

KANSAS GEOLOGICAL SURVEY

1930 Constant Ave., Campus West
The University of Kansas
Lawrence, Kansas 66047-3726
phone 785-864-3965
fax 785-864-5317

Proposed Project for Application for a Rural Development Loan and a Rural Development Grant from the U.S. Department of Agriculture, and for a Kansas Department of Commerce Block Grant

Applicant: City of Hartford
Water Supply System Improvements

Contact Person: Brian J. Foster, E.I.T.
Address: BG Consultants, Inc.
2508 W. 15th Avenue
Emporia, KS 66801

Sent to the Kansas Geological Survey for environmental review.

Agency Review Comments:

The long-term benefits of the improvements to the water-supply system, which primarily involves replacement of 75-year old water lines, should offset any short-term adverse environmental impacts during construction. The project might consider providing a loop to the improvement B water line that ends on South Street to prevent potential problems with a dead-end water line.

Recommended Action:

- ☒ Clearance of project should be granted
☐ Clearance of project should not be granted
☐ Clearance of project should be delayed until the issues or questions have been clarified
☐ Clearance of project should not be delayed, but the applicant (in the application) should address or clarify the questions or concerns indicated above

Donald Whittemore
Reviewer's Name

Geohydrology Section, Kansas Geological Survey
Division/Agency

7/05/06
Date


Reviewer's Signature

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of this facility or property. The information provided in this letter is from regional or county-wide studies and should not be used as a substitute for detailed site characterization by a licensed geologist or engineer. It is the responsibility of the applicant to provide any required site characterizations.

BG CONSULTANTS, INC. / Engineers-Architects-Surveyors

2508 W. 15th Avenue • Emporia, Kansas 66801 • (620) 343-7842 • FAX: (620) 343-7844 • www.bgcons.com

June 1, 2006

Kansas Geological Survey
University of Kansas
1930 Constant Ave.-Campus West
Lawrence, KS 66047-3726

RE: Environmental Review – Hartford, KS – Water System Improvements

Dear Sirs:

The City of Hartford will be applying for a Rural Development Loan of approximately \$750,750 and a Rural Development Grant of approximately \$614,250 from the United States Department of Agriculture along with a \$400,000 Department of Commerce Block Grant to upgrade the city's water distribution system. The improvements will be situated within city right of way.

The improvements will be in the City of Hartford located in Section 15, Township 20S, Range 13E, Lyon County, Kansas.

I am attaching the Explanation of Alternatives and a map of the proposed line replacement.

Please submit your response to BG Consultants, Inc., 2508 W. 15th Avenue, Emporia KS 66801.

Please contact me at (620) 343-7842 with any questions you might have.

Sincerely,



Brian J. Foster, E.I.T.

Enc.



Also

Lawrence, Ks. • Hutchinson, Ks. • Manhattan, Ks.

SECTION 1

INTRODUCTION

1.1 REPORT OBJECTIVE

This study has been prepared for the purpose of planning improvements to the water distribution system currently serving the City of Hartford, Kansas. This study provides an analysis of the various components of the system, including supply, quality, storage, and distribution. An evaluation of the condition and capabilities of the distribution system under all potential flow conditions is included. This study will provide a program of capital improvements and upgrades considered necessary

1.2 EXECUTIVE SUMMARY

OVERVIEW: The study was conducted due to a public health concern that arose this past year regarding the quality of water the City of Hartford was providing. The City of Hartford's water supply has recently been in violation of KDHE drinking water standards. Water sampling of the public water supply showed positive results of the presence of coliform bacteria. A copy of the 2005 Boil Water Order for Hartford is located in the Appendix.

ALTERNATIVES: Several possible alternatives were examined and were discussed with the City. A summary of the alternatives is listed below

- NO ACTION – This is determined to be not an option due to the unreasonable response regarding the public health concern issues.
- PARTIAL WATERLINE REPLACEMENT – The majority of the waterlines were installed at the same time and are seventy five years old. Many waterline breaks are scattered throughout the City. Community involvement and current public health concerns have lead the City to not consider this to be an option.
- WATERLINE REPLACEMENT ONLY – Along with waterlines being seventy five years old, the elevated storage tank has the same age and is in need of repairs.
- WATERLINE & ELEVATED STORAGE TANK REPLACEMENT – The existing elevated storage tank can remain in service with the proper repairs. Total replacement is not necessary at this time.
- WATERLINE & ELEVATED STORAGE TANK REHABILITATION – This is the recommended project. Enclosed in the appendix is a cost estimate for upkeep on the existing storage tank. The City will have a reliable water system for current and future city residents.

RECOMMENDATIONS: It is recommended that the City of Hartford replace the aging City water mains and rehabilitate the elevated storage tank. It is recommended that 27,400 linear feet of waterline replacement be done and the water tower be rehabilitated at the same time. These upgrades are necessary to minimize the OM&R and to provide

potable water to the citizens of Hartford. The opinion of probable cost for the proposed project is \$1,765,000. A detailed cost description is located at the end of Section 6.

FUNDING: There are several different funding options available to the City of Hartford. The following is a brief description with the deadlines associated with each funding option.

- Community Block Development Grant (CDBG) – This grant program is a competitive program with a maximum possible grant of \$400,000. The city must attend a KIAC meeting before submitting for the grant. All grant applications must be submitted by October 15th and funds are awarded in January.
- State Revolving Loan Fund (KDHE-SRF) – This SRF loan is a 20 year loan with an interest rate and service fee of around 4%. Projects are selected for funding in May of each year and are competitive with other Cities.
- Rural Development (RD) – The Rural Development loan is a 40 year loan with an interest rate that may vary from 4%-5% and is competitive with other Cities, Counties, etc. The grants are based on a percentage of the project and will not exceed 75%. The Rural Development funding is from a federal pool of money that is awarded in October of each year.

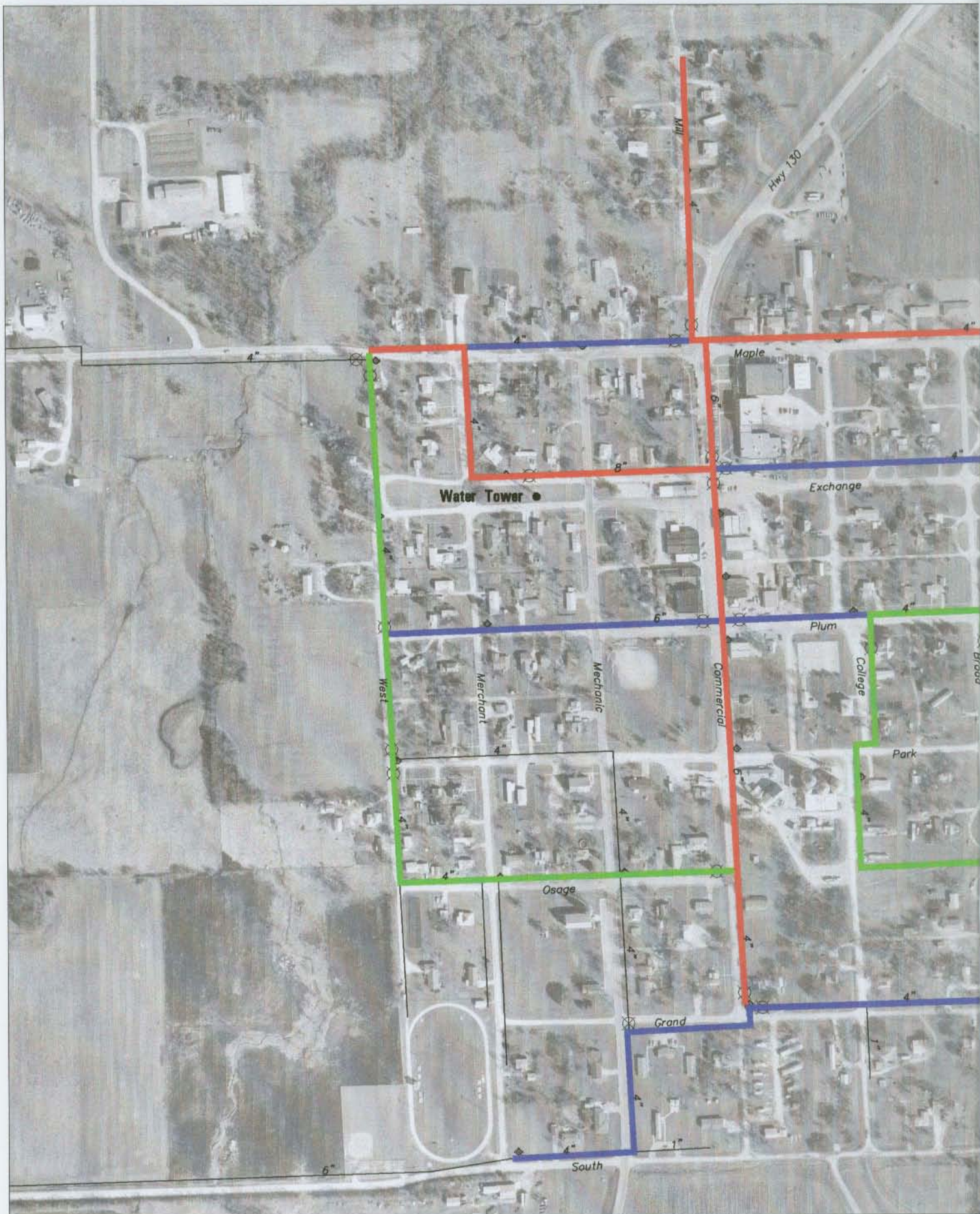
USER RATES: The increase in consumer water rates will be dependent upon which funding option is obtained. The current water rates for the City of Hartford are as follows:

CURRENT USER RATES			
USER	NO.	RATE	\$/MO.
Base Rate, city users	238	\$ 18.29	\$ 4,353
Base Rate, rural users	50	\$ 24.29	\$ 1,215
Additional thousand gallons	867.4	\$ 5.00	\$ 4,337
TOTAL (monthly)			\$ 9,905
TOTAL (yearly)			\$ 118,860

Currently the average user uses approx. 5,000 gallons per month. This would equate to an average monthly water bill of \$38.29

The proposed funding options are as follows with the proposed monthly bill for a 5,000 gallon per month user listed below. A detailed explanation of each option can be found in Section 8.

- Assuming that \$400,000 is obtained from CDBG and that 45% of the remaining cost (\$614,250) is funded by a rural development grant the City would be responsible for the remaining 55% (\$750,750), which could be funded with a 40 year rural development loan. The proposed monthly bill for a 5,000 gallon per month user would be \$58.00 in 2007 and \$50.00 in 2009.



LEGEND

	Waterline
	Gate Valve
	Fire Hydrant
	Improvement A
	Improvement B
	Improvement C

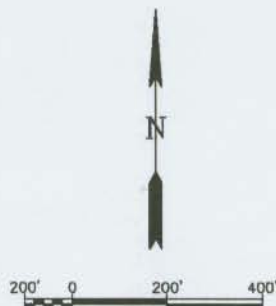


FIGURE 4

AERIAL MAP
PROPOSED
IMPROVEMENTS

BG CONSULTANTS, INC.
ENGINEERS—ARCHITECTS—SURVEYORS
MANHATTAN, KANSAS HUTCHINSON, KANSAS
LAWRENCE, KANSAS EMPORIA, KANSAS



AGENCY REVIEW TRANSMITTAL FORM

Comments by: _____

Transmittal Date _____

PROJECT TITLE: _____

CONTACT PERSON: _____

____ Notification of Int
____ Preapplication
____ Final Application
____ Direct Development

This form provides notification and the opportunity for your agency to review and comment on this proposed project as required by Executive Order 12372. Please complete Parts II & III as appropriate. Your prompt response will be appreciated.

RETURN TO: _____

PART I

REVIEW AGENCIES/COMMISSIONS

____ Aging	____ Education	____ State Forester,
____ Agriculture - DWR	____ Geological Survey, KS	____ Transportation
____ Biological Survey, KS	____ Health & Environment	____ Water Office, KS
____ Conservation Comm.	____ Historical Society	____ Wildlife & Park
____ Corporation Comm.	____ Human Resources	____
____ Commerce	____ Social & Rehab. Serv.	____

PART II (To be completed by review agency and returned to contact person)
AGENCY REVIEW COMMENTS
COMMENTS:

PART III (To be completed by review agency and returned to contact person)
RECOMMENDED ACTION COMMENTS

____ Clearance of the project should be granted.	____ Clearance of the project should not be delayed but the Applicant should (in the final application) address
____ Clearance of the project should not be granted.	clarify the questions or concerns indicated above.
____ Clearance of the project should be delayed until the issues or questions have been clarified	____ Request the opportunity to review final application prior to submission to the federal funding agency

____ Request a State Process
Recommendation in concurrence with above comments.

DIVISIONS/AGENCY/COMMISSION

Reviewer's Name

Date

(09/23/04) PN 532