Legend

PUBLIC UTILITIES

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Column <u>Number</u> (1)	Code *	<u>Description</u> Indicates a project not previously shown in the CIP
(3)	A B C	Urgent Necessary Desirable
(4 & 7)	AA BCCCODFGGGKLMNNOPPRRT9CFORFMUUNWW	Urban Area Projects Athletic Fees Bridge Replacement Community Development Block Grant Community Improvement Financing Lancaster County Developer Contribution Federal Aids Golf Capital Improvements G.O. Bonds General Revenues Keno Funds Landfill Revenues Municipal Infrastructure Redevelopment Fund State Revenue or Aid National Highway System Other Financing Transportation Enhancement STPP - Hazard Elimination Revenue Bonds Railroad Transportation Safety District Section 9 Service Charges State/Federal Funds Highway Allocation Funds Special Reserves Tennis Fees State - Train Mile Tax User Fees Unknown Utility Revenues City Residual Wheel Tax City Wheel Tax New Construction
(9)	ICWP GCP NIP NICP	In Conformance with the Plan Generally Conforms with the Plan Not Included in the Plan Not in Conformance with the Plan
(10)	0 1 2 3 4 5 6 7	Plans not needed Nothing done except this report Preliminary estimate received Surveys completed Work on plans scheduled Sketch plans in preparation Sketch plans completed Detail plans in preparation Detail plans completed

Project Summary and Justification

Department **Public Works and Utilities**

Division Sanitary Landfill

The Capital Improvement Program for the 2000-2006 period is a continuing effort to provide an environmentally sound and integrated solid waste management system in Lincoln and Lancaster County. The six-year program identifies over \$16.33 million for the continued development, maintenance, and closure, of Lincoln's solid waste management facilities and waste reduction programs.

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.

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, Project 569112)

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, Project 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. Gas Collection and Utilization Feasibility, Evaluation, and Construction

A previous evaluation of landfill gas was performed at the Bluff Road Landfill and it concluded that a landfill gas extraction system is not currently required for the facility. These evaluations are performed every five years with the next scheduled for FY 00-01. The next evaluation may indicate that a gas extraction system is necessary and funding in FY 01-02 is for such an extraction system. The evaluation will also include the feasibility of utilizing landfill gas for electrical energy generation. This analysis will be conducted in cooperation with the Lincoln Electric System. The final determination on the installation of a gas extraction system within the six-year planning period will depend on several considerations including regulatory requirements, feasibility of energy production, and the need for odor control.

e. Final Cover Construction (Continuation, Project 569131)

Funding provides for the design and construction of a final cover system on top of the landfill as required by regulations in areas where wastes have been placed to final elevation according to the site's permit conditions.

f. Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation (Continuation, 569127)

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 permitted by the NDEQ will be evaluated and allow for planning for additional landfill capacity beyond the current site life of 2022.

g. Site Re-Permitting

This project will provide for costs associated with re-permitting the facility in 2002 to correspond with expiration of the five-year permit in September 2003.

h. Maintenance Building Expansion

The identified funding provides for expanding the existing maintenance facility to provide for additional suitable storage for operating equipment during cold and inclement weather. Heavy equipment occasionally cannot be started or serviced as a result.

i. North 70th Street Paving

Sanitary landfill's contribution toward the paving of North 70th Street from approximately I-80 to Bluff Road. The project is being completed in conjunction with the City's Wastewater and Streets and Highways capital improvement programs.

Project 2 NORTH 48th STREET LANDFILL AND TRANSFER STATION SITE. Approximately 450 acres.

a. Closure Costs for Landfill East (310 acres) and Landfill West (140 acres)

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 biosolids 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 contamination at this site dependent upon NDEQ's review of a previously completed groundwater assessment study.

b. Closure Costs for Construction and Demolition Site

These costs are for closure of the City's permitted Construction and Demolition Landfill. In CIP submittals prior to 2000-2006, these costs were rolled into project 2a. above. In order to provide the necessary financial accounting as it relates to financial assurance, these costs were separated from those above.

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.

Project Summary and Justification (cont.)

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.

d. Air Quality Assessment

An additional air quality assessment (Tier II) may have to be made in FY 01-02 as a result of the Clean Air Act.

e. Expansion of Existing Transfer Station Operations

The identified funding is for expansion of the small vehicle waste transfer operation. The capacity of the existing transfer station does not allow for the expedient service during peak usage times which occurs primarily on weekend days and in the spring and summer months. The expanded facilities will reduce the amount of time customers sometimes must wait to dispose of waste materials.

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, Project 569115)

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 2010. 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, Project 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. 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.

Project Summary and Justification (cont.)

The second element of this project is 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, Project 700850)
- 2. Expansion of Recycling Drop-Off Program. (Continuation, Project 700942)

Close to half of the people in Lincoln utilize the drop-off sites. Currently, there are eight recycling sites in north Lincoln and only six in south Lincoln. More people reside in south Lincoln than north Lincoln. The recycling centers in southeast Lincoln are receiving more material on Saturday and Sunday than can be handled.

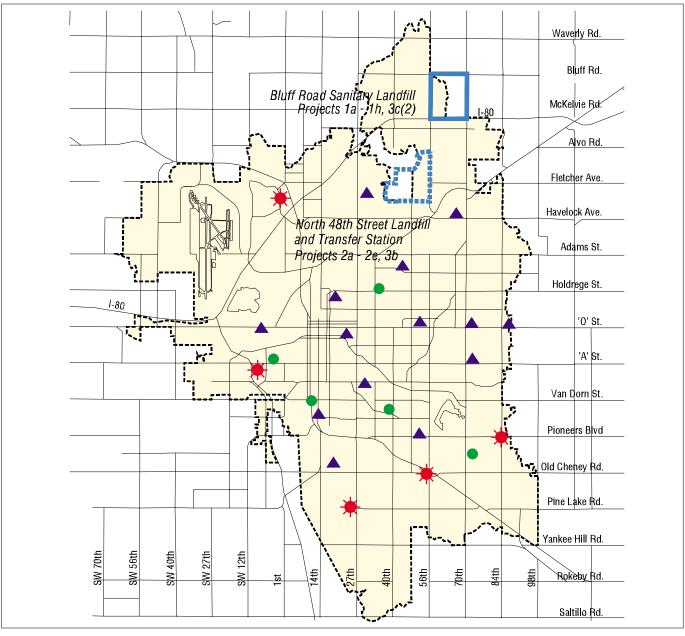
Due to size, traffic, noise, and concerns about litter and illegal dumping, the siting of additional centers has become very difficult in commercial areas. Various publicly owned properties have been investigated, but no agreements for specific property for addition sites in south Lincoln has been obtained.

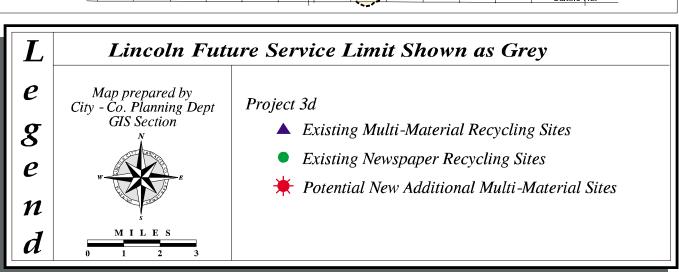
The first element of this project is to provide for improvements to existing centers including asphalt resurfacing, fencing, and landscaping. These improvements are critical to continue with the current use, improve appearance, and gain greater acceptance of nearby commercial and residential property owners.

The second element of this project provides for the expansion of the recycling drop-off center program. Funds have been added for the purchase of property in the event that a recycling site would be co-located with a government facility or to pay a developer for land in a commercial development. Figures also include the necessary site development costs associated with the recycling drop-off sites.

Lincoln CIP 2000 - 2006

Public UtilitiesSolid Waste Operations





Project Number	Project Title
1	BLUFF ROAD LANDFILL. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)
1a	Leachate Collection and Liner Facilities.
1b	Site Maintenance and Closure. (Continuation, Project 569112)
1c	Leachate Collection and Treatment Facilities. (Continuation, Project 569129)
1d	Gas Collection and Utilization Feasibility, Evaluation, and Construction.
1e	Final Cover Construction. (Continuation, Project 569131)
1f	Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation. (Continuation, Project 569127)
1g	Site Re-Permitting.
1h	Maintenance Building Expansion.
1i	North 70 th Street Paving (Sanitary Landfill's Contribution)
2	NORTH 48th STREET LANDFILL AND TRANSFER STATION SITE. Approximately 450 acres.
2a	Closure Costs for Landfill East (310 acres) and Landfill West (140 acres).
2b	Closure Costs for Construction and Demolition Site.
2c	Parks Development.
2d	Air Quality Assessment.
2e	Expansion of Existing Transfer Station Operations.
3	SOLID WASTE MANAGEMENT SYSTEM - VOLUME REDUCTION (Phase I, Solid Waste Management Plan).
(3a)	Solid Waste Management Plan Update. (Continuation, Project 569115)
3b	Construction and Demolition (C & D) Site.
3c	Organic Waste Composting/Materials Recovery Facility. (1) Feasibility Study.
	2 Upgrades to Existing Composting Facility. (Continuation, Project 569133)
3d	Recycling Drop-Off Sites.
	1 Existing Site Maintenance/Improvements. (Continuation, Project 700850)
	2 Expansion of Recycling Drop-Off Program. (Continuation, Project 700942)

Project number in parenthesis indicates project is not shown on map.

DEPARTMENT: PUBLIC UTILITIES FORM A 2000 - 2006 CAPITAL IMPROVEMENT PROGRAM **DIVISION:** SANITARY LANDFILL (1) (2) (3) 5% Inflation per year (4) PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's) PROJ PROJ. PROJECT TITLE 2000-2001 FS 2001-2002 FS 2002-2003 FS 2003-2004 FS 2004-2005 FS 2005-2006 FS NO PRIO. Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation) 1.a. Leachate Collection and Liner Facilities 2,200.0 LF 300.0 LF 2,000.0 LF Site Maintenance and Closure Α 80.5 LF 25.0 LF 390.0 LF 93.1 LF 420.0 LF (Continuation, Project 569-112) Leachate Collection and Treatment Facilities 100.0 LF 1,700.0 LF (Continuation, Project 569-129) Gas Collection and Utilization Feasibility, 21.9 LF 499.0 LF 1,930.0 LF Evaluation, and Construction Final Cover Construction (Continuation, 851.4 LF 890.0 LF 990.0 LF 810.0 LF Project 569-131) Additional Groundwater Monitoring Wells and 50.0 LF 75.0 LF Initial Geologic Borings for Site Expansion Evaluation. (Continuation, Project 569-127) Site Re-Permitting В 30.0 LF Maintenance Building Expansion 37.0 LF Paving in 70th St (I-80 to Bluff Rd) 28.6 LF

DATE SUBMITTED: 2/4/00 DATE REVISED: 6/19/00 FILE NAME: PUDSL01A Page K-1 (a

D	

(5)	(6)	(7)	(8)	(9)	(10)				(11)			(1)
(5)		(1)		(9)	(10)							(')
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2004-2005 (000's)	PRIOR APPROPRIATIONS (000's) YEAR FS	TOTAL CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	PRELIM PLANS	ST BREAKI FINAL PLANS	LAND ACQUISI- TION	R SIX-YEA	R EXPENDI EQUIP / FURNISH	TURES (000's) OTHER (EXPLAIN)	PROJ. NO.
												1.
4,500.0	16,600.0	2,609.3 99-00 LF	23,709.3	GCP	7		135.0		4,365.0			1.a.
1,008.6	5,379.5	819.2 99-00 LF	7,207.3	GCP	0				1,008.6			1.b.
1,800.0	1,300.0	900.6 99-00 LF	4,000.6	GCP	2	36.0	90.0		1,674.0			1.c.
2,450.9	2,500.0	50.5 99-00 LF	5,001.4	GCP	2	73.5	122.5		2,254.8			1.d.
3,541.4	29,050.0	1,499.5 99-00 LF	34,090.9	GCP	7		106.2		3,435.2			1.e.
125.0	0.0	188.0 99-00 LF	313.0	GCP	2		8.8		116.3			1.f.
30.0	375.0	0.0	405.0	GCP	0		30.0					1.g.
37.0	0.0	154.0 99-00 LF	191.0	GCP	2				37.0			1.h.
28.6	0.0		28.6	GCP					28.6			1.i.

DEPARTMENT: PUBLIC UTILITIES FORM A

2000 - 2006 CAPITAL IMPROVEMENT PROGRAM DIVISION: SANITARY LANDFILL

(1)	(2)	(3)	5% Inflation per	year (4)				
					ED EXPENDITUR	ES & FUNDING S	OURCES (FS) (000)'s)
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	2000-2001 FS	2001-2002 FS	2002-2003 FS	2003-2004 FS		2005-2006 FS
2.	North 48th Street Landfill and Transfer Station Site. Approximately 450 acres.							
2.a.	Closure Costs for Landfill East (310 acres) and Landfill West (140 acres)	Α	100.0 LF	373.5 LF		100.0 LF	50.0 LF	
2.b.	Closure Costs for Construction and Demolition Site			270.0 LF		215.0 LF	280.0 LF	
2.c.	Parks Development	С						
2.d.	Air Quality Assessment	В		20.0 LF				
2.e.	Expansion of Existing Transfer Station Operations	В	30.0 LF	360.0 LF				
3.	Solid Waste Management System - Volume Reduction (Phase I, Solid Waste Management Plan)							
3.a.	Solid Waste Management Plan Update (Continuation, Project 569-115)	В					80.0 LF	
3.b.	Construction and Demolition (C & D) Site (See narrative of explanation for "no funding")	В						
3.c.	Organic Waste Composting/Materials Recovery Facility	В						
	 Feasibility Study Upgrades to Existing Composting Facility (Continuation 569133) 			35.0 LF			200.0 LF	50.0 LF
3.d.	Recycling Drop-Off Sites	Α						
	Existing Site Maintenance/ Improvements (Continuation 700850)		23.0 LF	26.0 LF	30.0 LF	32.0 LF	33.0 LF	35.0 LF
	Expansion of Recycling Drop-Off Program (Continuation 700942)			35.8 LF	210.0 LF		223.0 LF	
	FUNDING SOURCE BREAKDOWN : LF (Landfill Revenue)		1,091.9	2,739.8	2,495.0	2,102.0	3,469.1	4,435.0
	DIVISION TOTAL		1,091.9	2,739.8	2,495.0	2,102.0	3,469.1	4,435.0
DATE	SUBMITTED: 2/4/00	DATE	REVISED:		 FILE NAME: PI	IDCI 02A		je K-2 (a)

DATE SUBMITTED: 2/4/00 DATE REVISED: FILE NAME: PUDSL02A Page K-2 (a)

											FORM B	
T	(-)		(-)	(-)	(1-1)							<u> </u>
(5)	(6)	(7)	(8)	(9)	(10)	(11) COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)						(1)
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2004-2005 (000's)	PRIOR APPROPRIATIONS (000's) YEAR FS	TOTAL CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	PRELIM PLANS	FINAL PLANS	LAND ACQUISI- TION	CONST	EQUIP / FURNISH	OTHER (EXPLAIN)	PRO. NO
(000 3)	(000 3)	(0003)	(0)1(0)1(1)	GOIN OINM	TEARO	TERIO	LANG	non	001101	T GIGHGIT	(EXI EXIV)	2.
623.5	800.0	1,208.4 99-00 LF	2,631.9	GCP	7		18.7		604.8			2.a
765.0	1,050.0	0.0	1,815.0	GCP	5		53.6		711.5			2.b
0.0	0.0	0.0	0.0	GCP	1							2.0
20.0	50.0	0.0	70.0	GCP	0		20.0					2.0
390.0	0.0	0.0	390.0	GCP	5	7.8	19.5		362.7			2.e
				GCP								3.
80.0	100.0	50.0 99-00 LF	230.0	GCP	0		80.0					3.a
	5,200.0	0.0	5,200.0	GCP	1							3.b
				GCP								3.0
50.0 235.0	2,750.0 300.0	0.0 316.8 99-00 LF	2,800.0 851.8		0 2	50.0	18.8		216.2			
				GCP								3.0
179.0	366.2	84.8 99-00 LF	630.0		5		9.0		170.1			
468.8	1,160.0	310.0 99-00 LF	1,938.8		5		23.4		445.4			
16,332.8												
16,332.8												