

This is **EXHIBIT K**, consisting of 14 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. 03

The Effective Date of this Amendment is: September 29, 2022.

Background Data

Effective Date of Owner-Engineer Agreement: August 17, 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

Engineer shall provide the following services as summarized below and described in detail following:

1. Revise the existing 30% complete design package from a treatment train of ozone and biologically active filtration (O₃/BAF) to a treatment train of membrane filtration and granular activated carbon contactors (MF/GAC), per the attached Exhibits.
 - a. Modify the Blending Vault
 - b. Modify the Pretreatment Building improvements and include a sodium permanganate system
 - c. Revise the entire Treatment Building from O₃/BAF to MF/GAC
 - d. Modification of the proposed electrical distribution system

2. Update procurement documents
3. Conduct a series of MF/GAC Design Workshops to evaluate, collaborate and make determinations on the project scope.
4. Revise the work product prepared to date on MF/GAC and decisions made during the MF/GAC Design Workshops. No formal design submittal until the 60% milestone.
5. Site investigations
6. Provide credit for Task Series 600 – CMAR Selection & Collaboration tasks, as performed by the Owner.

TASK SERIES 1300 – 40% DESIGN AS MF/GAC

Task 1301 – Project, Risk and Resource Management, Schedule, and Budget Controls

Engineer shall provide project management services for the revised preliminary design package includes project coordination between the Owner and the team members. The Engineer will monitor project status, monitor project schedule, monitor project deliverables, and coordinate resources including sub-Engineers. The Engineer will maintain the action, decision, potential change, and risk register throughout the course of the design phase. The Engineer will utilize our internal accounting systems to track budget and manage project scope.

Task 1304 - Develop Preliminary MF/GAC Design

Engineer shall develop the preliminary designs for the scope listed above. The preliminary MF/GAC design will consist of civil, architectural, structural, process, mechanical, electrical, and pipeline details to convey the intended scope of improvements. Engineer will provide interim, progress prints in PDF format of the preliminary MF/GAC design in accordance with Engineer's and/or sub-consultant's drafting standards. No formal drawing set will be produced for the preliminary MF/GAC design.

Updated drawings or exhibits include:

- a. Revised civil site plans
 - i. Access roads
 - ii. Grading and drainage
 - iii. Yard piping
- b. Updated structural drawings
 - iv. Create new Treatment Building models
 - v. Plans and sections
 - vi. Details
- c. Update architectural drawings
 - vii. Create new Treatment Building models
 - viii. Code review and egress plans
 - ix. Elevations
 - x. Plans and sections
 - xi. Details
 - xii. Isometric Views
- d. Updated plumbing, heating, and ventilation drawings
 - xiii. Create new Treatment Building models
- e. Update process drawings
 - xiv. Design criteria
 - xv. Hydraulic profile

- xvi. Equipment, pipe, and valve schedules
- xvii. Modify the existing Blending Vault model
- xviii. Create new Treatment Building models
- xix. Modify the existing Residuals Building as a single story
- f. Update electrical drawings
 - xx. One-line diagrams
 - xxi. Load calculations
 - xxii. Demolition drawings
 - xxiii. Network architecture
 - xxiv. Process & instrumentation diagrams

This task includes updating the draft specifications, where affected by MF/GAC. The Engineer shall finalize the process flow diagram for the overall WTP as MF/GAC. The process flow diagram shall indicate the overall process flow but shall not include most valves or the number of equipment items. The Engineer will finalize the unit process sizing and include the information in a process design sheet, suitable for inclusion in the 60% complete design package.

Task 1305 – MF/GAC Design Workshops

Engineer shall schedule, prepare meeting materials, and host a series of MF/GAC Design Workshops at the Owner's offices. The MF/GAC Design Workshops will be used to present design concepts, receive Owner input, collaborate, and make design decisions on new or modified scope items. Engineer shall provide summary notes after each workshop and update the Decision Log and Cost Trending tool.

Eight (8) MF/GAC Design Workshops are assumed to resolve conceptual design for the following areas where the scope is not fully defined:

1. MF selection criteria and MF/GAC equipment layout
2. Site civil and potential early work package
3. Electrical distribution and backup power supply
4. Blending vault, distribution, and storage pump stations
5. Building and architectural considerations
6. Residuals building
7. Administration and/or maintenance spaces, disinfection contact basin
8. Pretreatment building modifications

Task 1306 – Update Basis of Design Report & Opinion of Probable Cost:

Engineer shall update the Basis of Design Report (BODR) with decisions made during the preliminary MF/GAC design phase. Engineer shall update the existing Option C Opinion of Probable Cost (OPC) of August 2022 based on the preliminary MF/GAC design. OPC shall comply with AACE Class 4 definition.

Engineer shall prepare a Cost Trending tool, based on design decisions made at the MF/GAC Design Workshops and recorded in the existing Action/Decision/PCO log. Engineer shall assign Rough Order of Magnitude costs for design decisions and trend costs against the existing conceptual estimate for Option C – MF/GAC, as prepared in August 2022.

This cost opinion will be submitted along with the BODR for review and comment by the Owner. The cost opinion will be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Assumptions will be included for reference.

Detailed and Final Design

The following tasks series will be performed by Engineer for the MF/GAC treatment train as defined in the existing Agreement between Owner and Engineer for Professional Services dated August 17, 2021.

- Task Series 400 – Detailed Design (60%)
 - Task 401 - Prepare 60% Design
 - Task 403 - Review Meeting 2 - 60% Design
 - Task 404 - Initial Permitting Support
- Task Series 500 – Final Design (90%)
 - Task 501 - Prepare 90% Design
 - Task 502 - Review Meeting 3 - 90% Design
 - Task 503 - Final Permitting Support
 - Task 504 - Prepare Construction Documents
 - Task 505 - Review Meeting 4 – Construction Documents

Task Series 400 – Detailed Design (60%) will not start until the selection of the preferred MF and GAC suppliers, based on the proposal submittals including sufficient technical information to act as the basis of design. Technical information shall include overall process description, equipment lists, general arrangements, estimated equipment weights, equipment cut sheets, chemical and power consumption, process, and control narratives.

No early work packages are assumed except the complete 60% and 90% design submittals. Engineer shall work with the Owner and CMAR to evaluate the cost and schedule benefit of potential early work packages.

TASK SERIES 1400 – MF/GAC PROCUREMENT

Task 1401 - Prepare Procurement Request for Proposals Packages

Engineer shall prepare technical documents for the Town to administer the early selection and procurement of the MF and GAC systems (FIL-01 Membrane Filtration, GAC-01 Granular Activated Carbon System). Technical documents include specifications and general arrangement drawings. Engineer shall develop procurement packages for MF/GAC vendors to evaluate and select the preferred technology. Engineer shall use the available data to develop performance criteria for selection. Engineer shall develop qualifications for vendor acceptance. Town shall provide front-end procurement documents and facilitate the solicitation and receipt of proposals.

The following procurement packages were developed for O₃/BAF. Their associated technical specifications will be updated for MF/GAC with the 60% design.

- i. CHM-01 Chemical feed systems
- ii. ELE-01 Electrical gear, power panels, VFDs, MCCs
- iii. ELE-02 Control panels
- iv. GEN-01 Generators
- v. MOV-01 Motor operated valves

- vi. PMP-01 Vertical and inline centrifugal pumps
- vii. PMP-02 Progressive cavity pumps
- viii. PMP-03 Centrifugal pumps
- ix. PMP-04 Sample and miscellaneous pumps
- x. TNK-01 Tanks

Task 1402 - Procurement Period Support

Engineer shall support the Owner by responding in writing to questions received from equipment vendors.

Task 1403 - Evaluation & Negotiation of Procurement Packages

Engineer shall assist the Owner with evaluation of the received equipment package bids. Engineer shall facilitate a selection of the preferred equipment supplier, based on monetary and non-monetary criteria. This scope of work assumes a Design-Build approach, with the Design-Builder assuming responsibility for procurement of the equipment packages after selection by the Owner and Engineer.

Task 1404 - Submittal Review

Engineer shall review compliance submittals from equipment suppliers. Includes initial submittal review, coordination meetings and resubmittal review.

TASK SERIES 1500 – REDEFINE PROJECT SCOPE (May to September 2022)

Task 1501 – Project Meetings & Coordination

Engineer shall organize project meetings and coordinate with the project team from the 30% design milestone to the redefinition of the project as MF/GAC. Task includes providing project background, summarizing the basis of design, revisiting design decisions resolved at previous workshops and hosting coordination meetings with the Owner and Owner's Representative. Meetings include Workshops 15 and 16, Owner's Representative meetings on August 4 and 8. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

Task 1502 – Alternatives Analysis

Engineer shall prepare two alternative treatment train options to the 30% preliminary design, including process train layouts, initial sizing calculations, construction phasing constraints, integration points with the existing WTP and potential impacts to the existing WTP operations. Engineer shall develop opinions of probable construction costs for three options. Engineer shall develop assumptions for 20-year net present value comparison. Engineer shall prepare equipment design criteria and coordinate with equipment suppliers for budgetary quotes. Engineer shall present options to Owner and Owner's Representative at a workshop. Engineer shall develop a framework for non-monetary evaluation of three Options. Engineer shall present the 20-year net present value at a design meeting. Engineer shall coordinate a selection workshop at the Owner's office. Engineer shall prepare meeting materials and attend a working session with the Town Council to present the alternatives analysis.

Task 1503 – Scope Options & Cost Models

Engineer shall develop a list of potential scope changes and value engineering concepts in an effort to manage project estimated construction costs. Engineer shall develop a scope for each potential change, including sketches and design criteria, where applicable. Engineer shall evaluate the feasibility of potential scope items to consider the impact on future and existing WTP operations and project goals. Engineer shall use the 30% opinion of probable costs model to establish the estimate cost impact of each potential scope change. Engineer shall

collaborate with Owner and Owner's representative at design workshops to evaluate the merit of including potential scope change items in a redefined project scope.

TASK SERIES 600 – CMAR Selection & Collaboration

The following tasks shall be performed by the Owner instead of the Engineer. The following tasks shall be deleted from the Engineer's scope in the original agreement. Cost credit for the tasks no longer performed by the Engineer are included in this amendment.

603 – Prepare Request for Qualifications (RFQ) Documents

604 - Review Meeting 5 - CMAR RFQ Documents

605 - Evaluation of Received Qualification Packages & Development of Short List

606 - Preparation of Request for Proposals (RFP)

607 - Review Meeting 6 - CMAR RFP Documents

608 - RFP Period Support

609 - Evaluation of CMAR Proposals & Contractor Negotiation

Agreement Summary (Basic Services):

Original agreement amount:	\$2,059,442
Net change for prior amendments	\$ 527,154
This amendment amount:	\$ 618,791
Adjusted Agreement amount:	\$3,205,387
Change in time for services (days or date, as applicable)	254 days

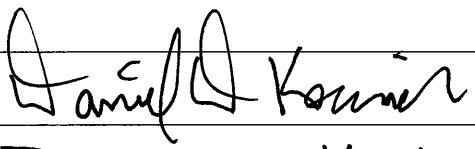
The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

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: _____

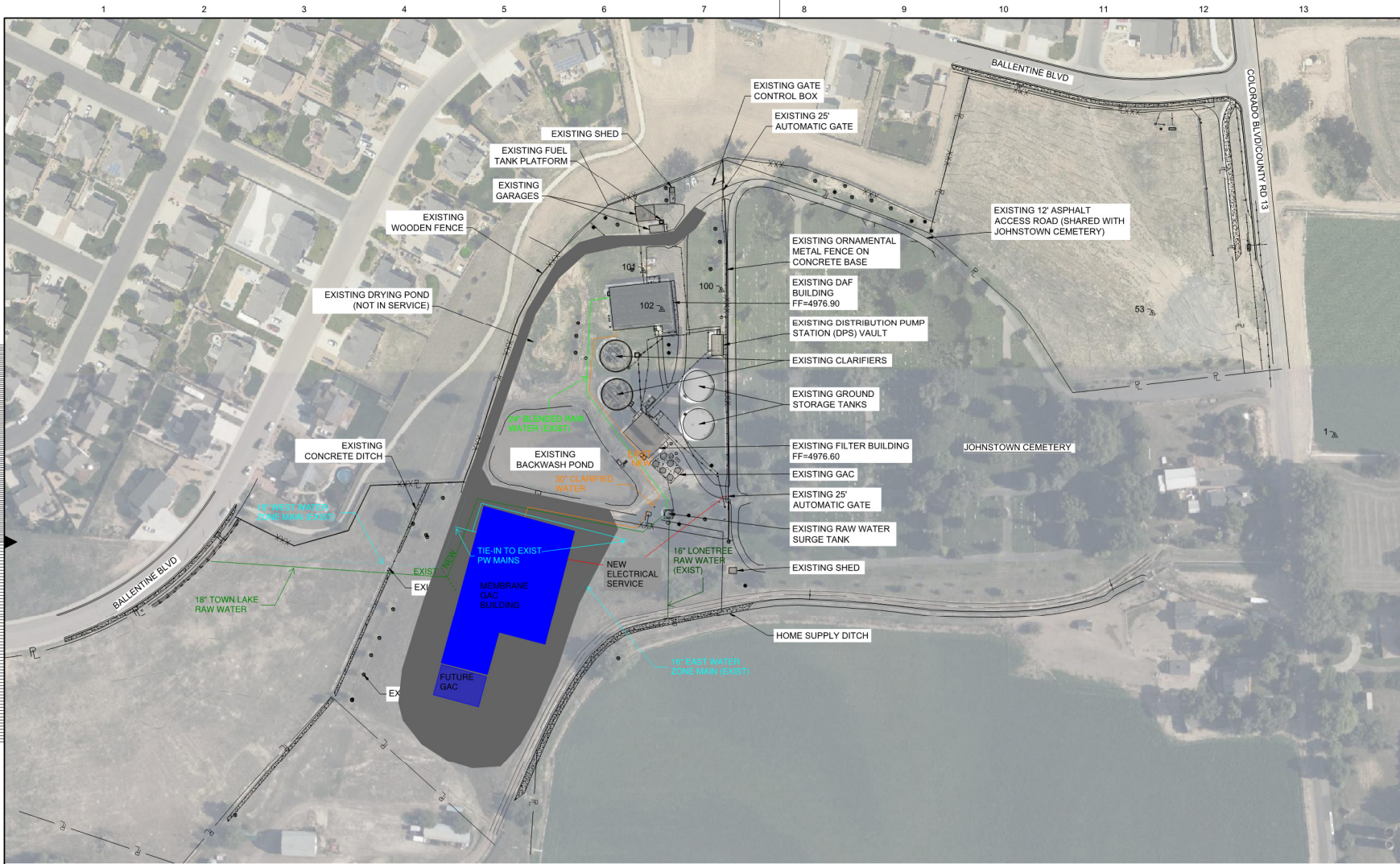
By: 
Print
name: Daniel D. Korinek

Title: _____

Title: Vice President

Date Signed: _____

Date Signed: 9/28/2022



no.	date	by	ckd	description
A	3/10/22	JHB	NT	15% REVIEW
B	5/5/22	JHB	NT	30% REVIEW

PRELIMINARY - NOT FOR CONSTRUCTION



date	FEBRUARY 2022	detailed	J. BROTHERS
designed	J. BROTHERS	checked	N. TESSITORE

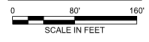


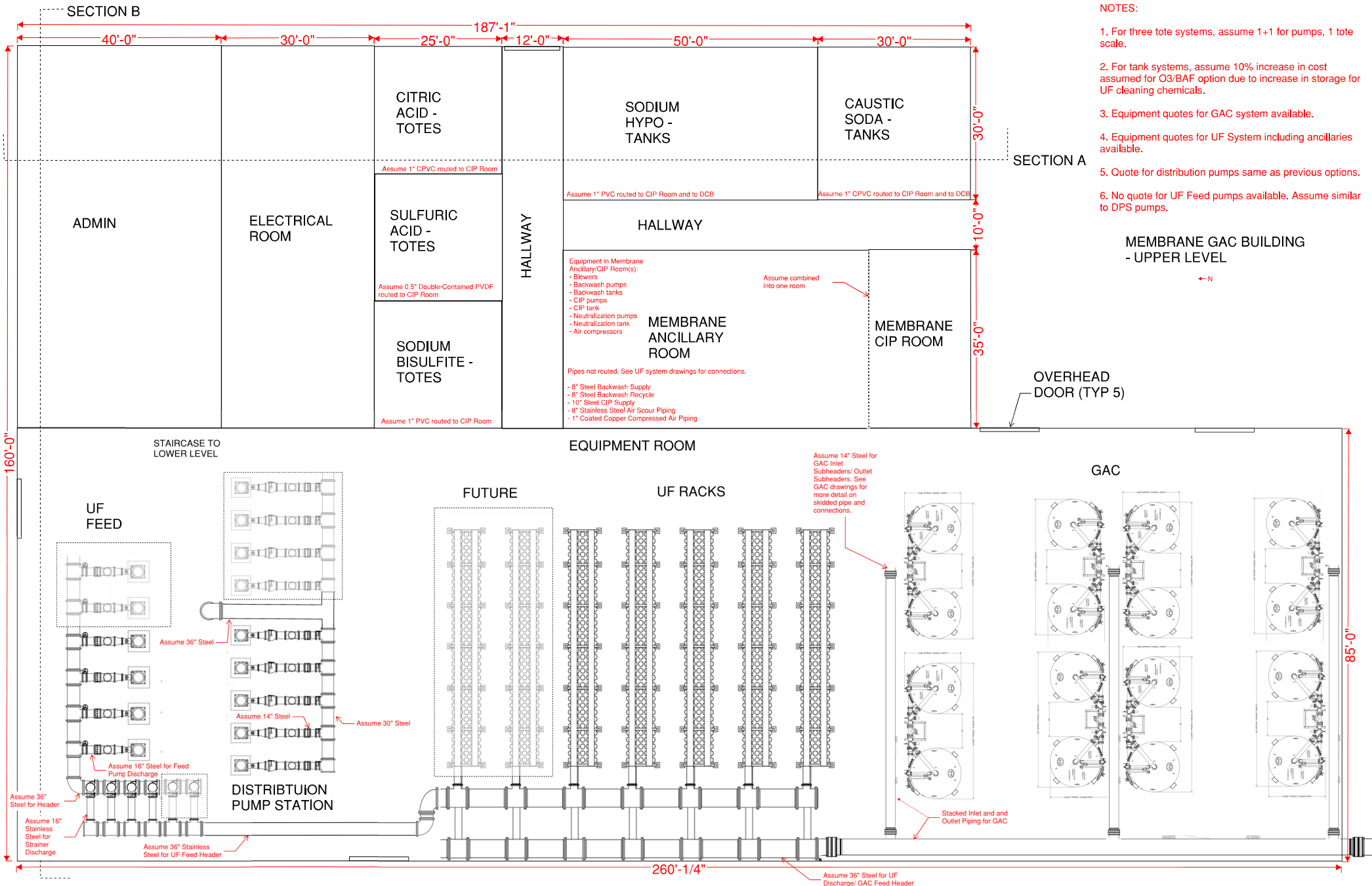
JOHNSTOWN WTP EXPANSION		
EXISTING CONDITIONS & SURVEY CONTROL PLAN		
project	contract	
137834	-	
drawing	rev.	
00CS-101	B	
sheet	of	sheets
file	137834_00CS-101_XP.dwg	

SURVEY CONTROL POINT TABLE

POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	CP - FSI BM	1366536.8260	3155600.9760	4950.98
53	CP - NE RD	1366733.5200	3155309.2960	4958.10
100	CP - EX EAST	1366769.9380	3154619.7810	4976.26
101	CP - EX NORTH	1366800.3820	3154494.3790	4976.14
102	CP - INT DAF	1366739.0520	3154524.5630	4976.78

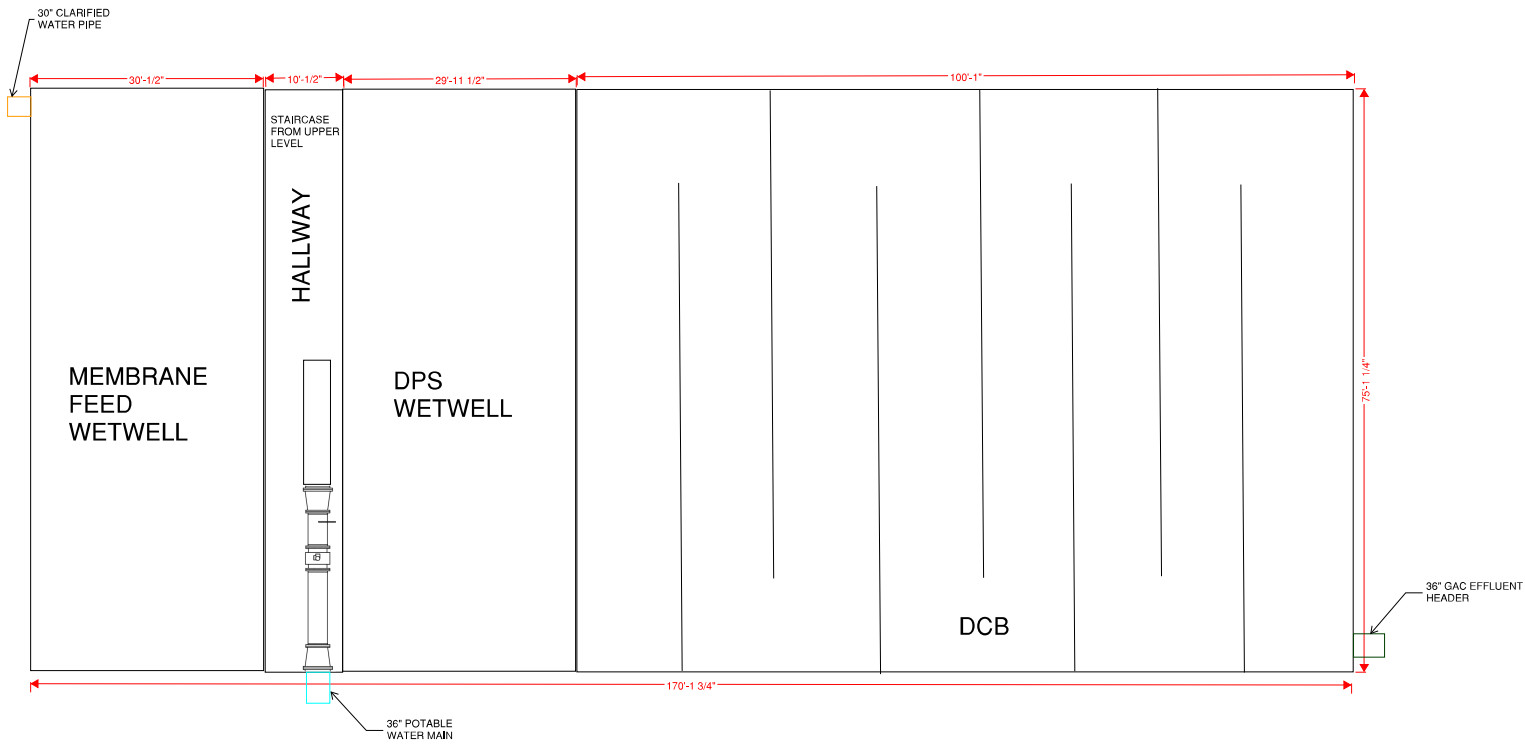
EXISTING CONDITIONS & SURVEY CONTROL PLAN



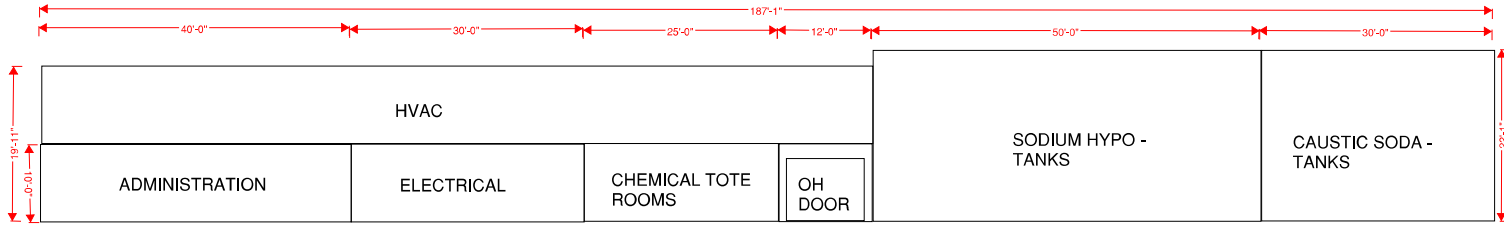


- NOTES:**
1. For three tote systems, assume 1+1 for pumps, 1 tote scale.
 2. For tank systems, assume 10% increase in cost assumed for O3/BAF option due to increase in storage for UF cleaning chemicals.
 3. Equipment quotes for GAC system available.
 4. Equipment quotes for UF System including ancillaries available.
 5. Quote for distribution pumps same as previous options.
 6. No quote for UF Feed pumps available. Assume similar to DPS pumps.

MEMBRANE GAC BUILDING -
LOWER LEVEL

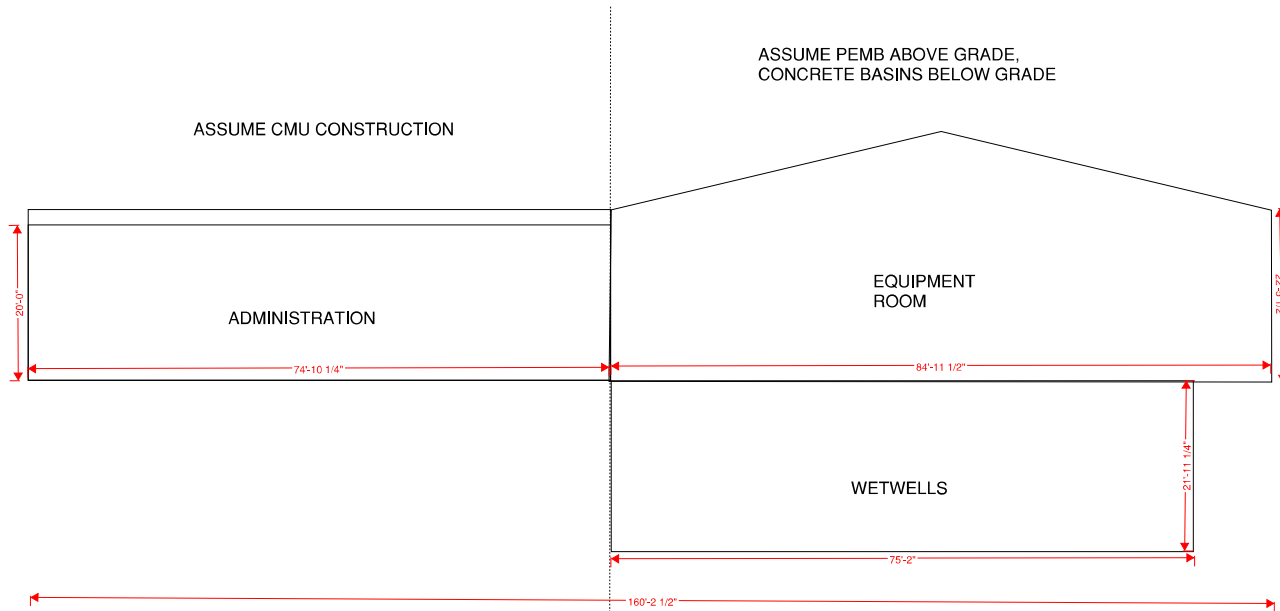


ASSUME CMU CONSTRUCTION

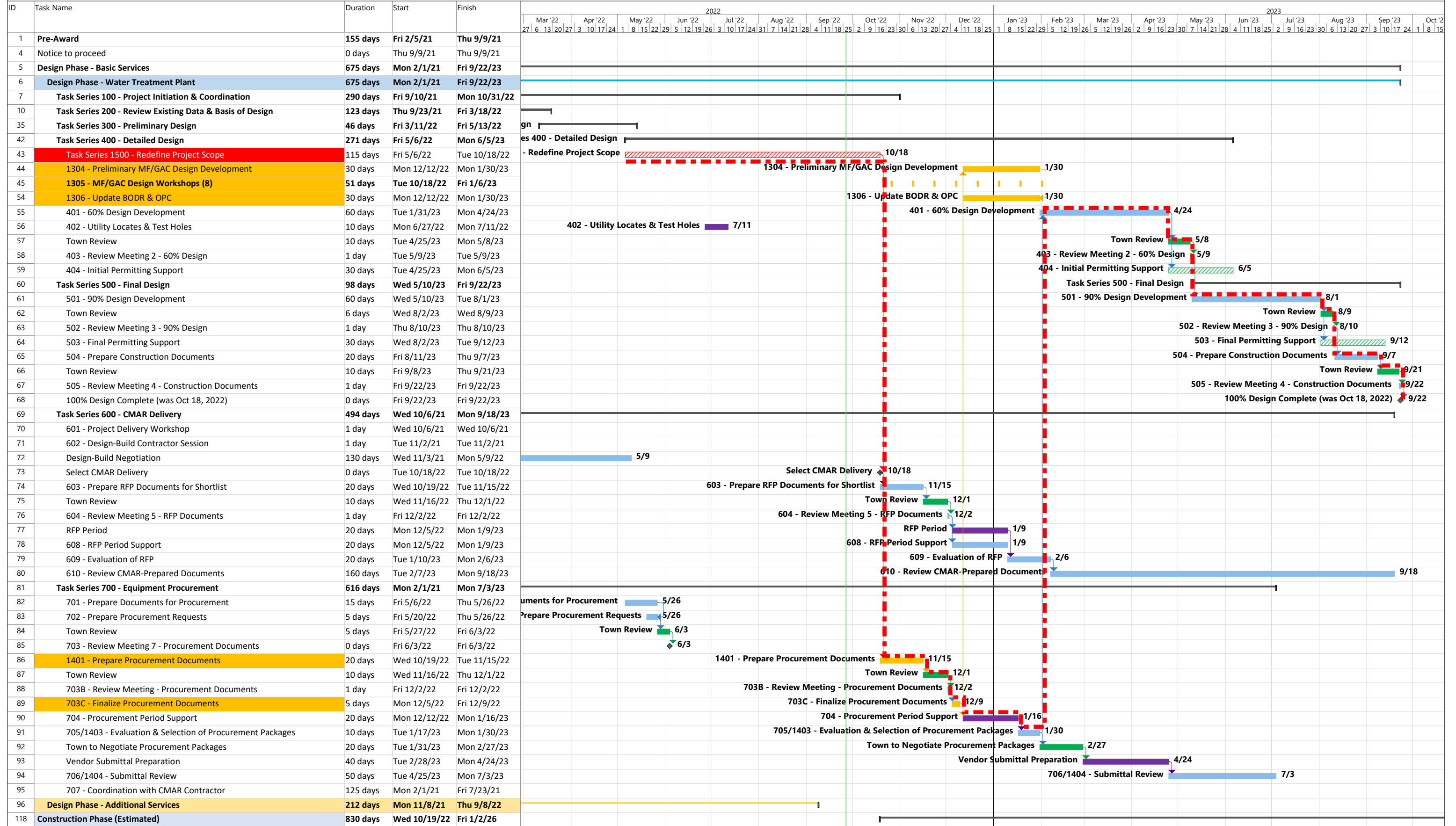


SECTION A

ASSUME PEMB ABOVE GRADE,
CONCRETE BASINS BELOW GRADE



SECTION B



Town of Johnstown
 Water Treatment Plant Expansion from 5 to 12.5 mgd
 Amendment 03 - Work Breakdown Structure and Fee Schedule

Rev 2

Activity	Project Manager	Quality Control	Lead Process	Process	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	BMcD Total Labor		Expenses	Sub-Consultants	Total Cost
	Pugh	Schaefer	Lundgren	Wetz	Kienholz	Dalglisch Lang	Brothers Tessitore	Olsen	Patwari Baker	Kuntz Waddell	Hours	Cost	Direct	Cost	
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
TASK SERIES 1300 - Preliminary MF/GAC Design															
1301 - Project, Risk and Resource Management, Schedule and Budget Controls	40										40	\$10,600	\$420		\$ 11,020
1304 - Develop Preliminary MF/GAC Design	80	12	320	400	250	225	98	100	240	40	1,765	\$359,807	\$14,390		\$ 374,197
1305 - MF/GAC Design Workshops ¹	32		32		8	8	4		16		100	\$21,554	\$860		\$ 22,414
1306 - Update BODR & OPC	20	4	32	48	8	8	24	12	20	16	192	\$38,880	\$1,560		\$ 40,440
Sub-Total Series 1300	172	16	384	448	266	241	126	112	276	56	2,097	\$430,840	\$17,230	\$0	\$448,070
TASK SERIES 1400 - MF/GAC Procurement															
1401 - Prepare Procurement Request for Proposals	32	4	40	120					40		236	\$44,116	\$1,760		\$ 45,876
1402 - Procurement Period Support	4		8	4					8		24	\$4,655	\$190		\$ 4,845
1403 - Evaluation & Negotiation of Procurement Packages ²	4		4	8					8	4	28	\$5,684	\$230		\$ 5,914
1404 - Submittal Review ³	8		24	40	8			4	20		104	\$19,864	\$790		\$ 20,654
Sub-Total Series 1400	48	4	76	172	8	0	0	4	76	4	392	\$74,320	\$2,970	\$0	\$77,290
TASK SERIES 1500 - Redefining Scope (May to September, 2022)															
1501 - Project Meetings & Coordination	34		62								96	\$19,302	\$770		\$ 20,072
1502 - Alternative Analysis	27.5		41.5								69	\$14,177	\$570		\$ 14,747
1503 - Scope Options & Cost Models	79.5		128.5	32.5		25.5	24.5		79	68.5	438	\$91,152	\$3,650		\$ 94,802
Sub-Total Series 1500	141	0	232	32.5	0	25.5	24.5	0	79	68.5	603	\$124,631	\$4,990	\$0	\$129,621
TASK SERIES 600 - CMAR Selection (Credit for Owner-Performed Tasks)															
603 - Preparation of Request for Qualifications Documents															\$ (7,820)
604 - Review Meeting 5 - CMAR RFQ Documents															\$ (2,876)
605 - Evaluation of Received Qualification Packages & Development of Short List															\$ (4,448)
606 - Preparation of Request for Proposals															\$ (8,778)
607 - Review Meeting 6 - CMAR RFP Documents															\$ (2,876)
608 - RFP Period Support															\$ (4,136)
609 - Review of Cost Estimates, Schedules, Value Engineering & Constructability Issues															\$ (5,256)
Sub-Total Series 600	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	-\$36,190
Project Subtotals	361	20	692	652.5	274	266.5	150.5	116	431	128.5	3,092	\$629,791	\$25,190	\$0	\$618,791
Project Total															\$618,791

Notes:

1. Assumes 8 MF/GAC Workshops
2. In addition to efforts carried in original scope for Ozone/BAF (Task 705)
3. In addition to efforts carried in original scope for Ozone/BAF (Task 706)