

This is **EXHIBIT K**, consisting of 6 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

AMENDMENT TO OWNER-ENGINEER AGREEMENT
Amendment No. 06

The Effective Date of this Amendment is: April 3, 2024.

Background Data

Effective Date of Owner-Engineer Agreement: September 9, 2021

Owner: Town of Johnstown, Colorado

Engineer: Burns & McDonnell Engineering Company, Inc.

Project: Johnstown Water Treatment Plant Design

Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]

- ☐ Additional Services to be performed by Engineer
- ☒ Modifications to services of Engineer
- ☐ Modifications to responsibilities of Owner
- ☐ Modifications of payment to Engineer
- ☐ Modifications to time(s) for rendering services
- ☐ Modifications to other terms and conditions of the Agreement

Description of Modifications:

Scope of Services

The following tasks summarize the scope of services for engineering construction phase services for the Water Treatment Plant expansion.

The scope of services is based on the construction agreement between the Town (Owner) and MWH Constructors Inc. (Contractor), as presented to Town Council on October 16, 2023. The schedule is based on that provided by MWH Constructors dated March 15, 2024:

- Notice to Proceed, Work Authorization 1 – December 8, 2023
- Substantial Completion – December 28, 2026
- Construction Duration – 159 weeks (38 months)

The scope of services shall be completed within 38 months and are based on the Contractor achieving Substantial Completion in that timeframe. If the Contractor does not achieve Substantial Completion and the Engineer has performed the scope of services, this shall be considered as additional services, and Engineer will request additional time/cost for completion.

TASK SERIES 2000 – CONSTRUCTION ADMINISTRATION SERVICES

The Scope of Services described herein represents the Engineer's professional engineering activities necessary for engineering services during construction and post-construction activities. Engineer's construction administration services will in no way relieve the Contractor(s) of their obligations for complete compliance with the drawings and specifications. Engineer shall not make exhaustive or continuous on-site assessments to check the quality or quantity of such work. Engineer shall not be responsible for the means, methods, techniques, sequences, or procedures of Contractor, or for their safety precautions and programs incident to their work. Engineer shall not be responsible for the failure of Contractor to perform the work in accordance with their Contract Documents. Notwithstanding the foregoing, if Engineer becomes aware of any deficiencies or defects in the work, or any lack of conformity of the work to the drawings and specifications, Engineer will bring such deficiencies, defects, or lack of conformity to Owner's attention.

Insofar as job site safety is concerned, Engineer is only responsible for its employees' activities on the job site, and this shall not be construed to relieve Owner or any Contractors from their responsibilities for maintaining a safe job site. Neither the professional activities of Engineer, nor presence of Engineer or its employees and subcontractors shall be construed to imply Engineer has any responsibility for methods of work performance, superintendence, sequencing of construction, or safety in, on or about the job site. Owner agrees that the Contractors are solely responsible for job site safety, and this intent shall be made evident in Owner's agreement with all Contractors. Owner and Engineer shall be made additional insureds under the Contractors' general liability insurance policy.

Engineer will not be a party to any construction contract and all authority and responsibility to stop work belongs to the Owner. Engineer shall not be liable for the results of any interpretations or decisions rendered by it in good faith when acting as an arbitrator or interpreter of the design documents; provided, however, that all interpretations and decisions of Engineer shall be consistent with the intent of, and reasonably inferable from, the design documents and shall be in writing or in the form of drawings.

By recommending any payment to others, Engineer will not thereby be deemed to have represented that continuous or exhaustive examinations have been made by Engineer to check the quality or quantity of the work or to review the means, methods, sequences, techniques or procedures of construction or safety precautions or programs incident thereto or that Engineer has made an examination to ascertain how or for what purposes any person(s) has used the moneys paid on account, or that title to any of work, materials or equipment has passed to the Owner free and clear of any lien, claims, security interests or encumbrances, or that others have completed their work exactly in accordance with the Contract Documents. Notwithstanding the foregoing, it is agreed that, by recommending any payment to others, Engineer does thereby represent that, based on Engineer's evaluation of the work and the data comprising the Contractor's Application for Payment, that, to the best of Engineer's knowledge, information and belief, the work has progressed to the point indicated, the quality of the work is in accordance with the design documents, that the Contractor is entitled to payment in the amount certified by Contractor, and that Engineer knows of no legitimate reason that such payment or any part thereof may or should be withheld.

Construction will be administered through three (3) Work Authorizations (WA):

1. WA1 – Early Site Work: Includes mobilization, site preparation, stormwater control and dewatering. Includes relocation of existing raw and treated piping during low water demand season 2023/2024 to create construction areas for proposed facilities on the project's critical path (i.e., the new Treatment Building). Includes deep foundations for proposed Treatment Building (Membrane Feed Pump Station Wet Well).

Issued for Construction documents:	December 2023
Completion of Yard Pipe and Site Work:	August 2024
Completion of Concrete/Structural:	October 2024

2. WA2 – Early Procurement Supply Packages: Includes membrane filtration system, GAC system, vertical turbine pumps, emergency generators, and electrical switchgear.

Issued for procurement specifications:	December and January 2024
Submittal review:	January to October 2024
Notice to proceed for equipment packages:	January to October 2024

3. WA3 – Balance of Work: Includes supply, installation, startup and testing of the remaining project scope.

Issued for Construction documents:	May 2024
Mobilization with WA1 above.	
Start-up and testing:	April 2026
Substantial Completion:	December 2026

This scope of services covers WA1 and WA2 only, starting in December 2023 and ending October 31, 2024. This represents forty-seven (47) weeks of the total construction duration of one hundred fifty-nine (159) weeks.

A separate scope of services for WA3 will be submitted once the Owner and Contractor reach agreement on the balance of work.

Task 2001 – Overall Project and Construction Administration

This task includes office administrative tasks to be performed throughout the construction phase, including:

- Receive and review submittals provided by the Contractor in accordance with the Issued for Construction design documents. Maintain and transmit reviewed documents to the Owner's project manager.
- Provide the Owner's project manager with observations regarding defects or deficiencies in the Contractor's work relating to compliance with Issued for Construction design documents.
- Preparation of Engineer's monthly invoices and cover sheet.

This represents forty-seven (47) weeks of the total construction duration of one hundred fifty-nine (159) weeks.

Task 2002 – Pre-Construction Conference

Engineer will prepare the pre-construction conference agenda, attend, and run the meeting, and take, prepare, and distribute meeting minutes. It is anticipated that the pre-construction meeting will be in-person and attended by the Owner, the Contractor's project manager and the Engineer's project manager, process engineer, and resident project representative.

Task 2003 – Construction Progress Meetings

Engineer will attend meetings for 47-weeks construction period for WA1 and WA2 on a weekly basis. It is anticipated that the construction meetings will be attended by the Owner's project manager, the Contractor's project manager, the Engineer's project manager, the Engineer's project engineer, and the Engineer's resident project representative. The Engineer's project manager will attend 25% of the meetings in-person and 75% remotely. The Engineer's project engineer will attend all meetings remotely. The Engineer's resident project representative will attend the meetings in-person. The resident project representative hours are included in Task 2101. The level of effort assumes that every other meeting may also be attended by one (1) of the Engineer's support disciplines remotely. Labor assumptions for project manager, project engineer, and support disciplines are a total of two (2) hours per remote meeting. Labor assumptions assume that the in-person meetings for the project manager will coincide with Task 2004.

Task 2004 – Periodic Site visits by Project Manager or Project Engineer

This includes one (1) site visit per month for one (1) discipline engineer and two (2) site visits per month for either the project manager or engineer for the first 47 weeks of the 159-week construction period. Each site visit is assumed to be eight (8) hours in duration, including travel.

Task 2005 – Answer Contractor’s Question through written RFI Process

Engineer will provide formal written responses to RFI’s to the Contractor and the Owner. This includes written response to fifty (50) RFI’s with a review, determination, and response time of approximately four (4) hours per RFI.

Task 2006 – Submittal and Resubmittal Reviews

Engineer will review submittals for the project and provide a response and status for each submittal. This task assumes one hundred (100) different submittals from the Contractor, exclusive of those included in the early procurement task (Task Series 700). This task assumes each submittal will require an average of two (2) hours review and response time for the first submittal and one (1) hour for resubmittals (one resubmittal per submittal).

Task 2007 – Change Management

At the request of the Owner’s project manager, Engineer will review Contractor’s requests for Contract Amendments, Work Authorizations, Change Order, Work Change Directive or Field Orders and provide a summary of their review and/or recommendations to the Owner. The Engineer’s review will be focused on whether or not the scope associated with the change order should have been originally contemplated and included in the Contractor’s scope. This task assumes one (1) Contract Amendment, one (1) Work Authorizations (in addition to the existing WA1 and WA2), ten (10) total Change Orders and Work Change Directives and sixteen (16) Field Orders. Labor estimates are based on an average review and response time of forty (40) hours per Contract Amendment and Work Authorization and twenty (20) hours per Change Order, Work Change Directive and Field Order.

Task 2008 – Applications for Payment

Engineer will review Contractor’s monthly applications for payment. Task includes a cursory review of supporting documents against worksite progress, coordination with Contractor and approval by Owner. This task assumes a total eleven (11) pay applications for the duration of the project at an average review time of four (4) hours each, based on a review of a Schedule of Values in a lump sum compensation method. More effort will be required if the project remains open book and does not convert to a lump sum.

Task 2009 – Substantial Completion Inspection and Punchlist

Excluded from this scope of work for WA1 and WA2 only.

Task 2010 – Final Completion Inspection and Punchlist

Excluded from this scope of work for WA1 and WA2 only.

TASK SERIES 2100 – RESIDENT PROJECT REPRESENTATIVE AND START-UP SERVICES

Task 2101 – Full-Time Resident Project Representative

Engineer will provide a Resident Project Representative (RPR) or field engineer to observe and record the construction progress and quality of the work as is reasonably necessary at various stages of construction to determine if the work is proceeding in general accordance with the design documents. It is estimated that the RPR or field engineer will be on site for one hundred twenty-one (121) of the one hundred fifty-nine (159) week construction period. The RPR is not required for the first twelve (12) weeks as the contractor prepares to mobilize and works on procurement and subcontracting items.

- Phase 1 – Part Time (March 1 to June 30, 2024): The RPR or field engineer will be onsite for an estimated 2-days per week for the next seventeen (17) weeks during work included in WA1 to witness work that will be buried. Exposed work that will not be buried, as work progresses, will be observed by the RPR when onsite during phase.
- Phase 2 – Full Time (July 1, 2024, to October 31, 2024): The RPR or field engineer increases time to 5-days per week starting with the preparation of the subgrade for the Membrane Feed Pump Station wet well for seventeen (17) weeks.
- Phase 3 – Part Time: Excluded from this scope of work for WA1 and WA2 only.

It is assumed the RPR or field engineer effort is 8 hours each day, including travel time. The effort is based on a 5-day work week.

The RPR will:

- Provide observation of construction progress and of the quality of the work as is reasonably necessary at various stages of construction to determine if the work is proceeding in general accordance with the design documents.
- Examine and review delivered and on-site materials for conformance with the design documents and approved submittals.
- Prepare and submit daily construction observation reports to the Owner on a weekly basis.
- Provide construction photos of construction activities.
- Conduct weekly progress meetings, provide meeting agendas, and take and distribute meeting minutes.
- Participate with Contractor and Owner regarding start-up, testing, and commissioning. The Contractor will be responsible for start-up, testing, and commissioning.
- Report to Project Engineer, opinions and suggestions based on observations regarding defects or deficiencies in the work and compliance with drawings and specifications.

- Advise Project Engineer and Contractor immediately of any work requiring shop drawing review prior to work commencement.
- Observe and document differing subsurface and physical conditions encountered.
- Review Contractor's construction schedule for conformance with milestones, and other project requirements.
- Observe onsite quality assurance testing and maintain copies of testing results on site.
- Review as-built construction mark-ups on a weekly basis to observe if contractor is accurately documenting field changes to the work in a common set of drawings/specifications.
- Conduct special inspections of the following:
 - Reinforced steel
 - Anchors cast in concrete
 - Anchors post installed in concrete
 - Concrete mix design
 - Concrete placement
 - Inspection of formwork
 - Subgrade preparation
 - Welding
 - Masonry construction
 - Mortar and grout placement
 - Open web steel joist installation
- The following special inspections will be provided by the Contractor and are not the responsibility of Engineer:
 - Fabricate specimens for strength, perform slump, air content and temperature.
 - Verification and inspection of soils by the geotech.
 - Verification of f'm
 - Verifications of grout and mortar are in compliance with the specifications
 - Structural steel welding

Task 2102 – Start-Up Coordination Meetings

Excluded from this scope of work for WA1 and WA2 only.

Task 2103 – Start-up Assistance

Excluded from this scope of work for WA1 and WA2 only.

Task 2104 – Equipment Operations Training Assistance

Excluded from this scope of work for WA1 and WA2 only.

TASK 2200 SERIES – PROJECT CLOSE OUT

Task 2201 – Compile O&M Manual

Excluded from this scope of work for WA1 and WA2 only.

Task 2202 – Prepare and Furnish Conforming to Construction Records

Excluded from this scope of work for WA1 and WA2 only.

Task 2203 – Project Closeout

Excluded from this scope of work for WA1 and WA2 only.

Task 2204 – Warranty Period Support

Excluded from this scope of work for WA1 and WA2 only.

Task 2205 – Correction Period Site Walks

Excluded from this scope of work for WA1 and WA2 only.

Agreement Summary (Basic Services):

Original Agreement:	\$2,059,442
Net Change for Prior Amendments:	\$1,435,940
This Amendment Amount:	\$ 882,022
Adjusted Agreement Amount:	\$4,377,404*
Change in Time of Services	147 days
(Days or Date, As Applicable):	October 31, 2024

* Basic Services only. Excludes approved Additional Services of \$831,280.

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this, or previous Amendments remain in effect.

OWNER:

ENGINEER:

By: _____
Print
name: _____

Title: _____

Date Signed: _____

By: _____
Print
name: _____

Title: _____

Date Signed: _____

Town of Johnstown

Water Treatment Plant Expansion from 5 to 12.0 mgd

Amendment 06 - Work Breakdown Structure and Fee Schedule - Construction Phase Services

Activity	Project Manager	Quality Control	Project Engineer	Asst. Project Engineer	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	CAD / Designer	Fire Protection	Field Representation	BMcD Total Labor		Expenses	Sub-Consultants	Total Cost
	Pugh	Schaefer	Huth	Wetz	Kienholz	Dalglish Lang	Strobel Lee	Olsen	Patwari Elliott	Kuntz Waddell	Mimiaga	Ginsburg DeGroff	Thompson					
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
TASK SERIES 2000 - Construction Administration Services																		
2001 - Overall Project and Construction Administration	100		100											200	\$58,170	\$2,330		\$ 60,500
2002 - Pre-Construction Conference	6		4	4									4	18	\$4,918	\$283		\$ 5,201
2003 - Progress Meetings (Weekly)	120		60	30	20	16	24		30					300	\$83,557	\$9,571		\$ 93,128
2004 - Periodic Site Visits by PM or PE	100		50	50	30	20	10	10	50			20		340	\$93,587	\$8,548		\$ 102,135
2005 - Answer Contractor Questions Through Written RFI Process	24		40	60	20	10	10	10	24					198	\$51,393	\$2,060		\$ 53,453
2006 - Submittal and Resubmittal Review	20		30	60	40	40	40	20	50			20		320	\$84,137	\$3,370		\$ 87,507
2007 - Change Management	40		80	90	60	20	20	20	90		40	20		480	\$123,113	\$4,920		\$ 128,033
2008 - Pay Applications	20		20											40	\$11,634	\$470		\$ 12,104
2009 - Substantial Completion Inspection & Punchlist														0	\$0	\$0		\$ -
2010 - Final Completion Inspection & Punchlist														0	\$0	\$0		\$ -
Sub-Total Series 2000	430	0	384	294	170	106	104	60	244	0	40	60	4	1,896	\$510,508	\$31,552	\$0	\$542,060
TASK SERIES 2100 - Resident Project Representative & Start Up Services																		
2101 - Resident Project Representative x 8 hour days																		
Phase 1 - Part Time (2 days per week for 26 weeks)													280	280	\$79,240	\$10,462		\$ 89,702
Phase 2 - Full Time (5 days per week for 87 weeks)													700	700	\$198,100	\$52,160		\$ 250,260
Phase 3 - Part Time (2 days per week for 18 weeks)														0	\$0	\$0		\$ -
2102 - Start Up Coordination Meetings														0	\$0	\$0		\$ -
2103 - Start-Up Assistance																		
1 - DAF Start Up Support														0	\$0	\$0		\$ -
2 - Ultrafiltration Start Up Support														0	\$0	\$0		\$ -
3 - GAC Start Up Support														0	\$0	\$0		\$ -
4 - Pumping Systems Start Up Support														0	\$0	\$0		\$ -
5 - Electrical Power Systems Start Up Support														0	\$0	\$0		\$ -
6 - Control Systems Start Up Support														0	\$0	\$0		\$ -
7 - Chemical Systems														0	\$0	\$0		\$ -
2104 - Equipment Operations & Training Assistance														0	\$0	\$0		\$ -
Sub-Total Series 2100	0	0	0	0	0	0	0	0	0	0	0	0	980	980	\$277,340	\$62,622	\$0	\$339,962
TASK SERIES 2200 - Project Close Out																		
2201 - Compile O&M Manual														0	\$0	\$0		\$ -
2202 - Conforming to Construction Drawings														0	\$0	\$0		\$ -
2203 - Project Close Out														0	\$0	\$0		\$ -
2204 - Warranty Period Support														0	\$0	\$0		\$ -
2205 - Correction Period Site Walks														0	\$0	\$0		\$ -
Sub-Total Series 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
Project Subtotals	430	0	384	294	170	106	104	60	244	0	40	60	984	2876	\$787,848	\$94,174	\$0	\$882,022
Project Total																		\$882,022

- Notes:
- Expected active construction period is expected to last 38 months, per MWH Constructor's schedule dated March 15, 2024.
 - Refer to the attached scope of work for phased RPR and office staff site visits.
 - Construction document control through MWH Constructor's web interface. Construction document control software charges are excluded.
 - For outside expenses incurred by Burns & McDonnell, such as authorized travel and subsistence, and for services rendered by others such as subconsultants, the client shall pay the cost to Burns & McDonnell plus 10%
 - The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.
 - The rates shown above are effective for services through December 31, 2024, and are subject to revision thereafter.

Activity ID		Activity Name	Orig Dur	Rem Dur	ACD	Start	Finish	Total Float	Gantt Chart																											
Johnstown WTP Expansion Project - LIVE									Gantt Chart																											
General Conditions									Gantt Chart																											
Contract Milestones (L1)									Gantt Chart																											
MSL1000010		LNTP for Preconstruction Services	0	0	0	10-Feb-23		-20	Gantt Chart																											
MSL1000030		NTP Based on 90% (WA3)	0	0	0	16-Apr-24	16-Apr-24	6	Gantt Chart																											
MSL1000020		NTP Based on GMP (WA4)	0	0	0	22-May-24		-20	Gantt Chart																											
MSL1000050		Contractor's Weather Allowance	25	25	25	18-Nov-26	28-Dec-26	0	Gantt Chart																											
SC		Substantial Completion (4/15/26)	0	0	0		28-Dec-26	0	Gantt Chart																											
FC		Final Completion	0	0	0		22-Apr-27	0	Gantt Chart																											
Project Milestones (L2/L3)									Gantt Chart																											
Low Demand Season									Gantt Chart																											
A6450		Low Demand Season 23/24 - Finish	0	0	0		01-Apr-24*	0	Gantt Chart																											
A6440		Low Demand Season 23/24 - Start	0	0	0	22-May-24*		1094	Gantt Chart																											
A6490		Low Demand Season 23/24	0	0	0	22-May-24	22-May-24	-50	Gantt Chart																											
A6460		Low Demand Season 24/25 - Start	0	0	0	01-Nov-24*		3	Gantt Chart																											
A6500		Low Demand Season 24/25	176	176	176	01-Nov-24	25-Apr-25	-26	Gantt Chart																											
A6470		Low Demand Season 24/25 - Finish	0	0	0		25-Apr-25*	-26	Gantt Chart																											
A4460		Low Demand Season 25/26 - Start	0	0	0	01-Nov-25*		566	Gantt Chart																											
A6510		Low Demand Season 25/26	150	150	150	01-Nov-25	30-Mar-26	0	Gantt Chart																											
A4470		Low Demand Season 25/26 - Finish	0	0	0		30-Mar-26*	0	Gantt Chart																											
Xcel									Gantt Chart																											
A4580		Xcel Energy Power Feeds in Colorado Blvd.	250	250	250	05-Feb-24*	31-Jan-25	265	Gantt Chart																											
A1130		Temporary Power - Xcel	10	10	10	22-May-24	05-Jun-24	115	Gantt Chart																											
A4280		Coordnate 6" Natural Gas Line Tie in with Utilities (6months prior)	130	130	130	05-Jul-24	10-Jan-25	477	Gantt Chart																											
A4640		Xcel Upgrade Power in Plant - Electrical Area	20	20	20	03-Feb-25	03-Mar-25	291	Gantt Chart																											
A4590		Xcel Complete (ready to energize)	0	0	0		03-Mar-25	421	Gantt Chart																											
Design Phase									Gantt Chart																											
Design									Gantt Chart																											
A1010		Develop 60% Design (100% for LLE, Underground Utility Relcations)	118	118	118	10-Feb-23	28-Jul-23	-20	Gantt Chart																											
A1110		Evaluate Basis Pricing and VE Options	12	12	12	16-Mar-23	31-Mar-23	38	Gantt Chart																											
MSL1000025		60% Design Receipt	0	0	0		28-Jul-23	95	Gantt Chart																											
A6420		Develop EWP Design	10	10	10	29-Sep-23	12-Oct-23	-20	Gantt Chart																											
A1050		Develop 90% Design	70	70	70	13-Oct-23	26-Jan-24	-20	Gantt Chart																											
MSL1000035		90% Design Receipt	0	0	0		26-Jan-24	6	Gantt Chart																											
A1080		Develop 100% Design	51	51	51	29-Jan-24	09-Apr-24	-20	Gantt Chart																											
MSL1000045		100% Design Receipt	0	0	0		09-Apr-24	-20	Gantt Chart																											
Procurement Specifications									Gantt Chart																											
A6070		Procurement Specifications - GAC (P-04)	84	84	84	31-Jul-23	28-Nov-23	195	Gantt Chart																											
A6080		Procurement Specifications - Vertical Turbine Pumps (P-03)	84	84	84	31-Jul-23	28-Nov-23	109	Gantt Chart																											
A6090		Procurement Specifications - Ultrafiltration System (P-05)	64	64	64	31-Jul-23	27-Oct-23	47	Gantt Chart																											
A6120		Procurement Specifications - PEMB (P-06)	80	80	80	29-Sep-23	26-Jan-24	216	Gantt Chart																											
A6130		Procurement Specifications - Generators (P-01)	26	26	26	17-Oct-23	21-Nov-23	47	Gantt Chart																											
A6140		Procurement Specifications - Electrical Switchgear (P-07 & P-02)	21	21	21	27-Dec-23*	26-Jan-24	0	Gantt Chart																											
Owner/Client									Gantt Chart																											
A1020		Owner Review Basis of Cost Model	10	10	10	03-Apr-23	14-Apr-23	38	Gantt Chart																											
A1040		Owner Review 60%	12	12	12	01-Sep-23	19-Sep-23	59	Gantt Chart																											
A1090		Owner Review 90%	10	10	10	02-Apr-24	15-Apr-24	6	Gantt Chart																											
A1100		Owner Review 100% Reconciliation	10	10	10	08-May-24	21-May-24	-20	Gantt Chart																											
Owner/Design - EWP Seperation									Gantt Chart																											
A1440		Storm Water Design - EWP	38	38	38	31-Jul-23	21-Sep-23	-15	Gantt Chart																											
A1460		Yard Piping & JUB Coordination - EWP	43	43	43	31-Jul-23	28-Sep-23	-20	Gantt Chart																											

Data Date: 10-Feb-23

Run Date: 06-Mar-24

Project ID: JTWTP-PC

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Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Last Update Milestone

Milestone

Johnstown WTP Expansion Project - LIVE

JTWTP - Full Schedule

MWH

Building a Better World

[illegible]

Activity ID		Activity Name	Orig Dur	Rem Dur	ACD	Start	Finish	Total Float	2023												2024												2025												2026												2027											
									F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul																		
Civil																																																																				
A4070		Dewatering Prep Membrane Feed Wetwell - Treatment Building	5	5	5	24-May-24	31-May-24	0																																																												
A3980		Excavate Membrane Feed Wetwell - Treatment Building	8	8	8	03-Jun-24	12-Jun-24	0																																																												
A4060		Subgrade Prep Membrane Feed Wetwell - Treatment Building	5	5	5	13-Jun-24	19-Jun-24	0																																																												
A2940		Hydrotest Membrane Feed Wetwell - Treatment Building	10	10	10	02-Aug-24	15-Aug-24	0																																																												
A4010		Backfill Membrane Feed Wetwell - Treatment Building	10	10	10	16-Aug-24	29-Aug-24	0																																																												
A2500		Subgrade Prep Aggregate Piers - Treatment Building	5	5	5	30-Aug-24	06-Sep-24	0																																																												
Concrete/Structural																																																																				
A2470		FRP Slab Membrane Feed Wetwell - Treatment Building	8	8	8	20-Jun-24	01-Jul-24	0																																																												
A4040		Cure Slab Membrane Feed Wetwell - Treatment Building	7	7	7	02-Jul-24	11-Jul-24	0																																																												
A3990		FRP Walls Membrane Feed Wetwell - Treatment Building	8	8	8	12-Jul-24	23-Jul-24	0																																																												
A4030		Cure Walls Membrane Feed Wetwell - Treatment Building	7	7	7	24-Jul-24	01-Aug-24	0																																																												
A4050		Install Shoring - Membrane Feed Wetwell - Treatment Building	5	5	5	24-Jul-24	30-Jul-24	2																																																												
A4000		FRP Deck Membrane Feed Wetwell - Treatment Building	10	10	10	31-Jul-24	13-Aug-24	2																																																												
A2580		Aggregate Piers - Treatment Building	20	20	20	09-Sep-24	04-Oct-24	0																																																												
Work Authorization 2																																																																				
Contract Milestones (L1)																																																																				
MSL1000085		Early Work Package Work Authorization 2 Substantial Completion (08-Jan-26)	0	0	0		08-Jan-26*	0																																																												
P-Packages																																																																				
P-01 Emergency Generators																																																																				
A6670		Develop RFP P-01	5	5	5	22-Nov-23	30-Nov-23	47																																																												
A6680		Bid RFP P-01	15	15	15	01-Dec-23	21-Dec-23	47																																																												
A6690		Review RFP P-01 with town	5	5	5	22-Dec-23	02-Jan-24	47																																																												
A4550		Negotiations, Development, and Execute of Contracts with Vendors - P-01 Emerg	30	30	30	03-Jan-24	14-Feb-24	47																																																												
A1940		Submit/Approve/Deliver Backup Generators (3ea.) (25/25/325)	430	430	430	15-Feb-24	28-Oct-25	47																																																												
P-02 MCC's and SWBD's																																																																				
A6700		Develop RFP P-02	5	5	5	29-Jan-24	02-Feb-24	0																																																												
A6710		Bid RFP P-02	15	15	15	05-Feb-24	26-Feb-24	0																																																												
A6720		Review RFP P-02 with town	5	5	5	27-Feb-24	04-Mar-24	0																																																												
A4630		Negotiations, Development, and Execute of Contracts with Vendors - P-02 Motor i	30	30	30	05-Mar-24	15-Apr-24	0																																																												
A2320		Procure/Submit/Approve/Deliver MCCs (3ea.) (30/80/25/300)	435	435	435	16-Apr-24	08-Jan-26	0																																																												
A1950		Procure/Submit/Approve/Deliver SWBDs (3ea.) (30/80/25/300)	435	435	435	22-May-24	17-Feb-26	0																																																												
P-03 Vertical Turbine Pumps																																																																				
A6730		Develop RFP P-03	5	5	5	29-Nov-23	05-Dec-23	109																																																												
A6740		Bid RFP P-03	15	15	15	06-Dec-23	28-Dec-23	109																																																												
A6750		Review RFP P-03 with town	5	5	5	29-Dec-23	05-Jan-24	109																																																												
A4710		Negotiations, Development, and Execute of Contracts with Vendors - P-03 Vertica	30	30	30	08-Jan-24	20-Feb-24	109																																																												
A2810		Submit/Approve/Deliver Vertical Turbine Pumps (35/25/260)	365	365	365	21-Feb-24	31-Jul-25	109																																																												
P-04 GAC Vessels and Media																																																																				
A6760		Develop RFP P-04	5	5	5	29-Nov-23	05-Dec-23	195																																																												
A6770		Bid RFP P-04	15	15	15	06-Dec-23	28-Dec-23	195																																																												
A6780		Review RFP P-04 with town	5	5	5	29-Dec-23	05-Jan-24	195																																																												
A4790		Negotiations, Development, and Execute of Contracts with Vendors - P-04 GAC V	30	30	30	08-Jan-24	20-Feb-24	195																																																												
A3420		Submit/Approve/Deliver GAC Vessels (35/25/130)	215	215	215	21-Feb-24	26-Dec-24	195																																																												
P-05 Assignment of Membrane Supply																																																																				
A1240		Owner Procure/Submit/Approve Membrane Package	163	163	163	10-Feb-23	02-Oct-23	339																																																												
A6790		Develop RFP P-05	5	5	5	30-Oct-23	03-Nov-23	265																																																												
A6800		Bid RFP P-05	15	15	15	06-Nov-23	28-Nov-23	265																																																												
A6810		Review RFP P-05 with town	5	5	5	29-Nov-23	05-Dec-23	265																																																												
A4870		Negotiations, Development, and Execute of Contracts with Vendors - P-05 Assign	30	30	30	06-Dec-23	22-Jan-24	265																																																												
A1230		Deliver Membrane Package (180 WDs)	180	180	180	23-Jan-24	04-Oct-24	265																																																												

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Run Date: 06-Mar-24

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Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Last Update Milestone

Milestone

Johnstown WTP Expansion Project - LIVE

JTWTP - Full Schedule

MWH

Building a Better World

Activity ID		Activity Name		Orig Dur	Rem Dur	ACD	Start	Finish	Total Float	2023												2024												2025												2026												2027																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
										F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
P-06 Pre-Engineered Metal Building (Treatment Building Only)				250	250	250	29-Jan-24	24-Jan-25	216																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

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Activity ID		Activity Name	Orig Dur	Rem Dur	ACD	Start	Finish	Total Float	2023														2024														2025														2026														2027																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
									F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	A8840	Cure Deck - Drain Pump Station	28	28	28	13-Nov-24	10-Dec-24	159																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

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Activity ID		Activity Name	Orig Dur	Rem Dur	ACD	Start	Finish	Total Float	2023												2024												2025												2026												2027											
									F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul																		
Division 13 - Special Construction (Residuals & DCB)																																																																				
S3250	Execute Agreement Cleaning and Disinfection of Water Treatment Plant		30	30	30	22-May-24	03-Jul-24	529	Execute Agreement Cleaning and Disinfection of Water Treatment Plant																																																											
S3300	Execute Agreement Metal Building Systems (Residuals & DCB)		30	30	30	22-May-24	03-Jul-24	145	Execute Agreement Metal Building Systems (Residuals & DCB)																																																											
S3350	Execute Agreement Lightning Protection Systems		30	30	30	22-May-24	03-Jul-24	542	Execute Agreement Lightning Protection Systems																																																											
S3260	Develop Submittal Cleaning and Disinfection of Water Treatment Plant		10	10	10	05-Jul-24	18-Jul-24	529	Develop Submittal Cleaning and Disinfection of Water Treatment Plant																																																											
S3310	Develop Submittal Metal Building Systems (Residuals & DCB)		10	10	10	05-Jul-24	18-Jul-24	145	Develop Submittal Metal Building Systems (Residuals & DCB)																																																											
S3360	Develop Submittal Lightning Protection Systems		10	10	10	05-Jul-24	18-Jul-24	542	Develop Submittal Lightning Protection Systems																																																											
S3270	MWH Review and Approve Cleaning and Disinfection of Water Treatment Plant		5	5	5	19-Jul-24	25-Jul-24	529	MWH Review and Approve Cleaning and Disinfection of Water Treatment Plant																																																											
S3320	MWH Review and Approve Metal Building Systems (Residuals & DCB)		5	5	5	19-Jul-24	25-Jul-24	145	MWH Review and Approve Metal Building Systems (Residuals & DCB)																																																											
S3370	MWH Review and Approve Lightning Protection Systems		5	5	5	19-Jul-24	25-Jul-24	542	MWH Review and Approve Lightning Protection Systems																																																											
S3280	Engineer Review and Approve Cleaning and Disinfection of Water Treatment Plan		20	20	20	26-Jul-24	22-Aug-24	529	Engineer Review and Approve Cleaning and Disinfection of Water Treatment Plant																																																											
S3330	Engineer Review and Approve Metal Building Systems (Residuals & DCB)		20	20	20	26-Jul-24	22-Aug-24	145	Engineer Review and Approve Metal Building Systems (Residuals & DCB)																																																											
S3380	Engineer Review and Approve Lightning Protection Systems		20	20	20	26-Jul-24	22-Aug-24	542	Engineer Review and Approve Lightning Protection Systems																																																											
S3290	Fabricate and Deliver Cleaning and Disinfection of Water Treatment Plant		30	30	30	23-Aug-24	04-Oct-24	529	Fabricate and Deliver Cleaning and Disinfection of Water Treatment Plant																																																											
S3340	Fabricate and Deliver Metal Building Systems (Residuals & DCB)		130	130	130	23-Aug-24	04-Mar-25	145	Fabricate and Deliver Metal Building Systems (Residuals & DCB)																																																											
S3390	Fabricate and Deliver Lightning Protection Systems		30	30	30	23-Aug-24	04-Oct-24	542	Fabricate and Deliver Lightning Protection Systems																																																											
Division 22 - Plumbing																																																																				
S3450	Execute Agreement Sleeves and Sleeve Seals for Plumbing Piping		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Sleeves and Sleeve Seals for Plumbing Piping																																																											
S3500	Execute Agreement Escutcheons for Plumbing Piping		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Escutcheons for Plumbing Piping																																																											
S3550	Execute Agreement Meters and Gauges for Plumbing Piping		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Meters and Gauges for Plumbing Piping																																																											
S3600	Execute Agreement General-Duty Valves for Plumbing Piping		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement General-Duty Valves for Plumbing Piping																																																											
S3650	Execute Agreement Hangers and Supports for Plumbing Piping and Equipment		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Hangers and Supports for Plumbing Piping and Equipment																																																											
S3700	Execute Agreement Identification for Plumbing Piping and Equipment		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Identification for Plumbing Piping and Equipment																																																											
S3750	Execute Agreement Plumbing Piping Insulation		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Plumbing Piping Insulation																																																											
S3800	Execute Agreement Domestic Water Piping		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Domestic Water Piping																																																											
S3850	Execute Agreement Domestic Water Piping Specialties		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Domestic Water Piping Specialties																																																											
S3900	Execute Agreement Domestic Water pumps		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Domestic Water pumps																																																											
S3950	Execute Agreement Sanitary, Waste, and Vent Piping		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Sanitary, Waste, and Vent Piping																																																											
S4000	Execute Agreement Sanitary Waste Piping Specialties		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Sanitary Waste Piping Specialties																																																											
S4050	Execute Agreement Sump Pumps		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Sump Pumps																																																											
S4100	Execute Agreement Fuel-Fired, Domestic-Water Heaters		30	30	30	22-May-24	03-Jul-24	290	Execute Agreement Fuel-Fired, Domestic-Water Heaters																																																											
S4150	Execute Agreement Commercial Water Closets		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Commercial Water Closets																																																											
S4200	Execute Agreement Commercial Urinals		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Commercial Urinals																																																											
S4250	Execute Agreement Commercial Lavatories		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Commercial Lavatories																																																											
S4300	Execute Agreement Commercial Sinks		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Commercial Sinks																																																											
S4350	Execute Agreement Emergency Plumbing Fixtures		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Emergency Plumbing Fixtures																																																											
S4400	Execute Agreement Pressure Water Coolers		30	30	30	22-May-24	03-Jul-24	552	Execute Agreement Pressure Water Coolers																																																											
S3460	Develop Submittal Sleeves and Sleeve Seals for Plumbing Piping		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Sleeves and Sleeve Seals for Plumbing Piping																																																											
S3510	Develop Submittal Escutcheons for Plumbing Piping		10	10	10	05-Jul-24	18-Jul-24	552	Develop Submittal Escutcheons for Plumbing Piping																																																											
S3560	Develop Submittal Meters and Gauges for Plumbing Piping		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Meters and Gauges for Plumbing Piping																																																											
S3610	Develop Submittal General-Duty Valves for Plumbing Piping		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal General-Duty Valves for Plumbing Piping																																																											
S3660	Develop Submittal Hangers and Supports for Plumbing Piping and Equipment		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Hangers and Supports for Plumbing Piping and Equipment																																																											
S3710	Develop Submittal Identification for Plumbing Piping and Equipment		10	10	10	05-Jul-24	18-Jul-24	552	Develop Submittal Identification for Plumbing Piping and Equipment																																																											
S3760	Develop Submittal Plumbing Piping Insulation		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Plumbing Piping Insulation																																																											
S3810	Develop Submittal Domestic Water Piping		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Domestic Water Piping																																																											
S3860	Develop Submittal Domestic Water Piping Specialties		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Domestic Water Piping Specialties																																																											
S3910	Develop Submittal Domestic Water pumps		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Domestic Water pumps																																																											
S3960	Develop Submittal Sanitary, Waste, and Vent Piping		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Sanitary, Waste, and Vent Piping																																																											
S4010	Develop Submittal Sanitary Waste Piping Specialties		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Sanitary Waste Piping Specialties																																																											
S4060	Develop Submittal Sump Pumps		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Sump Pumps																																																											
S4110	Develop Submittal Fuel-Fired, Domestic-Water Heaters		10	10	10	05-Jul-24	18-Jul-24	290	Develop Submittal Fuel-Fired, Domestic-Water Heaters																																																											
S4160	Develop Submittal Commercial Water Closets		10	10	10	05-Jul-24	18-Jul-24	552	Develop Submittal Commercial Water Closets																																																											

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Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Last Update Milestone

Milestone

Johnstown WTP Expansion Project - LIVE

JTWTP - Full Schedule

MWH

Building a Better World

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