



TOWN OF

BEACON FALLS

CONNECTICUT

## WPCF Monthly Report

August 2022 Meeting / July 2022 Data

Total Flow (RAW SEWAGE) : 7,899,900 gals.  
Total Septage Received : 10,500 gals.  
Total Sludge Removed : 97,600 gals.  
Beacon Heights Leachate : 449,286 gals.  
Total Phosphorous Discharged : 2.7 lbs./day  
Total Nitrogen Discharged : 25 lbs./day

Beacon Heights Leachate  
2nd QT Arcadis was invoiced for 1,320,357 gals

### EMERGENCY CALLS & ALARMS :

None to report

### Repair or Replacement :

8-11 Ford escape was brought to Hillside auto, the transmission wont shift into 2nd or 4th gear. Replacement is \$5,000  
Phone line and time clock at WPCA down all month.  
Magnawind is currently working on our #2 VFD at the plant, it won't run in auto.

### Testing :

7-5 ATMR quarterly was done this month and we passed

### Misc.:

Moving forward with the digester job, the modifications are in production

### Ongoing :

we are 60 % done with replacing the bladders in aeration tank #3

- \* The Town has also decided to move forward with the \$1M bid package (everything except Bid add alternate #2)
- \* see attachments \*

### Meetings / Classes :

7-12 Met with OSHA rep. to go over safety violations at the WPCA ,all ready working on them. The official notice should be coming in August and they will be time sensitive.

7-13 Quarterly safety meeting

*Thank you,  
For letting me serve.*

*Thomas A. Carey  
WPCF Superintendent*

## Tom Carey

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**From:** George G. Caughman <gcaughman@slrconsulting.com>  
**Sent:** Wednesday, June 15, 2022 9:45 AM  
**To:** Tom Carey; Natasha Nau  
**Cc:** Stephen R. Dietzko; Paul DeStefano  
**Subject:** \$1M Bid Package - 50% Submission Planning Level Estimate  
**Attachments:** 50Pct Submission Estimate.pdf

Good Morning,

Attached please find our Planning Level Estimate for the 50% submission of the \$1M bid package, broken out individually between Base Bid and the agreed Bid Add Alternates. The bare costs of these items are shown individually and the OH&P and projected bond costs are added to the total on the last page. As is customary for planning level, and especially given the volatile price of goods and services these days, we also listed a 20% contingency.

We have additional comments as follows:

- As discussed earlier, completing the cover on the south Digester Tank really means that the guardrail (BAA #3) should be in place to protect operators when working up there, since there's nothing preventing one from sliding off the edge in winter conditions.
- Bid Add Alternate #2 is for replacing the Influent Pumping System, requires modifications to the existing small wetwell to prevent vortexing (which will damage the pumps). Due to the narrow width of the pump room and pipe fitting geometry, we are unable to connect to the existing twin 8" forcemains in a reliable manner, and instead have to run the new 12" forcemain that would be installed for the eventual plant upgrade anyway, about half of its eventual distance. We put in a tee with valved branches so the flow can be directed to the grit chamber now, and to the proposed Screening/Headworks Building in the future, and carried the appropriate cost.
- Included in BAA#2 (Influent Pumping System) is one month's rental on a pair of temporary bypass pumps – one VFD electric, and one constant speed diesel. A "fuel cube" and containment dike is also included in the rental, as well as about 350 gallons of diesel fuel. The plan is to power the electric pump from the MCC as the normal duty pump, and use the diesel as a backup. Each was specified with 1 MGD capacity. (You could transfer any leftover diesel fuel to the generator or existing heating fuel tank.)
- Electing Bid Add Alternate #2 essentially requires also doing BAA#4 – refurbishment of the Influent Pump Station Roof Slab, in order to protect the investment in new pumps, VFDs and control system. The roof slab is presently in very poor condition structurally, and water leakage through soft and cracked concrete has damaged the brick walls that hold it up. We have included the cost of removal and replacement of about 50% of the roof slab, as well as saw cutting and repointing the top 3 joints and replacing soft brick, for most of the perimeter of the building, including over the wetwell. A new insulated rubber roof is included, to prevent future damage to the repaired slab.
- Please note that when comparing the total cost of base bid and various combinations of BAAs, include the OH&P, bond and contingency costs applied to the individual bare costs selected.

Please review and advise if we are to complete the design we owe you per contract, or if there is an alternate path you'd like us to take. Please contact me with any questions. Thank you very much!

George

Beacon Falls WWTP - \$1M Bid Package - 50% Submission Planning Level Estimate					
June 15, 2022					
Description	Quantity	Unit	Unit Price	Cost	Total Cost
<b>Base Bid (Electrical Service, Generator and Distribution Upgrades, and Required Supporting Work)</b>					
Sedimentation and Erosion Control	1	LS	\$ 2,500	\$ 2,500	
Dumpster	4	LS	\$ 500	\$ 2,000	
Site Maintenance during construction period	1	LS	\$ 1,500	\$ 1,500	
Bollards at Transformer per Eversource Requirements	1	LS	\$ 10,000	\$ 10,000	
Demolition - Exist Chlorine Stg & Chlorinator Rms - Arch prep for new Elec Rm	1	LS	\$ 3,800	\$ 3,800	
Masonry Infill (former window openings)	1	LS	\$ 3,000	\$ 3,000	
New Exterior FRP door, frame and hardware	1	LS	\$ 4,500	\$ 4,500	
Demo roof fans, ventilator and hydronic heater	1	LS	\$ 1,000	\$ 1,000	
Install new roof exh fan, elec unit heater, ductwork, damper, H&V controls	1	LS	\$ 11,500	\$ 11,500	
Seismic Bracing (mechanical)	1	LS	\$ 2,500	\$ 2,500	
Roof penetration flashing/sealing	1	LS	\$ 1,500	\$ 1,500	
Finishes - painting, signage	1	LS	\$ 2,000	\$ 2,000	
Electric Utility Fees and Primary Conduit	1	LS	\$ 24,000	\$ 24,000	
Switchgear	1	LS	\$ 147,000	\$ 147,000	
Generator/ATS and generator pad	1	LS	\$ 360,000	\$ 360,000	
Conduit and Wire	1	LS	\$ 40,000	\$ 40,000	
Lights and Devices	1	LS	\$ 7,500	\$ 7,500	
Elect Demo	1	LS	\$ 32,500	\$ 32,500	
Reverse existing 208/480V transformer to backfeed exist switchgear	1	LS	\$ 7,500	\$ 7,500	
I&C Coordination for Blower Control during power changeout	1	LS	\$ 2,500	\$ 2,500	
				\$ -	
<b>Base Bid Total (excludes OH&amp;P, bond and contingency)</b>				\$ 666,800	\$ 666,800

<b>Bid Add/Alternate #1 - Aeration Tank - Automation of DO Control</b>					
1" Sch 80 Conduit in trench with 4 ea T/S pair	125	LF	\$ 30	\$ 3,750	
JBS NEMA 4 on AT	4	EA	\$ 615	\$ 2,460	
Strut/anchors for JB and conduit supports	1	LS	\$ 5,420	\$ 5,420	
1" Aluminum conduit exposed at AT	40	LF	\$ 23	\$ 900	
Salvage Exist radiotransmitter	1	LS	\$ 2,500	\$ 2,500	
Conduit cores, seals, and seal fittings	3	EA	\$ 400	\$ 1,200	
Grounding	1	LS	\$ 500	\$ 500	
1" RGS in Building	50	LF	\$ 23	\$ 1,144	
Terminations at AT	1	LS	\$ 250	\$ 250	
Demo/make Safe Exist Instrument Backboard Instrumentation	1	LS	\$ 1,600	\$ 1,600	
Modify Exist Instrumentation Backboard	1	LS	\$ 800	\$ 800	
Mount New AT DO Control Panel	1	LS	\$ 800	\$ 800	
New AT DO Control Panel, Hardware, software and Commissioning	1	LS	\$ 75,000	\$ 75,000	
				\$ -	
				\$ -	
<b>Bid Add/Alternate #1 - Aeration Tank - Automation of DO Control - TOTAL (excludes OH&amp;P, Bond and Contingency)</b>				\$ 96,324	\$ 96,324

<b>Bld Add Alternate #2 - Replacement of Influent Pumping System</b>					
Temporary Bypass Pumping System Rental (1 electric on VFD, 1 diesel)	1	LS	\$ 18,000	\$ 18,000	
Setup of Temp Bypass Pumping System and Removal	1	LS	\$ 10,000	\$ 10,000	
Fuel for backup pump in Temporary Bypass Pumping System	1	LS	\$ 1,800	\$ 1,800	
Wiring for Electric Pump from MCC to Temp Bypass Pumping System	1	LS	\$ 20,000	\$ 20,000	
Maintain Temp Pumping System	1	LS	\$ 5,000	\$ 5,000	
Wetwell Demo of Exist Fill Concrete	1	LS	\$ 8,500	\$ 8,500	
Wetwell Modifications - Influent channels and baffle walls	1	LS	\$ 31,500	\$ 31,500	
Demolition of Exist Pumps, Pads, Motors, Piping, Valves and Supports	1	LS	\$ 10,800	\$ 10,800	
New Pumps and Motors, with submittals, spare parts, training and startup	3	EA	\$ 33,333	\$ 99,999	
New Pump Bases	3	EA	\$ 1,667	\$ 5,001	
Installation of New Pumps and Motors	3	EA	\$ 6,667	\$ 20,001	
Pump Station Piping and Valves	1	LS	\$ 98,000	\$ 98,000	
Pipe Supports	1	LS	\$ 54,000	\$ 54,000	
Demolition-exist forcemain connections to Grit Chamber & Mods for new 12"	1	LS	\$ 8,700	\$ 8,700	
New 12" Forcemain	1	LS	\$ 45,000	\$ 45,000	
Replace Pump Station Control Panel, Flowmeter, Additional Instrumentation	1	LS	\$ 90,000	\$ 90,000	
Pump Station Architectural Demo	1	LS	\$ 800	\$ 800	
New Exterior FRP door, frame and hardware	1	LS	\$ 4,500	\$ 4,500	
Demo exist ventilation	1	LS	\$ 500	\$ 500	
New ventilation slab, wall and roof penetrations, sealing and flashing	1	LS	\$ 3,000	\$ 3,000	
New exhaust fans, ventilator, ductwork, MODs, Heater, H&V Controls	1	LS	\$ 46,750	\$ 46,750	
Seismic Bracing	1	LS	\$ 5,900	\$ 5,900	
Electrical Demo	1	LS	\$ 5,000	\$ 5,000	
Elect power, Conduit, Wire	1	LS	\$ 85,000	\$ 85,000	
VFDs	3	EA	\$ 7,500	\$ 22,500	
Lights and Devices	1	LS	\$ 21,000	\$ 21,000	
Demo old seal water system and pad	1	LS	\$ 1,500	\$ 1,500	
				\$ -	
<b>Bld Add Alternate #2 - Replacement of Influent Pumping System - TOTAL (excludes OH&amp;P, bond and contingency)</b>				\$ 722,751	\$ 722,751

<b>Bld Add Alternate #3 - Control Bldg Guardrail/Handrail Code Updates</b>					
Handrail/Guardrail/Stair Code Updates	1	LS	\$ 65,000	\$ 65,000	
				\$ -	
<b>Bld Add Alternate #3 - Control Bldg Guardrail/Handrail Code Updates-TOTAL (excludes OH&amp;P, bond and contingency)</b>				\$ 65,000	\$ 65,000

<b>Bld Add Alternate #4 - Refurbishment of Influent Pump Station Roof Slab</b>					
Scaffold Under Roof Slab - Erect/Dismantle	1	LS	\$ 5,500	\$ 5,500	
Partial Demo Roof Slab	1	LS	\$ 4,000	\$ 4,000	
Dumpster	1	LS	\$ 500	\$ 500	
Protect Exist Equipment	1	LS	\$ 500	\$ 500	
Form, Reinforce & Pour Repair Concrete Mix; new lifting eye	1	LS	\$ 9,000	\$ 9,000	
Masonry Repair Scaffolding (Including over wetwell)	1	LS	\$ 10,000	\$ 10,000	
Masonry repairs - sawcut joints, 3 rows, 4 sides, replace soft brick	1	LS	\$ 10,000	\$ 10,000	
Apply blocking, built-up insulation and membrane roof	1	LS	\$ 7,500	\$ 7,500	
Aluminum cap, fascis, gutter box, downspouts	1	LS	\$ 2,000	\$ 2,000	
Exterior Light Fixtures/Misc	1	LS	\$ 5,000	\$ 5,000	
				\$ -	
<b>Bld Add Alternate #4 - Refurbishment of Influent Pump Station Roof Slab - TOTAL (excludes OH&amp;P, bond and contingency)</b>				\$ 54,000	\$ 54,000

<b>PROJECT TOTAL</b>					
Subtotal Base Contract and Bld Add Alternates - BARE COSTS					\$ 1,604,875
Overhead and Profit - 15% Subtotal					\$ 240,731
Bond Cost - 2.5% of Subtotal					\$ 40,122
Contingency - Planning Level carried at 20% of Subtotal					\$ 320,975
<b>PROJECT TOTAL</b>					<b>\$ 2,206,703</b>