



# CRANSTON

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March 28, 2023

Mr. Wes Byne, P.E. - Director  
Augusta Utilities Department  
452 Walker Street, Suite 200  
Augusta, Georgia 30901

Re: Augusta Canal Diversion Dam Repairs  
Planning & Due Diligence  
Cranston File No. 2022-0298

Dear Mr. Byne:

In accordance with your request and our previous discussions, we are pleased to offer the following proposal for professional services associated with the Diversion Dam structure. Cranston recently completed a structural condition assessment of the Diversion Dam. The assessment concluded that repairs were necessary to mitigate potential issues with stability, safety, and general performance of the structure. This proposal states our understanding of the project scope, the required tasks, and the fees for accomplishing the work.

## **GENERAL:**

The February 2, 2023 Augusta Canal Diversion Dam Condition Assessment Report concluded that the Diversion Dam structure is in fair to good condition, considering the age and function of the structure. The report prioritized repairs as follows:

1. Scour and undercutting on the downstream face and foundation.
2. Spalls, cracks, voids, and associated leaks on the surface and dam structure interior.
3. Repair and replacement of stop log bays and appurtenances.
4. Repair and "re-seating" of the Fish Ladder.

The Priority 1 designation was assigned to the Scour and Undercutting condition as foundation failure could lead to a catastrophic event. While not anticipated to be catastrophic in nature, failure due to spalls, cracks, and voids could lead to localized failure necessitating emergency repairs. Likewise, failure of the stop log systems would also be localized and would not lead to global failure of the dam structure. The fish ladder detachment does not represent a structural dam failure and is considered optional in terms of repair or replacement.

Given the potential structural solutions for the Diversion Dam structure and the anticipated multi-agency coordination required, we recommend a project approach that includes a Planning and Due Diligence task as a precursor to formal design and permitting activities. This task would focus on the development of conceptual improvements for each of the repair priorities noted above. Using refined exhibits from the Diversion Dam Condition Assessment Report, potential design solutions will be identified for the locations noted during the Condition Assessment.

Concurrent with the development of potential solutions, Cranston will engage the Federal Energy Regulatory Commission (FERC) to establish permitting requirements. In addition to FERC, we anticipate multiple agency review requirements. These entities could include the US Army Corps of Engineers, State Historic Preservation Commission(s), and Federal Emergency Management Agency (FEMA), among others. Stakeholders will include Augusta, Georgia, North Augusta, South Carolina, Columbia County, Georgia, Aiken County, South Carolina, Edgefield County, South Carolina, and Dominion Energy, at a minimum.

As noted in our March 3, 2023 meeting, Cranston recommends contractor engagement very early in the project development process. Given the existing conditions and unique project requirements, an experienced marine contractor would add significant value to the project team. Specific roles and responsibilities during the design phase could include constructability review, staging and sequencing planning, construction budget control, and scheduling. We understand the Construction Manager at-Risk project delivery method is being considered as a means to this end.

The scope of work noted below outlines our proposed scope for the Planning and Due Diligence task.

### **SCOPE OF WORK:**

Cranston proposes to complete Planning and Due Diligence activities associated with the proposed Diversion Dam improvements. We propose to complete the following tasks and provide the outlined deliverables.

- **Task 1.1 – Conceptual Design**
  - Cranston will develop concept plans identifying areas proposed for improvement using inspection data, available basemap information, and exhibits from the Diversion Dam Condition Assessment Report.
  - Potential design solutions and alternatives will be shown schematically in cross-sections, conceptual details, and plan view notations. Established stationing along the Diversion Dam will be noted for location of conceptual repairs.
  - Conceptual improvements will address each priority condition identified in the Report.

- Cranston will evaluate construction phase access options. Planning activities will also consider permanent measures (e.g., easements) to assure accessibility for operation and maintenance use.
- **Task 1.2 – Regulatory Engagement**
  - At the direction of Augusta Utilities Department, Cranston will engage FERC and other agencies to discuss the project intent and potential improvements. Cranston will request direction regarding permitting requirements from each agency.
  - Cranston will identify the required permit processes for each jurisdictional authority and document those as part of the project deliverables.
  - In coordination with Augusta Utilities Department, Cranston will engage project stakeholders such as North Augusta, Edgefield County, etc.
- **Task 1.3 – Project Delivery Coordination**
  - Cranston will assist the Augusta Utilities Department with pre-qualification requirements and Construction Manager selection, as requested.

### **Deliverables:**

Cranston will prepare a comprehensive Concept Report that outlines the design considerations and proposed alternatives for repair of the prioritized areas. Conceptual drawings will be developed that identify areas requiring repair based on our recent Condition Assessment. Conceptual cross-sections, details, and plan view descriptions will be included. Design repair alternatives will be illustrated schematically on the Concept Plans and described in the Concept Report.

The Concept Report will include a Regulatory Permit summary that outlines all known permitting requirements and contact information per agency. Minutes from stakeholder engagement meetings will be included in the Concept Report.

### **FEE PROPOSAL:**

We propose to complete the task-based approach based on the following fee schedule. Items without a definite scope are proposed on a time and material (T&M) basis at our standard hourly rates that are in effect at that time.

<b><u>Task</u></b>	<b><u>Description</u></b>	<b><u>Fee</u></b>
1.1	Concept Design	\$17,500 (Lump Sum)
1.2	Regulatory Engagement	\$7,500 (Time and Mat's-Est.)
1.3	Project Delivery Coordination	\$5,000 (Time and Mat's-Est.)
<b>TOTAL:</b>		<b>\$30,000</b>

We will invoice you monthly for the percentage of each item completed during that month and would expect payment within 15 days following the submittal of our invoice.

**TIME OF COMPLETION:**

Cranston understands that time is of the essence. We are prepared to begin work at your direction. We anticipate Task 1.1 will require 4-6 weeks to develop and deliver for review and comment. Services associated with Task 1.2 will run concurrently with Task 1.1. Although regulatory based timelines are challenging to quantify, Cranston will document all outreach activities for inclusion in the Concept Report. Similarly, we anticipate support Task 1.3 will be delivered along the same timeline as the over Concept Development services.

We appreciate the opportunity of making this proposal and trust that you find it satisfactory. We stand ready to prepare and forward to you a standard form engineering contract covering this assignment at your request. Should you have any question concerning the scope of the services offered, or the fees, please do not hesitate to give us a call.

Sincerely,

CRANSTON, LLC



Tom Dunaway, P.E., MBA  
Senior Project Manager

Wes Byne, P.E.  
March 28, 2023  
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Diversion Dam – Planning & Due Diligence  
CEG# 2022-0298

ACCEPTED:

**CITY OF AUGUSTA, GEORGIA**

BY: W Byne

TITLE: Director

DATE: \_\_\_\_\_