

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

November 28, 2005

Ms. Cynthia A. Neitzel
Terracon Consultants, Inc.
1815 S. Eisenhower
Wichita, Kansas 67209

**Re: Permit Application Notification
Ellis County Construction and Demolition Landfill
Ellis County, Kansas
Terracon Project No. 01057011**

Dear Ms. Neitzel,

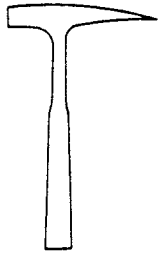
Thank you for informing me of the error in the cover letter dated October 18, 2005. I had actually based my comments on the location enclosed topographic map where the landfill is shown in the SE $\frac{1}{4}$ of Section 17.

I took the opportunity to update my letter of October 25th. I made three changes to the letter. 1) I corrected the public land survey system location of the landfill site. 2) I noted that the Kansas Geological Survey has no data on landslides at the proposed C&D landfill site. 3) I reexamined the site plan provided and observed that the intermittent stream has been diverted around the landfill. Thus, impoundment of surface water may not be an issue; however, erosion of the toe of the landfill still needs to be addressed in the final application. I have enclosed a revised copy of my comment letter.

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

Sincerely,

Gregory C. Ohlmacher, P.G.
Engineering Geologist



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Wichita, Kansas 67209

**Re: Permit Application Notification
Ellis County Construction and Demolition Landfill
Ellis County, Kansas
Terracon Project No. 01057011**

Dear Ms. Neitzel,

I received your request for comment by the Kansas Geological Survey (KGS) on the proposed expansion of the Construction & Demolition (C&D) Landfill for Ellis County. The proposed disposal area is located north of Hays, Kansas in the SE¼ of Section 17, T13S, R18E.

Your letter included a portion of the USGS Hays North 7½-minute topographic map and a site map showing the location of the C&D Landfill expansion. Additionally I examined a 2002 orthophotograph, a geologic map of Ellis County (Neuhauser and Pool, 1998), and a geologic report on southern Ellis County (Leonard and Berry, 1961). Below the existing landfill, the local geology is Cretaceous Blue Hill Shale and Quaternary Alluvium. The Kansas Geological Survey has no data on landslides at the proposed C&D landfill site; however, landslides have been observed in the Blue Hill Shale and residual soils on this unit in Ellis County. The Quaternary Alluvium could be an aquifer that might allow contaminants to escape from the landfill. It is difficult to tell from the existing data, but this landfill may be blocking an intermittent stream. The site map indicates that the intermittent stream was diverted around the landfill site. Several issues may exist related to the safe operation and maintenance of the proposed C&D and other landfills at this site including erosion of waste and flooding. These topics should be addressed in the final application.

Neuhauser, K. R., and Pool, J. C., 1988. Geologic Map, Ellis County, Kansas, Kansas Geological Survey Map M-19.

Leonard, A. R. and Berry, D. W., 1961. Geology and Ground-water Resources of Southern Ellis County and Parts of Trego and Rush Counties, Kansas. Kansas Geological Survey, Bulletin 149, 156 pp.

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 characterization by a licensed geologist or engineer. It is the responsibility of the applicant to produce the detailed site characterization.

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 stylized, flowing script.

Gregory C. Ohlmacher, P.G.
Engineering Geologist

November 16, 2005

Mr. Lawrence Brady
Kansas Geological Survey
University of Kansas, Campus West
1930 Constant Ave
Lawrence, KS 66047-3726

Terracon
Consulting Engineers & Scientists

Terracon Consultants, Inc.
1815 South Eisenhower
Wichita, Kansas 67209
Phone 316.262.0171
Fax 316.262.6997
www.terracon.com

Re: Permit Application Notification
Ellis County Construction and Demolition Landfill
Ellis County, Kansas
Terracon Project No. 01057011

Dear Mr. Brady:

In a letter dated October 18, 2005, Terracon provided information on a proposed C&D landfill expansion project for Ellis County, Kansas. However, the C&D landfill is actually located in the SE/4 of Section 17 in Ellis County as shown on the attached Figure 1 not the SW/4 of Section 17 in Ellis Co., as incorrectly stated in the October 18, 2005 letter.

Attached to this transmittal Terracon is a new letter with the correct location. Also attached is a copy of your previous response.

Thank you for your consideration in this matter. Please contact us if you need any further information for your review. We respectfully request an expedited review and response. Please call (316-262-0171) or fax (316-262-6997) us with results.

Sincerely,
TERRACON


Cynthia A. Neitzel, P.E.
Project Manager


Douglas A. Aldrich, P.E.
Principal, Office Manager

Attachment

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November 16, 2005

Mr. Lawrence Brady
Kansas Geological Survey
University of Kansas, Campus West
1930 Constant Ave
Lawrence, KS 66047-3726

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Re: Permit Application Notification
Ellis County Construction and Demolition Landfill
Ellis County, Kansas
Terracon Project No. 01057011

Dear Mr. Brady:

We have been retained by Ellis County to prepare an application for a landfill permit. One of the requirements is to check with several agencies to determine if they have any information about the proposed site. We request a response from your agency indicating any issues you may be aware of regarding this proposed land use.

The existing C&D landfill and the proposed expansion area are located on 60 acres in SE/4 of Section 17, Township 13 South, Range 18 West in Ellis County. The location of the existing C&D landfill and the proposed expansion area is depicted on the enclosed 1961/1983 United States Geological Survey 7.5-Minute Series Quadrangle map (Figure 1) and in greater detail on Figure 2. Please note the attached 1961/1983 Quadrangle map does not reflect current site conditions (e.g. there have not been any ponds on the site since the site was developed in the 1970s-1980s). The facility includes a closed municipal solid waste (MSW) landfill, transfer station, a household hazardous waste collection center, composting area, and an active C&D landfill which was opened in 1994. The proposed C&D landfill expansion is situated next to the previously permitted MSW landfill which was opened in 1976 and closed in 1994. Thus, the C&D landfill is located within property historically used for solid waste disposal.

Thank you for your consideration in this matter. Please contact us if you need any further information for your review. We respectfully request an expedited review and response. Please call (316-262-0171) or fax (316-262-6997) us with results.

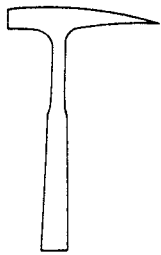
Sincerely,
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Cynthia A. Neitzel
Project Manager


Douglas A. Aldrich, P.E.
Principal, Office Manager

Attachment

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KANSAS GEOLOGICAL SURVEY

1930 Constant Ave., Campus West
The University of Kansas
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October 25, 2005

Ms. Cynthia A. Neitzel
Terracon Consultants, Inc.
1815 S. Eisenhower
Wichita, Kansas 67209

**Re: Permit Application Notification
Ellis County Construction and Demolition Landfill
Ellis County, Kansas
Terracon Project No. 01057011**

Dear Ms. Neitzel,

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Your letter included a portion of the USGS Hays North 7 $\frac{1}{2}$ -minute topographic map and a site map showing the location of the C&D Landfill expansion. Additionally I examined a 2002 orthophotograph, a geologic map of Ellis County (Neuhauser and Pool, 1998), and a geologic report on southern Ellis County (Leonard and Berry, 1961). Below the existing landfill, the local geology is Cretaceous Blue Hill Shale and Quaternary Alluvium. Landslides have been observed in the Blue Hill Shale and residual soils on this unit in Ellis County. The Quaternary Alluvium could be an aquifer that might allow contaminants to escape from the landfill. It is difficult to tell from the existing data, but this landfill may be blocking an intermittent stream. Several issues may exist related to flooding and the safe operation and maintenance of the proposed C&D and the existing landfills at this site including erosion of waste, water impounding against the landfill might allow contaminants to escape, and other issues.

Neuhauser, K. R., and Pool, J. C., 1988. Geologic Map, Ellis County, Kansas, Kansas Geological Survey Map M-19.

Leonard, A. R. and Berry, D. W., 1961. Geology and Ground-water Resources of Southern Ellis County and Parts of Trego and Rush Counties, Kansas. Kansas Geological Survey, Bulletin 149, 156 pp.

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Gregory C. Ohlmacher, P.G.
Engineering Geologist

October 18, 2005

Mr. Lawrence Brady
Kansas Geological Survey
University of Kansas, Campus West
1930 Constant Ave
Lawrence, KS 66047-3726

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Cynthia A. Neitzel
Project Manager


Douglas A. Aldrich, P.E.
Principal, Office Manager

Attachment

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More Than 70 Offices Nationwide



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LEGEND

— APPROXIMATE
PROPERTY
BOUNDARY

NOTES

PROPERTY DESCRIPTION:
SOUTH 980 FEET OF THE SOUTHEAST QUARTER
OF SECTION 17, TOWNSHIP 13 SOUTH, RANGE
18 WEST, ELLIS COUNTY, KANSAS

HAYS NORTH QUADRANGLE
KANSAS - ELLIS COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)
1961 - PHOTOREVISED 1983

ELLIS COUNTY C & D LANDFILL EXPANSION

ELLIS COUNTY
PUBLIC WORKS

ELLIS COUNTY, KANSAS

MARK	DATE	DESCRIPTION

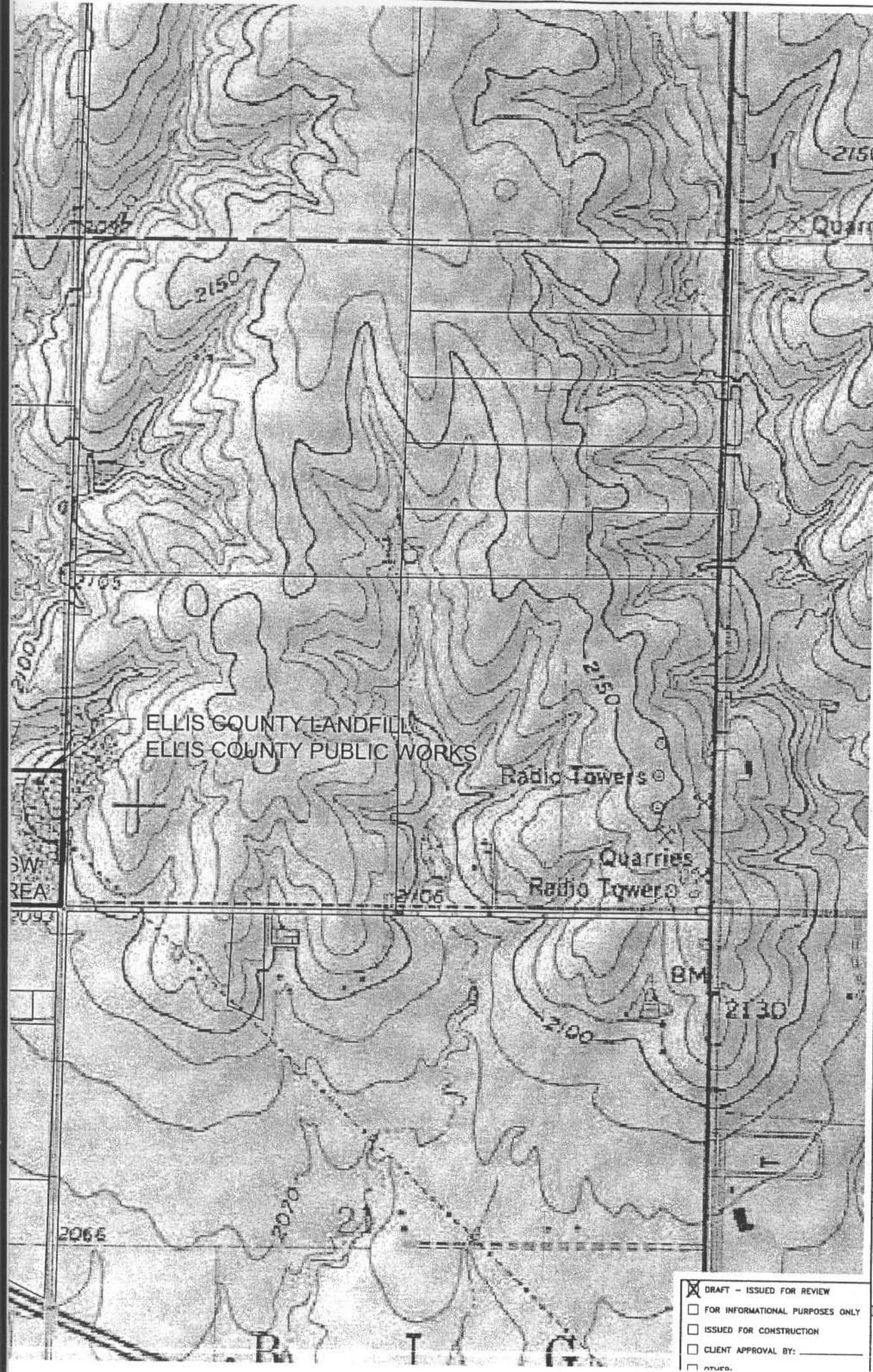
PROJECT NO: 01057011
CAD DWG FILE: 01057011.DWG
DRAWN BY: BCD
CHK'D BY: CAN
DATE: 09/29/05

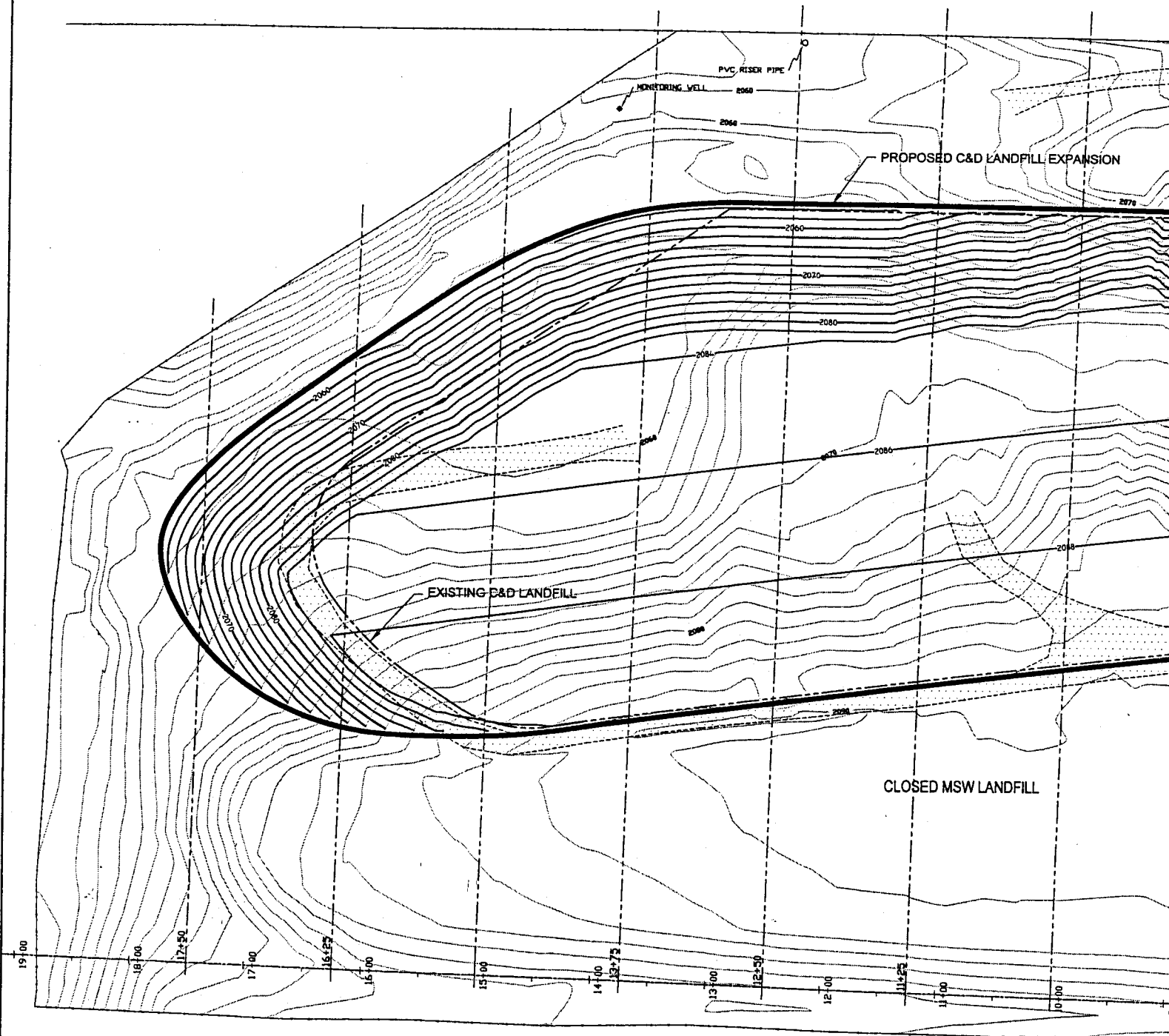
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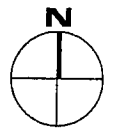
SITE LOCATION MAP

FIGURE 1

- ☒ DRAFT - ISSUED FOR REVIEW
- ☐ FOR INFORMATIONAL PURPOSES ONLY
- ☐ ISSUED FOR CONSTRUCTION
- ☐ CLIENT APPROVAL BY: _____
- ☐ OTHER: _____





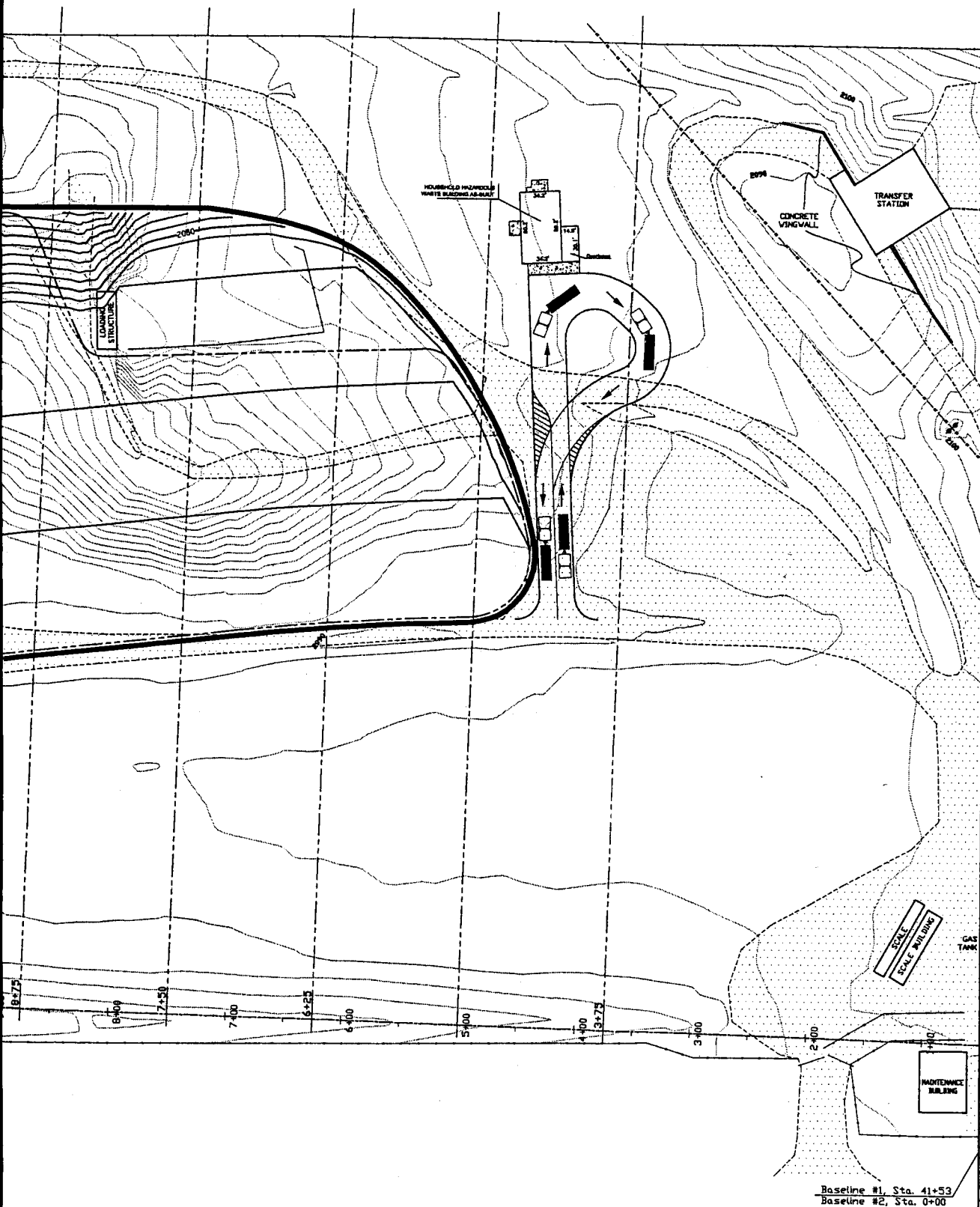


LEGEND

- POTENTIAL C&D LANDFILL BOUNDARY
- POWER POLE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTR
- FENCE
- TRAVELWAY
- EXISTING C&D LANDFILL BOUNDARY

ELLIS COUNTY C&D LANDFILL EXPANSION

ELLIS COUNTY, KANSAS



Baseline #1, Sta. 41+53
Baseline #2, Sta. 0+00

- ☐ DRAFT - ISSUED FOR REVIEW
- ☒ FOR INFORMATIONAL PURPOSES ONLY
- ☐ ISSUED FOR CONSTRUCTION
- ☐ CLIENT APPROVAL BY: _____

BCB	01/24/05	CHG SOL / ADD CONT LB
MARK	DATE	DESCRIPTION
PROJECT NO.	01057011	
CAD DWG FILE:	01057011#2.DWG	
DRAWN BY:	BCB	
CHK'D BY:	DAA	
DATE:	06/07/05	

SHEET TITLE

SITE MAP