



July 26<sup>th</sup>, 2023

TO: Rob Spreitzer  
City of Gladstone  
22 Delta Avenue  
Gladstone, MI 49837

RE: A-C Allis Chalmers Inspection and Repair

Dear Rob,

Thank you for the opportunity to provide a cost proposal to rebuild the A-C Allis in the City of Gladstone, MI. Municipal Well and Pump (MWP) has extensive knowledge of pumping equipment throughout the Midwest. We are a trusted service provider for vertical turbine pumps, submersible pumps, split-case horizontal pumps, and centrifugal pumps. Well rehabilitation is another strong suit of Municipal Well and Pump.

For this project, MWP would propose to mobilize to the site with a two-man crew, support truck with tools, and disconnect the existing A-C Allis Chalmers split case pump.

The maintenance project will be performed in the following steps:

- Load equipment and mobilize to the City of Gladstone, MI Water Treatment Facility.
- Set up and run a short performance test to determine current operating condition.
- Perform LOTO and disconnect electrical and discharge piping.
- Remove pump and load for inspection.
- Inspect the pump assembly at MWP shop.
- **Repair pump as needed based on the inspection.**
  - **No repairs to be made without approval from the City.**
- Reinstall repaired pumping equipment.
- Align Falk 1080- T10 grid coupler and others.
- Perform a pump test.
- Clean up site and demobilize equipment back to yard.

**Pricing Schedule:**

Item #	Item Description	Estimated Quantity	Units	Unit Price	Extended Price
1	Mobilization, Pump Disassembly, Inspection with Report, Pump Reassembly, Falk Coupling Alignment, and Test	1	LS	\$8,620.00	\$8,620.00
2	Falk 1080-T10 Grid Coupling for 1-5/8" Pump Shaft and 2-7/8" Motor Shaft	1	EA	\$1,760.00	\$1,760.00

Notes:

- Access and Egress is the responsibility of the owner.
- Price includes freight of materials.
- Proposal does not include bacti sampling.
- Proposal does not include replacement of additional material if determined during inspection. A proper Pump Repair Report will follow the disassembly and inspection.
- Prices are good for 30 days due to market volatility.

We would like to thank the City of Gladstone for the opportunity to submit this proposal for your review and consideration. Should you have any questions or concerns regarding this proposal, please contact our offices at your earliest convenience. We hope that our proposal meets your approval and that Municipal Well and Pump will earn the right to be your preferred water supply services provider.

Respectfully,

**Municipal Well & Pump**

*Chris Ferguson*

Chris Ferguson  
Project Manager

Accepted By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Northern Machining & Repair, Inc.**  
 1701 N 26th Street - Escanaba, Michigan 49829 USA  
 "We Work To Keep You Working"

# QUOTATION

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[dickl@northernmachine.us](mailto:dickl@northernmachine.us)  
 Cell 906-280-6008  
[www.northernmachining.com](http://www.northernmachining.com)

**Gladstone City Water treatment**  
**Gladstone, MI 49837**

Date: 12/15/22  
 Quotation NO: DL121522A  
 Requested Date:  
 Required Delivery:

Your RFQ No.	Requested By:	Quote Prepared By	Terms	Ship Via	Purchase Order No
	Troy Rodman	Dick Liberty		TBD	-

Quantity	Description	Each	Total
1	<p>Budgetary quote</p> <p><b>Repair Allis Chalmers KS pump</b></p> <p><b>In Scope:</b></p> <ol style="list-style-type: none"> <li>1. Removal of pump, parts on site.</li> <li>2. Teardown, inspection &amp; report, in NMR shop.</li> <li>3. Repair of minor components, in NMR shop.</li> <li>4. Reassembly and installation of pump, on site.</li> <li>5. New Falk 1080- T10 coupler installed &amp; lined up.</li> <li>6. Line up of additional coupler.</li> <li>7. Repack and adjust pump.</li> </ol> <p><b>Out of scope:</b></p> <ol style="list-style-type: none"> <li>1. Any delays not caused byu NMR.</li> <li>2. Any third party inspections.</li> <li>3. All work quoted straight time, no overtime or weekends.</li> <li>4. All materials and tooling surcharges.</li> <li>5. Any required machining or repair outside of in scope ie new sleeves, shaft or impellor work.</li> </ol> <p>Due to the volatility of the materials market. The material prices are based on the best estimate of material costs at this moment. All orders resulting from this quote will be priced at the time the order is processed.</p> <p><b>NOTE:</b> Quote is subject to steel surcharge at time of order.</p>	\$ 17,134.62	\$ 17,134.62

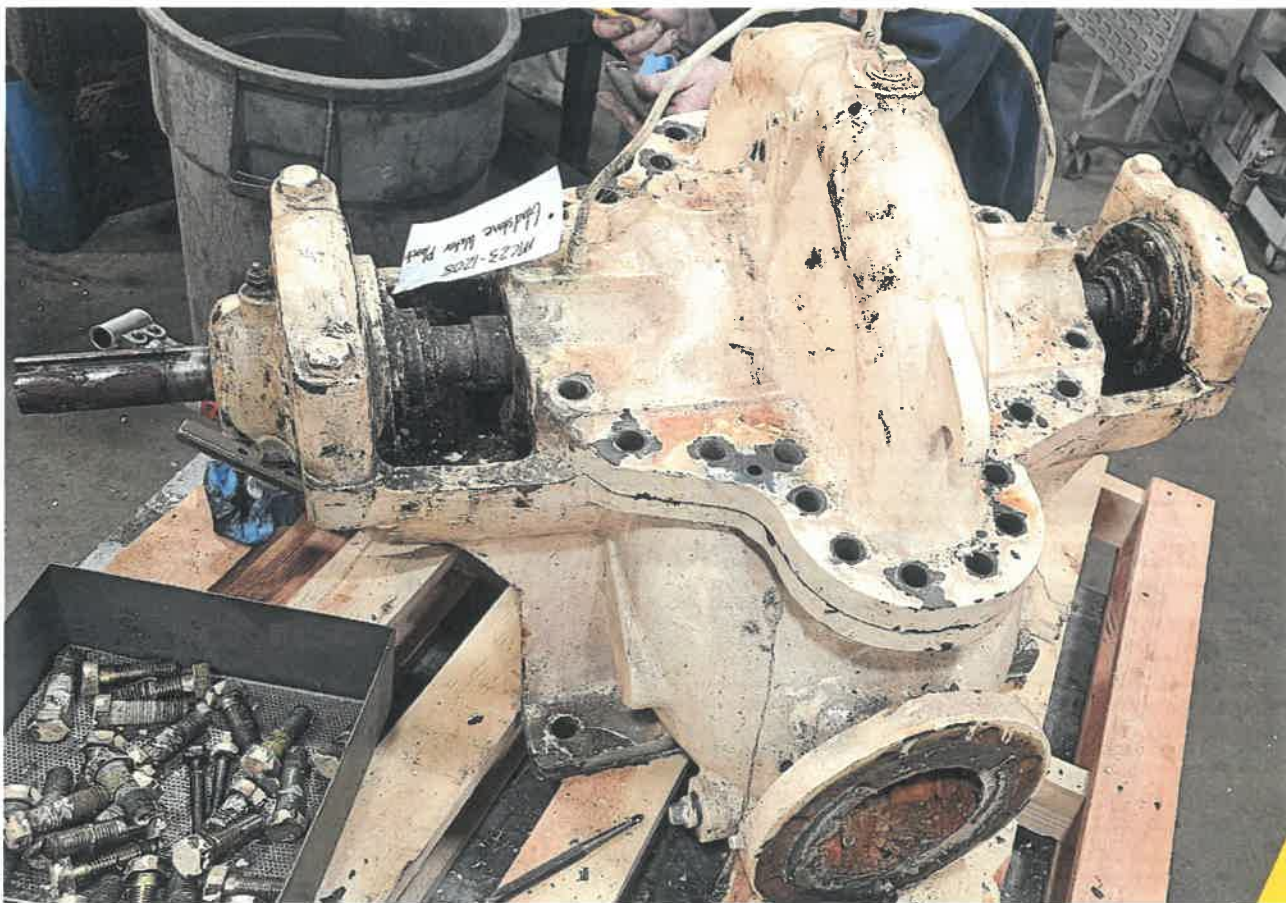


## REBUILD REPORT

Customer: Gladstone, City of  
Job#: MC23-1208

**Flowserve**

Pump Model: Allis-Chalmers 6x5x16 Pump S/N: 1-91900-3-3





### Part Findings:

- Case
  - The casing will be sand blasted clean.
  - The case is still in good condition.
- Impeller
  - The impeller is still in good condition with minimal wear.
  - The impeller will be cleaned.
- Bearings
  - Both bearings are in bad condition and have major wearing and looseness.
  - Both bearings need to be replaced.
- Shaft
  - There is no wear indicated on the shaft.
  - The shaft is still in good condition.
- Shaft Sleeve
  - Both shaft sleeves have very major wear on them
  - Both shaft sleeves will need to be replaced.
- Packing
  - The packing is in very bad condition.
  - The packing needs to be replaced.
- Flush Lines
  - The flush lines are in bad condition and will need to be replaced.
- Gaskets
  - All gaskets are in bad condition.
  - All gaskets will need to be replaced.
- O-Rings
  - All O-Rings are in bad condition.
  - All O-Rings will need to be replaced.
- Bushings
  - All bushings are in bad condition.
  - All bushings will need to be replaced.
- Sleeve Nuts
  - Both sleeve nuts are in bad condition from the sleeves incurring major wear.

Both shaft nuts will need to be replaced.

**Conclusions:**

- It appears that the shaft sleeves had taken significant wearing from the bearings
- The misalignment of the shaft within the bearings caused the bearings to wear on the shaft sleeves.

**Rebuild Scope:**

- All bearings, seals, gaskets, and O-rings will be replaced.
- The pump will be sand blast cleaned for the rebuild.
- Case
  - The casing will be sand blasted clean.
- Impeller
  - The impeller will be cleaned.
  - The impeller will be rebalanced to G1.0 Specs.
- Bearings
  - Both bearings need to be replaced.
- Shaft Sleeve
  - Both shaft sleeves will need to be replaced.
- Packing
  - The packing needs to be replaced.
- Flush Lines
  - The flush lines are in bad condition and will need to be replaced.
- Gaskets
  - All gaskets will need to be replaced.
- O-Rings
  - All O-Rings will need to be replaced.
- Bushings
  - All bushings will need to be replaced.
- Sleeve Nuts
  - Both shaft nuts will need to be replaced.
- The pump will be assembled.
- The pump will be painted
  - Intercure 99
- The pump will be packaged for shipment.



### Cost Change Request

Job No. **MC23-1208**  
 Cost Change Request 1  
 Salesperson Name Chris Ferguson

#### Contract Summary:

Customer Name:	Gladstone Water Department	Date	10/10/2023
Contact Name:	Rob Spreitzer 22 Delta Avenue Gladstone, MI 49837	Original Contract Amount	\$10,380.00
Email:	rspreitzer@gladstonemi.org	Previous Contract Balance	10,380.00
Job Name:	Gladstone Water Plant	Amount of Cost Change	11,370.00
		New Contract Balance	\$21,750.00

#### Cost Change Request Summary:

Item Description	Quantity	Unit Price	Total
Labor to Rebuild Existing Pump (Please reference Inspection Report/ Repair Proposal dated October 9th, 2023)	1.00	3,430.00	3,430.00
Materials to Rebuild Existing Pump (Please reference Inspection Report/ Repair Proposal dated October 9th, 2023)	1.00	7,940.00	7,940.00

-Inspection Report/ Repair Proposal reflects the labor involved in the project as well as the list of materials that will be replaced on the existing pump.

**Total Change Request** **\$11,370.00**

We hereby authorize Municipal Well & Pump to proceed with the work described above. We acknowledge that all the terms and conditions of the original contract apply to this change order as well.

#### Accepted By

Owner	Title	Date
Engineer	Title	Date