# AMENDMENT NUMBER 3 TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN HUBBELL, ROTH & CLARK, INC. AND THE CITY OF ANN ARBOR FOR THE WWTP HEADWORKS IMPROVEMENT PROJECT

This Amendment Number 3 ("Amendment") is to the agreement between the City of Ann Arbor, ("City") and Hubbell, Roth & Clark, Inc, ("Contractor") for Professional Engineering Services, which is dated January 14, 2020 ("Agreement") for engineering design services for improvements to the wastewater treatment plant (WWTP) headworks treatment equipment. City and Contractor agree to amend the Agreement as follows:

- 1. **Article III, SERVICES**, is amended as follows:
  - A. The Contractor agrees to provide Professional Engineering Services ("Services") in connection with the Project as described in Exhibit A of the original Agreement dated January 14, 2020, Exhibit A-1 of Amendment No. 1 dated May 18, 2021, Exhibit A-2 of Amendment No. 2 dated April 28, 2022, and Exhibit A-3 of this Amendment No. 3. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.
- 2. Article V, COMPENSATION OF CONTRACTOR is amended to read as follows:
  - A. The Contractor shall be paid in the manner set forth in Exhibit B of the original Agreement dated January 14, 2020, Exhibit B-1 of Amendment No. 1, Exhibit B-2 of Amendment No. 2, and Exhibit B-3 of this Amendment No. 3. Payment shall be made monthly, unless another payment term is specified in Exhibit B, B-1, B-2, and B-3, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator. Total compensation payable for all Services performed during the term of this Agreement shall not exceed <a href="One Million Six-Hundred and sixty-nine Thousand, Eight-Hundred-Seventy-Five Dollars and Fifty-Three Cents">One Million Six-Hundred and sixty-nine Thousand, Eight-Hundred-Seventy-Five Dollars and Fifty-Three Cents (\$1,669,875.53).</a>
  - B. The Contractor will be compensated for Services performed in addition to the Services described in Article III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator. Compensation will be payable according to the fee schedule in Exhibit B of the original Agreement dated January 14, 2020, Exhibit B-1 of Amendment No. 1, Exhibit B-2 of Amendment No. 2, and in Exhibit B-3 of this Amendment No. 3. The Contract Administrator shall be the sole arbitrator of what shall be considered "reasonable" under this provision.
- 3. The attached Exhibit A-3 supersedes and replaces the previous Exhibits A, A-1, and A-2.
- 4. The attached Exhibit B-3 supersedes and replaces the previous Exhibits B, B-1, and B-2.

All terms, conditions, and provisions of the Agreement, unless specifically amended above, shall apply to this Amendment, and are made a part of this Amendment as though expressly rewritten, incorporated, and included herein.

City and Contractor agree that for this Amendment and any documents related to the Agreement: 1) signatures may be delivered electronically in lieu of an original signature; 2) to treat electronic signatures as original signatures that bind them; and 3) signatures may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

This Amendment to the Agreement shall be binding on the Parties' heirs, successors, and assigns.

HUBBELL, ROTH & CLARK, INC.		CITY	CITY OF ANN ARBOR		
Ву:	Docusigned by:  Shomae Maxwell  D08000100740480	Ву:	Docusigned by: Milton Diluney Jr. 82ABAD5BD386491		
Name:	Thomas Maxwell	Name:	Milton Dohoney Jr.		
Title:	Partner/Vice President	Title:	City Administrator		
Date:	8/14/2023	Date:	8/15/2023		
		Appro	Approved as to substance:		
		Ву:	Docusigned by: Brian Stylity SONT STOND TOOLS		
		Name:	Brian Steglitz		
		Title:	Public Services Area Administrator		
		Date:	8/14/2023		
		Appro	ved as to form:		
		Ву:	DocuSigned by:  Atum kaur  62730898550MDD		
		Name:	Atleen Kaur		
		Title:	City Attorney		
		Date:	8/15/2023		
		Date.			

#### EXHIBIT A-3 SCOPE OF SERVICES

The following tasks shall be added to the scope of services provided by Hubbell, Roth & Clark, Inc., for design of the WWTP Headworks Improvement Project.

Task 1. Structural, Architectural, and Process Design of Additional North Dry Pit Room and Connecting Hallway

During the 50% Design Submittal review meeting, the Owner requested the North Channel include a dry pit room to accommodate the screw auger motor similar to the design included in the south garage area rather than installing submersible screw auger motors. This was not included as part of the original design. Hydraulic calculations had to be updated and provided to Huber and the weir design had to be updated. Additionally, historical drawings had to be located and reviewed for structural plausibility of installing the conjoining hallway between the lower alcove room and the new dry pit room. Architectural and OSHA requirements had to be reviewed and implemented in the drawings for the new dry pit room and connection hallway layout. Six coordination meetings occurred between Structural, Architectural, and Hazen and Sawyer Process departments and were required to complete this task as well as one meeting with the Huber. The three sheets (plan, section and details) were updated by the structural department and served as the base file for all process files. In turn, three process sheets (plan, section, and details) had to be updated and equipment relocated accordingly to account for the new room in the north channel. Details that were different than the south dry pit included design of retrofitting the existing sludge overflow chamber to a walkable/occupiable space, iterations to develop the walking access and the addition of a davit arm for equipment removal.

Task 2. Structural Design of Grating Replacement & Influent Pump Station (IPS) Cover Infill due to Odor Control Design

The original design scope did not include the Structural Department's involvement in the Odor Control design to include the replacement of grating to provide airtight seals to the influent flow splitter walkways and sealing features to the IPS cover. An additional two structural drawings were included to the design drawings to depict the work to be conducted at the IPS and influent flow splitter tank. In conjunction with the developed design drawings, extensive research was conducted to determine the appropriate material to infill the corrugated openings along the IPS screw pump covers and non-slip aluminum covers to replace the existing grating. Therefore, multiple coordination meetings were required between the Structural and Mechanical engineers with manufacturers/suppliers.

3. Structural Design of Lifting Frame in the South Garage for Screenings Washer Removal via Forklift

The inclusion of a lifting frame to allow the Owner to remove the screenings washer equipment in the South Garage Area via forklift was not included in the original design scope. Due to the layout of the South Garage roof, removal of the equipment via crane is not possible. Additionally, there is not an existing hoist located in the South Garage building and due to the location of existing roof drains and piping along the building ceiling a new hoist could not be feasibly designed and installed. Therefore, a design of a forklift anchor point attached to the existing roof was designed

and included in the drawings. This resulted in calculations, an additional structural drawing, and extensive details.

#### 4. Structural Design of Monorail System for Grit Wolf rather than Proprietary Design

The original scope of work included a propriety monorail system that utilized an automated closure piece at the overhead doors that was to be used for the removal of the Grit Wolf lamella plates, however, due to COVID-19 the cost estimate of the proposed system was significantly higher than the initial quote. Therefore, HRC changed to designing the monorail system with a manual closure piece to save costs. In terms of the cost savings, the schedule of values submitted by the contractor lists the monorail system located in the existing Headworks facility as \$81,500 (original HRC cost estimate in 2021 was \$66,000) and the quote from the proprietary manufacturer was \$170,000 not including contractor markup (manufacturer proposal a). This difference of approximately \$100K led to the change in design and resulted in additional design drawings, structural calculations, and multiple coordination meetings with manufacturers/suppliers.

## 5. Architectural and Electrical Design of New Electrical Room in South Garage

The original design included the new equipment controls to be housed in the electrical room located in the existing Headworks Building and within the proposed GPOC Building. To eliminate the need for Class 1 Division 1 rated controls, reduce the footprint of the proposed building, and utilize existing space a new electrical room was proposed in the unoccupied space in the South Garage. The updated design included a room sealed from the existing South Garage and included new doors to maintain access to the existing South Garage. Therefore, additional design drawings were generated, and multiple coordination meetings were required between the Electrical, Structural, and HVAC departments.

## 6. Structural Design of New Wall Openings to Accommodate HVAC Ductwork into New Electrical Room

The original HVAC ductwork design did not include ductwork to enter the South Garage area but rather the HVAC ductwork ran along the South Garage roof to the new Grit Pump and Odor Control (GPOC) Building. Including a new electrical room within the South Garage area required ductwork to enter the building through a wall opening between the existing Headworks Building and South Garage area and included new openings out the south wall of the South Garage for intake and ductwork to the new GPOC Building. The electrical room required ventilation by the new makeup air unit that is being replaced on the roof. The electrical room was added as described in item #6 (to remove requirement for Class 1 Division 1 controls). Therefore, the original design did not include the wall openings for ventilation and the structural and architectural departments updated two sheets (plan and section) and included two new details as well as having coordination meetings between the Electrical, HVAC, and Architectural departments.

#### 7. Architectural Design of Miscellaneous Masonry Repair

During the 50% Design Submittal Review meeting, the Owner confirmed that miscellaneous masonry repairs within the existing Headworks Building and the South Garage should be included as part of this project which was not included in the original project scope. Requirements to complete this work included a site visit to document required repairs, an investigation into existing materials (tile, brick, etc.), and development of two additional drawings.

#### 8. Electrical Design of Re-Classification of South Garage to Class 1 Division 1

The existing South Garage area currently houses Class 1 Division 2 electrical equipment, however, due to the presence of the screenings washer equipment the South Garage the area should be classified as Class 1 Division 1. As a result, all existing and proposed equipment to be located within the south garage (not the electrical room) had to be updated to Class 1 Division 1 rated. This required all drawings and specifications to be updated.

#### 9. Process and Electrical Design of Sump Pump Replacements

During the 70% Design Submittal review meeting, the Owner requested that all existing sump pumps should be replaced as part of the project. The inclusion of this tasks resulted in additional Process and Electrical drawings and specifications as well as coordination meetings between the departments.

#### 10. Process, Electrical, and Structural Design of Additional Grit Pump

During the 90% Design Submittal review meeting, the Owner requested the addition of redundant grit pump to be included in the North Channel dry pit room. Due to space constraints resulting from the existing lower alcove room dimensions, the location of the originally proposed grit pump, pipe and fittings, and the location of the existing sump pumps, a redundant grit pump within the room was not included in the original design. The design intention was to have a spare grit pump onsite to be used as the redundant pump if the existing grit pump required maintenance. The original main goal was to allow the Owner clear access in the room to maintenance the grit pump and have a clear walkway to the hallway leading to the dry pit auger motor room. During the 90% Design Submittal review meeting, the Owner made it clear a redundant pump in the lower alcove area was preferred than a spare pump onsite and would deal with the tight room conditions. As a result, structural calculations were required to determine the allowable opening width of the western wall in the lower alcove grit pump room (as the western wall holds the load of the building above), additional details were required to include this in the design and coordination meetings required between departments.

The total requested amount for additional design scope in addition to Contract Amendment 2 is \$69,600.

# EXHIBIT B-3 COMPENSATION

## <u>General</u>

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:

Task 1	Structural, Architectural, and Process Design of Additional North Dry Pit Room and Connecting Hallway	\$ 18,125.00
Task 2	Structural Design of Grating Replacement & Influent Pump Station (IPS) Cover Infill due to Odor Control Design	\$ 10,875.00
Task 3	Structural Design of Lifting Frame in the South Garage for Screenings Washer Removal via Forklift	\$ 5,800.00
Task 4	Structural Design of Monorail System for Grit Wolf rather than Proprietary Design	\$ 8,700.00
Task 5	Architectural and Electrical Design of New Electrical Room in South Garage	\$ 5,800.00
Task 6	Structural Design of New Wall Openings to Accommodate HVAC Ductwork into New Electrical Room	\$ 2,900.00
Task 7	Architectural Design of Miscellaneous Masonry Repair	\$ 5,800.00
Task 8	Electrical Design of Re-Classification of South Garage to Class 1 Division 1	\$ 2,175.00
Task 9	Process and Electrical Design of Sump Pump Replacements	\$ 4,350.00
Task 10	Process, Electrical, and Structural Design of Additional Grit Pump	\$ 5,075.00
		\$ 69,600.00