

Goodwyn Mills Cawood

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September 23, 2024

Effingham County Board of Commissioners Tim Callanan County Manager 804 South Laurel Street Springfield, GA 31329

RE: Engineering Evaluation of the Effingham County Water Treatment Plant
Phase II

Dear Mr. Callanan:

Thank you for the opportunity to submit a proposal for the <u>Engineering Evaluation</u> of the <u>Effingham County Water Treatment Plant (WTP – Phase II)</u>. We recently completed Phase I of the evaluation and recommended that the County construct a 24 MGD raw water intake on the Savannah River, 42" raw water main from the raw water intake to the proposed plant site, 12 MGD water treatment plant initially operated at 8 MGD, 30" finished water main, and elevated storage tank.

In accordance with these recommendations, we have the following understanding of the Phase II Project Scope and the primary work items requiring our involvement:

PROJECT SCOPE:

Currently Effingham County purchases water from the City of Savannah. Effingham County desires assistance on determining the feasibility for constructing a new plant versus purchasing water from Savannah. If feasible, Effingham County needs assistance in developing documents to move to detailed design of a new intake and treatment facility.

A. SCOPE:

GMC will perform the tasks below:

Task 0 - Project Management

Project management shall consist of all meetings associated with the scope of work. GMC will perform the following Project Management tasks:

- WS1: Stakeholder Workshop
- WS2: Distribution
- WS3: Source Water Workshop
- WS4: Demand Projections and Capacity Workshop
- WS5: Treatment Technology



WS6: Mitigation

WS7: DDR

Task 1 - Community Engagement

Community Engagement shall include providing assistance/support to Effingham County engaging with the community to inform those about the pursuit of a new water treatment plant and intake. GMC will perform the following Community Engagement tasks:

- Stakeholder involvement
- Public/Stakeholder Involvement
- Develop and deliver Technical Memorandum 1

Task 2 – Distribution

Distribution shall include the appropriate raw water and transmission mains. GMC will perform the following Distribution tasks:

- Review, validate, update existing water model
- Perform alternatives analysis of site locations and distribution routes
- Develop and deliver Technical Memorandum 2

Task 3 - Source Water Assessment

Source Water Assessment shall include activities associated with maintaining the water quality of the Savannah River. GMC will perform the following Source Water Assessment tasks:

- Conduct necessary meetings with EPD
- Develop Source Water Assessment Plan
- Perform water sampling and water analysis which will be included as an allowance
- Develop Engineering Report per EPD
- Develop and deliver Technical Memorandum 3

Task 4 - Demand Projections and Capacity Analysis

Demand Projections and Capacity Analysis shall include the review of existing and development of projected water demands and performing cost-benefit analysis for the planning horizon. GMC will perform the following Demand Projections and Capacity Analysis tasks:

- Develop and define future demands
- Develop and deliver Technical Memorandum 4

Task 5 - Treatment and Piloting

Treatment and Piloting shall include review of water treatment technologies and performing studies to determine the treatability of the raw water source. GMC will perform the following Treatment and Piloting tasks:

- Perform treatment technology review
- Develop a plan for treatability or piloting
- Piloting selection (if required)
- Develop capital and operational cost estimates



Develop and deliver Technical Memorandum 5

Task 6 - Mitigation

Mitigation shall include review of technologies and to offset the dissolved oxygen deficit at the raw water source. A Dissolved Oxygen Mitigation Plan will also be prepared in this phase. GMC will perform the following Mitigation tasks:

- Perform mitigation technology review
- Prepare a Dissolved Oxygen Mitigation Plan
- Develop capital and operational cost estimates
- Develop and deliver Technical Memorandum 6

Task 7 - Design Development Report

Design Development Report shall be the basis of design for the project. GMC will perform the following Design Development Report tasks:

- Development of Design Development Report
- Receive and address comments
- Develop and deliver Final Design Development Report

B. ASSUMPTIONS/EXCLUSIONS:

Assumptions:

- Piloting is included in the schedule (duration is unknown),
- Minimum of 6 months of sampling is required
- The existing water model is in working order to draw conclusions regarding required improvements

Exclusions:

- Site survey
- Geotechnical investigation
- Site selection consulting (appraisal, realty)
- Permitting as it relates to the selected site
- Piloting rental, installation, and management
- Resiliency evaluation (climate change, severe weather, sea level rise)
- Field delineation of waters of the U.S.
- Surveys for protected species
- Surveys for cultural/historic resources
- Modeling or FEMA coordination related to potential impacts to floodplains
- Design and construction

Separate costs will be provided to perform these services once the specific proposed project area has been determined.



B. COMPENSATION:

We propose performing the work illustrated above under the "Scope of Services" section in accordance with the attention." section in accordance with the attached cost estimate breakdown.

Phase II	Basic Services Fee
Task 0 - Project Management	\$56,300
Task 1 - Community Engagement	\$28,400
Task 2 - Distribution	\$41,500
Task 3 - Source Water Assessment	\$137,100
Task 4 - Demand Projections & Capacity Analysis	\$12,500
Task 5 - Treatment and Piloting	\$33,000
Task 6 - Mitigation	\$26,400
Task 7 - Design Development Report	\$24,800
Expenses	\$12,000
Total	\$372,000

The basic services fees are lump sum and will be invoiced monthly as work progresses. The following allowances are associated with Basic Services but outside of the fees above.

Phase II	Allowances
Task 3 - Water Quality Analysis	\$50,000
Total	\$50,000

PAYMENT TERMS:

Professional services will be invoiced monthly in accordance with the status of the work. Payment is due 30 days from the invoice date, and is consider past-due thereafter. Past-due invoices will accrue interest at a rate of one percent (1%) per month.

C. PROJECT SCHEDULE:

We propose performing the work illustrated above under the "Scope of Services" section in accordance with the schedule duration breakdown below.

	Estimated Duration	
Task 1	20 weeks	
Task 2	15 weeks	
Task 3	30 weeks	
Task 4	9 weeks	
Task 5	13 weeks	
Task 6	7 weeks	
Task 7	8 weeks	
Total	37 weeks	

We approach each project with a professional level of diligence, and we strive to maintain our schedule commitments. However, from time-to-time circumstances



outside of our control will influence project schedules. Schedule risks are existing water model quality (Task2), SWAP approval (Task 3), EPD required water sampling (Task 3) and Piloting (Task 5).

We will commence work on October 2, 2024.

We appreciate the opportunity to work with you over the course of this project, and trust our proposal is consistent with your expectations. Please feel free to contact me at your convenience to discuss the terms of this proposal and any questions or concerns you may have.

Sincerely:

GOODWYN MILLS AND CAWOOD, LLC.

Je In

James C. Vaughn, P.E.

Approval Date

Engineering Market Leader

Wesley Corbitt, Chairman

Effingham County Board of Commissioners
