

**CITY OF ANN ARBOR
UTILITIES DEPARTMENT CHANGE ORDER
CHANGE ORDER NO. 1**

Date: November 1, 2018 Encumbrance Order No. _____ Change Order No. 1

File No. _____ Contractor Kiser Hydro, LLC

Contract Name Barton Dam Hydro Turbine, 10-Year Inspection and Overhaul

No.	Description of Change	Quantity	Unit	Unit Price	Addition (Deduction)
1	Additional Work Items and Project Costs	NA	NA	NA	\$ 131,260.63
Sub-total from page 2				\$	131,260.63
Net Addition or (Deduction) this Change Order No. 1				\$	131,260.63
Contract amount ± previous Change Orders No. and No.				\$	542,858.00
NEW TOTAL CONTRACT AMOUNT				\$	674,118.63

Completion: April 30, 2019

Recommended by: _____ Date _____
Glen Wiczorek, P.E., Sr. Utilities Engineer

The Contractor agrees to the changes and prices outlined above.

Accepted by: _____ Date _____
Joe Spinnato, Kiser Hydro LLC

Approved by: _____ Date _____
Craig Hupy, Public Services Area Administrator

Approved by: _____ Date _____
Howard S. Lazarus, City Administrator

Reviewed by: _____ Date _____
Stephen K. Postema, City Attorney

CHANGE ORDER NO. 1

Project: Barton Dam Hydro Turbine, 10-Year Inspection and Overhaul Project

Bid Number: 4467

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Description	Unit Price	Quantity	Value Change	Contract Time Extension (Consecutive Calendar Days)
1) Gear box compression ring	1	LS	3,875.00	
2) Main lower seal	1	LS	25,031.00	
3) Wicket link arms, ring couplings and spherical bearings	1	LS	2,507.18	
4) Wicket inner shaft, o-ring sleeving	1	LS	5,446.40	
5) Wicket inner hub	1	LS	13,919.05	
6) Recoating of wicket intake assembly	1	LS	26,217.18	
7) Repair damage to runner assembly	1	LS	No charge	
8) Runner links and pins	1	LS	57,200.47	
9) Runner bearings	1	LS	28,680.10	
10) Lower bearing	1	LS	-13,204.00	
11) Gear box repairs	1	LS	10,341.84	
12) Not used	1	LS	Not used	
13) Lock nut low speed shaft	1	LS	3,816.85	
14) Operating ring spherical bearings	1	LS	362.41	
15) Wickets – encapsulated o-rings	1	LS	167.15	
16) Replacement parts	1	LS	10,000.00	
17) Allowance for re-assembly of work	1	LS	30,000.00	
18) Additional General Conditions for Contract Time Extension	1	LS	\$6,900.00	
19) Use of Contract Allowances (Bid Items 9 and 10) for parts and labor	1	LS	-80,000.00	
Final Total Value of Changes			\$ 131,260.63	April 30, 2019

CHANGE ORDER NO. 1

Project: Barton Dam Hydro Turbine, 10-Year Inspection and Overhaul Project

Bid Number: 4467

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Change Item Explanation

1. Gear box compression ring: Upon disassembly and inspection, damage to existing ring feders coupling was observed.
2. Main lower seal: The main seal quoted at the original bid date is no longer available. New selection includes a new split seal design.
3. Wicket link arms, ring couplings and spherical bearings: Upon disassembly and inspection, corrosion and wear were observed.
4. Wicket inner shaft, o-ring sleeving: Upon disassembly and inspection, a wear grove was observed. Replacement will reduce leakage.
5. Wicket inner hub: Replacement, including a new bronze spacer, will reduce leakage.
6. Repair and recoating of wicket intake assembly: Upon disassembly and inspection, corrosion adjacent to the wicket blades was observed. Repair of pitting included in the runner hub. Repair and recoating will maintain proper clearances on edges of wicket blades.
7. Repair damage to runner assembly: Upon disassembly and inspection, corrosion and pitting on the runner assembly was observed. Cost is included with Item #6.
8. Runner links and pins: Upon disassembly and inspection, parts were observed to be worn and pitted.
9. Runner bearings: Upon disassembly and inspection, existing bearings observed to be stiff and showing signs of needing replacement.
10. Lower bearing: Credit provided by bearing manufacturer.
11. Gear box repairs: Additional cost to remove the gear box and repair of the damage to the main shaft.
12. Not used
13. Lock nut low speed shaft: Upon disassembly and inspection, internal threads were damaged and stretched, requiring replacement.
14. Operating ring spherical bearings: Upon disassembly and inspection, bearings were observed to be worn and require replacement.
15. Wickets: encapsulated o-rings: City requested an upgrade to the o-rings.
16. Replacement Parts: Hanche, Rohn, Hericles shafts, seals, o-rings, bearings and other parts.
17. Allowance for re-assembly work: The unit is completely disassembled. There still remains a risk for unforeseen conditions during the reassembly of the unit (trunnion welding and turning, link repair). The Contractor shall not use the allowance without the written approval by the City.
18. Additional General Conditions for Contract Time Extension: The additional work results in a contract time extension and general condition costs.
19. Use of Contract Allowances (Bid Items 9 and 10) for parts and labor