

RESOLUTION 21-30

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, FLORIDA, APPROVING TASK ORDER 2021-01 TO THE MASTER SERVICES AGREEMENT FOR WATER UTILITY ENGINEERING SERVICES WITH DEWBERRY ENGINEERS, INC., RELATED TO EMERGENCY RESPONSE PLANNING IN THE AMOUNT OF \$60,690.

BE IT RESOLVED by the City Council of the City of Panama City Beach that the appropriate officers of the City are authorized to deliver and execute on behalf of the City that certain Task Order 2021-01 to the Master Services Agreement for Water Utility Engineering Services between the City and Dewberry Engineers, Inc., relating to Emergency Response Planning and Cyber Security Incident Response Planning, in the basic amount of Sixty Thousand, Six Hundred Ninety Dollars (\$60,690), 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, whose execution shall be conclusive evidence of such approval.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in regular session this 10th day of December, 2020.

CITY OF PANAMA CITY BEACH

By: 
Mark Sheldon, Mayor

ATTEST:


Lynne Fasone, MMC, City Clerk



November 30, 2020

ATTACHMENT A

Mr. Al Shortt, PE
Utilities Director
City of Panama City Beach
116 South Arnold Road
Panama City Beach, FL

RE: City of Panama City Beach Water System Risk and Resilience Planning – Phase 2
Emergency Response Planning and Cyber Security Incident Response Planning

Dear Mr. Shortt,

Dewberry Engineers Inc. (Dewberry) appreciates this opportunity to submit this proposal for professional engineering services for the above referenced project to the City of Panama City Beach (CLIENT).

UNDERSTANDING OF THE PROJECT

With the advent of formal standards and best practices for assessing and managing risk and resilience at water facilities, it has become critical for utilities to undertake the formal process of risk and resilience management an emergency planning. The America's Water Infrastructure Act of 2018 has been signed into law, with a requirement specifically for water systems to perform risk and resilience assessments and follow up Emergency Response Planning.

The Dewberry team has been utilizing a phased approach to this overall project to assist with budgeting and allow for understanding of each phase ahead of agreement. Phase 1 covered the assets/threats characterization with site visits, consequences/threat analysis, vulnerability analysis and baseline and final reporting. Phase 2 will address an update to the water system Emergency Response Plan (ERP) and Cyber Security Incident Response Plan.

Dewberry recently assisted the City with execution of the J-100 standard process of risk and resilience assessment (RRA) and system management planning with inclusion of cyber security assessment. This effort is being completed and will be certified before the December 31, 2020 deadline.

The AWIA law states:

(b) EMERGENCY RESPONSE PLAN. — Each community water system serving a population greater than 3,300 shall prepare or revise, where necessary, an emergency response plan that incorporates findings of the assessment conducted under subsection (a) for such system (and any revisions thereto). Each community water system shall certify to the Administrator, as soon as reasonably possible after the date of enactment of America's Water Infrastructure Act of 2018, but not later than 6 months after completion of the assessment under subsection (a), that the system has completed such plan.

The emergency response plan shall include:

- (1) strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;*
 - (2) plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;*
 - (3) actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers; and*
 - (4) strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.*
- (c) COORDINATION. — Community water systems shall, to the extent possible, coordinate with existing local emergency planning committees established pursuant to the Emergency Planning and Community Right-To-Know Act of 1986 (42 U.S.C. 11001 et seq.) when preparing or revising an assessment or emergency response plan under this section.*

Per law the Water System Emergency Response Plan (ERP) has a due date of six months after RRA certification or no later than June 30, 2021. We understand the City is undertaking a City-wide Emergency Response Plan to be completed prior to May 2021. Dewberry will work to complete the water system ERP to coordinate with the completion of the City-wide ERP. Dewberry will generally follow industry standard guidance per AWWA G440 Emergency Preparedness Practices standard and the corresponding Manual M19 Emergency Planning for Water Utilities and the recently published by EPA, Community Water System Emergency Response Plan Template as well as other industry resources to update your existing ERP.

SCOPE OF SERVICES

Task 1 – Dewberry will review all existing ERP related documents including, but not necessarily limited to the existing Risk and Resilience Assessment (RRA), ERP, emergency contacts, mutual aid agreements, inter-local service agreements, utility organizational structure (normal and emergency), chemicals stored at the facility, operating schedules and shifts, existing facilities/assets and equipment, detailed communication modes and information, existing checklists, forms, lists and structure of emergency training conducted, etc. Some of these items have been previously reviewed and discussed while others may have not.

Task 2 – Dewberry will schedule and lead a meeting with key CLIENT stakeholders to go over the existing available information, confirm the goals of the update, establish Critical Success Factors, confirm project contacts and communication and set schedules. Additional discussion will take place aimed at capturing all relevant input, concerns and direction from the CLIENT's staff in attendance. Dewberry will provide direction on who should be invited to this meeting

Mr. Al Shortt, P.E.
City of Panama City Beach
November 30, 2020

from among the CLIENT's staff. The meeting is presumed to last approximately two (2) hours and occur virtually.

Task 3 – Dewberry will work with the CLIENT to develop and schedule one meeting with representatives of the Local Emergency Planning Committee (LEPC) and to include other relevant agencies, if the CLIENT chooses to include them. Dewberry will develop an invitation with an introduction, meeting purpose, agenda and enough information to allow all attendees to be prepared in advance. The goal is to raise awareness by all parties regarding the water system's emergency planning efforts, enhance communication and incorporate, where practical, elements to increase and simplify coordination at the regional level.

Task 4 – Using the CLIENT's existing emergency documents (ERP, GOGs, SOP's and EOP's) as a starting point, Dewberry will develop and deliver a draft outline of the updated ERP for concurrence. Dewberry will provide updates to the ERP that focus on a few key areas, including:

- Utility Information - reference to background and purpose, critical staff contacts, primary system component information, document control and current ERP protocols.
- Resilience Strategies and Readiness Resources – roles and responsibilities relevant to the water system, the first responders, LEPC, incident chain of command, etc. as well as critical equipment/services, mutual aid partners/agreements and critical customer communication. Media outreach will be addressed as well. As a key step in having an effective ERP, Dewberry will recommend to the CLIENT, the staff position that should be assigned responsibility for document maintenance.
- Cybersecurity/SCADA recovery – relevant to the assessment completed during the AWIA work by EMA (subconsultant). Dewberry is proposing to use EMA to address input into the following sections relevant to cybersecurity for the Utility – ICS roles, communication, core response procedures, incident specific response procedures and cyber intrusion. Additionally, the AWWA cybersecurity guidelines suggest using controls detailed in NIST800-53 as discussed during the AWIA assessment. The incident response family in NIST800-53 has 10 controls and the City has/is implementing some controls. We propose to further address the remaining controls with the help of EMA, as applicable. This task will cover the cybersecurity requirements of the ERP by developing a Cybersecurity Incident Response Policy, Plan and Procedure (IR3P) specific to the City of Panama City Beach Water Utility. This task will require meetings/workshop to further discuss the development of controls via WEBEX/TEAMS or other non-face to face meetings.
- Incident Specific Emergency Action Procedures (EAPs) - Identify specific steps in responding to an operational emergency or malevolent act based on the results of the Water System J100 Risk and Resilience Assessment and Management Plan. Dewberry will review existing General Operating Guidelines, (GOGs), Standard Operating Procedures and Emergency Operation Procedures (SOPs and EOPs) that may exist within the Utility. Dewberry will recommend updates to specific GOGs, SOPs or EOPs as well as address cybersecurity, finished water contamination and source water

contamination as required by AWIA. Others may include flooding, fire/explosion, hazardous material incident, extreme cold/winter storms, tornado/high winds, hurricanes, earthquakes, site security incident, cross-contamination. Dewberry will work with the City to incorporate existing plans/procedures and include per reference as might exist such as drought response and others. We have assumed preparing four (4) incident specific EAPs, that may not already exist and will reference the City-wide ERP as applicable.

- Training and plan review - identify potential training and exercises to undertake and related plans that may require further review and updating. Address updates as required by AWIA and provide procedure for annual updating of critical common to change information.

Task 5 – Dewberry will plan, schedule and lead a meeting to review the draft updates to the ERP. The meeting will be scheduled to last approximately two (2) hours with key staff attending.

At least one week prior to this meeting, Dewberry will deliver an electronic version of the draft ERP with EAPs to the CLIENT for their review and comment, in preparation for the review meeting. It is assumed that all CLIENT comments will be received and reviewed during the meeting, or within one week following the meeting.

Task 6 – With all agreed upon comments received in Task 5, above, Dewberry will incorporate these into the drafts and produce a final, updated ERP along with final, updated or new EAPs. Dewberry will deliver to the CLIENT three hard copies and a PDF version of all final documents.

ADDITIONAL SERVICES

Any item not contained in the Scope of Services or items outlined as Exclusions will be deemed as Additional Services. Additional Services will be provided at the Standard Hourly Billing Rates.

COMPENSATION

Dewberry/EMA will provide the Scope of Services detailed above for a Lump Sum amount of \$60,690.

Task	Fee
Emergency Response Plan (ERP) and EAPs	\$34,300
Cybersecurity Incident Response Policy, Plan and Procedure (IR3P)	\$26,390
TOTAL	\$60,690

SCHEDULE

Dewberry understand both the challenge with scheduling a complex project during Covid-19 stay safe orders. We will conduct the majority of this work using video/telecommunication techniques. Therefore, we will conduct the work using a fluid schedule with completion no later than late end of April 15, 2021.

CYBERSECURITY INCIDENT RESPONSE POLICY

AWIA Emergency Response Plan Background

The America's Water Infrastructure Act of 2018 (AWIA) requires Panama City Beach, and other large utilities, submit a certification that a Community Water System (CWS) Risk and Resilience Assessment (RRA) to the Environmental Protection Agency (EPA) by December 31, 2020 and an Emergency Response Plan (ERP) within six months of submitting the RRA. This scope of work will cover the cybersecurity requirements of the ERP by developing a Cybersecurity Incident Response Policy, Plan, and Procedure (IR3P) specific to the Panama City Beach Utility ("Utility").

The EPA has supplied a template for the AWIA ERP requirement. The followings section in the EPA template have cybersecurity inputs that will be addressed during the development of the Cybersecurity IR3P:

- 1.2 Incident Command System Roles
- 1.3 Communication
- 2.1 Core Response Procedures
- 2.2 Incident Specific Response Procedures
- 4.3 Cyber Intrusion

Heading numbers reference the EPA template and may change based on ERP contents. As part of meeting AWIA recommendations, a Cybersecurity Incident Response Plan should be included in the Emergency Response Plan. The American Water Works Association (AWWA) Cybersecurity Guidelines suggest using controls detailed in NIST800-53. The Incident Response family in NIST800-53 has 10 controls and controls 1-8 are high priority. The low priority controls will not be included in this scope and are not required by AWIA.

The table below lists the NIST800-53 controls. Controls IR-9 and IR-10 will not but incorporated into the policy or procedures developed during the project.

No.	Control	Priority
IR-1	INCIDENT RESPONSE POLICY AND PROCEDURES	1
IR-2	INCIDENT RESPONSE TRAINING	2
IR-3	INCIDENT RESPONSE TESTING	2
IR-4	INCIDENT HANDLING	1

No.	Control	Priority
IR-5	INCIDENT MONITORING	1
IR-6	INCIDENT REPORTING	1
IR-7	INCIDENT RESPONSE ASSISTANCE	2
IR-8	INCIDENT RESPONSE PLAN	1
IR-9	INFORMATION SPILLAGE RESPONSE	0
IR-10	INTEGRATED INFORMATION SECURITY ANALYSIS TEAM	0

Cybersecurity IR3P Work Plan

Documentation Request

This task will include an analysis of current incident response policies and procedures (written and unwritten) in place for the Utility SCADA networks. Workshops will be held with SCADA technical teams to evaluate the existing practices.

Policy and Procedure Workshops

Each control will be discussed in a workshop before being developed. If there are existing policies, these policies will be discussed for updates and adoption into the updated IRP. A total of three workshops are planned, each two hours in length. The contents of the Incident Response Policy and Procedure document is highly customized to the utility but some of the elements that may be discussed and included in the documents are:

- Policy Elements
 - Purpose and objectives
 - Scope
 - Definitions and Acronyms
 - Organization structure
 - Definition of roles and responsibilities
 - Level of authority
 - Prioritization of incidents
 - Performance Measures
 - Reporting and contact forms

- Procedure Elements
 - Standard operating procedures specifically developed for the utility as needed (limited to 3 for budgetary purposes)

Workshop 1: IR-1 Incident Response Policy

- Purpose and Scope
- Roles and Responsibilities
- Management commitment
- Interorganizational coordination
- Current log monitoring and intrusion detection
- Future log monitoring goals

Workshop 2: Incident Response Events (IR Controls 4-7)

- Defining actionable events
- Intrusion containment and eradication
- Recovery from an incident
- Reporting requirements

Workshop 3: IR-8 Incident Response Plan

- Defining reportable incidents
- Defining metrics for measuring incident response capabilities
- Defining incident response procedures for three types of cyber attacks

Policy, Plan, and Procedure Development

The notes from the workshop will serve as the guideline for policy and procedures development. Once the document is developed, a draft version will be sent to key stakeholders for comment. A web-based meeting will be held to review the draft document two weeks after submission. After comments are collected, the final version will be developed and published.

Schedule

EMA can begin this project immediately, and the work can be completed in seven to ten weeks.

Summarized Cost Table

The lump-sum cost for the work to be performed by EMA, Inc (sub-consultant) is \$26,390.00. A breakdown by major tasks is provided below.

Deliverable	Estimate
Kickoff / Document Review / Preparation	\$1,810.00
Workshops	\$3,480.00
Develop, Present and Revise Incident Response Plan (IRP)	\$18,010.00
Project Management	\$2,040.00
Expenses	\$1,050.00
Total	\$26,390.00

**EXHIBIT B
COMBINED TASK ORDER AND
NOTICE TO PROCEED**

TASK ORDER NO. _____

DATE: _____

Reference is made to that certain MASTER SERVICES AGREEMENT BETWEEN CITY OF PANAMA CITY BEACH AND DEWBERRY ENGINEERS INC. (formerly PREBLE-RISH, INC.) RELATING TO PROFESSIONAL UTILITY ENGINEERING SERVICES (General Water and Sewer and Reclaimed Utility) dated April 8, 2014, (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 a **Water System Emergency Response Plan and Cyber Security Incident Response Plan.**

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

- a stipulated sum of \$ 60,690.00 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 \$ _____

Work shall begin no later than December 15, 2020 and shall be completed within 170 calendar days. The date of completion of all work is therefore no later than April 15, 2021. Liquidated delay damages, if any, are set at the rate of \$0 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:

Attest:

DEWBERRY ENGINEERS INC.

By: _____ **Date:** _____

Its: _____

CITY OF PANAMA CITY BEACH, FL

By: _____
City Manager

Date: _____