AGENDA ITEM

TO: Tim Vandall, City Administrator

FROM: Anthony J. Zell, Jr., Wastewater Utility Director

DATE: January 11, 2024

SUBJECT: Equipment Replacement Request – Non-Potable Water Reuse Pumps

The treatment facility creates non-potable water from the treatment process and uses that water throughout the facility, most notably for operation of the belt filter press. On a typical day, nearly 30,000 gallons of effluent are recycled and used. In December, the second of three pumps broke down, leaving only one pump in operation. Staff solicited bids for replacement pumps from our supplier network and two bids were received.

Bid Results

C&B Equipment	$24,036.00
Cogent (Fluid Equipment)	$29,383.29

Policy Consideration: Staff recommend the purchase from Cogent, as they bid stainless steel pump housings and impellers vs. mild steel.

Financial Consideration: Funds for this purchase in the Utility's base acquisition account 50-05-43301.

Recommended Action: A motion to accept the bid from Cogent (Fluid Equipment) in the amount of $30,853.00, (base bid plus 5% contingency of $1,470) for the replacement and installation of the non-potable water system pumps.

OP-577866
December 12, 2023

RE: Lansing Non-Pot Replacement Booster Pump

Scope of Work:

- Cogent Service Technicians to provide and install
  - (3) Xylem GS 21STG
  - (3) 7.5 HP 4”CP Motors
    - LOTO existing Sulzer pumps and disconnect from power
    - Ensure system is inactive and drained
    - Disconnect pump from discharge piping
    - Remove pumps
      - Coordinate with customer on disposal of existing pumps
    - Lower (3) new Xylem pumps with Motor in place
    - Reconnect discharge piping
      - Make piping modification to discharge if applicable
    - Connect pump to power
  - Startup
    - Coordinate with customer for startup and testing

Work/Tasks/Lead Time or Delivery Date

Equipment delivery estimated 4-6 weeks after approval of order.
2 week startup notification required.

Cost $29,383.29

Includes equipment, startup, and freight

GOULDS WATER TECHNOLOGY
a xylem brand

Customer	Date 05.09.2023
Contact	Project
Phone number	Project no. Intellitronic X-20106216
Email	

Technical Data

85GS75CBM - M75434

Operating data

Pump type		Submersible Well Pumps	Fluid			Water
No. of pumps / Reserve		1 / 0	Operating temperature t A		°F	39.2
Nominal flow	US g.p.m.	99.99	pH-value at t A			7
Nominal head	ft	185	Density at t A		lb/ft³	62.4
Static head	ft	0	Kin. viscosity at t A		ft²/s	1.689E-5
Inlet pressure	psi	0	Vapor pressure at t A		psi	14.5
Environmental temperature	°F	68	Solids			0
Available system NPSH	ft	0	Altitude		ft	0

Pump data

Make	Goulds Water Technology				Nominal	US g.p.m.	103.6	(103.6)
Speed	rpm	3450	Flow		Max-	US g.p.m.	120	
No. of stages		21			Min-	US g.p.m.		
Max. casing pressure	psi				Nominal	ft	198.7	
Max. working pressure	psi	211.5	Head		at Qmax	ft	112.9	
Head H(Q=0)	ft	490			at Qmin	ft	487.8	
Weight	lb	105	Shaft power			hp		( )
Max.	inch	0	Max. shaft power			hp		
Impeller R designed	inch	0	Efficiency			%		
Min.	inch	0	NPSH 3%			ft		

Motor data

Specific design	3ph Motors			Speed	3450 rpm	Insulation class	B
Electric voltage	460 V			Frame size	56	Colour	RAL 5010
Type	460 V (M75434)			Degree of protection	IP 55		
Rated power	7.5 hp	Electric current	12.2 A				

Remarks:

GOULDS WATER TECHNOLOGY
a xylem brand

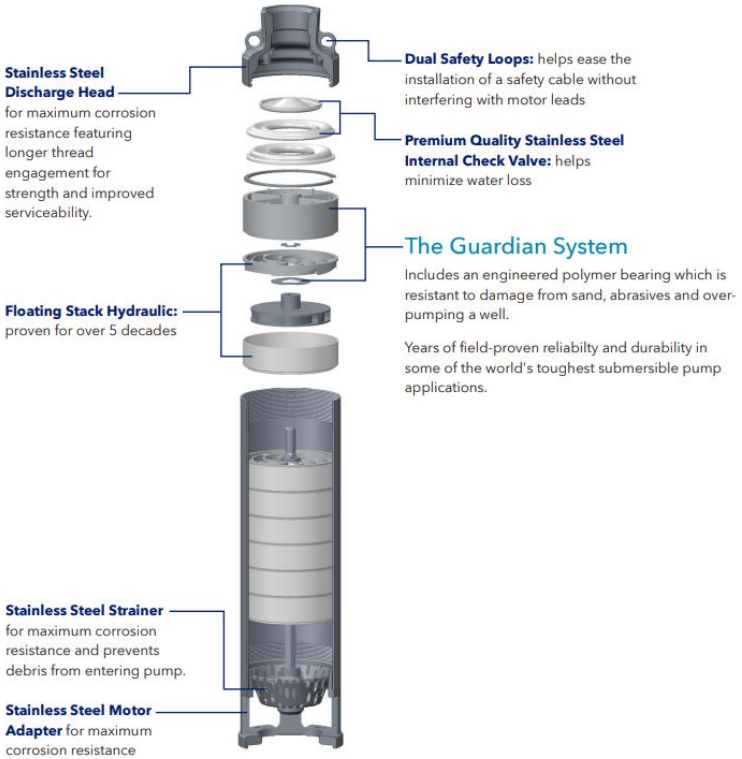
Customer	Date 05.09.2023
Contact	Project
Phone number	Project no. Intellitronic X-20106216
Email	

85GS75CBM - M75434

Construction Data

Pump Materials

1 - Discharge Head	AISI 303 SS
2 - Bearing Spider – Upper	Glass Filled Engineered Composite
3 - Bearing	Proprietary Engineered Composite
4 - Klipring	AISI 301 SS
5 - Diffuser	Glass Filled Engineered Composite*
6 - Impeller	Glass Filled Engineered Composite
7 - Bowl	AISI 304 SS
8 - Intermediate Sleeve*	AISI 304 SS, Powder Metal
9 - Intermediate Shaft Coupling*	AISI 304 SS, Powder Metal
10 - Intermediate Bearing Spider*	Glass Filled Engineered Composite
11 - Intermediate Bearing Spider*	AISI 303 SS
12 - Shim	AISI 304 SS
13 - Screws – Cable Guard	AISI 304 SS
14 - Motor Adapter	AISI 303 SS
15 - Casing	AISI 304 SS
16 - Shaft (up to 3 HP)	AISI 304 SS
17 - Shaft (5 HP and larger)	17/4 PH
18 - Coupling	AISI 304 SS, Powder Metal
19 - Cable Guard	
20 - Suction Screen	



Remarks:

PROPOSAL

C&B EQUIPMENT

4719 Merriam Drive
Overland Park, Kansas 66203
(913) 236-8222
Fax (913) 262-8992

PHONE	DATE
913-705-0536	12/8/2023
JOB NAME/LOCATION	Good for 15 days from this date.

To: Lansing KS
Attn: Ron Lake

Job #

JOB DESCRIPTION: 3ea Sulzer S6L8 - 7.5 HP

Service men will be sent to pull your existing pumps and motors.
Supply and install new pumps and motor and perform start up.
Estimate this will take two days.

$24,036.00

estimate 4 weeks on new units plus fgt

Due to the volatility in pricing = quote is good for 15 days.

THIS PROPOSAL IS FOR COMPLETING THE JOB AS DESCRIBED ABOVE. IT IS BASED ON OUR EVALUATION AND DOES NOT INCLUDE MATERIAL PRICE INCREASES OR ADDITIONAL LABOR AND MATERIALS WHICH MAY BE REQUIRED SHOULD UNFORESEEN PROBLEMS OR ADVERSE WEATHER CONDITIONS ARISE AFTER THE WORK HAS STARTED.

We Remember

PROPOSED COST **$24,036.00**

NOTES: **taxes not included**
pricing good for 15 days

PROPOSED BY *Jacqui Maple*

Please sign and send back your acceptance of the above listed pricing.

PO# **Date:**

print name **signature**