

Permit Drawings – are they noted on the permit, and current?

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Solid Waste Landfills Unit
Solid Waste Permits Section
Bureau of Waste Management
Kansas Department of Health & Environment
at
SWANA/KDHE Solid Waste Management
Conference and Operator
Training Course
November 20, 2014

Basis

- **K.S.A 65-3407(f)** - Plans, designs and relevant data for the construction of solid waste processing facilities and disposal sites shall be prepared by a professional engineer licensed to practice in Kansas and shall be submitted to the department for approval prior to the construction, alteration or operation of such facility or area.
- **Kansas Statutes require ownership information to assess**
 - Easement/lease issues,
 - Allowable financial assurance mechanisms.
- **Kansas Regulations require information to assess**
 - Restrictions of land use on closed landfill disposal cells,
 - Closure cost-estimates, etc.

State of Kansas

Department of Health and Environment

Bureau of Waste Management
1001 SW Jackson, Suite 320, Topeka, Kansas 66612-1366 (785) 296-1600

PERMIT

No. 0106

For operating a processing facility or a solid waste disposal area
in accordance with the provisions of Kansas Statutes Annotated 65-3407

Permission is hereby granted

to Clark County
(name of governmental entity, corporation or person)

to operate an Municipal Solid Waste Landfill

location SW ¼, SE ¼, Section 11, T 33 S, R 23 W, Clark County

An approximately 42.07-acre facility permitted area with approximately 36.65 acres of disposal area.

in conformity with the attached general and special conditions and with all documents submitted by the permittee and approved by the Department of Health and Environment, including design plans as noted below.

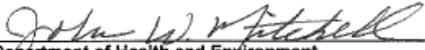
Permit Design Drawing set entitled:

"Municipal Solid Waste Landfill (Grandfathered SAL)", KDHE Permit No. 0106, Clark County, Kansas."

Sheets 1, and 3 through 10 of 10 sealed and signed by Kansas licensed Professional Engineer on 09/27/13 and sheet 2 of 10 sealed and signed by Kansas licensed Land Surveyor on 09/27/13.



Done at Topeka, this 22 day of October 2013


Department of Health and Environment

Permit

- **An approximately 42.07-acre facility permitted area with approximately 36.65 acres of disposal area.**
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Your Permit

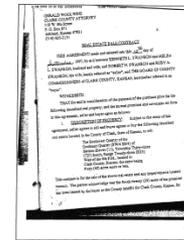
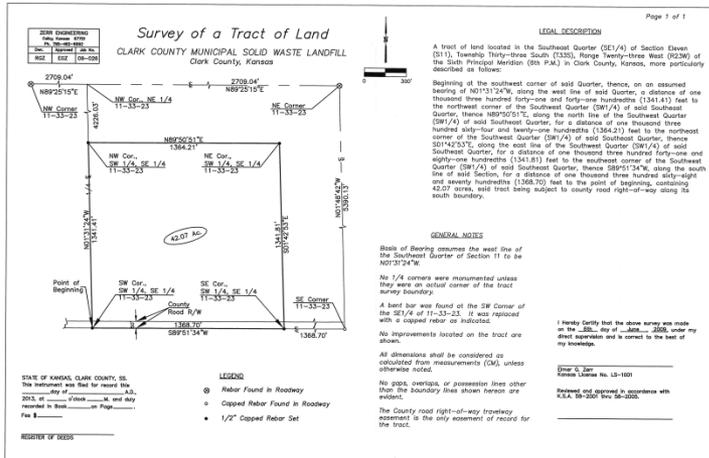
- Is the Facility Permit Area noted?
- Is the Disposal Area noted?
- Are the applicable engineering drawings noted?
 - when noted on the permit these engineering drawings become the permit drawings?

Permit

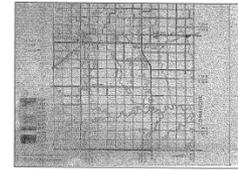
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Permit Engineering Drawings

BASE MAP CLARK COUNTY MSW LANDFILL



Filed Deed



Clark County Road Right-of-Way Map

Section Corner References

- NW Corner 11-33-23
- 1/2" bar found in pavement at corner
 - Nail & bottle cap in top of fence corner post 73.37' S
 - Nail & bottle cap in top of fence corner post 86.40' NW
 - Nail & bottle cap in top of fence corner post 83.61' NNE
- NE Corner 11-33-23
- 1/2" bar found in pavement at corner
 - Centerline of top of telephone pedestal 94.00' SW
 - Nail & bottle cap in top of fence corner post 96.34' NW
 - Nail & bottle cap in the west face of power pole 88.88' NNE
- SE Corner 11-33-23
- 5/8" capped bar found in roadway at corner
 - Spikes & weather in the top of a railroad tie corner post 76.74' NW
 - Centerline of 10" metal fence corner post 52.20' NE
 - Nail & bottle cap in the top of a hedge fence corner post 66.33' SW
- SW Corner, SE 1/4 11-33-23
- 1/2" capped bar reset in roadway at corner
 - Nail & bottle cap in top of fence post 44.99' SE
 - Nail & bottle cap in top of fence gate post 28.88' SSE
 - Centerline of the top of a metal fence corner post 76.41' NNE

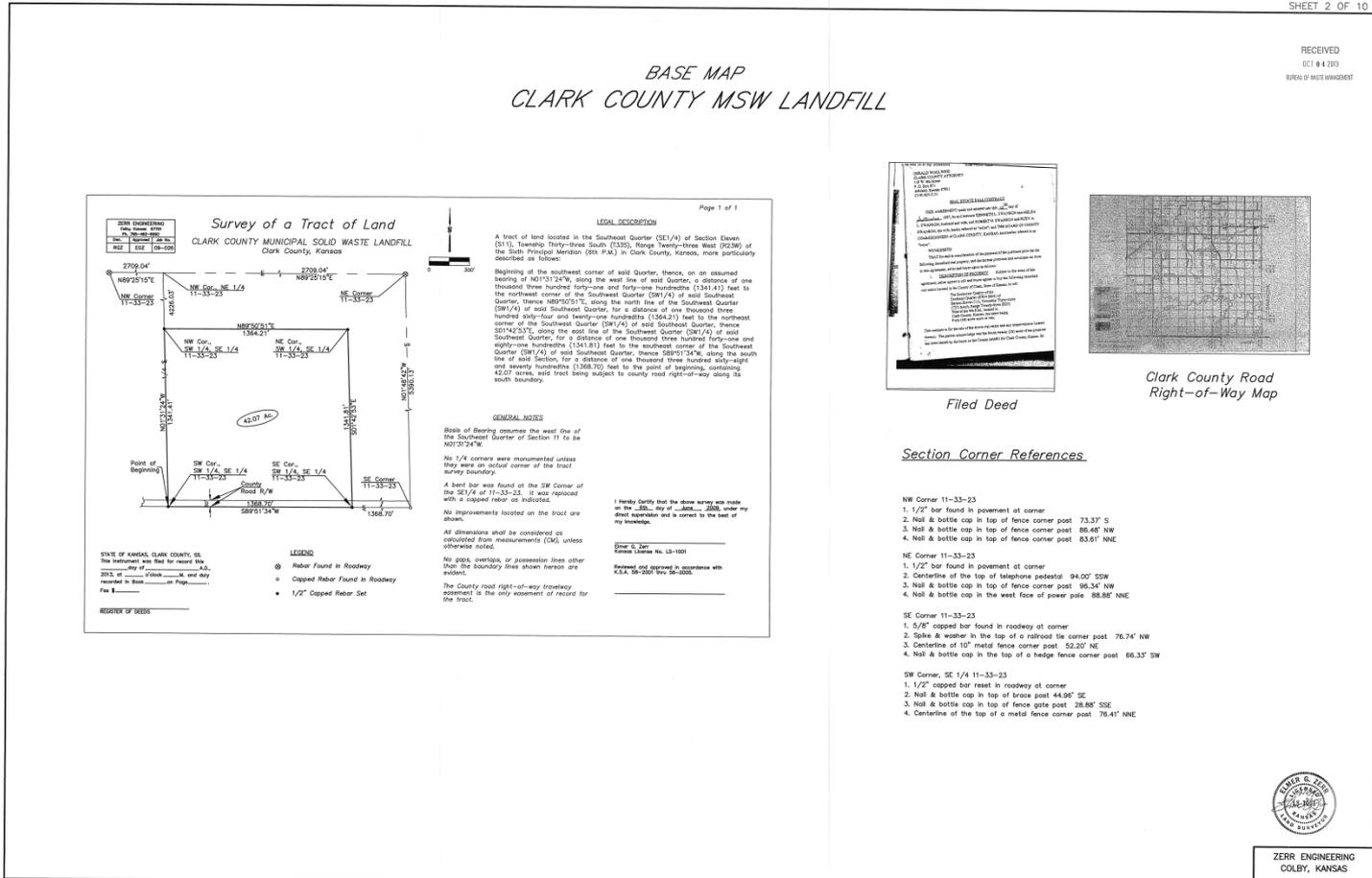


ZERR ENGINEERING
COLBY, KANSAS
PROJECT NO. 13-023

Permit Engineering Drawings (contd)

- Boundary survey by **Kansas licensed Professional Land Surveyor**
 - Notes ownership of the entire Facility Permit Area
 - Multiple parcels ?
 - Multiple owners ? Note percentage of ownership
 - Record all easements of record that apply to any acreage within the Facility Permit Area.

Permit Engineering Drawings (contd)



Permit Engineering Drawings (contd)

- Disposal Area clearly delineated
 - Buffers
 - Final Elevations

Permit Engineering Drawings (contd)

LANDFILL HISTORY, AREA, AND CAPACITY TABLE
JOHNSON COUNTY LANDFILL – KDHE SOLID WASTE PERMIT 263

MUNICIPAL SOLID WASTE UNITS									
CELL NO.	KDHE PERMIT DATE	AREA (ACRES)	CAPACITY (CY)	OPENED	CLOSED	CQA CERT. BY ENGINEER	ACCEPTANCE BY KDHE	RESTRICTIVE COVENANT	
PHASE 1		30.0	1,359,653	~1967	~1989			8/10/1995, BK 4650, PG 335	
PHASE 1M	27-JAN-11	82.5	13,030,717						
STAGE A		NA	3,478,250	30-NOV-11	ACTIVE	12-OCT-11	28-OCT-11		
PHASE 2		10.0	2,724,355	1976	1987			8/10/1995, BK: 4650, PG: 328	
PHASE 3	~1995	75.0	5,120,637	1995	2003	30-JAN-04	1-JUL-04	8/10/1995, BK: 4650, PG: 328	
STAGE 1		NA		JAN-96 (CQA RPT.DATE)	2003	30-JAN-04	1-JUL-04	8/10/1995, BK: 4650, PG: 328	
STAGE 2		NA		JAN-97 (CQA RPT.DATE)	2003	30-JAN-04	1-JUL-04	8/10/1995, BK: 4650, PG: 328	
STAGE 3		NA		1-JAN-98	2003	30-JAN-04	1-JUL-04	8/10/1995, BK: 4650, PG: 328	
STAGE 4		NA		18-JUN-98	2003	30-JAN-04	1-JUL-04	8/10/1995, BK: 4650, PG: 328	
STAGE 5	19-MAY-99	NA	5,000,000	30-NOV-99	2003	30-JAN-04	1-JUL-04	11/21/2002, BK: 8365, PG: 654	
PHASE 4		70.0	8,047,543	1987	1996	OCT-97		6/3/2002, BK: 7858, PG: 188	
PHASE 5	8-AUG-02	65.0	11,400,000	AUG-02	Closed 45.3 ac	Feb 2012		6/3/2002, BK: 7858, PG: 184	
STAGE A		NA		22-AUG-02	ACTIVE			6/3/2002, BK: 7858, PG: 184	
STAGE B		NA		18-AUG-03	ACTIVE			6/3/2002, BK: 7858, PG: 184	
STAGE C		NA		2-AUG-05	ACTIVE			6/3/2002, BK: 7858, PG: 184	
PHASE 6	3-APR-07	163.3	37,250,176					11/6/2006, BK:200611 PG:001921	
STAGE A1		NA		26-MAR-08	ACTIVE	25-JAN-08	18-FEB-08		
STAGE A2		NA		04-JAN-10	ACTIVE				
STAGE B1		NA		24-NOV-08	ACTIVE	14-NOV-08	21-NOV-08		
TOTAL		413.3	83,933,081						

CONSTRUCTION & DEMOLITION UNITS								
CELL NO.	KDHE PERMIT DATE	AREA (ACRES)	CAPACITY (CY)	OPENED	CLOSED	CQA CERT. BY ENGINEER	ACCEPTANCE BY KDHE	RESTRICTIVE COVENANT
C&D 2001 EXPANSION	12-MAY-97***	20.7			2004	2004	ON HOLD****	LIES WITHIN PH 1 AND PH 4 COVENANTS
VALLEY C&D	25-APR-03	10.0	567,250	2003	JUN-05	14-DEC-06**	PENDING	LIES WITHIN PH 1 AND PH 3 COVENANTS

An aerial satellite view of a landfill site. The landfill is a large, rectangular area with a light brown, sandy surface, showing signs of active use with various tracks and mounds. To the left of the landfill is a paved road with a few vehicles. The surrounding landscape is a mix of green fields, some with patches of bare earth, and clusters of trees. A small pond is visible on the right side of the image. A red location pin icon is placed on the road to the left of the landfill.

Barber County Landfill



Barber County Landfill

Acreages considered

- Total permitted waste disposal acres
- Total permitted area certified closed
- Areas currently open
- Largest area requiring final cover during the renewal period



Barber County Landfill

PHASE 3

CLOSED UNIT
CONSTRUCTED AREA = 75.7 ACRES
POST-CLOSURE AREA = 70.8 ACRES

PHASE 2

CLOSED UNIT
CONSTRUCTED AREA = 40.9 ACRES
POST-CLOSURE AREA = 8.8 ACRES

PHASE 1

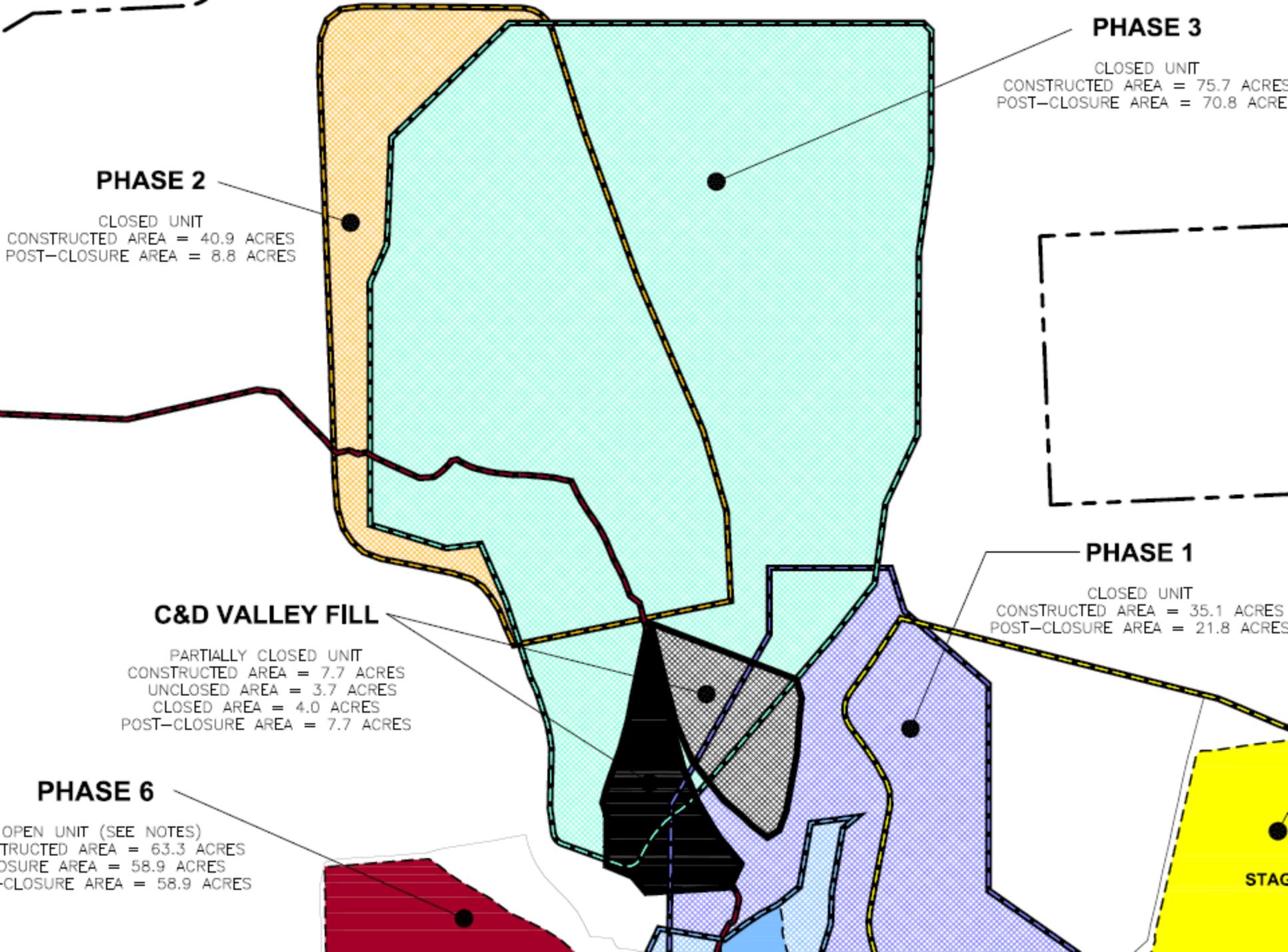
CLOSED UNIT
CONSTRUCTED AREA = 35.1 ACRES
POST-CLOSURE AREA = 21.8 ACRES

C&D VALLEY FILL

PARTIALLY CLOSED UNIT
CONSTRUCTED AREA = 7.7 ACRES
UNCLOSED AREA = 3.7 ACRES
CLOSED AREA = 4.0 ACRES
POST-CLOSURE AREA = 7.7 ACRES

PHASE 6

OPEN UNIT (SEE NOTES)
CONSTRUCTED AREA = 63.3 ACRES
POST-CLOSURE AREA = 58.9 ACRES
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JOHNSON COUNTY LANDFILL – KDHE SOLID WASTE PERMIT 263

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TOTAL		413.3	83,933,081						



Our Mission: To protect and improve the health and environment of all Kansans.

Key points to remember

- Design your full site – Permit Engineering Drawings
- Construct manageable amounts of airspace – CQA
- Operate with coordinated planning
 - Convenient access to working face for users,
 - Minimize leachate generation
 - Control storm water
 - Soil balance and availability – daily cover/final cover
 - Equipment use audit
- Cover and close in stages to minimize environmental exposure

Life Estimate worksheet

- Make sure you have permit drawings that have been approved for full disposal at the site.
- Make sure you are not filling the airspace with soil.
- Regular “surveys” to assess airspace usage.

??Questions??



Our Mission: To protect and improve the health and environment of all Kansans.

Contact Information

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