

## ***Project Summary and Justification***

**Department** Public Works & Utilities  
**Division** Water Supply & Distribution

### **Project 1 General System Improvements**

- A. Data Link to Ashland  
To develop connection via microwave between City-Wide Area Network and Ashland Facilities.
- B. Facilities Master Plan  
To develop a comprehensive master plan for supply, treatment, transmission, and distribution facilities to accommodate city growth.
- C. Preliminary Design & Engineering Support  
Provide design and review of unanticipated water projects.
- D. Reroof part of 2021 North 27th Facility  
To replace current roof installed in 1986 with a new 20-year life roof.

### **Project 2 Water Supply: Wells, Treatment, and Transmission**

- A. Well Replacement - Ashland  
To replace existing wells in Ashland Wellfield to maintain current capacity as wells become obsolete.
- B. Control System Upgrade - Ashland  
To replace existing supervisory control and Data Acquisition System (SCADA) which electronically controls the water operations for the entire system from Ashland.
- C. Transmission Pump #13 - Ashland  
To provide necessary water transmission capacity to move treated water from Ashland to Lincoln.
- D. Wellfield Modifications - Ashland  
Replace several large critical valves in wellfield collection system.
- E. Treatment Plant/Wellfield Expansion (25 MGD)  
Water Master Plan will identify size, timing, and costs of plant and wellfield facilities required to meet the growth needs of the city.

### **Project 3 Storage Reservoirs**

- A. Floating Storage Reservoir (6 MG) - 84th & Yankee Hill Road  
To increase the water pressure and reliability of the Southeast pressure system and provide minimum additional elevated storage and fire protection in Southeast pressure system; and supply water to the south end of the high duty pressure system; and provide for future Cheney Booster supply storage.

***Project Summary and Justification (Continued)***

**Department** Public Works & Utilities  
**Division** Water Supply & Distribution

- B. Reservoir Painting - 84th & South - High  
Repainting of steel reservoirs is required every 15 to 20 years.
- C. Reservoir Painting - 84th & Pine Lake Road - Southeast  
Repainting of steel reservoirs is required every 15 to 20 years.
- D. Reservoir Painting - 26th & Merrill  
Repainting of steel reservoirs is required every 15 to 20 years.

**Project 4 Pump Stations**

- A. Replace Pump at Northeast Pump Station - 102nd & Alvo Road  
Pumps are being replaced to increase the volume of transfer from pumping stations to meet the growth needs of the city.
- B. Northwest Pump Station - Northwest 12th & Alvo Road  
The Northwest Pump Station will provide a new pressure system; Belmont Booster System to meet the growth needs in the Northwest part of the city.
- C. Coddington & Van Dorn Pump Station  
This station will provide an additional pumping station in the Belmont Pressure System to meet the growth needs in the West "A" area and the Belmont Pressure System.

**Project 5 Major Transmission Mains**

- A. 48" Main from 77th & Vine Street to 84th & Yankee Hill Road  
Major transmission mains provide for the transfer of water between pressure systems.
- B. 36" Main from 102nd & Alvo Road to Northwest 12th & Alvo Road  
Major transmission mains provide for the transfer of water between pressure systems.
- C. 30" Main from 16th & A to Coddington & Van Dorn  
Major transmission mains provide for the transfer of water between pressure systems.
- D. 36" Main from Yankee Hill Road, 84th to 56th  
Major transmission mains provide for the transfer of water between pressure systems.
- E. 30" Main from Fletcher, 1st to 14th  
Provide for the growth needs of the city.

***Project Summary and Justification (Continued)***

**Department** Public Works & Utilities  
**Division** Water Supply & Distribution

F. 30" Main from 14th, Fletcher and Alvo Road  
Provide for the growth needs of the city.

**Project 6 Selected Replacement of Water Facilities or Mains such as:**

- A. N.W. 27th, "O" to "R"
- B. "B", 18th to 20th; 20th, "A" to "D"
- C. 24th, "J" to "M" to 25th
- D. 15th, Claremont to Court
- E. Baldwin, 56th to 59th
- F. 38th, Sheridan to Calvert
- G. Clinton, 27th to 30th to Holdrege
- H. 59th, South to Normal
- I. "M", 56th to Cotner
- J. 74th, Baldwin to Walker
- K. Madison, 59th to 61st to Baldwin
- L. Leighton, 63rd to 68th
- M. Havelock, 70th to 73rd

Provide reconstruction of water facilities and/or mains which have served beyond their useful life. Includes mains with a history of multiple breaks, mains to be replaced in conjunction with street repaving projects, and larger mains to provide improved fire flow capacity.

**Project 7 Distribution Mains**

- A. 24" - Yankee Hill, 20th to 27th
- B. N.W. 48th, "O" to Olympic Heights
- C. 16" - Fletcher, 77th to 82nd
- D. 16" Coddington & Van Dorn to Folsom & Pioneers
- E. 24" - 56th, Union Hill Road to Yankee Hill Road
- F. 24" - Highway 34, 1st to N.W. 12<sup>th</sup>
- G. 24" - 84th, Pine Lake Road to Yankee Hill Road
- H. 24", Yankee Hill Road, 40th to 56th

Distribution mains identified above will provide for either tie-in between existing water mains to increase system capacity of distribution system or to allow for the orderly development of the city in accordance with Land Use Phasing of the Comprehensive Plan.

**Project 8 Distribution Main Subsidies**

To provide for the construction of oversized mains in residential, commercial, and industrial area. To provide a water distribution grid system. Also, to subsidize mains in certain water districts constructed in developed residential areas, or other city projects.

*The map of Lincoln  
Water System is not  
available for viewing on  
the website.*

*Please contact Lincoln  
Water System at 441-7511  
for more information.*

***List of Projects***

*Department: Public Works & Utilities / Water Supply & Distribution*

<b>Project Number</b>	<b>Project Title</b>
(1)	General System Improvements
(2)	Water Supply - Wells, Treatment, and Transmission
3	Storage Reservoirs
4	Pump Stations
5	Major Transmission Mains
6	Selected Replacement of Mains
7	Distribution Mains
(8)	Distribution Main Subsidies

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

2001 - 2007 CAPITAL IMPROVEMENT PROGRAM

DIVISION: WATER PRODUCTION & DISTRIBUTION

(1)	(2)	(3)	5% Inflation per year (4)						
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)						
			2001-2002 FS	2002-2003 FS	2003-2004 FS	2004-2005 FS	2005-2006 FS	2006-2007 FS	
1	General System Improvements								
	A. Data Link to Ashland - #506224	B	350.0 UR	350.0 UR					
	B. Facilities Master Plan	B				400.0 UR			
	C. Preliminary Design & Engineering Support - #506005	A	30.0 UR	30.0 UR	30.0 UR	30.0 UR	30.0 UR	30.0 UR	30.0 UR
*	D. Reroof part of 2021 North 27	A	155.0 UR						
2	Water Supply - Wells, Treatment & Transmission								
	A. Well Replacement - Ashland - #701024	A				980.0 RB			
	B. Control System Upgrade - Ashland	B				600.0 RB			
	C. Transmission Pump #13 - Ashland	B					1,630.0 RB		
	D. Well Modifications - Ashland	B	200.0 UR						
*	E. Treatment Plant/Wellfield Expansion (25 MGD)	B							500.0 RB
3	Storage Reservoirs								
	A. Floating Storage Reservoir (6MG) - S E P S - 84th & Yankee Hill Road - #506219	A		2,000.0 RB	1,710.0 RB				
	B. Reservoir Painting - 84th & South	A	450.0 RB						
	C. Reservoir Painting - 84th & Pine Lake Road	A		240.0 UR 160.0 RB					
	D. Reservoir Painting - 26th & Merrill	A	50.0 RB						

(5)	(6)	(7)		(8)	(9)	(10)	(11)					(1)
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2006-2007 (000's)	PRIOR APPROPRIATIONS (000's)	YEAR FS	TOTAL CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)					PROJ. NO.
							PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH	
700.0	None	120.0	97-98	820.0	GCP	1		70.0		750.0		1
400.0	None	None		400.0	GCP	0	400.0					
180.0	None	None		180.0	GCP	0	180.0					
155.0	None	None		155.0	GCP	1		5.0		150.0		
980.0	Ongoing	520.0	91-94	2,360.0	GCP	1		80.0		900.0		2
600.0	None	700.0	99-00		GCP	1		60.0		540.0		
600.0	None	160.0	00-01	600.0	GCP	1		60.0		540.0		
1,630.0	None			1,630.0	GCP	1		130.0		1,500.0		
200.0	None			200.0	GCP	1		20.0		180.0		
500.0	Unknown	None		500.0	GCP	1	500.0					
3,710.0	None	80.0	94-95	3,906.0	GCP	1		410.0		3,300.0		3
450.0	None	116.0	97-98		GCP	1		50.0		400.0		
400.0	None	None		400.0	GCP	1		40.0		360.0		
50.0	None	None		50.0	GCP	1		5.0		45.0		

2001 - 2007 CAPITAL IMPROVEMENT PROGRAM

DIVISION: WATER PRODUCTION & DISTRIBUTION

(1)	(2)	(3)	5% Inflation per year (4)																	
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)																	
			2001-2002	FS	2002-2003	FS	2003-2004	FS	2004-2005	FS	2005-2006	FS	2006-2007	FS						
4	Pump Stations																			
	A. Replace Pump at Northeast Pump Station - 102nd & Alvo Road	B					416.0 UR 354.0 RB													
	B. Northwest Pump Station - N.W. 12th & Alvo Rd	A	360.0 UR 150.0 DC																	
*	C. Coddington & Van Dorn	A	500.0 RB																	
5	Major Transmission Mains																			
	A. 48" - 77th & Vine to 84th & Yankee Hill Road - #506220	A	4,000.0 RB				2,000.0 RB													
	B. 36" - 102nd & Alvo Road to N.W. 12th & Alvo Rd.	B																	1,776.0 UR 1,224.0 RB	
*	C. 30" - 16th & A to Coddington & Van Dorn	A	1,000.0 UR 2,780.0 RB																	
	D. 36" - Yankee Hill Road, 84th to 56th	B														2,646.0 RB				
	E. 30" - Fletcher, 1st to 14th	B											235.0 UR 920.0 RB							
	F. 30" - 14th, Fletcher to Alvo Road	B																		1,092.0 UR
6*	Selected Replacement of Mains such as - #700210:	A	1,200.0 UR	1,200.0 UR			1,200.0 UR				1,200.0 UR				1,200.0 UR					1,200.0 UR
	A. N.W. 27th, "O" to "R"																			
	B. "B", 18th to 20th; 20th, "A" to "D"																			
	C. 24th, "J" to "M" to 25th																			
	D. 15th, Claremont to Court																			
	E. Baldwin, 56th to 59th																			
	F. 38th, Sheridan to Calvert																			
	G. Clinton, 27th to 30th to Holdrege																			
	H. 59th, South to Normal																			
	I. "M", 56th to Cotner																			
	J. 74th, Baldwin to Walker																			
	K. Madison, 59th to 61st to Baldwin																			
	L. Leighton, 63rd to 68th																			



(5)	(6)	(7)		(8)	(9)	(10)	(11)					(1)	
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2006-2007 (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.	
		(000's)	YEAR FS				PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH		OTHER (EXPLAIN)
770.0	None	None		770.0	GCP	1		70.0			700.0		4
510.0	None	None		510.0	GCP	1		60.0			450.0		
500.0	None	None		500.0	GCP	1		50.0			450.0		
6,000.0	None	300.0	92-94	11,500.0	GCP	1		600.0			5,400.0		5
		3,000.0	99-00										
		2,200.0	00-01										
3,000.0	9,000.0	None		12,000.0	GCP	1	200.0	300.0			2,500.0		
3,780.0	None	None		3,780.0	GCP	1		380.0			3,400.0		
2,646.0	None	None		2,646.0	GCP	1		246.0			2,400.0		
1,155.0	None	None		1,155.0	GCP	1		115.0			1,040.0		
1,092.0	None	None		1,092.0	GCP	1		92.0			1,000.0		
7,200.0	Ongoing	Ongoing		7,200.0	GCP	1		700.0			6,500.0		6

2001 - 2007 CAPITAL IMPROVEMENT PROGRAM

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(1)	(2)	(3)	5% Inflation per year (4)						
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)						
			2001-2002 FS	2002-2003 FS	2003-2004 FS	2004-2005 FS	2005-2006 FS	2006-2007 FS	
7	Distribution Mains	A							
	A. 24" - Yankee Hill, 20th to 27th		200.0 UR 63.0 DC						
*	B. N.W. 48th, "O" to Olympic Heights	A	728.0 UR						
	C. 16" - Fletcher, 77th to 82nd	A	200.0 UR						
*	D. 16" Coddington & Van Dorn to Folsom & Pioneers	A		1,060.0 RB					
	E. 24" - 56th, Union Hill Road to Yankee Hill Road	B				672.0 UR			
	F. 24" - Highway 34, 1st to N.W. 12th	B				840.0 UR			
	G. 24" - 84th, Pine Lake Road to Yankee Hill Road	B			874.0 RB				
*	H. 24" - Yankee Hill Road, 40th to 56th	B							1,002.0 UR
8	Distribution Main Subsidies - #506050	A	500.0 UR	500.0 UR	500.0 UR	500.0 UR	500.0 UR	500.0 UR	500.0 UR
FUNDING SOURCE BREAKDOWN:									
	DC (Developer's contribution)		213.0	0.0	0.0	0.0	0.0	0.0	0.0
	RB (Revenue Bonds)		7,780.0	3,220.0	4,938.0	2,500.0	4,276.0	1,724.0	
	UR (Utility Revenue)		4,923.0	2,320.0	2,146.0	3,877.0	1,730.0	5,600.0	
DIVISION TOTALS			12,916.0	5,540.0	7,084.0	6,377.0	6,006.0	7,324.0	

(5)	(6)	(7)		(8)	(9)	(10)	(11)					(1)	
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2006-2007 (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.	
		(000's)	YEAR FS				PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH		OTHER (EXPLAIN)
263.0	None	None		263.0	GCP	1		23.0			240.0		7
728.0	None	None		728.0	GCP	1		68.0			660.0		
200.0	None	None		200.0	GCP	1		20.0			180.0		
1,060.0	None	None		1,060.0	GCP	1		100.0			960.0		
672.0	None	None		672.0	GCP	1		72.0			600.0		
840.0	None	None		840.0	GCP	1		80.0			760.0		
874.0	None	None		874.0	GCP	1		74.0			800.0		
1,002.0	None	None		1,002.0	GCP	1		102.0			900.0		
3,000.0	Ongoing	Ongoing		3,000.0	GCP	0					3,000.0		8
213.0													
24,438.0													
20,596.0													
=====													
45,247.0													