

2012

Leavenworth Water Department

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[CAPITAL IMPROVEMENT PLAN]

This capital improvement plan addresses administration, distribution, and water treatment. It does not include special projects, which the Waterworks Board of Directors may approve on a case-by-case basis.

OVERVIEW

This document presents the proposed 2012 Capital Improvement Plan (CIP) for the Leavenworth Water Department. The CIP is a comprehensive plan defining all capital improvements to be pursued by the Water Department over the next year as constrained by available financial resources.

The CIP is a financial and objectives planning document. By necessity, it is intended to be a flexible plan that is subject to change over time. For example, new regulations could be promulgated by the US Environmental Protection Agency that could require the investment of capital funds to comply with new water treatment standards. Operational costs and revenue estimates from rates, fees, and charges must be reviewed and updated, and the timing of projects must be evaluated in the light constantly-changing internal and external factors that affect the operations of the Water Department.

While the Water Department will continue to pursue new customers and revenue, this CIP is predicated on the assumption that revenue sources will remain constant through the planning period.

This 2012 CIP document is generally organized to illustrate existing projects that are carried forward from the 2011 CIP and the most recent five-year planning spreadsheet and projects that have been included in the CIP for the first time. Some of these first-time projects are in response to the 2011 flood damage.

Recommended capital improvements are defined for Administration, Water Distribution, and Water Treatment (North Plant and South Plant).

The Water Department expects to be reimbursed for 85% of its expenses from FEMA and the State of Kansas for the 2011 flood of the Missouri River. These expenses may extend into 2012 or even 2013. The remainder of the expensed (15%) will be born by the Water Department. These costs and reimbursements are expense dollars and are not included in this CIP.

2012 Capital Improvements**Summary**

Department	Costs (\$)
Administration	69,500
Distribution	
A. Mechanical Equipment	78,700
B. Water Main Replacements	605,550
C. Water Main Relocations	17,250
D. Hydrant Replacements	48,000
E. Miscellaneous Projects	183,000
Total	932,500
Water Diversion and Treatment	
A. Intake and North Plant	506,000
B. South Plant, Well Field and Access Road, Booster Pump Station, and Pilot Knob	1,015,000
Total	1,521,000
Total	2,523,000

2012 Capital Improvements

ADMINISTRATION

Office Equipment and Software	Costs (\$)
A. Accounting software (Windows-based)	30,000
B. On-Line Billing Statements (consulting)	15,000
C. New Computers (4)	2,800
D. New Printers (3)	900
E. Cash Receipt Printers (3)	1,800
F. Server	4,000
G. Folding Machine (may roll to 2013)	15,000
Total	69,500

WATER DISTRIBUTION

Mechanical Equipment	Costs (\$)
A. Wet Saw	6,000
B. Miscellaneous Tools	7,000
C. McElroy TracStar 618 Fuser and data logger for PVC with trailer	65,000
D. Computer and Auxiliary Hard Drive	700
Total	78,700

Water Main Replacements (Dimensions)	Feet
A. Shawnee Street from 6 th to Esplanade and south to Delaware	2,400
B. Delaware Street from 13 th to 16 th (initial survey completed)	2,090
C. 16 th Street from Santa Fe to Thornton (initial survey completed)	1,050
D. Franklin Street from Ohio to Kansas (may roll to 2013; initial survey completed)	650
E. Spruce Street from Broadway to Columbia (may roll to 2013)	360
F. Columbia Avenue from Spruce Street to Kansas Avenue (may roll to 2013)	1,900
G. Columbia Avenue from Kansas Avenue to Michigan Avenue (may roll to 2013)	1,000
H. State Highway 5	900
Total	10,350

Water Main Replacements (Costs)	Costs (\$)
A. Materials (8-in HDPE Pipe – stockpiled); (12-in PVC)	30,000
B. Horizontal Drilling, Pipe Installation, Restoration (including misc. materials)	525,550
C. Surveying and Engineering	20,000
D. Sewer Lateral Delineation	30,000
Total	605,550

Water Main Relocations	Costs (\$)
3 rd Street over 3-Mile Creek (50:50 Cost Share with City):	0
C. Surveying and Engineering/Inspection	4,500
D. Materials (200 feet of 8-in DIP)	5,000
E. Contract Labor	15,000
F. Street Restoration	10,000
Total	34,500
Net (50%)	17,250

Fire Hydrant Replacements	Costs (\$)
Change out 12 Hydrants at \$4,000 each (in-house labor)	48,000
Total	48,000

Miscellaneous Projects	Costs (\$)
Perimeter Fence and Security Gates Around Administration and Shop Buildings:	
A. Security Gates (s) – materials and installation (contractor)	50,000
B. Perimeter Privacy/Security Fence – 440 feet at \$75/ft	33,000
Trailer Storage Building (\$20/ft ² for 5,000 ft ²)	100,000
Total	183,000

Total Water Distribution	932,500
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WATER DIVERSION AND TREATMENT

North Plant and Intake

Intake	Costs (\$)
A. "Water-on-Floor" Alarm	5,000
B. Fence/Gate and Front Door Improvements	6,000
C. Interior Removable Flood Walls -- aluminum plates (5)	5,000
D. Security cameras - interior and exterior (7)	20,000
E. Rock/earth fill on west side of intake (requires Corps permit)	200,000
Total	236,000

Plant Grounds Equipment	Costs (\$)
A. Air-Conditioned Tractor	42,000
B. Zero-Turn Mower	12,000
C. Weed Trimmers (2)	1,000
D. Service Pickup Truck	30,000
Total	85,000

Roads	Costs (\$)
A. Mill and Repave Driveway	30,000
B. Place Rock Front Access Road and Circle Drive	5,000
Total	35,000

Security Gate System	Costs (\$)
A. Security Gate	30,000
B. Concrete Pad and Electrical Controls	20,000
Total	50,000

Basins and Flumes	Costs (\$)
A. Partial Replacement of Concrete in Basins	50,000
B. Installation of Sluice Gates	50,000
Total	100,000

Treatment Building	Costs (\$)
A.	0
Total	0

Total Intake and North Plant	506,000
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South Plant, Well Field and Access Road, Booster Pump Station, and Pilot Knob

Pilot Knob		Costs (\$)
A. On-Line Chlorine Monitor		15,000
Total		15,000

Booster Pump Station		Costs (\$)
A. Human Machine Interface (HMI)		20,000
B. Replace Louvers for Ventilation		6,000
Total		26,000

Well Field and Access Road		Costs (\$)
A. Test Well		35,000
B. Backup Well (emergency supply) and Pump		350,000
Total		385,000

Treatment Facility		Costs (\$)
A. Security Gate and Concrete Pad		50,000
B. Tools for Garage		1,000
C. Replace Gas House		10,000
D. Laboratory Equipment		8,000
E. Replace High-Voltage Switch Gear to Soft Start		150,000
F. Replace Position Indicator and Hold-Position Switch for Filter Influent Valves		15,000
G. High Service Pump and VFD		300,000
Total		534,000

Plant Grounds Equipment		Costs (\$)
A. Air-Conditioned Tractor		42,000
B. Zero-Turn Mower		12,000
C. Weed Trimmers (2)		1,000
Total		55,000

Total South Plant, Well Field, Access Road, Booster Pump Station, and Pilot Knob	1,015,000
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