

KANSAS GEOLOGICAL SURVEY

1930 Constant Ave., Campus West
The University of Kansas
Lawrence, Kansas 66047-3726
Phone: 785-864-3965
Fax: 785-864-5317

Jeff Schminke, Area Specialist
2615 Farm Bureau Road
Manhattan, KS 66502

May 31, 2006

Dear Mr. Schminke,

I have reviewed the information available at the Kansas Geological Survey concerning the area for the dairy in Nemaha County, Kansas. Looking at the soils data from the NRCS database the soils are generally clays and clay loams. These soils are conducive to runoff issues. The soils may also be subject to cracking when dry and thus provide potential pathways for contaminants. This is something that should be discussed with the NRCS as this is their area of expertise.

There is a topographic drainage area in the eastern portion of the area of interest (T3S-R13E-Sec 28 SW). The drainage direction is toward a creek in the SE quarter of the section and therefore runoff from the dairy must be controlled to prevent surface water contamination.

Based on the information available to me from a report on the glacial deposits in northeastern Kansas (Denne et al., 1998), there is the possibility that this property is near a buried valley. These valleys are the primary source of ground water for use in the area. If the dairy is near one of these valleys then there should be sufficient ground water available for use. This is something the owner should consult area drillers about as there are no well logs available for the section of interest.

The owner of this project needs to address manure disposal issues and wastewater treatment in order to prevent contamination of ground water and surface water.

In general the site should be acceptable for a dairy assuming that the above questions are addressed.

The above discussion represents the information that the Kansas Geological Survey has on this proposed site. Other geologic conditions, not discussed here, might affect the proposed project. The information provided in this letter is from regional (countywide and statewide) studies and should not be used as a substitute for detailed site investigations by a licensed geologist or engineer. It is the responsibility of the applicant to produce the detailed site evaluation.

Reference: Denne, J. E., Miller, R. E., Hathaway, L. R., O'Connor, H. G., and Johnson, W. C., Hydrogeology and geochemistry of glacial deposits in northeastern Kansas: KGS Bulletin 229.

Sincerely,

Margaret A. Townsend
Hydrogeologist



**United States Department of Agriculture
Rural Development**

April 19, 2006

Dr. Lee Allison, Director
Ks. Geological Survey
1930 Constant Avenue
Lawrence, Ks. 66047

RE: Brian Haverkamp Farms – Nemaha Marshall Rural Electric Cooperative Assn., Inc.

The Nemaha Marshall Rural Electric Cooperative, Axtell, Kansas has submitted an application for a Rural Economic Development Loan to USDA-Rural Development to assist Brian Haverkamp of Seneca, KS. The purpose of the proposed loan will be to expand his dairy operation. This would include; a new confinement dairy free stall barn, heifer facilities, waste management system, feed storage, water storage, weigh scales and a new maintenance facility.

The legal description of the project is: SW ¼, 28-3-13.

This letter is providing notification of the above-proposed project, as well as the opportunity for your agency to review and comment on the proposed project as required by Executive order 12372.

More specific information describing the proposal may be obtained from the following contacts:

APPLICANT

Nemaha-Marshall Electric Cooperative
Kathy Brinker, Manager
PO Box 0
Axtell, KS 66403
785-736-2345

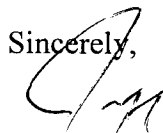
ULTIMATE RECEIPIENT

Brian Haverkamp
Brian Haverkamp Farms
1326 M-4 Road
Seneca, KS 66538
785-548-5015

Please provide your comments to this office, attention Jeff Schminke, Area Specialist, no later than 05-19-06. Faxed responses are acceptable.

Rural Development will not obligate funds for this project until we have completed an Environmental Assessment of the project.

Sincerely,


JEFF SCHMINKE
Area Specialist

JJSchminke:js

2615 Farm Bureau Road • Manhattan, KS 66502
(785) 776-7582 • Fax (785) 539-2733 • www.rurdev.usda.gov/ks

Committed to the future of rural communities

Rural Development is an Equal Opportunity Lender, Provider, and Employer. Complaints of discrimination should be sent to USDA, Director, Office of Civil Rights, Washington, D. C. 20250-9410

Comments by: Dr. Lee Allison, Director
Ks. Geological Survey
1930 Constant Avenue
Lawrence, Ks. 66047

Transmittal Date: April 19, 2006

PROJECT TITLE: Brian Haverkamp Farms
Nemaha Marshall Rural Electric Cooperative

CONTACT PERSON:

☐ Notification of Intent
☐ Preapplication
☐ Final Application
☐ Direct Development

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

RETURN TO: USDA RURAL
DEVELOPMENT,
2615 Farm Bureau Road
Manhattan, KS. 66502
Attn: Jeff Schminke

PART I

REVIEW AGENCIES/COMMISSIONS

☐ Aging	☐ Education	☐ State Forester
☐ Agriculture-DWR	☒ Geological Survey, KS	☐ Transportation
☐ Biological Survey, KS	☐ Health & Environment	☐ Water Office, Kansas
☐ Conservation Commission	☐ Historical Society	☐ Wildlife & Parks
☐ Corporation Commission	☐ Human Resources	☐
☐ Commerce	☐ Social & Rehab. Services	☐

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 be (in the final application) address and clarify the questions or concerns indicated above.
☐ Clearance of the project should not be granted.	
☐ 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.	

DIVISION/AGENCY/COMMISSION

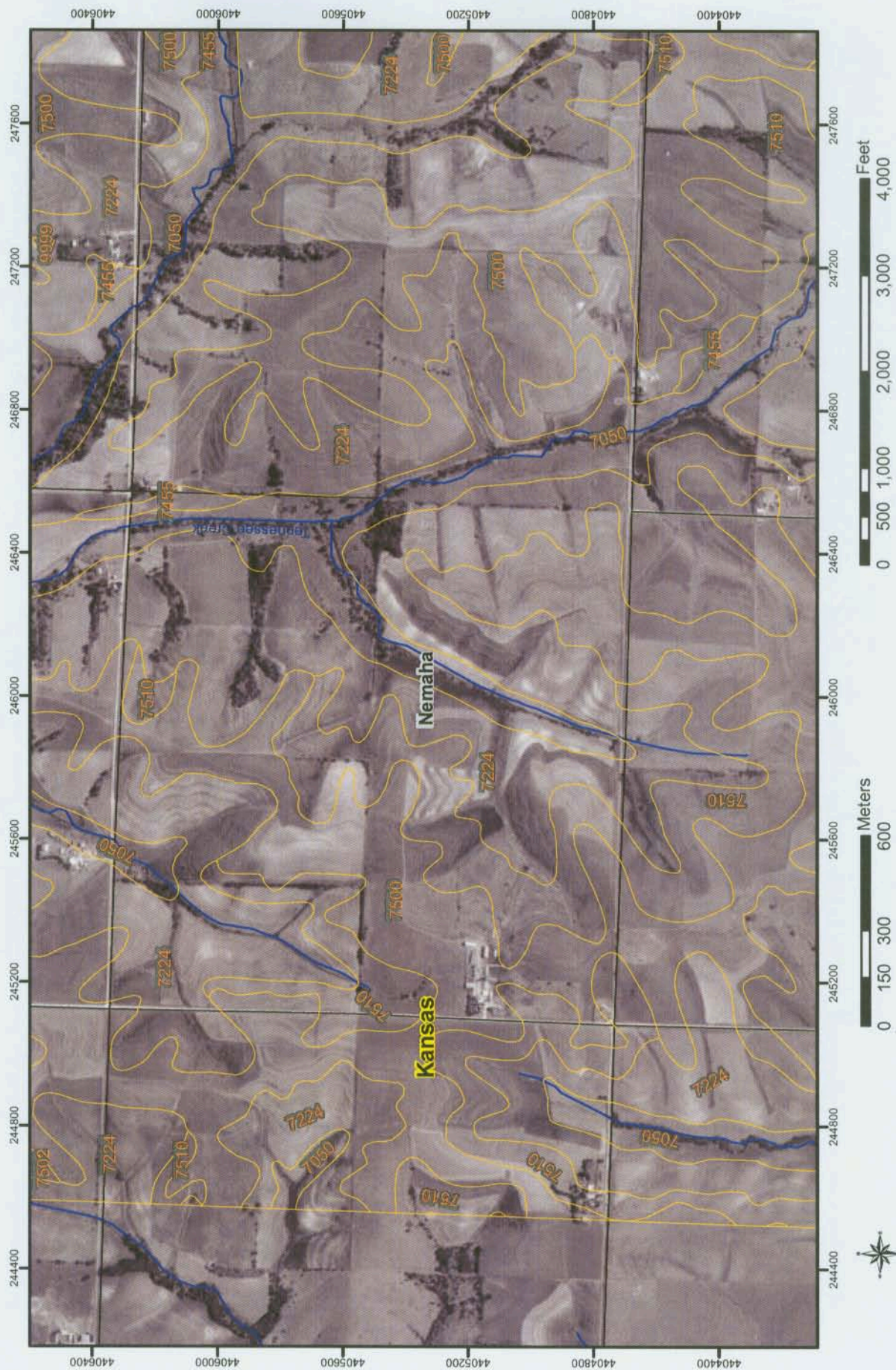
viewer's Name Margaret A. Townsend Date: 5-31-06

PLEASE FAX THIS FORM TO 785-539-2733 As Soon As Possible.



SOIL SURVEY OF NEMAHA COUNTY, KANSAS

Nemaha Dairy



SOIL SURVEY OF NEMAHA COUNTY, KANSAS

Nemaha Dairy

MAP LEGEND

- Soil Map Units
- Cities
- Detailed Counties
- Detailed States
- Interstate Highways
- Roads
- Rails
- Water
- Hydrography
- Oceans
- Escarpment, bedrock
- Escarpment, non-bedrock
- Gulley
- Levee
- Slope
- Blowout
- Borrow Pit
- Clay Spot
- Depression, closed
- Eroded Spot
- Gravel Pit
- Gravelly Spot
- Gulley
- Lava Flow
- Landfill
- Marsh or Swamp
- Miscellaneous Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Slide or Slip
- Sinkhole
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Perennial Water
- Wet Spot

MAP INFORMATION

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 15

Soil Survey Area: Nemaha County, Kansas
Spatial Version of Data: 3
Soil Map Compilation Scale: 1:24000

Map comprised of aerial images photographed on these dates:
10/7/1991

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend Summary

Nemaha County, Kansas

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	444.6	10.2
7224	Burchard-Steinauer clay loams, 6 to 12 percent slopes	2,212.6	50.5
7455	Olmitz loam, 1 to 5 percent slopes	21.6	0.5
7500	Pawnee clay loam, 1 to 3 percent slopes	1,130.6	25.8
7502	Pawnee clay loam, 3 to 7 percent slopes	47.2	1.1
7510	Pawnee clay, 3 to 7 percent slopes, eroded	481.7	11.0
7681	Wymore silty clay loam, 1 to 3 percent slopes	28.7	0.7
7688	Wymore-Baileyville complex, 3 to 6 percent slopes, eroded	3.5	0.1
9983	Gravel pits and quarries	4.0	0.1
9999	Water	4.9	0.1