

RESOLUTION NO. 23-39

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, FLORIDA, APPROVING A TASK ORDER WITH GEMINI ENGINEERING & SCIENCES, INC. FOR ENGINEERING SERVICES RELATED TO LULLWATER LAKE BASIN STORMWATER WATER QUALITY INVESTIGATION, IN AN AMOUNT NOT TO EXCEED \$150,000.

BE IT RESOLVED that the appropriate officers of the City are authorized to accept and deliver on behalf of the City that certain Task Order 2023-01 to its Master Services Agreement with Gemini Engineering & Sciences, Inc. for Professional Stormwater Engineering Services dated December 28, 2021, related to the Lullwater Lake Basin Stormwater Water Quality Investigation, in the amount not to exceed One Hundred Fifty Thousand Dollars (\$150,000.00), in substantially the form **attached** and presented to the Council today, with such changes, insertions or omissions as may be approved by the City Manager and whose execution shall be conclusive evidence of such approval.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in special session this 10th day of November, 2022.

CITY OF PANAMA CITY BEACH

By: _____


Mark Sheldon, Mayor

ATTEST:



Lynne Fasone, City Clerk

COMBINED TASK ORDER AND
NOTICE TO PROCEED

TASK ORDER NO. 2023-01

DATE 11/10/2022

Reference is made to that certain MASTER SERVICE AGREEMENT BETWEEN CITY OF PANAMA CITY BEACH AND GEMINI ENGINEERING & SCIENCES, INC. RELATING TO PROFESSIONAL ENGINEERING SERVICES dated 12/28/21, (the "Agreement"), the terms, conditions, and definitions of which are incorporated herein as if set forth in full. Neither party is in breach of the Agreement.

Pursuant to the Agreement, Engineer agrees to perform the specific tasks set forth upon incorporated Attachment A, Scope of Services, relating to Lullwater Lake Basin Stormwater Water Quality Investigation.

Engineer's total compensation shall be (check one):

a stipulated sum of \$ 150,000.00; or
 a stipulated sum of \$ _____ plus one or more specified allowances listed below which may be authorized in writing by the City Manager or his designee,
Allowance of \$ _____ for _____, and
Allowance of \$ _____ for _____; or
 a fee determined on a time-involved basis with a maximum cost of \$ _____;

as set forth upon incorporated Attachment B, Fee Breakdown, and shall be paid in monthly installments as specified in the Agreement.

Work shall begin on _____, 2022, and shall be completed within _____ calendar days. The date of completion of all work is therefore _____, 2022. Liquidated delay damages, if any, are set at the rate of \$ 0.00 per day. There are no additional rights and obligations related to this Task Order other than as specified in the Agreement.

Upon execution of this task order by both Engineer and City, Engineer is directed to proceed.

IN WITNESS WHEREOF the parties have caused these presents to be executed in their names on the date shown.

Witness:

GEMINI ENGINEERING & SCIENCES, INC.

By: _____ Date: _____
Its:

CITY OF PANAMA CITY BEACH, FL.

ATTEST:

City Clerk

By: _____ Date: _____
City Manager

**Lullwater Lake Stormwater Water Quality Investigation
City of Panama City Beach**



October 31, 2022

SCOPE OF SERVICES

SECTION 1. PROJECT BACKGROUND

This statement of work describes the responsibilities of Gemini Engineering & Sciences (PROFESSIONAL) and the City of Panama City Beach (CITY) for the Stormwater Water Quality Investigation of the Lullwater Lake Basin. The scope of work for this project is to provide support to the CITY by conducting an Assessment of the Lullwater Lake existing stormwater conditions and potential restoration activities relative to the Lake's long-term water quality management needs.

The overall effort will complement an expanded Hydrologic and Hydraulic (H&H) Stormwater Modeling Study of the Lullwater Basin which will further improve the City's Stormwater Management Master Plan (SMMP), and will include coordination with overlapping aspects of on-going CRA activities and the Lullwater Stormwater Outfall project. This project aims to assess water quality impacts of Lullwater Lake and its drainage basin and to evaluate potential options for improvements. It will propose a master strategy to accomplish the determined goals while meeting regulatory requirements. The assessment will address the concerns expressed by local residents regarding the restoration and enhancement of water quality and stormwater drainage in the Lullwater Lake Basin.

SECTION 2. SCOPE OF SERVICES

The effort outlined in this proposal has been divided into two phases. Phase I involves the technical and scientific investigation while Phase II emphasizes the possible permitting of improvements. The exact course to be followed for Phase II will be dependent upon the results from Phase I, however, we have provided our best estimate for Phase II based on information available today.

The Scope of Work for this assignment will include the following specific services.

PHASE I

Task 1 – Background Data Gathering and Review

Task 1 includes gathering and reviewing existing and available background information available from the CITY and obtained from other regulatory and academic sources. This task will ensure that the objective of this assignment can be accomplished consistent with all relevant regulations and legal requirements. Therefore, this task will include collection and review of public waters and wetland maps, property information and other publicly available GIS database information, as necessary.

Permitting and Agency Coordination: Schedule meetings with the regulatory agencies (FDEP, USACE) to introduce the project, data collection to date, and project goals along with anticipated schedules. The results from this meeting will provide an initial review and identify potential issues that may need to be addressed during the permitting phase.

Task 2 – Surveys of lake bathymetry and water quality conditions in Lullwater Lake

Bathymetry Survey: Task 2 includes planning and conducting surveys to assess current lake bottom physical conditions and water quality status in the lake. This will include a bathymetry survey to determine depth to and thickness of sediment deposits and a survey of conditions on the lake surface. Investigations and early discussions with contractors will also be undertaken as needed.

Water Quality Assessment: Perform field surveys of the lake surface and water column to assess water quality, including water clarity and the extent and quality of aquatic vegetation.

Task 3 – Water Quality and Sediment Sampling

Task 3 includes planning the locations and timing of sampling, collection and analyses of both lake water and sediments to assess water quality and sediment characteristics in Lullwater Lake and the overall Lullwater Lake Basin. Sample data will be used to assess the potential for any release of contaminants from the sediments by possible dredging or excavation, which will be considered as part of potential stormwater improvements. Estimated data collection and testing include:

- a. **Sediment Collection:** Collect up to eighteen (18) lake bottom sediment cores and submit to laboratory for analysis of geotechnical and chemical parameters.
- b. **Water Quality Collection:** Collect up to six (6) lake water samples and submit to laboratory for analysis.

Task 4 – Stormwater Modeling Updates and Assessment of Sustainability of Water Quality Standards

Task 4 includes updating and expanding the existing SMMP of the basin, including GIS coverages and the numerical model. The analysis includes conducting long-term simulations of the impacts of sea level rise, population growth, and associated development on runoff and water quality. Different scenarios will be considered for potential conceptual designs of improvements to restore water quality. Based on the data obtained in Tasks 2 and 3 (above), an assessment will be undertaken of the feasibility and cost-effectiveness of various stormwater Best Management Practices (BMPs), including: spraying with herbicides and removing vegetation, dredging and/or excavation of lake sediments, and relocating (disposing) of sediments elsewhere. This will include assessing the feasibility and likely impacts on water quality of maintaining intermittent connections to exchange water between Lake Lullwater and the Gulf of Mexico. In addition, the information obtained in Task 1 (above) will be used to identify any potential environmental concerns and account for them during the development and assessment of potential conceptual designs for improvements to restore water quality.

Task 4.1– Stormwater Water Quality Analysis

Task 4.1 includes expanding, updating, and eventually leveraging the SMMP Model of Lullwater Lake Basin to conduct simulations to understand anticipated stormwater runoff and water quality impacts. This will include evaluating: 1) how potential improvements to Lullwater Lake Basin, in conjunction with the ongoing Lullwater/Calyppo Coastal Outfall project, will impact water quality in the Basin, and 2) any potential changes to regulatory requirements such as may result from both the construction of the Coastal Outfall project and the potential improvements to Lullwater Lake Basin.

Task 4.2 – Evaluation of Potential Improvements

Task 4.2 includes: 1) reviewing scientific and technical literature as well as legal statutes and regulations, 2) based on that review, proposing potential conceptual designs for improvements, including numerical analysis using baseline SMMP model, 3) estimating approximate costs for implementation and long-term monitoring and maintenance of such potential improvements to assess the cost-effectiveness of different options, and 4) outlining the permitting requirements that would be associated with each conceptual design alternative considered. As necessary, we will provide characterization of sediment material to be removed to determine viability for reuse or disposal at an acceptable disposal site. This task will also determine potential removal quantity.

PHASE II

Task 5 – Presentations and Outreach

Task 5 includes preparing and presenting the results and recommendations to the City and to the local residents to facilitate understanding of the intent and likely impacts of the proposed improvements. In order to inform the City's decision-making and assure the satisfaction of local residents, their feedback will be requested and communicated to the City.

Task 6– Preparation of the Summary Report and Final Conceptual Plans

Task 6 includes preparing and delivering to the City a Report summarizing the findings concerning how proposed alternatives for improvements are likely to impact stormwater water quality and drainage capacity within the Lullwater Lake Basin and downstream areas. The report will also summarize initial permitting agency coordination and provide recommendations and conceptual designs for proposed improvements. The Summary Report with the concept plans will be a roadmap for practical project implementation, including strategic planning guidelines to minimize disruptions to area residents.

Task 7 – Permitting

Based on discussions with federal and state regulatory agencies, and through coordination with the City, we will prepare and submit the appropriate permit application(s) based on the data developed from the previous tasks. We will coordinate and respond to requests for information as needed and work with the regulatory agency to expedite processing.

SECTION 3. SERVICES NOT INCLUDED

The following services are not provided as part of this Scope of Services:

- Design and permitting of any dewatering facility. Will be assuming dredged material will not be hazardous and can be moved directly to most appropriate landfill.
- Construction support during potential dredging activities.
- Preparing and obtaining permits or authorizations not specifically mentioned in this Scope of Services.
- Implementation or construction of the improvements to be evaluated and recommended.

Further, the following assumptions apply to this Scope of Services:

- The water quality sampling will not indicate hazardous material within Lake or potential dredged areas.
- Benefit-Cost Analysis will not be required.
- Field survey of the wetland delineation line around Lake Lullwater and proposed dredge limits will not be required. Will assume work will be completely within wetlands.
- Feasible landfill options will be available for disposal of dredged material.
- Professional geotechnical assessment is not currently assumed.

SECTION 4. DELIVERABLES

Gemini Engineering & Sciences will complete Tasks 1 through 7 and deliver to the CITY a report summarizing an analysis of current conditions and conceptual designs for improvements to stormwater water quality in the Lullwater Lake Basin.

SECTION 5. INFORMATION AND SERVICES TO BE PROVIDED BY CITY

The CITY will provide the following information and services at the time of notice to proceed:

- Latest stormwater inventory GIS features and photographs for our study areas, as available.
- Potential additional information of City-owned septic, sewer and stormwater infrastructure, as necessary, beyond what is available within the City's stormwater inventory.
- Information about expenditures for Operations and Maintenance, Capital Improvements, and other budgets and expenditures for the CITY's Stormwater System and related infrastructure, as needed to complete the analyses and conceptual designs.
- As available, information about the ownership of property and associated rights-of-way within and bordering the Lullwater Lake Drainage Basin.

SECTION 6. PROJECT SCHEDULE

The total project period and period of performance for the services outlined in this scope are as follows:

- Phase I – December 1, 2022 to April 30, 2023.
- Phase II – Dependent upon regulatory permit review time-frame, but for non-permit related tasks, from May 1, 2023 to August 1, 2023. Typical permitting timelines are agency dependent and could exceed 120 days from initial submittal.

SECTION 7. COMPENSATION

Gemini Engineering & Sciences shall perform the Scope of Services on a Not-to-Exceed basis per task. The total Not-to-Exceed fee for this Scope of Services is \$150,000.00.

- Phase I - \$101,500
- Phase II - \$48,500