

## **Appendix C – Phase 1 Collection System Cost Estimates**

**Brown County Regional Sewer District**  
**New Sanitary Sewer System - Phase 1**  
**Alternative: Summary of Project Costs**  
**Considerations:**  
**Level of Certainty: Preliminary Scoping**  
**Prepared By: BAB**  
**Checked By:**

**Date: 2/7/2023**  
**Date:**

No. Item	Construction Cost	Section Total
<b>CONSTRUCTION COST ESTIMATE</b>		
<b>Sewer Collection System - Phase 1</b>		\$30,520,000
1 Areas		
1.01 West of Helmsburg	\$19,410,000	
1.02 East of Helmsburg	\$11,110,000	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>		<b>\$30,520,000</b>
<b>NON-CONSTRUCTION COSTS</b>		
<b>Eligible Non-Construction Costs</b>		
<b>Engineering and Inspection Services</b>		\$7,630,000
Survey, Design, Bidding, Permits, Soil Borings, Const. Admin and Const. Ob.	\$7,630,000	
<b>Legal and Bond Counsel</b>		\$300,000
<b>Financial Advisor and Financing Fees</b>		\$250,000
<b>Electrical Utility Charges</b>		\$200,000
<b>Administration</b>		\$100,000
<b>Subtotal Non-Construction Costs</b>		<b>\$8,480,000</b>
<b>TOTAL ESTIMATED PROJECT COSTS</b>		<b>\$39,000,000</b>

This opinion of probable construction cost is made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional generally familiar with the industry. However, since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids or actual construction cost will not vary from this opinion of probable construction cost.

Alternative: Phase 1 Zone 100 West of Helmsburg

Considerations:

Level of Certainty: Preliminary Scoping

Prepared By: BAB Date: 1/21/2023

Checked By: Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$195,000.00	\$195,000	\$275,000	
2	Maintenance of Traffic/Erosion Control	1	LS	\$80,000.00	\$80,000		
<b>Sitework</b>							
3	Boring and Jacking					\$90,000	
3.01	24-inch Casing	150	LF	\$600.00	\$90,000		
<b>Lift Stations and Force Mains</b>							
4	Lift Stations					\$344,000	
4.01	Lift Station 1	1	LS	\$300,000.00	\$300,000		
5	Force Main Air Release Valves						
5.01	Combination Force Main Air Valves	8	EA	\$5,500.00	\$44,000		
<b>Low Pressure Sewers with Grinder Pumps</b>							
6	Grinder Pump Stations					\$3,466,900	
6.01	Simplex Grinder Pump Stations, Low Pressure	107	EA	\$11,500.00	\$1,230,500		
6.02	Service Valve Vault Assembly	107	EA	\$1,500.00	\$160,500		
7	Low Pressure Sewers -Directional Bore						
7.01	1.25-inch Low Pressure Sewers	1,400	LF	\$55.00	\$77,000		
7.02	2-inch Low Pressure Sewers	1,000	LF	\$70.00	\$70,000		
7.03	3-inch Low Pressure Sewers	3,100	LF	\$75.00	\$232,500		
7.04	4-inch Low Pressure Sewers	2,500	LF	\$80.00	\$200,000		
7.07	6-inch Low Pressure Sewers	10,400	LF	\$93.00	\$967,200		
7.06	8-inch Low Pressure Sewers	2,400	LF	\$95.00	\$228,000		
8	Low Pressure Sewers - Open Trench						
8.08	1.25-inch Low Pressure Sewers	5,400	LF	\$25.00	\$135,000		
9	Low Pressure Sewer Valves						
9.01	2-inch Low Pressure Sewer Valves	2	EA	\$1,200.00	\$2,400		
9.02	3-inch Low Pressure Sewer Valves	4	EA	\$1,500.00	\$6,000		
9.03	4-inch Low Pressure Sewer Valves	6	EA	\$1,800.00	\$10,800		
9.04	6-inch Low Pressure Sewer Valves	2	EA	\$2,250.00	\$4,500		
9.05	8-inch Low Pressure Sewer Valves	1	EA	\$2,500.00	\$2,500		
10	Low Pressure Sewer Cleanouts						
10.01	Low Pressure Sewer Cleanouts	40	EA	\$3,500.00	\$140,000		
<b>Lawns and Grasses</b>							
11	Lawns and Grasses					\$6,400	
11.01	Seeding	1,600	SY	\$4.00	\$6,400		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$4,182,300	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$427,700	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$4,610,000	

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Alternative: Phase 1 Zone 110 West of Helmsburg

Considerations:

Level of Certainty: Preliminary Scoping

Prepared By: BAB Date: 1/21/2023

Checked By: Date:

No. Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>						
<b>Administrative</b>						
1 Mobilization/Demobilization	1	LS	\$75,000.00	\$75,000		\$120,000
2 Maintenance of Traffic	1	LS	\$45,000.00	\$45,000		
					\$1,009,000	
<b>Gravity Sanitary Sewers</b>						
3 8-inch Gravity Sanitary Sewers						
3.01 8-inch Gravity Sanitary Sewers to 8 Foot Depth	1,200	LF	\$165.00	\$198,000		
3.02 8-inch Gravity Sanitary Sewers above 8-foot depth to 10-foot depth	2,500	LF	\$180.00	\$450,000		
4 4-foot Dia. Gravity Sanitary Sewer Manholes						
4.01 4-foot Dia. Gravity Sanitary Sewer Manholes to 8 Foot Depth	4	EA	\$4,000.00	\$16,000		
4.02 4-foot Dia. Gravity Sanitary Sewer Manholes above 8-foot depth to 10-foot depth	7	EA	\$4,500.00	\$31,500		
5 Sewer Wyes						
5.01 8" x 6" Sewer Wye	76	EA	\$125.00	\$9,500		
6 Sewer Laterals						
6.01 6-inch Sewer Lateral	1,520	LF	\$200.00	\$304,000		
					\$100,000	
<b>Low Pressure Sewers with Grinder Pumps</b>						
7 Grinder Pump Stations						
7.01 Duplex Grinder Pump Station - 6,000 gpd	2	EA	\$50,000.00	\$100,000		
					\$375,000	
<b>Bases and Pavements</b>						
8 Bases						
8.01 6-inch Compacted Aggregate Base	5,000	LF	\$20.00	\$100,000		
8.01 HMA Base, Type B, 770#/SY	5,000	LF	\$55.00	\$275,000		
<b>Lawns and Grasses</b>						
9 Lawns and Grasses						
9.01 Seeding	1,000	SY	\$4.00	\$4,000		\$4,000
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>					\$1,608,000	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>					\$162,000	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>					\$1,770,000	

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Alternative: Phase 1 Zone 120 West of Helmsburg

Considerations:

Level of Certainty:

Preliminary Scoping

Prepared By:

BAB

Date:

1/21/2023

Checked By:

Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$115,000.00	\$115,000	\$165,000	
2	Maintenance of Traffic	1	LS	\$50,000.00	\$50,000		
<b>Lift Stations and Force Mains</b>							
3	Force Main Air Release Valves					\$33,000	
3.01	Combination Force Main Air Valves	6	EA	\$5,500.00	\$33,000		
<b>Low Pressure Sewers with Grinder Pumps</b>							
4	Grinder Pump Stations					\$2,216,000	
4.01	Simplex Grinder Pump Stations, Low Pressure	72	EA	\$11,500.00	\$828,000		
4.02	Service Valve Vault Assembly	72	EA	\$1,500.00	\$108,000		
5	Low Pressure Sewers -Directional Bore						
5.01	1.25-inch Low Pressure Sewers	900	LF	\$55.00	\$49,500		
5.02	2-inch Low Pressure Sewers	10,200	LF	\$70.00	\$714,000		
5.03	3-inch Low Pressure Sewers	1,800	LF	\$75.00	\$135,000		
5.04	4-inch Low Pressure Sewers	2,600	LF	\$80.00	\$208,000		
6	Low Pressure Sewers - Open Trench						
6.05	1.25-inch Low Pressure Sewers	3,600	LF	\$25.00	\$90,000		
7	Low Pressure Sewer Valves						
7.01	2-inch Low Pressure Sewer Valves	4	EA	\$1,200.00	\$4,800		
7.02	3-inch Low Pressure Sewer Valves	1	EA	\$1,500.00	\$1,500		
7.03	4-inch Low Pressure Sewer Valves	4	EA	\$1,800.00	\$7,200		
8	Low Pressure Sewer Cleanouts						
8.01	Low Pressure Sewer Cleanouts	20	EA	\$3,500.00	\$70,000		
<b>Lawns and Grasses</b>							
9	Lawns and Grasses					\$3,600	
9.01	Seeding	900	SY	\$4.00	\$3,600		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$2,417,600	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$242,400	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$2,660,000	

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Alternative: Phase 1 Zone 200 West of Helmsburg

Considerations:

Level of Certainty: Preliminary Scoping

Prepared By: BAB Date: 1/21/2023

Checked By: Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$162,500.00	\$162,500	\$227,500	
2	Maintenance of Traffic	1	LS	\$65,000.00	\$65,000		
<b>Lift Stations and Force Mains</b>						\$88,000	
3	Force Main Air Release Valves						
3.01	Combination Force Main Air Valves	16	EA	\$5,500.00	\$88,000		
<b>Low Pressure Sewers with Grinder Pumps</b>						\$3,161,700	
4	Grinder Pump Stations						
4.01	Simplex Grinder Pump Stations, Low Pressure	88	EA	\$11,500.00	\$1,012,000		
4.02	Service Valve Vault Assembly	88	EA	\$1,500.00	\$132,000		
5	Low Pressure Sewers -Directional Bore						
5.01	1.25-inch Low Pressure Sewers	1,100	LF	\$55.00	\$60,500		
5.02	2-inch Low Pressure Sewers	8,100	LF	\$55.00	\$445,500		
5.03	3-inch Low Pressure Sewers	1,300	LF	\$60.00	\$78,000		
5.05	6-inch Low Pressure Sewers	13,600	LF	\$93.00	\$1,264,800		
6	Low Pressure Sewers - Open Trench						
6.06	1.25-inch Low Pressure Sewers	5,000	LF	\$25.00	\$125,000		
7	Low Pressure Sewer Valves						
7.01	2-inch Low Pressure Sewer Valves	2	EA	\$1,200.00	\$2,400		
7.02	3-inch Low Pressure Sewer Valves	3	EA	\$1,500.00	\$4,500		
7.03	6-inch Low Pressure Sewer Valves	4	EA	\$2,250.00	\$9,000		
8	Low Pressure Sewer Cleanouts						
8.01	Low Pressure Sewer Cleanouts	8	EA	\$3,500.00	\$28,000		
<b>Lawns and Grasses</b>						\$2,000	
9	Lawns and Grasses						
9.01	Seeding	500	SY	\$4.00	\$2,000		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$3,479,200	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$350,800	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$3,830,000	

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Alternative: Phase 1 Zone 210 West of Helmsburg

Considerations:

Level of Certainty: Preliminary Scoping

Prepared By:

BAB

Date:

1/21/2023

Checked By:

Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$130,000.00	\$130,000	\$180,000	
2	Maintenance of Traffic	1	LS	\$50,000.00	\$50,000		
<b>Lift Stations and Force Mains</b>						\$327,500	
3	Lift Stations						
3.01	Lift Station 2	1	LS	\$300,000.00	\$300,000		
4	Force Main Air Release Valves						
4.01	Combination Force Main Air Valves	5	EA	\$5,500.00	\$27,500		
<b>Low Pressure Sewers with Grinder Pumps</b>						\$2,263,600	
5	Grinder Pump Stations						
5.01	Simplex Grinder Pump Stations, Low Pressure	101	EA	\$11,500.00	\$1,161,500		
5.02	Service Valve Vault Assembly	101	EA	\$1,500.00	\$151,500		
6	Low Pressure Sewers -Directional Bore						
6.01	1.25-inch Low Pressure Sewers	1,300	LF	\$55.00	\$71,500		
6.02	2-inch Low Pressure Sewers	3,100	LF	\$70.00	\$217,000		
6.03	3-inch Low Pressure Sewers	1,300	LF	\$75.00	\$97,500		
6.04	4-inch Low Pressure Sewers	4,700	LF	\$80.00	\$376,000		
7	Low Pressure Sewers - Open Trench						
7.05	1.25-inch Low Pressure Sewers	5,000	LF	\$25.00	\$125,000		
8	Low Pressure Sewer Valves						
8.01	2-inch Low Pressure Sewer Valves	2	EA	\$1,200.00	\$2,400		
8.02	3-inch Low Pressure Sewer Valves	1	EA	\$1,500.00	\$1,500		
8.03	4-inch Low Pressure Sewer Valves	4	EA	\$1,800.00	\$7,200		
9	Low Pressure Sewer Cleanouts						
9.01	Low Pressure Sewer Cleanouts	15	EA	\$3,500.00	\$52,500		
<b>Lawns and Grasses</b>						\$2,000	
10	Lawns and Grasses						
10.01	Seeding	500	SY	\$4.00	\$2,000		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$2,773,100	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$286,900	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$3,060,000	

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Alternative: Phase 1 Zone 300 West of Helmsburg

Considerations:

Level of Certainty:

Preliminary Scoping

Prepared By:

BAB

Date:

1/21/2023

Checked By:

Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$150,000.00	\$150,000	\$246,000	
2	Maintenance of Traffic	1	LS	\$60,000.00	\$60,000		
3	Field Offices	18	Mo	\$2,000.00	\$36,000		
<b>Sitework</b>							
4	Boring and Jacking					\$126,000	
4.01	16-inch Casing	120	LF	\$450.00	\$54,000		( Estimate
4.02	24-inch Casing	120	LF	\$600.00	\$72,000		
<b>Lift Stations and Force Mains</b>							
5	Lift Stations					\$324,000	
5.01	Lift Station 2	1	LS	\$300,000.00	\$300,000		
6	Sewer Force Main Connections						
6.01	Force Main Connection to Existing Manhole	1	EA	\$2,000.00	\$2,000		Connection at
7	Force Main Air Release Valves						
7.01	Combination Force Main Air Valves	4	EA	\$5,500.00	\$22,000		
<b>Low Pressure Sewers with Grinder Pumps</b>							
8	Grinder Pump Stations					\$2,461,500	
8.01	Simplex Grinder Pump Stations, Low Pressure	31	EA	\$11,500.00	\$356,500		
8.02	Service Valve Vault Assembly	31	EA	\$1,500.00	\$46,500		
9	Low Pressure Sewers - Directional Bore						
9.01	1.25-inch Low Pressure Sewers	400	LF	\$55.00	\$22,000		
9.01	10-inch Low Pressure Sewers	7,500	LF	\$110.00	\$825,000		
9.02	12-inch Low Pressure Sewers	9,100	LF	\$125.00	\$1,137,500		
10	Low Pressure Sewers - Open Trench						
10.03	1.25-inch Low Pressure Sewers	1,600	LF	\$25.00	\$40,000		
11	Low Pressure Sewer Valves						
11.01	10-inch Low Pressure Sewer Valves	2	EA	\$3,000.00	\$6,000		
11.02	12-inch Low Pressure Sewer Valves	2	EA	\$3,500.00	\$7,000		
12	Low Pressure Sewer Cleanouts						
12.01	Low Pressure Sewer Cleanouts	6	EA	\$3,500.00	\$21,000		
<b>Lawns and Grasses</b>							
13	Lawns and Grasses					\$2,000	
13.01	Seeding	500	SY	\$4.00	\$2,000		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$3,159,500	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$320,500	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$3,480,000	

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Alternative: Phase 1 Zone 600 West of Helmsburg

Considerations:

Level of Certainty:

Preliminary Scoping

Prepared By:

BAB

Date:

1/21/2023

Checked By:

Date:

No. Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>						
<b>Administrative</b>						\$374,000
1 Mobilization/Demobilization	1	LS	\$250,000.00	\$250,000		
2 Maintenance of Traffic	1	LS	\$100,000.00	\$100,000		
3 Field Offices	12	Mo	\$2,000.00	\$24,000		
<b>Sitework</b>						\$72,000
4 Boring and Jacking						
4.01 24-inch Casing	120	LF	\$600.00	\$72,000		
<b>Lift Stations and Force Mains</b>						\$757,000
5 Lift Stations						
5.01 Lift Station 4	1	LS	\$300,000.00	\$300,000		
5.02 Lift Station 5	1	LS	\$400,000.00	\$400,000		
6 Sewer Force Main Connections						
6.01 Force Main Connection to Existing Manhole	1	EA	\$2,000.00	\$2,000		
7 Force Main Air Release Valves						
7.01 Combination Force Main Air Valves	10	EA	\$5,500.00	\$55,000		
<b>Low Pressure Sewers with Grinder Pumps</b>						\$4,205,100
8 Grinder Pump Stations						
8.01 Simplex Grinder Pump Stations, Low Pressure	113	EA	\$11,500.00	\$1,299,500		
8.02 Service Valve Vault Assembly	113	EA	\$1,500.00	\$169,500		
8.03 Duplex Grinder Pump Station - 3,500 gpd	2	EA	\$24,000.00	\$48,000		
9 Low Pressure Sewers -Directional Bore						
9.01 1.25-inch Low Pressure Sewers	1,500	LF	\$55.00	\$82,500		
9.02 2-inch Low Pressure Sewers	5,300	LF	\$70.00	\$371,000		
9.03 3-inch Low Pressure Sewers	600	LF	\$75.00	\$45,000		
9.04 4-inch Low Pressure Sewers	5,500	LF	\$80.00	\$440,000		
9.07 6-inch Low Pressure Sewers	3,200	LF	\$93.00	\$297,600		
9.06 8-inch Low Pressure Sewers	100	LF	\$100.00	\$10,000		
9.07 10-inch Low Pressure Sewers	10,000	LF	\$110.00	\$1,100,000		
10 Low Pressure Sewers - Open Trench						
10.08 1.25-inch Low Pressure Sewers	5,700	LF	\$25.00	\$142,500		
11 Low Pressure Sewer Valves						
11.01 2-inch Low Pressure Sewer Valves	5	EA	\$1,200.00	\$6,000		
11.02 3-inch Low Pressure Sewer Valves	1	EA	\$1,500.00	\$1,500		
11.03 4-inch Low Pressure Sewer Valves	20	EA	\$1,800.00	\$36,000		
11.04 6-inch Low Pressure Sewer Valves	2	EA	\$2,250.00	\$4,500		
11.05 8-inch Low Pressure Sewer Valves	1	EA	\$2,500.00	\$2,500		
11.06 10-inch Low Pressure Sewer Valves	3	EA	\$3,000.00	\$9,000		
12 Low Pressure Sewer Cleanouts						
12.01 Low Pressure Sewer Cleanouts	40	EA	\$3,500.00	\$140,000		
<b>Lawns and Grasses</b>						\$8,000
13 Lawns and Grasses						
13.01 Seeding	2,000	SY	\$4.00	\$8,000		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$5,416,100
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$543,900
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$5,960,000

This opinion of probable construction cost is made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional generally familiar with the industry. However, since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids or actual construction cost will not vary from this opinion of probable construction cost.

Alternative: Phase 1 Zone 700 West of Helmsburg

Considerations:

Level of Certainty: Preliminary Scoping

Prepared By: BAB Date: 1/21/2023

Checked By: Date:

No.	Item	Quantity	Unit Type	Unit Cost	Extension	Section Total	Cost Source
<b>CONSTRUCTION COST ESTIMATE</b>							
<b>Administrative</b>							
1	Mobilization/Demobilization	1	LS	\$220,000.00	\$220,000	\$310,000	
2	Maintenance of Traffic	1	LS	\$90,000.00	\$90,000		
<b>Sitework</b>							
3	Boring and Jacking					\$54,000	
3.01	16-inch Casing	120	LF	\$450.00	\$54,000		Estimate
<b>Lift Stations and Force Mains</b>							
4	Lift Stations					\$505,000	
4.01	Lift Station 6	1	LS	\$450,000.00	\$450,000		
5	Force Main Air Release Valves						
5.01	Combination Force Main Air Valves	10	EA	\$5,500.00	\$55,000		
<b>Low Pressure Sewers with Grinder Pumps</b>							
6	Grinder Pump Stations					\$3,800,400	
6.01	Simplex Grinder Pump Stations, Low Pressure	110	EA	\$11,500.00	\$1,265,000		
6.02	Service Valve Vault Assembly	110	EA	\$1,500.00	\$165,000		
7	Low Pressure Sewers -Directional Bore						
7.01	1.25-inch Low Pressure Sewers	1,500	LF	\$55.00	\$82,500		
7.02	2-inch Low Pressure Sewers	5,200	LF	\$70.00	\$364,000		
7.03	3-inch Low Pressure Sewers	4,600	LF	\$75.00	\$345,000		
7.04	4-inch Low Pressure Sewers	9,000	LF	\$80.00	\$720,000		
7.06	6-inch Low Pressure Sewers	7,000	LF	\$93.00	\$651,000		
8	Low Pressure Sewers - Open Trench						
8.07	1.25-inch Low Pressure Sewers	3,000	LF	\$25.00	\$75,000		
9	Low Pressure Sewer Valves						
9.01	2-inch Low Pressure Sewer Valves	8	EA	\$1,200.00	\$9,600		
9.02	3-inch Low Pressure Sewer Valves	2	EA	\$1,500.00	\$3,000		
9.03	4-inch Low Pressure Sewer Valves	6	EA	\$1,800.00	\$10,800		
9.04	6-inch Low Pressure Sewer Valves	2	EA	\$2,250.00	\$4,500		
10	Low Pressure Sewer Cleanouts						
10.01	Low Pressure Sewer Cleanouts	30	EA	\$3,500.00	\$105,000		
<b>Lawns and Grasses</b>							
11	Lawns and Grasses					\$4,000	
11.01	Seeding	1,000	SY	\$4.00	\$4,000		
<b>SUBTOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$4,673,400	
<b>CONSTRUCTION CONTINGENCIES (10%)</b>						\$476,600	
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>						\$5,150,000	

This opinion of probable construction cost is made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional generally familiar with the industry. However, since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids or actual construction cost will not vary from this opinion of probable construction cost.

Brown County Regional Sewer District  
 New Sanitary Sewer System - Phase 1

Alternative:

Considerations:

Level of Certainty:

Prepared By:

Checked By:

Summary of Operation and Maintenance Expenses

Preliminary Scoping

BAB

Date:	2/7/2023
Date:	

		Section Total
<b>Operation and Maintenance</b>		
Salaries and Wages		
Employee Pension and Benefits		
Purchased Power for Lift Stations		\$25,000
Fuel for Power Production		\$15,000
Chemicals		
Material and Supplies		\$6,000
Contractual Services - Engineering		\$12,500
Contractual Services - Accounting		\$12,500
Contractual Services - Legal		\$10,000
Contractual Services - Management Fees		
Contractual Services - Testing		
Contractual Services - Other		\$30,000
Rental of Building/Real Property		
Rental of Equipment		
Transportation Expenses		
Insurance - Vehicle		
Insurance - General Liability		
Insurance - Workman's Compensation		
Insurance - Other		
Miscellaneous Expenses		\$5,000
Lift Station Pump Maintenance and Replacement		\$12,000
Grinder Pump Maintenance and Replacement		\$25,000
<b>TOTAL ESTIMATED O &amp; M COSTS</b>		<b>\$153,000</b>