# CARTER ASSOCIATES, INC.

CONSULTING ENGINEERS AND LAND SURVEYORS

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August 20, 2020

Ms. Elizabeth Powell Assistant Director, Parks & Conservation Resources Division Indian River County 5500 77<sup>th</sup> Street Vero Beach, Florida 32967

### RE: South Prong Slough Civil Engineering and Surveying Services Proposal CAI Project No. 20-295 E

Dear Beth:

It is our pleasure to present for your acceptance, the following proposal for Civil Engineering and Surveying services associated with the above referenced project. Please find attached an ENGINEER's scope of services and budget outlining the steps for the enhancement planning and design services. Additional services required, but not included in the estimate, will be provided at our hourly rates, a copy of which is attached.

Thank you for giving us the opportunity to submit a proposal for our services. We look forward to working with you on this project. Should you have any questions or need additional information, please do not hesitate to contact me at our office.

Sincerely,

CARTER ASSOCIATES, INC.

John H. Blum, P.E. Principal



#### PROPOSAL TO PROVIDE PROFESSIONAL ENGINEERING AND SURVEYING SERVICES for INDIAN RIVER COUNTY PARKS & CONSERVATION RESOURCES SOUTH PRONG SLOUGH

#### SECTION 1: PROJECT OVERVIEW & OBJECTIVES

The project objectives for design and engineering of the South Prong Slough are briefly summarized as follows:

- The project consists of two parcels located north and south of County Road 510 (85<sup>th</sup> Street) located in and owned by Indian River County. The north parcel (31383600000100000004.0) is known as the "Ryall" parcel, and the south parcel (31382500000700000004.0) is known as the "Shadowbrook" parcel.
- The two subject parcels contain wetlands and the South Prong Slough. It is the intention of Indian River County Parks & Conservation Resources Division to develop an educational environment for guests to enjoy. An accessible pedestrian route/trail will be proposed to cross CR 510 for parcel interconnectivity.
- The Ryall parcel currently has a small existing historic house to remain. Indian River County Parks & Conservation Resources Division intends to propose parking to accommodate 6-8 or more vehicles. The proposed parking will have vehicle access to and from County Road 510. The existing access will be modified or removed and replaced to meet County standards and will need to be coordinated with the Florida Department of Transportation (FDOT) to consider the design of the future roadway improvements for CR 510.
- The Shadowbrook parcel is currently vacant. Indian River County Parks & Conservation Resources Division intends to propose an enclosed building (pavilion) that will have a comfortable occupancy of approximately 20 people as determined by the Indian River County Parks & Conservation Resources Division. A parking lot will be proposed associated with the building (pavilion) improvements to accommodate guests. Water and electricity will be installed and connected to the proposed structure; however sanitary sewer utilities will not be proposed. The proposed improvements will have vehicle access to and from County Road 510.

#### SECTION 2: SCOPE OF SERVICES

Based on the South Prong Slough Project Overview & Objectives described in Section 1, the following Scope of Services has been prepared to define the design and engineering work to be completed by Carter Associates, Inc. (ENGINEER) for the Indian River County Parks and Conservation Resources Division (CLIENT).



### TASK 1-FEASIBILITY PLANNING

In order to achieve the objectives outlined in Section 1, ENGINEER at a minimum will need to coordinate with the following agencies:

- CLIENT to receive guidance and feedback for the Master Site Plan design.
- Florida Department of Transportation (FDOT) and Indian River County (IRC) Public Works to plan and incorporate the future roadway improvements of CR 510 with the abovementioned proposed pedestrian and vehicle access locations.
- St. Johns River Water Management District (SJRWMD) to discuss environmental resource permitting requirements and wetland impacts/mitigation.
- Sebastian River Improvement District (SRID) to consider the water stage fluctuations of the adjacent canal known as "Lateral L" that have a potential to impact the project's design.

ENGINEER will attend up to three initial coordination meetings each with FDOT, IRC Public Works, SJRWMD, and SRID to discuss the proposed Master Site Plan and access to the parcels.

ENGINEER will conduct one site visit to the subject parcels within the project limits determined and defined by the CLIENT to observe the existing conditions and to identify potential design constraints.

ENGINEER will coordinate with prospective architects in order to design the proposed building (pavilion) on the Shadowbrook parcel that incorporates the desire of the CLIENT mentioned in Section 1: Project Overview & Objectives. ENGINEER will select the architect with approval from the CLIENT to design and permit the proposed building (pavilion).

ENGINEER will coordinate with prospective geotechnical engineers to perform geotechnical explorations within the project limits determined and defined by the CLIENT and prepare a report of the findings that include boring results for the proposed building (pavilion) foundation design, parking lot recommendations, and groundwater characteristics.

Deliverable for this task will be a memorandum prepared by the ENGINEER outlining the information gathered from meetings, site review, and coordination, and providing a general discussion of issues that may need to be addressed as part of site design. Also, a proposal from the prospective architect and geotechnical will be provided.

### TASK 2 - SITE SURVEYS

ENGINEER will perform survey to collect baseline data including topography and vegetative cover the following locations: 1) 450' x 400' area on northeast corner of the Shadowbrook



parcel, 2) 200' x 300' area on the southwest corner of the Ryall parcel, 3) right-of-way area north and south of County Road 510 along the frontage of the subject parcels, and 4) quarter-mile long accessible trail from south of the Shadowbrook development site. Topographic survey to include spot elevations on approximately 50-foot intervals to obtain sufficient information to complete the required grading plan, protected tree locations with 4" or greater DBH, and wetland delineation flagged by the CLIENT. Future site-specific surveys for potential trail and boardwalk locations throughout the parcels will be performed separately under a new purchase order from the CLIENT.

Deliverables for this task will include 24"x36" full-sized drawings of the survey signed and sealed by a Professional Surveyor and Mapper.

### TASK 3 – MASTER SITE PLAN

After coordinating with the abovementioned entities outlined in TASK 1 and obtaining the survey for design outlined in TASK 2, the ENGINEER will design the Master Site Plan that addresses the concerns of all the entities and facilitate the desires of the CLIENT.

ENGINEER will coordinate with selected architect to produce preliminary building plans including proposed floor plan, renderings and materials for CLIENT approval.

Once the Master Site Plan is approved by CLIENT, ENGINEER will attend preapplication meetings with Indian River County to receive preliminary comments on the Master Site Plan prior to the creation of construction documents outlined in TASK 4.

Deliverables for this task will be renderings for each portion of the Master Site Plan design and jurisdictional feedback from preapplication meetings, as outlined above.

### TASK 4 – DEVELOPMENT OF PROJECT CONSTRUCTION PLANS

ENGINEER will develop a dimensional site plan conforming to local permitting requirements. Site plan will depict pedestrian accessible trails/boardwalks between the two subject parcels and proposed parking lots, driveway connections, and the building (pavilion). Prepare site data to include land use calculations, setbacks, and open space. Complete and submit applications for site plan approval including all checklist items required by the Indian River County Planning Department.

ENGINEER will prepare the following documents as part of the site plan submittal:

- Stormwater management report for proposed stormwater feature to include flood routings, retention sizing, discharge calculations, and recovery analysis as required. Develop drainage and grading plans for proposed parking lots and building (pavilion).
- Utility construction plan for extension of water line to proposed pavilion.



- "Code minimum" landscape plan to meet Indian River County requirements along with wetland planting plan (by others) for the proposed stormwater feature.
- Prepare project specifications sufficient for permitting and bidding and prepare preliminary engineer's cost estimates for construction

ENGINEER and CLIENT will coordinate with selected architect to prepare final and complete building construction plans of the approved building (pavilion) design outlined in TASK 3. ENGINEER will also coordinate with selected geotechnical engineer to receive required soil information to design the building, pavement and stormwater features.

#### TASK 5 – PERMITTING

Prepare application documents to obtain the following permits:

- Indian River County
  - o Major Site Plan
  - o Stormwater Management System
  - o Right-of-Way
  - o Utility Construction
  - o Land Clearing / Tree Removal
- Florida Department of Transportation
  - o Driveway Connection
  - o Drainage Connection
- St. Johns River Water Management District Environmental Resource Permit.
- Florida Department of Environmental Protection
  - o General Water Permit
  - o NPDES Permit (NOI)
- Sebastian River Improvement District
  - o Drainage Connection Permit
- Army Corp of Engineers (as applicable)

ENGINEER will coordinate as necessary with the appropriate jurisdictions throughout the permitting process and keep CLIENT informed of mandatory design changes to the project.

### TASK 6 – CONSTRUCTION ADMINISTRATION AND BIDDING ASSISTANCE

It is assumed CLIENT will prepare a contract for construction, including bidding requirements and general conditions. ENGINEER will provide technical specifications and project plans in sufficient detail to define the scope and requirements for the proposed improvements within the final permitted construction plans for this project. ENGINEER will assist CLIENT in bidding the project by attending a pre-bid meeting and by addressing inquiries from potential bidders regarding the scope of the proposed work. ENGINEER will assist the County during project bid review and provide a letter summarizing our recommendations regarding contract award.



ENGINEER will review contractor's material submittals and scheduling. Construction inspection services will be provided for the duration of construction in order to ensure that the contractor's work conforms to the requirements of the project design drawings and specifications. Provide certification upon completion of construction and review of contractor provided as-builts.

### TASK 7 – REIMBURSABLE EXPENSES

Reimbursable expenses, such as prints, copies, vellum, postage, etc.

#### SECTION 3: ENGINEERING SCOPE ASSUMPTIONS:

In developing this Scope of Services, ENGINEER represents to the CLIENT that the following assumptions have been made and that deviation from these assumptions may require additional work and compensation on behalf of CLIENT to the ENGINEER.

- 1. This proposal specifically excludes all application and/or impact fees, which shall be the responsibility of CLIENT.
- 2. Fees for the services of the architect and geotechnical engineer are not included with this proposal and will be billed at cost plus 10% upon approval by the CLIENT.
- 3. This Scope of Services specifically excludes preparation of legal documents, easement descriptions, structural, mechanical, electrical, landscape, and architectural work.
- 4. Wetland planting design drawings, plant lists, and installation will be provided by others.
- 5. Civil engineering design and permitting fees for off-site improvements, such as turn lanes or utility line extensions, are not included with this proposal.
- 6. Permitting for disposal of any existing on-site hazardous or industrial waste material, or any other underground, unforeseen issues is not included with this proposal.
- 7. Construction stakeout and as-builts are not included with this proposal.



### **SECTION 4: COMPENSATION**

The proposed scope of services will be provided on a NOT TO EXCEED basis and invoiced monthly based on work performed to date for each task.

Task 1 – Feasibility Planning	\$9,445.00.
Task 2 – Site Surveys	\$15,420.00.
Task 3 – Master Site Plan	
Task 4 – Development of Project Construction Plans	\$19,940.00.
Task 5 – Permitting	\$17,870.00.
Task 6 – Construction Administration and Bidding Assistance.	
Task 7 – Reimbursable Expenses	
ΤΟΤΑ	L\$89,555.00.



## CARTER ASSOCIATES, INC. JANUARY 2020 FEE SCHEDULE

Staff Type:	Hourly Rates
Engineer (Principal)	\$165.00
Engineer I	\$140.00
Engineer II	\$125.00
Engineer III	\$115.00
Engineer IV	\$105.00
Engineer V	\$ 95.00
Surveyor (Principal)	\$165.00
Surveyor (Sr. Consultant)	\$140.00
Surveyor I	\$140.00
Surveyor II	\$125.00
Surveyor III	\$105.00
CAD/GIS Tech I	\$115.00
CAD/GIS Tech II	\$110.00
CAD/GIS Tech III	\$105.00
CAD/GIS Tech IV	\$ 95.00
CAD/GIS Tech V	\$ 85.00
Administrative Staff	\$ 60.00
Expert Witness	\$300.00
4 Man Survey Crew	\$175.00
3-Man Survey Crew	\$150.00
2-Man Survey Crew	\$135.00
1-Man Survey Crew	\$110.00
Inspector	\$ 65.00
SPECIALIZED EQUIPMENT:	
Leica HD P40 Scanner	\$175.00/Hour
Aluminum Boat	\$500.00/Day
All-Terrain Vehicle (ATV)/Trailer	\$250.00/Day
	\$1,000.00/Weck
<b>REIMBURSABLE EXPENSES:</b>	
Postage, Express Mail, etc.	Cost
Blueprints/Blackline (24" x 36")	\$2.00/Each
Color Prints (24"x36)	\$5.00/Each
Mileage	IRS Standard Rate
Mylar	\$7.00/Each
Photocopics:	
8.5" x 11"	15¢/Each
8.5" x 14"	25¢/Each
11" x 17"	35¢/Each
Concrete Monuments	\$20.00/Each
Rebar	\$ 2.50/Each
Laths	\$ 0.75/Each
Hubs	\$ 1.00/Each
Sub-Consultants	
Cost + 10%	

Note: These hourly billing rates will remain effective for the duration of this Agreement

