of the current cases before the City point to a substantive pre-existing right maintained by the owners and the zoning applicant. The zoning applicant is under contract to purchase 7631 and 7632 Reinhardt. The owner of at least 7632 Reinhardt is under contract to acquire a replacement residence. An illegal change of attitude, especially by four council members voting in favor of the 2018 zoning and lot split case is arbitrary and unsupportable.

This is why Prairie Village has ordinances and past official actions which can be relied upon by its citizens, not the whims of its leaders. I realized this during my time on my city council and later as a Kansas legislator. A denial of these rezoning requests and lot splits will jeopardize sales and subsequent purchases resulting in damages. These decisions you are called upon to make have serious consequences and are worthy of more from you than just an effort to assuage often anonymous internet trolls and Facebook posts. Such was the consideration in *Alb. Commons P'ship v. Alb. City Council*, 146 N.M. 568, 212 P.3d 1122, rev'd sub nom. *Albuquerque Commons P'ship v. City Council of City of Albuquerque*, 2011-NMSG-002, ¶ 30, 149 N.M. 308, 248 P.3d 856, where an award of damages in excess of \$8 million dollars and attorney's fees against the city was made and upheld, with specific reference to *Jacobs*.

I would urge you to adopt the recommendations of the Planning Commission made July 7, 2020 regarding 7631 Reinhardt – Ordinance 2422 as well as PC2020-110 - 7632 Reinhardt and approve the rezoning requests and lot splits you now and will have before you.

Respectfully submitted,

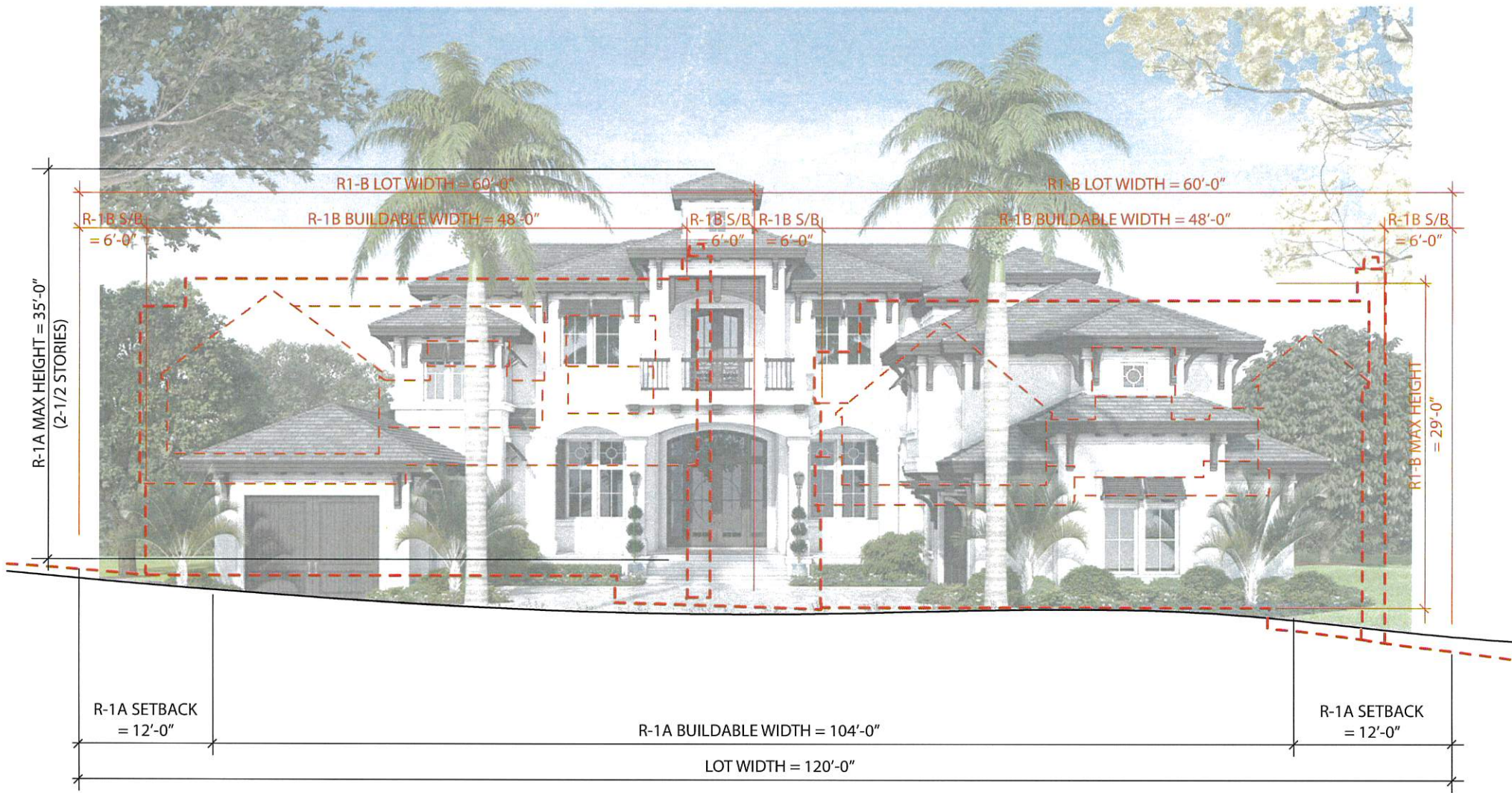


Douglas J. Patterson

DJP/lm

Attachment – Graphic – 7631 Reinhardt

cc: David Waters, Esq – David.waters@lathropgpm.com



Scale: 1/8" = 1'-0"
 Project No.: 2020.05.26
 Date: July 15, 2020

CITY OF PRAIRIE VILLAGE, KANSAS
REZONING APPLICATION FORM

For Office Use Only

Case No.: _____
Filing Fees: _____
Deposit: _____



Date Advertised: _____
Date Notices Sent: _____
Public Hearing Date: _____

APPLICANT: MOTO BUILT, LLC PHONE: 913.491.6800
ADDRESS: 5300 COLLEGE BLVD, OP, KS ZIP: 66211
OWNER: RITA ESBY PHONE: _____
ADDRESS: 7631 REINHARDT ST, PV, KS ZIP: 66208
LOCATION OF PROPERTY: 7631 REINHARDT ST
LEGAL DESCRIPTION: SUNSET HILL ACRES LOT 9 PVC-11544

Present Zoning RI-A Requested Zoning: RI-B
Present Use of Property: RESIDENTIAL

SURROUNDING LAND USE AND ZONING:

	Land Use	Zoning
North	<u>RESIDENTIAL</u>	<u>RI-A</u>
South	<u>RESIDENTIAL</u>	<u>RI-A</u>
East	<u>RESIDENTIAL</u>	<u>RI-A</u>
West	<u>RESIDENTIAL</u>	<u>RI-A</u>

CHARACTER OF THE NEIGHBORHOOD: RESIDENTIAL

RELATIONSHIP TO EXISTING ZONING PATTERN:

1. Would proposed change create a small, isolated district unrelated to surrounding districts?
NO
2. Are there substantial reasons why the property cannot be used in accord with existing zoning?
MANY EXISTING, SURROUNDING LOTS ARE CURRENTLY ZONED RI-A, BUT DO
If yes, explain: NOT CONFORM IN WIDTH OR AREA.

CONFORMANCE WITH COMPREHENSIVE PLAN:

1. Consistent with Development Policies? YES
2. Consistent with Future Land Use Map? YES

DEVELOPMENT PLAN SUBMITTAL:

- Development Plan
- Preliminary Sketches of Exterior Construction

LIST OF NEIGHBORING PROPERTIES:

Certified list of property owners within 200 feet

TRAFFIC CONDITIONS:

1. Street(s) with Access to Property: REINHARDT STREET
2. Classification of Street(s):
Arterial _____ Collector _____ Local
3. Right-of-Way Width: 50'0"
4. Will turning movements caused by the proposed use create an undue traffic hazard?
NO

IS PLATTING OR REPLATTING REQUIRED TO PROVIDE FOR: N/A

1. Appropriately Sized Lots? _____
2. Properly Size Street Right-of-Way? _____
3. Drainage Easements? _____
4. Utility Easements:
Electricity? _____
Gas? _____
Sewers? _____
Water? _____
5. Additional Comments: _____

UNIQUE CHARACTERISTICS OF PRPOERTY AND ADDITIONAL COMMENTS:

NONE

SIGNATURE: _____

DATE: 4/29/2020

BY: JOHN MORFITT

TITLE: Member

STAFF REPORT

TO: Prairie Village Planning Commission
FROM: Chris Brewster, AICP, Gould Evans, Planning Consultant
DATE: June 2, 2020, Planning Commission Meeting

Application: PC 2020-106

Request: Rezoning from R-1A to R1B & Request for Lot Split

Action: *A Rezoning requires the Planning Commission to evaluate facts and weigh evidence, and based on balancing the factors and criteria in the zoning ordinance, make a recommendation to the City Council.*

A Lot Split requires the Planning Commission to apply the facts of the application to the standards and criteria of the ordinance, and if the criteria are met, to approve the application.

Property Address: 7631 Reinhardt Street

Applicant: MoJo Built, LLC

Current Zoning and Land Use: R-1A – Single-family Residential – Single-family House

Surrounding Zoning and Land Use: **North:** R-1A – Single-family Residential – Single-family House
East: R-1A – Single-family Residential – Single-family House
South: R-1A – Single-family Residential – Single-family House
West: R-1A – Single-family Residential – Single-family House

Legal Description: SUNSET HILL ACRES LOT 9 PVC-11544

Property Area: 0.38 acres (16,723.86 s.f.)

Related Case Files: n/a

Attachments: Application, site plan, proposed lot split

General Location Map



Aerial Map



Site



Birdseye View



Street Views



Street view looking north on Reinhardt (subject property in background)



Street view of subject property frontage

COMMENTS:

The applicant has requested a zoning change from R-1A to R-1B in order to facilitate a proposed lot split and build two homes on the existing lot. Therefore, the proposal involves two related applications, but each requires independent action by the Planning Commission. The Planning Commission makes a recommendation to the City Council for a rezoning request, but makes a final decision for lot split requests.

The existing lot is 120 feet wide by 140 feet deep, for a total of 16,723.86 square feet. The R-1A zoning district has a minimum lot requirement of 80 feet wide by 125 feet deep, and 10,000 square feet. Although this lot is larger than required by the R-1A zoning district, it is not large enough to split into two conforming lots in that zoning district.

The lot has an existing home that was constructed in 1953 according to Johnson County AIMS mapping records. The R-1A zoning district requires the following setbacks: front – 30 feet; side – at least 20% of the lot width between both sides, and at least 7 feet on each side; rear – 25 feet. The existing home is setback approximately 40' from the front lot line, and is centered on the lot with setbacks larger than the required side and rear setbacks. The character of the block has a wide range of building placements, including the home immediately to the south and across the street to the west, each of which are setback deep on the lot near the rear lot line

The applicant is proposing to split this lot into two lots, and build two homes that would conform to the setback requirements. However, the lot is not big enough to result in two lots conforming to the R-1A zoning district. Therefore, the applicant is proposing to rezone this property to R-1B, which has the following zoning standards:

Width – 60 feet

Depth – 100 feet

Area – 6,000 square feet

Front Setback – 30 feet

Side Setbacks – at least 20% of lot width total, and at least 6 feet each side

Rear Setback – 25 feet.

The proposed lots would be 60 feet by 140 feet, and approximately 8,361 square feet.

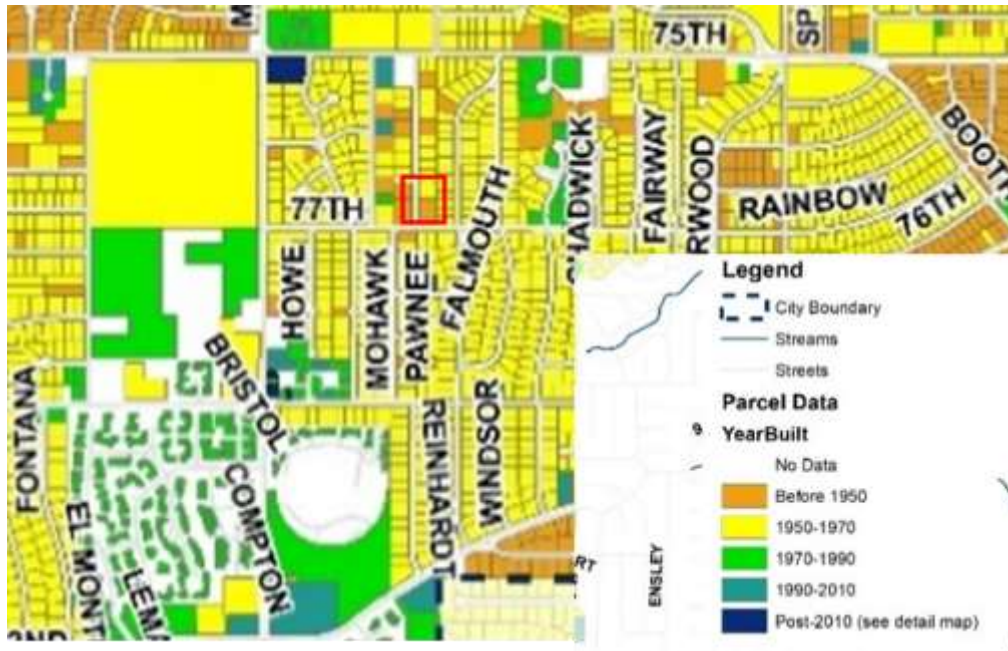
The applicant held a neighborhood meeting on May 20, 2020 at Harmon Park, and a summary of that meeting has been added to the application.

ANALYSIS – RE-ZONING:

In considering a change in zoning classification, the Planning Commission must consider a number of factors commonly referred to as the “Golden” factors, which are incorporated into the City’s Zoning Ordinance [19.52.030]. The factors include, but are not limited to the following:

1. The character of the neighborhood;

This is a single-family residential neighborhood with a variety of lot sizes and ages of homes. Homes in the area are primarily 1-story, 1.5-story ranches and split-levels. The majority of homes in the area were built between 1950 and 1970, including this home built in 1953. A few of the homes were built prior to 1950. This same street also had a similar rezoning and lot split approved two years ago, so the street includes two new homes, as well.



Year Built

This area does include a wide variety of lot sizes reflecting platting and development patterns that pre-date the zoning and subdivision regulations. Records show this lot was platted in 1923. The majority of lots on this block are larger (all but one over 10,000 square feet and many over 15,000 square feet), with smaller lots occurring to the east and west of this block. [Note: A similar application was approved by the City Council in March 2018 resulting in two smaller lots to the north and on the opposite side of Reinhardt Street – 7540 Reinhardt, not reflected in these maps.]



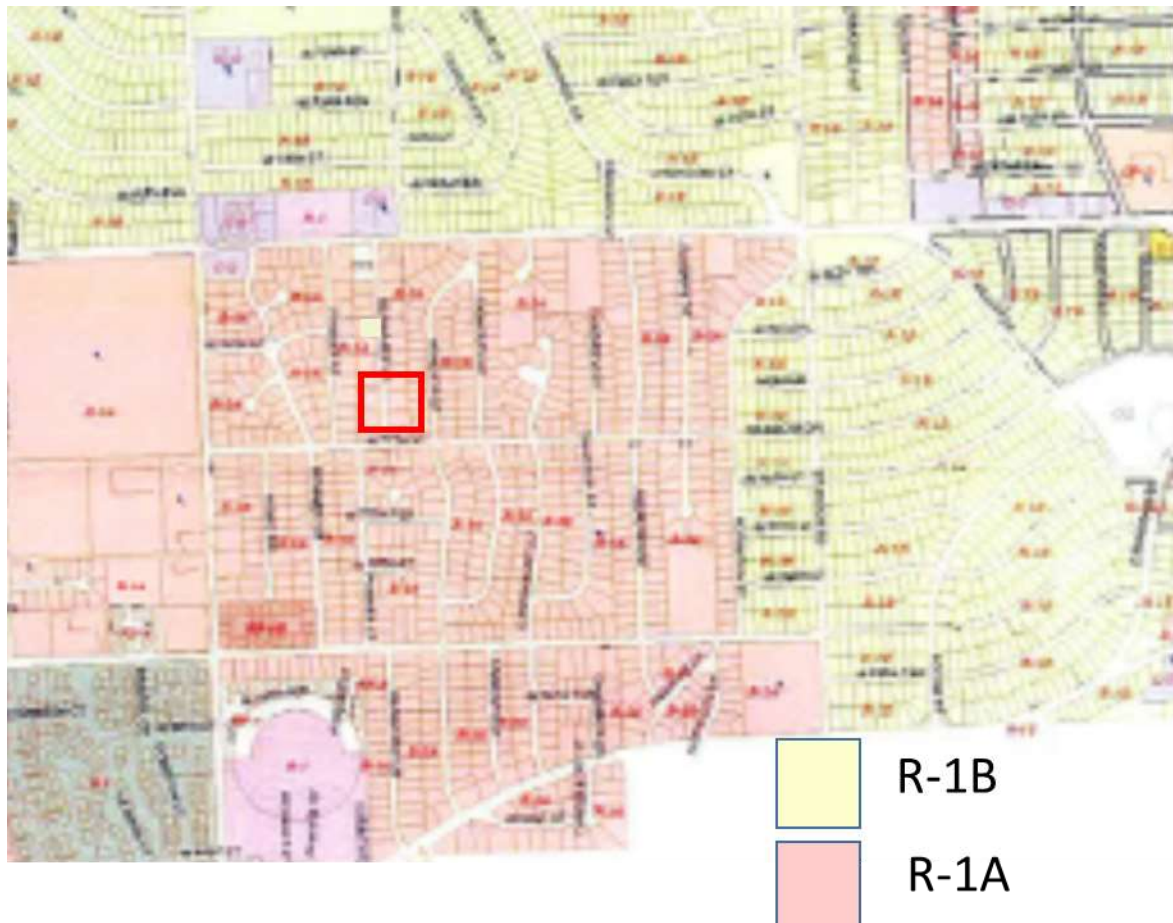
Lot Size

Lot widths are also important to the character of neighborhoods, as that affects the frontage design, building pattern and access along a streetscape. In the general vicinity, many lots have a 60 to 75 foot width. These exist primarily on several blocks immediately east of Reinhardt. The blocks to the west of Reinhardt have a bit more irregular pattern due to Mohawk Drive alignment, some cul-de-sacs, and irregular or corner-orientation lots. Reinhardt Street and the east side of Pawnee Street reflect predominantly wider lots - typically 120 feet wide, with a few noted irregularities where two lots were re-platted as three, or three lots were re-platted as four. (Note: This pattern would generally be allowed under current R-1A zoning, where two 120-foot wide lots could be divided into three 80-foot wide lots, but two 120'-wide lots could be re-platted as three 80'-wide lots). In this specific case, the subject lot is 120' wide. The lots immediately to the north are 100-feet, 80-feet, and 90-feet respectively; the lots immediately to the south are 120-feet and 79-feet; and the lots on the opposite side of the street also range from 79-feet to 120-feet (excluding a platted 40' lot that is unbuilt and owned as part of another lot).

2. The zoning and uses of property nearby;

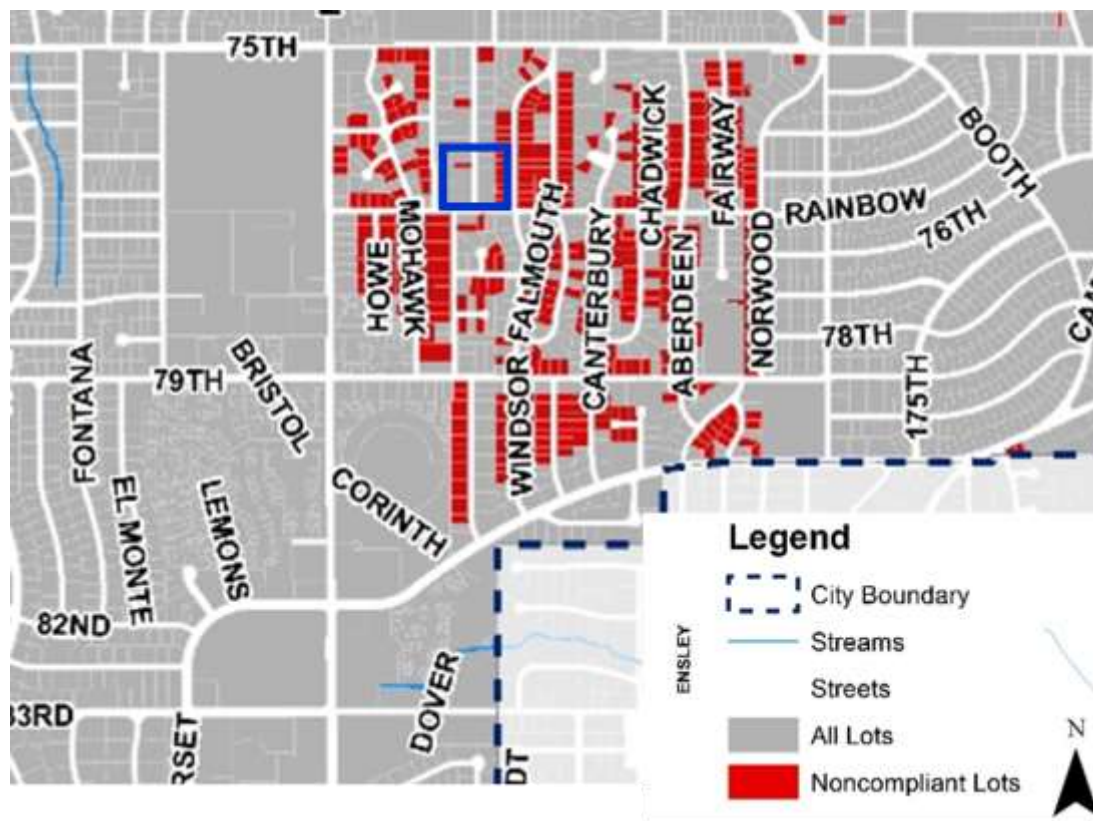
North: R-1A Single-family District – Single Family Dwellings
East: R-1A Single-family District – Single Family Dwellings
South: R-1A Single-family District – Single Family Dwellings
West: R-1A Single-family District – Single Family Dwellings

All of the property in the general vicinity is zoned R-1A, with the exception of some property along the 75th Street Corridor or Mission Road zoned for commercial, multi-family, or planned residential projects, and the 2018 rezoning to R-1B at 7540 Reinhardt. Property further to the east (east of Norwood Street) and north of 75th Street is zoned R-1B.



Zoning

The vicinity has many lots that do not conform to the R-1A zoning districts. This is likely due to the platting and buildings being built prior to the adoption of the zoning ordinance. Non-conformances are typically for lots less than 80 feet wide or less than 10,000 square feet, or both. The majority of these exist on the blocks immediately to the east (Windsor Street and Falmouth Street) and west and southwest (Mohawk Street and Howe) of this area. The lots on Reinhardt are typically conforming to R-1A, although one lot to the north on the west side is non-conforming due to its width (70' x 138'; approximately 9,672 s.f.), and the two new 64' x 138' lots next to it which conform to the R-1B standards, not reflected on this map.



Non-conforming Lots

3. The suitability of the property for the uses to which it has been restricted under its existing zoning;

The property is zoned R-1A, which requires a minimum lot width of 80 feet and a minimum area lot of 10,000 sq. ft. The lot is 140 feet deep by 120 feet wide. The lot is suitable for a residential lot, despite being larger than required by the zoning district. There are many examples of lots this size in the R-1A zoning district. These are most prevalent in the south area of the City. However, there are several lots of a similar size in the area and on this block that are currently used for single-family homes.

4. The extent that a change will detrimentally affect neighboring property;

The applicant is proposing two single-family homes, which is generally consistent with uses in the area. However, the rezoning and lot split would allow lots smaller than any lots on this block, although it is comparable to some of the smallest non-conforming lots in the vicinity. Additionally, the R-1B zoning category does allow taller buildings than generally exist in this area (29' / 2-story from the top of foundation, compared to the typical 1-story, 1.5 story or split-levels). Although this is lower than what is currently allowed under existing R-1A zoning (35' / 2.5 stories), the potential to build to this extent on two smaller lots could change the effect on the area both in terms of what is built on lots comparable in size to this one in the area, and what could be built under existing R-1A zoning. However, the effect on what could be built adjacent to either property boundary is not

that significant – the current R-1A zoning requires a 1-foot greater side setback (7-feet as opposed to 6-feet in R-1B), but allows 6-feet of additional height (35-feet as opposed to 29-feet in R-1B.) The applicant has proposed site plans with building footprints and house plans including building elevations for what he anticipates building under the R-1B rules.

5. The length of time of any vacancy of the property;

The existing residence was built in 1953, so the property has not been vacant, but the structure is one of the older homes in the area.

6. The relative gain to public health, safety and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners;

The existing home on the site is small relative to the lot (1,380 s.f. building), and the vicinity is experiencing re-investment through rehabilitation and new development. The approval of this request will permit redevelopment that will increase the value of this site, and make it more practical to build two moderate-sized single-family homes on smaller lots. This is generally consistent with the use and patterns in the vicinity, though smaller than most lots on this block. Additionally, any new structures will be required to meet the Neighborhood Design Standards that were adopted in 2018, and are comparable for both R-1A zoning districts and R-1B zoning districts.

7. City staff recommendations;

The proposed rezoning of this site may make sense to promote this redevelopment, and general reinvestment in the neighborhood. Typically, rezoning property for site-specific applications should be avoided, unless specifically called for under a plan or clearly justified through a site-specific analysis. Many of the justifications for this rezoning are applicable to other property in the vicinity. However, the impact of a potential larger-scale rezoning of the area has not been considered under the comprehensive plan or through a specific plan or detailed analysis for the area. Recent similar applications, and recent discussions regarding comprehensive plan updates regarding housing dealt with adding more diversity of lot and building types in areas similar to this to address rising land costs. Further, the conditions in the area that support rezoning (smaller lots with 60' to 70' frontages) are not typical on this specific block, so the City may anticipate future similar requests and the cumulative impact of such redevelopment activity in this area.

While pending updates to the comprehensive plan may warrant further consideration of the appropriate zoning in this area, and the application of a wider range of building types to areas similar as this, there are many of the site-specific considerations present that support rezoning. These considerations are reflected in the other seven criteria in this report, which the Planning Commission is required to consider. In particular, the Planning Commission should eventually evaluate the zoning designation of this entire area, based on outcomes in the Comprehensive Plan update, and determine if R-1A zoning is appropriate or what other zoning actions may be appropriate. In this regard, and similar to the 2018 rezoning at the north end of this block, the Commission may consider approval of this application the part of a broader reclassification of the general area. As part of that broader, and more comprehensive strategy, staff recommends approval of this rezoning.

8. Conformance with the Comprehensive Plan;

The Policy Foundation for the comprehensive plan includes the following:

- **Community Character and Activities:** Provide an attractive, friendly and safe community with a unique village identity appealing to the diverse community population.
- **Housing:** Encourage neighborhoods with unique character, strong property values and quality housing options for families and individuals of a variety of ages and incomes.

The Conceptual Development Framework maps areas of the City for specific implementation strategies associated with the Policy Foundation. This area is mapped as Neighborhood Conservation, which includes the following specific policies and goals:

- Examine zoning regulations to determine where the uniform lot and building standards restrict the amount of land available to accommodate building expansion.
- Create basic building design standards that can protect the character of neighborhoods.
- Consider financial incentives where home renovations are not possible through traditional financing or other qualified home improvement programs.
- Allow for more compact housing or different and more dense housing options along major thoroughfares.

In contrast, the Neighborhood Improvement areas identified in the Conceptual Development Framework have more proactive strategies for reinvestment, redevelopment or code enforcement based on specific neighborhood initiated plans for investment and/or redevelopment.

Other implementation actions and policy statements in the plan include:

- Permitting higher density, primarily near existing commercial areas or along arterial corridors.
- Keeping neighborhoods vibrant by encouraging home renovation and housing investment.
- Allowing housing variety throughout the City, while maintaining distinct neighborhood character within specific neighborhoods

ANALYSIS – LOT SPLIT:

Chapter 18.02 of Prairie Village subdivision regulations allows the Planning Commission to approve splits provided each lot meets the zoning standards. Section 18.02.010 of the subdivision regulations provide the criteria for approval of a lot split. Essentially, the applicant must submit a certificate of survey demonstrating that both lots will meet the zoning ordinance standards and that any existing buildings on a remaining lot are not made nonconforming as a result of the lot split. The certificate of survey is also required to ensure that no utility easement or right-of-way issues are created by the lot split or need to be addressed due to the lot split.

In this case, the proposed lot split will not meet width required in R-1A, and the applicant has proposed an associated rezoning to R-1B. If the Planning Commission recommends approval and the City Council approves the proposed rezoning, then proposed lot split would meet all criteria of the ordinance and should be approved. However, if the Planning Commission recommends denial or the City Council does not approve the rezoning, then the proposed lot split does not meet these criteria and should be denied.

RECOMMENDATION:

Staff's recommendation is contingent on the Planning Commission's action on the associated zoning application:

1. If the Planning Commission recommends approval of the proposed rezoning from R-1A to R-1B, then it should approve the proposed lot split based on the following conditions:
 - a. That the City Council accepts the Planning Commission recommendation and approves the rezoning; and
 - b. That the applicant submit a certificate of survey to comply with the following information required in the ordinance, prior to a building permit:
 - 1) The location of existing buildings on the site, or specifically noting the removal of existing buildings.
 - 2) The dimension and location of the lots, including a metes and bounds description of each lot.
 - 3) The location and character of all proposed and existing public utility lines, including sewers (storm and sanitary), water, gas, telecommunications, cable TV, power lines, and any existing utility easements.

- 4) Any platted building setback lines with dimensions.
 - 5) Indication of location of proposed or existing streets and driveways providing access to said lots.
 - 6) Topography (unless specifically waived by the City Planning Commission) with contour intervals not more than five feet, and including the locations of water courses, ravines , and proposed drainage systems. (Staff recommends waiver of topography)
 - 7) Said certificate of survey shall include the certification by a registered engineer or surveyor that the details contained on the survey are correct.
- c. That the applicant record the approved lot split with the register of deeds and provide a copy of the recorded document prior to issuance of a building permit.
2. If the Planning Commission recommends denial of the proposed rezoning from R-1A to R-1B, then it should table the lot split application until a final decision by the City Council. Denial of the rezoning by the City Council should result in the withdrawal of the application. However, approval of the rezoning by City Council should result in the Planning Commission considering the application subject to the criteria in the regulations and analysis in this staff report.

EFFECT OF DECISION:

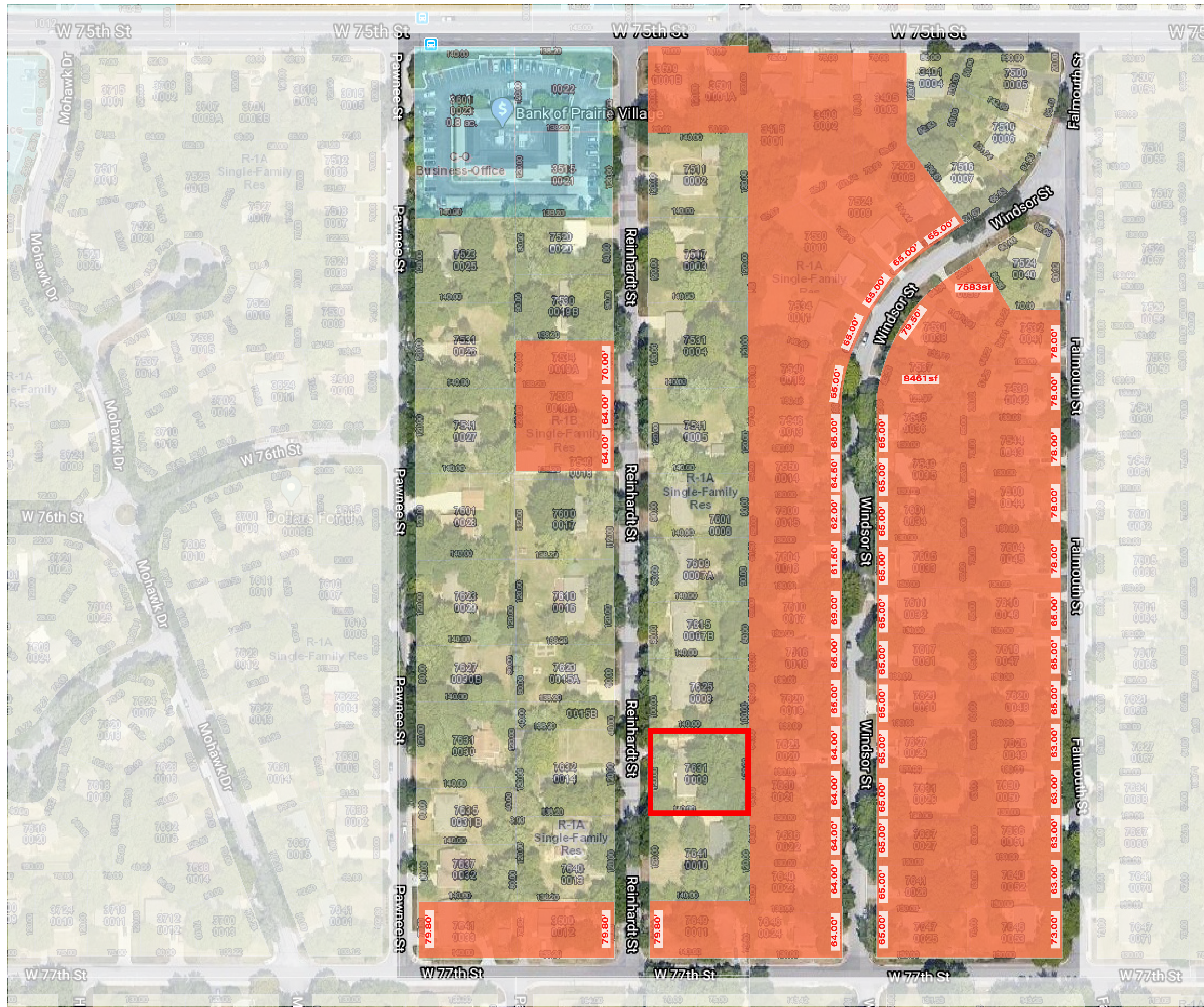
Rezoning. The Planning Commission makes a recommendation to the City Council on the rezoning. The City Council will make a final decision, according to the following:

- Approve the Planning Commission recommendation by a majority vote (including any conditions if the recommendation was for approval subject to conditions).
- Return to Planning Commission with direction to reconsider specific actions, either by a majority vote or by failure to approve the Planning Commission recommendation.
- Override or modify the Planning Commission recommendation by at least a 2/3 vote of the membership of the governing body.

If a valid protest is filed with the City Clerk within 14 days of the close of the public hearing, the City Council may only approve the application with a 3/4 vote of the membership of the governing body.

If approved by the Planning Commission and City Council, the applicant may submit building plans for permits according to the R-1B designation, and the Neighborhood Design Standards required in R-1A and R-1B zoning districts.

Lot Split. The Planning Commission makes the final decision on lot splits. If approved the applicant shall submit a certificate of survey for the new lots to be recorded with the Register of Deeds of Johnson County, and may apply for building permits according to the new lot boundaries. A denial by the Planning Commission may be appealed to the City Council.



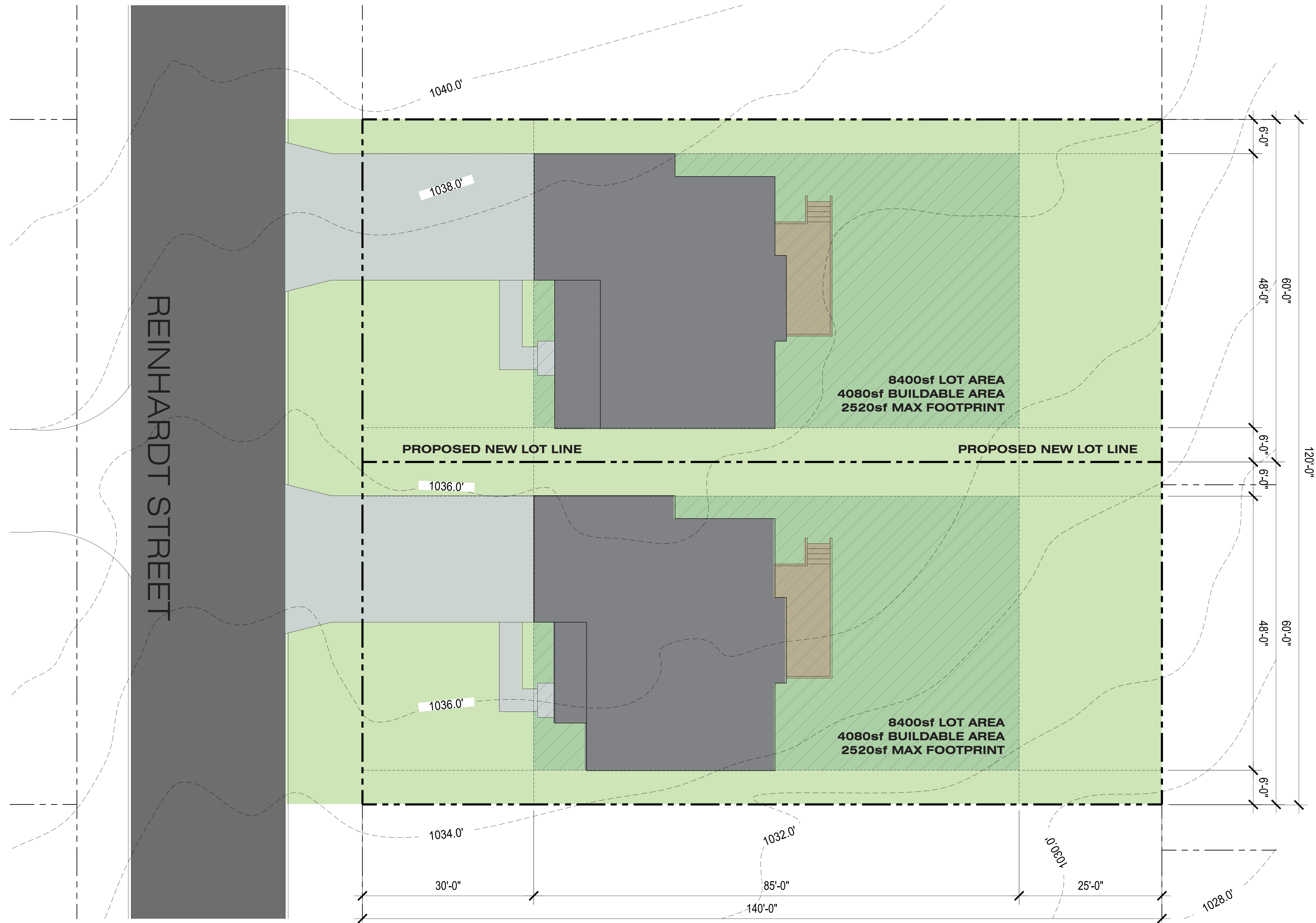
- R-1A Zoning**
(Residential, Single Family, Large Lot)
- R-1B Zoning**
(Residential, Single Family, Small Lot)
- C-0 Zoning**
(Business - Office)

Residential Lot Summary
Pawnee Street to Falmouth Street
75th Street to 77th Street

- R-1A Zoning
 - Minimum Lot Width | 80.00'
 - Minimum Lot Depth | 125.00'
 - Minimum Lot Area | 10,000 SF
- R-1B Zoning
 - Minimum Lot Width | 60.00'
 - Minimum Lot Depth | 100.00'
 - Minimum Lot Area | 6,000 SF

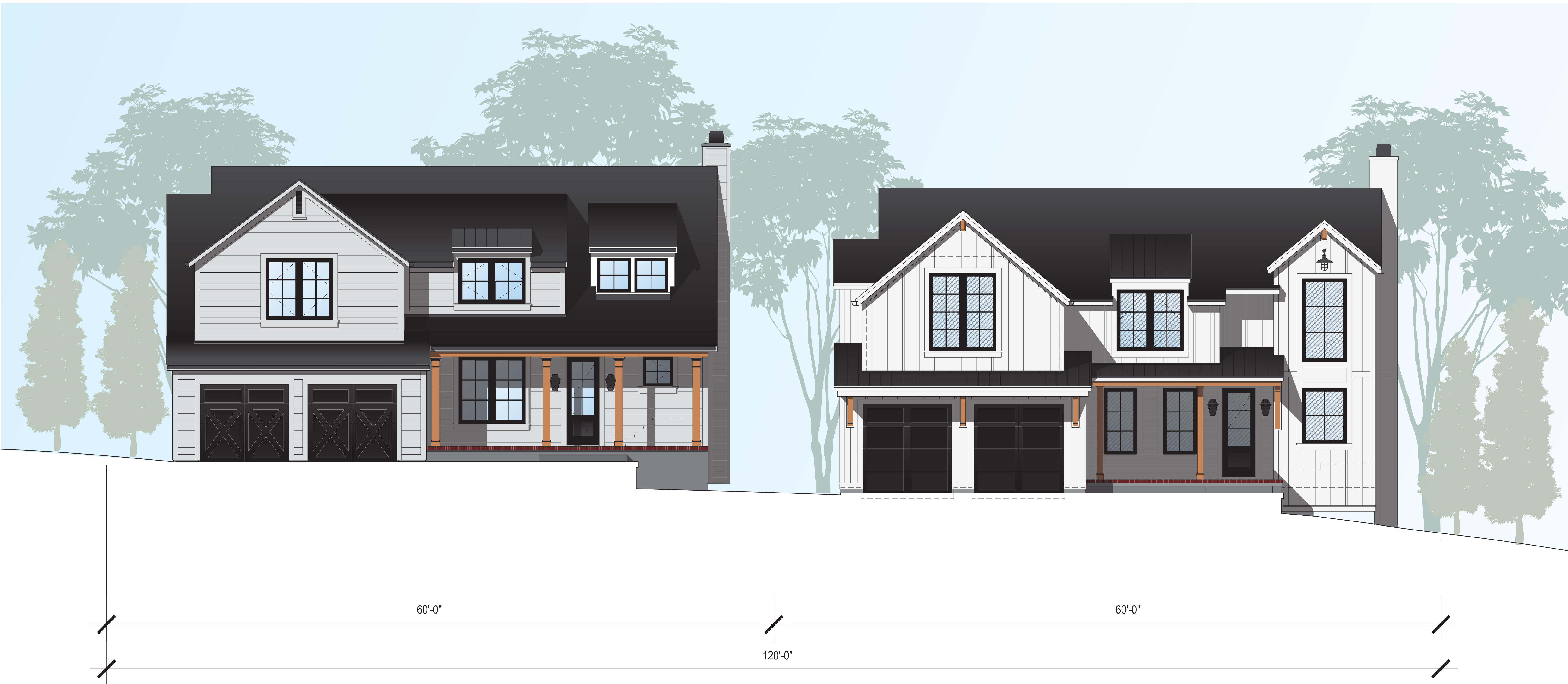
85 Parcels Reviewed
56 Parcels Non-Conforming
Due To ...

- Shortened Lot Width
- Shortened Lot Area



Overall Site Plan
Scale: 1/8" = 1'-0"





Proposed Model Home Elevations
Scale: 1/4" = 1'-0"



[IoCo Home](#) > [AIMS Home](#) > [Internet Maps](#)

200 foot buffer (5.66 acres)
 Buffer search returned 32 properties
[Download as Mailing Labels](#)

No.	Property ID	Area (ft ²)	Acres	Situs Address	Owner1	Owner2	Owner Address	City, State Zip	Billing Name	Billing Name2	Billing A
1	OP14000000 0027	8,276	0.19	7637 WINDSOR DR	SCHROEDER, ROBERT K	SCHROEDER, RUTHANNE	3513 W 92ND TER	LEAWOOD, KS 66206			
2	OP14000000 0018	8,276	0.19	7616 WINDSOR DR	SIEGMAN, TAYLOR		7616 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
3	OP14000000 0023	8,276	0.19	7640 WINDSOR DR	SDC HOLDING LLC		7640 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
4	OP14000000 0029	8,276	0.19	7627 WINDSOR DR	RUIZ-GONZALEZ, ANTONIO D J		7627 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
5	OP14000000 0020	8,276	0.19	7626 WINDSOR DR	BOWLING, RYAN L.	BOWLING, LAURA E.	7626 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
6	OP14000000 0016	8,276	0.19	7604 WINDSOR DR	GREEN, CODY W.	GREEN, JUSTIN L.	2901 W 71ST ST	PRAIRIE VILLAGE, KS 66208			
7	OP14000000 0019	8,712	0.20	7620 WINDSOR DR	HARRIS, KATHERINE A		7620 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
8	OP14000000 0026	8,276	0.19	7641 WINDSOR DR	AU, DANIEL M		7641 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
9	OP73000000 0032	11,326	0.26	7637 PAWNEE ST	COOPER, CHARLES W. TRUSTEE	COOPER, SONDR KAY TRUSTEE	7637 PAWNEE ST	PRAIRIE VILLAGE, KS 66208			
10	OP73000000 0030	16,988	0.39	7631 PAWNEE ST	CLARK, ROBERT M. JR	CLARK, BETTY J.	7631 PAWNEE ST	PRAIRIE VILLAGE, KS 66208			
11	OP73000000 0011	11,326	0.26	7649 REINHARDT ST	STRANGE, PAUL A.	STRANGE, MARY E.	7649 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
12	OP73000000 0012	10,890	0.25	3500 W 77TH ST	KAUFFMAN, MATTHEW		3500 W 77TH ST	PRAIRIE VILLAGE, KS 66208			
13	OP14000000 0022	8,276	0.19	7636 WINDSOR DR	HALL, ALICE H. TRUSTEE	HALL, ALICE H. TRUST	27027 W 77TH ST	SHAWNEE, KS 66227			
14	OP14000000 0017	9,148	0.21	7610 WINDSOR DR	SPAL, MICHAEL P.		7119 ROBINSON ST	OVERLAND PARK, KS 66204			
15	OP14000000 0021	8,276	0.19	7630 WINDSOR DR	KRZESINSKI, ROSE A.	KRZESINSKI, ROSE ANN	7630 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
16	OP14000000 0024	8,276	0.19	7646 WINDSOR DR	BECKER, KEN A.	BECKER, LAURA L.	7646 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
17	OP14000000 0031	8,276	0.19	7617 WINDSOR DR	GANTERT, JAMES L. TRUST	EE	7617 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
18	OP73000000 0008	13,939	0.32	7625 REINHARDT ST	MANKAMEYER, MATTHEW S	MANKAMEYER, ELIZABETH M	7625 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
19	OP73000000 0031B	10,890	0.25	7635 PAWNEE ST	MARNETT, JOHN T.	MARNETT, PATTI S.	7635 PAWNEE ST	PRAIRIE VILLAGE, KS 66208			
20	OP73000000 0015A	10,890	0.25	7620 REINHARDT ST	EITZEN, BROOKE E	COLLINS, DANIEL S	7620 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
21	OP73000000 0030B	11,326	0.26	7627 PAWNEE ST	RAHE, RACHEL M.	RAHE, KATINA L.	7627 PAWNEE ST	PRAIRIE VILLAGE, KS 66208			
22	OP73000000 0007A	12,632	0.29	7609 REINHARDT ST	S C NELSON PROPERTIES LLC		11514 S CARBONDALE ST	OLATHE, KS 66061			
23	OP14000000 0030	8,276	0.19	7621 WINDSOR DR	COOLBAUGH, KAREN S.		7621 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
24	OP14000000 0028	8,276	0.19	7631 WINDSOR DR	THOMAS, ANDREW	THOMAS, CASEY	7631 WINDSOR DR	PRAIRIE VILLAGE, KS 66208			
25	OP73000000 0010	16,553	0.38	7641 REINHARDT ST	GARCIA, CARLOS	DIAZ, MARIA T	7641 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
26	OP73000000 0016	16,553	0.38	7610 REINHARDT ST	BECKLOFF, MICHAEL C	BECKLOFF, KATHLEEN A	14108 CANTEBURY ST	LEAWOOD, KS 66224	MICHAEL&KATHLEEN BECKLOFF		14108 CAI
27	OP73000000 0013	16,553	0.38	7640 REINHARDT ST	BORTOLOTTI-MELO, JAVIER	RODRIGUEZ, ANA M.	7640 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
28	OP73000000 0015B	5,663	0.13	0 NS NT	EITZEN, BROOKE E	COLLINS, DANIEL S	7620 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
29	OP73000000 0031C	0	0.00	0 NS NT	PATTERSON, EMILY E.		12712 EL MONTE ST	LEAWOOD, KS 66209			
30	OP73000000 0014	16,553	0.38	7632 REINHARDT ST	PATTERSON, EMILY E.		7632 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
31	OP73000000 0007B	11,326	0.26	7615 REINHARDT ST	DOPSON, FREDRICK L.	DOPSON, CHERYL K.	7615 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			
32	OP73000000 0009	16,553	0.38	7631 REINHARDT ST	ESRY, RITA		7631 REINHARDT ST	PRAIRIE VILLAGE, KS 66208			

Total Area of Parcels: 7.70 acres (335,412 ft²)
 Selected Property

MOJO Built, LLC
 Neighborhood Meeting
 7631 Reinhardt Street - Lot Split
 Sign In List
 May 20th, 2020
 5:00pm
 Harmon Park Shelter

Required Per City of Prairie Village

Required Per Covid-19 Guidelines

Name	Physical Address	Email Address	Phone Number
Pat Boppart MOJO	5224 Knox Street, Merriam, KS 66203	pat.boppart@moffitbuilt.com	(913) 927-4127
ADAM FEFFER MOJO Architect	12214 W. 79 th TERR	ADAM@APDSTUDIOS.COM	785-650-3563
Alison Chaplick MOJO	-	alison.chaplick@moffittrealty.com	913-777-1413
Joe Woods MOJO	5300 College Blvd OPKS 66211	joe-woods@moffittrealty.com	913-980-4797
Tim Marneff Neighbor	7635 Pawnee		
Bob & Betty Clark Neighbor	7631 "	bobclarkkc@msn.com	
			913-648-7355
John H. Moffitt III MOJO	5300 College Blvd.	j.moffitt@moffittrealty.com	913 927 0039

Meeting Minutes
Neighborhood Meeting for 7631 Reinhardt St
May 20,2020

Meeting begins at 5pm at Harmon Park

In Attendance:

John Moffit, MOJO Built
Joe Woods, MOJO Built
Pat Boppart, MOJO Built
Adam Pfeifer, NSPJ Architects
Alison Chaplick, Moffitt Realty
Bob and Betty Clark, 7631 Pawnee
Tim Marnett, 7635 Pawnee

Issues Raised:

1. What are the required lot sizes?
2. Is MOJO building other homes in the area?
3. What is the distance between homes?
4. What is the rear yard set back?
5. What are the prices of these homes?
6. How much does it cost to build per sq. ft.?
7. What is the attraction to the area?
8. Noise concerns, construction times allowed?
9. How long will it take to complete the project?

Response / Resolution

60 Feet wide.
Yes. Example are the two up the street.
12' minimum, most of the time more.
25' minimum, most of the time more.
\$750,000 -\$950,000.
Varies widely, but around \$1.90 per sf.
Schools and shopping.
7:00am to 7:00pm.
Eight to twelve months.

All questions were answered.

Meeting was adjourned at 6pm.



PC2020-106: Consider Ordinance 2422 to rezone 7631 Reinhardt St from R-1A to R-1B

RECOMMENDATION

Make a motion to accept the Planning Commission's recommendation and approve PC2020-106, rezoning 7631 Reinhardt St from R-1A (Single-Family Residential) to R-1B (Single-Family Residential).

BACKGROUND

The applicant is MOJO Built, LLC, who is requesting to rezone the lot located at 7631 Reinhardt St from R-1A to R-1B. The applicant's plan, if the rezoning is approved, is to split the lot, demolish the existing structure on the lot, and build two new single-family residences at the site. A lot split on this lot would not be possible under the lot size requirements for R-1A zoning, which requires the lot to be at least 10,000 square feet with a minimum width of 80 feet and a minimum depth of 125 feet. The existing lot is 16,724 square feet with a width of 120 feet and a depth of 140 feet. If the rezoning is approved, the two new lots proposed would be approximately 8,361 square feet with a width of 60 feet and a depth of 140 feet. These new proposed lots would meet the lot size requirements for R-1B zoning.

The current structure on this lot was built prior to the development of the City's zoning regulations, so the structure is considered a legal, non-conforming property. This application is very similar to a request from the same applicant back in 2018, in which the applicant sought to rezone and split the lot located at 7540 Reinhardt. That application was unanimously recommended to be approved by the Planning Commission, and the City Council approved the rezoning with a vote of 8-4. The main reasoning behind approving the rezoning at the time was due to the irregularities of lots in the area, with many lots being zoned R-1A that do not actually meet the requirements of R-1A. The Planning Commission noted at the time that they would not normally support rezoning individual lots; however, due to the irregularities of lot sizes in the area and the large number of non-conformities, they believed approving the rezoning would be a first step in a broader reclassification of this area that may be needed. There are also two other pending requests for rezoning/lot splits at 7641 Reinhardt and 7632 Reinhardt that are going to the Planning Commission for consideration on July 7, 2020.

The Planning Commission considered the application at their June 2, 2020 meeting, at which time a public hearing was held. There was nobody present to speak in favor or against the application and no written comments were received beforehand. After discussing and weighing the Golden Factors, the Planning Commission voted unanimously to recommend approval of the requested rezoning to the City Council and voted to approve the requested lot split contingent upon the rezoning being approved by the City Council. The Zoning Regulations require rezoning requests to go to the City Council for final approval, while the Planning Commission is tasked with the final approval on lot splits.

A rezoning application requires the City Council to act in its quasi-judicial role. When acting in this capacity, rather than a legislative capacity, the governing body must set aside personal opinions and, like a judge, apply the law to facts presented in the public record. In considering a residential rezoning, the Council must consider the overall use of the land/lot itself, and not the design of the structures that are being proposed. The following criteria, commonly referred to as the "Golden" factors, must be used in determining the reason as to why the application should be approved or denied:

1. The character of the neighborhood.
2. The zoning and uses of property nearby.
3. The suitability of the property for the uses to which it has been restricted under its existing zoning.

4. The extent that a change will detrimentally affect neighboring property.
5. The length of time of any vacancy of the property.
6. The relative gain to public health, safety, and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners.
7. City staff recommendations.
8. Conformance with the Comprehensive Plan.

An analysis of all of these factors is provided in the attached Planning Commission staff report.

According to Section 19.52.040 of the Zoning Regulations, the Governing Body can take the following actions on a rezoning recommendation from the Planning Commission:

1. Adopt the Planning Commission's recommendation by a simple majority (7 votes including the Mayor)
2. Override the Planning Commission's recommendation by a 2/3 majority vote of the entire Governing Body (9 votes including the Mayor)
3. Return the recommendation to the Planning Commission with a statement specifying the basis for the Governing Body's failure to approve or disapprove by a simple majority. The Planning Commission can then submit the original recommendation or submit a new and amended recommendation. The Governing Body then can adopt or amend the recommendation by a simple majority (7 votes) or take no further action.

Chris Brewster, the City's Planning Consultant, will be present at the meeting to provide a short presentation and answer any associated questions. The applicant will also be present at the meeting to answer any questions the Council may have.

ATTACHMENTS

Ordinance 2422

Planning Commission Staff Report

Rezoning Application

Excerpt from June 2, 2020 Planning Commission Minutes

PREPARED BY

Jamie Robichaud

Deputy City Administrator

Date: July 1, 2020

**EXCERPT OF PLANNING COMMISSION MINUTES
JUNE 2, 2020**

**PC2020-106 Rezoning and Request for Lot Split
7631 Reinhardt Street
Current Zoning: R-1A
Requested Zoning: R-1B
Applicant: Mojo Built, LLC**

Mr. Brewster stated that the property was on a block with many non-conforming lots. Most of the lots were zoned R1-A, but the Planning Commission had approved a rezoning and lot split on the north end of the street to R-1B in 2018.

Mr. Brewster reminded Planning Commission members that a rezoning required them to evaluate facts, weigh evidence, and make a recommendation to the City Council based on balancing the “Golden Factors” outlined in the zoning ordinance:

1. The character of the neighborhood
2. The zoning and uses of property nearby
3. The suitability of the property for the uses to which it has been restricted under its existing zoning
4. The extent that a change will detrimentally affect neighboring property
5. The length of time of any vacancy of the property
6. The relative gain to public health, safety and welfare by destruction of value of the applicant's property as compared to the hardship on other individual landowners
7. City staff recommendations
8. Conformance with the Comprehensive Plan

Mr. Breneman asked how the proposed lot widths would compare to the lot split that was completed in 2018. Mr. Brewster stated that the prior lot split resulted in two 64’ wide lots, whereas this lot split would result in two 60’ wide lots, which met R-1B requirements. Mr. Lenahan asked why the area had originally been zoned R-1A since most of the lots were non-conforming. Mr. Brewster stated that it was unclear, but could have been due to the large lot sizes.

John Moffitt, applicant and co-owner of Mojo Built, was present to speak to the Commission. He noted that the company had constructed the current homes on the lots that had been rezoned and split in 2018.

Mr. Wolf opened the public hearing at 7:20 p.m. With no comments received and no one attending the Zoom meeting to speak, Mr. Wolf closed the public hearing at 7:21 p.m.

Based on the Planning Commission’s consideration of the Golden factors, Mr. Valentino made a motion to recommend approval of the rezoning to the City Council. Ms. Brown seconded the motion, which passed unanimously.

Mr. Valentino made a motion to approve the lot split with the following conditions:

1. That the City Council accepts the Planning Commission recommendation and approves the rezoning; and
2. That the applicant submit a certificate of survey to comply with the following information required in the ordinance, prior to a building permit:
 - a) The location of existing buildings on the site, or specifically noting the removal of existing buildings.
 - b) The dimension and location of the lots, including a metes and bounds description of each lot.
 - c) The location and character of all proposed and existing public utility lines, including sewers (storm and sanitary), water, gas, telecommunications, cable TV, power lines, and any existing utility easements.
 - d) Any platted building setback lines with dimensions.
 - e) Indication of location of proposed or existing streets and driveways providing access to said lots.
 - f) Topography (unless specifically waived by the City Planning Commission) with contour intervals not more than five feet, and including the locations of water courses, ravines, and proposed drainage systems. (Staff recommends waiver of topography)
 - g) Said certificate of survey shall include the certification by a registered engineer or surveyor that the details contained on the survey are correct.
3. That the applicant record the approved lot split with the register of deeds and provide a copy of the recorded document prior to issuance of a building permit.

Ms. Brown seconded the motion, which passed unanimously.



ADMINISTRATION

Council Meeting Date: July 20, 2020

COU2020-33: Recommend the governing body adopt Charter Ordinance No. 29, which repeals Charter Ordinance No. 27.

SUGGESTED MOTION

Move that the City Council approve the Charter Ordinance No 29.

BACKGROUND

Charter Ordinance No 27 was approved by Council on November 16, 2015. Charter Ordinance No 29 repeals Charter Ordinance No 27 and authorizes the City Clerk to administer the collection of the transient guest tax fees. The transient guest tax rate is not to exceed 9% upon the gross receipts collected by the Inn at Meadowbrook. The City will collect 2% for administering. Charter Ordinance No 27 assumed collection of transient guest tax fees by the Kansas Department of Revenue (KDOR). KDOR collects 2 percent for administering the fund.

ATTACHMENTS

Charter Ordinance No 29

Prepared by:

Lisa Santa Maria

Finance Director

Date: July 13, 2020

CHARTER ORDINANCE NO. 29

A CHARTER ORDINANCE OF THE CITY OF PRAIRIE VILLAGE, KANSAS, KANSAS, RELATING TO TRANSIENT GUEST TAX LEVY, EXEMPTING THE CITY FROM THE PROVISIONS OF K.S.A. 12-1696 THROUGH 12-1698a, INCLUSIVE, PROVIDING FOR ADDITIONAL AND SUBSTITUTE PROVISIONS ON THE SAME SUBJECT, AND REPEALING CHARTER ORDINANCE NO. 27.

WHEREAS, the City of Prairie Village, Kansas has heretofore adopted Charter Ordinance No. 27 pursuant to the provisions of Section 5(c) of Article 12 of the Constitution of the State of Kansas exempting itself and making inapplicable to it provisions of subparagraphs (b) and (f) of K.S.A. 12-1696, subparagraph (a) of K.S.A. 12-1697, and subparagraph (e) of K.S.A. 12-1698, all related to transient guest taxes, and providing substitute provisions on the same subject; and

WHEREAS, Section 5(c)(4) of Article 12 of the Constitution of the State of Kansas provides that a Charter Ordinance may be repealed or amended by charter ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF PRAIRIE VILLAGE, KANSAS:

SECTION 1. That pursuant to the provisions of Section 5(c) of Article Twelve (12) of the Constitution of the State of Kansas, the City of Prairie Village, Kansas, hereby exempts itself from the provisions of K.S.A. 12-1696 through 12-1698a, inclusive, and adopts the following additional and substitute provisions:

- a. As used in this Charter Ordinance, the following words and phrases shall have the meanings respectively ascribed to them herein:
 - i. "Person" means an individual, firm, partnership, corporation, joint venture or other association of persons;
 - ii. "Hotel, motel or tourist court" means any structure or building which contains rooms furnished for the purposes of providing lodging, which may or may not also provide meals, entertainment or various other personal services to transient guests, and which is kept, used, maintained, advertised or held out to the public as a place where sleeping accommodations are sought for pay or compensation by transient or permanent guests and having six or more bedrooms furnished for the accommodation of such guests. The terms shall not include group homes (as defined by K.S.A. 12-736, as amended).
 - iii. "Transient guest" means a person who occupies a room in a hotel, motel or tourist court for not more than 28 consecutive days;
 - iv. "Business" means any person engaged in the business of renting, leasing or letting living quarters, sleeping accommodations, rooms or a part thereof in connection with any motel, hotel or tourist court;
 - v. "Accommodations broker" means any business which maintains an inventory of six or more rooms in one or more locations which are offered for pay to a person

or persons for not more than 28 consecutive days.

- b. In order to provide revenues to promote tourism and conventions, the governing body of the City of Prairie Village, Kansas (City) is hereby authorized to levy, and the City hereby does levy, a transient guest tax at not to exceed the rate of nine percent (9%) upon the gross receipts derived from or paid directly or through an accommodations broker by transient guests for sleeping accommodations, exclusive of charges for incidental services or facilities, in any hotel, motel or tourist court located within the City of Prairie Village. The percentage of such transient guest tax may hereafter be determined by the Governing body by ordinary ordinance.
- c. Any transient guest tax levied pursuant to this section shall be based on the gross rental receipts collected by any business or accommodations broker.
- d. The transient guest taxes levied pursuant to this section shall be paid by the consumer or user to the business and it shall be the duty of each and every business to collect from the consumer or user the full amount of any such tax, or an amount equal as nearly as possible or practicable to the average equivalent thereto. Each business collecting any of the taxes levied hereunder shall be responsible for paying over the same to the City, and the City shall administer and enforce the collection of such taxes. To the extent the City timely and actually receives transient guest taxes from a third-party provider or platform (whether pursuant to a voluntary collection agreement or otherwise), then a business shall not be responsible for payment of transient guest taxes; provided, that to the extent transient guest taxes are not so timely or actually received, the business will remain responsible for payment of transient guest taxes.
- e. The collection of any City transient guest tax authorized to be levied pursuant to this section has previously commenced under previous Charter Ordinance No. 27, and shall continue as of the effective date of this Charter Ordinance.
- f. Any tax levied and collected shall become due and payable by the business monthly, on or before the 25th day of the month immediately succeeding the month in which it is collected, with the first payment due and payable on or before the 25th day of the month specified in the resolution of the governing body which levies the tax. Each business shall make a true report to the City, on a form prescribed by the City Clerk, providing such information as may be necessary to determine the amounts to which any such tax shall apply for all gross rental receipts for the applicable month or months, which report shall be accompanied by the tax disclosed thereby. Records of gross rental receipts shall be kept separate and apart from the records of other retail sales made by a business in order to facilitate the examination of books and records as provided herein.
- g. The City Clerk or the City's authorized representative shall have the right at all reasonable times during business hours to make such examination and inspection of the books and records of a business as may be necessary to determine the accuracy of such reports.
- h. The City Clerk is hereby authorized to administer and collect any transient guest tax levied pursuant to this Charter Ordinance and to adopt such procedures as may be necessary for the efficient and effective administration and enforcement of the collection thereof. Whenever any business liable to pay any transient guest tax refuses or neglects to pay the same, the amount, including any penalty, shall be collected in the manner prescribed for the collection of the transient guest tax by the Code of Ordinances and amendments thereto. All of the taxes collected under the provisions of this Charter Ordinance shall be remitted

by the City to the City Clerk in accordance with the provisions of the Code of Ordinances, and amendments thereto. Upon receipt of each such remittance, the City Clerk shall deposit the entire amount in the City treasury, and the city treasurer shall credit 2% of all taxes so collected to the City general fund to defray the expenses of the department in administration and enforcement of the collection thereof. The remainder of such taxes shall be credited to the City transient guest tax fund, which fund is hereby established.

- i. Revenues received by the City from the transient guest tax shall be expended for all, or any portion of, community, economic development and cultural activities which encourage or which are deemed to result in increased economic development, visitors and tourism for the City, and to the payments of principal and interest on bonds issued by the City, including bonds issued pursuant to K.S.A. 12-1774.
- j. Interest and penalties for failure to pay or untimely payment of transient guest tax shall be as follows:
 - i. If any taxpayer shall fail to pay the tax levied pursuant to this Charter Ordinance, and amendments thereto, there shall be added to the unpaid balance of the tax, interest at the rate per month prescribed by the Code of Ordinances, and amendments thereto, from the date the tax was due until paid.
 - ii. If any taxpayer due to negligence or intentional disregard fails to pay the tax due at the time required by or under the provisions of this Charter Ordinance, and amendments thereto, there shall be added to the tax a penalty in an amount equal to 10% of the unpaid balance of tax due.
 - iii. If any person fails to pay any tax, within sixty (60) days from the date the return or tax was due, except in the case of an extension of time granted by the city manager, there shall be added to the tax due a penalty equal to 25% of the amount of such tax.
 - iv. If any taxpayer, with fraudulent intent, fails to pay any tax or make, render or sign any return, or to supply any information, within the time required by or under the provisions of this Charter Ordinance, and amendments thereto, there shall be added to the tax a penalty in an amount equal to 50% of the unpaid balance of tax due.
 - v. Penalty or interest applied under the provisions of subsections j.i and j.iv shall be in addition to the penalty added under any other provisions of this section, but the provisions of subsections j.ii and j.iii shall be mutually exclusive of each other.
 - vi. The failure of the taxpayer to comply with the provisions of subsections j.ii and j.iii was due to reasonable causes and not willful neglect; the city administrator may waive or reduce any of the penalties upon making a record of the reasons therefor.
 - vii. For serious or repeated and/or continuous violations of any of the requirements of this Charter Ordinance, or for interference with the City staff performance of duties, any license to operate or conduct business as a hotel, motel, or tourist court may be suspended and/or permanently revoked after an opportunity for a hearing before the City Council has been provided. Prior to such action, the City Clerk shall notify the license holder in writing, stating the reasons for which the license is subject to suspension and advising that the license shall be temporarily

suspended at the end of thirty (30) days following service of such a notice, unless a request for a hearing is filed with the City Clerk, by the license holder, within ten (10) days.

- viii. Hearings provided for in this Charter Ordinance shall be conducted by the City Council at a time and place designated by the City Council. Based upon the record of such hearing, the City Council shall make a finding and shall sustain, modify, or rescind any official notice or order considered in the hearing. A written report of the hearing decision shall be furnished to the license holder by the City Clerk.
- ix. In addition to all other penalties provided by this section, any person who willfully fails to pay any tax imposed under this Charter Ordinance, and amendments thereto, or who makes a false or fraudulent return, or fails to keep any books or records necessary to determine the accuracy of the person's reports, or who willfully violates any regulations of the City, for the enforcement and administration of the provisions of this Charter Ordinance, inclusive, and amendments thereto, or who aids and abets another in attempting to evade the payment of any tax imposed or who violates any other provision of this Charter Ordinance, inclusive, and amendments thereto, shall, upon conviction thereof, be fined not less than \$100.00 nor more than \$1,000.00, or be imprisoned in the city / county jail not less than one (1) month nor more than six (6) months, or be both so fined and imprisoned, in the discretion of the court.

SECTION 2. Charter Ordinance No. 27 is hereby deleted and repealed in its entirety.

SECTION 3. This Charter Ordinance shall be published once a week for two (2) consecutive weeks in the official city newspaper.

SECTION 4. This Charter Ordinance shall take effect sixty-one (61) days after its final publication, unless a sufficient petition for a referendum is filed and a referendum held on this Charter Ordinance as provided in Article 12, Section 5, Subsection (c)(3) of the Constitution of the State of Kansas, in which case this Charter Ordinance shall become effective if approved by a majority of the electors voting thereon.

PASSED AND APPROVED by the Governing Body, not less than two-thirds (2/3) of the members elect voting in favor thereof, this ____ day of _____, 2020.

Eric Mikkelson, Mayor

ATTEST:

Adam Geffert, City Clerk

DATES OF PUBLICATION: _____, 2020.
_____, 2020.



ADMINISTRATION

City Council Meeting Date: July 20, 2020

COU2020-34: Consider Amendments to Chapter 1 (Article 13 - Emergency Assistance and National Emergency Situations) of the Municipal Code.

RECOMMENDED MOTION

Move to approve amendments to Chapter 1 (Article 13) of the Municipal Code as specified.

BACKGROUND

During the July 6, 2020, City Council meeting the Governing Body discussed Governor Kelly's most recent emergency orders and determined there was a need to amend applicable City Ordinance(s) contained in Chapter 1 (Article 13) of the Municipal Code to give the Mayor the expanded authority in order to enforce any county, state or federal health orders. The Council voted 12-0 to direct the City Attorney to make necessary changes so the Mayor would be able to declare such an emergency by proclamation to allow for local enforcement actions to preserve the health, safety, peace and/or order of the City.

ATTACHMENTS

- Chapter I - Article 13 Municipal Code
- Ordinance No. 2423

PREPARED BY

Wes Jordan
City Administrator
Date: July 14, 2020

ARTICLE 13. EMERGENCY ASSISTANCE AND NATIONAL EMERGENCY SITUATIONS

- 1-1301. DEFINITIONS. For the purpose of this title, certain terms or words used herein shall be interpreted or defined as follows in this article:
- (a) Municipality -- Any city, county or township;
 - (b) Public Safety Agency -- Any municipal fire department, law enforcement office, sheriff's department, volunteer and nonvolunteer fire protection associations, emergency management department, public works department or other similar public or private agency; and
 - (c) Disaster -- The occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from any natural or man-made cause, including, but not limited to, fire, flood, earthquake, wind, storm, epidemics, pandemics, disease, air contamination, blight, drought, infestation, explosion or riot.
- 1-1302. REQUEST FOR ASSISTANCE. In the event of a disaster when there is a request for assistance from a municipality or public safety agency within or outside the State of Kansas, if the city can provide assistance to the municipality or agency without unduly jeopardizing the protection of its own community, this section hereby authorizes the city administrator or his or her designee, to provide such assistance as may be required under authority granted in K.S.A. 12-16,117, with all the privileges and immunities provided therein.
- 1-1303. ASSISTANCE AGREEMENT. Nothing in this article is intended to conflict or circumvent any existing interlocal agreement, any automatic aid, intergovernmental or mutual aid agreement, or any authority to enter into such agreements in the future.
- 1-1304. LIMITATION OF ASSISTANCE. It is the intent of this article to provide assistance in any form of service including, but not limited to police, public works, administrative, and clerical during times of disaster as defined in K.S.A. 12-16,117 with all the privileges and immunities described therein.
- 1-1305. TEMPORARY LOCATION OF GOVERNMENT. Whenever, due to an emergency resulting from the effects of enemy attack, or the anticipated effects of a threatened enemy attack, it becomes imprudent, inexpedient or impossible to conduct the affairs of local government at the regular or usual place or places thereof, the governing body may meet at any place within or without the city limits on the call of the presiding officer or any two members of such governing body, and shall proceed to establish and designate by ordinance, resolution or other manner, alternate or substitute sites or places as the emergency temporary location, or locations, of government where all, or any part of the public business may be transacted and conducted during the emergency situation. Such sites or places may be within or without the city limits and within this state.
- 1-1306. SAME; POWERS OF ~~Governing body~~GOVERNING BODY. During the period when the public business is being conducted at the emergency temporary location, or locations, the governing body and other officers of the city shall have and ~~posses~~possess and shall exercise, at such location, or locations, all of the executive, legislative and judicial powers and functions conferred upon such body and officers by or under the laws of this state. Such powers and functions may be exercised in the light of the exigencies of the emergency situation without regard to our

compliance with time consuming procedures and formalities prescribed by law and pertaining thereto, and all areas of the governing body and officers of the city shall be as valid and binding as if performed within the territorial limits of their political subdivision.

1-1307. MAYOR; VACANCY IN THE EVENT OF NATIONAL EMERGENCY. When any vacancy occurs in the office of mayor by reason of a catastrophe which is declared to be a national-, regional, state, or local emergency, the president of the council for the time being shall exercise the duties of the office of the mayor, and should the president of the council not be available, then the councilmembers of the governing body shall succeed respectively, for the time being, to exercise the duties of the office of mayor, in the order of the councilmembers with the longest period of service, as such, who might survive to assume the duties of the office. In the event two or more councilmembers shall be eligible to assume the duties of the office of mayor in the event of a national-, regional, state, or local emergency, and shall have equal service in time as councilmember, then in such event the councilmember from the lowest numbered ward shall be next in line for the succession to the office of mayor.

1-1308. POWERS OF SUCCESSOR TO MAYOR. The president of the council or the respective successive councilmember, who for the time being shall exercise the duties of the office of the mayor in the event of national-, regional, state, or local emergency under sections 1-1305:1310as provided in this article, shall have all the rights, privileges and jurisdiction of the mayor, until such vacancy is filled or such disability is removed, or in case of temporary disability, until the mayor shall return; and in case of such vacancy, other than temporary absence or disability, the person exercising the office of mayor shall cause a new election to be held mayor to be selected in accordance with the provisions of section 1-208 of the city code, giving 10 days notice by proclamationas amended.

~~1-1309. EMERGENCY PREPAREDNESS STATUTES AND PROVISIONS INCORPORATED BY REFERENCE. There is incorporated by reference herein and made a part hereof all of the provisions of K.S.A. 48-201 through 48-406, K.S.A. 48-904 through 48-936, The Kansas Emergency Preparedness Act of 1977, revised, and Johnson County, Kansas Resolution No. 023-81 adopted on March 22, 1982 insofar as they can be made applicable to the city, and the Prairie Village Emergency Preparedness Plan.~~

1-1309. EMERGENCY OPERATION PLAN AND NATIONAL INCIDENT MANAGEMENT SYSTEM. The City of Prairie Village, Kansas, hereby adopts the Johnson County Emergency Operations Plan, as may be amended by Johnson County, Kansas, from time to time, as the Emergency Operation Plan of the City of Prairie Village Kansas. The City of Prairie Village, Kansas, hereby additionally adopts the National Incident Management System, as the same may be amended from time to time by the Federal Department of Homeland Security, to the extent it is not inconsistent with the Johnson County Emergency Operations Plan.

1-1310. EMERGENCY PREPAREDNESS COMMITTEE. There is created within the city an Emergency Preparedness Committee, whose members shall consist of the city administrator, chief of police, public works director, fire chief and other members as may be required. The governing body may appoint an emergency preparedness coordinator who shall be the chairperson of the emergency preparedness committee. The duties of the committee are primarily, but not limited to, carrying out the

provisions of the Prairie Village Emergency ~~Preparedness-Operation~~ Plan as adopted in section 1-1309.

1-1311. EMERGENCY PROCLAMATION; ACTION. ~~Whenever~~Subject to the provisions of section 1-1313 below, whenever, in the judgment of the mayor (or in the event of his or her inability to act, the president of the council-) determines that an emergency exists-, or is continuing, as a result of mob action, public or natural disaster, or other civil disobedience causing danger of injury to or damages to persons or property, ~~he or she~~the mayor shall have power to ~~impose~~declare such an emergency by proclamation-, and the mayor may, by one or more subsequent orders issued pursuant to such proclamation, impose any or all of the following regulations necessary to preserve the health, safety, peace~~and,~~ or order of the city, which regulations shall have the force and effect of law during the period of the proclaimed emergency or as otherwise established in the applicable order:

- (a) To impose a curfew or issue stay-at-home orders upon all or any portion of the city requiring all persons in such designated ~~curfew~~areas to remove themselves from the public streets, alleys, parks or other places or buildings that are otherwise generally open to the public~~places~~; provided, however, that physicians, nurses and ambulance operators performing medical services, utility personnel maintaining essential public services, firefighters ~~and city,~~ city-authorized or requested law enforcement officers and personnel-, and such other individuals and/or individuals performing specified activities may be exempted from such curfew or stay-at-home order;
- (b) To order the closing of any business establishments and other buildings or facilities generally open to the public anywhere within the city for the period of the emergency, such businesses to include, but not be limited to, those selling intoxicating liquors, cereal malt beverages, gasoline or firearms;
- (c) To designate any public street, thoroughfare or vehicle parking areas closed to motor vehicles and pedestrian traffic;
- (d) To call upon regular and auxiliary law enforcement-, peacekeeping and/or public safety agencies and organizations within or without the city to assist in preserving and keeping the peace-, and to ensure the public health, safety and welfare within the city-;
- (e) To impose such other regulations as are necessary or appropriate, consistent with applicable law, to preserve the health, safety, peace, or order of the city; provided, that such other regulations are for the purpose of adopting or incorporating by reference requirements or recommendations, or portions thereof, contained in health or emergency orders issued by applicable Federal, State, or County officials related to the same emergency or disaster that is the basis for the mayor's proclamation, whether the same are imposed as to the city or not; and further provided that, and notwithstanding the foregoing, such regulations may be equally or more restrictive than such Federal, State, or County orders.

1-1312. EMERGENCY PROCLAMATION; EFFECTIVE WHEN. ~~The proclamation~~Proclamations of emergency ~~provided in sections 1-1311:1314 as provided in section 1-1311,~~ and any orders issued pursuant to such proclamation, and any resolutions of the governing body as provided in section 1-1313 below, shall become effective upon ~~is~~ issuance and dissemination to the public by appropriate news media or other outlets designated for informing the general public.

1-1313.

EMERGENCY PROCLAMATION; TERMINATION.

(a) Any emergency proclaimed in accordance with the provisions of sections 1-1311:1314 shall terminate after 48 hours from the issuance thereof, or upon the issuance of a proclamation determining an emergency no longer exists, whichever occurs first; provided, however, that such emergency section 1-1311, and/or any orders imposed by pursuant to such proclamation, shall terminate upon the earliest of the following:

- (i) after seven (7) days from the issuance thereof, unless extended as provided in subsection (b) below;
- (ii) upon the issuance of a proclamation by the mayor determining an emergency no longer exists or that a particular order is no longer necessary or advisable; or
- (iii) upon resolution of the governing body, exercisable at any time, terminating the emergency proclamation and/or any orders promulgated therewith.

If the governing body terminates the emergency proclamation and/or any such orders, then the mayor shall not have the authority to issue a subsequent proclamation as to the same emergency or continued emergency, or re-issue an order pursuant thereto, in substantially the same form or content as that terminated by the governing body, without further approval by the governing body in each such case, unless there is a new emergency or a material increase in the severity of or risks to the health, safety, peace, or order of the city presented by a continuing emergency.

(b) Notwithstanding the foregoing, any emergency proclamation may be extended for such additional periods of time as determined necessary by resolution of the governing body.

(c) The governing body may condition extension of a proclamation or any order on the mayor's modifying or amending such proclamation or order in accordance with the governing body's resolution within forty-eight (48) hours after the effectiveness of such resolution, provided that such amendments are themselves consistent with the powers and authorities granted to the mayor under section 1-1311 above and other applicable law. If the mayor fails or refuses to modify or amend any proclamation or order within such forty-eight (48) hours, then such proclamation or order shall be deemed terminated as provided in subsection (a)(iii) above.

1-1314.

EMERGENCY PROCLAMATION; VIOLATION, PENALTY. Any person who willfully fails or refuses to comply with the orders of duly authorized law enforcement officers or personnel charged with the responsibility of enforcing the proclamation of emergency authorized in sections 1-1311:~~1314~~ through 1-1313, inclusive, is guilty of a misdemeanor, and upon conviction therefore, shall be punished by a fine of not more than \$500 or by imprisonment in jail for a period of not to exceed six months, or by both such fine and imprisonment.

ARTICLE 13. EMERGENCY ASSISTANCE AND NATIONAL EMERGENCY SITUATIONS

- 1-1301. **DEFINITIONS.** For the purpose of this title, certain terms or words used herein shall be interpreted or defined as follows in this article:
- (a) Municipality -- Any city, county or township;
 - (b) Public Safety Agency -- Any municipal fire department, law enforcement office, sheriff's department, volunteer and nonvolunteer fire protection associations, emergency management department, public works department or other similar public or private agency; and
 - (c) Disaster -- The occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from any natural or man-made cause, including, but not limited to, fire, flood, earthquake, wind, storm, epidemics, pandemics, disease, air contamination, blight, drought, infestation, explosion or riot.
- 1-1302. **REQUEST FOR ASSISTANCE.** In the event of a disaster when there is a request for assistance from a municipality or public safety agency within or outside the State of Kansas, if the city can provide assistance to the municipality or agency without unduly jeopardizing the protection of its own community, this section hereby authorizes the city administrator or his or her designee, to provide such assistance as may be required under authority granted in K.S.A. 12-16,117, with all the privileges and immunities provided therein.
- 1-1303. **ASSISTANCE AGREEMENT.** Nothing in this article is intended to conflict or circumvent any existing interlocal agreement, any automatic aid, intergovernmental or mutual aid agreement, or any authority to enter into such agreements in the future.
- 1-1304. **LIMITATION OF ASSISTANCE.** It is the intent of this article to provide assistance in any form of service including, but not limited to police, public works, administrative, and clerical during times of disaster as defined in K.S.A. 12-16,117 with all the privileges and immunities described therein.
- 1-1305. **TEMPORARY LOCATION OF GOVERNMENT.** Whenever, due to an emergency resulting from the effects of enemy attack, or the anticipated effects of a threatened enemy attack, it becomes imprudent, inexpedient or impossible to conduct the affairs of local government at the regular or usual place or places thereof, the governing body may meet at any place within or without the city limits on the call of the presiding officer or any two members of such governing body, and shall proceed to establish and designate by ordinance, resolution or other manner, alternate or substitute sites or places as the emergency temporary location, or locations, of government where all, or any part of the public business may be transacted and conducted during the emergency situation. Such sites or places may be within or without the city limits and within this state.
- 1-1306. **SAME; POWERS OF GOVERNING BODY.** During the period when the public business is being conducted at the emergency temporary location, or locations, the governing body and other officers of the city shall have and possess and shall exercise, at such location, or locations, all of the executive, legislative and judicial powers and functions conferred upon such body and officers by or under the laws of this state. Such powers and functions may be exercised in the light of the

exigencies of the emergency situation without regard to our compliance with time consuming procedures and formalities prescribed by law and pertaining thereto, and all areas of the governing body and officers of the city shall be as valid and binding as if performed within the territorial limits of their political subdivision.

- 1-1307. MAYOR; VACANCY IN THE EVENT OF NATIONAL EMERGENCY. When any vacancy occurs in the office of mayor by reason of a catastrophe which is declared to be a national, regional, state, or local emergency, the president of the council for the time being shall exercise the duties of the office of the mayor, and should the president of the council not be available, then the councilmembers of the governing body shall succeed respectively, for the time being, to exercise the duties of the office of mayor, in the order of the councilmembers with the longest period of service, as such, who might survive to assume the duties of the office. In the event two or more councilmembers shall be eligible to assume the duties of the office of mayor in the event of a national, regional, state, or local emergency, and shall have equal service in time as councilmember, then in such event the councilmember from the lowest numbered ward shall be next in line for the succession to the office of mayor.
- 1-1308. POWERS OF SUCCESSOR TO MAYOR. The president of the council or the respective successive councilmember, who for the time being shall exercise the duties of the office of the mayor in the event of national, regional, state, or local emergency as provided in this article, shall have all the rights, privileges and jurisdiction of the mayor, until such vacancy is filled or such disability is removed, or in case of temporary disability, until the mayor shall return; and in case of such vacancy, other than temporary absence or disability, the person exercising the office of mayor shall cause a new mayor to be selected in accordance with the provisions of section 1-208 of the city code, as amended.
- 1-1309. EMERGENCY OPERATION PLAN AND NATIONAL INCIDENT MANAGEMENT SYSTEM. The City of Prairie Village, Kansas, hereby adopts the Johnson County Emergency Operations Plan, as may be amended by Johnson County, Kansas, from time to time, as the Emergency Operation Plan of the City of Prairie Village Kansas. The City of Prairie Village, Kansas, hereby additionally adopts the National Incident Management System, as the same may be amended from time to time by the Federal Department of Homeland Security, to the extent it is not inconsistent with the Johnson County Emergency Operations Plan.
- 1-1310. EMERGENCY PREPAREDNESS COMMITTEE. There is created within the city an Emergency Preparedness Committee, whose members shall consist of the city administrator, chief of police, public works director, fire chief and other members as may be required. The governing body may appoint an emergency preparedness coordinator who shall be the chairperson of the emergency preparedness committee. The duties of the committee are primarily, but not limited to, carrying out the provisions of the Prairie Village Emergency Operation Plan as adopted in section 1-1309.
- 1-1311. EMERGENCY PROCLAMATION; ACTION. Subject to the provisions of section 1-1313 below, whenever, in the judgment of the mayor (or in the event of his or her inability to act, the president of the council) determines that an emergency exists, or is continuing, as a result of mob action, public or natural

disaster, or other civil disobedience causing danger of injury to or damages to persons or property, the mayor shall have power to declare such an emergency by proclamation, and the mayor may, by one or more subsequent orders issued pursuant to such proclamation, impose any or all of the following regulations necessary to preserve the health, safety, peace, or order of the city, which regulations shall have the force and effect of law during the period of the proclaimed emergency or as otherwise established in the applicable order:

- (a) To impose a curfew or issue stay-at-home orders upon all or any portion of the city requiring all persons in such designated areas to remove themselves from the public streets, alleys, parks or other places or buildings that are otherwise generally open to the public; provided, however, that physicians, nurses and ambulance operators performing medical services, utility personnel maintaining essential public services, firefighters, city-authorized or requested law enforcement officers and personnel, and such other individuals and/or individuals performing specified activities may be exempted from such curfew or stay-at-home order;
- (b) To order the closing of any business establishments and other buildings or facilities generally open to the public anywhere within the city for the period of the emergency, such businesses to include, but not be limited to, those selling intoxicating liquors, cereal malt beverages, gasoline or firearms;
- (c) To designate any public street, thoroughfare or vehicle parking areas closed to motor vehicles and pedestrian traffic;
- (d) To call upon regular and auxiliary law enforcement, peacekeeping and/or public safety agencies and organizations within or without the city to assist in preserving and keeping the peace, and to ensure the public health, safety and welfare within the city;
- (e) To impose such other regulations as are necessary or appropriate, consistent with applicable law, to preserve the health, safety, peace, or order of the city; provided, that such other regulations are for the purpose of adopting or incorporating by reference requirements or recommendations, or portions thereof, contained in health or emergency orders issued by applicable Federal, State, or County officials related to the same emergency or disaster that is the basis for the mayor's proclamation, whether the same are imposed as to the city or not; and further provided that, and notwithstanding the foregoing, such regulations may be equally or more restrictive than such Federal, State, or County orders.

1-1312. EMERGENCY PROCLAMATION; EFFECTIVE WHEN. Proclamations of emergency as provided in section 1-1311, and any orders issued pursuant to such proclamation, and any resolutions of the governing body as provided in section 1-1313 below, shall become effective upon issuance and dissemination to the public by appropriate news media or other outlets designated for informing the general public.

1-1313. EMERGENCY PROCLAMATION; TERMINATION.

- (a) Any emergency proclaimed in accordance with the provisions of section 1-1311, and/or any orders imposed by pursuant to such proclamation, shall terminate upon the earliest of the following:
 - (i) after seven (7) days from the issuance thereof, unless extended as provided in subsection (b) below;

- (ii) upon the issuance of a proclamation by the mayor determining an emergency no longer exists or that a particular order is no longer necessary or advisable; or
- (iii) upon resolution of the governing body, exercisable at any time, terminating the emergency proclamation and/or any orders promulgated therewith.

If the governing body terminates the emergency proclamation and/or any such orders, then the mayor shall not have the authority to issue a subsequent proclamation as to the same emergency or continued emergency, or re-issue an order pursuant thereto, in substantially the same form or content as that terminated by the governing body, without further approval by the governing body in each such case, unless there is a new emergency or a material increase in the severity of or risks to the health, safety, peace, or order of the city presented by a continuing emergency.

- (b) Notwithstanding the foregoing, any emergency proclamation may be extended for such additional periods of time as determined necessary by resolution of the governing body.
- (c) The governing body may condition extension of a proclamation or any order on the mayor's modifying or amending such proclamation or order in accordance with the governing body's resolution within forty-eight (48) hours after the effectiveness of such resolution, provided that such amendments are themselves consistent with the powers and authorities granted to the mayor under section 1-1311 above and other applicable law. If the mayor fails or refuses to modify or amend any proclamation or order within such forty-eight (48) hours, then such proclamation or order shall be deemed terminated as provided in subsection (a)(iii) above.

1-1314. EMERGENCY PROCLAMATION; VIOLATION, PENALTY. Any person who willfully fails or refuses to comply with the orders of duly authorized law enforcement officers or personnel charged with the responsibility of enforcing the proclamation of emergency authorized in sections 1-1311 through 1-1313, inclusive, is guilty of a misdemeanor, and upon conviction therefore, shall be punished by a fine of not more than \$500 or by imprisonment in jail for a period of not to exceed six months, or by both such fine and imprisonment.

ORDINANCE NO. 2423

AN ORDINANCE REGARDING EMERGENCY OPERATIONS AND THE PROTECTION OF THE HEALTH, SAFETY, AND WELFARE OF THE CITY OF PRAIRIE VILLAGE, KANSAS; AMENDING CHAPTER I (ADMINISTRATION), ARTICLE 13 (EMERGENCY ASSISTANCE AND NATIONAL EMERGENCY SITUATIONS) OF THE CODE OF THE CITY OF PRAIRIE VILLAGE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PRAIRIE VILLAGE, KANSAS:

Section 1. Existing Section 1-1301 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

- 1-1301. DEFINITIONS. For the purpose of this title, certain terms or words used herein shall be interpreted or defined as follows in this article:
- (a) Municipality -- Any city, county or township;
 - (b) Public Safety Agency -- Any municipal fire department, law enforcement office, sheriff's department, volunteer and nonvolunteer fire protection associations, emergency management department, public works department or other similar public or private agency; and
 - (c) Disaster -- The occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from any natural or man-made cause, including, but not limited to, fire, flood, earthquake, wind, storm, epidemics, pandemics, disease, air contamination, blight, drought, infestation, explosion or riot.

Section 2. Existing Section 1-1306 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

- 1-1306. SAME; POWERS OF GOVERNING BODY. During the period when the public business is being conducted at the emergency temporary location, or locations, the governing body and other officers of the city shall have and possess and shall exercise, at such location, or locations, all of the executive, legislative and judicial powers and functions conferred upon such body and officers by or under the laws of this state. Such powers and functions may be exercised in the light of the exigencies of the emergency situation without regard to our compliance with time consuming procedures and formalities prescribed by law and pertaining thereto, and all areas of the governing body and officers of the city shall be as valid and binding as if performed within the territorial limits of their political subdivision

Section 3. Existing Section 1-1307 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

- 1-1307. MAYOR; VACANCY IN THE EVENT OF NATIONAL EMERGENCY. When any vacancy occurs in the office of mayor by reason of a catastrophe which is declared to be a national, regional, state, or local emergency, the president of the council for the time being shall exercise the duties of the office of the mayor, and

should the president of the council not be available, then the councilmembers of the governing body shall succeed respectively, for the time being, to exercise the duties of the office of mayor, in the order of the councilmembers with the longest period of service, as such, who might survive to assume the duties of the office. In the event two or more councilmembers shall be eligible to assume the duties of the office of mayor in the event of a national, regional, state, or local emergency, and shall have equal service in time as councilmember, then in such event the councilmember from the lowest numbered ward shall be next in line for the succession to the office of mayor.

Section 4. Existing Section 1-1308 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1308. **POWERS OF SUCCESSOR TO MAYOR.** The president of the council or the respective successive councilmember, who for the time being shall exercise the duties of the office of the mayor in the event of national, regional, state, or local emergency as provided in this article, shall have all the rights, privileges and jurisdiction of the mayor, until such vacancy is filled or such disability is removed, or in case of temporary disability, until the mayor shall return; and in case of such vacancy, other than temporary absence or disability, the person exercising the office of mayor shall cause a new mayor to be selected in accordance with the provisions of section 1-208 of the city code, as amended.

Section 5. Existing Section 1-1309 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1309. **EMERGENCY OPERATION PLAN AND NATIONAL INCIDENT MANAGEMENT SYSTEM.** The City of Prairie Village, Kansas, hereby adopts the Johnson County Emergency Operations Plan, as may be amended by Johnson County, Kansas, from time to time, as the Emergency Operation Plan of the City of Prairie Village Kansas. The City of Prairie Village, Kansas, hereby additionally adopts the National Incident Management System, as the same may be amended from time to time by the Federal Department of Homeland Security, to the extent it is not inconsistent with the Johnson County Emergency Operations Plan.

Section 6. Existing Section 1-1310 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1310. **EMERGENCY PREPAREDNESS COMMITTEE.** There is created within the city an Emergency Preparedness Committee, whose members shall consist of the city administrator, chief of police, public works director, fire chief and other members as may be required. The governing body may appoint an emergency preparedness coordinator who shall be the chairperson of the emergency preparedness committee. The duties of the committee are primarily, but not limited to, carrying out the provisions of the Prairie Village Emergency Operation Plan as adopted in section 1-1309.

Section 7. Existing Section 1-1311 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1311. EMERGENCY PROCLAMATION; ACTION. Subject to the provisions of section 1-1313 below, whenever, in the judgment of the mayor (or in the event of his or her inability to act, the president of the council) determines that an emergency exists, or is continuing, as a result of mob action, public or natural disaster, or other civil disobedience causing danger of injury to or damages to persons or property, the mayor shall have power to declare such an emergency by proclamation, and the mayor may, by one or more subsequent orders issued pursuant to such proclamation, impose any or all of the following regulations necessary to preserve the health, safety, peace, or order of the city, which regulations shall have the force and effect of law during the period of the proclaimed emergency or as otherwise established in the applicable order:

- (a) To impose a curfew or issue stay-at-home orders upon all or any portion of the city requiring all persons in such designated areas to remove themselves from the public streets, alleys, parks or other places or buildings that are otherwise generally open to the public; provided, however, that physicians, nurses and ambulance operators performing medical services, utility personnel maintaining essential public services, firefighters, city-authorized or requested law enforcement officers and personnel, and such other individuals and/or individuals performing specified activities may be exempted from such curfew or stay-at-home order;
- (b) To order the closing of any business establishments and other buildings or facilities generally open to the public anywhere within the city for the period of the emergency, such businesses to include, but not be limited to, those selling intoxicating liquors, cereal malt beverages, gasoline or firearms;
- (c) To designate any public street, thoroughfare or vehicle parking areas closed to motor vehicles and pedestrian traffic;
- (d) To call upon regular and auxiliary law enforcement, peacekeeping and/or public safety agencies and organizations within or without the city to assist in preserving and keeping the peace, and to ensure the public health, safety and welfare within the city;
- (e) To impose such other regulations as are necessary or appropriate, consistent with applicable law, to preserve the health, safety, peace, or order of the city; provided, that such other regulations are for the purpose of adopting or incorporating by reference requirements or recommendations, or portions thereof, contained in health or emergency orders issued by applicable Federal, State, or County officials related to the same emergency or disaster that is the basis for the mayor's proclamation, whether the same are imposed as to the city or not; and further provided that, and notwithstanding the foregoing, such regulations may be equally or more restrictive than such Federal, State, or County orders.

Section 8. Existing Section 1-1312 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1312. EMERGENCY PROCLAMATION; EFFECTIVE WHEN. Proclamations of emergency as provided in section 1-1311, and any orders issued pursuant to such proclamation, and any resolutions of the governing body as provided in section 1-1313 below, shall become effective upon issuance and dissemination to the public by appropriate news media or other outlets designated for informing the general public.

Section 9. Existing Section 1-1313 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1313. EMERGENCY PROCLAMATION; TERMINATION.

- (a) Any emergency proclaimed in accordance with the provisions of section 1-1311, and/or any orders imposed by pursuant to such proclamation, shall terminate upon the earliest of the following:
- (i) after seven (7) days from the issuance thereof, unless extended as provided in subsection (b) below;
 - (ii) upon the issuance of a proclamation by the mayor determining an emergency no longer exists or that a particular order is no longer necessary or advisable; or
 - (iii) upon resolution of the governing body, exercisable at any time, terminating the emergency proclamation and/or any orders promulgated therewith.

If the governing body terminates the emergency proclamation and/or any such orders, then the mayor shall not have the authority to issue a subsequent proclamation as to the same emergency or continued emergency, or re-issue an order pursuant thereto, in substantially the same form or content as that terminated by the governing body, without further approval by the governing body in each such case, unless there is a new emergency or a material increase in the severity of or risks to the health, safety, peace, or order of the city presented by a continuing emergency.

- (b) Notwithstanding the foregoing, any emergency proclamation may be extended for such additional periods of time as determined necessary by resolution of the governing body.
- (c) The governing body may condition extension of a proclamation or any order on the mayor's modifying or amending such proclamation or order in accordance with the governing body's resolution within forty-eight (48) hours after the effectiveness of such resolution, provided that such amendments are themselves consistent with the powers and authorities granted to the mayor under section 1-1311 above and other applicable law. If the mayor fails or refuses to modify or amend any proclamation or order within such forty-eight (48) hours, then such proclamation or order shall be deemed terminated as provided in subsection (a)(iii) above.

Section 10. Existing Section 1-1314 of the Code of the City of Prairie Village, Kansas, is hereby amended to read as follows:

1-1314. EMERGENCY PROCLAMATION; VIOLATION, PENALTY. Any person who willfully fails or refuses to comply with the orders of duly authorized law enforcement officers or personnel charged with the responsibility of enforcing the proclamation of emergency authorized in sections 1-1311 through 1-1313, inclusive, is guilty of a misdemeanor, and upon conviction therefore, shall be punished by a fine of not more than \$500 or by imprisonment in jail for a period of not to exceed six months, or by both such fine and imprisonment.

Section 11. Sections 1-1301, 1-1306, 1-1307, 1-1308, 1-1309, 1-1310, 1-1311, 1-1312, 1-1313, 1-1314, 1-1315, and 1-1316 of the Prairie Village Municipal Code, in existence as of and prior to the adoption of this ordinance, are hereby repealed.

Section 12. This ordinance shall take effect and be enforced from and after its passage, approval, and publication as provided by law.

PASSED by the City Council of the City of Prairie Village, Kansas on _____, 2020.

APPROVED by the Mayor on _____, 2020.

CITY OF PRAIRIE VILLAGE, KANSAS

Eric Mikkelson, Mayor

ATTEST:

Adam Geffert, City Clerk

APPROVED AS TO LEGAL FORM:

David E. Waters, City Attorney



Consider Approval of Agreement with Energy Solutions Professionals for an Investment Grade Energy Audit

BACKGROUND

The City Council budgeted \$10,000 in 2020 for an energy audit.

Back in 2010, the City issued a Request for Qualifications to conduct an energy audit and a possible energy performance contract. At that time, the City solicited qualifications from consultants who met the National Association of Energy Service Companies requirements, who were prequalified companies through the State of Kansas Facility Conservation Improvement Program (FCIP), and who had at least 5 years of experience.

The City received 4 submissions at the time and moved forward with selecting Energy Solutions Professionals. The investment grade energy audit in 2010 then resulted in an energy performance contract, which is the project through which the geothermal HVAC system was installed in 2011. The 2010 Investment Grade Audit that was completed is attached for the Council's review.

Because of our past work with Energy Solutions Professionals and their in-depth knowledge of the current energy systems that are in place, staff felt that it made sense to use their services again for a new energy audit rather than going out to bid.

Attached is the proposed agreement with Energy Solutions Professionals to conduct the investment grade audit, as well as the proposed process that they will follow. The total fee to conduct the investment grade audit is \$8,602 and includes evaluation of the community center, city hall, police department, and the pool facility. ESP will conduct a comprehensive study to analyze all major energy consuming equipment within our city facilities, as well as look at current processes, procedures, environment, people, strategic plan, and goals. ESP will then produce a final report and action plan to present to the Council based on their findings.

Representatives from ESP will be present at the meeting to answer any questions. The investment grade audit agreement has been approved by the City Attorney.

RECOMMENDATION

Make a motion to authorize the mayor to execute the investment grade audit agreement with Energy Solutions Professionals.

ATTACHMENTS

2020 Investment Grade Audit Agreement with Energy Solutions Professionals
2020 IGA Process
2010 Completed Investment Grade Audit

PREPARED BY

Jamie Robichaud
Deputy City Administrator
Date: July 16, 2020

INVESTMENT GRADE AUDIT AGREEMENT

This Investment Grade Audit Agreement (“Agreement”) is entered into between Energy Solutions Professionals, LLC. (“ESCO”), and City of Prairie Village, Kansas (“Client”) for an energy and facility audit, a report on the findings and assistance developing a final scope of work for inclusion in a potential Energy Performance Contract for the Client’s facilities as set forth in Section 4.

SECTION 1. GENERAL.

The primary objective in completing an Investment Grade Audit (IGA) of the Client’s facilities is to provide detailed information regarding the technical and financial aspects of proceeding with an Energy Performance Contract at the Client’s facilities. The IGA will provide comprehensive information on the existing conditions, cost of implementing a wide array of energy-saving facility-improvement measures, the guaranteed savings associated with each individual measure and a detailed financial picture about the impacts of implementing an Energy Performance Contract. This data enables the Client to make an informed decision about proceeding with an Energy Performance Contract.

This agreement is a mutual commitment between the ESCO and the Client. The ESCO commits to conducting the analysis necessary to develop a project that may be fully funded from re-directed energy and operational savings. If this is not accomplished, the Client will not owe the ESCO the IGA Fee identified in Section 4 of this Agreement. The Client commits that if a paid-from-savings project is identified, they will pay for the Audit. The Client will have the option of rolling the IGA Fee into the Energy Performance Contract where the fee will be paid for by savings.

SECTION 2. SCOPE OF WORK.

2.1 Energy Audit Data

ESCO shall prepare an Investment Grade Audit (IGA) of the Client’s facilities. The Client will provide its complete cooperation in connection with the preparation of the IGA. To assist ESCO in preparing the IGA, Client shall furnish (or cause others to furnish) to ESCO information pertinent to understanding the energy-consuming characteristics of their facilities. This information will include accurate and complete data concerning utility usage and cost for all facilities for the most current 24-month (minimum) time period. Additional data required will include; but not be limited to: physical access to facilities for conducting field surveys; historical operation and maintenance costs; occupancy information and schedules; description of any changes in the building structure or its heating, cooling, lighting or other systems or energy requirements; descriptions of all energy consuming equipment used at the Facilities; and description of energy management procedures presently utilized. If requested by ESCO, Client will also provide any prior energy audits of the Facilities, existing construction documentation, equipment submittals and any other related data.

2.2 Field Survey

ESCO will conduct a comprehensive field survey of the Facilities to gather information and data pertinent to the analysis of energy usage and preparation of the IGA. The field survey shall include physical review of, but not be limited to, the heating, ventilating, and air conditioning systems, temperature control systems, lighting systems, water-consuming systems, energy plant, and the building envelope. The physical review shall provide equipment quantities, characteristics and all pertinent model or nameplate data, and data-logging of significant energy consuming systems. Descriptions of equipment operation, equipment condition, and comfort levels will be recorded for each Facility. In addition, the survey will include interviews with all key personnel responsible for operating each facility.

2.3 Investment Grade Audit Report

ESCO shall present to the Client the written IGA Report within **90 working days** after execution of this Agreement. The IGA Report shall set forth the following information:

- A. An Executive Summary providing an overview of the IGA process, audit findings and a summary of technical and financial parameters associated with a potential Energy Performance Contract.
- B. A Technical Section that provides facility write-ups identifying existing conditions, a list and description of potential Energy Conservation Measure (ECM) opportunities, and guaranteed cost and savings for each ECM analyzed, even those not recommended for inclusion in project. The costs will be based on firm subcontractor and/or vendor quotes, and the guaranteed savings on a combination of engineering methods, logged-data and/or accepted energy-estimating programs.
- C. A Financial Analysis Section that will summarize various financing options and avenues for funding the potential Energy Performance Contract, including sample pro forma cash flow tables for various combinations of Energy Conservation Measures.
- D. A Project Management Plan Section that will identify the steps necessary to implement the Energy Performance Contract. This plan will include a project timeline associated with completing each step necessary to fulfill the Client's objectives for an implementation schedule.
- E. Appendices necessary to provide full disclosure on how the savings were calculated and how they will be measured and verified to fulfill the guarantee, field-measured data, cut-sheets or any other pertinent technical information that will help the Client understand the full scope and financial parameters for all ECMs evaluated.

SECTION 3. ACCEPTANCE OF THE INVESTMENT GRADE AUDIT REPORT

The IGA Report will be presented to the Client, and the Client will be given 90 days from the date of presentation of this Report to decide whether or not to enter into an Energy Performance Contract with the ESCO. If the Client executes an Energy Performance Contract with the ESCO within the 90 days, the IGA Fee will be included in the Energy Performance Contract, and be paid for from savings. If the Client does not execute the Energy Performance Contract within 90 days, the IGA fee will be billed by ESCO and paid by the Client within 30 days of billing. If not paid within 30 days, a \$150 late fee will be assessed.

- 3.1 If, at any time during the audit it is determined by ESCO that for technical, cost or lack of savings reasons the economics of the project will not meet the stated objectives, or that it does not seem feasible to spend more funds to complete the remaining work of this Agreement, ESCO will advise the Client immediately. Under such circumstances, the Client may, at its option, terminate this Agreement at no expense, or agree to have the ESCO proceed with the work covered in this Agreement subject to mutually agreeable revised financial parameters.
- 3.2 Upon execution of the guaranteed Energy Performance Contract agreement, the IGA Report shall become a part of the Energy Performance Contract, and will be attached as a "Schedule".
- 3.3 To clarify acceptance and payment terms: a) the Client will not owe ESCO the IGA Fee if ESCO fails to develop a paid-from-savings project; b) the Client may elect to pay the IGA Fee amount directly or roll this Fee into the Energy Performance Contract project so that the IGA is paid for by program savings.

SECTION 4. FACILITIES

The Client Facilities to be evaluated as part of this Agreement include:

Building / Opportunity	Area (SF)	IGA Fee / SF	IGA Fee
Community Center	2,100	\$0.12	\$252.00
City Hall	17,500	\$0.08	\$1,400.00
Police Department	18,000	\$0.08	\$1,440.00
City Hall /Police Dept - RCx Analysis	17,500	\$0.06	\$1,050.00
Harmon Park (Pool, Misc.)			\$1,260.00
Solar Analysis - Pool, City Hall, Police			\$3,200.00
Project Totals	55,100		\$8,602.00

SECTION 5. ACCEPTANCE

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this instrument on the date first above written. This Agreement shall be effective on the last signature date set forth below.

City of Prairie Village, Kansas

Energy Solutions Professionals, LLC

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

Investment Grade Audit Process

The Energy Solutions Professionals team views the Investment Grade Audit (IGA) as the technical and financial cornerstone for effective facility improvement planning. The data collected, dialogue with your Team and ensuing evaluation provide the keys to making sound energy and facility improvement solution recommendations. A primary goal of the audit is to identify energy saving opportunities that enable our clients to redirect funds from the utility company to investment in their facilities. However, our audit process ensures that the proposed solutions go beyond simply energy savings, to also address the core needs and strategic plans of your organization. We have honed this process over many years of providing energy services, and we continually strive to improve our methods and delivery.

Our Investment Grade Audit includes an analysis of all major energy consuming equipment within your facilities, processes, procedures, environment, people, strategic plan and goals, as well as your financial and business situation. The objective is to ensure a comprehensive study that maximizes solutions and value. We strive to understand how your facility(s) currently operate and learn what your future plans are, so that the solutions we offer can solve current issues, while meeting future objectives. The audit provides the basis from which solutions that will impact your facility(s), people and the community you serve for many years are developed and implemented.

The following outline and descriptions define the primary steps in completing an effective energy and facility audit. These steps are completed iteratively and in parallel.

1. Introduce teams and setup workshops (on-going)

- a. Establish team members, identify roles and set up channels of communication.
- b. We use workshops to ensure our efforts are focused on the issues important to your team. Our aim is to keep you informed of our progress, while not being a burden on your staff.

2. Collect and evaluate historical operating cost data

- a. Collect historical utility usage, demand and cost data for gas, electric and water/sewer
- b. Collect information regarding historic maintenance costs for all pertinent systems
Focus on: Material, outsourced maintenance, end-of-life equipment, etc.
- c. Enter operating cost data into analysis tools for evaluation
 - i. Utility analysis provides trending, benchmarking and a macro view of situation
 - ii. Operations and maintenance information is evaluated to determine if there are specific problem-area equipment or systems, and to quantify savings potential.

3. Collect and evaluate field-data

- a. Confer with operating personnel to identify the type and condition of mechanical, electrical, process and water systems in each facility. These meetings will identify system set-points, scheduling practices, perceived needs and/or problem areas.

- b. Conduct field survey(s) to gain an understanding of existing energy-consuming equipment and systems that are in place. Survey includes evaluating condition of equipment, mechanical rooms, occupied spaces (light-levels, temperatures, perceived comfort and other conditions) and building envelope systems. We also take power, temperature, flow and/or other pertinent measurements where warranted.
- c. Evaluate all field data. We bridge the gap between theory and reality by comparing field readings with engineering calculations to verify heating/cooling loads and equipment sizing.

4. Develop solutions to address needs

- a. Develop a comprehensive list of energy efficiency and facility improvement needs. This will include items that have good payback (savings vs. cost), critical facility needs and “wish-list” upgrades. Our solutions will always consider and identify the affect on environment, people and strategic objectives. Operational savings are calculated for each measure.
 - i. All measures are designed to compliment strategic planning, and to go beyond just energy savings to holistically address the organization’s needs.
 - ii. This list is a sound tool for long-term planning in organizations, and typically includes a myriad of opportunities. Some of these end up not being included in the energy performance contract due to financial; savings payback, constraints.
- b. Once a mutually agreed upon list of measures is developed, we obtain pricing from engineering estimates &/or multiple (pre-qualified and approved) subcontractor bids.
- c. Obtain proposals from leading financiers; based on various combinations of measures, to have a sense of available financial criteria (rates, terms and options).

5. Produce final report and action plan

The IGA report and action plan accurately communicates all the findings from the audit, and provides an effective tool for deciding action steps to take based on these findings.

- a. The information provided in the report includes; but is not limited to, an executive summary, utility analysis, existing conditions descriptions, energy and facility improvement measures list (costs & savings by measure) and descriptions, financing options, savings calculations, pricing evaluations and an implementation plan.
- b. A draft of the report is completed and presented to the client in a workshop setting. It is during this workshop that various combinations and options of measures to include in a project are evaluated. Our client has complete control over deciding the scope and magnitude of the final (potential) energy performance contract project.
- c. We include information on all measures evaluated and identify the mutually agreed “best-value” scenario for the client’s current situation.

City of Prairie Village – Specific Requirements

Some members of ESP's Team have met with City of Prairie Village staff to discuss some of the key focal points that need to be addressed through the proposed Investment Grade Audit. We want to specifically identify these items to ensure that you know we will evaluate these items as part of our overall analysis and solution development for the proposed energy-saving and facility-improvement audit.

- Conversion of all lighting to LED technology
- Retro-commissioning of the Ground Source Heat Pump system and controls
- Evaluation of Indoor Air Quality and options for solutions that clean the air and eliminate pathogens, virus and/or particulates from air to optimize health-safety
- Analyze swimming pool operation to optimize energy and operating costs, conduct thorough leak-detection effort to determine where water is being lost
- Analysis of renewable energy opportunities to include solar heating, solar PV, wind generation and other options that the Teams may jointly identify.

Summary

Our process and methods for completing an Investment Grade Audit are designed to create a collaborative, team-oriented environment in which our highly skilled group of energy and facility professionals supplements your staff to develop truly holistic solutions for your specific situation. We work with all levels of your organization to ensure that energy, facility, environmental, people, business and financial aspects are all considered during the evaluation process. This lays the groundwork from which an effective energy efficiency, facility improvement project may be implemented.

Investment Grade Audit

prepared for

City of Prairie Village

Prairie Village, Kansas

December 23, 2010



Energy Solutions Professionals

9218 Metcalf | Suite 274

Overland Park, KS 66212

www.energysolutionsprofessionals.com

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1. Introduction and Executive Summary

Introduction

The Energy Solutions Professionals team would like to thank the City of Prairie Village's energy project team; especially Quinn Bennion, Dennis Enslinger, David McAuliffe, and Mike Helms for their invaluable time and effort assisting us to complete the Investment Grade Audit. We also extend our appreciation to the entire Prairie Village administration for your time and consideration reviewing this report. The measures recommended in this Investment Grade Audit represent significant savings, investment and long-term solutions for many City needs. We structured our audit to provide the key information necessary to assist you with securing funding for projects through the public projects grant, renewable energy grants, and utility rebates. Further, we have included information to help with determining whether the City may leverage these funds; via an energy performance contract project, to secure an even wider array of energy-saving facility improvements.

We recognize that significant consideration will be needed regarding undertaking the proposed energy-efficiency, facility-improvement projects. We truly welcome that chance to assist the City in reaching your long-term goals.

ESP's mission is to provide exceptional energy services in a professional, people-oriented and cost-effective manner, with an emphasis on integrity and excellence. The energy saving opportunities and facility infrastructure improvements available through this program can positively impact your staff and patrons both today and far into the future. The dollar savings ena-

ble the City to stretch existing budgets and attain much needed facility improvements without burdening current capital budgets or tax-payers with increased taxes. The improvements yield a tangible environmental benefit and reduction of carbon emissions, which positions the City of Prairie Village staff as sound fiscal and environmental stewards.

Energy performance contracting is a procurement tool designed to help people improve the energy and operational efficiency of their facilities, stretch the effectiveness of existing budgeted dollars and address critical infrastructure needs. When properly applied and implemented, an energy performance contract provides unique benefits that will positively affect budgets, facility operations, the environment and even the morale of City staff and patrons for many years. Combining this with the significant funds available through the public projects grant, renewable energy grant, and utility rebate programs will result in truly holistic solutions.

The City and ESP project team mutually identified objectives for the Investment Grade Audit early in the process. These may be summarized as follows:

- Analyze all City systems for potential efficiency improvements
- Provide holistic evaluation of deferred maintenance projects
- Develop measures for public projects and renewable energy grant funding, with cost-savings analysis
- Investigate and develop utility rebate opportunities
- Provide cost-savings and cash-flow analysis for prioritizing measures

The purpose of this report is to define the energy and operational savings

opportunities, facility improvements and financial parameters that will yield the greatest overall value for the City of Prairie Village. The report has sections that include a utility analysis, existing conditions, recommended improvements, guaranteed savings, financing parameters, a plan to measure and verify the savings, and appendices with supporting calculations and details.

There were several steps taken in completing the analysis to gain an understanding of the existing conditions, develop solution options and evaluate the financial soundness of various approaches. Our project team obtained and evaluated historical utility cost and usage data, conducted site-surveys to evaluate existing systems, and had meetings with City staff to gain a thorough understanding of existing conditions. The City and ESP Team jointly developed a variety of improvement opportunities, and our engineers calculated the savings potential for each measure. Multiple contractors were provided a scope of work and were asked to submit pricing for each of the measures that appeared to be viable. Workshops were held in which the City & ESP personnel evaluated the cost and savings values to determine what grouping of measures offers the best long-term value for the City.

The ensuing report presents all of our findings, and offers what we believe to be the best approach for the City. We welcome further dialogue on how we can tailor this project to meet the specific facility, staff and patron needs of the City, while maximizing savings.

Executive Summary

Completing the Investment Grade Audit allowed us to learn more about the City of Prairie Village mission and facilities, identify your primary energy and facility needs, and determine that there are opportunities for us to provide tangible assistance. The members of ESP are committed to maximizing benefits by emphasizing integrity and excellence. Our company structure generates low overhead costs, and ensures direct access to the owners of the company. This enables us to be flexible and responsive to City's needs, in a value-oriented manner. Our vendor and commodity independence enables us to provide unbiased, application-specific, solution recommendations. We are committed to providing solutions in a cost-effective manner that truly maximizes benefits for Prairie Village, your staff and the entire community.

Key Decision Factors

The City of Prairie Village has several factors which directly impacted the amount of utility cost savings, and types of measures that ended up being recommended for inclusion in the public projects grant, renewable energy grant, and (potential) energy performance contract project. These things include utility rates, existing facility conditions and much needed upgrade needs. We have described these items below:

Utility Rates

The utility rate structure and costs have a direct impact on what measures will be economically feasible to implement. The City has multiple utilities across the buildings analyzed, including electricity, natural gas, water, and sewer. There are multiple energy rates for elec-

tricity across the buildings; the actual rates were analyzed for each building and energy savings are calculated based upon the actual amount of cost savings each facility could expect to receive. The water rates are fairly low and water usage is not very great, so water conservation measures are not as viable as they are elsewhere. Gas rates fluctuate dramatically, but continue to be rather high.

All of these factors impact the viability of recommending certain measures for inclusion in the energy grants / EPC project. The utility rate structure was considered as part of the economic evaluation of the various energy conservation measures identified in this report.

Public Projects Grant, Renewable Energy Grant, & Utility Rebates

The City of Prairie Village has been awarded a public projects grant for energy efficiency improvements and a renewable energy grant for the installation of a geothermal heat pump system. Additionally, ESP can assist the City with securing utility rebate dollars of at least \$11,000; possibly much more. These funds can be applied to many system replacement needs and/or energy saving measures.

Additional Deferred Maintenance

The existing HVAC systems at City Hall and the Police Headquarters buildings are aging, have experienced mechanical failures, and have trouble maintaining comfort in several areas. These systems were analyzed in detail during this audit. These systems were targeted for replacement and a renewable energy grant was applied for and received to offset the cost of fixing these systems. Due to the aging systems

and their maintenance issues, replacement of the mechanical systems will result in energy conservation as well as avoided future maintenance costs.

Energy Saving Measures

The City of Prairie Village buildings are clean and functional; however, some of the systems in place are past their useful life, are inefficient for the function which they are being used, or are simply maintenance and operational headaches. Additionally, there are newer technologies available which will allow for more energy efficient operation that also enhances safety and comfort. Hence, there are significant energy-saving and facility improvement opportunities available at City facilities.

The annual cost for electric, gas, water and sewer utilities is about \$98,500, which yields a \$2.01/sq. ft. benchmark for utility costs (electricity, natural gas, water and sewer) in the buildings included in this Investment Grade Audit. Based on the systems found, the utility and maintenance costs identified, and energy conservation/facility improvement measures identified and developed, ESP has projected annual energy and operational savings of about \$45,200 if all recommended energy-saving measures are included. (Note that \$8,300 of these savings are cost savings associated with changing City Hall, Police Headquarters, and the Community Center to an electric space heating rate associated with the geothermal heat pump system.)

While the primary objective for energy performance contracting is to identify and implement energy saving improvement measures, it is also our goal to provide solutions for the prima-

ry facility challenges our clients are facing. A couple of the City facilities included in the IGA have major issues that offer unique opportunities for our team to provide tangible value and assistance. We will provide a cost-effective and timely approach to replace aging equipment and systems

that are constant maintenance headaches. The substantial energy savings that would be achieved will reduce cost, while also having a significant positive impact on the global environment for years to come.

The ECM Summary Tables below illustrate the improvements we recom-

mend the City of Prairie Village include in a holistic Grant/Utility Rebate/EPC project, including the cost and savings associated with each upgrade.

ESP is flexible and welcomes an opportunity to assist the City on whatever approach your team deems to be in Prairie Village's best long-term interest.

City of Prairie Village - Summary of Costs/Savings for ENERGY ONLY MEASURES										
ECM				Total Installed Cost	Annual Energy Savings	Annual O&M Savings	Total Annual Savings	Energy Grants	Energy Rebates	Payback
Energy Project										
Lighting Retrofits				\$76,600	\$8,200	\$600	\$8,800	\$25,000	\$3,500	5.5
Water Efficiency Upgrades				\$13,200	\$1,400	\$200	\$1,600			8.3
Building Infiltration Improvements				\$48,300	\$6,500	\$0	\$6,500	\$25,000		3.6
Energy Management System				\$149,000	\$7,500	\$1,000	\$8,500	\$100,000		5.8
Transport Gas*										
Vending Machine Controls				\$1,160	\$300	\$0	\$300			3.9
Energy Project Total				\$288,260	\$23,900	\$1,800	\$25,700	\$150,000	\$3,500	5.2
IGA Audit Fee				\$1,964						
ESP Project Magnitude Discount				\$0						
Total Installed Cost & Annual Savings for Project				\$290,224	\$23,900	\$1,800	\$25,700	\$150,000	\$3,500	5.3

Grants, Rebates and Bond										
Energy Grants & Utility Rebates				-\$153,500						
City Bond Money for Efficiency Improvements				-\$136,724						
Total Grants, Rebates, and Bond				\$0						
Project Totals Including Grants, Rebates, and Bond				\$0	\$23,900	\$1,800	\$25,700			0.0

* Transport gas was evaluated for the Mission Road campus facilities. Prairie Village does not meet the monthly threshold of 1,500 MCF or annual threshold of 3,000 MCF for switching to transport rates.

Potential Cash Flow for Energy (ONLY) Project

Project Costs			Projected Annual Savings		
Energy Measures Installed Cost	\$	288,260	Utility Cost Savings	\$	23,900
Investment Grade Audit Fee	\$	1,964	Operation & Maintenance Svgs	\$	1,800
ESP Project Magnitude Discount	\$	-			
Energy Grants	\$	(150,000)			
Energy Rebates	\$	(3,500)			
Bond Funds for Energy Efficiency	\$	(136,724)			
Net Capitalized Costs	\$	-	Total Annual Savings	\$	25,700
Annual Costs			Finance Factors		
On-Going Technical Service / M&V	\$	-	Term		10.0 years
Avoided Future Costs	\$	-	Interest Rate		4.50%
			Escalation Rate		2.0%
			Energy Escalation Rate		2.0%

YEAR	PROJECTED UTILITY COST SAVINGS	GUARANTEED UTILITY COST SAVINGS	OPER & MAINT / AVOID. FUTURE COST SAVINGS	TOTAL FUNDS AVAILABLE	DEBT SERVICE	ON-GOING TECHNICAL SERVICE FEE	GUARANTEED PROGRAM COST	PROJECTED EXCESS SAVINGS
Interim	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1	\$23,900	\$22,705	\$1,800	\$24,505	\$0	\$0	\$0	\$25,700
2	\$24,378	\$23,159	\$1,836	\$24,995	\$0	\$0	\$0	\$26,214
3	\$24,866	\$23,622	\$1,873	\$25,495	\$0	\$0	\$0	\$26,739
4	\$25,363	\$24,094	\$1,910	\$26,004	\$0	\$0	\$0	\$27,273
5	\$25,870	\$24,576	\$1,948	\$26,524	\$0	\$0	\$0	\$27,818
6	\$26,387	\$25,068	\$1,987	\$27,055	\$0	\$0	\$0	\$28,374
7	\$26,915	\$25,569	\$2,027	\$27,596	\$0	\$0	\$0	\$28,942
8	\$27,453	\$26,080	\$2,068	\$28,148	\$0	\$0	\$0	\$29,521
9	\$28,002	\$26,602	\$2,109	\$28,711	\$0	\$0	\$0	\$30,111
10	\$28,562	\$27,134	\$2,151	\$29,285	\$0	\$0	\$0	\$30,713
11	\$29,133	\$27,677	\$0	\$27,677	\$0	\$0	\$0	\$29,133
12	\$29,716	\$28,231	\$0	\$28,231	\$0	\$0	\$0	\$29,716
13	\$30,310	\$28,796	\$0	\$28,796	\$0	\$0	\$0	\$30,310
14	\$30,916	\$29,372	\$0	\$29,372	\$0	\$0	\$0	\$30,916
15	\$31,534	\$29,959	\$0	\$29,959	\$0	\$0	\$0	\$31,534
16	\$32,165	\$30,558	\$0	\$30,558	\$0	\$0	\$0	\$32,165
17	\$32,808	\$31,169	\$0	\$31,169	\$0	\$0	\$0	\$32,808
18	\$33,464	\$31,792	\$0	\$31,792	\$0	\$0	\$0	\$33,464
19	\$34,133	\$32,428	\$0	\$32,428	\$0	\$0	\$0	\$34,133
20	\$34,816	\$33,077	\$0	\$33,077	\$0	\$0	\$0	\$34,816
TOTAL	\$580,691	\$551,668	\$19,709	\$571,377	\$0	\$0	\$0	\$600,400

- Notes:** 1) This project would not require any additional funding, as Grant, Rebate and Bond Funds cover 100% of Project Cost.
 2) Escalation rates are conservative estimates to reflect increased utility and maintenance costs/savings over time.
 3) Maintenance savings are associated with reduced replacement for lighting/mechanical equipment & outsourced maintenance - ONLY.



City of Prairie Village - Summary of Costs/Savings for ENERGY + VALVE REPAIRS										
ECM				Total Installed Cost	Annual Energy Savings	Annual O&M Savings	Total Annual Savings	Energy Grants	Energy Rebates	Payback
Energy Project										
	Lighting Retrofits			\$76,600	\$8,200	\$600	\$8,800	\$25,000	\$3,500	5.5
	Water Efficiency Upgrades			\$13,200	\$1,400	\$200	\$1,600			8.3
	Building Infiltration Improvements			\$48,300	\$6,500	\$0	\$6,500	\$25,000		3.6
	Energy Management System			\$149,000	\$7,500	\$1,000	\$8,500	\$100,000		5.8
	Transport Gas*									
	Vending Machine Controls			\$1,160	\$300	\$0	\$300	\$0		3.9
	VAV 3-way Valve Replacements			\$44,100	\$0	\$500	\$500			88.2
Energy Project + Valve Repairs Total				\$332,360	\$23,900	\$2,300	\$26,200	\$150,000	\$3,500	6.8
IGA Audit Fee				\$1,964						
ESP Project Magnitude Discount				\$0						
Total Installed Cost & Annual Savings for Project				\$334,324	\$23,900	\$2,300	\$26,200	\$150,000	\$3,500	6.9

Grants, Rebates and Bond											
Energy Grants & Utility Rebates				-\$153,500							
City Bond Money for Efficiency Improvements				-\$180,824							
Total Grants, Rebates, and Bond				\$0							
Net (Out of Pocket) Cost & Total Annual Savings				\$0	\$23,900	\$2,300	\$26,200				0.0

* Transport gas was evaluated for the Mission Road campus facilities. Prairie Village does not meet the monthly threshold of 1,500 MCF or annual threshold of 3,000 MCF for switching to transport rates .

Potential Cash Flow for Energy + Valve Repair Project

Project Costs			Projected Annual Savings		
Energy Measures Installed Cost	\$	332,360	Utility Cost Savings	\$	23,900
Investment Grade Audit Fee	\$	1,964	Operation & Maintenance Svgs	\$	2,300
ESP Project Magnitude Discount	\$	-			
Energy Grants	\$	(150,000)			
Energy Rebates	\$	(3,500)			
Bond Funds for Energy Efficiency	\$	(180,824)			
Net Capitalized Costs	\$	-	Total Annual Savings	\$	26,200
Annual Costs			Finance Factors		
On-Going Technical Service / M&V	\$	-	Term		10.0 years
Avoided Future Costs	\$	-	Interest Rate		4.50%
			Escalation Rate		2.0%
			Energy Escalation Rate		2.0%

YEAR	PROJECTED UTILITY COST SAVINGS	GUARANTEED UTILITY COST SAVINGS	OPER & MAINT / AVOID. FUTURE COST SAVINGS	TOTAL FUNDS AVAILABLE	DEBT SERVICE	ON-GOING TECHNICAL SERVICE FEE	GUARANTEED PROGRAM COST	PROJECTED EXCESS SAVINGS
Interim	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1	\$23,900	\$22,705	\$2,300	\$25,005	\$0	\$0	\$0	\$26,200
2	\$24,378	\$23,159	\$2,346	\$25,505	\$0	\$0	\$0	\$26,724
3	\$24,866	\$23,622	\$2,393	\$26,015	\$0	\$0	\$0	\$27,259
4	\$25,363	\$24,094	\$2,441	\$26,535	\$0	\$0	\$0	\$27,804
5	\$25,870	\$24,576	\$2,490	\$27,066	\$0	\$0	\$0	\$28,360
6	\$26,387	\$25,068	\$2,540	\$27,608	\$0	\$0	\$0	\$28,927
7	\$26,915	\$25,569	\$2,591	\$28,160	\$0	\$0	\$0	\$29,506
8	\$27,453	\$26,080	\$2,643	\$28,723	\$0	\$0	\$0	\$30,096
9	\$28,002	\$26,602	\$2,696	\$29,298	\$0	\$0	\$0	\$30,698
10	\$28,562	\$27,134	\$2,750	\$29,884	\$0	\$0	\$0	\$31,312
11	\$29,133	\$27,677	\$0	\$27,677	\$0	\$0	\$0	\$29,133
12	\$29,716	\$28,231	\$0	\$28,231	\$0	\$0	\$0	\$29,716
13	\$30,310	\$28,796	\$0	\$28,796	\$0	\$0	\$0	\$30,310
14	\$30,916	\$29,372	\$0	\$29,372	\$0	\$0	\$0	\$30,916
15	\$31,534	\$29,959	\$0	\$29,959	\$0	\$0	\$0	\$31,534
16	\$32,165	\$30,558	\$0	\$30,558	\$0	\$0	\$0	\$32,165
17	\$32,808	\$31,169	\$0	\$31,169	\$0	\$0	\$0	\$32,808
18	\$33,464	\$31,792	\$0	\$31,792	\$0	\$0	\$0	\$33,464
19	\$34,133	\$32,428	\$0	\$32,428	\$0	\$0	\$0	\$34,133
20	\$34,816	\$33,077	\$0	\$33,077	\$0	\$0	\$0	\$34,816
TOTAL	\$580,691	\$551,668	\$25,190	\$576,858	\$0	\$0	\$0	\$605,881

- Notes:** 1) This project would not require any additional funding, as Grant, Rebate and Bond Funds cover 100% of Project Cost.
 2) Escalation rates are conservative estimates to reflect increased utility and maintenance costs/savings over time.
 3) Maintenance savings are associated with reduced replacement for lighting/mechanical equipment & outsourced maintenance - ONLY.

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City of Prairie Village - Summary of Costs/Savings for ENERGY + HVAC REPLACEMENTS											
Conservation Measure Description				Total Installed Cost	Annual Energy Savings	Annual O&M Savings	Total Annual Savings	Energy Grants	Utility Rebates	Simple Payback	
Energy Project											
Lighting Retrofits				\$76,600	\$8,200	\$600	\$8,800	\$25,000	\$3,500	5.5	
Water Efficiency Upgrades				\$13,200	\$1,400	\$200	\$1,600			8.3	
Building Infiltration Improvements				\$48,300	\$6,500	\$0	\$6,500	\$25,000		3.6	
Energy Management System				\$149,000	\$7,500	\$1,000	\$8,500	\$100,000		5.8	
Transport Gas*											
Vending Machine Controls				\$1,160	\$300	\$0	\$300			3.9	
Energy Project Total				\$288,260	\$23,900	\$1,800	\$25,700	\$150,000	\$3,500	5.2	
HVAC Unit Replacements				\$519,050	\$0	\$2,500	\$2,500			207.6	
Installed Cost for Energy Project + HVAC Replacements				\$807,310							
IGA Audit Fee				\$1,964							
ESP Project Magnitude Discount				-\$33,400							
Total Installed Cost & Annual Savings for Project				\$775,874	\$23,900	\$4,300	\$28,200	\$150,000	\$3,500	22.1	
Grants, Rebates and Bond											
Energy Grants & Utility Rebates				-\$153,500							
City Bond Money for Efficiency Improvements				-\$370,000							
Total Grants, Rebates, and Bond				-\$523,500							
Net (Out of Pocket) Cost & Total Annual Savings				\$252,374	\$23,900	\$4,300	\$28,200			8.9	
* Transport gas was evaluated for the Mission Road campus facilities. Prairie Village does not meet the monthly threshold of 1,500 MCF or annual threshold of 3,000 MCF for switching to transport rates.											
Potential Cash Flow for Energy + HVAC Repairs Project											
Project Costs					Projected Annual Savings						
Energy Measures Installed Cost				\$ 807,310	Utility Cost Savings				\$ 23,900		
Investment Grade Audit Fee				\$ 1,964	Operation & Maintenance Svgs				\$ 4,300		
ESP Project Magnitude Discount				\$ (33,400)							
Energy Grants				\$ (150,000)							
Energy Rebates				\$ (3,500)							
Bond Funds for Energy Efficiency				\$ (370,000)							
Net Capitalized Costs				\$ 252,374	Total Annual Savings				\$ 28,200		
Annual Costs					Finance Factors						
On-Going Technical Service / M&V				\$ -	Term				12.5 years		
Avoided Future Costs				\$ -	Interest Rate				4.50%		
					Escalation Rate				2.0%		
					Energy Escalation Rate				2.0%		
YEAR	PROJECTED UTILITY COST SAVINGS	GUARANTEED UTILITY COST SAVINGS	OPER & MAINT / AVOID. FUTURE COST SAVINGS	TOTAL FUNDS AVAILABLE	DEBT SERVICE	ON-GOING TECHNICAL SERVICE FEE	GUARANTEED PROGRAM COST	PROJECTED EXCESS SAVINGS			
Interim	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD			
1	\$23,900	\$22,705	\$4,300	\$27,005	\$26,837	\$0	\$26,837	\$1,363			
2	\$24,378	\$23,159	\$4,386	\$27,545	\$26,837	\$0	\$26,837	\$1,927			
3	\$24,866	\$23,622	\$4,474	\$28,096	\$26,837	\$0	\$26,837	\$2,503			
4	\$25,363	\$24,094	\$4,563	\$28,657	\$26,837	\$0	\$26,837	\$3,089			
5	\$25,870	\$24,576	\$4,654	\$29,230	\$26,837	\$0	\$26,837	\$3,687			
6	\$26,387	\$25,068	\$4,747	\$29,815	\$26,837	\$0	\$26,837	\$4,297			
7	\$26,915	\$25,569	\$4,842	\$30,411	\$26,837	\$0	\$26,837	\$4,920			
8	\$27,453	\$26,080	\$4,939	\$31,019	\$26,837	\$0	\$26,837	\$5,555			
9	\$28,002	\$26,602	\$5,038	\$31,640	\$26,837	\$0	\$26,837	\$6,203			
10	\$28,562	\$27,134	\$5,139	\$32,273	\$26,837	\$0	\$26,837	\$6,864			
11	\$29,133	\$27,677	\$5,242	\$32,919	\$26,837	\$0	\$26,837	\$7,538			
12	\$29,716	\$28,231	\$5,347	\$33,578	\$26,837	\$0	\$26,837	\$8,226			
13	\$30,310	\$28,796	\$0	\$28,796	\$0	\$0	\$0	\$30,310			
14	\$30,916	\$29,372	\$0	\$29,372	\$0	\$0	\$0	\$30,916			
15	\$31,534	\$29,959	\$0	\$29,959	\$0	\$0	\$0	\$31,534			
16	\$32,165	\$30,558	\$0	\$30,558	\$0	\$0	\$0	\$32,165			
17	\$32,808	\$31,169	\$0	\$31,169	\$0	\$0	\$0	\$32,808			
18	\$33,464	\$31,792	\$0	\$31,792	\$0	\$0	\$0	\$33,464			
19	\$34,133	\$32,428	\$0	\$32,428	\$0	\$0	\$0	\$34,133			
20	\$34,816	\$33,077	\$0	\$33,077	\$0	\$0	\$0	\$34,816			
TOTAL	\$580,691	\$551,668	\$57,671	\$609,339	\$322,049	\$0	\$322,049	\$316,313			
Notes: 1) ESP recognizes that the City may self-finance this project, above cash-flow is based on current financing quotes ESP has received.											
2) Escalation rates are conservative estimates to reflect increased utility and maintenance costs/savings over time.											
3) Maintenance savings are associated with reduced replacement for lighting/mechanical equipment & outsourced maintenance - ONLY.											

City of Prairie Village - Summary of Costs/Savings for ENERGY + GEOTHERMAL SYSTEM PROJECT								
Conservation Measure Description	Total Installed Cost	Annual Energy Savings	Annual O&M Savings	Total Annual Savings	Energy Grants	Utility Rebates	* Simple Payback	
Energy Project								
Lighting Retrofits	\$76,600	\$8,200	\$600	\$8,800	\$25,000	\$3,500	5.5	
Water Efficiency Upgrades	\$13,200	\$1,400	\$200	\$1,600			8.3	
Building Infiltration Improvements	\$48,300	\$6,500	\$0	\$6,500	\$25,000		3.6	
Energy Management System	\$125,000	\$7,500	\$1,000	\$8,500	\$100,000		2.9	
Vending Machine Controls	\$1,160	\$300	\$0	\$300			3.9	
Energy Project Total	\$264,260	\$23,900	\$1,800	\$25,700	\$150,000	\$3,500	4.3	
Geothermal System at City Hall, Police, and Community Center (includes electric rate change)	\$1,100,000	\$21,300	\$6,500	\$27,800	\$250,000	\$7,500	12.8	
Installed Cost for Energy Project + Geothermal	\$1,364,260							
IGA Audit Fee	\$1,964							
ESP Project Magnitude Discount	-\$75,300							
Total Installed Cost & Annual Savings for Project	\$1,290,924	\$45,200	\$8,300	\$53,500	\$400,000	\$11,000	16.4	
Grants, Rebates and Bond								
Energy Grants & Utility Rebates	-\$411,000							
City Bond Money for Efficiency Improvements	-\$370,000							
Total Grants, Rebates, and Bond	-\$781,000							
Net (Out of Pocket) Cost & Total Annual Savings	\$509,924	\$45,200	\$8,300	\$53,500			9.5	
* The Simple Payback for the Geothermal System takes into account the differential cost for replacing existing system with conventional system.								
Potential Cash Flow for Recommended Project								
Project Costs				Projected Annual Savings				
Energy Measures Installed Cost	\$	1,364,260		Utility Cost Savings	\$	45,200		
Investment Grade Audit Fee	\$	1,964		Operation & Maintenance Svgs	\$	8,300		
ESP Project Magnitude Discount	\$	(75,300)						
Energy Grants	\$	(400,000)						
Energy Rebates	\$	(11,000)						
Bond Funds for Energy Efficiency	\$	(370,000)						
Net Capitalized Costs	\$	509,924		Total Annual Savings	\$	53,500		
Annual Costs				Finance Factors				
On-Going Technical Service / M&V	\$	-		Term		13.5	years	
Avoided Future Costs	\$	-		Interest Rate		4.50%		
				Escalation Rate		2.0%		
				Energy Escalation Rate		2.0%		
YEAR	PROJECTED UTILITY COST SAVINGS	GUARANTEED UTILITY COST SAVINGS	OPER & MAINT / AVOID. FUTURE COST SAVINGS	TOTAL FUNDS AVAILABLE	DEBT SERVICE	ON-GOING TECHNICAL SERVICE FEE	GUARANTEED PROGRAM COST	PROJECTED EXCESS SAVINGS
Interim	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1	\$45,200	\$43,121	\$8,300	\$51,421	\$51,219	\$0	\$51,219	\$2,281
2	\$46,104	\$43,983	\$8,466	\$52,449	\$51,219	\$0	\$51,219	\$3,351
3	\$47,026	\$44,863	\$8,635	\$53,498	\$51,219	\$0	\$51,219	\$4,442
4	\$47,967	\$45,760	\$8,808	\$54,568	\$51,219	\$0	\$51,219	\$5,556
5	\$48,926	\$46,675	\$8,984	\$55,659	\$51,219	\$0	\$51,219	\$6,691
6	\$49,905	\$47,609	\$9,164	\$56,773	\$51,219	\$0	\$51,219	\$7,850
7	\$50,903	\$48,561	\$9,347	\$57,908	\$51,219	\$0	\$51,219	\$9,031
8	\$51,921	\$49,532	\$9,534	\$59,066	\$51,219	\$0	\$51,219	\$10,236
9	\$52,959	\$50,523	\$9,725	\$60,248	\$51,219	\$0	\$51,219	\$11,465
10	\$54,018	\$51,533	\$9,920	\$61,453	\$51,219	\$0	\$51,219	\$12,719
11	\$55,098	\$52,564	\$10,118	\$62,682	\$51,219	\$0	\$51,219	\$13,997
12	\$56,200	\$53,615	\$10,320	\$63,935	\$51,219	\$0	\$51,219	\$15,301
13	\$57,324	\$54,687	\$10,526	\$65,213	\$51,219	\$0	\$51,219	\$16,631
14	\$58,470	\$55,781	\$0	\$55,781	\$0	\$0	\$0	\$58,470
15	\$59,639	\$56,897	\$0	\$56,897	\$0	\$0	\$0	\$59,639
16	\$60,832	\$58,035	\$0	\$58,035	\$0	\$0	\$0	\$60,832
17	\$62,049	\$59,196	\$0	\$59,196	\$0	\$0	\$0	\$62,049
18	\$63,290	\$60,380	\$0	\$60,380	\$0	\$0	\$0	\$63,290
19	\$64,556	\$61,588	\$0	\$61,588	\$0	\$0	\$0	\$64,556
20	\$65,847	\$62,820	\$0	\$62,820	\$0	\$0	\$0	\$65,847
TOTAL	\$1,098,234	\$1,047,723	\$121,847	\$1,169,570	\$665,844	\$0	\$665,844	\$554,237
Notes:								
1) ESP recognizes that the City may self-finance this project, above cash-flow is based on current financing quotes ESP has received.								
2) Escalation rates are conservative estimates to reflect increased utility and maintenance costs/savings over time.								
3) Maintenance savings are associated with reduced replacement for lighting/mechanical equipment & outsourced maintenance - ONLY.								

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2. Existing Conditions

Overall

A total of six buildings are evaluated in this investment grade audit. These buildings include:

Building	Area (sf)	Building	Area (sf)
Community Center	2,100	Public Works A	7,200
City Hall	17,500	Public Works B	1,300
Police Department	18,000	Public Works G	3,000

The buildings are of varying age and each contains different use and occupancy patterns. The type of building systems, the use of the building, and the occupancy patterns all have an

impact on what the building’s energy use profile looks like. Building information was gathered during the site walk-through and has been used to understand each building’s energy

profile so that viable energy conservation projects can be identified.

A table outlining the existing equipment and systems in each building is included on the following page

Existing Conditions: City of Prairie Village, KS

	Community Center	City Hall	Police Department	Public Works A	Public Works B	Public Works G
System/Equipment						
Lighting						
Incandescent	X	X				
Tungsten Halogen		X				
Compact fluorescent	X	X	X			
T12 fluorescent		X	X	X	X	X
T8 fluorescent	X	X	X	X	X	
Metal Halide HID	X	X	X			
Mercury Vapor				X		X
High Pressure Sodium HID				X	X	X
Incandescent ("EXIT")		X	X	X	X	
LED ("EXIT")			X			
Air Distribution						
Constant Volume Split Systems	X	X		X	X	
Variable air Volume RTU			X			
Unit heaters				X	X	X
Heating Source						
Natural gas	X	X	X	X	X	
Cooling Equipment						
Condensing unit	X	X	X	X	X	
Heating Equipment						
Hot water boiler - stnd efficiency			X			
Furnace	X	X		X	X	
Unit heaters				X	X	X
Controls						
Manual thermostats	X	X	X	X	X	X
Plumbing Fixtures						
Faucets	X	X	X	X	X	
Toilets	X	X	X	X	X	
Urinals		X	X	X	X	
Showerheads		X	X		X	
Pre-rinse spray valves	X					
Domestic Hot Water						
Tank style water heater - nat gas	X	X	X	X	X	

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3. Utility Analysis

The analysis of the utility information is critical to understanding where energy dollars are being spent. A thorough analysis can yield clues with regard to confirming trends or identifying anomalies that can point towards opportunities for savings. In addition, a clear understanding of the utility rates and how they affect the true dollar savings that an energy project can provide is an important component in compiling a project that reflects a true and realistic result from a fiscal perspective.

Utility Profiles

Utility profiles provide insight into how energy is being consumed by both the individual buildings and in total. The utility profiles are based on month by month data collected for each of the utilities at each building.

Historical Energy Use

The energy utilities evaluated for this project include water, sewer, electricity and natural gas. Following is a description of how each utility is utilized by the City, a description of the cost per unit energy, and how the utility cost is utilized within this energy audit to determine how the energy project will affect the overall utility costs.

Individual Buildings

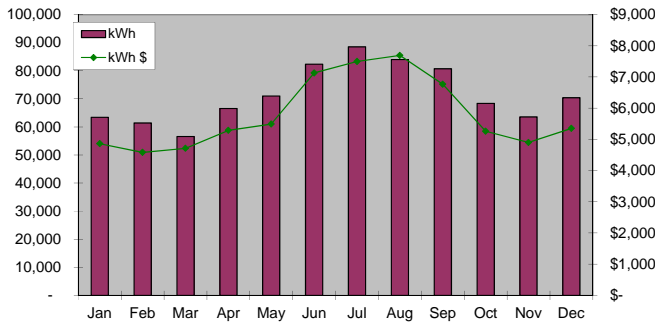
The provided historical utility consumption for each building is charted and analyzed. This gives valuable insight into how a building consumes energy, and allows an accurate analysis of energy conservation opportunities. Each utility for each building is broken out into usage categories and used in savings calculations for each energy

conservation measure. The graphs detailing the historical energy use for each building is shown in the appendix.

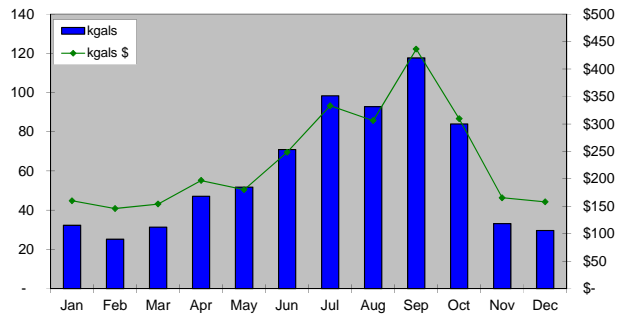
Building Totals

Once the utility consumption is entered for the individual buildings, their utilities can be summed to analyze the usage patterns of the group of buildings as a whole. The charts showing the total energy consumption of the group of buildings included within the scope of this analysis are provided in this section.

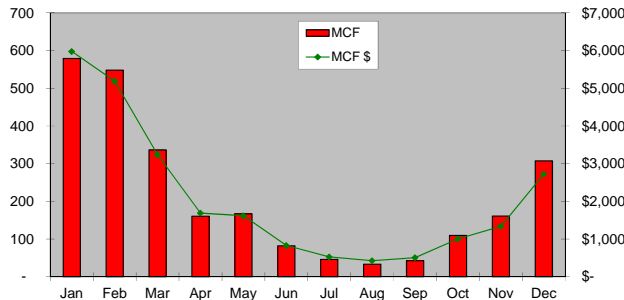
Electric Usage



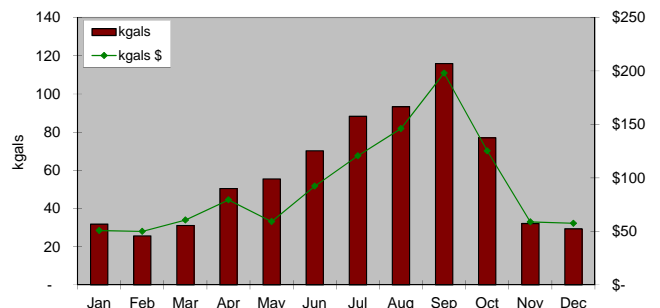
Water Usage



Natural Gas Usage



Sewer Usage



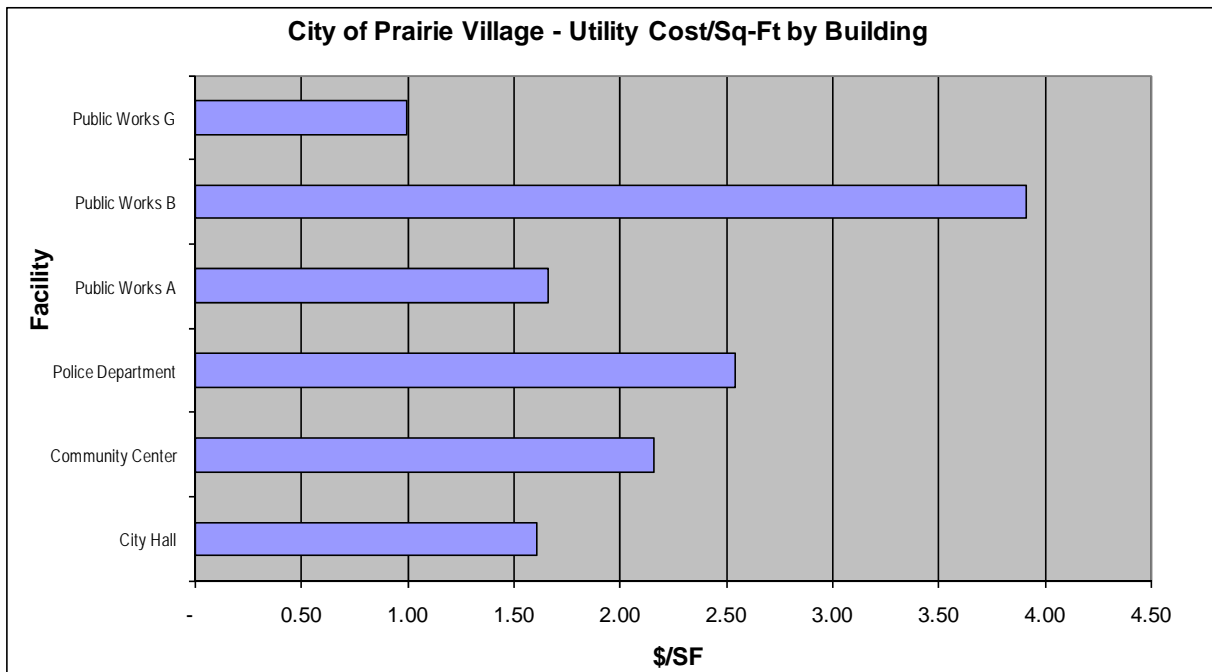
Cost per Square Foot

Rather than just looking at the total utility cost for each building, the table below presents a cost-per-square foot analysis that normalizes the data based on building size to create a better apples-to-apples comparison.

This cost-per-square foot analysis yields a couple of important facts: (1) which buildings are the least efficient,

and therefore likely to present the greatest opportunities for savings, and (2) each of the buildings have some level of opportunity for utility savings since they are all operating at a higher cost per square foot than what is achievable for an energy efficient building. Hours of operation are another variable that must be taken into consideration when analyzing this graph.

The Police Headquarters building has areas that are occupied 24 hours a day and the Community Center is occupied intermittently throughout the week. The occupancy and use of the building affects the expected energy consumption as well as the savings opportunity.



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Utility Rates

A good understanding of the utility rates is important such that when savings are identified and subsequently calculated, that the correct rates are applied to provide a true representation of what the City of Prairie Village should expect to see on their bills after a project is completed. Often times, energy analysts will inadvertently oversimplify rates and fail to provide a true

picture of the dollar savings that can be achieved. This can easily happen when rates are tiered such that the base consumption of energy is charged at a higher rate. Within these situations, the more a consumer uses in a given month, the lower the cost per unit of energy becomes; hence when energy consumption is reduced, the lower cost per units may need to be applied to

those savings as the base consumption remains.

An average cost of each utility has been calculated and these are the rates which are used for the purpose of calculating energy cost savings in this audit. The energy rates calculated are a reflection of the actual, current cost of utilities at each facility.

City of Prairie Village Utility Rates						
	Elec Rate	\$/kWh	\$/kW	Natural Gas \$/Mcf	Water \$/kgal	Wastewater \$/kgal
City Hall	2MGSE	\$0.0377	\$4.66	\$9.75	\$3.58	\$1.99
Police Dept	2MGSE	\$0.0377	\$4.66	\$9.75	\$3.16	\$1.99
Community Center	2SGSE	\$0.0402	\$2.40	\$9.75	\$3.85	\$1.99
Public Works A	2MGSE	\$0.0377	\$4.66	\$9.75	\$3.16	\$1.99
Public Works B	2SGSE	\$0.0402	\$2.40	\$9.75	\$3.16	\$1.99
Public Works G	2SGSE	\$0.0402	\$2.40	\$9.75	\$3.16	\$1.99

Electric

The City of Prairie Village pays an electric bill to KCP&L for each of the buildings. The table above provides a list of the applicable electric rate and the cost of electricity used for the purposes of this audit. This cost represents the dollar amounts that would be expected of savings through implementing energy conservation measures.

To determine a cost of electric energy to be used within this audit, several years of historical data was analyzed, focusing primarily on the current rate tariff and the applicable surcharges. The electric consumption and peak demand rates are calculated by taking a weighted average of the summer and winter rates. A detail of the rate struc-

tures are provided in the two tables on the following page.

Natural Gas

Each of the City buildings utilize natural gas for heating. Natural gas is supplied by Kansas Gas Service.

To determine an average cost of natural gas cost for use in this energy audit, historical costs were evaluated for three of the most recent years and a conservative estimate of the near future natural gas prices is calculated. Natural gas is the most volatile utility for the City, and it is impossible to predict future trends. The best analysis is to analyze current and historical costs and use a conservative analysis. The average cost for natural gas listed in the previous table represents the total historical average for the City.

Water and Sewer

Water utilities are provided by WaterOne and wastewater utilities are provided by Johnson County Wastewater. Historical water and sewer consumption was evaluated to determine baseline use. The listed costs for water in the previous table is based upon the rate structure of WaterOne. The rate varies depending upon whether consumption is billed at the Block I rates or the Block II rates. The current year (2010) costs for water are \$3.16 for Block I and \$4.19 for Block II. Block I charges apply for all consumption up to 125% of the average winter consumption (months January – April). Block II rates are applicable for all consumption over this amount.

Utility	Rate	Description
KCPL	2MGSE	Medium General Service, Generally Available, Standard, Commercial
	kWh Usage Charge:	per kWh for May 16 - September 15
	\$0.0763	per kWh for the first 180 hours use
	\$0.0478	per kWh for the next 180 hours use
	\$0.0484	per kWh for all kWh over 360 hours use
	kWh Usage Charge:	per kWh for September 16 - April 15
	\$0.0683	per kWh for the first 180 hours use
	\$0.0384	per kWh for the next 180 hours use
	\$0.0323	per kWh for all kWh over 360 hours use
	kW Demand Charge:	
	\$3.3650	per kW for May 16 - September 15
	\$1.7040	per kW for September 16 - April 15
	Facilities Charge:	
	\$2.4050	per kW
	Billing Demand:	
		Minimum of 10 kW

Utility	Rate	Description
KCPL	2SGSE	Small General Service, Generally Available, Standard, Commercial
	kWh Usage Charge:	per kWh for May 16 - September 15
	\$0.12256	per kWh for the first 180 hours use
	\$0.05381	per kWh for the next 180 hours use
	\$0.04809	per kWh for all kWh over 360 hours use
	kWh Usage Charge:	per kWh for September 16 - April 15
	\$0.09756	per kWh for the first 180 hours use
	\$0.04597	per kWh for the next 180 hours use
	\$0.03625	per kWh for all kWh over 360 hours use
	Facilities Charge:	
	\$0.0000	first 25 kW
	\$2.4030	per kW for all kW over 25 kW

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4. Energy Conservation Measure Descriptions

The table below presents a list of recommended energy conservation

measures for the City buildings. Following the table is a discussion of each of

the individual ECMs that were evaluated.

ECM Matrix: City of Prairie Village, KS

Building	Lighting Retrofits	Water Efficiency Improvements	Vending Machine Controls	Building Infiltration Improvements	Energy Management System	Geothermal System	Motor Replacements	Solar Photovoltaic System
City Hall	X	X	X	X	X	X		
Community Center	X	X		X	X	X		
Police Department	X	X	X	X	X	X		
Public Works A	X	X		X	X			
Public Works B	X	X	X	X	X			
Public Works G	X	X						

Lighting Improvements

New lighting technologies produce light at greater efficiencies than older systems. In addition to greater efficiency, lighting retrofits can also provide advantages such as increased light levels where needed, improving the color of the light, and the replacement of failing fixtures. Maintenance costs can also be reduced by installing new lamps and ballasts.

Fluorescent Upgrades

- Existing T12 fluorescent lighting with magnetic ballasts will be replaced with energy-efficient T8 lamps and electronic ballasts. The process of replacing older T12 lamps and magnetic ballasts with the more efficient T8 technology allows not only for longer lamp life and improved light quality, but also a reduction in energy consumption of up to 45% or more.
- Even older T8 fluorescent lamps can be replaced with the newer generation of T8 lamps to improve efficiency. These lamps carry the same advantages of all T8 technology including longer lamp life and improved light quality. Energy savings can be maximized utilizing the newest generation of T8 lamps.
- In some situations, the existing fixtures are beyond their useful life, while in other situations, the configuration and use of the space has changed. Either of these conditions can necessitate that the entire fixture be replaced. Although the first cost is higher than just the straight retrofit, the savings can be even greater than that of the retrofit.

Incandescent to Fluorescent Conversions

Incandescent and tungsten halogen fixtures can be retrofitted with compact fluorescent lamps, or replaced with new fluorescent fixtures. Due to the improved efficiency of fluorescent lighting over the incandescent lighting, savings achieved can be near 70%. Compact fluorescent lamps also provide a much longer lamp than that of incandescent life which reduces overall lamp maintenance.

High Intensity Discharge (HID) to Fluorescent Conversions

In many high ceiling applications such as gymnasiums, warehouses, and manufacturing facilities, HID lighting has been the commonly accepted solution. HID lighting can consist of mercury vapor, metal halide, high pressure sodium, or low pressure sodium lamps. Replacement of these HID fixtures applications with fluorescent fixtures provides several advantages. The overall quality and color rendering of the fluorescent is much better than that of all the various HID options. The fluorescent lamp technology also has a much longer rated life than that of HID lamps allowing for reduced maintenance and lamp replacement frequency. The third advantage is that of energy savings. The fluorescent technology does have better efficiency than the HID allowing for more light with less energy consumed. In addition, the fixtures can be turned off during low usage times and easily turned back on when needed. The HID technology requires several minutes to reach optimal lighting levels once they are turned on. This issue is the often times the reason that lighting is left on during times of un-occupancy and thus needlessly consuming energy.

LED Exit Signs

Older generation exit signs are typically equipped with either incandescent

or fluorescent. These older exit signs can be converted or replaced with Light Emitting Diode (LED) technology. LED technology allows for significant energy savings as well as much improved lamp life of 5-10 times that of traditional incandescent and fluorescent exit fixture technologies.

Occupancy Sensors

Occupancy sensors are a proven technology that provides for great energy efficiency. These devices are typically connected to the lighting in various spaces to allow the lighting to be turned off when a room or space is no longer occupied. Once someone enters the room the sensor or sensors detect occupancy and subsequently turn the lighting on. The ability to turn lights off automatically has proven to be more effective than relying on people to consistently turn lights off.

The City of Prairie Village buildings contain predominantly 32W T8 fluorescent lighting with electronic ballasts; however there are some T12 fluorescent fixtures with magnetic ballasts. A complete room by room audit of all of the lighting was conducted to determine the opportunities for improvement as well as energy savings. Light level readings were taken across all types of areas within the buildings to understand which areas have too much lighting installed and which areas may not. Light levels will be corrected with the retrofit project to meet IESNA standards for each area type.

Detailed data regarding the lighting opportunities is identified in the appendices of this report.

Exterior Lighting Upgrades

Exterior lighting for parking lots, paths, and walkways is typically provided by high intensity discharge fixtures.



When properly sized for the application, HID lighting illuminates effectively. However, in some cases such as wall

pack fixtures and flood lighting, compact fluorescent lighting provides effective illumination as well, but also pro-

vides for better energy efficiency and better color rendering.

Lighting Savings Calculations

Assumptions

- 10 buildings were audited for lighting conservation opportunities; the fixture and lamp types and quantities used in the calculations for these buildings are taken from the audit.
- Occupancy data loggers were installed in the same 10 buildings; the annual hours of operation for each room usage type is determined from this logged data.
- Information garnered from the audits and logged data for these 10 buildings was extrapolated over the other 54 buildings included within the scope of this project.
- Refer to the appendix for more detailed information about the savings calculations for this ECM.

Example Calculation

Peak kW Savings

$((\text{Existing Lamp Wattage} - \text{New Lamp Wattage}) \times \# \text{ of New Fixtures} \times \# \text{ of Lamps per Fixture} \times 90\% \text{ diversity factor} / 1,000 \text{ Watts per kW}) \times 12 \text{ months} = \text{Annual peak demand savings (kW)}$

$((32 \text{ W} - 28 \text{ W}) \times 100 \text{ fixtures} \times 2 \text{ lamps per fixture} \times .9 / 1,000) \times 12 \text{ months} = 8.6 \text{ kW}$

kWh Savings

$((\text{Existing Lamp Wattage} - \text{New Lamp Wattage}) \times \# \text{ of New Fixtures} \times \# \text{ of Lamps per Fixture} \times \text{annual hours of operation} / 1,000 \text{ Watts per kW}) = \text{Annual electrical consumption savings (kWh)}$

$((32 \text{ W} - 28 \text{ W}) \times 100 \text{ fixtures} \times 2 \text{ lamps per fixture} \times 2,340 \text{ hours} / 1,000) = 1,872 \text{ kWh}$

Water Conservation Measures

New plumbing technologies provide excellent functionality while utilizing less water than older systems. In addition, automated controls on some plumbing fixtures provide even greater water efficiency. Other advanced water conservation measures including water reclamation methods allow for reducing overall usage of utility provided water.

Plumbing Fixtures

Improving water efficiency is accomplished by replacing water-consuming bathroom fixtures with more efficient fixtures. Prior to 1993, toilets and urinals were typically designed to flush a min-

imum of 3.5 gallons of water per flush. New technology greatly reduces this amount.

Water conservation is typically a good cost savings measure within this type of facility, especially the dormitory buildings. Measures within this project include low-flow showerheads, low-flow toilets and urinals, and sink faucet aerators. All of these devices will reduce the amount of water consumption, as well as conserve heating energy used for domestic hot water.

Automatic sensors can also be installed with new faucets to further improve water efficiency. Sensors on toilets and urinals provide a greater benefit with regard to convenience and cleanliness rather than water savings.

Sewer Credits

Another measure to reduce the cost of the water utility would be to investigate the possibility of a sewer credit. Water consumption typically increases during the summer months, which is usually an indication of lawn irrigation. A charge is incurred for the water consumption as well as a sewer charge. Since the water used for lawn irrigation does not return through the sewer system, it is possible that an irrigation usage can be accounted for and a credit can be recognized from the sewer bill.

ESP recommends that all existing high-flow water devices be retrofitted or replaced with low flow technology. For the City of Prairie Village, this means that flushometer and tank style water



closets will be retrofitted with 1.6 gallons per flush valves where possible. And, new faucet aerators will be installed on restroom lavatories and kitchen sinks to attain low flow, typically about 1.0 gallons per flush.

Energy Management System

An energy management system (EMS) is a computer-based control system that can automatically monitor and run multiple building systems including environmental, lighting, fire protection, and security. The technology allows precise control of heating, ventilation and air conditioning equipment (e.g., pumps, fans, air-handling units, dampers, boilers, and chillers).

A significant benefit of an EMS is the computer-based graphical user interface. This feature allows facility maintenance personnel to monitor, troubleshoot, and control HVAC systems and building temperatures from a remote location. This can result in quicker maintenance response time to troubled systems, reduced downtime, and better comfort control throughout the facility.

An EMS can be installed and programmed to perform very basic energy strategies, very advanced energy strategies or a combination of both. Several of the available strategies are described below:

Unoccupied (night) setback

This strategy is the method of assigning time schedules to specific rooms, areas, systems, etc. that define the time at which those areas will be occupied. When the systems are outside the “occupied” times, the temperature setpoints are raised (cooling season) or lowered (heating season) to maximize energy savings. Adjustable temporary

overrides can be incorporated for those infrequent times that the space is occupied during outside the “occupied” schedules.

Economizer control

Economizer control is typically incorporated as part of air side delivery systems. This strategy allows the user to take advantage of cool outside air temperatures in times where indoor areas are still in need of cooling. By eliminating the need for mechanical cooling, a significant amount of energy savings can be achieved. Economizers are also known as a method of “free cooling.” Although this strategy is incorporated into air side equipment on occasion, often times first cost restrictions don’t allow for implementation, hence higher energy costs are a result. Another benefit of the economizer is the elimination of running mechanical cooling in cold weather. Mechanical cooling requires specialized controls to operate in cold weather to avoid damaging compressors which can cause higher maintenance costs.

Optimal start/stop

A computer based EMS is a system that can “learn” the characteristics of the facilities it is controlling. By continuously collecting data at the beginning and the end of the occupied schedules, and the amount of time to achieve occupied setpoints, it can reset the actual start and stop times to optimize energy efficiency yet still maintain occupied setpoints.

Occupancy based intermediate setbacks

Areas that have intermittent use are often times equipped with occupancy sensor controls for the lighting to shut lighting off when rooms are unoccupied. EMS systems can communicate

with the lighting occupancy sensor to allow for an intermediate setback. Intermediate meaning that it is not the traditional deep setback when the entire building is unoccupied, but a more moderate setback that is less noticeable to someone who walks into the space and triggers the sensor back to occupied mode. This intermediate setback is typically around four degrees however is adjustable.

Demand control ventilation

This control is also known as CO₂ control. Ventilation in certain amounts is required by the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) for different types of spaces. Ultimately the ventilation is necessary for maintaining a healthy quality of air for occupants within a space. By monitoring the amount of carbon dioxide in a space, the system can adjust the level of mechanical ventilation to more closely match the true occupancy in the space. This saves energy by reducing the need for mechanically cooling hot outside air or mechanically heating cold outside air. This strategy is especially effective in those areas that have significantly variable occupancy during occupied schedules. Some examples are gymnasiums, auditoriums, theaters, and warehouses.

Demand limiting

The ability to turn equipment off or dial down the amount of energy it consumes can have a significant impact on the utility cost. This is primarily due to the “instantaneous” charge that is associated with an electrical demand spike in a given month. The window for setting this peak demand is only fifteen minutes which makes it very difficult to avoid. By having the EMS actively

watch the building demand and programming in certain demand thresholds, loads can be shed over a period of an hour or more to help avoid that electrical demand spike and thus provide a significant cost savings to the facilities owner.

Many times energy management systems are in place and are underutilized. This is very common when a facility expands its operation and adds additional buildings, yet does not have the

capital to add the building to the existing EMS. In addition, it is not uncommon that advanced strategies such as optimal start, occupancy based setbacks, economizer control, and demand control ventilation are not incorporated. The majority of these strategies take advantage of periods of low to no occupancy. These more advanced strategies can usually be incorporated economically and produce significant savings.

ESP recommends installing an Energy Management System for the Police Department, City Hall, and the Community Center. This will control and monitor the newly installed geothermal heat pump systems for these buildings.

Additionally, we recommend that the Public Works Buildings A and B be included on the EMS. This would allow control and monitoring of one HVAC unit apiece at each of these buildings.

Energy Management System Savings Calculations

Assumptions

- There are several strategies recommended to save energy with the energy management system: demand limiting, demand controlled ventilation, intermediate temperature setback, and optimal start stop of the system.
- Each energy savings measure is calculated independently, based upon how the particular strategy will save energy. For several of the strategies proposed, energy savings result from reducing the runtime of the system which results in a reduced amount of air that is heated or cooled by the system. The amount of air is calculated and therefore the amount of heating or cooling savings can be determined.
- Refer to the appendix for more detailed information about the savings calculations for this ECM.

Example Calculation

$1.08 \times \text{air volumetric flow rate (cfm)} \times (\text{temperature difference}) \times \text{hours of operation} = \text{Btu of heating or cooling saved}$

$1.08 \times 4,000 \text{ cfm} \times (82 \text{ degrees outside} - 72 \text{ degrees inside}) \times 1 \text{ hour} = 43,200 \text{ Btu}^*$

*Once the amount of heat energy is calculated, it is converted to steam and natural gas savings, as well as cooling peak demand savings and cooling electrical energy savings

Life Expectancy

POLICE STATION		
Equipment Description	Expected Useful Life (Years)	Current Age
Packaged Rooftop Units	15	15
Variable Air Volume Boxes	20	15
Reheat Valves*	15	15
Boilers	15	15
Pumps	20	15
* existing reheat valves are a poor design and often fail within 3 year		
CITY HALL / COMMUNITY CENTER		
Equipment Description	Expected Useful Life (Years)	Current Age
Split AC / Furnaces	15	15

Geothermal System

Heat pump systems are a very common method of distributing heating and air conditioning throughout a building. The unique characteristic of a heat pump is that it utilizes the refrigeration cycle on both the cooling side and the heating side. A reversing valve is used to alternate the warm coil and the cold coil from being the one located inside or outside. In other words, when a space needs heating, the warm coil or condenser coil is the one located inside to provide heating for the space. When a space needs cooling, the heat pump acts as a traditional air conditioning unit which has the cold coil or evaporator coil inside to allow for cold air to be distributed for cooling. Heat pump systems can be configured in many ways. Three of the most common heat pumps systems are air to air heat pumps, water source heat pumps, and geothermal (ground source) heat pumps.

Geothermal heat pump systems are similar to water source heat pump systems in that the heat pumps contain individual compressors and transfer heat by way of one direct expansion coil on the air distribution side and a water coil on the heat rejection/absorption side. The geothermal system also incorporates a common water loop that connects all of the heat pumps in the system together. As stated above, the advantage of connecting all of the heat pumps to a common loop is that heat can be moved from one area of the building to another. In essence, an area that needs cooling can reject heat into the common loop and subsequently an area that needs heating at the same time can utilize the heat that was rejected by the heat pump operating in cooling mode. A geothermal system is different than a water source system since it does not utilize boilers or cooling towers. Instead, the geothermal system incorporates an

additional loop that is buried in the ground. Thus, the earth becomes the source of heat absorption or heat rejection. Utilizing the relatively constant earth temperature many feet below the surface is what enables the geothermal heat pump system to provide higher energy efficiency.

Although a geothermal heat pump system has a higher initial first cost, its longer life, higher efficiency, and ease of maintenance make it a very cost effective solution.

Geothermal heat pump systems are recommended for City Hall, Police Headquarters, and the Community Center. A grassy field is located directly east of City Hall that is large enough to handle vertical wells for a geothermal heat pump system.

Piping from the well field will enter the Police Headquarters in one location and will be connected through the building to City Hall. One piping entrance will be made into the Community Center.

Existing ductwork within the buildings will be reused where possible. Existing vertical split system units at City Hall will be replaced with heat pump units. Zoning for City Hall will be altered in order to add more zones that have common thermal exposures.

In the Police Headquarters, many of the existing zones will be combined so that there are 2-3 offices per zone. The existing RTU will be removed. At the Community Center, the existing single HVAC unit will be replaced with a heat pump.

Spoils from the drilling of the well field is planned to be used by the City on a local road project. Once drilling is completed, all wells and horizontal trenches will be backfilled. Grass areas will be reseeded in the Fall and asphalt and concrete that may be affected will be patched with like materials.

The geothermal heat pump system is a green technology that would eliminate the possibility of simultaneous heating and cooling in any given space, yet make available heating and cooling throughout the building at all times. The geothermal system would also significantly reduce the amount of maintenance as compared to the current systems in place. The energy efficiency is at the top of the charts as far as available technologies meaning significant reduction in utility consumption.

Vending Machine Controls

Vending machines operate continuously regardless of the presence of potential consumers. Energy consumption by these machines can be reduced by controlling the machines to coincide with space occupancy. Savings can be realized by shutting down the lighting

as well as the compressors rather than having them operate continuously.

The technology utilized to accomplish the setback is smart in the sense that after one to three hours of being shutoff, the device will allow the machine to power back up so that beverage temperature is not compromised, thus a cold drink is available even during long periods of unoccupied mode operation.

Installation of these specifically manufactured controls on vending machines can reduce the energy consumption substantially.

ESP identified three locations within the City that have opportunity for installation of the vending machine control device.

High Efficiency Motors

Older standard efficiency motors are much less efficient than newer motors. They can be replaced with premium-efficiency motors that will save a percentage of energy consumption. Motor replacement is most advantageous for motors with continuous run times.

The analysis within this report includes an evaluation for motor replacements at the City Pool. The existing motors are not recommended for replacement due to their low run times. The pool is only open during the summer months of the year. During this time, the pool filter pumps operate 24 hours a day and the pumps serving the water features only operate during the times when the pool is open.

Solar Photovoltaic System

Solar PV systems consist of solar collecting panels, an electrical transformer, and electrical synchronizing and switch gear that allow the generated energy to be distributed within your building and

the electrical grid. The panels collect solar energy in DC voltage which then must be converted to AC. Solar PV systems can also utilize batteries that can store the energy for use when the sun is not available. Note that solar thermal systems are slightly different in that they collect solar energy directly into water and then utilize the heat within the building.

During this audit, a solar photovoltaic system was analyzed for installation at the Police Headquarters. A 3.2 kW system was analyzed which would contain about 300 square feet of solar collecting panels. These panels could be mounted on the south facing roof of the building. Electrical connections would be made in the electrical/mechanical room in the basement at the northwest corner of the building.

Due to the cost of the installation, it is not recommended that the solar PV system be installed. The simple payback exceeded 80 years which greatly exceeds the expected life of the equipment.

Building Envelope Improvements

Air infiltration is a significant source of heat loss and heat gain in buildings and result in higher energy consumption to compensate for the additional heating and cooling loads. Infiltration is most prominent when the air pressure inside the building is much greater than the air pressure outside the building, which is commonly the case on windy days. Research has shown that up to 30% of heating and cooling requirements can be attributed to air infiltration. Infiltration commonly occurs at joints in exterior windows and doors, as well as joints in walls from the floor all the way up to the roof. Reducing and

better controlling air leakage can be accomplished several ways. Sealing of gaps and cracks using appropriate weather stripping, caulking and other retardants such as non-porous foam is a very effective method in minimizing air infiltration and maximizing energy efficiency.

City Hall, Public Safety, the Community Center, and Public Works at Prairie Village all present opportunities to reduce air infiltration. Weather stripping around doors and caulking around windows in various locations as well as a significant amount of roof/wall joints can be filled with non-porous foam to

improve overall energy efficiency. Implementing these measures will reduce gas usage in the winter and electricity usage in the summer saving the City energy monies as a result.

5. Project Implementation

General Discussion

Our management plan involves three primary stages: project development, project implementation, and performance management. The project development stage usually includes a preliminary analysis to confirm economic viability and an Investment Grade Audit. This report is a direct result of our Investment Grade Audit, and reflects that substantial opportunities exist for the City of Prairie Village on the projects under review. The implementation stage is typically much faster-track than traditional construction, and our unique management and delivery approach enables us to complete implementation in a cost-effective manner for our clients. The final stage is performance management, which encompasses construction closeout through the finance period.

ESP's team-members have vast experience working in critical office and facility support settings and understand that your primary mission and objective is to provide services for the effective operation of the City. We will develop an implementation plan that will have minimal adverse affects on the day-to-day (core mission) operation of City facilities. However, since some of the scope of work calls for replacing major HVAC equipment, there will be some "down-time".

Energy Solutions Professionals will have sole-source responsibility for each phase of the work. We provide the audit, engineering, project and construction management, business and financial services required to manage every aspect of the project. We are

committed to installing energy efficiency improvements that maximize savings, improve the facility environment and meet your long-term needs and objectives. To ensure that we meet our common goals, we take great strides in developing energy conservation measures that are fundamentally sound. We analyze each recommendation to be sure that it has a positive impact from a technical, financial, business, and people perspective.

There are many advantages associated with using our unique process. The result is a truly holistic project that is co-authored by City staff and ESP's highly experienced professionals. We assure you that the focus will remain on your objectives and needs, so that the project is a success in the City's eyes. ECMs and ongoing services have been mutually developed and selected to maximize dollar savings and facility improvements. Our approach minimizes costs and risks for you, while enhancing the overall City environment.

Project/Construction Management

Construction Process

Communication and collaborative team-work are essential for effective construction management on an energy performance contract. The bulk of work will consist of retrofitting or replacing equipment in facilities that are currently occupied and fully operational. Hence, communication and planning become essential to making sure that disruption of the day-to-day City operations is kept to a minimum level. We will have a full-time Energy Solutions Professionals' Construction Man-

ager on-site during the entire implementation process.

This on-site Construction Manager (CM) will be the liaison between ESP, the City and all sub-contractors and vendors. He will coordinate all on-site issues and be the person that contractors and your staff go to on a daily-basis to resolve any on-site issues. The CM will chair the regularly scheduled on-site construction meetings and distribute meeting minutes from these meetings. He is the master scheduler for all construction activities, and must adjust this schedule as needed to minimize negative impact on the day-to-day operations in the City of Prairie Village. In addition, this person will be responsible for field-verifying that work is being completed per design intent, and ensuring scope is completed on time and in budget. The CM will help collect field-data to be used for fulfilling the measurement & verification plan and Post Implementation Report.

We understand the difference between "substantial" and "final" completion. It is not uncommon for efforts to get lax after substantial completion has been achieved. This is when equipment is in a state of operability, but has not received final check-out. We have a process whereby our Construction Manager oversees site-walkthroughs and creation, tracking and completion of punch-list items for all scopes of work. No work will be considered final until our Construction Manager and a City staff member inspect the work and mutually agree that it is FINAL. We have forms; created specifically for each job, which will be utilized for the walkthrough and punch-list signoff.

Communication & Scheduling

There are a myriad of factors that must be weighed when putting together the implementation schedule for an energy performance contract. First and foremost, we will schedule all endeavors in a manner to minimize disruption of the daily-operations for the City. We need to consider weather factors and try to schedule equipment replacements to not impact occupant comfort. It is important to maximize dollar savings generated by the program, so we will try to get the primary energy-saving measures installed as early in the process as possible. We will also ensure that all of our subcontractors are aware that we intend to have a MINIMAL impact on your day-to-day operation. Hence, it may be beneficial to complete any HVAC renovations during mild-temperature months in the spring/fall as opposed to summer or winter months. We recognize that equipment lead-time impacts construction schedule, as it is important not to have construction crews on-site with no materials to be installing, and we have specialized methods for ensuring effective material handling and implementation scheduling.

The fundamental approach is to determine what your desired completion date is, and then work back from there to determine what has to happen to accommodate the required end-date. All the factors mentioned above must be considered and will be included in the creation of the final schedule. We utilize scheduling software that allows all construction parameters; including equipment lead-time and delivery, labor hours, available work-hours, holidays, etc., to be factored into schedule. The schedule allows identification of critical milestones that must be hit in

order for subsequent work to complete on-time. The construction and project managers will monitor this software on a regular basis, and update project status based on real-time field conditions. This coupled with dynamic/regular communication with all parties helps keep us on time.

We have honed our project planning processes over many years of experience, and practical job-site interaction. As mentioned above, ESP holds regularly scheduled construction meetings throughout the implementation phase of the projects. Our construction manager is tasked with providing an agenda and meeting minutes from the previous meeting prior to each meeting. This ensures these meetings can proceed in an orderly, timely manner, which enhances productivity of all involved. We do not believe in meeting simply for the sake of meeting, and will vary the frequency of the meeting based on the level of activity on-site.

We work with your staff to understand scheduling requirements based on facility activity, and relay this to our subcontractors. The subcontractors and our team then develop a three week look-ahead schedule that identifies where they would LIKE to work 3-weeks out, where they PLAN to work 2-weeks out and where they WILL BE that particular week. This schedule is then shared with the City's project team so they can communicate with appropriate facility personnel to confirm whether the proposed schedule will work. This typically yields enough "lead-time" for your staff to approve scheduling at each facility, and (when necessary) for our subcontractors to adjust their plans to accommodate needs, without suffering a dramatic loss in production time.

There are several factors that have a significant impact on effective project scheduling. Clearly, sound communication channels and proactive planning are two of the primary items that can help projects proceed through implementation and not allow "mountains out of mole hills". It is highly likely that something will go wrong; such as equipment delivery delayed, subcontractor not staffed properly, weather does not cooperate, City activity precludes getting work done in an area as scheduled or other similar issues, during a major construction project. It is the effectiveness of the schedule planning and communication channels that will determine whether a minor issue develops into major problem.

Proactive use of scheduling software and regular communication can help avert trouble, and certainly reduces the chance of major problems. ESP's project team works closely with our client, vendors and subcontractors to develop a schedule; utilizing Microsoft Project software, that reflects realistic delivery times, committed installation times and buy-in from client staff regarding access and availability to conduct work in given areas. We then tie-together all activities so that everyone can clearly see the impact that each function has on the other (i.e. installation is impacted by availability of space to be "disrupted" and is tied to equipment delivery, which is tied to submittal approval, etc.). Demonstrating this co-dependency allows us to track the key milestones and address each step as it becomes important in the overall project schedule. Holding regularly scheduled construction meetings to review project status, update project schedule and discuss each component's progress provides a proactive platform from

which effective project scheduling can be built.

Change Order/Scope Alterations

Our projects come with a Guaranteed Cost commitment, so there will be no contractor-driven change orders that increase the price to provide the scope of work identified in our Energy Performance Contract document. The entire project is completed through a negotiated process, so there is the flexibility to make scope alterations that impact the work done and the cost to provide the work. Clients sometimes decide they would prefer to adjust the scope by adding and subtracting things from the “contractual” scope. Also, it is not uncommon for us to discover a more effective way of implementing a scope of work, and offer a price deduct; which then enables the client to ask for

additional scope (in a different area) to be provided. We will keep a detailed log that identifies all cost adds and deducts and the associated scope of work change. Unless you specifically request changes that cause there to be a cost increase or decrease, this log must balance to “zero” at project completion.

Project Timeline

Following is the detailed construction plan for implementing the selected energy conservation measures.

The first step once a contract is executed is to complete the formal design for the various measures. ESP and the City of Prairie Village will review submittals to ensure the proper equipment is ordered and purchased as well during this initial period.

All of the measures will be installed with respect to creating minimal interference to the daily operation of the building occupants. The installation of the geothermal system at the Police Station, City Hall, and Community Center will take careful staging and coordination to ensure timely completion yet maintain facilities in an operational mode such that staff and patrons have access to complete their day to day activities.

We expect to achieve final completion in 34 weeks after contract awarding. ESP will work with the City of Prairie Village and the subcontractors to expedite the schedule where possible to complete early and begin to garner energy savings.

City of Prairie Village

Energy Performance Contract

ID	Task Name	Start	Finish	1st Quarter		2nd Quarter			3rd Quarter			4th Quarter	
				Feb '11	Mar '11	Apr '11	May '11	Jun '11	Jul '11	Aug '11	Sep '11	Oct '11	Nov '11
1	Execution of EPC Agreement	Mon 3/7/11	Mon 3/7/11										
2	SUBCONTRACTOR AGREEMENTS	Mon 3/7/11	Tue 3/22/11		◆ 3/7								
44	DOCUMENT BINDER TO ESP CONSTRUCTION MANAGER	Fri 3/4/11	Tue 3/29/11		▬								
58	DESIGN & SUBMITTAL PROCESS	Mon 3/7/11	Fri 4/29/11		▬								
59	Collection of submittals from subcontractors	Mon 3/7/11	Fri 4/8/11		▬								
78	Review & approval of submittals by ESP engineer	Fri 3/18/11	Fri 4/15/11			▬							
85	Review & approval of submittals by Owner	Fri 3/25/11	Fri 4/22/11			▬							
92	Issue approved submittals to appropriate sub	Fri 4/1/11	Fri 4/29/11			▬							
99	CONSTRUCTION	Tue 3/22/11	Tue 9/27/11			▬							
100	CONSTRUCTION MEETINGS	Tue 3/22/11	Tue 9/27/11			▬							
143	CONSTRUCTION PROGRESS	Wed 3/30/11	Wed 9/7/11			▬							
144	ECM #01 - Lighting Improvements - CONSTRUCTION	Wed 4/13/11	Fri 5/27/11			▬							
152	ECM #02 - Water Efficiency Upgrades - CONSTRUCTION	Wed 4/20/11	Wed 5/25/11			▬							
160	ECM #03 - Building Infiltration Improvements - CONSTRUCTION	Wed 4/13/11	Fri 6/3/11			▬							
168	ECM #04 - EMS Upgrades - CONSTRUCTION	Wed 4/13/11	Wed 9/7/11			▬							
176	ECM #05 - Vending Machine Controls - CONSTRUCTION	Wed 4/13/11	Mon 4/25/11			▬							
183	ECM #06 - Geothermal Heat Pump System - CONSTRUCTION	Wed 3/30/11	Fri 8/26/11			▬							
192	SUBSTANTIAL COMPLETION	Fri 8/26/11	Fri 8/26/11								◆ 8/26		
194	FINAL COMPLETION	Wed 9/21/11	Fri 10/28/11									▬	
195	TRAINING	Thu 9/22/11	Fri 10/7/11									▬	
226	O&M/ WARRANTY INFO/ AS-BUILT DRAWINGS	Wed 9/21/11	Fri 10/28/11									▬	
253	MEASUREMENT & VERIFICATION	Fri 3/4/11	Mon 9/12/11			▬							

Project: PV - EPC Implementation Sch Date: Tue 12/21/10	Task		External Milestone		Manual Summary Rollup	
	Split		Inactive Task		Manual Summary	
	Milestone		Inactive Milestone		Start-only	
	Summary		Inactive Summary		Finish-only	
	Project Summary		Manual Task		Progress	
	External Tasks		Duration-only		Deadline	

6. Financing

The primary objective of an Energy Performance Contract is to help clients identify energy efficiency and facility improvement needs, and provide a creative avenue for funding these improvements. In essence, the goal is to allow organizations to redirect funds that are budgeted for utility and operational expenses to pay for energy-saving, facility infrastructure improvements. This maximizes the value of these funds by investing them in your own organization as opposed to utility companies. Energy Solutions Professionals can facilitate acquiring third-party funding to pay for the portion of the project costs not covered by grant funds today, and the savings are used to make the principal and interest payments over time.

A performance contract can help you implement building efficiency improvements with a guarantee that the reduction in utility and operational costs will pay for the improvements. The EPC program can be structured so that energy and operational savings will exceed both the finance repayment costs, plus any (optional) mutually agreed costs for on-going services. In this type of a self-funded program, the Client does not need to provide funding up front. Instead, a lease is taken out to pay for improvements, and all project costs are guaranteed to be repaid by energy and operational savings.

If verified energy savings during any twelve-month period of this paid-from-savings program are inadequate to cover the annual costs of the program, Energy Solutions Professionals would

reimburse the City for 100% of the shortfall. We are assuming the risk that the program will reduce energy consumption (and related costs) and/or operating expenses enough to cover the project's costs.

Our energy services programs are not "shared-savings programs." Our projects are developed so that the City will retain 100% of the generated energy and operational savings after project costs are paid. Therefore, you will decide how to use these savings, possibly in other budget areas or to fund facility infrastructure improvements needs.

Financing Options

Although financing is typically an integral part of every EPC program, it does not constitute a profit center for Energy Solutions Professionals. We are more than willing to evaluate all avenues of potential financing, including working with clients who decide to self-finance projects. We have strong relationships with many of the leading national lending institutions, so are able to obtain very effective terms & rates. We work with your staff and administration in selecting a financing arrangement that best meets YOUR needs.

We do not require that our clients utilize an outsourced financing mechanism. Financing does NOT represent a profit center for ESP, so we strive to work with clients to find the approach that offers the best long-term value for your situation. The City may elect to implement only those projects which can be funded via the grant dollars. ESP would welcome an opportuni-

ty to be of service no matter what approach or funding stream the City of Prairie Village goes with. We strive to assist in identifying the best long-term financial solution for the City.

We have extensive experience in helping to arrange financing, and will lend our expertise to find the best possible solution for the City of Prairie Village. Our objective is to help the City find the most cost-effective way to fund the project, which maximizes the value obtained from the savings generated through the energy efficiency measures. The primary deciding factor is determining which avenue yields the best long-term value for the City and its patrons.

Flexible Financing Options Available

We have worked with many financing sources, and we have developed agreements that offer maximum flexibility at no cost for our Client. The financing can be set up as a master lease, allowing additional projects at a later date by simply adding a rider to the existing lease. The lease may often be set up so that there is no early or pre-payment penalty, so you may buy-down the principal if funds are available (potentially with excess savings generated from program), which can greatly reduce interest costs. The funds are typically placed in an escrow account during construction period, and interest accrues to the benefit of the City of Prairie Village.

7. Measurement & Verification

Measurement and Verification (M&V) provides a means of proving that the savings that are guaranteed under a performance contract are truly achieved.

This is accomplished by using a combination of engineering calculations, system measurements, whole facility measurements and/or simulations to clearly identify that the savings achieved met the stated goals for guaranteed energy savings.

There are three primary cost factors that impact the overall utility costs for facilities.

- 1.The efficiency or rate at which the equipment/system consumes energy
- 2.The number of hours equipment operates for its stated purpose

3.The unit cost for the energy type being impacted.

It needs to be recognized that a change in any one of these three parameters could dramatically impact the utility costs within a given facility.

The main objective for the Measurement and Verification Plan is to provide clear evidence that each energy conservation measure actually had the impact on the primary cost factor that was expected. Further, it is important to balance the verification methodology versus the magnitude of savings generated; that is, don't spend an inordinate amount of time and money to verify a measure that has a relatively small magnitude of savings. Similarly, do not spend lots of time or money verifying measures for which there is a

proven track-record and high degree of confidence in the efficacy of the savings.

ESP follows the guidelines of the International Performance Measurement & Verification Protocol (IPMVP) when conducting M&V. The IPMVP is the industry standard for conducting M&V and was originally developed by the Department of Energy as a framework for conducting M&V.

The table below presents the four basic M&V options outlined in the IPMVP. We'll work with you to mutually determine the amount of measurement and verification that is most appropriate for your project, and the methods that will be used to measure and verify the savings.

IPMVP Option	How Savings Are Calculated	Typical Applications
<p>A. Retrofit Isolation: Key Parameter Measurement</p> <p><i>Savings</i> are determined by field measurement of the key performance parameter(s) which define the <i>energy</i> use of the <i>ECM's</i> affected system(s) and/or the success of the project. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the measured parameter, and the length of the <i>reporting period</i>. Parameters not selected for field measurement are <i>estimated</i>. <i>Estimates</i> can based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the <i>estimated</i> parameter is required. The plausible <i>savings</i> error arising from <i>estimation</i> rather than measurement is evaluated.</p>	<p>Engineering calculation of <i>baseline</i> and <i>reporting period energy</i> from:</p> <ul style="list-style-type: none"> ○ short-term or continuous measurements of key operating parameter(s); and ○ <i>estimated</i> values. <p><i>Routine</i> and <i>non-routine adjustments</i> as required.</p>	<p>A lighting retrofit where power draw is the key performance parameter that is measured periodically. Estimate operating hours of the lights based on building schedules and occupant behavior.</p>

<p>B. Retrofit Isolation: All Parameter Measurement</p> <p><i>Savings</i> are determined by field measurement of the <i>energy</i> use of the <i>ECM</i>-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the <i>savings</i> and the length of the <i>reporting period</i>.</p>	<p>Short-term or continuous measurements of <i>baseline</i> and <i>reporting period energy</i>, and/or engineering computations using measurements of proxies of <i>energy</i> use. Routine and non-routine adjustments as required.</p>	<p>Application of a variable-speed drive and controls to a motor to adjust pump flow. Measure electric power with a kW meter installed on the electrical supply to the motor, which reads the power every minute. In the <i>baseline period</i> this meter is in place for a week to verify <i>constant</i> loading. The meter is in place throughout the <i>reporting period</i> to track variations in power use.</p>
<p>C. Whole Facility</p> <p><i>Savings</i> are determined by measuring energy use at the whole <i>facility</i> or sub-<i>facility</i> level. Continuous measurements of the entire <i>facility's energy</i> use are taken throughout the <i>reporting period</i>.</p>	<p>Analysis of whole <i>facility baseline</i> and <i>reporting period</i> (utility) meter data. <i>Routine adjustments</i> as required, using techniques such as simple comparison or regression analysis. <i>Non-routine adjustments</i> as required.</p>	<p>Multifaceted energy management program affecting many systems in a <i>facility</i>. Measure energy use with the gas and electric utility meters for a twelve month <i>baseline period</i> and throughout the <i>reporting period</i>.</p>
<p>D. Calibrated Simulation</p> <p><i>Savings</i> are determined through simulation of the <i>energy</i> use of the whole <i>facility</i>, or of a sub-<i>facility</i>. Simulation routines are demonstrated to adequately model actual <i>energy</i> performance measured in the <i>facility</i>. This Option usually requires considerable skill in calibrated simulation.</p>	<p>Energy use simulation, calibrated with hourly or monthly utility billing data. (Energy end use metering may be used to help refine input data.)</p>	<p>Multifaceted energy management program affecting many systems in a facility but where no meter existed in the <i>baseline period</i>.</p> <p>Energy use measurements, after installation of gas and electric meters, are used to calibrate a simulation. <i>Baseline</i> energy use, determined using the calibrated simulation, is compared to a simulation of <i>reporting period energy</i> use.</p>

Source: IPMVP Volume I, Concepts and Options for Determining Energy and Water Savings, April 2007.

General Overview

The reason for measurement and verification is simple: the City of Prairie Village is entering into a guaranteed savings contract in which significant dollars are at stake, and there needs to be some means of proving that the savings are truly achieved. ESP's only objective with respect to Measurement & Verification (M&V) is to provide our clients the evidence they need to feel good about the results, for the least cost possible. It is important to notice that every dollar spent on annual M&V reduces up-front dollars available for facility infrastructure improvement by

\$7 to \$10 dollars. If the annual M&V Fee is \$10,000, this reduces the amount of upfront improvements the city receives by \$70,000 to \$100,000, which is significant. Hence, we at Energy Solutions Professionals work diligently to jointly develop an M&V Plan that will yield the proof and comfort you need that the savings are achieved, while minimizing cost.

Our Team members have experience implementing, providing and receiving all of the M&V Options identified in the International Performance Measurement & Verification Protocol table above. Every project requires an application-specific M&V evaluation, because

each will have its own unique set of improvement measures, and differing levels of client parameters to meet.

While the above is fundamentally true, we at Energy Solutions Professionals are convinced that there may be value in utilizing prescriptive, equipment specific measurement to prove as much of the savings as possible. We prefer to take the M&V Plan into the quantifiable realm of measuring efficiency and operating points (energy consumption, flows, temperatures, etc.) both before and after retrofit work is completed, and then compare the readings. Today's technology offers numerous devices that can be used for



accurately taking these pre & post measurements. If the efficiency improved and/or the energy consumption decreased by the guaranteed values, then you know the savings area achievable.

We still need to have workshops to review the various M&V Options with your staff, and will make a joint decision as to which M&V Option(s) to include in the M&V Plan for the EPC.

Note that a measurement and verification plan could combine one or any number of the options identified in the IPMVP.

ESP's objective is to clearly quantify savings and provide the comfort level to the city that savings are being achieved, while minimizing the on-going cost to you for attaining this assurance. We can provide the measurements on a one-time, multiple-year or continuous basis. However, there are diminishing returns when too much money is spent verifying the savings, so we will work with your staff to determine the best approach for your given application.

Site-Specific Observation for Prairie Village

ESP's members strongly believe that proving the savings guarantee through

sound methods that yield a clear understanding by all parties is essential. The proposed grouping of energy conservation measures offers a diverse level of complexity for proving the savings.

The following table gives some examples for different energy conservation measures and a sound method for determining savings performance. Some, none, or all of these could be incorporated into a project for Prairie Village. The ECMs the city elects to move forward with, will dictate which method will be used, and may likely include a combination of methods.

Whatever improvements the City of Prairie Village elects to proceed with, ESP is committed to working with your team to put together a plan that clearly defines how the savings will be verified and ultimately achieved. Any potential on-going cost associated with this plan will be quantified and contractually identified prior to executing the Energy Performance Contract document.

ECM	Measurement methodology	Energy parameter	Efficiency parameter	Measurement parameters	Comments
Lighting upgrades	Pre & post installation	kW & kWh	Watts/fixture	Watts	Single fixture or a circuit of fixtures
Water efficiency improvements	Pre & post installation	Gallons per minute (GPM) / gallons per flush	GPM / GPF	Gallons	On toilets, faucets, showerheads, dish sprayers, etc.
Pump replacement	Pre & post installation	kW & kWh	"wire to water"	Hydraulic pressure, GPM, & kW	Performance curves may be established for the before and after conditions and multiple points on the curve tested.
Fan replacement	Pre & post installation	kW & kWh	"wire to air"	Static pressure, CFM, & kW	Performance curves may be established for the before and after conditions and multiple points on the curve tested.
Boiler replacement	Pre & post installation	Natural gas	Combustion	Flue gases & temperatures	Boilers with atmospheric burners cannot be evaluated with this method.
Chiller replacement	Pre & post installation	kW & kWh	kW/ton	GPM, entering & leaving evaporator temperatures, & kW	Flows established during initial commissioning will be utilized where chillers utilize constant flow through the evaporator.
Heat pumps (water source / geothermal)	Post installation	kW & kWh	Coefficient of performance (COP)	GPM, entering & leaving water temperatures, & kW	Flows established during initial commissioning will be utilized where heat pumps utilize constant flow.
Window replacement	Calculated	kWh & natural gas	Thermal resistance & shading coefficient		
Energy management system	Commissioning & verification	kWh & natural gas	Operational	Schedules, setpoints, sequence	Graphical matrices are established to demonstrate setpoints with respect to recommendations.
Pipe insulation	Calculated	Natural gas	Thermal resistance		
Steam trap replacement	Pre-testing & calculated	Natural gas	Failed/ not failed	Test traps for failures	Based on ultrasonic testing, the size of the trap, and the system pressure a leakage (loss) rate is established.

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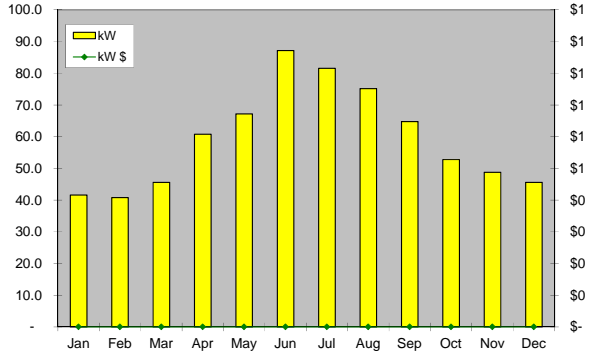


Appendix A – Utility Charts

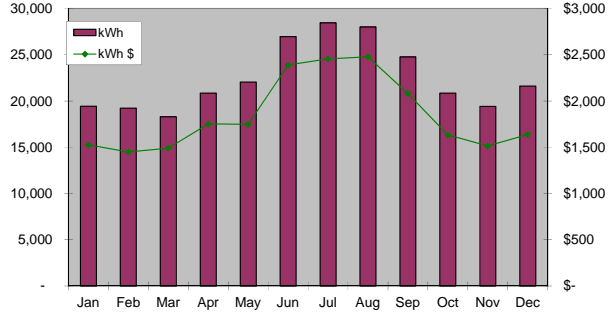
Following are charts that detail the annual utility costs for each of the buildings evaluated.

City Hall

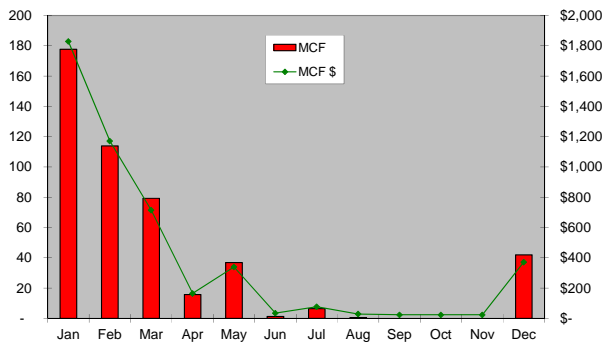
Electric Demand



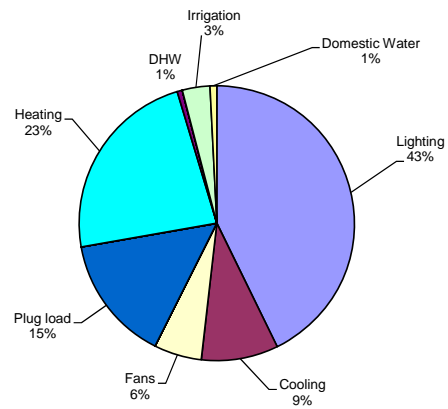
Electric Usage



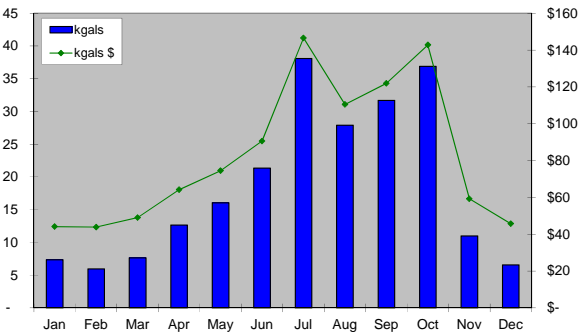
Natural Gas Usage



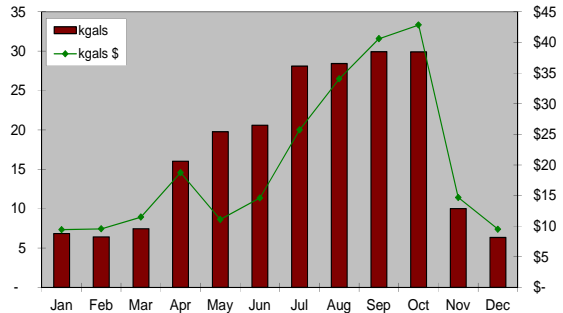
Energy Cost by Equipment



Water Usage



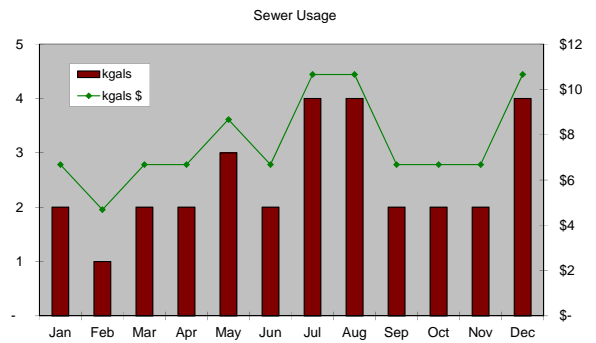
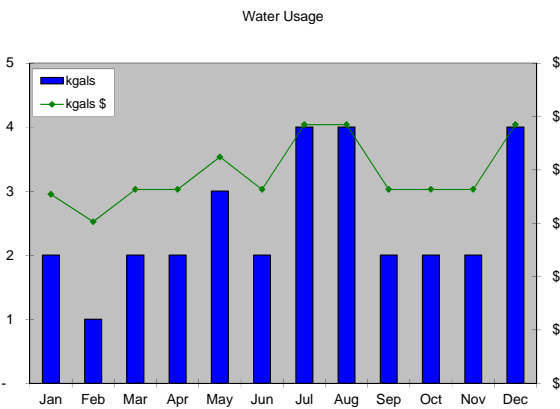
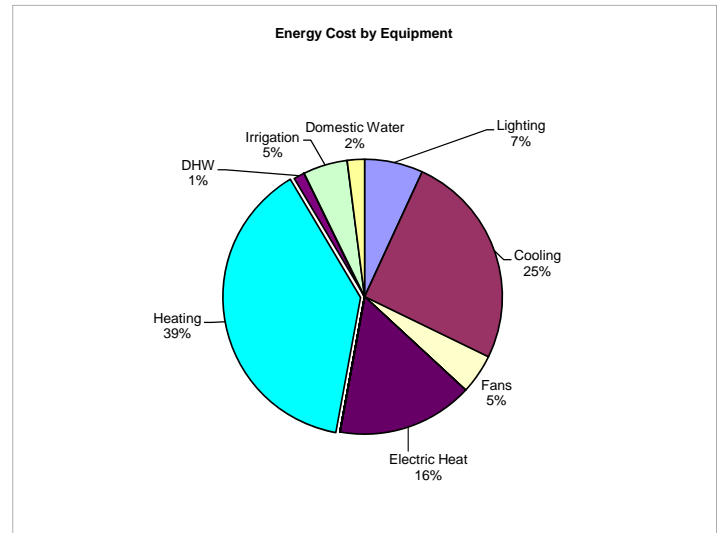
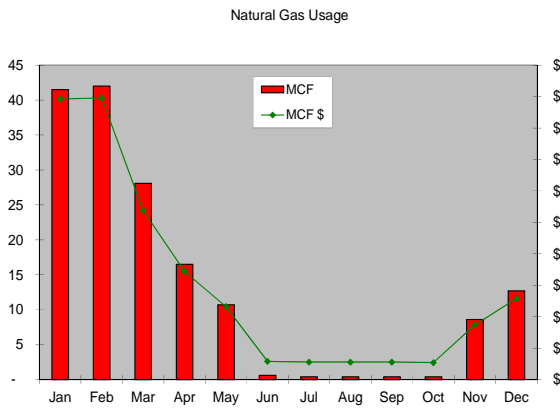
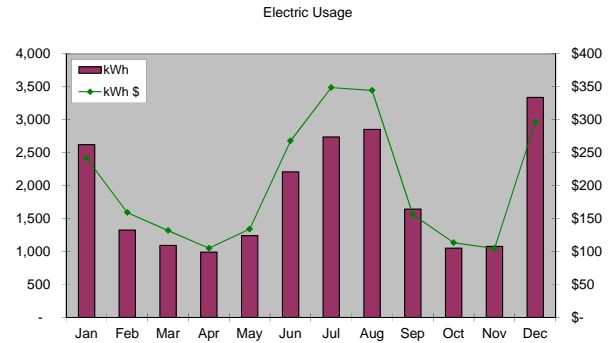
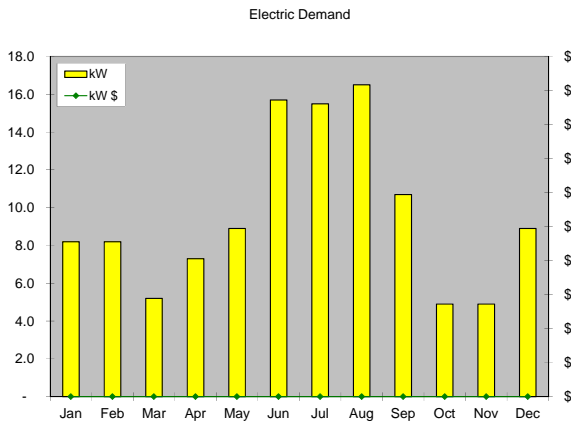
Sewer Usage



printed on paper containing a minimum of 35% recycled content.



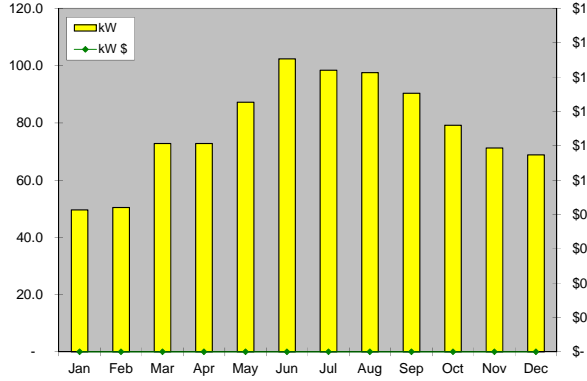
Community Center



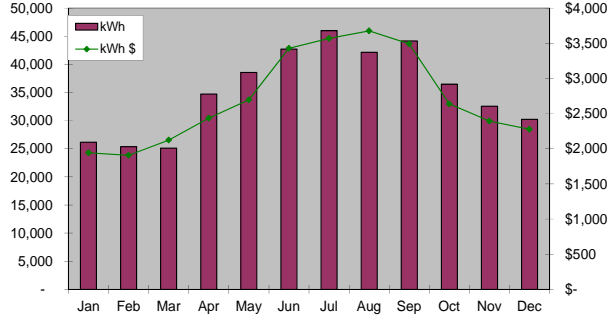
printed on paper containing a minimum of 35% recycled content.

Police Station

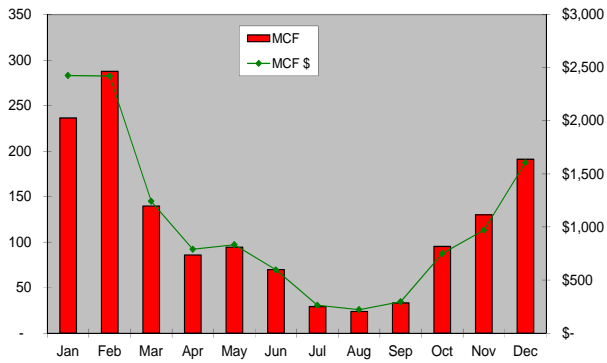
Electric Demand



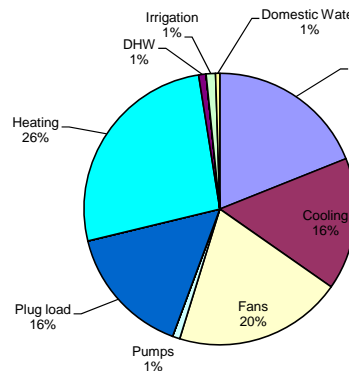
Electric Usage



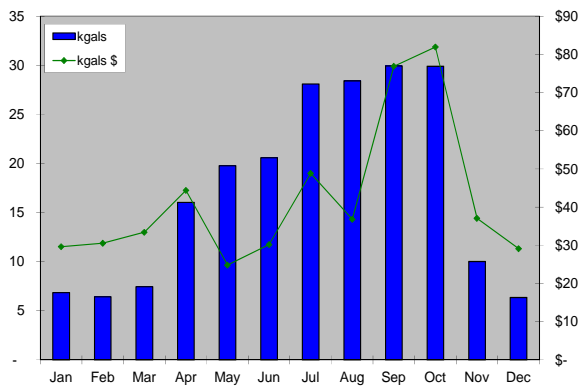
Natural Gas Usage



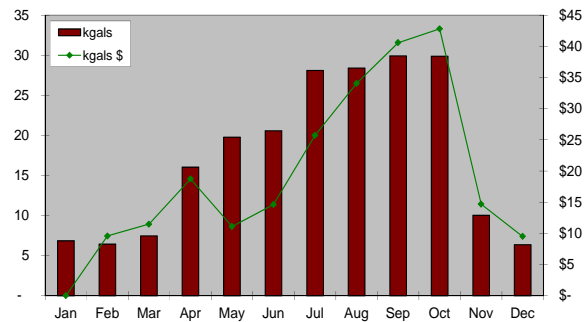
Energy Cost by Equipment



Water Usage



Sewer Usage

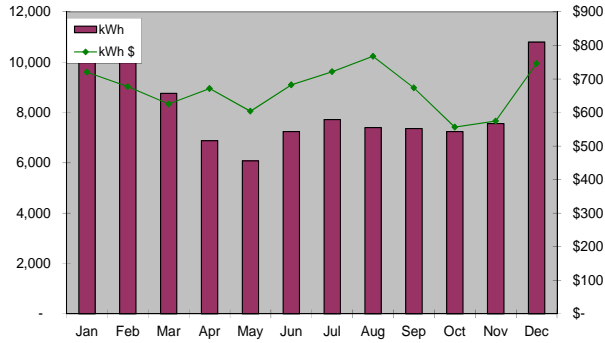


printed on paper containing a minimum of 35% recycled content.

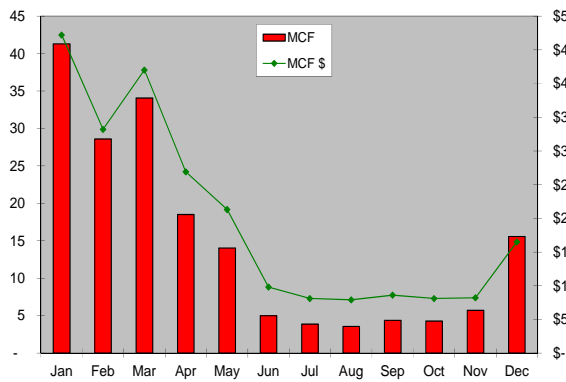


Public Works A

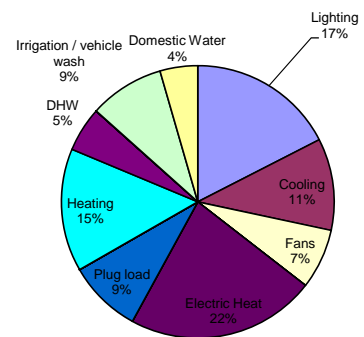
Electric Usage



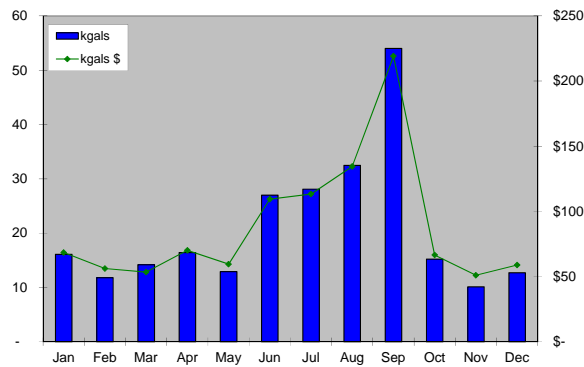
Natural Gas Usage



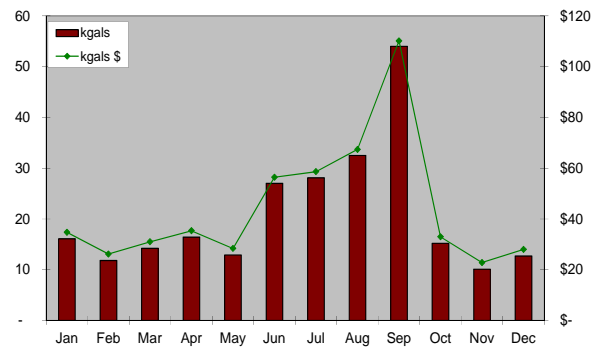
Energy Cost by Equipment



Water Usage



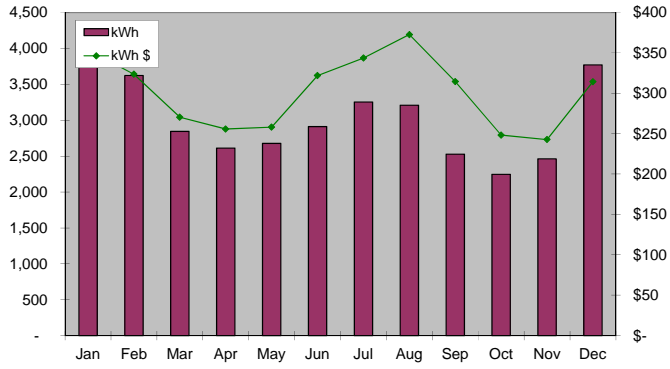
Sewer Usage



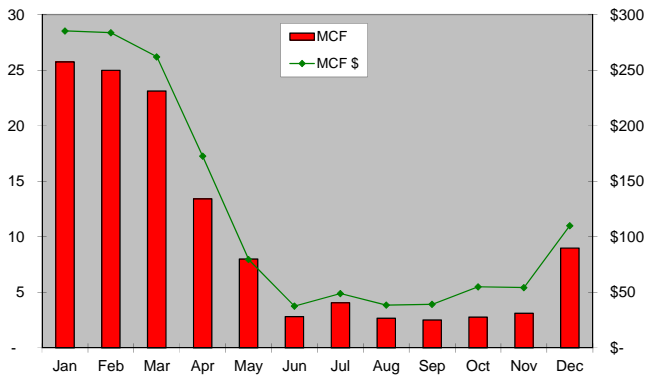
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Public Works B

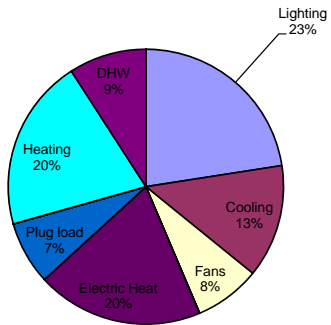
Electric Usage



Natural Gas Usage

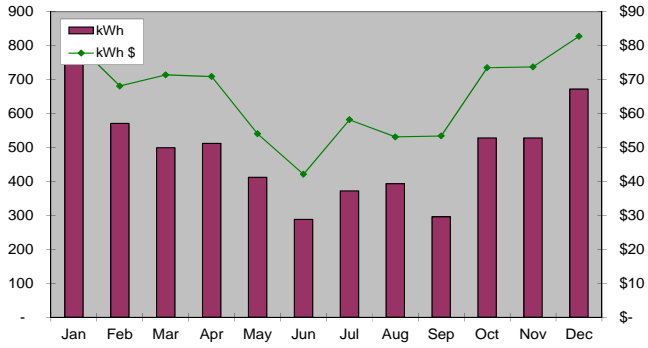


Energy Cost by Equipment

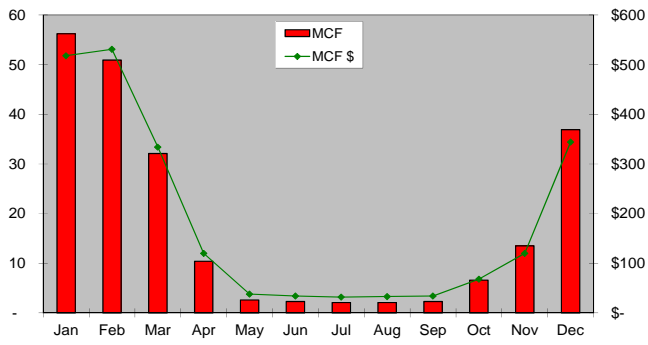


Public Works G

Electric Usage



Natural Gas Usage



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Appendix B – Savings Calculations

**CITY OF PRAIRIE VILLAGE, KS
LIGHTING RETROFIT SAVINGS**

Item #	Building	Room	Existing Fixture	Existing Qty	Existing Light Level (FC)	Proposed Fixture	Proposed Quantit	Existing fixture watts	Proposed fixture	Existing Hours	kWh Savings	kWh Savings
1	Police Station	Evidence room	Troffer 2x4 4L 32w T8-ELEC	8	73	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	8	112	45	2,250	0.54	1,206
2	Police Station	Evidence garage	Strip 8' 1L 59w T8-ELEC	5	33	Conv. Kit - EB & 28w lamps (2L)	5	58	45	250	0.01	16
3	Police Station	Evidence garage closet	Industrial 2L 32w T8-ELEC	4	63	Low wattage EB & 28w lamps (2L)	4	58	45	100	0.00	5
4	Police Station	Basement mech room	Strip 8' 4L 32w T8-ELEC	2	37	Low wattage EB & 28w lamps (4L)	2	110	88	100	0.00	4
5	Police Station	Basement equipment storage	Strip 4' 2L 32w T8-ELEC	2	27	Low wattage EB & 28w lamps (2L)	2	58	45	250	0.00	7
6	Police Station	Basement corridors	Troffer 2x2 2L 32w T8-ELECT	28	42	DO NOTHING	28	58	58	5,000	-	-
7	Police Station	Basement corridors	Exit incandescent 2L 20w	2		NEW LED Exit (RED)	2	40	3	8,760	0.07	648
8	Police Station	Bsmt. community equipment	Strip 4' 2L 32w T8-ELEC	4	49	Low wattage EB & 28w lamps (2L)	4	58	45	125	0.00	7
9	Police Station	Bsmt. squad room	Troffer 2x4 4L 32w T8-ELEC	8	88	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	8	112	45	1,460	0.37	783
10	Police Station	Bsmt. armory	Troffer 2x4 4L 32w T8-ELEC	1	113	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	1	112	45	1,460	0.05	98
11	Police Station	Bsmt. armory	Strip 4' 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	1,460	0.00	3
12	Police Station	Bsmt. armory	Strip 4' 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	1,460	0.02	38
13	Police Station	Bsmt. uniform storage	Troffer 1x4 2L 32w T8-ELEC	2	53	Low wattage EB & 28w lamps (2L)	2	58	45	350	0.00	9
14	Police Station	Bsmt. women's locker	Troffer 2x4 4L 32w T8-ELEC	3	58	Low wattage EB & 28w lamps (4L)	3	112	88	2,920	0.07	210
15	Police Station	Bsmt. women's locker	Strip 3' 2L 30w T12-MAG	1		Low wattage EB & 25w lamps (2L)	1	72	50	2,920	0.02	64
16	Police Station	Bsmt. women's locker	Strip 2' 2L 20w T12-MAG	1		Low wattage EB & 17w lamps (2L)	1	52	34	2,920	0.02	53
17	Police Station	Bsmt. women's locker	Strip 4' 2L 32w T8-ELEC	2	43	Low wattage EB & 28w lamps (2L)	2	58	45	2,920	0.03	76
18	Police Station	Bsmt. women's locker	Vapor tight incandescent fixture	1		DO NOTHING	1	60	60	2,920	-	-
19	Police Station	Bsmt. women's locker	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	2,920	-	-
20	Police Station	Bsmt. janitor closet	Wrap 4' 2L 32w T8-ELEC	1	93	Low wattage EB & 28w lamps (2L)	1	58	45	8,760	0.01	114
21	Police Station	Bsmt. detention reception	Troffer 2x4 4L 32w T8-ELEC	8	84	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	8	112	45	8,760	0.54	4,695
22	Police Station	Bsmt. detention closet	Strip 4' 2L 34w T12-MAG	1		Low wattage EB & 28w lamps (2L)	1	74	45	125	0.00	4
23	Police Station	Bsmt. detention restroom	Strip 4' 2L 32w T8-ELEC	1	60	Low wattage EB & 28w lamps (2L)	1	58	45	250	0.00	3
24	Police Station	Bsmt. detention restroom	Strip 2' 2L 20w T12-MAG	1		Low wattage EB & 17w lamps (2L)	1	52	34	250	0.00	5
25	Police Station	Bsmt. detention restroom	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	250	-	-
26	Police Station	Bsmt. detention cells	Troffer 1x4 2L 32w T8-ELEC	6	42	Low wattage EB & 28w lamps (2L)	6	58	45	250	0.01	20
27	Police Station	Bsmt. detention fingerprint	Troffer 2x4 4L 32w T8-ELEC	2	128	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,920	0.13	391
28	Police Station	Bsmt. sally port	Industrial 8' 2L 59w T8-ELEC	8	27	Conv. Kit - EB & 28w lamps (4L)	8	58	88	7,300	(0.24)	(1,752)
29	Police Station	Bsmt. report writing	Troffer 2x4 4L 32w T8-ELEC	3	99	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	3	112	45	2,920	0.20	587
30	Police Station	Bsmt. report writing	Task 1L 32w T8-ELEC	2		Lamp replacement with 28 watt lamp (1L)	2	31	29	2,920	0.00	12
31	Police Station	Bsmt break room	Troffer 2x4 4L 32w T8-ELEC	3	75	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	3	112	45	2,920	0.20	587
32	Police Station	Bsmt break room	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	2,920	-	-
33	Police Station	Bsmt community services officer	Troffer 2x4 4L 32w T8-ELEC	3	87	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	3	112	45	5,936	0.20	1,193
34	Police Station	Bsmt special investigation	Troffer 2x4 4L 32w T8-ELEC	4	115	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	4	112	45	2,250	0.27	603
35	Police Station	Bsmt special investigation	Can fixture 2L 13w CFL	5		DO NOTHING	5	26	26	2,250	-	-
36	Police Station	Bsmt shift supervisor	Troffer 2x4 4L 32w T8-ELEC	4	98	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	4	112	45	2,920	0.27	783
37	Police Station	Bsmt shift supervisor	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	2,920	-	-
38	Police Station	Bsmt shift supervisor	Strip 4' 2L 34w T12-MAG	1		Low wattage EB & 28w lamps (2L)	1	74	45	125	0.00	4
39	Police Station	Bsmt men's locker	Troffer 2x4 4L 32w T8-ELEC	8	50	Low wattage EB & 28w lamps (4L)	8	112	88	3,504	0.19	673
40	Police Station	Bsmt men's locker	Strip 4' 2L 32w T8-ELEC	1	65	Low wattage EB & 28w lamps (2L)	1	58	45	3,504	0.01	46
41	Police Station	Bsmt men's locker	Strip 4' 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	3,504	0.03	91
42	Police Station	Bsmt men's locker	Strip 4' 2L 17w T8-ELEC	1	68	DO NOTHING	1	32	32	3,504	-	-
43	Police Station	Bsmt men's locker	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	3,504	-	-
44	Police Station	Bsmt visitor detention	Troffer 2x4 4L 32w T8-ELEC	3	43	Low wattage EB & 28w lamps (4L)	3	112	88	2,920	0.07	210
45	Police Station	Bsmt visitor detention	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
46	Police Station	Stairs	Troffer 2x4 4L 32w T8-ELEC	2	25	Low wattage EB & 28w lamps (4L)	2	112	88	8,760	0.05	420
47	Police Station	Stairs	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	8,760	-	-
48	Police Station	1st flr admin hallway	Troffer 2x2 2L 32w T8-ELECT	24	20	DO NOTHING	24	58	58	2,250	-	-
49	Police Station	1st flr admin hallway	Troffer 2x4 4L 32w T8-ELEC	3	81	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	3	112	45	2,250	0.20	452
50	Police Station	1st flr police chief	Troffer 2x4 4L 32w T8-ELEC	4	96	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	4	112	45	2,250	0.27	603
51	Police Station	1st flr conference room	Troffer 2x4 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	500	0.01	13
52	Police Station	1st flr conference room	Can fixture 2L 13w CFL	6		DO NOTHING	6	26	26	500	-	-
53	Police Station	1st flr patrol command	Troffer 2x4 4L 32w T8-ELEC	2	109	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
54	Police Station	1st flr patrol command	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	2,250	-	-
55	Police Station	1st flr patrol command	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
56	Police Station	1st flr inv. command	Troffer 2x4 4L 32w T8-ELEC	2	109	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
57	Police Station	1st flr inv. command	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	2,250	-	-
58	Police Station	1st flr inv. command	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
59	Police Station	1st flr det sergeant	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
60	Police Station	1st flr det sergeant	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	2,250	-	-
61	Police Station	1st flr det sergeant	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
62	Police Station	1st flr patrol ops	Troffer 2x4 4L 32w T8-ELEC	2	89	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302

**CITY OF PRAIRIE VILLAGE, KS
LIGHTING RETROFIT SAVINGS**

Item #	Building	Room	Existing Fixture	Existing Qty	Existing Light Level (FC)	Proposed Fixture	Proposed Quantit	Existing fixture watts	Proposed fixture	Existing Hours	kW Savings	kWh Savings
63	Police Station	1st flr patrol ops	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	2,250	-	-
64	Police Station	1st flr patrol ops	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
65	Police Station	1st flr prof standards	Troffer 2x4 4L 32w T8-ELEC	2	77	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
66	Police Station	1st flr prof standards	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	2,250	-	-
67	Police Station	1st flr prof standards	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
68	Police Station	1st flr traffic sergeant	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
69	Police Station	1st flr traffic sergeant	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	2,250	-	-
70	Police Station	1st flr traffic sergeant	Task 1L 32w T8-ELEC	1		Lamp replacement with 28 watt lamp (1L)	1	31	29	2,250	0.00	5
71	Police Station	1st flr crime analysis	Troffer 2x4 4L 32w T8-ELEC	2	93	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
72	Police Station	1st flr Detective Wakefield	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
73	Police Station	1st flr Detective Roth	Troffer 2x4 4L 32w T8-ELEC	2	65	Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
74	Police Station	1st flr tech ops	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
75	Police Station	1st flr DARE	Troffer 2x4 4L 32w T8-ELEC	4	65	Low wattage EB & 28w lamps (4L)	4	112	88	2,250	0.10	216
76	Police Station	1st flr traffic unit	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	2,250	0.02	54
77	Police Station	1st flr traffic unit	Can fixture 2L 13w CFL	1	40	DO NOTHING	1	26	26	2,250	-	-
78	Police Station	1st flr interview room	Can fixture 2L 13w CFL	1		DO NOTHING	1	26	26	2,250	-	-
79	Police Station	1st flr interview room	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	2,250	0.02	54
80	Police Station	1st flr invest support	Troffer 2x4 4L 32w T8-ELEC	2	90	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
81	Police Station	1st flr closet	Strip 4' 2L 34w T12-MAG	1		Low wattage EB & 28w lamps (2L)	1	74	45	125	0.00	4
82	Police Station	1st flr women's restroom	Strip 3' 2L 30w T12-MAG	1		Low wattage EB & 25w lamps (2L)	1	72	50	1,000	0.01	22
83	Police Station	1st flr women's restroom	Can fixture 2L 13w CFL	2		DO NOTHING	2	26	26	1,000	-	-
84	Police Station	1st flr women's restroom	Strip 4' 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	1,000	0.01	26
85	Police Station	1st flr closet	Strip 4' 2L 34w T12-MAG	1		Low wattage EB & 28w lamps (2L)	1	74	45	125	0.00	4
86	Police Station	1st flr men's restroom	Strip 4' 2L 32w T8-ELEC	3	90	Low wattage EB & 28w lamps (2L)	3	58	45	1,000	0.02	39
87	Police Station	1st flr men's restroom	Can fixture 2L 13w CFL	3		DO NOTHING	3	26	26	1,000	-	-
88	Police Station	1st flr work room	Troffer 2x4 4L 32w T8-ELEC	2	56	Low wattage EB & 28w lamps (4L)	2	112	88	1,000	0.02	48
89	Police Station	1st flr records	Troffer 2x4 4L 32w T8-ELEC	7	81	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	7	112	45	2,125	0.47	997
90	Police Station	1st flr records closet	Troffer 2x4 4L 32w T8-ELEC	1	53	Low wattage EB & 28w lamps (4L)	1	112	88	213	0.00	5
91	Police Station	1st flr staff service supervisor	Troffer 2x4 4L 32w T8-ELEC	2	56	Low wattage EB & 28w lamps (4L)	2	112	88	2,125	0.05	102
92	Police Station	1st flr dispatch	Strip 4' 1L 32w T8-ELEC	25	27	Lamp replacement with 28 watt lamp (1L)	25	31	29	8,760	0.05	438
93	Police Station	1st flr dispatch restroom	Troffer 2x4 4L 32w T8-ELEC	1	75	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	1	112	45	8,760	0.07	587
94	Police Station	1st flr corridor	Can fixture 2L 13w CFL	7		DO NOTHING	7	26	26	3,504	-	-
95	Police Station	1st flr corridor	Troffer 2x4 2L 32w T8-ELEC	1	96	Low wattage EB & 28w lamps (2L)	1	58	45	3,504	0.01	46
96	Police Station	1st flr corridor	Exit incandescent 2L 20w	2		NEW LED Exit (RED)	2	40	3	8,760	0.07	648
97	Police Station	1st flr corridor	Exit LED 1L 3w	2		DO NOTHING	2	3	3	3,504	-	-
98	Police Station	1st flr East vestibule	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	4,400	-	-
99	Police Station	1st flr front corridor	Can fixture 2L 13w CFL	19		DO NOTHING	19	26	26	3,504	-	-
100	Police Station	1st flr front corridor	Exit incandescent 2L 20w	2		NEW LED Exit (RED)	2	40	3	8,760	0.07	648
101	Police Station	1st flr front corridor	Industrial 2L 32w T8-ELEC	7		Low wattage EB & 28w lamps (2L)	7	58	45	3,504	0.09	319
102	Police Station	1st flr public interview	Troffer 2x4 4L 32w T8-ELEC	2	90	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	1,000	0.06	134
103	Police Station	1st flr men's restroom	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	1,000	0.01	24
104	Police Station	1st flr women's restroom	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	1,000	0.01	24
105	Police Station	1st flr breezeway corridor	Can fixture 2L 13w CFL	8		DO NOTHING	8	26	26	4,400	-	-
106	Police Station	1st flr breezeway corridor	Strip 4' 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	4,400	0.03	114
107	City Hall	Court records	Troffer 2x4 4L 32w T8-ELEC	2	87	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	1,000	0.06	134
108	City Hall	IT room	Troffer 2x4 4L 32w T8-ELEC	2	63	Low wattage EB & 28w lamps (4L)	2	112	88	1,000	0.02	48
109	City Hall	Multipurpose room	Troffer 2x4 4L 32w T8-ELEC	8	60	Low wattage EB & 28w lamps (4L)	8	112	88	1,125	0.10	216
110	City Hall	Multipurpose room	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
111	City Hall	Record storage	Troffer 2x4 4L 32w T8-ELEC	8	67	Low wattage EB & 28w lamps (4L)	8	112	88	125	0.01	24
112	City Hall	Break room	Troffer 2x4 4L 32w T8-ELEC	6	93	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	6	112	45	500	0.10	201
113	City Hall	Break room	Wrap 4' 2L 32w T8-ELEC	1		Low wattage EB & 28w lamps (2L)	1	58	45	250	0.00	3
114	City Hall	Basement men's restroom	Troffer 1x4 2L 32w T8-ELEC	5	23	Low wattage EB & 28w lamps (2L)	5	58	45	250	0.01	16
115	City Hall	Basement men's restroom	Strip 4' 2L 32w T8-ELEC	3		Low wattage EB & 28w lamps (2L)	3	58	45	250	0.00	10
116	City Hall	Basement women's restroom	Troffer 1x4 2L 32w T8-ELEC	1		Low wattage EB & 28w lamps (2L)	1	58	45	250	0.00	3
117	City Hall	Basement women's restroom	Strip 4' 2L 32w T8-ELEC	2		Low wattage EB & 28w lamps (2L)	2	58	45	250	0.00	7
118	City Hall	Basement fitness center	Industrial 2L 32w T8-ELEC	6	29	Low wattage EB & 28w lamps (2L)	6	58	45	2,920	0.08	228
119	City Hall	Basement mech room	Strip 2L 60w T12	2	25	Conv. Kit - EB & 28w lamps (4L)	2	144	88	250	0.01	28
120	City Hall	Basement radio room	Strip 2L 60w T12	2	31	Conv. Kit - EB & 28w lamps (4L)	2	144	88	125	0.01	14
121	City Hall	Basement EOC	Troffer 1x4 2L 32w T8-ELEC	11	31	Low wattage EB & 28w lamps (2L)	11	58	45	500	0.03	72
122	City Hall	Basement EOC	Exit LED 1L 3w	1		DO NOTHING	1	3	3	500	-	-
123	City Hall	Stairs	Wrap 4' 2L 32w T8-ELEC	3		Low wattage EB & 28w lamps (2L)	3	58	45	8,760	0.04	342
124	City Hall	Stairs	Exit LED 1L 3w	1		DO NOTHING	1	3	3	8,760	-	-

**CITY OF PRAIRIE VILLAGE, KS
LIGHTING RETROFIT SAVINGS**

Item #	Building	Room	Existing Fixture	Existing Qty	Existing Light Level (FC)	Proposed Fixture	Proposed Quantit	Existing fixture watts	Proposed fixture	Existing Hours	kW Savings	kWh Savings
125	City Hall	Human resources	Troffer 2x4 4L 32w T8-ELEC	4		Low wattage EB & 28w lamps (4L)	4	112	88	500	0.02	48
126	City Hall	Storage room	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	125	0.00	6
127	City Hall	1st floor men's restroom	Troffer 2x4 4L 32w T8-ELEC	3	130	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	3	112	45	1,000	0.10	201
128	City Hall	1st floor women's restroom	Troffer 2x4 4L 32w T8-ELEC	3		Low wattage EB & 28w lamps (4L)	3	112	88	1,000	0.03	72
129	City Hall	1st floor women's restroom	Vanity - globe incandescent lamp	28	50	Replace lamp - Sylvania LED8G25/DIM/F/830	28	40	8	1,000	0.42	896
130	City Hall	Prosecutor	Troffer 1x4 2L 32w T8-ELEC	2	92	Low wattage EB & 28w lamps (2L)	2	58	45	312	0.00	8
131	City Hall	Kitchenette	Troffer 2x4 4L 32w T8-ELEC	4	78	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	4	112	45	624	0.08	167
132	City Hall	Kitchenette	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
133	City Hall	Council chambers	Wall sconce 2L 24w CFL	12		DO NOTHING	12	48	48	624	-	-
134	City Hall	Council chambers	Surface round 4L 24w CFL	6	40	DO NOTHING	6	96	96	624	-	-
135	City Hall	Council chambers	Surface round 4L 24w CFL	10		DO NOTHING	10	96	96	624	-	-
136	City Hall	Council chambers	Can fixture 2L 13w CFL	4		DO NOTHING	4	26	26	624	-	-
137	City Hall	Council chambers	Exit incandescent 2L 20w	2		NEW LED Exit (RED)	2	40	3	8,760	0.07	648
138	City Hall	Executive conference room	Strip 3' 2L 30w T12-MAG	4		Low wattage EB & 25w lamps (2L)	4	72	50	520	0.02	46
139	City Hall	Mayor's office	Strip 3' 2L 30w T12-MAG	4	52	Low wattage EB & 25w lamps (2L)	4	72	50	832	0.03	73
140	City Hall	City administrator	Troffer 2x4 4L 32w T8-ELEC	4	100	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	4	112	45	2,600	0.27	697
141	City Hall	Server room	Troffer 2x4 4L 32w T8-ELEC	1	90	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	1	112	45	78	0.00	5
142	City Hall	Server room	Wrap 4' 2L 32w T8-ELEC	1	40	Low wattage EB & 28w lamps (2L)	1	58	45	2,600	0.01	34
143	City Hall	Mayor corridor	Can 65w incandescent	6		Screw-in TWIST CFL 13w (1L)	6	65	12	2,600	0.32	827
144	City Hall	City clerk	Wrap 4L 32w T8-ELEC	2	127	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	2	112	45	2,600	0.13	348
145	City Hall	Assistant city administrator	Troffer 2x4 4L 32w T8-ELEC	1	59	Low wattage EB & 28w lamps (4L)	1	112	88	2,600	0.02	62
146	City Hall	Open office	Troffer 2x4 4L 32w T8-ELEC	4	105	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	4	112	45	2,600	0.27	697
147	City Hall	Open office	Wrap 4L 32w T8-ELEC	2	120	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	2	112	45	2,600	0.13	348
148	City Hall	Open office	Task 1L 32w T8-ELEC	5		Lamp replacement with 28 watt lamp (1L)	5	31	29	2,600	0.01	26
149	City Hall	Finance director	Troffer 2x4 4L 32w T8-ELEC	2	28	Low wattage EB & 28w lamps (4L)	2	112	88	2,600	0.05	125
150	City Hall	File work room	Troffer 2x4 4L 32w T8-ELEC	2	40	Low wattage EB & 28w lamps (4L)	2	112	88	2,600	0.05	125
151	City Hall	Finance assistant	Troffer 2x4 4L 32w T8-ELEC	2	37	Low wattage EB & 28w lamps (4L)	2	112	88	2,600	0.05	125
152	City Hall	Receptionist	Troffer 2x4 4L 32w T8-ELEC	4	95	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	4	112	45	2,600	0.27	697
153	City Hall	Codes/Admin open office	Troffer 2x4 4L 32w T8-ELEC	9	69	Low wattage EB & 28w lamps (4L)	9	112	88	2,250	0.22	486
154	City Hall	Dennis Enslinger's office	Troffer 1x4 2L 32w T8-ELEC	4	45	Low wattage EB & 28w lamps (2L)	4	58	45	2,250	0.05	117
155	City Hall	??	Troffer 1x4 2L 32w T8-ELEC	2	35	Low wattage EB & 28w lamps (2L)	2	58	45	2,250	0.03	59
156	City Hall	Grading's office	Troffer 1x4 2L 32w T8-ELEC	2	45	Low wattage EB & 28w lamps (2L)	2	58	45	2,250	0.03	59
157	City Hall	Court open office	Troffer 2x4 4L 32w T8-ELEC	9	104	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	9	112	45	2,250	0.60	1,357
158	City Hall	Court open office	Troffer 2x2 2L 32w T8-ELECT	1		DO NOTHING	1	58	58	2,250	-	-
159	City Hall	Court office	Troffer 2x4 4L 32w T8-ELEC	2	70	Low wattage EB & 28w lamps (4L)	2	112	88	2,250	0.05	108
160	City Hall	Mechanical room	Wrap 4' 2L 32w T8-ELEC	7		Low wattage EB & 28w lamps (2L)	7	58	45	2,250	0.09	205
161	City Hall	Corridors	Wrap 4L 32w T8-ELEC	4		Low wattage EB & 28w lamps (4L)	4	112	88	2,250	0.10	216
162	City Hall	Corridors	Troffer 2x4 4L 32w T8-ELEC	9		Low wattage EB & 28w lamps (4L)	9	112	88	2,250	0.22	486
163	City Hall	Corridors	Can 65w incandescent	6		Screw-in TWIST CFL 13w (1L)	6	65	12	2,250	0.32	716
164	City Hall	Corridors	Track lighting spots - MR16	36		Replace lamp - Sylvania LED6MR16/DIM/830/FL40	36	40	6	2,250	1.22	2,754
165	City Hall	Corridors	Track lighting spots - cone shape	15		Replace lamp - Sylvania LED8PAR20/DIM/830/FL40	15	50	8	2,250	0.63	1,418
166	City Hall	Corridors	Track lighting spots - cylinder shape	3		Replace lamp - Sylvania LED8PAR20/DIM/830/FL40	3	50	8	2,250	0.13	284
165	City Hall	Corridors	Troffer 1x4 2L 32w T8-ELEC	3		Low wattage EB & 28w lamps (2L)	3	58	45	2,250	0.04	88
166	City Hall	Corridors	Can 65w incandescent	2		Screw-in TWIST CFL 13w (1L)	2	65	12	2,250	0.11	239
167	City Hall	Pool electrical room	Vapor tight 8' 2L 59w T8-ELEC	6	52	Conv. Kit - EB & 28w lamps (4L)	6	116	88	850	0.07	143
168	City Hall	Pool pump room	Vapor tight 8' 2L 59w T8-ELEC	13		Conv. Kit - EB & 28w lamps (4L)	13	116	88	850	0.15	309
169	City Hall	Pool pump room	Vapor tight 4' 2L 32w T8-ELEC	1		Low wattage EB & 28w lamps (2L)	1	58	45	850	0.01	11
170	City Hall	Pool pump room hall	Vapor tight 8' 2L 59w T8-ELEC	2		Conv. Kit - EB & 28w lamps (4L)	2	116	88	850	0.02	48
171	City Hall	Chlorine room 1	Vapor tight 8' 2L 59w T8-ELEC	1		Conv. Kit - EB & 28w lamps (4L)	1	116	88	850	0.01	24
172	City Hall	Chlorine room 2	Vapor tight 8' 2L 59w T8-ELEC	2		Conv. Kit - EB & 28w lamps (4L)	2	116	88	850	0.02	48
173	City Hall	East pool men's restroom	Vapor tight 4' 2L 34w T12	2		Low wattage EB & 28w lamps (2L)	2	74	45	850	0.02	49
174	City Hall	East pool women's restroom	Vapor tight 4' 2L 34w T12	2		Low wattage EB & 28w lamps (2L)	2	74	45	850	0.02	49
175	City Hall	Pool exterior poles	Pole floods - 1L 1000w MH	14		DO NOTHING	14	1150	1150	850	-	-
176	City Hall	Pool exterior poles	Pole floods - 2L 400w MH	10		DO NOTHING	10	920	920	850	-	-
177	City Hall	East storage	Vapor tight 4' 2L 34w T12	4		Low wattage EB & 28w lamps (2L)	4	74	45	850	0.05	99
178	Community Center	Mechanical room	Strip 8' 4L 32w T8-ELEC	1	30	Low wattage EB & 28w lamps (4L)	1	110	88	1,000	0.01	22
179	Community Center	Hallway	Troffer 2x4 4L 32w T8-ELEC	2		Low wattage EB & 28w lamps (4L)	2	112	88	1,000	0.02	48
180	Community Center	Family restroom	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	1,000	0.01	24
181	Community Center	Men's restroom	Vanity - globe incandescent lamp	4		Replace lamp - Sylvania LED8G25/DIM/F/830	4	40	8	1,000	0.06	128
182	Community Center	Women's restroom	Vanity - globe incandescent lamp	4		Replace lamp - Sylvania LED8G25/DIM/F/830	4	40	8	1,000	0.06	128
183	Community Center	Mud rooms	Porcelain socket - 1L 65w incandescent	2		Screw-in TWIST CFL 13w (1L)	2	65	12	1,000	0.05	106
184	Community Center	Common area	Solid metal sides 4L 32w T8-ELEC	10	46	Low wattage EB & 28w lamps (4L)	10	112	88	1,000	0.11	240

**CITY OF PRAIRIE VILLAGE, KS
LIGHTING RETROFIT SAVINGS**

Item #	Building	Room	Existing Fixture	Existing Qty	Existing Light Level (FC)	Proposed Fixture	Proposed Quantit	Existing fixture watts	Proposed fixture	Existing Hours	kWh Savings	kWh Savings
185	Community Center	Common area	Can 75w 1L incandescent flood lamp	9		Replace lamp - Sylvania CF23EL/BR40/BL/1 screw in flood	9	75	23	1,000	0.22	468
186	Community Center	Kitchen	Troffer 2x4 4L 32w T8-ELEC	7	140	Delamp - 4L to 2L - low wattage EB & 28w lamps (2L)	7	112	45	1,000	0.22	469
187	Community Center	Entry	Square surface 13w CFL	1		DO NOTHING	1	13	13	1,000	-	-
188	PS/CH/CC	Exterior	Globe - pole - 175w MH	6		Retrofit kit - Sylvania area light LED 55	6	200	55	4,400	0.87	3,828
189	PS/CH/CC	Exterior	Globe - column - 175w MH	2		Retrofit kit - Sylvania area light LED 55	2	200	55	4,400	0.29	1,276
190	PS/CH/CC	Exterior	Inverted bowl - pole - 175w MH	11		Retrofit kit - Lithonia MRP series 100w induction	11	200	100	4,400	1.10	4,840
191	PS/CH/CC	Exterior	Twin inverted bowl - pole 175w MH	2		Retrofit kit - 1st Source Lighting - UISB series 100w induction	2	400	100	4,400	0.60	2,640
192	PS/CH/CC	Exterior	Flood - pole - 250w MH	1		DO NOTHING	1	288	288	4,400	-	-
193	PS/CH/CC	Exterior	Twin flood - pole - 250w MH	1		DO NOTHING	1	576	576	4,400	-	-
194	PS/CH/CC	Exterior	Box fixture - pole - 175w MH	5		Retrofit kit - Lithonia MRP series 100w induction	5	200	100	4,400	0.50	2,200
195	PS/CH/CC	Exterior	Flood - wall - 100w MH	1		NEW 42T flood light - RAB Future Flood	1	115	42	4,400	0.07	321
196	PS/CH/CC	Exterior	Wall pack 70w MH	5		NEW 40w induction wall pack - USLightingTech	5	81	40	4,400	0.21	902
197	PS/CH/CC	Exterior	Flood - ground - 100w MH	5		NEW 42T flood light - RAB Future Flood	5	115	42	4,400	0.37	1,606
198	PS/CH/CC	Exterior	Wall pack - stairs - 100w MH	1		DO NOTHING	1	115	115	4,400	-	-
199	PW A	Main open office	Parabolic 2'x4' 3L 32 watt T8-ELEC	13	95	Low wattage EB & 28w lamps (3L)	13	87	63	2,250	0.31	702
200	PW A	Main open office	Task 1L 32w T8-ELEC	3		Lamp replacement with 28 watt lamp (1L)	3	31	29	2,250	0.01	14
201	PW A	Work room	Parabolic 2'x4' 3L 32 watt T8-ELEC	3	102	Low wattage EB & 28w lamps (3L)	3	87	63	2,250	0.07	162
202	PW A	Restroom	Troffer 2x4 4L 32w T8-ELEC	1	90	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	1	112	45	500	0.02	34
203	PW A	Director's office	Parabolic 2'x4' 3L 32 watt T8-ELEC	4	125	Low wattage EB & 28w lamps (3L)	4	87	63	2,250	0.10	216
204	PW A	NE office	Parabolic 2'x4' 3L 32 watt T8-ELEC	4	92	Low wattage EB & 28w lamps (3L)	4	87	63	2,250	0.10	216
205	PW A	East office	Parabolic 2'x4' 3L 32 watt T8-ELEC	2	65	Low wattage EB & 28w lamps (3L)	2	87	63	2,250	0.05	108
206	PW A	Plan area	Troffer 2x4 4L 32w T8-ELEC	1	105	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	1	112	45	2,250	0.07	151
207	PW A	Conference room	Parabolic 2'x4' 3L 32 watt T8-ELEC	4	105	Low wattage EB & 28w lamps (3L)	4	87	63	1,000	0.05	96
208	PW A	Mechanic's office	Troffer 2x4 4L 32w T8-ELEC	6	60	Low wattage EB & 28w lamps (4L)	6	112	88	2,250	0.14	324
209	PW A	Storage closet	Troffer 2x4 4L 32w T8-ELEC	1	75	Low wattage EB & 28w lamps (4L)	1	112	88	250	0.00	6
210	PW A	Storage closet	Troffer 2x4 3L 32w T8-ELEC	1	95	Delamp from 3L to 2L - low wattage EB & 28w lamps (2L)	1	87	45	250	0.00	11
211	PW A	Kitchen	Troffer 2x4 4L 32w T8-ELEC	2	87	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	2	112	45	2,250	0.13	302
212	PW A	Men's locker	Troffer 2x4 4L 32w T8-ELEC	5	75	Low wattage EB & 28w lamps (4L)	5	112	88	2,250	0.12	270
213	PW A	Men's locker	Troffer 2x2 2L 32w T8-ELECT	1	54	DO NOTHING	1	58	58	2,250	-	-
214	PW A	Hallway	Troffer 2x4 4L 32w T8-ELEC	1		Low wattage EB & 28w lamps (4L)	1	112	88	2,250	0.02	54
215	PW A	Hallway	Exit incandescent 2L 20w - wbugeye	1		NEW LED Exit (RED) - wbug eye	1	40	3	8,760	0.04	324
216	PW A	Tool crib	Strip 8' 2L 59w T8-ELEC	4	27	Conv. Kit - EB & 28w lamps (4L)	4	116	88	2,250	0.11	252
217	PW A	Compressor room	Strip 8' 2L 59w T8-ELEC	2	25	Conv. Kit - EB & 28w lamps (4L)	2	116	88	1,000	0.03	56
218	PW A	Telephone room	Wrap 4' 2L 32w T8-ELEC	2	56	Low wattage EB & 28w lamps (2L)	2	58	45	1,000	0.01	26
219	PW A	Vehicle bay	Low bay 1L 250w MV	15	31	NEW - 6 lamp T8 - Williams AL series - 28w lamps w/HBF ballast	15	287	192	2,250	1.43	3,206
220	PW A	Vehicle bay	Strip 8' 2L 110w T12	2		Conv. Kit - EB & 28w lamps (4L) - high ballast factor ballast	2	253	127	8,760	0.25	2,208
221	PW A	Equipment bay	Strip 8' 2L 59w T8-ELEC	4		Conv. Kit - EB & 28w lamps (4L)	4	116	88	2,250	0.11	252
222	PW A	Equipment bay	Low bay 1L 250w MV	2		NEW - 6 lamp T8 - Williams AL series - 28w lamps w/HBF ballast	2	287	192	2,250	0.19	428
223	PW A	Exterior	Wall flood 50w HPS	8		NEW 42T flood light - RAB Future Flood	8	60	42	4,400	0.14	634
224	PW A	Exterior gas pump	Canopy 175w HPS	10		NEW canopy fixture - 42T compact fluorescent - Williams SMSQ12 s	10	200	42	4,400	1.58	6,952
225	PW A	Exterior salt barn	Low bay 1L 175w MV	3		NEW low bay fixture - 42T compact fluorescent - Williams SMPG ser	3	200	42	4,400	0.47	2,086
226	PW D	Exterior	Wall pack 50w HPS	2		NEW 40w induction wall pack - USLightingTech	2	57	40	4,400	0.03	150
227	PW D	Training/lunch room	Parabolic 2'x4' 4L 32 watt T8-ELEC	8	74	Low wattage EB & 28w lamps (4L)	8	112	88	2,125	0.19	408
228	PW D	Training/lunch room	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
229	PW D	Restroom	Troffer 2x4 4L 32w T8-ELEC	2	133	Low wattage EB & 28w lamps (4L)	2	112	88	2,125	0.05	102
230	PW D	Sign bay	Strip 4' 2L 32w T8-ELEC	2	20	Low wattage EB & 28w lamps (2L)	2	58	45	2,125	0.03	55
231	PW D	Sign storage	Troffer 2x4 4L 32w T8-ELEC	2	74	Low wattage EB & 28w lamps (4L)	2	112	88	2,125	0.05	102
232	PW D	Sign work room	Troffer 2x4 4L 32w T8-ELEC	4	83	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	4	112	45	2,125	0.27	570
233	PW D	Sign work room	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
234	PW D	Kitchen	Troffer 2x4 4L 32w T8-ELEC	4	57	Low wattage EB & 28w lamps (4L)	4	112	88	2,125	0.10	204
235	PW D	Kitchen	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
236	PW D	Crew leader office	Parabolic 2'x4' 3L 32 watt T8-ELEC	6	70	Low wattage EB & 28w lamps (3L)	6	87	63	2,125	0.14	306
237	PW D	Crew leader office	Exit incandescent 2L 20w	1		NEW LED Exit (RED)	1	40	3	8,760	0.04	324
238	PW D	Mike's office	Troffer 2x4 4L 32w T8-ELEC	3	90	Retrofit kit - white reflector, low wattage EB & 28w lamps (2L)	3	112	45	2,125	0.20	427
239	PW D	Mower bay 1	Strip 8' 2L 110w T12	4		Conv. Kit - EB & 28w lamps (4L) - high ballast factor ballast	4	253	127	2,125	0.50	1,071
240	PW D	Building maint. room	Strip 8' 2L 59w T8-ELEC	2	61	Conv. Kit - EB & 28w lamps (4L)	2	116	88	2,125	0.06	119
241	PW D	Building maint. room	Strip 8' 2L 110w T12	2	60	Conv. Kit - EB & 28w lamps (4L) - high ballast factor ballast	2	253	127	2,125	0.25	536
242	PW D	Mower bay 2	Strip 8' 2L 110w T12	3		Conv. Kit - EB & 28w lamps (4L) - high ballast factor ballast	3	253	127	2,125	0.38	803
243	PW G	Drainage/storage	Wrap 4' 2L 34w T12-MAG	2	45	Low wattage EB & 28w lamps (2L)	2	74	45	250	0.01	15
244	PW G	Restroom	Wrap 4' 2L 34w T12-MAG	2		Low wattage EB & 28w lamps (2L)	2	74	45	250	0.01	15
245	PW G	Restroom	Strip 4' 1L 34w T12-MAG	1		Low wattage EB & 28w lamps (1L)	1	40	29	250	0.00	3
246	PW G	Tire storage	Wrap 4' 2L 34w T12-MAG	2		Low wattage EB & 28w lamps (2L)	2	74	45	250	0.01	15

**CITY OF PRAIRIE VILLAGE, KS
LIGHTING RETROFIT SAVINGS**

Item #	Building	Room	Existing Fixture	Existing Qty	Existing Light Level (FC)	Proposed Fixture	Proposed Quantit	Existing fixture watts	Proposed fixture	Existing Hours	kW Savings	kWh Savings
247	PW G	South vehicle bay	Strip 2L 60w T12	7		Conv. Kit - EB & 28w lamps (4L)	7	144	88	1,000	0.19	392
248	PW G	North vehicle bay	Strip 2L 60w T12	6		Conv. Kit - EB & 28w lamps (4L)	6	144	88	1,000	0.16	336
249	PW G	North vehicle bay	Strip 4' 2L 34w T12-MAG	6		Low wattage EB & 28w lamps (2L)	6	74	45	1,000	0.08	174
250	PW G	North vehicle bay	Wrap 4' 2L 34w T12-MAG	6		Low wattage EB & 28w lamps (2L)	6	74	45	1,000	0.08	174
251	PW G	North code storage	Wrap 4' 2L 34w T12-MAG	2		Low wattage EB & 28w lamps (2L)	2	74	45	1,000	0.03	58
252	PW G	North code storage	Wrap 4' 2L 34w T12-MAG	2		Low wattage EB & 28w lamps (2L)	2	74	45	1,000	0.03	58
253	PW G	Restroom	Wrap 4' 2L 34w T12-MAG	1		Low wattage EB & 28w lamps (2L)	1	74	45	250	0.00	7
254	PW G	Restroom	Strip 4' 1L 34w T12-MAG	1		Low wattage EB & 28w lamps (1L)	1	40	29	250	0.00	3
255	PW G	Exterior	Wall pack 50w HPS	4		NEW 40w induction wall pack - USLightingTech	4	57	40	4,400	0.07	299
256	PW G	Exterior	Wall flood 50w HPS	2		NEW 42T flood light - RAB Future Flood	2	60	42	4,400	0.04	158
257	PW G	Exterior	Pole 1L 175w MV	1		Retrofit kit - 1st Source Lighting - UISB series 100w induction	1	200	100	4,400	0.10	440
TOTALS										2,114	26.6	84,504

Water Savings Calculations

City Of Prairie Village, KS Project Summary

City Of Prairie Village, KS All Buildings

TOILETS/ URINALS		EXISTING QTY	EXISTING AVG	QTY OF	QTY OF	AVG UPGRADED	GALLONS SAVED	USES	GALLONS USED	ANNUAL GAL	ANNUAL \$
ITEM	OF FIXTURES	USAGE, GPF	UPGRADES	NON-UPGRADES	USAGE, GAL.	PER FLUSH	PER YEAR	PER YEAR	PER YEAR	SAVED	SAVINGS
Flushometer Toilets	25		21	4					313,194	147,601	\$ 969
Tank Toilets	4		3	1					43,328	21,078	\$ 186
Urinals	12		0	12					46,583	0	\$ -

SHOWERS		EXISTING QTY	EXISTING	QTY OF	QTY OF	AVG UPGRADED	GALLONS SAVED	USAGE	GALLONS USED	ANNUAL	ANNUAL \$
ITEM	SHOWERS	USAGE, GPM	UPGRADES	NON-UPGRADES	USAGE, GPM	PER MINUTE	PER YEAR, MIN	PER YEAR, MIN	PER YEAR	SAVINGS	SAVINGS
Various	6		0	6					0	0	\$ -

FAUCETS		EXISTING QTY	EXISTING	QTY OF	QTY OF	AVG UPGRADED	GALLONS SAVED	USAGE	GALLONS USED	ANNUAL	ANNUAL \$
ITEM	FAUCETS	USAGE, GPM	UPGRADES	NON-UPGRADES	USAGE, GPM	PER MINUTE	PER YEAR, MIN	PER YEAR, MIN	PER YEAR	SAVINGS	SAVINGS
Lavatory	30		26	4					50,886	23,654	\$ 161
Utility	0		0	0					0	0	\$ -
Kitchen	7		5	2					10,811	3,261	\$ 21
Pre-Rinse	1		0	1					0	0	\$ -

OTHER	QTY	EXISTING USAGE, GPY	QTY OF UPGRADES	QTY OF NON-UPGRADES	GALLONS USED PER YEAR	ANNUAL GAL SAVED	ANNUAL \$ SAVINGS

FACILITY SUMMARY

Existing Annual Metered Water Usage :	725,200	gallons		Annual Water Savings :	195,594	gallons
Calculated Annual Water Usage :	464,801	gallons		Annual Water Savings :	27%	of metered
Calculated Consumption Compared to Metered:	64%			Annual Water Savings :	42%	of calculated

Facility Annual Water and Sewer Savings (\$)	\$1,337
Facility Annual Maintenance Savings (\$)	\$22
Facility Annual Hot Water Savings (\$)	\$58
Total Annual Savings (\$)	\$1,417
Facility Upgrade Costs (\$)	\$9,023
Simple Payback (yrs)	6.4

Notes:

GEOTHERMAL HEAT PUMP SYSTEM

Energy Savings Calculations

**City of Prairie Village
Geothermal Energy Savings Calculations**

	Heating Savings						Cooling Savings					Pump Energy			TOTAL MCF	TOTAL kWh SAVINGS
	Existing Efficiency	Existing MCF	Heating Load in BTUs	New COP	Proposed kWh	kWh Savings	Existing EER	Existing kWh	New EER	Proposed kWh	kWh Savings	kW	Hours	kWh		
JAN	78%	431	336,180,000	4.20	23,452	(23,021)	9.0	-	24.0	-	-	4	744	(2,775)	431	(25,796)
FEB	78%	419	326,820,000	4.40	21,763	(21,344)	9.0	-	23.0	-	-	4	672	(2,507)	419	(23,851)
MAR	78%	222	173,160,000	4.60	11,029	(10,807)	9.0	-	22.0	-	-	4	744	(2,775)	222	(13,583)
APR	78%	93	72,540,000	4.80	4,428	(4,335)	9.0	12,059	21.0	5,168	6,891	4	720	(2,686)	93	(130)
MAY	78%	117	91,260,000	5.00	5,348	(5,231)	9.0	17,336	19.0	8,212	9,124	4	744	(2,775)	117	1,118
JUN	78%	47	36,660,000	5.00	-	47	9.0	27,386	15.0	16,432	10,954	4	720	(2,686)	47	8,316
JUL	78%	-	-	-	-	-	9.0	32,687	15.0	19,612	13,075	4	744	(2,775)	-	10,300
AUG	78%	-	-	-	-	-	9.0	28,510	15.0	17,106	11,404	4	744	(2,775)	-	8,629
SEP	78%	-	-	-	-	-	9.0	26,072	18.0	13,036	13,036	4	720	(2,686)	-	10,350
OCT	78%	71	55,380,000	4.70	3,452	(3,381)	9.0	13,880	21.0	5,949	7,931	4	744	(2,775)	71	1,775
NOV	78%	114	88,920,000	4.40	5,921	(5,807)	9.0	8,546	23.0	3,344	5,202	4	720	(2,686)	114	(3,291)
DEC	78%	221	172,380,000	4.20	12,025	(11,804)	9.0	-	25.0	-	-	4	744	(2,775)	221	(14,580)
TOTAL		1,735						166,476		TOTAL SAVINGS					1,735	(40,742)

City Hall															
	kWh	MCF				kWh Savings					kWh Savings				TOTAL kWh SAVINGS
JAN	0	177.687				(6,369.74)					-				(6,369.74)
FEB	0	113.813				(5,905.65)					-				(5,905.65)
MAR	104.16	79.232				(2,990.29)					-				(2,990.29)
APR	1330.56	15.765				(1,199.42)					1,623.24				423.82
MAY	2249.856	36.921				(1,447.30)					2,149.34				702.05
JUN	7418.88	0				13.00					2,580.47				2,593.48
JUL	8749.44	0				-					3,079.96				3,079.96
AUG	7499.52	0				-					2,686.38				2,686.38
SEP	5322.24	0				-					3,070.82				3,070.82
OCT	833.28	0				(935.59)					1,868.37				932.78
NOV	201.6	0				(1,606.79)					1,225.39				(381.40)
DEC	0	42.006				(3,266.15)					-				(3,266.15)
TOTAL	33,710	465													
	23.6%	27.7%													

Police Headquarters															
	kWh	MCF				kWh Savings					kWh Savings				TOTAL kWh SAVINGS
JAN	0	206.5				(14,517.98)					-				(14,517.98)
FEB	0	257.8				(13,460.22)					-				(13,460.22)
MAR	802.032	109.7				(6,815.51)					-				(6,815.51)
APR	6985.44	55.8				(2,733.74)					4,756.60				2,022.86
MAY	11082.62	64.5				(3,298.70)					6,298.24				2,999.54
JUN	14112	39.9				29.64					7,561.57				7,591.21
JUL	19686.24	0				-					9,025.24				9,025.24
AUG	17498.88	0				-					7,871.92				7,871.92
SEP	14112	0				-					8,998.46				8,998.46
OCT	7874.496	65.4				(2,132.41)					5,474.89				3,342.48
NOV	4656.96	100				(3,662.21)					3,590.76				(71.45)
DEC	1968.624	161.2				(7,444.25)					-				(7,444.25)
TOTAL	98,779	1,061													
	69.0%	63.1%													

Community Center															
	kWh	MCF				kWh Savings					kWh Savings				TOTAL kWh SAVINGS
JAN	0	40.9				(2,133.63)					-				(2,133.63)
FEB	0	41.4				(1,978.18)					-				(1,978.18)
MAR	0	27.5				(1,001.64)					-				(1,001.64)
APR	0	15.9				(401.76)					511.01				109.25
MAY	729.12	10.1				(484.79)					676.63				191.84
JUN	1713.6	0				4.36					812.35				816.71
JUL	2213.4	0				-					969.60				969.60
AUG	2656.08	0				-					845.70				845.70
SEP	1260	0				-					966.72				966.72
OCT	843.696	0				(313.39)					588.18				274.79
NOV	831.6	8				(538.21)					385.76				(152.45)
DEC	364.56	12.1				(1,094.04)					-				(1,094.04)
TOTAL	10,612	156													
	7.4%	9.3%													

Vending Machines Savings Calculations

City Hall

Qty of Vending Machines =

1 with lights

0 without lights

	Total Vending kW	Existing Hours	% Savings	Proposed Hours	kWh Savings
JAN	0.4	744	30%	521	89
FEB	0.4	672	30%	470	81
MAR	0.4	744	30%	521	89
APR	0.4	720	30%	504	86
MAY	0.4	744	30%	521	89
JUN	0.4	720	30%	504	86
JUL	0.4	744	30%	521	89
AUG	0.4	744	30%	521	89
SEP	0.4	720	30%	504	86
OCT	0.4	744	30%	521	89
NOV	0.4	720	30%	504	86
DEC	0.4	744	30%	521	89
TOTAL					1,051

Police Headquarters

Qty of Vending Machines =

1 with lights

0 without lights

	Total Vending kW	Existing Hours	% Savings	Proposed Hours	kWh Savings
JAN	0.4	744	30%	521	89
FEB	0.4	672	30%	470	81
MAR	0.4	744	30%	521	89
APR	0.4	720	30%	504	86
MAY	0.4	744	30%	521	89
JUN	0.4	720	30%	504	86
JUL	0.4	744	30%	521	89
AUG	0.4	744	30%	521	89
SEP	0.4	720	30%	504	86
OCT	0.4	744	30%	521	89
NOV	0.4	720	30%	504	86
DEC	0.4	744	30%	521	89
TOTAL					1,051

Public Works B

Qty of Vending Machines =

1 with lights

0 without lights

	Total Vending kW	Existing Hours	% Savings	Proposed Hours	kWh Savings
JAN	0.4	744	30%	521	89
FEB	0.4	672	30%	470	81
MAR	0.4	744	30%	521	89
APR	0.4	720	30%	504	86
MAY	0.4	744	30%	521	89
JUN	0.4	720	30%	504	86
JUL	0.4	744	30%	521	89
AUG	0.4	744	30%	521	89
SEP	0.4	720	30%	504	86
OCT	0.4	744	30%	521	89
NOV	0.4	720	30%	504	86
DEC	0.4	744	30%	521	89
TOTAL					1,051

City of Prairie Village
Building Envelope/Air Infiltration Calculations

Air Leakage	Opening Length (feet)	Opening Width (inches)	Area of Opening (square feet)	Annual Cost of Leakage (kWh)	Annual Cost of Leakage (Therms)
Community Center					
Building K Factor: 125					
Doors	40	1/16	0.21		
Doors	20	1/16	0.10		
Roof/Wall	118	1/8	1.23		
Windows	20	1/8	0.21		
Total			1.75	467	797

City Hall					
Building K Factor: 115					
Doors	300	1/16	1.56		
Doors	60	1/16	0.31		
Vents	44	1/16	0.23		
Roof/Wall	887	1/8	9.24		
Roof/Level	725	1/8	7.55		
Windows	482	1/16	2.51		
Total			21.41	8,967	5,253

Public Works Building A					
Building K Factor: 125					
Doors	100	1/16	0.52		
Roof/Wall	190	1/16	0.99		
Roof/Wall	60	1/2	2.50		
Total			4.01	1,826	1,070

Public Works Building B					
Building K Factor: 125					
Doors	60	1/16	0.31		
Roof/Wall	170	1/16	0.89		
Roof/Wall	35	1/16	0.18		
Total			1.38	628	328

City of Prairie Village
All Electric Rate Change Analysis

CITY HALL - MED GENERAL SERVICE

Month	kW	kWh	Hours
JAN	41.6	19,440	467
FEB	40.8	19,227	471
MAR	45.6	18,293	401
APR	60.8	20,853	343
MAY	67.2	22,040	328
JUN	87.2	26,960	309
JUL	81.6	28,453	349
AUG	75.2	28,000	372
SEP	64.8	24,773	382
OCT	52.8	20,853	395
NOV	48.8	19,413	398
DEC	45.6	21,610	474

Geo save/add

kW	kWh
(33.5)	(6,370)
(30.0)	(5,906)
(23.0)	(2,990)
(16.0)	424
-	702
-	2,593
-	3,080
-	2,686
-	3,071
(12.0)	933
(22.0)	(381)
(28.0)	(3,266)

Post Geothermal Projected Utilities

kW	kWh	Hours
75.1	25,810	344
70.8	25,132	355
68.6	21,284	310
76.8	20,430	266
67.2	21,338	318
87.2	24,367	279
81.6	25,373	311
75.2	25,314	337
64.8	21,703	335
64.8	19,921	307
70.8	19,795	280
73.6	24,876	338

POLICE DEPT - MED GENERAL SERVICE

Month	kW	kWh	Hours
JAN	49.6	26,160	527
FEB	50.4	25,360	503
MAR	72.8	25,120	345
APR	72.8	34,720	477
MAY	87.2	38,560	442
JUN	102.4	42,720	417
JUL	98.4	46,000	467
AUG	97.6	42,160	432
SEP	90.4	44,160	488
OCT	79.2	36,480	461
NOV	71.2	32,560	457
DEC	68.8	30,240	440

Geo save/add

kW	kWh
(40.0)	(14,518)
(40.0)	(13,460)
(20.0)	(6,816)
(20.0)	2,023
-	3,000
-	7,591
-	9,025
-	7,872
-	8,998
(15.0)	3,342
(20.0)	(71)
(23.0)	(7,444)

kW	kWh	Hours
49.6	26,160	527
50.4	25,360	503
72.8	25,120	345
72.8	34,720	477
87.2	38,560	442
102.4	42,720	417
98.4	46,000	467
97.6	42,160	432
90.4	44,160	488
79.2	36,480	461
71.2	32,560	457
68.8	30,240	440

COMMUNITY CENTER - SM GENERAL SERVICE

Month	kW	kWh	Hours
JAN	8.2	2,621	320
FEB	8.2	1,325	162
MAR	5.2	1,092	210
APR	7.3	991	136
MAY	8.9	1,241	139
JUN	15.7	2,211	141
JUL	15.5	2,738	177
AUG	16.5	2,855	173
SEP	10.7	1,643	154
OCT	4.9	1,051	215
NOV	4.9	1,078	220
DEC	8.9	3,340	375

Geo save/add

kW	kWh
(5.00)	(2,134)
(5.00)	(1,978)
(5.00)	(1,002)
(4.00)	109
(3.00)	192
-	817
-	970
-	846
(3.00)	967
(6.00)	275
(6.00)	(152)
(6.00)	(1,094)

kW	kWh	Hours
8.2	2,621	320
8.2	1,325	162
5.2	1,092	210
7.3	991	136
8.9	1,241	139
15.7	2,211	141
15.5	2,738	177
16.5	2,855	173
10.7	1,643	154
4.9	1,051	215
4.9	1,078	220
8.9	3,340	375

City of Prairie Village
All Electric Rate Change Analysis

CITY HALL - MGS w/Space Heat

\$/kW	kWh			\$/kWh			TOTAL \$
	Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3	
\$ 1.74	13,518	12,292	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,525.75
\$ 1.74	12,744	12,388	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,469.08
\$ 1.74	12,348	8,936	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,305.78
\$ 1.74	13,824	6,606	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,331.55
\$ 1.74	12,096	9,242	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,297.88
\$ 1.74	15,696	8,671	-	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 1,764.20
\$ 1.74	14,688	10,685	-	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 1,773.91
\$ 1.74	13,536	11,778	-	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 1,727.10
\$ 1.74	11,664	10,039	-	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 1,482.97
\$ 1.74	11,664	8,257	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,226.39
\$ 1.74	12,744	7,051	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,264.39
\$ 1.74	13,248	11,628	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,479.24

POLICE DEPT - MGS w/Space Heat

\$/kW	kWh			\$/kWh			TOTAL \$
	Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3	
\$ 1.74	8,928	8,928	8,304	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,306.80
\$ 1.74	9,072	9,072	7,216	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,288.43
\$ 1.74	13,104	12,016	-	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,482.88
\$ 1.74	13,104	13,104	8,512	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,799.37
\$ 1.74	15,696	15,696	7,168	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 2,057.56
\$ 1.74	18,432	18,432	5,856	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 2,749.75
\$ 1.74	17,712	17,712	10,576	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 2,881.86
\$ 1.74	17,568	17,568	7,024	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 2,690.68
\$ 1.74	16,272	16,272	11,616	\$ 0.07631	\$ 0.04783	\$ 0.04840	\$ 2,739.52
\$ 1.74	14,256	14,256	7,968	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,915.85
\$ 1.74	12,816	12,816	6,928	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,714.73
\$ 1.74	12,384	12,384	5,472	\$ 0.06833	\$ 0.03835	\$ 0.03228	\$ 1,617.47

COMMUNITY CENTER - SGS w/Space Heat

\$/kW	kWh			\$/kWh			TOTAL \$
	Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3	
\$ -	1,476	1,145	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 196.63
\$ -	1,325	-	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 129.30
\$ -	936	156	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 98.49
\$ -	991	-	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 96.65
\$ -	1,241	-	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 121.10
\$ -	2,211	-	-	\$ 0.122560	\$ 0.053810	\$ 0.048090	\$ 270.98
\$ -	2,738	-	-	\$ 0.122560	\$ 0.053810	\$ 0.048090	\$ 335.61
\$ -	2,855	-	-	\$ 0.122560	\$ 0.053810	\$ 0.048090	\$ 349.91
\$ -	1,643	-	-	\$ 0.122560	\$ 0.053810	\$ 0.048090	\$ 201.41
\$ -	882	169	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 93.83
\$ -	882	196	-	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 95.06
\$ -	1,602	1,602	136	\$ 0.09756	\$ 0.04597	\$ 0.03625	\$ 234.87

City of Prairie Village
All Electric Rate Change Analysis

	\$/kW	kWh			\$/kWh			TOTAL \$	SAVINGS					
		Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3							
\$	2.34	13,518	12,292	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,020.22	\$	505.53
\$	2.34	12,744	12,388	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	981.33	\$	487.75
\$	2.34	12,348	8,936	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	875.99	\$	429.80
\$	2.34	13,824	6,606	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	897.78	\$	433.77
\$	2.34	12,096	9,242	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	870.03	\$	427.84
\$	1.74	15,696	8,671	-	\$	0.07631	\$	0.04783	\$	0.04840	\$	1,764.20	\$	-
\$	1.74	14,688	10,685	-	\$	0.07631	\$	0.04783	\$	0.04840	\$	1,773.91	\$	-
\$	1.74	13,536	11,778	-	\$	0.07631	\$	0.04783	\$	0.04840	\$	1,727.10	\$	-
\$	1.74	11,664	10,039	-	\$	0.07631	\$	0.04783	\$	0.04840	\$	1,482.97	\$	-
\$	2.34	11,664	8,257	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	822.97	\$	403.42
\$	2.34	12,744	7,051	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	851.09	\$	413.29
\$	2.34	13,248	11,628	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	989.64	\$	489.60

	\$/kW	kWh			\$/kWh			TOTAL \$	SAVINGS					
		Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3							
\$	2.34	8,928	8,928	8,304	\$	0.04029	\$	0.02440	\$	0.02120	\$	869.61	\$	437.18
\$	2.34	9,072	9,072	7,216	\$	0.04029	\$	0.02440	\$	0.02120	\$	857.73	\$	430.70
\$	2.34	13,104	12,016	-	\$	0.04029	\$	0.02440	\$	0.02120	\$	991.43	\$	491.45
\$	2.34	13,104	13,104	8,512	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,198.43	\$	600.94
\$	2.34	15,696	15,696	7,168	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,371.30	\$	686.26
\$	1.74	18,432	18,432	5,856	\$	0.07631	\$	0.04783	\$	0.04840	\$	2,749.75	\$	-
\$	1.74	17,712	17,712	10,576	\$	0.07631	\$	0.04783	\$	0.04840	\$	2,881.86	\$	-
\$	1.74	17,568	17,568	7,024	\$	0.07631	\$	0.04783	\$	0.04840	\$	2,690.68	\$	-
\$	1.74	16,272	16,272	11,616	\$	0.07631	\$	0.04783	\$	0.04840	\$	2,739.52	\$	-
\$	2.34	14,256	14,256	7,968	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,276.39	\$	639.45
\$	2.34	12,816	12,816	6,928	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,142.48	\$	572.26
\$	2.34	12,384	12,384	5,472	\$	0.04029	\$	0.02440	\$	0.02120	\$	1,078.05	\$	539.42

	\$/kW	kWh			\$/kWh			TOTAL \$	SAVINGS					
		Tier #1	Tier #2	Tier #3	Tier #1	Tier #2	Tier #3							
\$	-	1,476	1,145	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	143.97	\$	52.66
\$	-	1,325	-	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	87.90	\$	41.40
\$	-	936	156	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	68.35	\$	30.13
\$	-	991	-	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	65.70	\$	30.95
\$	-	1,241	-	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	82.33	\$	38.78
\$	-	2,211	-	-	\$	0.122560	\$	0.053810	\$	0.048090	\$	270.98	\$	-
\$	-	2,738	-	-	\$	0.122560	\$	0.053810	\$	0.048090	\$	335.61	\$	-
\$	-	2,855	-	-	\$	0.122560	\$	0.053810	\$	0.048090	\$	349.91	\$	-
\$	-	1,643	-	-	\$	0.122560	\$	0.053810	\$	0.048090	\$	201.41	\$	-
\$	-	882	169	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	65.31	\$	28.52
\$	-	882	196	-	\$	0.06632	\$	0.04025	\$	0.03488	\$	66.38	\$	28.67
\$	-	1,602	1,602	136	\$	0.06632	\$	0.04025	\$	0.03488	\$	175.47	\$	59.40

TOTAL RATE CHANGE SAVINGS = \$ 8,299

City of Prairie Village
Solar Photovoltaic System - Police HQ

Capacity	3.2	kW
Solar Collector Size	300	sf
Annual Savings	4873	kWh
Electric Demand Rate	\$4.66	per kW
Electric Usage Rate	\$0.0377	per kWh
System Cost	\$26,656	Energy Savings Store Price
Demand Savings Discount Factor	70%	
Annual Energy Savings	\$308.97	
Simple Payback	86	years

**City of Prairie Village
Motor Replacements**

Motor	hp	Existing Efficiency	New Efficiency	Load Factor
Motor 1	5	87.0%	92.0%	80.0%
Motor 2	7.5	87.0%	92.0%	80.0%
Motor 3	5	87.0%	92.0%	80.0%
Motor 4	15	87.0%	92.0%	80.0%
Motor 5	5	87.0%	92.0%	80.0%
Motor 6	10	87.0%	92.0%	80.0%
Motor 7	5	87.0%	92.0%	80.0%
Motor 8	7.5	87.0%	92.0%	80.0%
Motor 9	5	87.0%	92.0%	80.0%
Total	65	87.0%	92.0%	80.0%

	Available Hours of Operation	Hours of Operation	Existing kW	Existing kWh	New kW	New kWh	kW Savings	kWh Savings
Jan	744	0	0	0	0	0	0	0
Feb	672	0	0	0	0	0	0	0
Mar	744	186	45	8,293	42	7,843	2	451
Apr	720	360	45	16,052	42	15,179	2	872
May	744	744	45	33,174	42	31,371	2	1,803
Jun	720	720	45	32,104	42	30,359	2	1,745
Jul	744	744	45	33,174	42	31,371	2	1,803
Aug	744	744	45	33,174	42	31,371	2	1,803
Sep	720	720	45	32,104	42	30,359	2	1,745
Oct	744	372	45	16,587	42	15,685	2	901
Nov	720	180	45	8,026	42	7,590	2	436
Dec	744	0	0	0	0	0	0	0
Total	8,760	4,770	401	212,687	379	201,128	22	11,559

EMS SAVINGS

City Hall
Existing Conditions

OF DAYS

	SUN	MON	TUE	WED	THU	FRI	SAT	HOL	
JAN	5	4	4	4	4	4	4	2	31
FEB	4	3	4	4	4	4	4	1	28
MAR	4	5	4	5	4	5	4	0	31
APR	4	4	4	4	5	4	5	0	30
MAY	5	3	4	5	4	5	4	1	31
JUN	4	4	4	5	4	5	4	0	30
JUL	4	4	4	5	4	4	5	1	31
AUG	5	4	5	4	4	5	4	0	31
SEP	4	3	4	5	4	5	4	1	30
OCT	4	4	5	4	5	4	5	0	31
NOV	5	4	4	4	3	4	4	2	30
DEC	4	4	4	4	4	5	5	1	31
	52	46	50	53	49	54	52		9

AREA DESCRIPTION: PV - City Hall
 UNIT(S) DESIGNATION: AHUs - all but council chambers
 FAN / PUMP HP: 4
 UNIT(S) CFM: 8,750
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 0.78

OCCUPIED TEMP SETPOINTS

HEATING: 71
 COOLING: 74

UNOCCUPIED SETPOINTS

HEATING: 60
 COOLING: 85

EXISTING OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
FEB	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
APR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAY	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUL	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
AUG	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
SEP	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
OCT	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
NOV	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
DEC	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25

AREA DESCRIPTION: PV - City Hall
 UNIT(S) DESIGNATION: AHU - Council chambers
 FAN / PUMP HP: 1
 UNIT(S) CFM: 650
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 0.78

OCCUPIED TEMP SETPOINTS

HEATING: 71
 COOLING: 74

UNOCCUPIED SETPOINTS

HEATING: 60
 COOLING: 85

EXISTING OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
FEB	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
APR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAY	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUL	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
AUG	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
SEP	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
OCT	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
NOV	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
DEC	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25

EMS EXPANSION
 City Hall
 Unoccupied setback Savings

AREA DESCRIPTION: PV - City Hall
 UNIT(S) DESIGNATION: AHUs - all but council chambers
 FAN / PUMP HP: 3.5
 UNIT(S) CFM: 8750
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 78%

OCCUPIED TEMP SETPOINTS
 HEATING: 71
 COOLING: 74
 UNOCCUPIED SETPOINTS
 HEATING: 60
 COOLING: 85

PROPOSED OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
FEB	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
MAR	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
APR	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
MAY	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
JUN	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
JUL	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
AUG	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
SEP	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
OCT	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
NOV	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
DEC	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0

FAN/PUMP SAVINGS kWh	COOLING SAVINGS kWh	HEATING SAVINGS MCF
814	-	27
873	-	26
1,035	-	18
1,085	-	8
1,139	1,072	-
1,008	2,171	-
797	2,999	-
780	2,681	-
922	1,521	-
1,114	-	8
1,134	-	17
968	-	26

EMS EXPANSION
 City Hall
 Unoccupied setback Savings

AREA DESCRIPTION: PV - City Hall
 UNIT(S) DESIGNATION: AHU - Council chambers
 FAN / PUMP HP: 1
 UNIT(S) CFM: 650
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 78%

OCCUPIED TEMP SETPOINTS
 HEATING: 71
 COOLING: 74
 UNOCCUPIED SETPOINTS
 HEATING: 60
 COOLING: 85

PROPOSED OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
FEB	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
MAR	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
APR	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
MAY	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
JUN	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
JUL	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
AUG	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
SEP	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
OCT	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
NOV	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0
DEC	0	0	15	22	7	20	7	20	7	20	15	22	0	0	0	0

FAN/PUMP SAVINGS kWh	COOLING SAVINGS kWh	HEATING SAVINGS MCF
826	-	2
881	-	1
1,065	-	1
1,099	-	-
1,152	174	-
1,029	211	-
806	207	-
795	115	-
934	-	1
1,123	-	1
1,156	-	2
990	-	-

EMS SAVINGS
Community Center
Existing Conditions

# OF DAYS	SUN	MON	TUE	WED	THU	FRI	SAT	HOL	
JAN	5	4	4	4	4	4	4	2	31
FEB	4	3	4	4	4	4	4	1	28
MAR	4	5	4	5	4	5	4	0	31
APR	4	4	4	4	5	4	5	0	30
MAY	5	3	4	5	4	5	4	1	31
JUN	4	4	4	5	4	5	4	0	30
JUL	4	4	4	5	4	4	5	1	31
AUG	5	4	5	4	4	5	4	0	31
SEP	4	3	4	5	4	5	4	1	30
OCT	4	4	5	4	5	4	5	0	31
NOV	5	4	4	4	3	4	4	2	30
DEC	4	4	4	4	4	5	5	1	31
	52	46	50	53	49	54	52		9

AREA DESCRIPTION: PV - Community Center
 UNIT(S) DESIGNATION: AHUs - public works
 FAN / PUMP HP: 1
 UNIT(S) CFM: 2,500
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 0.78

OCCUPIED TEMP SETPOINTS
 HEATING: 71
 COOLING: 74
 UNOCCUPIED SETPOINTS
 HEATING: 60
 COOLING: 85

EXISTING OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
FEB	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
APR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAY	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUL	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
AUG	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
SEP	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
OCT	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
NOV	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
DEC	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25

EMS EXPANSION
Community Center
Unoccupied setback Savings

AREA DESCRIPTION: PV - Community Center
UNIT(S) DESIGNATION: AHUs - public works
FAN / PUMP HP: 0.75
UNIT(S) CFM: 2500
UNIT(S) kW/ton: 1.4
HEATING EFFICIENCY: 78%

OCCUPIED TEMP SETPOINTS
HEATING: 71
COOLING: 74
UNOCCUPIED SETPOINTS
HEATING: 60
COOLING: 85

PROPOSED OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
FEB	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
MAR	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
APR	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
MAY	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
JUN	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
JUL	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
AUG	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
SEP	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
OCT	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
NOV	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0
DEC	0	0	9	16	9	16	9	16	9	16	0	0	0	0	0	0

FAN/PUMP SAVINGS kWh	COOLING SAVINGS kWh	HEATING SAVINGS MCF
210	-	13
229	-	11
279	-	6
286	-	3
301	404	-
272	804	-
208	1,069	-
208	982	-
246	565	-
294	-	3
292	-	6
255	-	10

EMS SAVINGS

Police Department
Existing Conditions

OF DAYS

	SUN	MON	TUE	WED	THU	FRI	SAT	HOL	
JAN	5	4	4	4	4	4	4	2	31
FEB	4	3	4	4	4	4	4	1	28
MAR	4	5	4	5	4	5	4	0	31
APR	4	4	4	4	5	4	5	0	30
MAY	5	3	4	5	4	5	4	1	31
JUN	4	4	4	5	4	5	4	0	30
JUL	4	4	4	5	4	4	5	1	31
AUG	5	4	5	4	4	5	4	0	31
SEP	4	3	4	5	4	5	4	1	30
OCT	4	4	5	4	5	4	5	0	31
NOV	5	4	4	4	3	4	4	2	30
DEC	4	4	4	4	4	5	5	1	31
	52	46	50	53	49	54	52		9

AREA DESCRIPTION: PV - Police Department
 UNIT(S) DESIGNATION: AHU - upper floor - all but dispatch
 FAN / PUMP HP: 20
 UNIT(S) CFM: 12,600
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 0.78

OCCUPIED TEMP SETPOINTS

HEATING: 71
 COOLING: 74

UNOCCUPIED SETPOINTS

HEATING: 60
 COOLING: 85

EXISTING OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
FEB	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
APR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAY	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUL	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
AUG	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
SEP	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
OCT	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
NOV	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
DEC	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25

EMS EXPANSION
Police Department
Unoccupied setback Savings

AREA DESCRIPTION: PV - Police Department
UNIT(S) DESIGNATION: AHU - upper floor - all but dispatch
FAN / PUMP HP: 20
UNIT(S) CFM: 12600
UNIT(S) kW/ton: 1.4
HEATING EFFICIENCY: 78%

OCCUPIED TEMP SETPOINTS
HEATING: 71
COOLING: 74
UNOCCUPIED SETPOINTS
HEATING: 60
COOLING: 85

PROPOSED OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
FEB	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
MAR	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
APR	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
MAY	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
JUN	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
JUL	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
AUG	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
SEP	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
OCT	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
NOV	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0
DEC	0	0	7	18	7	18	7	18	7	18	7	18	0	0	0	0

FAN/PUMP SAVINGS kWh	COOLING SAVINGS kWh	HEATING SAVINGS MCF
-	-	56
-	-	45
-	-	28
-	-	12
-	1,544	-
-	3,126	-
-	4,319	-
-	3,861	-
-	2,190	-
-	-	12
-	-	24
-	-	45

EMS SAVINGS

Public Works
Existing Conditions

OF DAYS

	SUN	MON	TUE	WED	THU	FRI	SAT	HOL	
JAN	5	4	4	4	4	4	4	2	31
FEB	4	3	4	4	4	4	4	1	28
MAR	4	5	4	5	4	5	4	0	31
APR	4	4	4	4	5	4	5	0	30
MAY	5	3	4	5	4	5	4	1	31
JUN	4	4	4	5	4	5	4	0	30
JUL	4	4	4	5	4	4	5	1	31
AUG	5	4	5	4	4	5	4	0	31
SEP	4	3	4	5	4	5	4	1	30
OCT	4	4	5	4	5	4	5	0	31
NOV	5	4	4	4	3	4	4	2	30
DEC	4	4	4	4	4	5	5	1	31
	52	46	50	53	49	54	52		9

AREA DESCRIPTION: PV - public works
 UNIT(S) DESIGNATION: AHUs - public works
 FAN / PUMP HP: 2
 UNIT(S) CFM: 4,000
 UNIT(S) kW/ton: 1.4
 HEATING EFFICIENCY: 0.78

OCCUPIED TEMP SETPOINTS

HEATING: 71
 COOLING: 74

UNOCCUPIED SETPOINTS

HEATING: 60
 COOLING: 85

EXISTING OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
JAN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
FEB	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
APR	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
MAY	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUN	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
JUL	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
AUG	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
SEP	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
OCT	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
NOV	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25
DEC	1	25	1	25	1	25	1	25	1	25	1	25	1	25	1	25

EMS EXPANSION
Public Works
Unoccupied setback Savings

AREA DESCRIPTION: PV - public works
UNIT(S) DESIGNATION: AHUs - public works
FAN / PUMP HP: 1.5
UNIT(S) CFM: 4000
UNIT(S) kW/ton: 1.4
HEATING EFFICIENCY: 78%

OCCUPIED TEMP SETPOINTS
HEATING: 71
COOLING: 74
UNOCCUPIED SETPOINTS
HEATING: 60
COOLING: 85

PROPOSED OCCUPIED SCHEDULE

	SUN		MON		TUE		WED		THU		FRI		SAT		HOL		FAN/PUMP SAVINGS kWh	COOLING SAVINGS kWh	HEATING SAVINGS MCF
	on	off	on	off	on	off	on	off	on	off	on	off	on	off					
JAN	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	349	-	17
FEB	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	374	-	14
MAR	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	444	-	8
APR	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	465	-	4
MAY	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	488	539	-
JUN	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	432	1,044	-
JUL	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	342	1,420	-
AUG	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	334	1,280	-
SEP	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	395	747	-
OCT	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	477	-	4
NOV	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	486	-	7
DEC	0	0	6	17	6	17	6	17	6	17	6	17	0	0	0	0	415	-	14

Due to restricted access to City Hall, most meetings will be held virtually. Please continue to check <http://pvkansas.com> for access details.

MAYOR'S ANNOUNCEMENTS

Monday, July 20, 2020

Environmental Committee	07/22/2020	5:30 p.m.
City Council	08/03/2020	6:00 p.m.
Planning Commission	08/04/2020	7:00 p.m.
Arts Council	08/12/2020	5:00 p.m.

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INFORMATIONAL ITEMS
July 20, 2020

1. Arts Council minutes - June 10, 2020

PRAIRIE VILLAGE ARTS COUNCIL | MEETING MINUTES

Zoom

Wednesday, June 10th, 2020

3:30 P.M.

PLANNING COMMITTEE AS A WHOLE

EVENT REPORTS

March Show Kathy Clark, March curator, reported that the only art pieces still in the gallery are those of Hasna Sal, who is working on getting a friend and a truck to pick them up. Kathy will continue coordinating.

Art of Photography 2020 Shelly Trewolla, AOP curator, asked Dan Andersen about the status of the online gallery for the People's Choice voting, and he said they are still not up and ready, but are close.

June One-Woman Show Shelly, also the June curator, shared that she has notified artist Donna Yeager of the cancellation of her show (that was tentatively moved to July), and that Donna would like to reschedule for next year and hopes we can make that work.

PLANNING

August/September Shows Arts Council voted to cancel both of these shows due to a variety of reasons, including, but not limited to: the City isn't holding in-person meetings yet, the events wouldn't be able to have food, artists would have to limit their guests, many other arts events in the city and nation have been cancelled, and JazzFest has also decided to cancel.

October State of the Arts Show Arts Council voted to move this annual juried show online.

November/December Arts Council agreed to revisit the status of these shows at the September meeting.

Chamber in Chamber future events No update.

MARKETING

Marketing/Website Julie Hassel & Al Guarino updated us on the Wan Security proposal for web hosting and David Tai's proposal for on-call coding services. Dan also ran down the following for review to continue paying until the web hosting contract is finalized.

Ongoing Expenses even without events:

- FlipCause - \$100/month
- White Pages - \$25/month
- Credit card machine - \$10/month
- Website boosting - \$5/month
- Calendar Plug-in - \$89/year
- Constant Contact - \$70/month

Dan said we aren't seeing the value of any of these services yet.

Second Friday Logo Paul Tosh showed the latest options, and Council discussed and chose their favorite.

Consolidation of documents/photos on an FTP and accessible Still no update. We keep saying it should be part of our Wan Security contract, but no one has verified it with Wan or directed them to implement it. Dan said he would finalize this.

Intern Social Media Contractor Al shared the Scope of Work the marketing committee drafted for this contractor. It would be for a limited time of only 3 months and one-time only. Bonnie Limbird, Arts Council Chairperson for City Council, shared the City parameters for such a contract and how to move forward. City Council will have to approve the concept after Arts Council approves it, and then the contract will have to be reviewed by the city attorney at a rate of \$295 per hour billed to the Arts Council to insert the non-discrimination language, general provisions, insurance requirements, etc.. Al clarified the limited time frame for this contractor, and how the marketing committee has tried to tackle the digital platforms themselves, but they don't have the experience or skills, and this person would get us a digital strategy and plan formalized that the marketing committee then could implement once the contract is over. Arts Council voted to move forward.

Constant Contact No change. Review in July.

Sponsorship Package - No packages yet. Info on the website is old, and there are seemingly duplicative tabs that could be combined. No immediate action discussed.

MISCELLANEOUS

Storage Shed - No update.

Julie Flanagan - No one has heard from her in several months. Shelly will try to reach her, and Bonnie will talk to Jamie Robichaud, Deputy City Manager, about the appointment of the next volunteer for this seat.

Having concluded the Planning Committee as a Whole, the meeting was adjourned at 4:49 P.M.

BUSINESS MEETING

Our chairperson, Bonnie Limbird, called this evening's meeting to order at 4:49 pm. Council members present via Zoom were Dan Andersen, Betsy Holliday, Sherrod Taylor, Paul Tosh, Al Guarino, Julie Hassel, Kathy Clark, Shelly Trewolla, Nancy Maxwell, Jessie Cartwright, and Bonnie Limbird.

After **Roll Call and Introductions**, the **Agenda** was approved with added items to vote on cancelling arts shows through September, modifying the October State of the Arts event to be virtual, voting on the 2nd Friday logo, and approving the ongoing monthly expenses.

The **Consent Agenda** was unanimously approved after a motion by Daniel Andersen and a second by Al Guarino.

City Council Report – Bonnie gave the council update including the status of allowing chickens in PV and how that may or may not conflict with HOA deed restrictions for residents; the status of large item pickup; the mayor’s statement about the murders of George Floyd and others by police officers, the Police Chief’s response, and more; and thanked Arts Council for moving up the meeting so members could attend the PV March for Justice Rally.

A discussion of the **2020 Budget Update** included overview of expenses that have continued despite not having any shows or in-person events: web hosting, constant contact, etc.. One piece of artwork from the March show did sell, but it hasn’t hit our account yet, and there have been no other expenses recorded since last month, therefore the financial report has not been updated. Dan Andersen has several items to turn in to Meghan Buom for reimbursement.

Old Business

Dan moved to **continue paying our monthly ongoing expenses outlined below** while we’re waiting to finalize the Wan Security contract, and Shelly Trewolla seconded. Motion passed.

Ongoing Expenses:

- FlipCause - \$100/month
- White Pages - \$25/month
- Credit card machine - \$10/month
- Website boosting - \$5/month
- Calendar Plug-in - \$89/year
- Constant Contact - \$70/month

Dan moved to **approve the updated Wan Security** contract at \$45 per month with a six-month performance period (invoice attached), and Kathy Clark seconded the motion. Motion passed.

Shelly Trewolla moved to **approve the 2nd Friday Logo** (attached) modifying the red to be the same red as in our other logos, Julie Hassel seconded, and the motion was passed.

New Business

Dan moved to **approve a verbal contract with David Tai** for \$80 per month for two hours of work through the end of 2020. If the two hours in a month are not used, they will rollover to the next month. Additional hours beyond the first two will be billed at \$80 per hour. Paul seconded the motion, and the motion passed.

If needed, Al Guarino will draft up the contract for the City Attorney to review at a rate of \$295 per hour billed to Arts Council. This review will include adding all the general and non-discrimination language as well as insurance requirements. (Bonnie will confirm if needed or not.)

Dan moved to **approve the statement of work for a social media contractor** (see attached) for three months as drafted by the marketing committee and to be reviewed by the City Attorney at a rate of \$295 per hour billed to the Arts Council. Shelly seconded, and the motion passed.

Dan moved to **cancel the August and September events and move State of the Arts to a virtual show**. Kathy seconded, and the motion passed.

There being no further items on the business meeting agenda, Dan moved to close the meeting, and Shelly seconded. Bonnie adjourned the business meeting at 5:19 PM.

END