REQUEST FOR QUOTE

Construction of Living Shorelines in Coastal Retention Ponds
For
Bethune-Cookman University, Daytona Beach, FL
Quote # 0001

Issue Date: December 14, 2016

Opening Date: December 19, 2016

Quotes due by: January 15, 2017 11:59 pm
Request for QUOTE

BID FORM

QUOTES DUE BY: January 15, 2017 11:59 PM

Company Name: All Vendors
Representative: _____________________________________________
Internet Address: __________________________________________
Telephone Number: ___________ Fax Number: ________________

Refer questions to: Hyun Jung Cho    Phone: (386) 481-2793
Submit Quote to Hyun Jung Cho, choh@cookman.edu

The Bethune-Cookman University (B-CU) is seeking a qualified Subcontractor to provide Construction of Living Shorelines around 5 (five) retention ponds, a partial requirement for the Environmental Protection Agency (EPA)-funded project, Implementing and Evaluating the Effectiveness of Native Vegetative Buffers at Controlling Nonpoint Source Pollution and as a Tool for Public Education along the Indian River Lagoon.

Firms interested in providing these services may obtain this copy of the Request for Quotes from the Bethune-Cookman University website (www.cookman.edu) or ask questions to:

Hyun Jung (“J.”) Cho, Ph.D.
Professor, Department of Integrated Environmental Science
640 Dr. M.M. Bethune Blvd.
Bethune-Cookman University
Daytona Beach, FL 32114
(386) 481 2793
choh@cookman.edu

Instructions:
Please provide one electronic version via email or mail one hard copy.

- Cover page with contact information, statement of qualification, and previous experiences
- Attachments should include Professional Services forms, questions & answers, licenses, resumes, and other supplemental information.
- Copies of Insurance and Subcontractor license
- The entire document shall be limited to 15 pages on 8 ½ X 11 legible pages with 1 inch margins around, typed using a commonly used font (Times New Roman, Calibri, or Arial) size 12.
- Electronic submission to choh@cookman.edu (a copy to livingshoreslines@cookman.edu)

This solicitation is subject to the provisions of the BETHUNE-COOKMAN UNIVERSITY’s PURCHASE ORDERS TERMS AND CONDITIONS. The right is reserved to make an award on a line item, group, or total sum basis.
Background:
Bethune-Cookman University (B-CU) is soliciting quotes for services to transform turfgrass dominated shorelines of coastal retention ponds into living shorelines of native Florida plants that are known to be better filters of nonpoint source nutrients. The services will help achieve a task objective of a project funded by Environmental Protection Agency (EPA) through the Department of Florida Environmental Protection (FDEP). The project goal is to reduce nonpoint source pollution along the Mosquito Lagoon (ML), a northern sub-lagoon of the Indian River Lagoon (IRL) system in the cities of New Smyrna Beach, Edgewater, and Oakhill.

Five retention ponds located in the Mosquito lagoon watershed are identified for this project (Table 1). The ponds meet the following project criteria: Approximately 5,000-12,000 square-foot size with turf grass dominated shorelines. These five ponds located in New Smyrna Beach and Edgewater, FL (Table 1) are committed to living shoreline construction.

Table 1. Retention pond locations

<table>
<thead>
<tr>
<th>Maps GPS use</th>
<th>Property Type</th>
<th>Property Address</th>
<th>Est. Pond Surface Area (Sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29° 0' 54.122&quot;, -80° 58' 27.428&quot;</td>
<td>Private</td>
<td>199 Oak Ln New Smyrna Beach 32168</td>
<td>7795.60</td>
</tr>
<tr>
<td>28° 58' 1.065&quot;, -80° 55' 13.880&quot;</td>
<td>Private</td>
<td>1735 Maplewood Dr Edgewater 32132</td>
<td>8446.06</td>
</tr>
<tr>
<td>28.918778, -80.872011</td>
<td>Restaurant</td>
<td>4170 US Highway 1,Edgewater, FL 32141</td>
<td>4536.50</td>
</tr>
<tr>
<td>28.919866, -80.883969</td>
<td>Private</td>
<td>4140 Clinton Cemetery Rd, Edgewater, FL 32141</td>
<td>12129.58</td>
</tr>
<tr>
<td>28.993482, -80.904786</td>
<td>Public (City of Edgewater)</td>
<td>103 N Riverside Dr, Edgewater, FL 32132</td>
<td>6253.00</td>
</tr>
</tbody>
</table>

Selected bidder (Subcontractor) is expected to be contracted through B-CU and provide the following services:

Service Required: Construction and Maintenance of Coastal Retention Pond Best Management Practices (BMPs)
Subcontractor will construct Living Shorelines on the five (5) retention ponds in accordance with the following planting design(s) and permits have been exempt for the planting so long as the Subcontractor follows the BMPs and do not contribute to erosion or sedimentation of natural waterbody system. The shoreline planting will be conducted by Subcontractor based on the approved design. Subcontractor will come back to each of the sites three months, 12 months, and 18 months after construction for any post-construction maintenance including inspection of the health of the plants and identification of any invasive growth.

Shoreline Planting: All five ponds have different sizes and shapes. However, a 40 feet of linear shoreline “hedge” will be installed to each pond using native aquatic plants and Sand Cordgrass. The plants growing in the islands and on the shore will be tested for nutrient uptake and concentrations. Figures 1 and 2 demonstrate approximate position and coverage. The purpose of planting is to filter and sequester nutrient and chemical run-off resulting from fertilizer, pesticide application, and stormwater runoff. Plant type and planting zones will be determined based on salinity and size/littoral zone/contour of ponds. Candidate native plants include, but not limited to pickerel weed (Pontederia cordata), arrowhead (Sagittaria lancifolia), and Spartina bakeri (Sand cordgrass) that are known to effectively absorb nutrients from water. Plant spacing will be determined by the size of the selected ponds. Plants will be planted on 2 ft centers (Fig. 3). Shoreline planting width has to be at least 4 feet from a mean high water level edge if possible (contingent of the shoreline slope of each location) and into the mean low water.
**Floating Mat Planting:** The purpose of this treatment is to sequester nutrients from the water column which is not filtered by grasses or littoral vegetation. Floating vegetative mats will be installed in each of the five ponds to be situated approximately 10 - 15 ft. from the edge of shoreline plantings. The approximate coverage of the floating mats is 192 ft² per pond. Species composition proposed for this application may include but not be limited to: Golden canna (*Canna flaccida*), Pickerel weed (*Pontederia cordata*), Arrowhead (*Sagittaria lancifolia*), and/or Black needle rush (*Juncus effusus*). The floating mat islands will have approximately 480 plants.

![Figure 1. Planting spacing design for coastal retention ponds based on 2 ft centers (a) and 4 ft centers (b).](image)

**Deliverables:** Five (5) Coastal Retention Pond Living Shorelines constructed, as evidenced by: 1) Dated color photographs of the construction site(s) prior to, during, and immediately following completion of the construction task; and 2) an electronic copy of the final design and any required final inspection report(s) for the project. It is expected to have installation of living shorelines and floating plant mats begin the last week of February 2017 and completed by March 31.

The successful candidate (bidder) will also receive and respond to comments from a review committee. Finally, the successful candidate will be present at a planning meeting hosted by B-CU to answer any questions on the material presented. Any further items are reserved for negotiations with the successful recipient, once the selection has been made.

Quoted price based upon above Scope of Work: ____________________
Request For Quote # 0001

This is not a Purchase Order

AUTHORIZED SIGNATURES/NEGOTIATORS

The bidder or proposer represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the bidder or proposer will be duly bound:

Name__________________________ Title__________________________ Phone # ____________________

Fax: ___________________________ Email: ____________________________

(Signature)

(Title)

(Name of Business)

The bidder/offeror shall complete and submit the following information with the bid or proposal:

Type of Organization

- Sole Proprietorship
- Partnership
- Joint Venture
- Corporation

State of Incorporation: __________________________

Federal I.D. or Social Security number is __________________________