

1930 Constant Avenue
Lawrence, KS 66047-3724
August 7, 2007

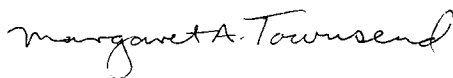
Donna Crawford, Grant Administrator
Governmental Assistance Services
905 Joseph Drive
Lawrence, KS 66049

Dear Ms. Crawford,

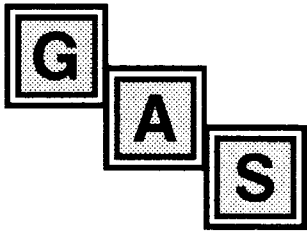
I was asked to do an environmental review for the city of Soldier wastewater treatment facility upgrade. The soils in the area are predominantly silty clay loams which should not cause problems with the construction and evaluation phase of the project. My only concern is that erosion control around the lagoons is mentioned but no details are given. The proximity of the lagoons to the stream may be an issue in case of flooding of the stream during heavy storms. Provided that the lagoons are protected by levees or some other structural method to prevent erosion during storms or flooding by overtopping if the stream should get that high I see no problem with the project moving forward.

The above comments are based on regional geologic conditions and limited information available to the KGS at the time of writing and cannot be used in substitute for a detailed site characterization. Other geologic conditions, not discussed here, or for which the KGS has no knowledge, may affect the viability or safe operation of this facility or property. Geotechnical engineering and design are outside the purview of the KGS. It is the responsibility of the applicant to produce any detailed site characterizations, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

Sincerely,



Margaret A. Townsend
Hydrogeologist
Geohydrology Section



Governmental Assistance Services

905 Joseph Drive

Lawrence, Kansas 66049

785-832-2141 • Fax 785-832-1111

Toll Free 888-832-3335

e-mail: gasdonnaa@sunflower.com

July 11, 2007

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

RE: Environmental Review - Soldier, KS Wastewater Collection & Treatment
System Improvements – KDOC 2008 Grant Submission

Dear Dr. Harrison:

Please note the attached information from Kramer Engineering. The city plans to submit a grant request to the Kansas Dept. of Commerce for \$162,500 and acquire a loan from KDHE for \$162,500 to complete \$325,000 of improvements to their sanitary sewer system.

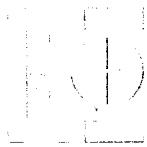
Please submit all comments to my office at Governmental Assistance Services, 905 Joseph Dr., Lawrence, KS 66049.

If you have questions please call Michael Kramer, City Engineer at 785-234-6600.

Sincerely,

Donna J. Crawford
Grant Administrator

Enc/ Eng. Description
Map



KRAMER ENGINEERING, P.A.
CONSULTING ENGINEERS & SURVEYORS

2240 SW TOWNE BLVD • TOWNE, NJ 07068-3601 • 785-234-6600 • FAX 785-234-6611

**Wastewater Collection and Treatment Facilities
For
City of Soldier, Kansas**

June 29, 2007

The planning area for the City of Soldier wastewater facilities includes the area within the City limits. The City of Soldier is located in northwest Jackson County, Kansas on Highway 62, 5 miles North of Highway 16, and 11 miles west of U.S. Highway 75. Population of the City is approximately 116 persons. Land within the community is used for residential homes, some businesses, and some undeveloped land. The area within the City limits is approximately 98 acres. Density within the City is 0.5 homes and 1.2 persons per acre.

The proposed wastewater project will not have a significant effect on land uses. There are no dramatic changes in land use projected during the planning period of 20 years. Therefore the project will have continuing compatibility of facilities with community needs over the planning period. The existing City wastewater treatment facility was first permitted for discharge in 1981. Collection system and treatment facilities were constructed in 1981. No major improvement projects to the wastewater system have occurred.

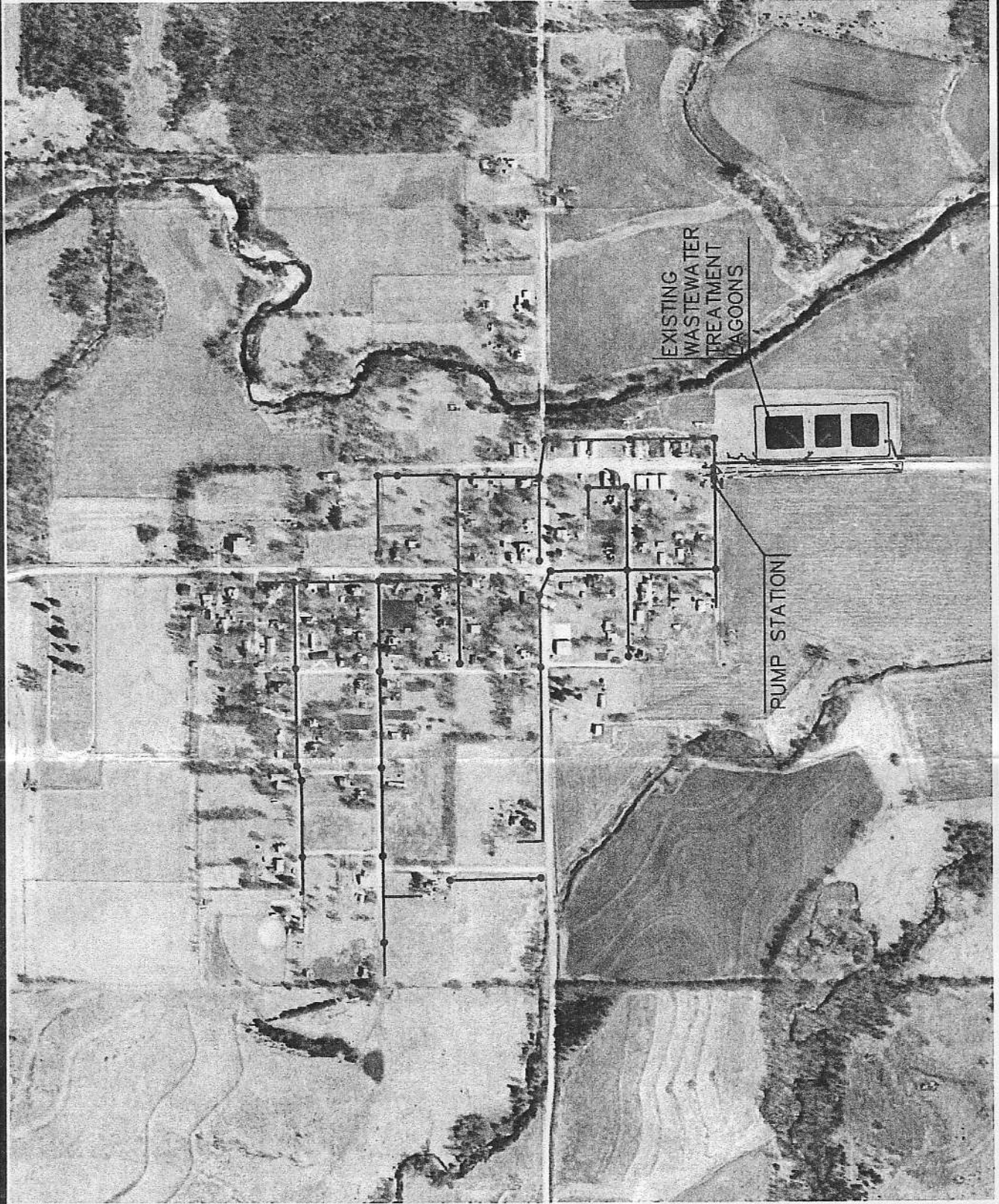
The wastewater treatment plant serving Soldier is a three-cell, discharging, waste stabilization lagoon system which was placed into operation in 1981. The effluent from the facility is discharged into Soldier Creek, Kansas River Basin. The wastewater treatment plant had an original design capacity of 190 persons at 50gpcd, and is currently permitted for a population equivalent of 190 persons at 100 gpcd. The sewer collection system presently serves 48 homes and 4 commercial users, with an estimated population of 116 persons.

The proposed improvements to the City of Soldier's sewer collection and treatment facility include cleaning and TV inspection of all sewer lines, the replacement of the existing pump station, and erosion control for the existing three cell wastewater treatment lagoon.

The opinion of probable costs for the project is \$ 325,000. The city is proposing to use Kansas water Pollution Revolving Loan and CDBG grant funds to finance the project which is Scheduled for completion in 2008.

Respectfully Submitted,
KRAMER ENGINEERING, P.A.

Michael E. Kramer, P.E.



CITY OF SOLDIER
JACKSON COUNTY, KANSAS

Exhibit

KRAMER ENGINEERING, P.A.
TOWSON, MARYLAND



DATE: 08/11/2007
SHEET: 1 OF 1