

August 2, 2016



Nick Mimms, PE
City of Ft. Pierce
City Manager
100 North US 1
Ft. Pierce, FL 34954

Cardno

380 Park Place Blvd
Suite 300
Clearwater, FL 33759
USA

Phone 727 531 3505
Fax 727 539 1294

www.Cardno.com

RE: Cost Estimate for 100% Seawall Design Plans Preparation and Seawall Replacement/Construction between 2nd Street and North Indian River Drive Adjacent to the Former H.D. King Site, Ft. Pierce

Dear Mr. Mimms:

Cardno is pleased to submit this technical and cost proposal for finalization of 100% design plans for the seawall replacement, construction of the replacement seawall and construction engineering and inspection during the project.

BACKGROUND

During the course of the brownfield remediation activities on the former HD King power plant site it was noted that the seawall along both the north and south sides of Moore's Creek was in poor condition. Numerous tie-back rods were observed to have completely deteriorated along the southern side of the seawall and portions of the wall were noted as having significant deflection outward into the channel of Moore's Creek. Based on these observations and potential for failure of the seawall system, the CITY had an independent seawall assessment conducted in 2014, which confirmed the need for replacement.

As you are aware, Cardno's team has been remediating the site in phases since 2010 and is uniquely suited to utilize our extensive knowledge of site conditions to optimize both the design and construction of the proposed new seawall. Integration of the brownfield remediation work with the proposed seawall replacement in 2016 will:

- allow close collaboration to improve the design and construction methods given the residual contamination landward of the seawall
- limit the potential for spreading of or exposure to residual contamination, and
- reduce overall costs to the CITY

In conjunction with the 2016 remediation work on the former HD King power plant site, Cardno was engaged to prepare 60% design plans and develop a guaranteed maximum price (GMP) to finalize the design and construct the seawall. The 60% design plans have been submitted and the following sections of this proposal detail the finalization of the design plans and construction/replacement of the seawall along both sides of Moore's Creek generally between 2nd Street and North Indian River Drive

PROPOSED SCOPE OF WORK

This Cost Proposal is broken down into three sections: final seawall construction plans preparation and permitting, construction, and construction engineering inspection.

Task I - Seawall Construction Plans Development

Cardno will prepare final construction plans for the replacement of the seawalls along both sides of Moore's Creek, from the east side of the North 2nd Street Bridge and extending to approximately 20 ft west of the bridge located on North Indian River Drive. These plans will use, as a basis, the 60% plans submitted previously.

- 1) Finalize wall design in accordance with CITY'S, Florida Department of Transportation (FDOT) and AASHTO Standards.
- 2) Complete supplemental Geotechnical investigation and analysis
- 3) Obtain required permits.
- 4) Coordinate with CITY's Utility Departments and other Utility owners having utilities that may be impacted with the new wall construction.
- 5) For the final contract plans submittal CARDNO will submit the following to the CITY:
 - Three (3) sets of 11" x 17" prints
 - Design Documentation in PDF form sent via email.
- 6) Develop construction specifications using FDOT Standard Specifications for Road and Bridge Construction – current edition

Task II – Seawall Construction

As a subconsultant to Cardno, Brothers Construction will construct replacement of the seawalls along both sides of Moore's Creek, from the east side of the North 2nd Street Bridge and extending to approximately 20 ft west of the bridge located on North Indian River Drive. New walls will be constructed in accordance with the final construction plans, construction specifications, and permits.

Task III – Construction Engineering Inspection

Cardno will provide construction engineering and inspection services for the duration of construction activities. Those services will include an average of two half-day site visits per week to assure that the contractor is in compliance with the contract documents and permit requirements. Threshold inspections will be performed to verify sheeting and piling installation minimum tip elevations, seawall cap and deadman dimensions, reinforcing steel placement, concrete placement, over the shoulder concrete testing verifications and concrete sheeting construction, if cast on site. Weekly progress reports will be prepared and provided to the CITY.

George Denti will be providing those services. He lives locally, has vast experience in marine and structures inspection, and is familiar with the site, the CITY and the permitting agencies involved.

SCHEDULE OF COMPENSATION

Task I - Seawall Construction Plans Development

Cardno Labor and Expenses	\$43,178
Subcontracted Services	
Geotechnical Services	\$1,000
Permitting	\$5,000
Task I Subtotal.....	\$49,178

Task II – Seawall Construction and Program Management

Cardno Program Management	\$121,941
Subcontracted Services	
Seawall Construction.....	\$1,399,402
Task II Subtotal..	\$1,521,343

Task III – Construction Engineering Inspection

Cardno Labor and Expenses (based on preliminary 8 month construction estimate)	\$40,000
Subtotal (Tasks I, II and III)	\$1,610,521

Owner’s Allowance/Contingency (10%) \$161,052

ESTIMATED PROJECT TOTAL \$1,771,573

The 10% Owner’s Allowance/Contingency of \$161,052 is intended to cover unforeseen conditions, such as environmental issues, utility modifications/relocations, and removal/disposal of unknown underground obstructions or contaminated material. Owner’s Allowance/Contingency funds will not be utilized without prior approval from the CITY. Any unused funds from this allowance will remain with the CITY at the completion of the project. In the event that unforeseen conditions are discovered that could potentially exceed the owner’s allowance, Cardno will immediately consult with the CITY to encumber additional funds.

PROPOSED PROJECT SCHEDULE

- Notice to Proceed – September 2016
- Final Construction Plans and Specifications Submittal – September/October 2016
- Permit Issuance – October 2016
- Begin Construction – October/November 2016
- Complete Construction – June 2017
- Submittal of As-Built drawings and permit SOC – July 2017

Cardno project fees and expenses will be invoiced on a lump sum basis up to the guaranteed Maximum Price (GMP) of \$1,610,521. If required, billing under the Owner’s Allowance will be on a time and materials basis. Work performed for this project will be in compliance with the current Agreement for Consulting Services contract with the Fort Pierce Redevelopment Agency.

After review of the scope of services, please call me or Greg Schultz at 727.531.3505, if you have any questions.

Sincerely,

Approved by:



Rick Hagberg, PG
Director
For Cardno
Email: Richard.Hagberg@Cardno.com

Signed by: _____
Title: _____
Date: _____