

KANSAS GEOLOGICAL SURVEY

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

Project for Application to KDHE Kansas Public Water Supply Loan Fund

Applicant: City of Seneca
Contact Person: Doug Goetz, Project Technician
Address: Wilson & Company
1700 East Iron Avenue
Salina, KS 67401

RE: Water Supply Improvements
WCI File: 0620050400/01/7141/8200

Sent to the Kansas Geological Survey for environmental review.

Agency Review Comments:

According to the WWC-5 log records, at least some of the city's current water-supply wells (wells 6 and 7 constructed in 1989) are located northeast of the city in the alluvial aquifer of the South Fork Big Nemaha River. The proposed location of two new water-supply wells appears to be in the alluvium of Tennessee Creek, a tributary to the South Fork Big Nemaha River. The size of the alluvial aquifer associated with the tributary may be smaller than that associated with the river. Much of the water pumped from an alluvial aquifer can be derived from the associated stream. Thus, the city may need to continue to consider water conservation plans in the event of an extended drought when Tennessee Creek could go dry. In general, the long-term benefits of the addition of the water from the new wells to the city's water-supply should offset any short-term adverse impacts during construction of the project.

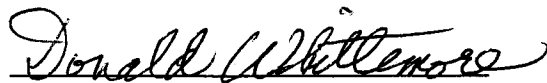
Recommended Action:

- ☒ 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

6/5/06
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.

WILSON & COMPANY

1700 East Iron Avenue
Salina, Kansas 67401
P.O. Box 1640 67402-1640
785-827-0433
785-827-5949 Fax

Albuquerque
Colorado Springs
Denver
Fort Worth
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Wilson & Company
Latin America, LLC

05 May 2006

Kansas Geological Survey
University of Kansas
1930 Constant Avenue, Campus West
Lawrence KS 66047

Re: City of Seneca, Kansas
Water Supply Improvements
Kansas Public Water Supply Loan
WCI File: 0620050400/01/7141/8200

Dear Sir or Madam:

The City of Seneca is preparing an application to the Kansas Department of Health and Environment for a loan from the Kansas Public Water Supply Loan Fund for the above referenced project. The improvements are described in the following pages:

- | | |
|--|-----------|
| ☐ Project Description and Cost | Pages 1-2 |
| ☐ Project Location Map | Pages 3 |
| ☐ Preliminary Project Schedule | Page 4 |
| ☐ KPWSLF – Project Submittal Form | Page 5 |
| ☐ Agency Review Transmittal Form | Page 6 |

The Agency Review Transmittal Form provides notification and the opportunity for your agency to review and comment on the proposed project. Your response by June 05, 2006 will be appreciated.

If you have any questions or concerns, please feel free to contact me at 785-827-0433.

WILSON & COMPANY



Doug Goetz
Project Technician

Attachments

cc: Glenn Rodden, City of Seneca (w/ Attachments)
William Carr, KDHE (w/ Attachments)



PROJECT DESCRIPTION and COST

Water Supply Improvements – City of Seneca, Kansas

INTRODUCTION

The City of Seneca's water supply, treatment, and distribution system consists of the following: water supply wells, a water treatment plant which includes chlorination feed, an underground storage reservoir, high service pumps, and the piping distribution system.

BACKGROUND

The City of Seneca currently obtains its water from multiple public supply wells located northeast of town. The City's water supply wells struggle to meet water demand and cannot provide the City with sufficient quantities of water for emergency purposes during the peak demand times. As a result of this, the City was interested in locating and developing new water supply wells as part of the proposed project.

The City of Seneca has been engaged in a search for additional water sources of sufficient quantity and quality for more than one year. Geological investigations have been conducted and one water source has been located southeast of the City and is of sufficient capacity and quality. The City has already drilled two test wells in this location of the water source. The installation of two new water supply wells and water supply piping will allow the City to lessen the demand on their existing wells, provide a sufficient quantity of water for emergency purposes, and would also reduce any future need to purchase water from an outside source.

In conjunction with this project, the City of Seneca intends to pursue additional water rights. While their existing water wells do not exceed the City's appropriations, the City is starting the process of pursuing additional rights.

PROPOSED PROJECT

The proposed project would include the following improvements:

Water Supply Wells

- Submersible Pumps & Wells
- Well houses (If necessary)
- Chemical Feed Systems (If necessary)
- Gate and check valves
- Sampling assemblies
- Valve pits
- Cement slabs
- Telemetry and controls for Wells

Water Supply Piping

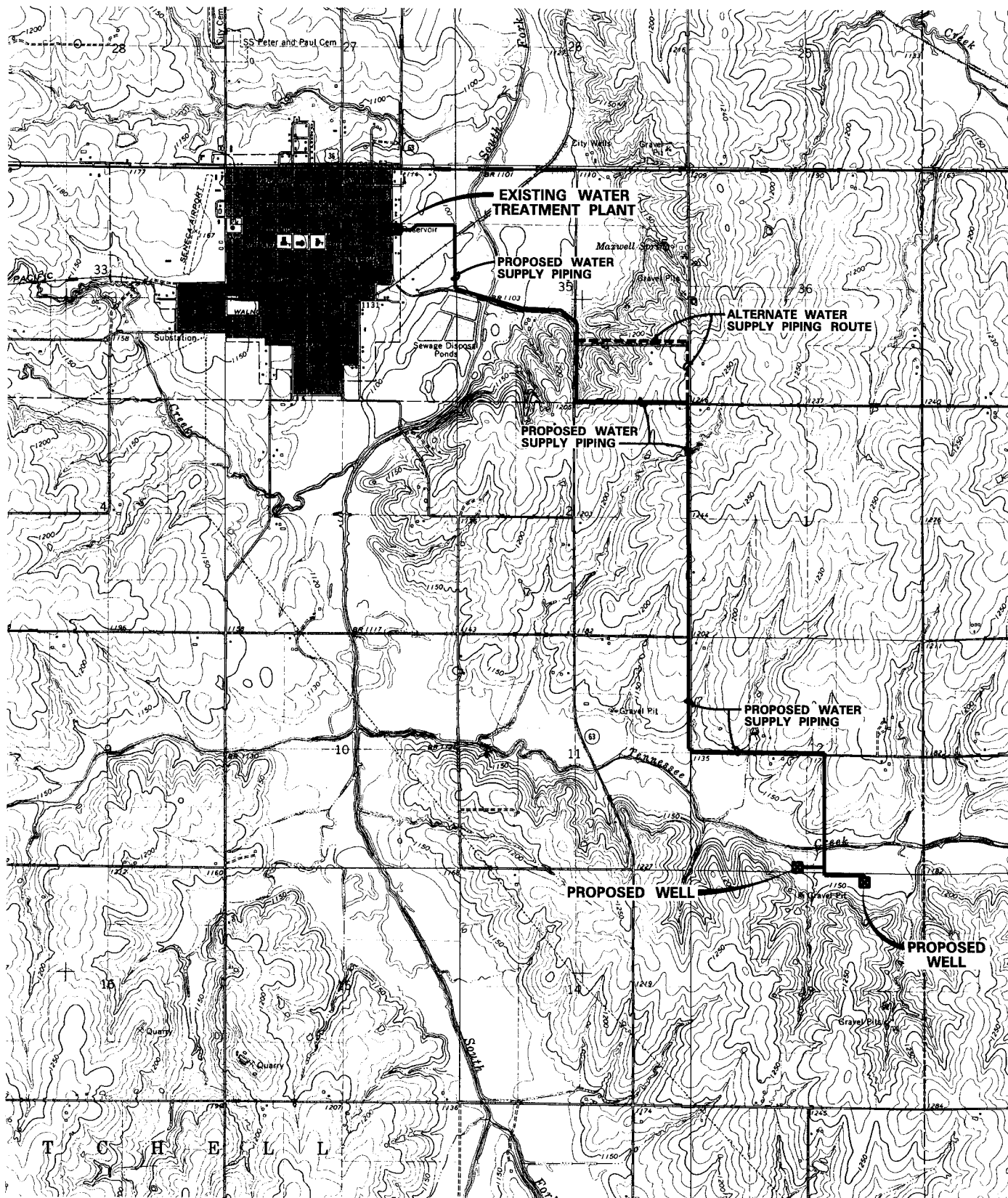
- Construction of a new water supply line from the well sites to the water treatment facility located on the east side of the City.

PROJECT COSTS

Estimated project costs are as follows:

Water Supply Wells:	\$300,000
Water Supply System:	\$700,000
Telemetry & Controls	\$50,000
Contingency (10%)	\$105,000
Surveying, Engineering, Inspection	\$77,000
Legal and Administrative	\$18,000

<i>Total Estimated Project Cost:</i>	<i>\$1,250,000</i>



NOTE: The actual route of the proposed water supply line have not been finalized due to easment acquisition but shown are the potential routes that the City will choose from.

LOCATION MAP

NOT TO SCALE

PROJECT LOCATION DESCRIPTION

Township 28S, Range 12E - Sections 34, 35, 36
 Township 35S, Range 12E - Sections 1, 2, 11, 12, 13



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& COMPANY**

PRELIMINARY PROJECT SCHEDULE

Water System Improvements City of Seneca, Kansas

Begin Design	April 2006
KPWSLF Application	June 2006
Plans Submitted to KDHE	August 2006
Advertise for Bids	September 2006
Bid Opening	October 2006
Award Construction Contract	November 2006
Begin Construction	December 2006
Substantial Completion of Construction	June 2007
Final Completion of Construction	August 2007

KANSAS PUBLIC WATER SUPPLY LOAN FUND
PROJECT SUBMITTAL FORM
KDHE - PUBLIC WATER SUPPLY
1000 SW JACKSON - SUITE 420
TOPEKA KS 66612-1367

1. Applicant Name: City of Seneca
2. Mailing Address: 531 Main Str
P.O. Box 40
Seneca, KS 66538
3. Person Completing Form: Glenn Rodden
Title: City Administrator
Phone: 785-336-2747
4. Project Description: Drill two wells four
miles east of Seneca and build
four miles of water lines to
bring new water to the Seneca treatment plant.
5. Purpose of Project: To increase the
city's water supply to meet our
growing demand.
6. Estimated Project Start Date: March 2006
7. Estimated Project Construction Start Date: August 2006
8. Estimated Project Cost: \$1.25 million

NOTE: Please provide as much information about the project as possible, including any engineering studies that would explain the need for the project, so the project can be ranked accurately. Rural water districts need to provide the number of meters by township, on the back of this form. Use additional pages if necessary.

The following form may be used by the Review Agency/Commission for comments in response to the request for clearance from the proposed Public Water Supply Loan Fund Project.

☐ Army Corps of Engineers
☐ Kansas Biological Survey
☐ State Conservation Commission
☐ Kansas Corporation Commission
☐ Division of Water Resources/Kansas Department of Agriculture
☐ Kansas Geological Survey
☐ Kansas State Historical Society, State Historic Preservation Office
☐ Kansas Water Office
☐ Kansas Department of Wildlife & Parks
☐ US Dept of Agriculture - Natural Resources Conservation Service
☐ Kansas Department of Health and Environment
☐ US Dept of the Interior - Fish and Wildlife Service

Agency Review Comments: (to be completed by reviewing agency and returned to applicant contact person at name and address shown below)

Comments:

Recommended Action: (to be completed by the reviewing agency and returned to applicant contact person at name and address shown below.)

☐ 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.

Reviewer's Name

Division/Agency/Commission

Date

**Project Title: Public Water Supply Loan Fund Application
Water Supply Improvements**

Applicant: City of Seneca, Kansas

Contact Person: Wilson & Company - Doug Goetz

Address: 1700 East Iron Avenue

City, State: Salina, KS Zip: 67401 Phone: (785) 827-0433