

Table 4-2 Springs Hill WWTP Present Worth Analysis

Project	Year Constructed	Projected Design Life (Years)	Years in Operation	Value in 2016	Salvage Value ⁽¹⁾	Depreciable Value	Annual Depreciation	Present Worth
Original Construction:			-					
Concrete	1972	70	44	\$719,000	N/A	\$719,000	\$10,271	\$267,057
Process Equipment	1972	50	44	\$414,000	\$28,980	\$385,020	\$7,700	\$75,182
Miscellaneous:								
Operations Building	1972	60	44	\$34,000	\$2,380	\$31,620	\$527	\$10,812
Yard Piping	1972	70	44	\$67,000	N/A	\$67,000	\$957	\$24,886
Plant Outfall Piping	1972	70	44	\$133,000	N/A	\$133,000	\$1,900	\$49,400
Site Electrical	1972	50	44	\$100,000	\$7,000	\$93,000	\$1,860	\$18,160
Site Grading	1972	80	44	\$40,000	N/A	\$40,000	\$500	\$18,000
Site Fence	1972	50	44	\$40,000	\$2,800	\$37,200	\$744	\$7,264
Asphalt Road	1972	40	44	\$27,000	N/A	\$27,000	\$675	\$0
Newer Construction:								
Metal Storage Building	1985	60	31	\$107,000	\$7,490	\$99,510	\$1,659	\$55,587
Metal Storage Building Slab	1985	70	31	\$80,000	N/A	\$80,000	\$1,143	\$44,571
Sludge Dewatering Box	2014	15	2	\$40,000	\$2,800	\$37,200	\$2,480	\$35,040
Sludge Dewatering Box Slab	2014	70	2	\$40,000	N/A	\$40,000	\$571	\$38,857
Oxidation Ditch Rotors	1992	30	24	\$160,000	\$11,200	\$148,800	\$4,960	\$40,960
Clarifier Inlet Skirt	2003	40	13	\$47,000	\$3,290	\$43,710	\$1,093	\$32,794
Electrical Generator, Transfer Switch	2015	30	1	\$167,000	\$11,690	\$155,310	\$5,177	\$161,823
Generator Support Frame	2015	40	1	\$40,000	\$2,800	\$37,200	\$930	\$39,070
RAS Sludge Pumps	2005	30	11	\$40,000	\$2,800	\$37,200	\$1,240	\$26,360
Electrical/Measuring Equipment	2009	15	7	\$20,000	\$1,400	\$18,600	\$1,240	\$11,320
Chlorine Feed Equipment	2010	15	6	\$20,000	\$1,400	\$18,600	\$1,240	\$12,560
TOTALS				\$2,335,000	\$86,030	\$2,248,970	\$46,868	\$969,704

 $[\]ensuremath{^{(1)}} Estimated$ at 7% for those items that have any salvage value.

Springs Hill WWTP Abandonment/Closure Opinion of Probable Construction Cost

Mobilization/Demobilization (15%)	\$39,000	
Bonds/Insurance (3%)	\$8,000	
Pump Basin Contents Through Plant or to New L	\$30,000	
Remove Basin Equipment and Dispose Off-site	\$25,000	
Clean/Disinfect Basin Walls/Floors	\$10,000	
Core Holes in Basin Floors to Prevent Basin Floa	\$20,000	
Knock in Basin Walls to 3 ft. Below Grade	\$40,000	
Backfill Structures 3,125 CY x \$20/CY	\$63,000	
Demolish Operations Building	\$10,000	
Demolish Generator and Support Structure	\$10,000	
Remove Headworks Structure	\$5,000	
Abandon Electrical Below Ground	\$10,000	
Demolish Sludge Box Concrete Pad	\$15,000	
Demolish Exposed Piping/Pumps	\$5,000	
Abandon Existing Plant Outfall Pipe	\$15,000	
Contactor Profit/Overhead (15%)	\$39,000	
Constructi	ion Subtotal:	\$344,000
Conting	gency (25%):	\$86,000
]	Engineering:	\$54,410
P	roject Total:	\$484,410



GBRA WWTP Lift Station and Force Main⁽¹⁾ Opinion of Probable Construction Cost

10" Force Main 6,500 LF x \$50/LF	\$325,000
10" Bridge Crossing (400 ft.)	\$85,000
10" Force Main by Bore 100 LF x \$350/LF	\$35,000
D.I. Compact Fittings 2.5 Tons x \$7,000/Ton	\$17,500
Air Release Valve 2 EA x \$7,500/EA	\$15,000
18" Gravity Sewer 100 LF x \$100/LF	\$10,000
Manholes 2 EA x \$8,000/EA	\$16,000
Asphalt Repair 100 LF x \$30/LF	\$3,000
Detective Wire 6,100 LF x \$1/LF	\$6,100
OSHA 6,100 LF x \$1/LF	\$6,100
Silt Fence 4,000 LF x \$2/LF	\$8,000
Hydromulch 22,000 SY x \$1/SY	\$22,000
SWPP	\$10,000
GPS	\$3,000
Lift Station	\$480,000
Electrical Supply	\$40,000
TxDOT Mitigation	\$25,000
Property Acquisition	\$10,000
Construction Subtotal:	\$1,116,700
Contingency (25%):	\$280,000
Engineering:	\$310,976

Project Total:

\$1,707,676



⁽¹⁾Project includes gravity sewer interceptor to divert flow from GBRA Plant to new lift station, 10" force main (capacity equal to 2,800 houses) extending north on Austin Street, crossing the river by support from bridge, through the Park and discharging directly to the Walnut Branch WWTP headworks.