AMENDMENT NUMBER 01 TO AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN HUBBELL, ROTH & CLARK, INC. AND THE CITY OF ANN ARBOR

The City of Ann Arbor, a Michigan municipal corporation, with offices at 301 E. Huron St., Ann Arbor, Michigan 48103 ("City") and Hubbell, Roth & Clark, Inc. a Michigan Corporation with its office at 555 Hulet Drive, P.O. Box 824, Bloomfield Hills, Michigan 48303 ("Consultant") agree to amend the professional services agreement for construction engineering services for the Secondary Effluent Pumps Replacement Project executed by the parties dated May 7, 2015 as follows:

- 1) **EXHIBIT A, SCOPE OF SERVICES**, is amended to add additional services as specified in the attached **EXHIBIT A-2**.
- 2) Article IV.A., COMPENSATION OF CONSULTANT is amended to add the following:

The Consultant shall be paid for providing the additional services specified in the attached **EXHIBIT A-2** on the basis of time spent and materials used at the rates and prices specified in attached **EXHIBIT B-2** for the professional service agreement for construction engineering services for the Secondary Effluent Pumps Replacement Project executed by the parties dated May 7, 2015. The additional fee to be paid the Consultant for the additional services specified in **EXHIBIT A-2** shall not exceed \$20,541.00.

All terms, conditions, and provisions of the original agreement between the parties executed May 7, 2015, unless specifically amended above, are to apply to this amendment and are made a part of this amendment as though expressly rewritten, incorporated, and included herein.

This amendment to the agreement between the parties shall be binding on the heirs, successors and assigns of the parties.

Dated this, 20	<u>016.</u>					
For Consultant	For City of Ann Arbor					
By Roland N. Alix, P.E., Vice President	By Christopher Taylor, Mayor					
, ,						
	By					
Approved as to form and content	Approved as to substance					
Stephen K. Postema, City Attorney	Howard S. Lazarus, City Administrator					
	Craig Hupy, Public Services Administrator					

EXHIBIT A-2

Scope of Services

Amendment No. 02, Exhibit A-2 WWTP Secondary Effluent Pump Replacement Project Construction Engineering Services

PROJECT TASKS

Item A1: Construction Engineering Services

Additional Construction Engineering effort during construction and pumping system startup. Scope of Services includes the following:

- Coordination for replacement of cracked Secondary Effluent Pump suction bell
- Electrical evaluation of pumps 1 and 3
- Evaluation of excessive vibration in pumps 1, 3, and 5
- Witness pump steady bearing installation and repeat pump vibration testing
- Witness of repeat vibration testing for pumps 1, 3, and 5
- Evaluation of unusual sounds and reduced capacity from pump 4
- Confined space inspection of Secondary Effluent Wet well for the presence of debris in pump suction wet well. A section of plastic snow fence was found in the pump assembly of pump 4.
- Evaluation of electrical and instrumentation and control system faults with pumps 4 and 6

EXHIBIT B-2

Fee Schedule

Additional HRC Construction Phase Engineering

	T. Grant \$135		K. Chapman \$126		M. Gazlay		CSE \$228		Total	
	Hr.	Cost	Hr.	Cost	Hr.	Cost	Hr.	Cost	Hr.	Cost
1. Oct. 2015 broken suction bell	4.5	\$608		\$0	2	\$228		\$0	6.5	\$836
2. Nov. 17, 2015 no-start #1, #3, #5, subsequent review & communication	12.5	\$1,688	10	\$1,260	6	\$684		\$0	28.5	\$3,632
3. Dec. 15, 2015 vibration testing #1, #3, #5, all failed and subsequent review, communication & meetings	19.5	\$2,633		\$0		\$0		\$0	19.5	\$2,633
4. Feb. 8, 2016 set steady bearings to solve vibration issue, meeting with parties	Section of the Section of	\$0		\$0	5	\$570		\$0	5	\$570
5. Feb. 16, 2016 re-test #1, #3, #5 vibration, subsequent review and communication	6.5	\$878	2.5	\$315	2	\$228		\$0	11	\$1,421
6. Mar. 1, 2016 start-up, vibration test #4	7	\$945		\$0		\$0		\$0	7	\$945
7. Mar. 2, 2016 wet well inspection, replace #5 motor shaft, adjust motor shafts #1, #3, #5 and subsequent review, communication, meetings.	12	\$1,620	2	\$252	4	\$456	8	\$1,824	26	\$4,152
8. Apr 21 and ongoing, review and communication regarding the #4 noise/vibration and #6 electrical fault and control issues.	30	\$4,050	7.5	\$945		\$0		\$0	37.5	\$4,995
9. May 13, 2016 step test #4, and troubleshoot and correct issues with #5 and #6.	10	\$1,350		\$0		\$0		\$0	10	\$1,350
								TOTAL	151	\$20,532

