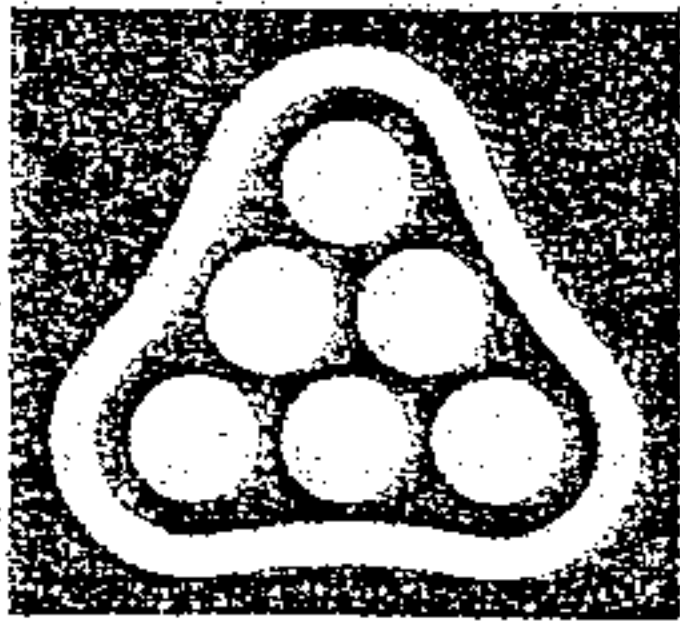
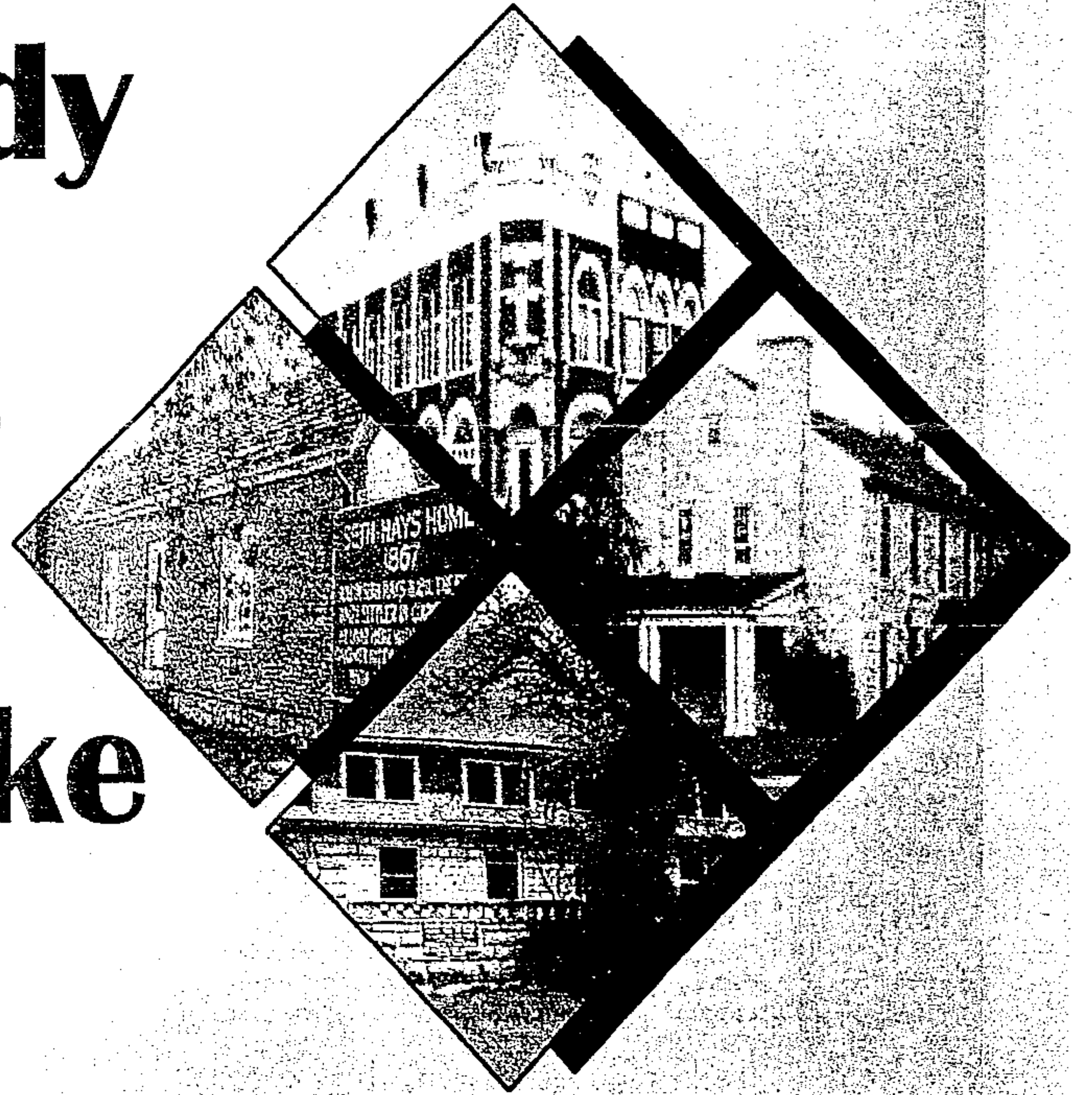


**COUNCIL GROVE**  
KANSAS



# Feasibility Study of Extending Water & Sewer Services for the City Lake



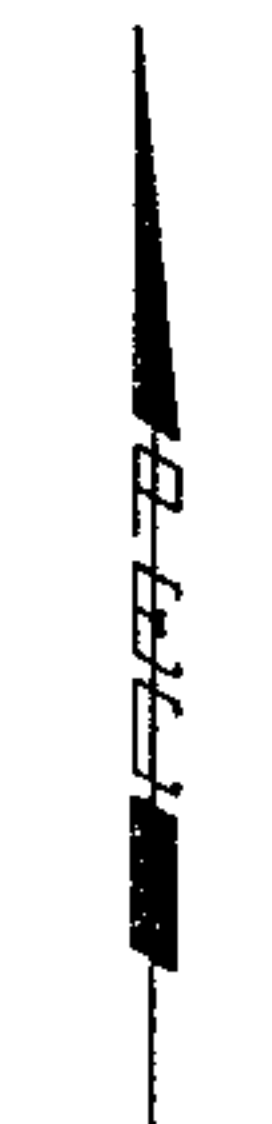
**P**rofessional **E**ngineering **C**onsultants, P.A.

**Table 1: Sanitary Sewer Cost Estimate**

Low Pressure Sanitary Sewer Cost Estimate Council Grove, Kansas					
Item No.	Description	Quantity	Units	Unit Price	Total Cost
1	2" pipe	16,500	LF	\$ 9	\$ 148,500
2	2.5" pipe	5,500	LF	\$ 10	\$ 55,000
3	3" pipe	16,000	LF	\$ 10	\$ 160,000
4	4" pipe	13,500	LF	\$ 12	\$ 162,000
5	End of Line Cleanout	20	EA	\$ 800	\$ 16,000
6	In-line Cleanout Assembly	35	EA	\$ 1,200	\$ 42,000
7	Valves	351	EA	\$ 150	\$ 52,650
8	Grinder Pump Stations	351	EA	\$ 3,300	\$ 1,158,300
9	Septic Tank Abandonment	351	EA	\$ 1,000	\$ 351,000
10	Electrical	351	EA	\$ 500	\$ 175,500
11	Air Release Valve	8	EA	\$ 3,000	\$ 24,000
12	4"-6" Force Main	20,000	LF	\$ 12	\$ 240,000
13	Lift Station	1	EA	\$ 150,000	\$ 150,000
Total Construction					\$ 2,734,950
Contingencies (20%)					\$ 546,990
Project Costs (20%)					\$ 546,990
Total Project Costs					\$ 3,828,930

**Table 2: Sanitary Sewer Cost Estimate (2 houses/pump)**

Low Pressure Sanitary Sewer Cost Estimate: 2 houses/pump Council Grove, Kansas					
Item No.	Description	Quantity	Units	Unit Price	Total Cost
1	2" pipe	16,500	LF	\$ 9	\$ 148,500
2	2.5" pipe	5,500	LF	\$ 10	\$ 55,000
3	3" pipe	16,000	LF	\$ 10	\$ 160,000
4	4" pipe	13,500	LF	\$ 12	\$ 162,000
5	End of Line Cleanout	20	EA	\$ 800	\$ 16,000
6	In-line Cleanout Assembly	35	EA	\$ 1,200	\$ 42,000
7	Valves	176	EA	\$ 150	\$ 26,400
8	Grinder Pump Stations	176	EA	\$ 3,300	\$ 580,800
9	Septic Tank Abandonment	350	EA	\$ 1,000	\$ 350,000
10	Electrical	176	EA	\$ 500	\$ 88,000
11	Air Release Valve	8	EA	\$ 3,000	\$ 24,000
12	4"-6" Force Main	20,000	EA	\$ 12	\$ 240,000
13	Lift Station	1	EA	\$ 150,000	\$ 150,000
Total Construction					\$ 2,042,700
Contingencies (20%)					\$ 408,540
Project Costs (20%)					\$ 408,540
Total Project Costs					\$ 2,859,780



SCALE:  
1 : 1000

No.	Revision	By	Date

FIGURE 1  
LOW PRESSURE SEWER  
PRELIMINARY LAYOUT



**Professional Engineering Consultants, P.A.**  
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Designed by	ALA	Job No.	_____	Sht. 1 of 1
Drawn by	GJR	Date	October 2002	

