

**SUPPLEMENTAL AGREEMENT NO. 1
FOR PROFESSIONAL SERVICES
City of Olathe, Kansas**

This Supplemental Agreement made this _____ day of _____, 20____, by and between the City of Olathe ("City") and Jacobs Engineering Group ("Consultant") (collectively, the "Parties").

WHEREAS, the City and Consultant have previously entered into an Agreement, dated February 11, 2025 ("the Agreement"), for engineering design of the WTP2: Membrane Module Replacement Project; PN 5-C-034-25 ("Project"); and

WHEREAS, Section II.B.2 of the Agreement provides that Consultant will provide, with City's concurrence, services in addition to those listed in the Agreement when such services are requested or authorized in writing by the City; and

WHEREAS, this Supplemental Agreement between the Parties is to provide engineering design and preparation of bid documents for the Project as outlined in **Exhibit A** of this Supplemental Agreement, attached hereto and incorporated herein by reference; and

WHEREAS, the City is desirous of entering into this Supplemental Agreement to pay the Consultant for additional services rendered to the City related to the Project; and

WHEREAS, the City is authorized and empowered to contract with the Consultant for the necessary additional services in this Supplemental Agreement.

NOW THEREFORE, the Parties hereby agree as follows:

- A. The Agreement is hereby amended as follows: The scope of services now includes Exhibit A of this Supplemental Agreement.
- B. The total fee for the additional professional services provided pursuant to this Supplemental Agreement is \$136,635.00, which raises the total fee for all services provided under the Agreement from \$48,715 to \$185,350.
- C. Section II.D. of the Agreement is amended to read: All work to be completed on or before May 31, 2027.
- D. The fee and rate schedule in Exhibit C of the Agreement and subsequent supplemental agreements is hereby amended as outlined in Exhibit B of this Supplemental Agreement No. 1.

IN ALL OTHER RESPECTS, the terms and conditions of the Agreement will remain in full force and effect, except as specifically modified by any prior written Supplemental Agreement

approved by the Parties and by this Supplemental Agreement, including all policies of insurance which will cover the work authorized by this Supplemental Agreement.

IN WITNESS WHEREOF, the Parties have caused this Supplemental Agreement to be executed as of the day and year first above written.

CITY OF OLATHE, KANSAS

By: _____
John Bacon, Mayor

ATTEST:

City Clerk

(SEAL)

APPROVED AS TO FORM:

City Attorney or Deputy/Assistant City Attorney

JACOBS ENGINEERING GROUP INC.

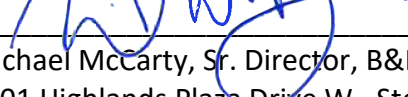
By: _____
Michael McCarty, Sr. Director, B&I Division
1001 Highlands Plaza Drive W., Ste 400
Saint Louis, MO 63110

EXHIBIT A
Supplemental #1 – Additional Scope of Services

Task 100 – Project Management and Administration

- Jacobs will provide project administration management services necessary throughout the design phase of the project to successfully manage and complete the Work,
- Jacobs will prepare and submit monthly invoices and provide a monthly project status report.
- Jacobs will participate in up to 10 monthly project progress meetings with the City.

Task 400 – Process Audit

- Jacobs will conduct a process audit of the MF system with specific focus on investigating the plausible causes for compromised integrity of the MF system.
- Jacobs will complete a review of operation and performance of the existing pretreatment system including the lime softening, enhanced coagulation basins, and chlorine dioxide system. This will include a review of chemical dosing of these systems and a review of water quality to confirm the pretreatment systems are providing stable and consistent feed water to the membranes. Parameters that will be reviewed include alkalinity, calcium, pH, LSI, CCPP as well as iron, manganese, magnesium and turbidity. The water quality review will also consider other process streams beyond the MF feed water, including the MF backwash/reverse flush supply (MF filtrate), and CIP makeup water. Jacobs will provide any recommendations identified to improve the water quality of these process streams to mitigate potential scaling if determined to be the cause of membrane integrity breaches.
- The process audit will also include a condition assessment of aging infrastructure associated with the Membrane Filtration system to identify rehabilitation or replacement needs. Equipment to be assessed will include (but not be limited to):
 - MF valve rack components (e.g. valves, pneumatic actuators, solenoid panel)
 - MF feed pumps
 - MF pre-strainers
 - MF backwash pumps
 - MF compressed air system
 - MF rack piping and header
 - RF piping
 - MF cleaning systems (e.g. pumps, piping, analyzers, probes, tanks, tank heating systems)
- Site visits will be performed as part of the process audit which are assumed to include:
 - A site visit will be conducted by a maximum of four (4) Jacobs staff over five (5) working days to perform the review of operations and performance of the pretreatment and MF systems, while also performing condition assessment of the aging infrastructure.
 - The condition assessment of vendor package equipment (e.g. strainers, compressed air) is anticipated to be performed by vendor representatives while Jacobs is on-site. Jacobs will work with the City to coordinate and schedule the

vendor site visits. It is assumed that the City will contract directly with the vendors for their field services.

- During the site visit, Jacobs will perform a cleaning study on select individual membrane modules (up to 5) with Jacobs' portable/mobile cleaning skid. The intent of the cleaning study would be to evaluate various cleaning regimes on aged and fouled modules to determine opportunities to optimize membrane cleaning and improve membrane performance.
- Jacobs will coordinate and contract with a subconsultant to perform CCTV of settled water header piping to assess its condition. It is anticipated that at least 60 linear feet of 36-inch pipe will be accessed at the water plant.

- Task 400 Deliverables:

- TM documenting findings from water quality and membrane integrity investigation as well as findings from the on-site cleaning study.
- TM documenting findings from the condition assessment and recommendations for replacement and/or rehabilitation.

Task 500 – Design and Bid Document Preparation

- Jacobs will prepare and issue a request for firm proposal from the chosen system manufacturer (Aria Filtra) for module replacements. Jacobs will assist the City to finalize an approach for procurement of the membrane modules, including pre-negotiating price, finalizing the warranty and establishing module delivery schedule.

EXHIBIT B
Supplemental #1 – Fee & Rate Schedule

Membrane Replacement Evaluation Study	Amendment 001	Jacobs Labor/Resources											
		Staff Name	Julie McNiff	Karla Albert	Alex Mazzoccoli	Mike Hwang	Yue Hu	Paul Mueller	Steve Wehrspann	Rebecca Suku			
		Staff Roll on Project	Sr. Project Manager	Project Assistant Contracting	Project Assistant/Project Controls	Assessment and Optimization Lead	Sr. Project Engineer	QA/QC and Site Investigations	Health & Safety	Field Support			
		Staff Classifications	Sr. Project Manager	Contract Admin	Project Assistant	Sr Process Engineer	Sr. Poject Engineer	Sr Technologist	HSE Manager	Engineer 1			
		Jacobs Bill Rate	\$ 215.00	\$ 120.00	\$ 105.00	\$ 260.00	\$ 170.00	\$ 260.00	\$ 230.00	\$ 100.00	\$ -	\$ -	Non Labor Expenses
Task Series	Task Description												
100	Project Management And Administration												
	Project Management (Admin, Contracting)	8	4	6								\$ 2,830.00	\$ -
	Monthly Invoicing	10										\$ 2,150.00	\$ -
	Progress Meetings (Agenda, Minutes)	12			8		8					\$ 6,740.00	\$ -
	KDHE Coordination Required	8			2		2					\$ 2,760.00	\$ -
	Health & Safety Plan	4						4				\$ 1,780.00	\$ -
	Task 100 Subtotal Hours	42	4	6	10	0	10	4	0	0	0	76	
	Task 100 Subtotal Fee	\$ 9,030.00	\$ 480.00	\$ 630.00	\$ 2,600.00	\$ -	\$ 2,600.00	\$ 920.00	\$ -	\$ -	\$ -	\$ 16,260.00	\$ -
400	Process Audit												
	Lime Softening, Enhanced Coagulation, and Chlorine Dioxide Operation and Performance Review	2			16	48	12					\$ 15,870.00	\$ -
	Condition Assessment of Membrane Filtration System including Site visits and vendor coordination associated with Condition Assessment (Max 4 staff, 5 days)	8			36		16		40			\$ 19,240.00	\$ 3,500.00
	Piping Assessment (Settled Water Header, 60 LF, 36" dia)	2			2		2		2			\$ 1,670.00	\$ 3,475.00
	Cleaning Study (up to 5 modules)				16		64		44			\$ 25,200.00	\$ 5,000.00
	TM - Membrane Integrity Investigation	4			16	16	16		24			\$ 14,300.00	\$ -
	TM - Conditon Assessment Findings	4			12	16	8		40			\$ 12,780.00	\$ -
												\$ -	\$ -
	Task 400 Subtotal Hours	20	0	0	98	80	118	0	150	0	0	466	
	Task 400 Subtotal Fee	\$ 4,300.00	\$ -	\$ -	\$ 25,480.00	\$ 13,600.00	\$ 30,680.00	\$ -	\$ 15,000.00	\$ -	\$ -	\$ 89,060.00	\$ 11,975.00
500	Design and Bid Document Preparation												
	RFP Preparation Support for Module Replacement	4			8	16	4					\$ 6,700.00	\$ -
	Procurement Assistance/Negotiations	4			8	16	4					\$ 6,700.00	\$ -
												\$ -	\$ -
												\$ -	\$ -
												\$ -	\$ -
												\$ -	\$ -
	Task 500 Subtotal Hours	8	0	0	16	32	8	0	0	0	0	64	
	Task 500 Subtotal Fee	\$ 1,720.00	\$ -	\$ -	\$ 4,160.00	\$ 5,440.00	\$ 2,080.00	\$ -	\$ -	\$ -	\$ -	\$ 13,400.00	\$ -
Amendment 001 Total Added Hours (Task 100, 400, 500)		70	4	6	124	112	136	4	150	0	0	606	
Total Hour * Bill Rate		\$ 15,050.00	\$ 480.00	\$ 630.00	\$ 32,240.00	\$ 19,040.00	\$ 35,360.00	\$ 920.00	\$ 15,000.00	\$ -	\$ -	\$ 118,720.00	\$ 11,975.00
Sum Subtotal Fees (Task 100, 400, and 500) Check		\$ 15,050.00	\$ 480.00	\$ 630.00	\$ 32,240.00	\$ 19,040.00	\$ 35,360.00	\$ 920.00	\$ 15,000.00	\$ -	\$ -	\$ 118,720.00	\$ 11,975.00

Total Jacobs LBR/EX (100, 400, 500)	\$ 130,695.00
Labor Contingency	\$ 5,940.00
Total	\$ 136,635.00

Membrane Replacement Evaluation Study

Olathe, KS

12-Jan-26

Schedule of Position Classifications

Employee Classification	Hourly Bill Rate
Principal	\$ 260.00
Project Executive	\$ 245.00
Senior Project Manager	\$ 215.00
Project Manager	\$ 200.00
Senior Project Engineer	\$ 170.00
Project Engineer	\$ 157.00
Sr. Process Engineer	\$ 260.00
Process Engineer	\$ 175.00
Engineer III	\$ 130.00
Engineer II	\$ 120.00
Engineer I	\$ 100.00
Sr. Technologist	\$ 260.00
Technologist	\$ 220.00
Contracts Administrator	\$ 120.00
Project Controller	\$ 105.00
Health and Safety Manager	\$ 235.00

Notes:

1) Bill Rates are good through October 2026.