



August 4, 2008

Ms. Jaclynne Drummond  
Division of Waste Management - Solid Waste Section  
401 Oberlin Road, Suite 150  
Raleigh, NC 27605

Re: Methane Monitoring Status Report  
Lee County Landfill - Sanford, NC  
NCDWM-Solid Waste Section Permit # 53-01

Dear Ms. Drummond:

Terraquest Environmental Consultants, P.C. is hereby reporting the status of methane monitoring at the Lee County Landfill. In accordance with the approved methane monitoring plan, wells with vapors exceeding the lower explosive limit are monitored on a bi-monthly basis. This update details the latest monitoring event.

The site location, vicinity, and layout are displayed on the attached Figures 1, 2, and 3, respectively. Figure 4 provides a closer view of the identified LEL violation area. Methane monitoring results are provided on the attached Table 1, and an NCDWM-SW Environmental Monitoring Reporting Form is also attached.

On August 1, 2008, Terraquest personnel utilized a Q-RAE multigas monitor to check the concentration of explosive vapors as methane in monitoring points M8, 28, 29, 36, 37, 38. As shown on Table 1, LEL violations were noted in M8, 28, 29, 37, and 38. Note that those wells have been previously modified to act as venting points.

With venting wells in place in the area surrounding M8, remediation in that area is underway. While the extent of LEL violations to the east of M38 is still undefined, the lack of human presence or buildings/structures capable of allowing the buildup of explosive gases lowers the risk of the LEL violation vapors in that area. Terraquest recommends that bi-monthly monitoring of the LEL violation wells be continued.

Please call me with any questions or comments that you have. Thanks.

Sincerely,

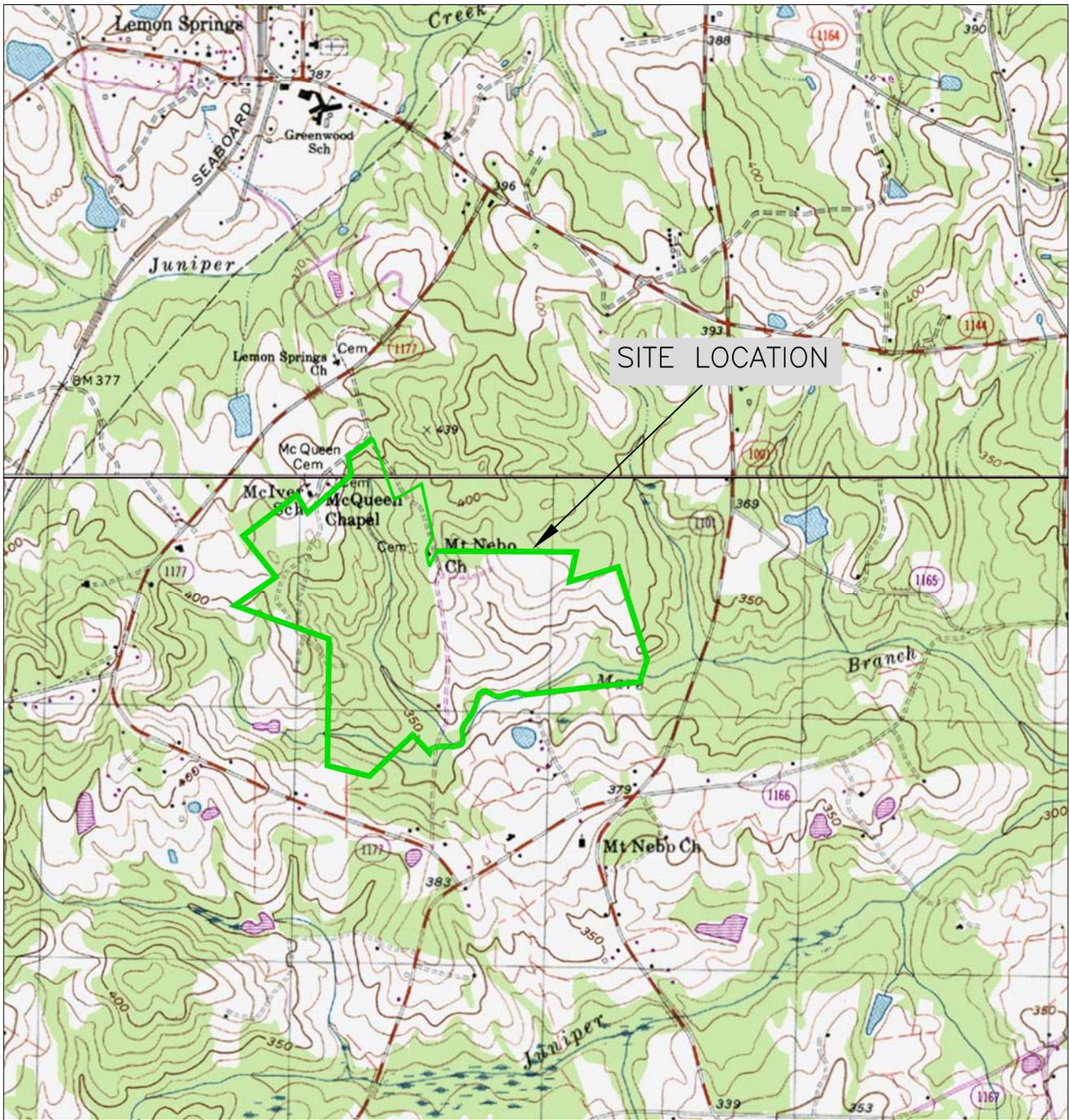
TERRAQUEST ENVIRONMENTAL CONSULTANTS, P.C.

A handwritten signature in black ink, appearing to read "R. Kerins".

Ryan D. Kerins  
Project Manager

Attachments: Figure 1 – Site Location Map, Figure 2 – Site Vicinity Map, Figure 3 – Site Layout Map, Figure 4 – LEL Violation Area  
Table 1 – Methane Monitoring NCDWM-SW Environmental Monitoring Reporting Form  
NCDWM-SW Environmental Monitoring Reporting Form

cc: oe Cherry – Lee County Public Works Department



MAP SOURCE: USGS 7.5 MINUTE TOPOGRAPHICS – SANFORD AND MURCHISONTOWN, NC

GRAPHIC SCALE



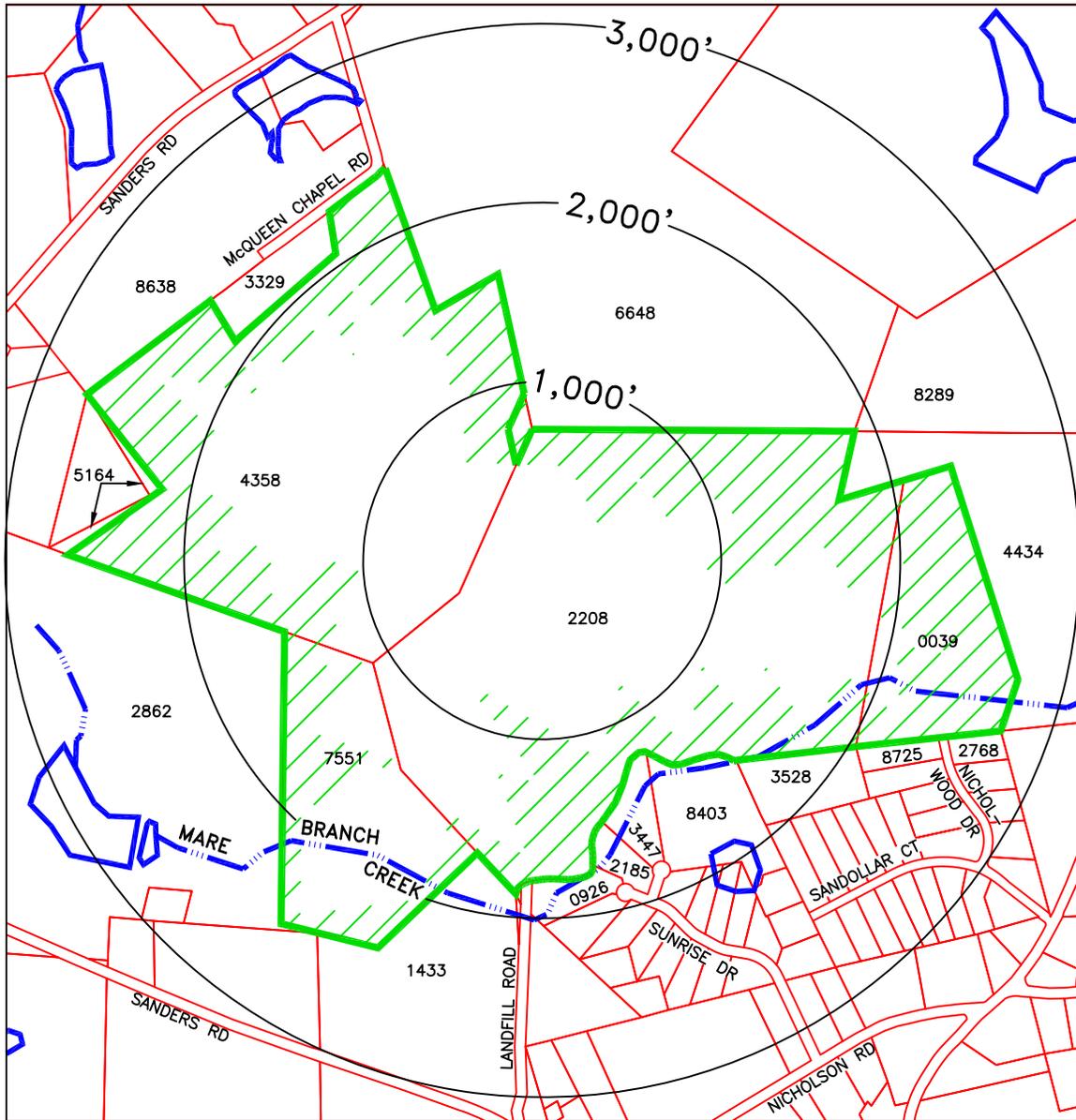
ENVIRONMENTAL CONSULTANTS, P.C.

SITE LOCATION MAP

LEE COUNTY LANDFILL  
331 LANDFILL ROAD  
LEE COUNTY, NORTH CAROLINA

LEE COUNTY PUBLIC WORKS SANFORD, NC

PROJECT NO.	02296	DRAWN BY:	RDK	DATE:	8/4/08
SCALE:	1" = 2000'	CHECKED BY:	JRG/MJB	FIGURE NO.	1



LEGEND

- LANDFILL PROPERTY BOUNDARY
- PARCEL BOUNDARIES
- SURFACE WATER BODY
- DISTANCE FROM LANDFILL CENTER
- 2106 TAX PARCEL ID (SEE TABLE 1)
- GRAPHIC SCALE (1" = 1,000')
- 

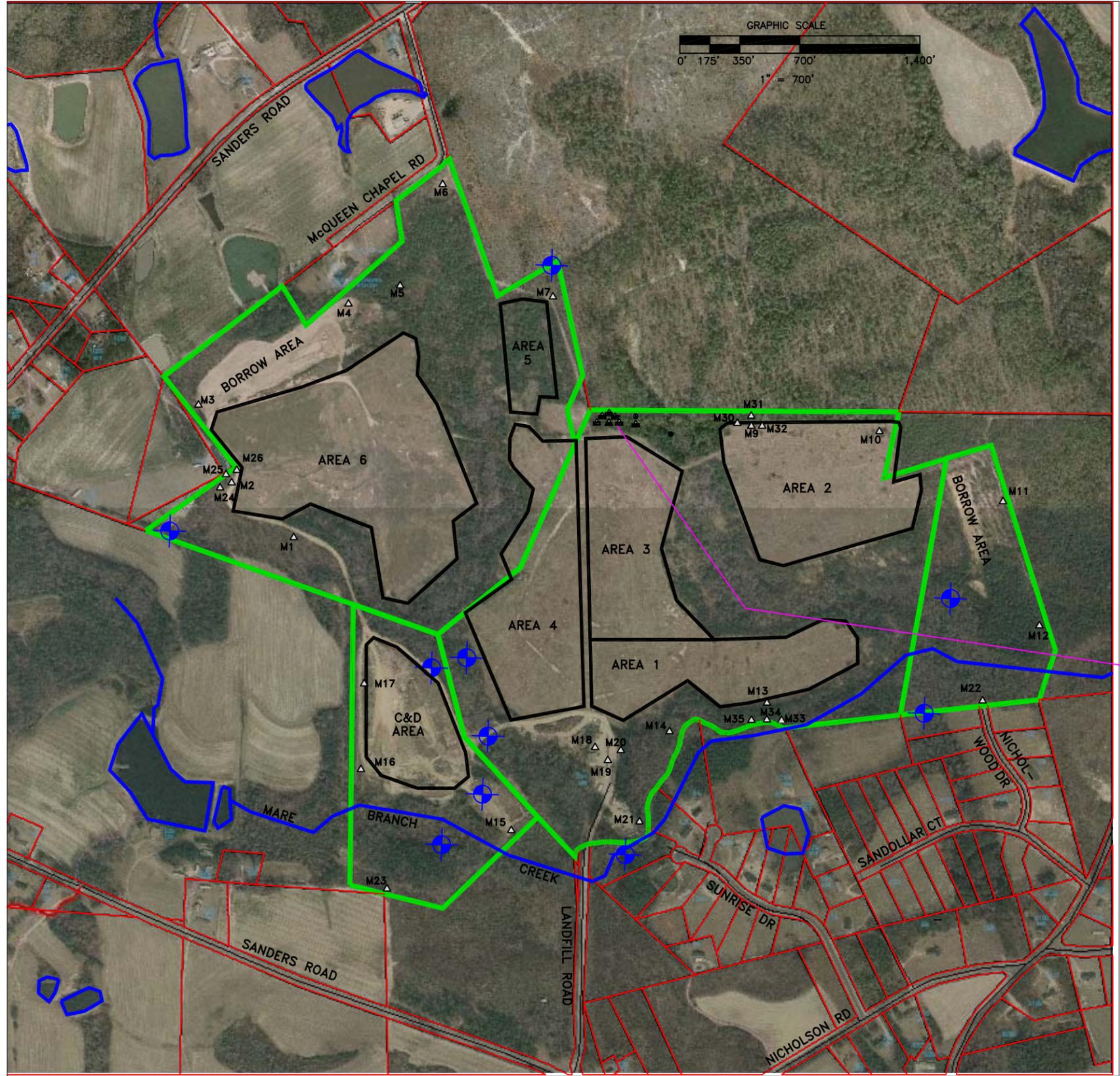
(NOTE: MAP ADAPTED FROM INFORMATION PROVIDED BY THE LEE COUNTY DEPARTMENT OF STRATEGIC SERVICES)



SITE VICINITY MAP

LEE COUNTY LANDFILL  
 331 LANDFILL ROAD  
 SANFORD, LEE COUNTY, NC 27332

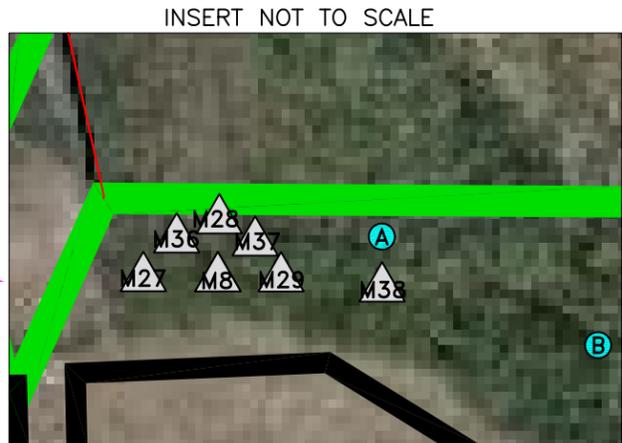
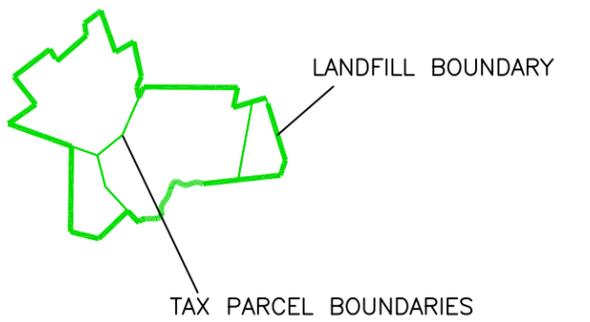
LKEE COUNTY PUBLIC WORKS		SANFORD, NC	
PROJECT NO.	02296	DRAWN BY:	RDK
SCALE:	1" = 1,000'	CHECKED BY:	MJB
DATE:	8/4/08	FIGURE NO.	2



**LEGEND**

- △ APPROVED METHANE MONITORING WELL
- Ⓐ 7/16/08 INVESTIGATIVE BORING

AREAS 1 – 6 CLOSED MSW  
C&D AREA STILL ACTIVE



(NOTE: MAP ADAPTED FROM INFORMATION PROVIDED BY THE LEE COUNTY DEPARTMENT OF STRATEGIC SERVICES)

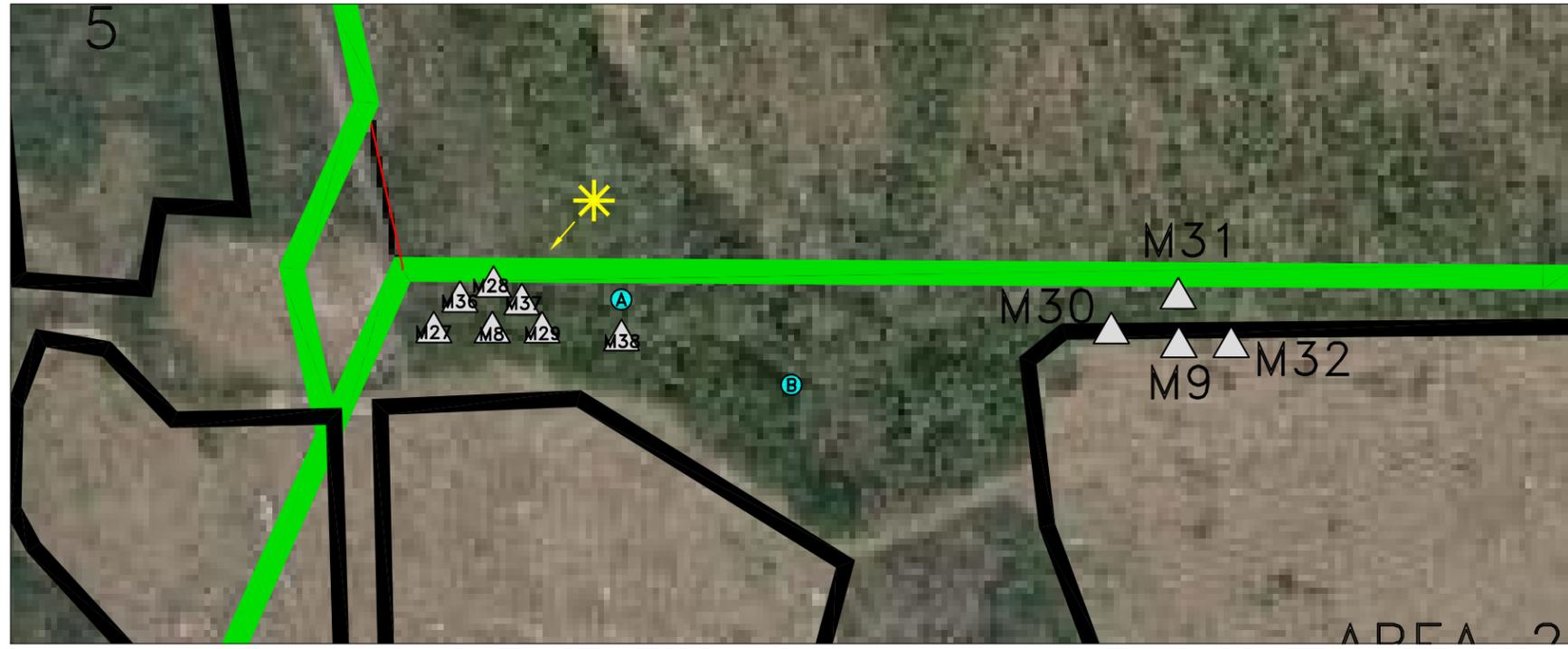


SITE LAYOUT MAP – AERIAL VIEW  
LEE COUNTY LANDFILL  
SANFORD, LEE COUNTY, NC

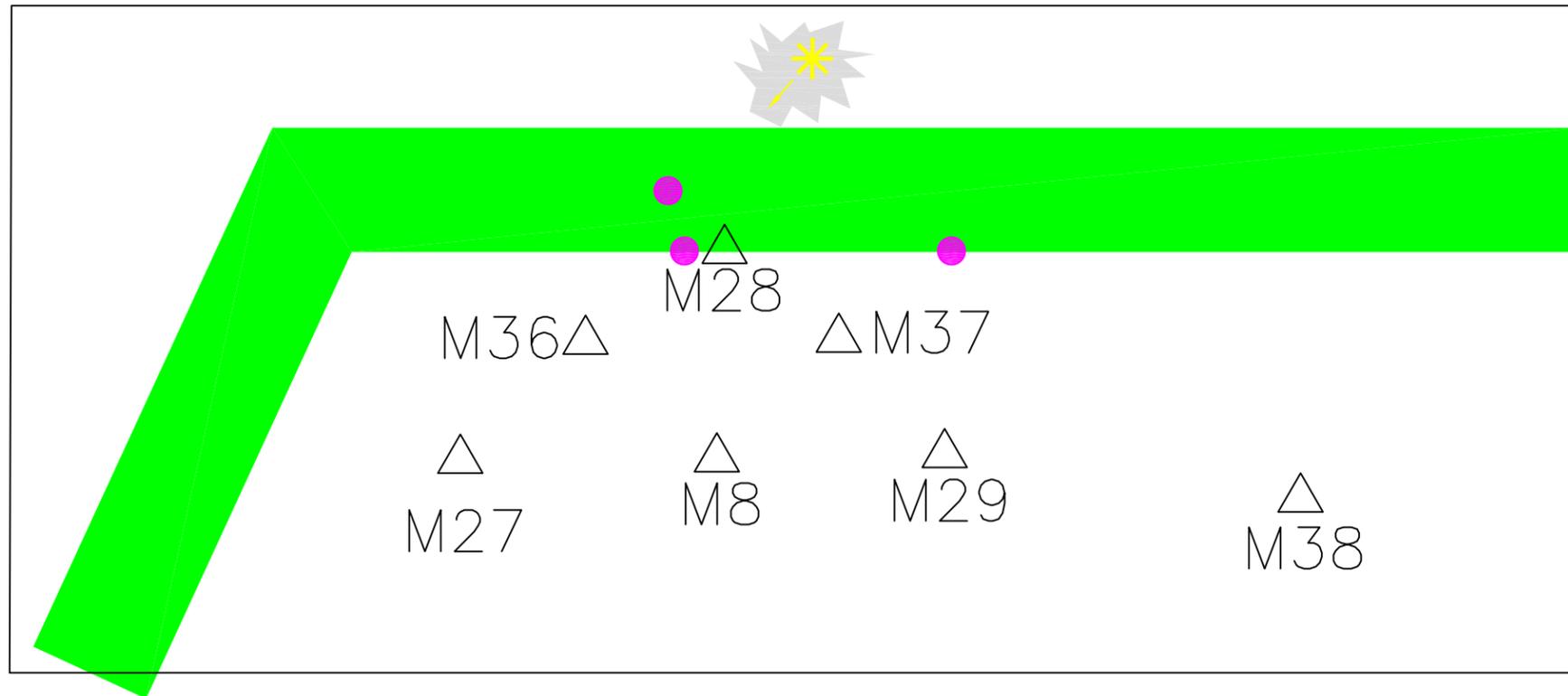
LEE COUNTY PUBLIC WORKS	PROJECT NO: 02296	CHECKED BY: MJB	FIGURE NO. 3	SANFORD, NC
SCALE: 1" = 700'		DRAWN BY: RDK	DATE: 8/4/08	



SCALE: 1" = 200'

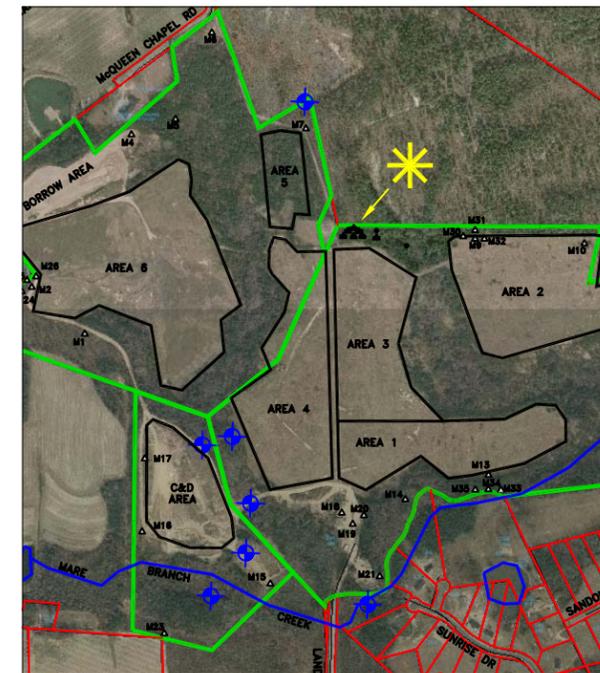


SCALE: 1" = 50'



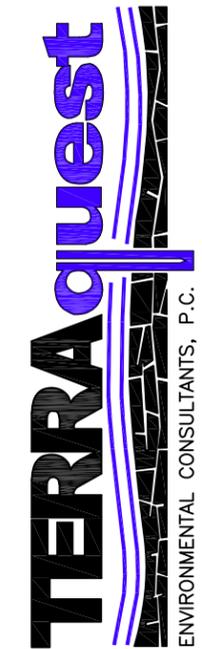
LEGEND

- △ APPROVED METHANE MONITORING WELL
- Ⓐ 7/16/08 LEL INVESTIGATIVE BORING
- 7/16/08 WASTE INVESTIGATIVE BORING



SCALE: 1" = 1,250'

(NOTE: MAP ADAPTED FROM INFORMATION PROVIDED BY THE LEE COUNTY DEPARTMENT OF STRATEGIC SERVICES)



LEE VIOLATION AREA  
LEE COUNTY LANDFILL  
SANFORD, LEE COUNTY, NC

LEE COUNTY PUBLIC WORKS	PROJECT NO: 02296	CHECKED BY: MJB	FIGURE NO. 4	SANFORD, NC
SCALE: AS SHOWN	AS SHOWN	DRAWN BY: RDK	DATE: 8/4/08	

Table 1		METHANE MONITORING					
Date: 8/4/08		Facility Name: Lee County Landfill					
FACILITY	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	COLLECT DATE
53-01	SITE	SW325	325	ambient temperature	28.0	°C	11:00 8/1/08
53-01	SITE			barometric pressure	29.85	"Hg	11:00 8/1/08
53-01	SITE			barometric pressure	1,010.7	hPA	11:00 8/1/08
53-01	M8			methane gas - OVM reading	100	%LEL	8/1/2008
53-01	M8	SW318	318	Depth To Water	6.24	feet	8/1/2008
53-01	M27			methane gas - OVM reading	0	%LEL	8/1/2008
53-01	M28			methane gas - OVM reading	100	%LEL	8/1/2008
53-01	M29			methane gas - OVM reading	100	%LEL	8/1/2008
53-01	M36			methane gas - OVM reading	62	%LEL	8/1/2008
53-01	M37			methane gas - OVM reading	100	%LEL	8/1/2008
53-01	M38			methane gas - OVM reading	100	%LEL	8/1/2008

NC DENR  
Division of Waste Management - Solid Waste

Environmental Monitoring  
Reporting Form

**Notice:** This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

**Instructions:**

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

**Solid Waste Monitoring Data Submittal Information**

Name of entity submitting data (laboratory, consultant, facility owner):

Terraquest Environmental Consultants, P.C.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Ryan Kerins Phone: (919) 563-9091  
E-mail: rdkerins@terraquestpc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Lee County Landfill	331 Landfill Rd, Sanford, NC 27332	53-01	.1600	August 1, 2008

**Environmental Status: (Check all that apply)**

- Initial/Background Monitoring  Detection Monitoring  Assessment Monitoring  Corrective Action

**Type of data submitted: (Check all that apply)**

- Groundwater monitoring data from monitoring wells  Methane gas monitoring data  
 Groundwater monitoring data from private water supply wells  Corrective action data (specify) \_\_\_\_\_  
 Leachate monitoring data  Other(specify) \_\_\_\_\_  
 Surface water monitoring data

**Notification attached?**

- No. No groundwater or surface water standards were exceeded.  
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.  
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

**Certification**

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Ryan Kerins Project Manager (919) 563-9091  
Facility Representative Name (Print) Title (Area Code) Telephone Number

Signature [Signature] Date 8/4/08

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

