

**WATER, SANITARY SEWER, AND WASTEWATER TREATMENT IMPROVEMENTS**  
**CITY OF COUNCIL GROVE, KANSAS**  
**APRIL 2022**  
**PRELIMINARY PROJECT ESTIMATE**

<u>Construction Costs</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>Part A: Water - Council Grove City Lake (Urban Water Distribution System - Enhanced Fire Protection)</u>				
1 Mobilization, Demobilization and Bonding	1	L.S.	\$200,000.00	\$200,000.00
2 Clearing and Grubbing	1	L.S.	\$30,000.00	\$30,000.00
3 6" PVC Waterline	17,600	L.F.	\$30.00	\$528,000.00
4 8" PVC Waterline	42,600	L.F.	\$45.00	\$1,917,000.00
5 10" PVC Waterline	9,800	L.F.	\$60.00	\$588,000.00
6 1" SDR 9 HDPE Service Line	29,250	L.F.	\$19.00	\$555,750.00
7 Booster P.S. w/ Standby Generator (200 gpm)	1	L.S.	\$220,000.00	\$220,000.00
8 6" Gate Valve	4	EA.	\$1,400.00	\$5,600.00
9 8" Gate Valve	20	EA.	\$1,800.00	\$36,000.00
10 10" Gate Valve	4	EA.	\$2,500.00	\$10,000.00
11 Air Release Valve Assembly	5	EA.	\$3,500.00	\$17,500.00
12 Tracer Wire	99,250	L.F.	\$0.40	\$39,700.00
13 Three Way Fire Hydrant Assembly	29	EA.	\$4,500.00	\$130,500.00
14 Road Crossing	20	EA.	\$6,000.00	\$120,000.00
15 Driveway Crossing	30	EA.	\$500.00	\$15,000.00
16 Stream Crossing	18	EA.	\$30,000.00	\$540,000.00
17 Residential Water Service	350	EA.	\$1,000.00	\$350,000.00
18 Directional Bore Service Line	3,000	L.F.	\$20.00	\$60,000.00
19 Water Storage Tank (150,000 Gal. Pedestal Tower)	1	L.S.	\$925,000.00	\$925,000.00
<b>Subtotal Construction Cost (Items 1-19) =</b>				<b>\$6,288,050.00</b>
+10% Contingencies =				\$628,805.00
<b>Total Construction Cost =</b>				<b>\$6,916,855.00</b>
<u>Part B: Sanitary Sewer - Council Grove City Lake (Var. Grade San. Sewer Collection System w/ Offsite Treatment)</u>				
1 Mobilization, Demobilization and Bonding	1	L.S.	\$200,000.00	\$200,000.00
2 Clearing and Grubbing	1	L.S.	\$20,000.00	\$20,000.00
3 6" SDR 11 HDPE Force Main	25,800	L.F.	\$24.00	\$619,200.00
4 4" SDR 11 HDPE Force Main	15,470	L.F.	\$22.00	\$340,340.00
5 3" SDR 11 HDPE Force Main	16,910	L.F.	\$20.00	\$338,200.00
6 2.5" SDR 11 HDPE Force Main	1,540	L.F.	\$19.00	\$29,260.00
7 2" SDR 11 HDPE Force Main	8,780	L.F.	\$18.00	\$158,040.00
8 1.25" SDR 11 HDPE Service Line	40,860	L.F.	\$16.00	\$653,760.00
9 Lift Station with Standby Generator	1	EA.	\$150,000.00	\$150,000.00
10 6" Isolation Valve	5	EA.	\$1,400.00	\$7,000.00
11 4" Isolation Valve	2	EA.	\$1,100.00	\$2,200.00
12 3" Isolation Valve	3	EA.	\$900.00	\$2,700.00
13 2" Isolation Valve	6	EA.	\$700.00	\$4,200.00
14 Air Release Valve Assembly	10	EA.	\$4,500.00	\$45,000.00
15 Tracer Wire	109,360	L.F.	\$0.40	\$43,744.00
16 3" Cleanout Assembly	6	EA.	\$1,500.00	\$9,000.00
17 4" Cleanout Assembly	6	EA.	\$1,800.00	\$10,800.00
18 Terminal End Cleanout Assembly	6	EA.	\$1,400.00	\$8,400.00
19 Road Crossing	12	EA.	\$3,000.00	\$36,000.00
20 Driveway Crossing	330	EA.	\$500.00	\$165,000.00
21 Stream Crossing	12	EA.	\$18,000.00	\$216,000.00
22 Grinder Pump Assembly	350	EA.	\$8,000.00	\$2,800,000.00
23 Directional Bore Service Line	500	L.F.	\$30.00	\$15,000.00
24 Directional Bore Force Main	2,600	L.F.	\$35.00	\$91,000.00
25 Demolish Existing Holding Tank	350	EA.	\$600.00	\$210,000.00
<b>Subtotal Construction Cost (Items 1-25) =</b>				<b>\$6,174,844.00</b>
+10% Contingencies =				\$617,484.40
<b>Total Construction Cost =</b>				<b>\$6,792,328.40</b>

Part C: Sanitary Sewer - City of Council Grove (CIPP Sewer Rehabilitation)

1	Mobilization and Demobilization	1	L.S.	\$30,000.00	\$30,000.00
2	Clearing and Grubbing	1	L.S.	\$5,000.00	\$5,000.00
3	Existing Manhole Rehabilitation	54	EA.	\$2,500.00	\$135,000.00
4	8" CIPP Sanitary Sewer Rehabilitation	9,500	L.F.	\$35.00	\$332,500.00
5	10" CIPP Sanitary Sewer Rehabilitation	400	L.F.	\$45.00	\$18,000.00
6	12" CIPP Sanitary Sewer Rehabilitation	1,200	L.F.	\$60.00	\$72,000.00
<b>Subtotal Construction Cost (Items 1-6) =</b>					<b>\$592,500.00</b>
+10% Contingencies =					\$59,250.00
<b>Total Construction Cost =</b>					<b>\$651,750.00</b>

\*Note: Point repairs and service lateral reinstatement costs subsidiary to the CIPP line items.

Wastewater Treatment - City of Council Grove (Wetland Cell with Irrigation)

1	Mobilization and Demobilization	1	L.S.	\$30,000.00	\$30,000.00
2	Wetland Cell Clearing and Grubbing	1	L.S.	\$25,000.00	\$25,000.00
3	Wetland Lagoon Cell Earthwork	1	L.S.	\$250,000.00	\$250,000.00
4	Remove and Reinstall Discharge Weir	1	L.S.	\$4,000.00	\$4,000.00
5	Install New Transfer Structure	1	EA.	\$12,000.00	\$12,000.00
6	Install New Discharge/Irrigation Structure	1	EA.	\$25,000.00	\$25,000.00
7	Install Irrigation Pivot Equipment	1	L.S.	\$125,000.00	\$125,000.00
8	Irrigation Pumping Equipment	1	L.S.	\$75,000.00	\$75,000.00
9	8" PVC Transfer Piping	1,900	L.F.	\$45.00	\$85,500.00
10	4' Dia. Transfer Manhole	4	EA.	\$5,000.00	\$20,000.00
11	Crushed Rock Lagoon Top Surfacing	600	TON	\$40.00	\$24,000.00
12	Lagoon Seeding	5	AC.	\$3,500.00	\$17,500.00
13	Lagoon Fencing	2,800	L.F.	\$20.00	\$56,000.00
<b>Subtotal Construction Cost (Items 1-13) =</b>					<b>\$749,000.00</b>
+10% Contingencies =					\$74,900.00
<b>Total Construction Cost =</b>					<b>\$823,900.00</b>

**Grand Total Construction Cost = \$15,184,833.40**

Overhead Costs

1	Engineering Design (8%)	LS	\$1,214,000.00
2	Construction Observation / Contract Admin. (4%)	Hourly	\$607,000.00
3	Geotechnical Investigations	LS	\$18,000.00
4	Loan Administration	LS	\$35,000.00
5	Interim Financing	LS	\$250,000.00
6	Environmental Review/Cultural Review	LS	\$60,000.00
7	Easement Acquisition	Hourly	\$50,000.00
8	Legal	Hourly	\$60,000.00
9	Relocate Everage Transmission Line	L.S.	\$50,000.00
<b>Total Overhead Cost (Items 1-9) =</b>			<b>\$2,344,000.00</b>

**Total Estimated Project Cost = \$17,528,833.40**