

KANSAS GEOLOGICAL SURVEY

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

July 21, 2005

Daniel E. Norman, P.E.
HWS Consulting Group
10844 Old Mill Road, Suite 1
Omaha, NE 68154-2651

Dear Mr. Norman:

I received your request for comment by the Kansas Geological Survey (KGS) on a permit application for the expansion of an existing Municipal Solid Waste Landfill for Seward County, Kansas. The Seward County Landfill is located 1 mile east of Liberal, Kansas including the E1/2 SE1/4 S27, and the NW1/4 SW1/4 and the NW1/4 S26 in T34S R33W.

I examined data from the U. S. Geological Survey Liberal, Kansas 7.5 minute topographic map, a 2002 orthophoto containing the landfill site, a geologic map and report on Seward County (Byrne and McLaughlin, 1948, KGS Bulletin 69); and data on ground-water levels surrounding the site (<http://www.kgs.ku.edu/Magellan/WaterLevels/index.html>). The landfill site is located in an area of dune sand that overlays alluvial deposits of Quaternary and Tertiary age. These alluvial deposits are part of a regional aquifer system including the High Plains Aquifer that is important for domestic, agricultural, and industrial use. The water table is currently more than 150 feet below the ground surface. Your letter stated that the Kansas Geological Survey commented on the location in 1993 and 1998. Unfortunately, I was unable to review the previous comments provided by our agency.

- The primary geologic concern for this site is potential contamination of the aquifer. Since this is an expansion of an existing landfill, has any monitoring of the ground water been conducted at this site? Is there any information on the performance of the current landfill design with respect to protecting the aquifer? How will any design changes or practices prevent ground-water contamination? The issue of potential ground-water contamination should be addressed in your final application.
- The Kansas Geological Survey has no knowledge of landslide, karst, and earth fissure issues affecting this application.

The above discussion represents the information that the Kansas Geological Survey has on this proposed landfill site. Other geologic conditions, not discussed here, might affect the stability or safe operation of this landfill. The information provided in this letter is from regional (countywide) 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.

If you have any questions about my comments, feel free to contact me at (785) 864-2194 or ohlmac@kgs.ku.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Ohlmacher', with a long horizontal flourish extending to the right.

Gregory C. Ohlmacher, P.G.
Engineering Geologist



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June 30, 2005

Mr. Greg Olmacher
Kansas Geological Survey
1930 Constant Avenue
University of Kansas, West Campus
Lawrence, KS 66047-3726

RE: Seward County Landfill Expansion - Request for Response Letter

Dear Mr. Olmacher:

This letter is a request by Seward County Landfill for a response from your department. Kansas Department of Health and Environment regulations require Seward County Landfill to demonstrate that the proposed expansion of an existing Municipal Solid Waste Landfill (MSWLF) meets location restriction requirements as defined by Kansas statute. The purpose for requesting a written response from you is to help fulfill that portion of the requirement. Location demonstrations for previous improvements were submitted to your agency in 1993 and 1998.

Seward County Landfill is located near Liberal, in Seward County, Kansas. A more accurate location description is as follows:

Approximately one (1) mile east of Liberal, Kansas and north of both U.S. Highway 54 and the St. Louis Southwestern Railroad. It includes the E ½ of the SE ¼ of Section 27; the NW ¼ of the SW ¼ and the NW ¼ of Section 26 in T34S, R33W, Seward County, Kansas.

The existing MSWLF consists of a C&D (Construction and Demolition) Disposal area, Subtitle "D" Cell (municipal solid waste), and a compost pad. The C&D Disposal area is on top of trenches, which were previously filled with municipal solid waste and covered. Expansion plans include increasing the height of the C&D Disposal area, adding three stages to the existing Subtitle "D" Cell, constructing a new compost pad, and providing a location for a future Subtitle "D" Cell. No streams or channels will be affected by the proposed improvements. Storm water retention areas have more than enough capacity to retain the 100-year storm event and are strategically located to prevent any storm water runoff from leaving the landfill site.

All that we are asking you to do is review the site and let us know of any issues that you may be aware of regarding the proposed land use. If your department does not foresee a conflict with these proposed improvements at the MSWLF site, the Seward County Landfill is requesting that you sign and date both copies of this letter below where indicated and return one of them in the postage paid envelope provided. The other copy is enclosed for your use if you choose to keep one for your files.

If you have any questions regarding this project or this letter, please contact Dan Norman at (402) 333-5792 or by email at dnorman@hws.com.

Sincerely,

Daniel E. Norman, P.E.
Project Engineer

cc: Mike Tabor/Doyle Petersen

We have examined the site indicated on the enclosed vicinity and site plans and to the best of our knowledge, we are unaware of any issues regarding the proposed land usage.

Signature: _____

Date: _____

Denver

Manhattan

Lincoln

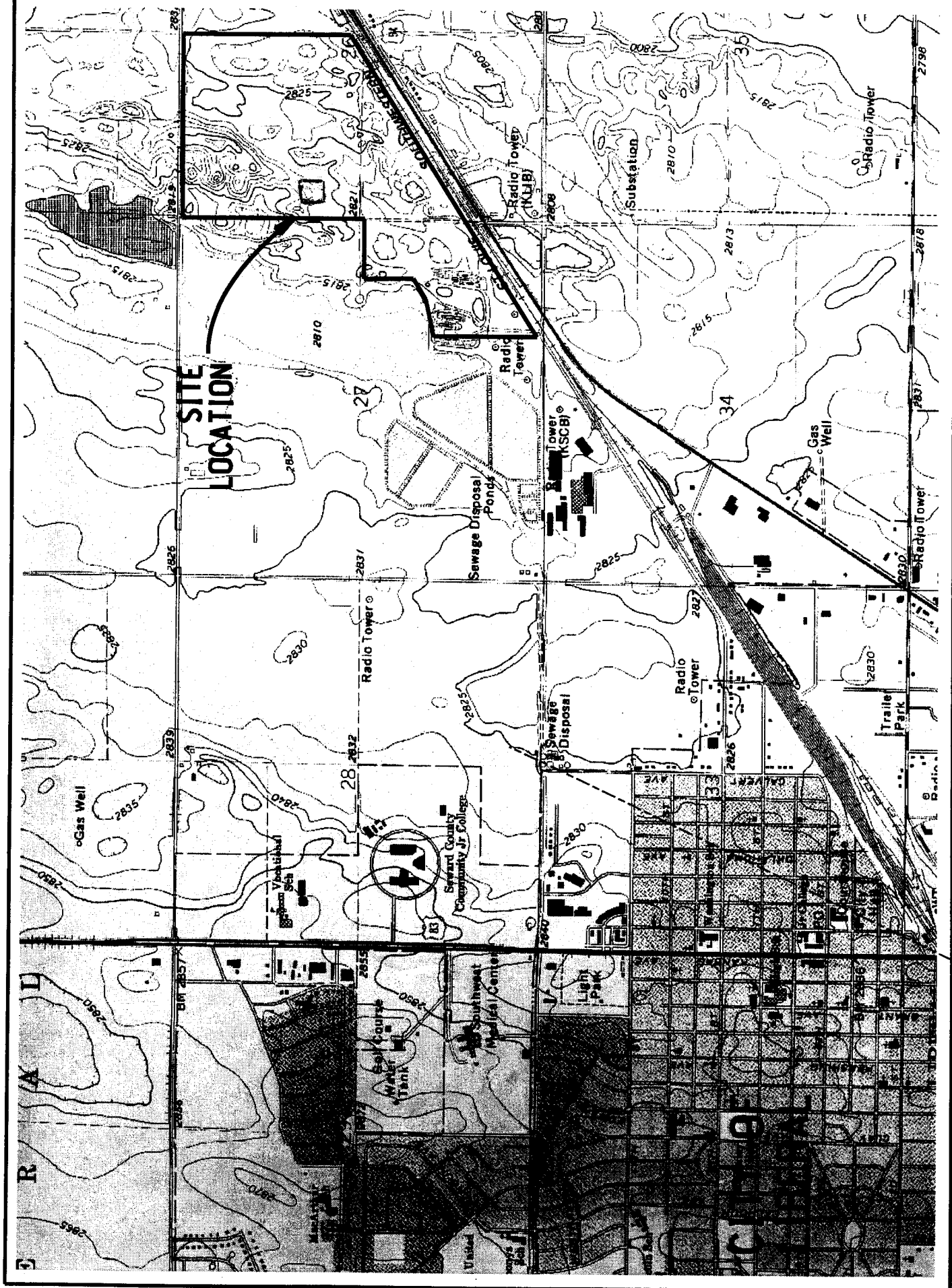
Omaha

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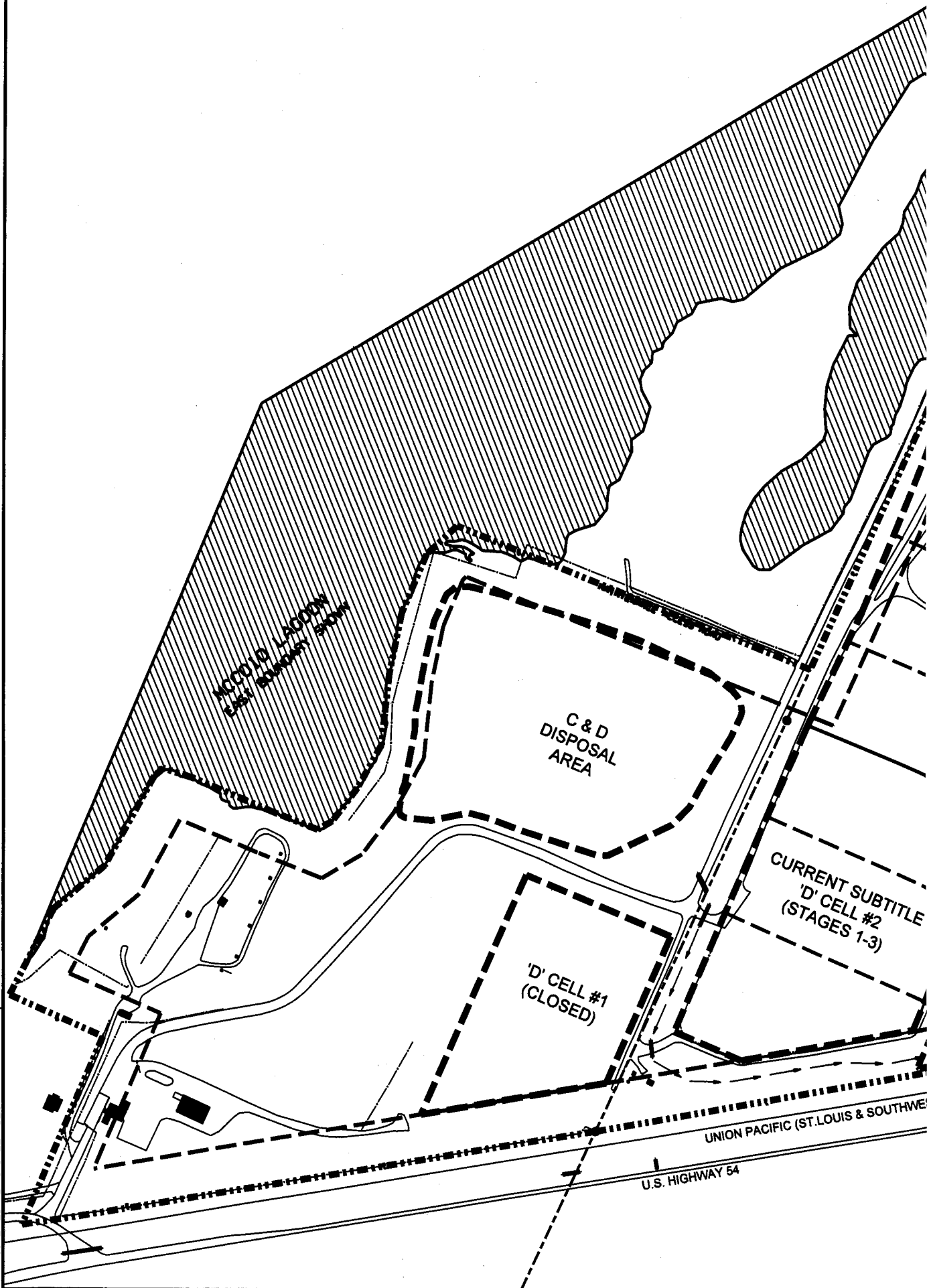
Chicago

...and anywhere else our Clients need us.





Drawn By: S.W. Plotted: JUNE 7, 2005
File: 1/COMBINED PLANS/SHEET 3DGN



SITE PLAN

SEWARD COUNTY MUNICIPAL SOLID WASTE LANDFILL
SEWARD COUNTY, KANSAS

LOCAL OFFICE
205 J. S. Ave. #205
Lawrence, KS 66044
(785) 842-1234
www.lawrenceks.org

