

CITY OF COALINGA

**WATER FILTRATION PLANT AND DISTRIBUTION INFRASTRUCTURE PROJECTS
PRELIMINARY DESIGN REPORT**

**CONSULTING SERVICES
TASK ORDER NO. 1**

May 6, 2021

Black Water is pleased to present this proposal for engineering services to evaluate and prepare conceptual design of the proposed water filtration plant revenue bond projects. Evaluation of the projects will include cost estimates for equipment and materials needed to build the improvements. This scope includes the preparation of a Technical Report that evaluates the proposed water filtration plant improvements, provides budget level cost estimates, and recommends priorities and sequencing strategies for completing the work.

SCOPE OF WORK

Black Water has completed a site visit and reviewed the project descriptions with City management staff and operators to understand the goals of this endeavor for maximizing spending of revenue bond money efficiently and quickly for the water filtration plant improvements, as follows:

- Rehabilitation of Flocculation Basins 1 and 2.
- Air scour for filter beds: Replace existing ceramic underdrains with plastic undrains for adding air scour to filters 1, 2, and 4. As part of the project, the media will also be replaced.
- Rehabilitation of the sludge dewatering basins and piping system.
- Moss screen replacement at the Coalinga Canal intake.
- Wash water tank: evaluate two alternatives - repair of the tank and rerouting piping to fill tank from the distribution system to eliminate or provide added reliability of the tank with a bypass option.
- Replacement of filter valve actuators.

Task 1: Information Collection and Review

On 4/22/21, Black Water's engineers met with City management and operations staff to discuss project goals and schedule and inspect the existing processes at the plant.

Black Water's Project Manager will prepare a list and request available documents and records including as-built drawings, design criteria, permits, O&M manuals and records, and compliance reporting and history. This will help expedite the information collection and review process.

In addition to obtaining these relevant documents will be conferring with the operations staff and understanding their perspectives on what is working and not working at the plant. Gleaning this institutional knowledge from those have who hands-on understanding of the facility's liabilities,

strengths, and opportunities is an essential component to our developing a report that will be useful for future planning of capital investment in the plant and achieving the City's water treatment and sustainability goals.

Task 2: Technical Report

Following our careful review of the relevant documents and assessment of the existing plant, Black Water will begin preparing the draft Technical Report. At a minimum, the sections of the report will include:

- Background of Water Filtration Plant
- Description of problems
- Summary of current and anticipated future regulatory requirements
- CEQA considerations
- Development of project options
- Evaluation criteria and methodology
- Comparison of options
- Planning level cost estimates
- Summary and recommendations
- References

The draft report will be prepared and internally reviewed following our quality assurance protocol, then submitted to the City for review and comment. At that time, Black Water will schedule and conduct a project review meeting to discuss and resolve any questions resulting from the City's review. The meeting will also be used to develop a consensus for completing the study and preparing a final document.

Deliverables: Preliminary and Final Technical Report provided in electronic format.

Task 3: Project Meetings and Administration

This task includes two (2) on-site project meetings with the client. Administration includes general office and overhead activities directly attributed to tracking and managing the progress of the project. Typical tasks include phone calls, copying and production, budget and schedule tracking, resource allocation, and invoicing.

Task 4 (Optional): Support and Presentation of Final Technical Report to the City Council

For this task, Black Water will work with City staff to prepare and present the results of the study to the City Council. This includes the preparation of exhibits and presentation documents, providing a summary narrative of the methodology and recommendations of the study, and respond to questions or comments from the council or the public.

Exclusions:

Construction Documents
Surveys
CEQA
Permitting
Agency Fees

In the event where the budget may be exceeded for a task, or where the City requests an addition to the scope, we will work with the City first to identify available budget under the current contract amount before requesting additional fees.

Attachments:

Level of Effort and Fee Estimate

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level of effort - staff time

		BLACKWATER							TOTAL
Billing Rates \$/hr		189	172	135	115	65			
TASK	Task Activity	Project Manager	Senior Engineer	Assistant Engineer	CADD/ GIS Pro	Office/ Admin.	BlackWater Total Hours	BlackWater Fee	
1.0	Information Collection and Review	4	12	24		1	41	\$6,125	\$6,125
2.0	Technical Report	12	40	94	32	8	186	\$26,038	\$26,038
3.0	Project Meetings and Administration	12	12	24		8	56	\$8,092	\$8,092
4.0	Task 4 (Optional) Presentation to Council Support	12	12			8	32	\$4,852	\$4,852
	TOTALS	40	76	142	32	25	315	\$45,107	\$45,107