



Strand Associates, Inc.
1906 Niebuhr Street
Brenham, TX 77833
(7) 979-636-7937

**CITY OF RICHWOOD, TEXAS
AMERICAN RESCUE PLAN ACT
LIFT STATION AND WATER WELL GENERATORS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
STRAND PROJECT NO. P211.026
March 28, 2022**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY		UNIT COST	TOTAL COST
CONSTRUCTION					
1.	Well No. 5 Generator with Automatic Transfer Switch. (480-Volt (V), 3-Phase, 100-Kilowatt (KW), 200-Amperage (Amp), Natural Gas-Powered).	1	LS	\$ 109,000.00	\$ 109,000.00
2.	Lift Station No. 1 and Service Center Generator with Automatic Transfer Switch. (480-V, 3-Phase, 125-KW, 400-Amp, Natural Gas-Powered).	1	LS	\$ 118,000.00	\$ 118,000.00
Subtotal Construction Cost (Rounded):					\$ 227,000.00
20% Contingency (Rounded):					\$ 46,000.00
TOTAL CONSTRUCTION COST:					\$ 273,000.00
ENGINEERING					
1.	Basic Services—Design, Bidding, and Construction-Related Services.				\$ 82,500.00
2.	Topographic Survey (Construction Staking by Contractor).				\$ 3,500.00
3.	Part-Time Construction Observation (Four Total Visits).				\$ 4,000.00
4.	Geotechnical Services and Construction Materials Testing.				\$ -
TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST:					\$ 363,000.00

Ryan D. Tinsley, P.E., ENV SP
Strand Associates, Inc.* (TBPE No. F-8405)
1906 Niebuhr Street
Brenham, TX 77833



 3/28/2022



Strand Associates, Inc.
1906 Niebuhr Street
Brenham, TX 77833
(P) 979-836-7937

**CITY OF RICHWOOD, TEXAS
AMERICAN RESCUE PLAN ACT
SOUTH WATER PLANT BOOSTER PUMP REPLACEMENTS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
STRAND PROJECT NO. P211.026
March 24, 2022**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY		UNIT COST	TOTAL COST
CONSTRUCTION					
1.	Mobilization.	1	LS	\$ 30,000.00	\$ 30,000.00
2.	Metal Roof Structure with Concrete Slab over Booster Pumps (34- by 10-Foot).	1	LS	\$ 40,000.00	\$ 40,000.00
3.	Metal Roof Structure over Existing Concrete Slab and Electrical Controls.	1	LS	\$ 10,000.00	\$ 10,000.00
4.	Centrifugal Booster Pumps.	3	EA	\$ 40,000.00	\$ 120,000.00
5.	Ductile Iron Piping, Buried, Mechanical Joint, Various Sizes, and Miscellaneous Fittings.	300	LF	\$ 120.00	\$ 36,000.00
6.	Ductile Iron Piping, Aboveground, Flanged, Various Sizes, and Miscellaneous Fittings.	1	LS	\$ 60,000.00	\$ 60,000.00
7.	Gate Valves, Aboveground, Flanged, and Various Sizes.	8	EA	\$ 4,500.00	\$ 36,000.00
8.	Check Valves, Aboveground, Flanged, and Weighted Arm or Spring.	3	EA	\$ 6,000.00	\$ 18,000.00
9.	Electrical Conduit and Wire.	1	LS	\$ 60,000.00	\$ 60,000.00
10.	Trench Safety.	1	LS	\$ 5,000.00	\$ 5,000.00
11.	Seeding and Restoration.	1	LS	\$ 5,000.00	\$ 5,000.00
Subtotal Construction Cost (Rounded):					\$ 420,000.00
20% Contingency (Rounded):					\$ 84,000.00
TOTAL CONSTRUCTION COST:					\$ 504,000.00
ENGINEERING					
1.	Basic Services–Design, Bidding, and Construction-Related Services.				\$ 80,000.00
2.	Topographic Survey (Construction Staking by Contractor).				\$ 7,000.00
3.	Part-Time Construction Observation (Eight Total Visits).				\$ 8,000.00
4.	Geotechnical Services (Construction Materials Testing by Contractor).				\$ 5,000.00
TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST:					\$ 604,000.00

Ryan D. Tinsley, P.E., ENV SP
Strand Associates, Inc.* (TBPE No. F-8405)
1906 Niebuhr Street
Brenham, TX 77833

