

22-019

**RESOLUTION AUTHORIZING CONTRACT MODIFICATION 2022-01 TO  
OPERATIONS MANAGEMENT INTERNATIONAL/JACOBS**

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**MOTIONED BY:** Marotta

**SECONDED BY:** Assadourian

**WHEREAS**, the North Hudson Sewerage Authority (hereinafter "Authority") is a public body, duly formed under the Sewerage Authorities law, constituting Chapter 138 of the Laws of New Jersey of 1946, as amended (Chapter 14A of Title 40 of the New Jersey Statutes Annotated) and possesses the powers set forth therein; and

**WHEREAS**, the Authority has contracted with Operations Management International, Inc., Denver, CO. in the amount of \$8,216,474.00 for the operation, maintenance and management of the Authority's sewerage collection and treatment facilities pursuant to the provisions of the Wastewater Treatment Privatization Act, N.J.S.A. 58:27-1 et seq; and

**WHEREAS**, Operations Management International, Inc., has submitted a proposal(Exhibit "A") for additional compensation in the amount of \$71,630.00 related to the Adams Street Operations and Pump Stations Out of Scope Work; and

**WHEREAS**, the Facilities Review Board has reviewed the proposal and recommends the approval of the requested contract.

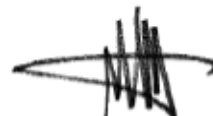
**NOW, THEREFORE, BE IT RESOLVED** that the Authority hereby authorizes the execution and implementation of said contract modification 2022-01 in the amount of \$71,630.00.

**DATED: FEBRUARY 7, 2022**

**RECORD OF COMMISSIONERS' VOTE**

	YES	NO	ABSENT
Commissioner Kappock	x		
Commissioner Marotta	x		
Commissioner Gardiner	x		
Commissioner Friedrich	x		
Commissioner Guzman	x		
Commissioner Velazquez			x
Commissioner Barrera	x		
Commissioner Zucconi	x		
Commissioner Assadourian	x		

**THIS IS TO CERTIFY THAT THIS RESOLUTION WAS DULY ADOPTED BY THE  
NORTH HUDSON BOARD OF COMMISSIONERS ON FEBRUARY 7, 2022.**



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**SECRETARY**



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Mr. Fredric J. Pocci, P.E.  
Authority Engineer  
North Hudson Sewerage Authority  
1600 Adams Street  
Hoboken, New Jersey 07030

February 3, 2022

Subject: Proposed Out of Scope Project: OMI 2022-01  
Adams Street Trickling Filter Pump Station Soft Start Installation

Dear Mr. Pocci,

Operations Management International, Inc. ("JACOBS OMI") is pleased to provide North Hudson Sewerage Authority ("Authority") our proposal for installation of two new Soft Starts in the Adams Street WWTP Trickling Filter Pump Station.

**Overview:**

The Trickling Filter Pump Station consists of two pump stations, each utilizing four pumps. Four pumps (G1-G4) pump trickling filter influent flow from a wet well up to the top of the trickling filters. Four pumps (G5-G8) pump trickling filter effluent flow from the second wet well up to PURAC. In 2008, five VFDs were replaced under a capital improvement project. VFDs were installed for the G2/G4 (shared drive), G3, G5, G6/G8 (shared drive), and G7. In the last two years, Jacobs OMI replaced the G2 Drive, and installed a drive into G1 that did not previously have a VFD.

As noted above, there is a shared drive on two pumps in each wet well. Having these pumps on a shared drive means that we are not able to use a set of two pumps simultaneously if that VFD is online. We are recommending divorcing these pumps from each other by rewiring one pump on the existing VFD, and installing a Soft Start for the second pump. We would install two soft starts, one on the G4 pump and one on the G8 Pump. Once complete, the trickling filter pump station will have all 8 pumps available to run independently, which provides a completely redundant pump to give us much needed backup in case of pump or drive failure. Increased pumping capacity also ensures that the facility can receive higher rates of stormwater flow.

### **Scope of Services and Specifics:**

The installation of soft starts for the G4 and G8 Pumps in the Trickleing Filter Pump Station will include:

- Remove the G4 and G8 main breaker wires and separate the leads after the motor starter to allow G2 and G6 to be independent from G4 and G8. All existing control wires will remain with the VFD.
- Remove primary power leads from each main breaker feeding the dual motor starter currently being used to select the pump being powered by the VFD.
- Remove main junction box inside the trickleing filter pump station from G4 and G8.
- Install new enclosure that will house the new soft starters. The new enclosures will be Saginaw brand, 60x24x18 enclosures.
- Install all components for the soft starters to allow for proper operation and to control the soft starts from the SCADA system. The new soft starts will be Stellar brand Model SR55 302A.
- Re-feed the soft start with new 2/0 wires from the main breakers.
- Connect wiring to be able to control the soft starts from the trickleing filter pump station PLC.
- Modify the existing PLC program to allow independent control of all eight pumps, separating the logic that feeds signals to the shared drives in tandem.
- Reconfigure SCADA graphics to separate control of G2 and G6 from G4 and G8.
- Test the soft starts in Lead and Lag positions to ensure proper ramping of the pumps. Provide completed Startup and Testing Form.
- Install a new rooftop exhaust fan and make repairs to the building interior ventilation system to increase airflow to all drives for proper operation.
- Provide final As Built Record Drawings for all eight pumps and drives in the Trickleing Filter Pump Station.
- Provide O&M Manuals for Soft Starts.

All work above will be completed by the Jacobs Regional Maintenance Team under the leadership of Regional Maintenance Director Kyle Arnold.

### **Schedule:**

Once the project is approved, the project is expected to take approximately 5 months to complete. The equipment lead times will take about 8-10 weeks, and then actual installation should be able to be completed in about 2-4 weeks for the soft starts. Additional time of approximately 3 weeks will be required to complete a full, updated set of As-Built drawings for all equipment in the Trickleing Filter Pump Station. Since the equipment needs to be utilized throughout the project, only one pump can be taken down at a time to work on the drive systems.

**Cost:**

JACOBS OMI's proposed cost estimate for the project is \$71,630 (Seventy-one thousand six hundred thirty dollars). This amount is based on the estimated direct costs and includes JACOBS OMI's markup of 15% on equipment to cover general and administrative costs, overhead, and profit. The installation work will be performed by Jacobs Regional Maintenance Team at the Lump Sum cost noted below. JACOBS OMI will invoice on a lump sum basis once the equipment is purchased and invoiced. A second Lump Sum payment will be requested once the project is complete.

The out of scope project costs are in addition to the Agreement's base fee and any other Agreement budget amounts.

<b>PROJECT COSTS - SUMMARY TABLE</b>		<b>COST (\$)</b>
<b>1</b>	All Equipment to install two Soft Starts	\$ 25,000
<b>2</b>	JACOBS OMI (15% O&P)	\$ 3,750
<b>3</b>	Jacobs Regional Support for Installation and As Built Drawing Preparation (1 Supervisor and 2 electricians for 304 hours, and travel expenses)	\$ 42,880
<b>TOTAL COST</b>		<b>\$ 71,630</b>

**TOTAL ESTIMATED COST: \$ 71,630**

If you are in agreement with this letter, please provide NHTSA Board approval in the form of a signed resolution. JACOBS OMI will proceed with the out of scope services in accordance with the above schedule.

JACOBS OMI appreciates the opportunity to provide these services. If you need additional information or have any questions regarding this letter, please feel free to contact me by phone at 201.795.1411 or by e-mail at Mark.Berube@jacobs.com.

Thank you for your consideration regarding this proposed out of scope project.

Regards,



Mark Berube  
Project Director

Cc: Richard Wolff, NHTSA Executive Director

Kevin Dahl, Jacobs OM  
Phil Reeve, Jacobs OM