

Project Summary and Justification

Department Public Utilities

Division Sanitary Landfill

The Capital Improvements Program for the 2003-2009 period is a continuing effort to provide an environmentally sound and integrated solid waste management system for Lincoln and Lancaster County.

Project 1 Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)

The Bluff Road landfill is essential to assure proper disposal of solid wastes for the City of Lincoln and Lancaster County in a manner protective to human health and the environment and to meet Nebraska Department of Environmental Quality (NDEQ) Title 132 Operating Permit Requirements and Federal regulatory requirements. The overall project involves the continued expansion and development of the facility.

- a. **Leachate Collection and Liner Facilities. (Continuation, 569279)**
Federal and State landfill regulations require leachate collection and treatment facilities to protect against groundwater pollution. Failure to protect groundwater can result in sizable corrective action costs if leachate contamination occurs. Installation of leachate collection facilities is an on-going part of the site development and the funding identified in the program reflects this need.
- b. **Site Maintenance and Closure. (Continuation, 569139, 569140, and 569141)**
This is an on-going operation that meets the requirements for annual site maintenance and closure activities such as litter fence construction, drainage improvements, seeding, and landscaping for perimeter screening and improved site aesthetics. Funding in FY 03-04 is for additional litter fencing and drainage structures. These improvements are necessary to comply with State and Federal requirements as well as provide for aesthetic improvements necessary for operating in close proximity to the community.
- c. **Leachate Collection and Treatment Facilities. (Continuation, 569129)**
Funds provide for design and construction of additional storage capacity and pretreatment for generated leachate. Cost effective methods for managing leachate have been evaluated, and a preliminary management plan has been completed. The Leachate Management Plan prepared for the Landfill was used to develop project timing and funding identified in this six-year plan.
- d. **Final Cover Construction. (Continuation, 569340 and 569342)**
Funding provides for the design and construction of a final cover system on top of the landfill as required by regulation.
- e. **Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation. (Continuation, 569169)**
Funds for additional groundwater monitoring wells provide for future evaluation of groundwater conditions at the site as required by the operating permit. In addition, the suitability of other areas available for future landfill development which are not currently

Project Summary and Justification (cont.)

Department Public Utilities

Division Sanitary Landfill

permitted by the NDEQ will be evaluated and allow for planning for additional landfill capacity beyond the current site life of 2025.

f. Storm Water Basin Reconstruction.

Funds will provide for the relocation of the existing storm water detention basin. Containment and testing of surface water draining from all non-capped areas of the landfill is required by regulation. The existing basin must be relocated downstream in advance of future landfill development.

**Project 2 North 48th Street Landfill and Transfer Station Site. Approximately 450 acres.
(Continuation)**

**a. Closure Costs for Landfill East (310 acres) and Landfill West (140 acres).
(Continuation, 569399 and 569400)**

The proposed project funding is for additional cover soil, drainage improvements, and revegetation of landfill areas associated with the City's old North 48th Street Solid Waste Landfill. This area is intended to be developed as a future park area. Compost materials and bio-solids may be utilized as a soil amendment to promote vegetative growth. In addition, State regulations specify proper closure procedures to protect the completed landfill and prevent impacts to surface water, groundwater, and air quality.

Additional funding may be necessary for corrective actions associated with groundwater and landfill gas at this site dependent upon NDEQ's review of a previously completed groundwater assessment study.

b. Closure Costs for Construction and Demolition Site. (Continuation, 700060 and 700061)

These costs are for closure of the City's permitted Construction and Demolition Landfill.

Similar to project 2a., these funds will provide for additional cover soil, drainage improvements, and revegetation of landfill areas that are intended to be developed as a future park area. A minimum cover soil depth of two feet is required by State regulations for all areas associated with the Construction and Demolition Site.

c. Parks Development.

There is no funding identified for this project during the six-year planning period. However, this project is identified at this time for the purpose of recognizing that additional capital improvements must occur at this site prior to use as park lands. An estimate of potential cost to develop this site is shown in the "cost beyond" column.

Project Summary and Justification (cont.)

Department Public Utilities

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d. Air Quality Assessment. (Continuation, 569404)

An additional air quality assessment (Tier II) may have to be made in FY 06-07 as a result of the EPA Clean Air Act requirements.

Project 3 Solid Waste Management System - Volume Reduction (Phase I, Solid Waste Management Plan).

Proposed funding will provide for further evaluation of solid waste reduction alternatives, enhancements to the City's existing yard waste composting facility, evaluation and development of organic waste composting and materials recovery facility, and expansion of the City's recycling drop-off centers.

a. Solid Waste Management Plan Update. (Continuation, 701174)

An update of the Solid Waste Management Plan for the City of Lincoln and Lancaster County is scheduled for FY 04-05. The plan was originally completed in 1992 by the Phase I Environmental Management Plan Steering Committee and updated in 2000.

b. Construction and Demolition (C & D) Site.

Funding for the siting of a new construction and demolition disposal facility has been shifted to beyond the six-year planning period based on the expected site life lasting through the year 2015, or beyond. Although no funding is identified in the six-year period, this project is listed as a reminder that the community will be considering a new C & D landfill site in the relative near term for this waste stream.

c. Organic Waste Composting/Materials Recovery Facility.

1. Feasibility Study.
2. Upgrades to Existing Composting Facility. (Continuation, 569133)

The 1992 Solid Waste Management Plan identifies an organic waste composting and material recovery facility as the next major element to increase the diversion of material from the Landfill.

Sub-project 1. is a feasibility study on the development of an expanded organic waste processing and material recovery facility is identified in FY 05-06. Construction of facilities is anticipated to occur beyond the current six-year planning period.

Sub-project 2. of this project provides funding for upgrades to the existing yard waste composting facility at the Bluff Road Landfill. These upgrades include improvements to storage areas for finished compost, additional site access for purchasers of compost, and potential required improvements for the management of surface water runoff.

d. Recycling Drop-Off Sites.

1. Existing Site Maintenance/Improvements. (Continuation, 700850)
2. Expansion of Recycling Drop-Off Program. (Continuation, 700942, 700943, 700944, and 700945)

Project Summary and Justification (cont.)

Department Public Utilities

Division Sanitary Landfill

Close to fifty percent of the people in Lincoln utilize the drop-off sites. Currently, there are nine (9) existing recycling sites in north Lincoln and eight (8) in south Lincoln. More people reside in south Lincoln than north Lincoln. The recycling drop-off sites in southeast Lincoln are the largest and receiving the greatest amounts of materials. These existing sites cannot be readily expanded to accept more material.

Due to size, traffic, noise, and concerns about litter and illegal dumping, the siting of additional drop-off sites has become very difficult in commercial areas. Various publicly owned properties are being investigated, but no agreements for additional sites in southeast Lincoln have been obtained.

Sub-project 1 of this project provides for repairs and improvements to existing drop-off sites and includes anticipated asphalt resurfacing, fencing, and landscaping. These improvements are critical to continue with the current use, improve appearance, and gain greater acceptance of nearby commercial and residential property owners.

Sub-project 2 of this project provides for the expansion of the recycling drop-off sites program. Identified funding includes the necessary site development costs associated with the recycling drop-off sites.

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Lincoln CIP 2003 - 2009

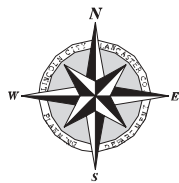
Public Utilities Solid Waste Operations



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Lincoln's Future Service Limit Shown as Grey

Map prepared by
City - Co. Planning Dept
GIS Section



Project 3d: Recycling Drop-off Sites

- ▲ Existing Multi-Material Sites
- Existing Newspaper Only Sites
- ☀ Potential New Multi-Material Sites

List of Projects *Department: Public Utilities / Sanitary Landfill*

Project Project
Number Title

- 1 BLUFF ROAD LANDFILL. Consisting of approximately 370 acres at Highway #77 and Bluff Road.
Continuation
- 1a Leachate Collection and Liner Facilities. Continuation, 569279
- 1b Site Maintenance and Closure. Continuation, 569139, 569140, 569141
- 1c Leachate Collection and Treatment Facilities. Continuation, 569129
- 1d Final Cover Construction. Continuation, 569340 and 569342
- 1e Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion
Evaluation. Continuation, 569169
- 1f Storm Water Basin Reconstruction.
- 2 NORTH 48th STREET LANDFILL AND TRANSFER STATION SITE. Approximately 450 acres.
Continuation
- 2a Closure Costs for Landfill East 310 acres and Landfill West 140 acres. Continuation, 569399
and 569400
- 2b Closure Costs for Construction and Demolition Site. Continuation, 700060 and 700061
- 2c Parks Development.
- 2d Air Quality Assessment. Continuation, 569404
- 3 SOLID WASTE MANAGEMENT SYSTEM - VOLUME REDUCTION Phase I, Solid Waste
Management Plan.
- 3a* Solid Waste Management Plan Update. Continuation, 701174
- 3b* Construction and Demolition C & D Site.
- 3c Organic Waste Composting/Materials Recovery Facility.
- 1* Feasibility Study.
- 2 Upgrades to Existing Composting Facility. Continuation, 569133
- 3d Recycling Drop-Off Sites
- 1 Existing Site Maintenance/Improvements. Continuation, 700850
- 2 Expansion of Recycling Drop-Off Program. Continuation, 700942, 700943, 700944,
and 700945

* Indicates project is **NOT** shown on the map.

DEPARTMENT: PUBLIC UTILITIES
 DIVISION: SANITARY LANDFILL

FORM A

2003 - 2009 CAPITAL IMPROVEMENT PROGRAM

(1) PROJ. NO.	(2) PROJECT TITLE	(3) PROJ. PRIO.	(4) 5% Inflation per year											
			PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)											
			2003-2004	FS	2004-2005	FS	2005-2006	FS	2006-2007	FS	2007-2008	FS	2008-2009	FS
	TOTAL PROJECT 1		377.0	LF	2,496.0	LF	4,148.5	LF	160.0	LF	1,847.0	LF	2,150.0	LF
1.	Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)													
1.a.	Leachate Collection and Liner Facilities (Continuation 569279)	A												
	1. Phase 10 Expansion				123.0	LF	2,327.5	LF						
	2. Phase 11 Expansion									1,675.0	LF	1,000.0	LF	
1.b.	Site Maintenance and Closure (Continuation, 569112, 140 & 141)	A	185.0	LF	170.0	LF	400.0	LF	160.0	LF	172.0	LF	150.0	LF
1.c.	Leachate Collection and Treatment Facilities (Continuation, 569129)	A			519.0	LF	1,181.0	LF						
1.d.	Final Cover Construction (Continuation 569340 & 342)	A	117.0	LF	1,684.0	LF							1,000.0	LF
1.e.	Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation.	A	75.0	LF										
1.f.*	Stormwater Basin Relocation	B					240.0	LF						
	TOTAL PROJECT 2		315.0	LF	50.0	LF	50.0	LF	455.0	LF	0.0	LF	200.0	LF
2	North 48th Street Landfill and Transfer Station Site. Approximately 450 acres. (Continuation)													
2.a.	Closure Costs for Landfill East (310 acres) and Landfill West (140 acres) (Continuation 569399 & 400)	A	100.0	LF	50.0	LF								
2.b.	Closure Costs for Construction and Demolition Site(Continuation 700060 & 061).	A	215.0	LF			50.0	LF	430.0	LF			200.0	LF
2.c.	Parks Development (See narrative of explanation for "no funding")	C												
2.d.	Air Quality Assessment (Continuation 569404)	B							25	LF				

(5)	(6)	(7)		(8)	(9)	(10)	(11)						(1)
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2008-2009 (000's)	PRIOR APPROPRIATIONS		TOTAL CAP COSTS (000's)	COMP PLAN CONFORM	STATUS OF PLANS	COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)						PROJ. NO.
		(000's)	YEAR FS	(5)+(6)+(7)			PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH	OTHER (EXPLAIN)	
11,178.5	48,457.0	4,207.8		63,843.3									
	13,900.0	2,060.0	02-03	15,960.0	GCP								1.a.
2,450.5		None		2,450.5	GCP	7		125.0		2,325.5			1.a.1
2,675.0		None		2,675.0	GCP	7		130.0		2,545.0			1.a.2
1,237.0	5,057.0	250.3	02-03 LF	6,544.3	GCP	0		70.0		1,167.0			1.b.
1,700.0	1,300.0	None		3,000.0	GCP	2		170.0		1,530.0			1.c.
2,801.0	28,050.0	1,792.6	02-03 LF	32,643.6	GCP	7		230.0		2,571.0			1.d.
75.0	150.0	104.9	02-03 LF	329.9	GCP	2		8.0		67.0			1.e.
240.0	None	None		240.0	GCP	2	7	24.0		216.0			1.f.
1,070.0	1,700.0	1,044.9		3,814.9									
150.0	800.0	753.8	02-03 LF	1,703.8	GCP	7		15.0		135.0			2.a.
895.0	850.0	270.0	02-03 LF	2,015.0	GCP	5		90.0		805.0			2.b.
0.0	Unknown	None		0.0	GCP	1							2.c.
25.0	50.0	21.1	02-03 LF	96.1	GCP	0		25.0					2.d.

DEPARTMENT: PUBLIC UTILITIES
 DIVISION: SANITARY LANDFILL

FORM A

2003 - 2009 CAPITAL IMPROVEMENT PROGRAM

(1)	(2)	(3)	5% Inflation per year (4)																				
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)																				
			2003-2004	FS	2004-2005	FS	2005-2006	FS	2006-2007	FS	2007-2008	FS	2008-2009	FS									
	TOTAL PROJECT 3				330.0	LF			50.0	LF			10.0	LF			40.0	LF			50.0	LF	
3.	Solid Waste Management System - Volume Reduction (Phase I, Solid Waste Management Plan)																						
3.a.	Solid Waste Management Plan Update (Continuation, 701174)	B			80.0	LF																	
3.b.	Construction and Demolition (C & D) Site (See narrative of explanation for "no funding")	B																					
3.c.	Organic Waste Composting/Materials Recovery Facility	B																					
	1. Feasibility Study								50.0	LF													
	2. Upgrades to Existing Composting Facility (Continuation 569133)				200.0	LF																	
3.d.	Recycling Drop-Off Sites	A																					
	1. Existing Site Maintenance/Improvements (Cont 700850)				10.0	LF							10.0	LF								10.0	LF
	2. Expansion of Recycling Drop-Off Program (Cont. 700942, 943, 944 & 945)				40.0	LF											40.0	LF				40.0	LF
	FUNDING SOURCE BREAKDOWN :																						
	LF (Landfill Revenue)				692.0				2,876.0				4,248.5				625.0				1,887.0		2,400.0
	DIVISION TOTAL				692.0				2,876.0				4,248.5				625.0				1,887.0		2,400.0

FORM B

(5)	(6)	(7)		(8)	(9)	(10)	(11)						(1)
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2008-2009 (000's)	PRIOR APPROPRIATIONS		TOTAL CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)						PROJ. NO.
		YEAR	FS				PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH	OTHER (EXPLAIN)	
480.0	8,950.0	355.1	LF	9,785.1									3.
80.0	100.0	42.8	02-03 LF	222.8	GCP	0						80.0 (Plan Update)	3.a.
	5,200.0	None		5,200.0	GCP	1				0.0			3.b.
													3.c.
50.0	2,750.0	None		2,800.0	GCP	0						50.0 (Study)	3.c.1
200.0	300.0	109.1	02-03 LF	609.1	GCP	2		20.0		180.0			3.c.2
													3.d.
30.0	100.0	38.2	02-03 LF	168.2	GCP	5		3.0		27.0			3.d.1
120.0	500.0	165.0	02-03 LF	785.0	GCP	5		10.0		110.0			3.d.2
12,728.5													
12,728.5													

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