

**City of Cartersville**  
**Agreement for General Engineering and Consulting Services**  
**WPCP Expansion to 25 mgd**  
**Amendment No. 2**

The scope of work described in the letter proposal dated November 7, 2023 (referred to as "PROPOSAL"), from Hazen and Sawyer, (referred to as "ENGINEER") to the City of Cartersville (referred to as "OWNER") for the Cartersville Water Pollution Control Plant (WPCP) Expansion to 25 mgd (referred to as "PROJECT"), and as amended in Amendment No. 1, is further amended as described below.

This Amendment No. 2 includes changes for the ENGINEER to advance the design to produce Issued-for-Construction (IFC) ready documents for WP-0 and to provide construction administration and inspection services during construction of WP-0 as described in the CMAR Contractor's WP-0 GMP.

A summary of the anticipated Work Packages is detailed in the following table.

<b>Work Package</b>	<b>General Description</b>	<b>Guaranteed Maximum Price</b>
WP-0	Long Lead Time Procurement Items and Early Works Package including Site Preparation and Demolition Work	WP-0 GMP
WP-1	Influent PS, Influent PS Electrical Building, Headworks Facility, Septage Receiving Station, Headworks Electrical Building, Headworks Odor Control, Equalization Tanks and flow control structures, associated demolition, site civil, electrical, and I&C improvements	WP-1 GMP
WP-2	Clarifier Splitter Box, Final Clarifiers 4 and 5, RAS Flume Structure, RAS PS Upgrades, Filter Addition, UV Disinfection Facility with NPW PS, Outfall Improvements, associated demolition, site civil, electrical, and I&C improvements	WP-2/3 GMP
WP-3	Bioreactor Splitter Box, Bioreactors 4, 5, and 6, Blower Building 2, Alum Storage and Feed Modifications, Dewatering Building improvements, associated demolition, site civil, electrical, and I&C improvements	
WP-4	Remaining site demolition (if applicable), associated site civil, electrical, and I&C improvements	

## **ARTICLE 1. BACKGROUND**

The Scope of Work of the original PROPOSAL included preliminary engineering services to support the OWNER through 30% design of the PROJECT and through selection of the CMAR Contractor. Amendment 1 included engineering services to advance the design to GMP-ready documents.

The original PROPOSAL and Amendment 1 included the following tasks:

- Task 1 – Project Management for Preliminary Engineering Services
- Task 2 – Assistance with CMAR RFP Development and Selection of CMAR Contractor
- Task 3 – Preliminary Engineering
- Task 4 – 30% Design
- Task 5 – Permitting Assistance

Task 6 – Field Services  
Task 7 – Industrial Support  
Task 8 – Design Phase Services to Produce GMP-Ready Documents  
Task 9 – GMP Development Support and CMAR Contract Management

As the PROJECT transitions from the GMP-development phase to construction, the following new engineering related tasks will be performed:

Task 10 – Design Phase Services to 100% Issued-for-Construction Documents  
Task 11 – Engineering Services During Construction  
Task 12 – Resident Inspection Services during Construction

This Amendment 2 includes the engineering-related services for WP-0 GMP for Tasks 10, 11, and 12.

## **ARTICLE 2. SCOPE OF WORK, SCHEDULE, AND PROJECT TEAM**

### **Scope of Work**

The scope of work for new Tasks 10, 11, and 12 is described below. The scope of work for Tasks 1 - 9, as described in the original PROPOSAL and Amendment 1, remains unchanged.

#### **Task 10 – Design Phase Services to 100% Issued-for-Construction Documents (New)**

This task includes detailed design from GMP-ready documents to the 100% issued-for-construction documents. ENGINEER will advance the design to conform to the agreed upon scope of work as negotiated between the CMAR Contractor and the OWNER at each GMP contract award milestone. As part of that effort, ENGINEER will perform quality assurance reviews as the design progresses to verify the accuracy and completeness of the drawings and other documents. ENGINEER will also prepare and submit application and obtain approval of Land Disturbance Permit, which will include ES&PC and stormwater management, from the relevant permitting authorities.

This Amendment 2 only includes the detailed design services to produce construction-ready documents for the WP-0 scope of work, as agreed upon in the WP-0 GMP negotiations with the CMAR Contractor. It is anticipated that Task 10's not-to-exceed budget will be increased in future amendments for each subsequent GMP package.

#### **Task 11 – Engineering Services During Construction (New)**

This task includes the performance of construction contract administration services during the construction of the project. ENGINEER will perform the following services during the construction of the Project:

- Consult with the OWNER and issue the OWNER's instructions to the CMAR Contractor.
- Perform the duties and responsibilities of the "ENGINEER" as defined in the construction contract between the OWNER and the CMAR Contractor and further detailed below.
- Conduct a preconstruction conference to address key contract elements, CMAR Contractor's construction schedule, coordination requirements, progress payment estimates, communications flow, change orders, field orders, as-recorded drawings, shop drawing submittals, etc.
- Provide a cloud-based construction project management system to facilitate construction communication, submittal management, and inspection reporting.

- Organize, identify, file, and distribute routine written project correspondence, including shop drawings, requests for information (RFIs), field orders, proposed change orders, change orders (COs), etc.
- Interpret the plans and specifications. Provide requested interpretations to the OWNER and the CMAR Contractor in a timely manner. The interpretations will be formally communicated as RFIs. Review and respond to RFIs submitted by the CMAR Contractor to interpret and clarify the intent of the Contract Documents and make recommendations to the OWNER.
- Prepare necessary technical documentation for proposed change orders to receive pricing from the CMAR Contractor. Review and negotiate with the CMAR Contractor prior to recommendation to OWNER to accept or reject.
- Prepare and maintain a shop drawing submittal log to track the status of submittals.
- Prepare and maintain an RFI log to track the status of requests for information.
- Prepare and maintain a decision log documenting decisions related to contingencies on the project.
- Review the proposed Preliminary Progress Schedule for the construction work and monthly Progress Schedule revisions prepared by the CMAR Contractor and report findings to the OWNER.
- Review and approve or take other appropriate action with respect to shop drawings, samples and other data which CMAR Contractor is required to submit. Reviews will be to verify conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- Receive, review, and determine the acceptability of schedules that CMAR Contractor is required to submit, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
- Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by CMAR Contractor.
- Review and approve or take other appropriate action with respect to Operation and Maintenance Manuals submitted by the CMAR Contractor.
- Coordinate, attend, and preside over monthly construction Progress Meetings and other meetings and/or conferences with the OWNER and the CMAR Contractor, including preparation and distribution of agendas, meeting minutes, and pertinent logs (shop drawings, RFIs, CO, etc.). Respond to issues raised at the meetings.
- Coordinate with the Construction Materials Testing Firm (via the 3<sup>rd</sup> party Inspection Company) to obtain special inspections or tests of CMAR Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections and tests.
- Review and evaluate modifications to the scope of work suggested by the CMAR Contractor and make recommendations to the OWNER.
- Submit Requests for Proposals to the CMAR Contractor to obtain costs and detailed breakdowns for performing extra work not included in the contract and subsequently prepare and issue any necessary Field Directives and/or Change Orders to instruct the CMAR Contractor to proceed with this additional work if approved by OWNER whether part of an allowance, contingency, or new work.

- Review claims for changes to the contract price or extensions in contract time submitted by the CMAR Contractor and make recommendations to the OWNER regarding acceptability of the claims.
- Review and verify monthly Applications for Payment submitted by the CMAR Contractor, verify CMAR Contractor's progress with respect to CMAR Contractor's pay applications, and make recommendations to OWNER for payment.
- Reject Work if Engineer believes such Work is (a) is defective under the standards set forth in the Contract Documents, (b) will not produce a completed Project that conforms to the Contract Documents, or (c) will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- Monitor the CMAR Contractor's compliance with procedural requirements identified for the project, including obtaining permits, meeting submittal requirements, project schedule, etc.
- Perform inspections of portions of the construction work with the OWNER when said portion of the work is certified by the CMAR Contractor to be substantially complete and ready for partial utilization. Generate a punch list of incomplete or incorrect items of the portion of the work, and perform an inspection of said work prior to acceptance by OWNER.
- Perform inspection of the entire construction work with the OWNER when it is certified by the CMAR Contractor to be substantially complete, generate a punch list of incomplete or incorrect items of the work, and perform a final inspection of the work prior to acceptance by OWNER.
- Observe operation of new treatment processes, confirm the mechanical, electrical, and control readiness of each process, and make recommendations to OWNER as needed.
- Receive, review, and transmit to the OWNER maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, shop drawings, samples, and other approved data.
- Recommend Final Acceptance. Review CMAR Contractor's final completion submittal. Conduct final inspection and prepare recommendation of final acceptance of the Project.
- Upon satisfactory and full completion of all required work, issue a Certificate of Substantial Completion and a Certificate of Final Acceptance.

This Amendment 2 only includes the construction contract administration services for the WP-0 GMP. It is anticipated that Task 11's not-to-exceed budget will be increased in future amendments to include contract administration services for each subsequent GMP package.

## **Task 12 – Resident Inspection Services During Construction (New)**

This task includes ENGINEER's activities to inspect the CMAR Contractor's Work during construction of the PROJECT. Hazen will provide an experienced Resident Project Representative (RPR) to review and observe the CMAR Contractor's work. The RPR will provide experienced construction observation throughout the project to monitor compliance with the Contract Documents and assist the OWNER and the CMAR Contractor in successfully completing the Project. Daily reports will be available to the OWNER through the construction project management system. The RPR will work closely with the OWNER's 3<sup>rd</sup> party Inspection Company in performance of these services. The RPR will perform the following:

- Function as Hazen's site representative and serve as the field liaison between the OWNER, Hazen, and the

CMAR Contractor.

- Assist the ENGINEER in observing progress and quality of the Work and act as the primary liaison with the CMAR Contractor.
- Review and observe field work, approve quantities of work items listed on the monthly Applications for Payment submitted by the CMAR Contractor, and determine acceptability of work items for compliance with the approved Contract Documents.
- Conduct on-site observations of CMAR Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
- Review equipment delivered to the site for conformance with the approved shop drawings.
- Attend meetings with CMAR Contractor and prepare and circulate copies of meeting minutes.
- Verify quantities for partial pay requests.
- Consider and evaluate CMAR Contractor's suggestions for modifications at Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer.
- Report to Engineer whenever RPR believes that any part of CMAR Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- Advise Engineer of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection, or approval.
- Verify that tests, equipment, and system start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that CMAR Contractor maintains adequate records thereof.
- Prepare a daily report for those days RPR is onsite recording CMAR Contractor's hours on the site, weather conditions, data relative to questions of change orders, field orders, work change directives, or changed conditions, site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures within the construction project management system.
- Maintain project records on site.
- Participate in preparation of substantial and final completion punch lists.
- Witness the acceptance testing and startup of equipment in the field by manufacturers' technical representatives as required by the Contract Documents.
- Coordinate materials sampling and testing services and any required geotechnical subgrade testing and consultation services.

The RPR will have no authority regarding the following:

- Authorizing any deviation from the Contract Documents or approval of any substitute materials or equipment.

- Performing any of the responsibilities of CMAR Contractor or subcontractor(s).
- Expediting work for the CMAR Contractor.
- Giving advice or directions relative to any aspect of the means, methods, techniques, sequences, or procedures of construction unless such is specifically called for in the Contract Documents.
- Participating in start-up activities and performance testing performed by equipment and materials suppliers.

The ENGINEER will provide staff on-site as ENGINEER deems necessary to fully inspect and coordinate work to supplement the anticipated one inspection staffer provided by the OWNER's 3<sup>rd</sup> party Inspection Company. Staffing will be determined based on the progression of the work and the amount of in-progress work to be observed.

This Amendment 2 only includes limited services for WP-0 which will be utilized as needed to supplement the 3<sup>rd</sup> party Inspection Company. It is anticipated that Task 12's not-to-exceed budget will be increased in future amendments to include inspection services for each subsequent GMP package.

## Schedule

ENGINEER will execute the work described in this amendment and will provide deliverables on a schedule that supports the PROJECT. Mutually agreeable dates for the work outlined under this amendment will be made between the OWNER, CMAR Contractor, and ENGINEER. Anticipated milestone dates are as follows:

- Task 10 – Design Phase Services to 100% Construction Ready Documents
  - WP-0 GMP: Completed by early May 2025
- Task 11 – Engineering Services During Construction
  - WP-0 GMP: May 2025 – December 2025
- Task 12 – Resident Inspection Services During Construction
  - WP-0 GMP: May 2025 – December 2025

## ARTICLE 3. COMPENSATION

ENGINEER will deliver the scope of work described in Amendment No. 2 for the additional not-to-exceed fee shown below. Compensation for the Project's Scope of Services as amended above will be based on ENGINEER's hourly rates by job classification with a maximum not to exceed amount of \$9,375,000 (Tasks 1-12).

Task	Original Budget	Amendment No. 1	Amendment No. 2	Revised Budget
Task 1: Project Management	\$1,500,000	No Change	No Change	\$1,500,000
Task 2: CMAR RFP Development and Selection				
Task 3: Preliminary Engineering				
Task 4: 30% Design				
Task 5: Permitting Assistance				
Task 6: Field Services	\$200,000	No Change	No Change	\$200,000

Task 7: Industrial Support	\$150,000	No Change	No Change	\$150,000
Task 8: Design Phase Services to Produce GMP-Ready Documents	n/a	\$6,000,000	No Change	\$6,000,000
Task 9: GMP Development Support and CMAR Management	n/a	\$500,000	No Change	\$500,000
Task 10: Design Phase Services to 100% Issued-for-Construction Documents (New)	n/a	n/a	\$350,000	\$350,000
Task 11: Engineering Services During Construction (New)	n/a	n/a	\$600,000	\$600,000
Task 12: Resident Inspection Services During Construction (New)	n/a	n/a	\$75,000	\$75,000
<b>Total Contract Amount</b>	<b>\$1,850,000</b>	<b>\$6,500,000</b>	<b>\$1,025,000</b>	<b>\$9,375,000</b>

ENGINEER reserves the right to reallocate the associated budget among the tasks as necessary to achieve the most efficient project delivery. The overall Total Contract Amount will not be exceeded without an Amendment and proper Authorization by the OWNER.

ACCEPTED BY:

For the OWNER, **City of Cartersville**, Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

By: \_\_\_\_\_

Name: Matt Santini  
Title: Mayor

By: \_\_\_\_\_

Name: Julia Drake  
Title: City Clerk

For the ENGINEER, **Hazen and Sawyer, P.C.**,

Dated this \_\_\_\_\_ day of \_\_, 2025.

By: \_\_\_\_\_

Name: Bryant K. Rogers  
Title: Vice President