

Division of Water

**Request for Legislation**

**An ordinance authorizing the Division of Water to enter into one or more Public Improvement contracts for improvements to the Kirtland Crib.**

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**Background/Purpose:**

Of the four CWD water treatment plants, only the Baldwin Plant has a visible above-water intake, known as the Kirtland Crib. The intakes for the other plants are submerged near the bottom of the Lake. Constructed between 1896 and 1904, the iconic orange structure protects the intake to the five-mile tunnel that runs 50 feet below the bottom of Lake Erie to the Kirtland Pump Station along the East Shoreway, which then pumps untreated lake water to the Baldwin Plant for treatment. The Crib has a concrete deck that supports a crane and a three-story building that houses a solar/electrical system, navigation aids, and assorted instrumentation.

The Crib exists in a harsh marine environment. The last major repair to the Crib was in 1991, when the original living quarters were demolished and the current three-story building was constructed. The Crib was repainted in 2004. During its entire history, the Crib has operated continuously and has been subject to routine inspections and maintenance visits by CWD personnel. Operations and engineering staff have noted ongoing maintenance issues on the structure. Major interior, exterior, and underwater inspections of the structure were performed in 2017. In particular, the steel beams that provide support to the three-story building require rehabilitation. Additionally, the exterior steel panels and concrete that comprise the Crib belt require repairs to provide continued protection from boats, floating debris, and ice.

**Scope of Work/Commodities/Services:**

A primary element of this project is to rehabilitate the major steel supporting beams; repair and/or replacement of the Crib belt, parapet, and building components are also in the scope. Additionally, the City is including repainting, security, solar / electrical supply, water quality, control, corrosion protection, safety, roofing and other structural element tasks.

This project will return the structure to a "like-new" condition, with no additional major renovation needed for the next 30 years.

**Justification/Urgency:**

The Kirtland Crib is the water intake for the Baldwin Plant, which provides potable water service to large areas of Northeast Ohio. This project will allow the intake to function for many decades to come and continue to comply with all USEPA and OEPA regulations.

**Anticipated Costs and funding source:**

The project is valued at \$16,000,000.00. The improvements shall be paid from Fund 52, SF 001 and/or from the fund or sub fund to which are credited the proceeds of future bonds if issued for this purpose.

**Schedule or Term of Contract:**

Public Improvements contracts for these improvements will be authorized, and the project is estimated to take approximately 3 years to complete.

**Current Contract(s):**

<b>Project Name</b>	<b>Vendor</b>	<b>Contract Info.</b>	<b>CSB Participation</b>
Baldwin Improvements A	Kokosing Construction 13700 McCracken Road Cleveland, Ohio 44125	Contract #: CT-2002-PI2019*011 Awarded Amt: \$10,123,300.00 Contract Exp Date: 08/04/20	0.00%