

KANSAS GEOLOGICAL SURVEY

The University of Kansas
1930 Constant Ave
Lawrence KS 66047-3726
phone 785-864-3965
fax 785-864-5317
www.kgs.ku.edu

August 1, 2006

Mr. Thayer L. Smith
Kirkham Michael
217 North Douglas
P. O. Box 4
Ellsworth, KS 67439

**RE: Rice County Landfill
KM#0504809**

Dear Mr. Smith:

I have received your request for comment by the Kansas Geological Survey (KGS) on a permit modification for an existing construction and demolition landfill in Rice County. The landfill expansion is located in S½ NE¼ S6 T20S R8W, west of Lyons, Kansas.

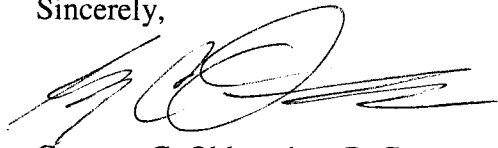
I examined the USGS Lyons 7½-minute topographic map, a 2002 orthophotograph, the geology and ground-water report for Rice County (Bayne and Ward, 1974, KGS Bulletin 206 pt. 3), and water well data from the KGS Data Library. The geologic map indicates that the landfill site is on Quaternary Loess. Loess is wind deposited silt and clay with relatively low water yields. The loess overlies a layer of Quaternary Alluvium, which is an aquifer that is connected to the local streams. Below the alluvium is the Cretaceous Kiowa formation. The upper part of the Kiowa contains sandstone layers that are local aquifers.

- The Kansas Geological Survey's main concern is the potential ground-water contamination at this site.
- The Kansas Geological Survey has no knowledge of landslide, karst, or poor ground conditions that might affect this application.

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 countywide 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.

If you have any questions regarding these issues, please contact Gregory Ohlmacher at (785)-864-2194 or ohlmac@kgs.ku.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. C. Ohlmacher', with a stylized flourish at the end.

Gregory C. Ohlmacher, P. G.
Engineering Geologist

July 17, 2006

RE: Rice County Landfill
KM# 0504809

Kansas Geological Survey
1930 Constant Avenue
Lawrence, Kansas 66047-3726

Dear Kansas Geological Survey staff:

We have been retained by Rice County to prepare an application for a landfill permit modification. One of the requirements is to check with several agencies to determine if they have any information about the site modification.

The proposed construction & demolition landfill modification is located on 148 acres in the NE quarter of Section 6, T20S, R8W in Rice County. A location map and site layout plan is attached. We request a response from your agency indicating any issues you may be aware of regarding this proposed land use.

Thank you for your consideration in this matter. If you have any questions about this request, please contact me at 785-472-3163 or by e-mail at tsmith@kirkham.com.

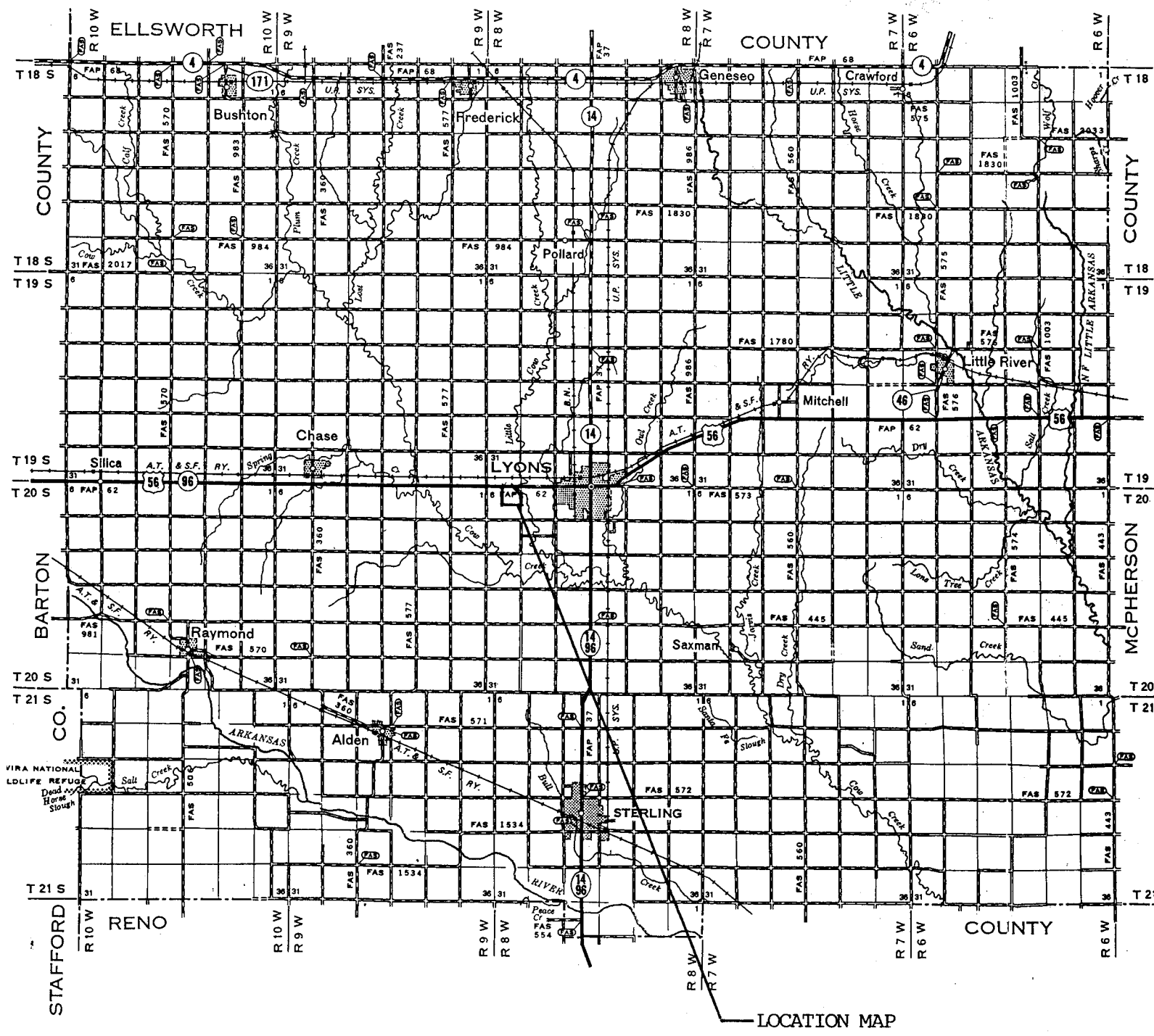
Sincerely,
KIRKHAM MICHAEL



Thayer L. Smith
Vice President

TLS:srg

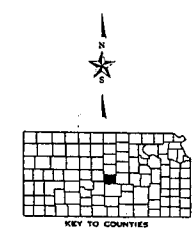
cc: Mike Selm, KDHE, BWM
John Achatz, Rice Co.



LOCATION MAP

LEGEND

ROADS AND ROADWAY FEATURES		ROAD SYSTEM DESIGNATION	
PRIMITIVE ROAD	=====	FEDERAL-AID INTERSTATE HIGHWAY SYSTEM	FAI
UNIMPROVED ROAD	=====	FEDERAL-AID PRIMARY HIGHWAY SYSTEM	FAP
GRADED AND DRAINED ROAD	=====	FEDERAL-AID SECONDARY HIGHWAY SYSTEM	FAS
SOIL SURFACED ROAD	=====	INTERSTATE NUMBERED HIGHWAY	70
GRAVEL OR STONE ROAD—NOT GRADED OR DRAINED	=====	U.S. NUMBERED HIGHWAY	20
GRAVEL OR STONE ROAD—GRADED AND DRAINED	=====	STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY	24
GRAVEL OR STONE ROAD WITH STABILIZED SURFACE	=====	END OF DESIGNATED SYSTEM OR MARKED ROUTE	24
BITUMINOUS ROAD—LOW TYPE	=====		
PAVED ROAD	=====		
DIVIDED HIGHWAY	=====		
HIGHWAY WITH FULL CONTROL OF ACCESS AND INTERCHANGE	=====		



FA SYSTEM REVISED TO AUG. 15, 1988

GENERAL HIGHWAY MAP RICE COUNTY KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



BM14 R.R. SPK IN EAST FACE OF 40"
TREE N. -1157.0301 E. -2348.3151

NOTE: Topography Data
Collected February, 2002.
Updated December, 2002.

N $\frac{1}{4}$ Cor.
Sec. 6, T20S, R8W

Facility Sign

Landfill Entrance

US-56, K-96

Exist

Sand

Existing Transfer Station

Existing White Goods Area

Existing Closed Dead
Animal Pit

Drainage Area=
1.011 AC

Drainage Area =

Existing C&D
Landfill Area

~~PROPOSED
C&D LAND~~

BM#2 Chisled + Cut in the Top of the
Conc. Foundation of the Solid Waste Bld.
776' West & 303' South of the NE cor
Sec. 6-20-8 Elevation = 1681.59

BM#4 Sq Cut in East end of the South
Headwall of a two barrel 8'x6'x48.5' RCB 427'
East & 29' South of the N 1/4 cor Sec.
6-20-8 Elevation = 1681.26

BM#5 Spike Step in Electric Switch
Pole 145' West & 900' South of the
NE cor Sec. 6-20-8 Elevation =
1674.955

