



# Agenda Report

2725 Judge Fran Jamieson  
Way  
Viera, FL 32940

## Consent

F.1.

5/4/2021

### Subject:

Nandivada Multi-Use Stormwater Treatment Area Design Services.  
Wood Environmental and Infrastructure Solutions, Task Order No. 20-4615-002-DSR SOIRL

### Fiscal Impact:

FY 2020-21: \$185,964 - Save Our Lagoon Trust Fund (1260)

### Dept/Office:

Natural Resources Management

### Requested Action:

It is requested that the Board of County Commissioners authorize the Chair to execute a Task Order with Wood Environmental and Infrastructure Solutions for \$185,964.

### Summary Explanation and Background:

On September 17, 2019, the Board authorized the contract for sale and purchase of the Merritt Island area, Nandivada parcel for use as a spoil management area, designed with multi-use options for the implementation of regional surface water and stormwater treatment projects. Located adjacent to Sykes Creek in Central Merritt Island, acquisition of the site was funded through the Save Our Indian River Lagoon Program and the Florida Inland Navigation District with the intent of improved water quality and clarity in this area through the implementation of stormwater and surface water management projects with periodic use for environmental and maintenance dredging projects.

The included Task Order with Wood Environmental and Infrastructure Solutions, Inc. provides for full multi-use site design, engineering and permitting services for this County owned parcel. This task order will evaluate the feasibility of using the subject multi-use spoil management area for treating stormwater runoff from that portion of the County's MS4 drainage area that exists along North Banana River Drive conveyed through the Nandivada parcel. Incorporation of a multi-use design maximizes the potential benefits to the lagoon as it can be readily repurposed from treating stormwater to serving other valuable functions including dredge spoil management or other configurations which may benefit water quality. During the design and permitting process, significant effort will be made to avoid impacts to wetlands and minimize impacts to residents adjacent to this parcel. The site design will maintain a natural buffer of existing vegetation between Sykes Creek and the work area along with the installation of a vegetative buffer along the perimeter of the parcel.

### Clerk to the Board Instructions:

An original electronic document is included with this agenda for execution by the Chair. Please contact Matt Culver at [matt.culver@brevardfl.gov](mailto:matt.culver@brevardfl.gov) <<mailto:matt.culver@brevardfl.gov>> for pickup of the final document.



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001  
Fax: (321) 264-6972  
Kimberly.Powell@brevardclerk.us

May 5, 2021

**MEMORANDUM**

TO: Virginia Barker, Natural Resources Management Director

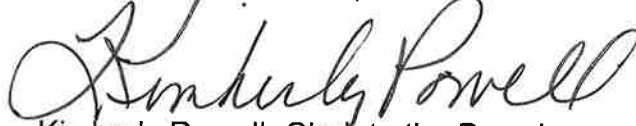
RE: Item F.1., Nandivada Multi-Use Stormwater Treatment Area Design Services.  
Wood Environmental and Infrastructure Solutions, Task Order No. 20-4615-002-  
DSR Save Our Indian River Lagoon (SOIRL)

The Board of County Commissioners, in regular session on May 4, 2021, executed and approved Task Order, No. 20-4615-002-DSR SOIRL, with Wood Environmental and Infrastructure Solutions for Nandivada Multi-Use Stormwater Treatment Area Design Services for \$185,964. Enclosed is the executed task order.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS  
RACHEL M. SADOFF, CLERK

  
Kimberly Powell, Clerk to the Board

Encl. (1)

cc: Budget  
Finance

**TASK ORDER TO FURNISH PROFESSIONAL SERVICES FOR BOARD OF  
COUNTY COMMISSIONERS OF BREVARD COUNTY  
NANDIVADA MULTI-USE STORMWATER TREATMENT AREA DESIGN SERVICES  
Brevard County Contract No. RFQ 5-19-10  
Wood Project No. 600731.1**

**TASK ORDER NO. 20-4615-002-DSR SOIRL**

This Task Order is made and entered into the date of last signature below by Wood Environment and Infrastructure Solutions, Inc., hereinafter referred as the CONSULTANT, and the BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, hereinafter referred to as the COUNTY, hereinafter referred to as the COUNTY.

WHEREAS, on January 28, 2020, the CONSULTANT and the COUNTY entered into an AGREEMENT, wherein the CONSULTANT agreed to furnish engineering services to the COUNTY as referred to in the AGREEMENT; and

WHEREAS, under SECTION II of the AGREEMENT, the CONSULTANT agrees to provide certain professional engineering services which shall be implemented by TASK ORDERS.

NOW, THEREFORE, the parties do mutually agree as follows:

**Summary:**

As Brevard County seeks to execute muck dredging projects, the availability of upland processing areas for the treatment of dredge spoils has become a growing concern. Development of spoil management areas, designed with multi-use options for the implementation of regional surface water or stormwater treatment projects is key to the effective, long-term and economical use of these locations and is consistent with the 2016 Save Our Indian River Lagoon Plan. The purpose of this task order is to evaluate the feasibility of using the subject multi-use spoil management area for treating stormwater runoff from that portion of the COUNTY's MS4 drainage area that exists along North Banana River Drive conveyed through the Nandivada parcel. Incorporation of a multi-use design maximizes the potential benefits to the lagoon as it can be readily repurposed from treating stormwater to serving other valuable functions including dredge spoil management or other configurations which may benefit water quality within the lagoon. Future utilization of this multi-use facility as a dredged material dewatering facility (DMWF) is anticipated to provide a significant cost savings over other single-purpose alternatives that would require additional engineering evaluations, potential land acquisition or more costly material management processes.

### **Section I - Scope of Work**

*See Exhibit A*

### **Section II - Schedule**

*See Exhibit A*

### **Section III - Deliverables**

*See Exhibit A*

### **Section IV – Compensation**

For the scope of work described in **Section I** of this task order, compensation from the COUNTY to the CONSULTANT shall be on an hourly basis as indicated in the attached **Exhibit B** (actual expenses by category and tasks may vary from those indicated during the course of work), not to exceed **\$185,964** unless authorized by a written Change Order executed by the COUNTY. Upon submittal of deliverables, as described in **Section III** of this task order, the COUNTY will be invoiced only for actual work performed. The County shall pay such invoices in accordance with Florida's Prompt Payment Act. The County reserves the right to refuse payment for or deduct from any invoice, fees for incomplete or defective work. The fee breakdown is provided in **Exhibit B**. Actual expenses by category and tasks may differ from those indicated in **Exhibits A and B** during the course of the work with written approval from the County Project Manager.

### **Section V - Other Terms and Conditions**

All of the terms and conditions of the Agreement shall apply to this Task Order as fully set out herein unless such terms and conditions are expressly superseded by the Terms and Conditions of this Task Order. It is hereby acknowledged that this Task Order is prepared based upon the master contract number 4615 approved by the COUNTY on January 28, 2020, for engineering services, and such, this Task Order is subject to all conditions and stipulations contained in said contract, as amended.

PURSUANT TO FLORIDA STATUTE SECTION 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF WOOD ENVIRONMENT AND INFRASTRUCTURE SOLUTIONS, INC. MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

### **Section VI - Effective Date and Authorized to Proceed**

This Task Order shall be effective on the date specified in the Notice to Proceed from the COUNTY'S designated representative. This task order will expire one (1) year from the date of issuance of the Notice to Proceed unless otherwise extended through a subsequent change order.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto set their hands and seals the date and year above written.

**BREVARD COUNTY BOARD OF  
COUNTY COMMISSIONERS**

**Wood Environment and Infrastructure  
Solutions, Inc.**

By:   
Rita Pritchett, Chair

By:   
Crissy Mehle, Service Line Leader

As approved by the Board on 5/4/21

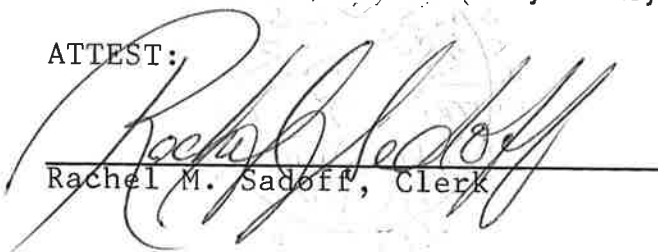
Date: May 4, 2021

Date: April 16, 2021

Reviewed of legal form and content for  
Brevard County:

  
Alexander Essee, Assistant County Attorney

ATTEST:

  
Rachel M. Sadoff, Clerk

## EXHIBIT A

### SECTION I SCOPE OF WORK

Wood Environment and Infrastructure Solutions, Inc. (CONSULTANT) is pleased to provide the Brevard County Board of County Commissioners (COUNTY) with the following scope of services. The CONSULTANT will evaluate the feasibility of using the multi-use spoil management area for treating stormwater runoff from that portion of the COUNTY's MS4 drainage area that exists along North Banana River Drive in front of the Nandivada parcel. This effort to design a multi-use spoil management area on the Nandivada parcel is consistent with the COUNTY's growing need to design multi-use facilities for muck removal projects that also incorporate a regional surface water or stormwater treatment function. This approach will result in significant cost savings compared to traditional DMWF and stormwater designs which are typically designed and implemented separately.

Please note that another separate scope of services *may be* required to cover any unidentified data collection or fieldwork, final design, and construction engineering services, that are not anticipated under this scope of services.

A separate scope of services *will be* necessary to design, plan, coordinate pre-application meetings, permit, provide bid documents, and perform construction-related services for a potential periodic DMWF, which is not offered under this scope of services.

The description of services expected within each task is listed below. Work will be completed by the terms specified in CONSULTANT's referenced contract with the COUNTY Task Order No. 20-4615-002-DSR SOIRL.

#### **TASK A-1: Project Administration, Project Schedule, and Meetings**

The CONSULTANT will perform the following project-related administrative functions during the entire phase of this project:

- Create a project schedule that covers the receipt of the CONSULTANT's Notice to Proceed through the CONSULTANT's completion of all construction-related services.
- Supply the COUNTY with up to six (6) updates to the project schedule, as requested by COUNTY staff
- Generate a summary of any team coordination events including any new responsibilities or relevant project changes assigned during meetings, etc., as requested by COUNTY staff

- Plan, attend, and participate in up to four (4) meetings with COUNTY staff to review project status (e.g., schedule issues, pending deliverables, etc.) during this phase of the project
- Plan, attend, and participate in a detailed permit pre-application meeting with COUNTY staff and permitting agencies
- Plan, attend, and participate in a detailed post-fieldwork and post data processing meeting with COUNTY staff and the public, as necessary

### **TASK B-1: Data Collection- Survey**

The proposed project area is located on Merritt Island, Florida on North Banana River Drive approximately 0.3 miles north of State Road 520. The project includes lands previously owned by Anupama Nandivada and identified as parcel number 24-37-31-00-4 in the records of the Brevard County Property Appraiser. The project area also includes lands adjacent to and east of the subject parcel (Brevard County Property Appraiser parcel number 24-37-30-83-A-1.01), as described in more detail below.

The CONSULTANT understands that topographic and hydrographic surveys are required to support the development of this parcel.

The survey data will be relative to the North American Datum of 1983 (NAD83) with values expressed in the Florida State Plane Coordinate System, US Survey Feet, and the North American Vertical Datum of 1988 (NAVD88) based on Global Positioning System (GPS) measurements and use of the National Geodetic Survey (NGS) Online Positioning User Service (OPUS). A minimum of three (3) 3-dimensional control monuments will be established on-site to support this Survey and subsequent construction activities.

#### Topographic Survey

The topographic surveying and mapping effort will include the location of visible/accessible/permanent improvements and features within the survey limits, including:

- Edge of roadway pavement
- Sidewalks
- Fences
- Stormwater inlet utility holes and pipes, including pipe invert elevations (if accessible)
- Sanitary utility holes and pipe, including pipe invert elevations (if accessible)
- Headwalls
- Visible surface evidence of buried utility lines

- Power and light poles
- Building footprints and/or outer limits of complex structures/equipment
- Limits of dense vegetation / wooded areas, not individual trees
- Street Signage
- Elevations at 100-foot intervals and changes in slope within topographic survey limits
- Limits of wetlands, based upon line marked by the CONSULTANT and verified by the requisite regulatory agencies during subtask B-2
- Apparent property boundary line and right-of-way based upon record documents
- Stakes will be set at 10' off of the northern property boundary for the client's assessment of existing vegetation buffering potential and whether an infill planting plan is necessary.

The topographic survey limits will include the uplands within the boundary depicted on the boundary survey of the Nandivada Property by the COUNTY, dated September 25, 2019 (approximately 11 acres), the roadway adjacent to this parcel, and the canal east of the roadway. The total area within the topographic survey limits being approximately 13 acres in size, as shown in **Figure 1**.

**Figure 1 - Project Location, Brevard County, Florida**



### Hydrographic Survey Services

This proposed hydrographic Survey will require obtaining horizontal and vertical locations of the bottom of the canal east of the roadway (North Banana River Road). Using a combination of bathymetric Survey and traditional survey methodologies, the CONSULTANT will measure and map the canal using a dual-frequency echo sounder attached to a small aluminum workboat. The CONSULTANT will locate the bottom based upon the first return from the echo sounder along cross-section lines spaced approximately 20 feet apart. At approximately ten locations, the CONSULTANT will physically measure the canal bottom surfaces using a vertical sounding pole to verify the echo sounder measurements. This system will be coupled with a real-time GPS navigation and positioning system to allow us to survey the canal bottom accurately. This hydrographic data will be processed, mapped, and included on the CONSULTANT's topographic survey map.

### Subsurface Utility Engineering (SUE) Services

Utilizing geophysical instrumentation, including radiofrequency direct, connect location, and ground-penetrating radar (GPR), the CONSULTANT will investigate the project area for the existence and approximate horizontal position of existing subsurface utilities. The limits or extent of this utility survey are identified on the attached aerial exhibit. This effort will also include the verification of the horizontal and vertical position of subsurface utility locations for up to eight (8) test holes.

All designated subsurface utilities will be marked on the ground and subsequently surveyed and included as part of the topographic survey product. The CONSULTANT will perform this service with due diligence. The CONSULTANT will use every reasonable effort to designate utilities in a manner consistent with ASCE Standard 38-02, Quality Level B. However, the CONSULTANT does not guarantee that all active, abandoned or out of service utility systems or structures can or will be detected, including but not limited to, utilities located underneath other utilities, non-conductive utility lines or systems located at depths of more than six (6) feet.

### Specific Purpose Survey (Drainage Features only)

To support engineering design, the CONSULTANT will locate and map specific stormwater drainage features (storm utility holes and inlets) along North Banana River Drive from the subject parcel north to Anchor Lane and south to the apparent north right-of-way of State Road 520. These features will include the location and elevation of the top of stormwater structures within the right of way of North Banana River Drive, elevations of accessible pipe inverts for each structure, and swales adjacent to the paved roadway. These specific features will be mapped and included in the topographic survey product.

## **TASK B-2: Data Collection - Geotechnical**

The CONSULTANT will drill fourteen (14) Standard Penetration Test (SPT) borings to the depth of 10 to 30 feet each below the existing grade (see **Table 1** and **Figure 2** below).

The CONSULTANT will install three (3) 2-inch diameter groundwater piezometers to the depth of 10 feet each for monitoring groundwater depths over 12 months. This scope of services does not include long-term monitoring, which can be offered in a separate scope or undertaken by COUNTY staff. The CONSULTANT will provide a geotechnical engineering investigation to classify all soil samples obtained during drilling. The CONSULTANT will perform laboratory index property and classification testing on selected soil samples, in addition to two laboratory constant-head permeability tests. The CONSULTANT will take precautions to place the piezometers in locations that will not require their removal if the COUNTY, were in the future, to use the site periodically as a potential DMWF.

**Table 1 – Geotechnical Testing Boring Plan**

| Boring No.   | Location                         | Rig Type | Boring Type   | Depth (ft) |
|--------------|----------------------------------|----------|---------------|------------|
| <b>B-01</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-02</b>  | General, inside STA              | ATV      | SPT           | 30         |
| <b>B-03</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-04</b>  | General, inside STA              | ATV      | SPT           | 30         |
| <b>B-05</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-06</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-07</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-08</b>  | General, inside STA              | ATV      | SPT           | 30         |
| <b>B-09</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-10</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>B-11</b>  | General, inside STA              | ATV      | SPT           | 10         |
| <b>D-01</b>  | Driveway /<br>Stormwater Outfall | ATV      | SPT           | 30         |
| <b>PZ-01</b> | Inside STA, GWL                  | ATV      | 2" Piezometer | 10         |
| <b>PZ-02</b> | Inside STA, GWL                  | ATV      | 2" Piezometer | 10         |
| <b>PZ-03</b> | Inside STA, GWL                  | ATV      | 2" Piezometer | 10         |
| <b>SO-01</b> | Stormwater Outfall               | ATV      | SPT           | 25         |
| <b>SO-02</b> | Stormwater Outfall               | ATV      | SPT           | 25         |

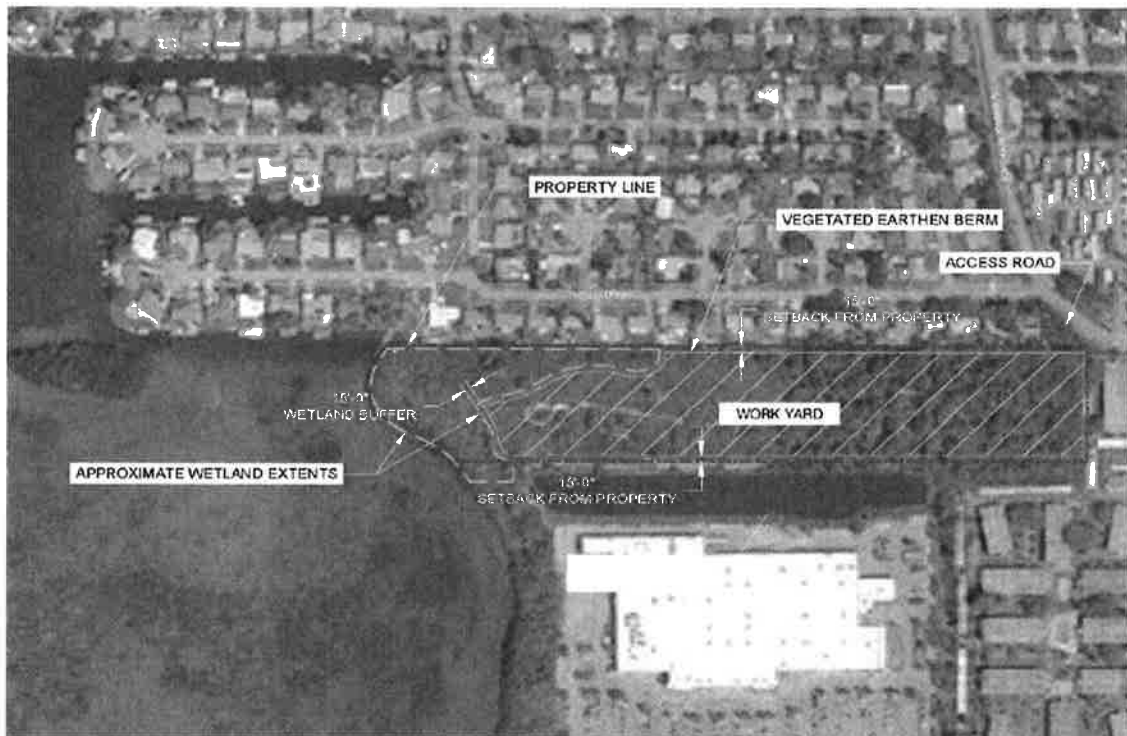
**Figure 2 – Geotechnical Testing Boring Plan, Brevard County, Florida**



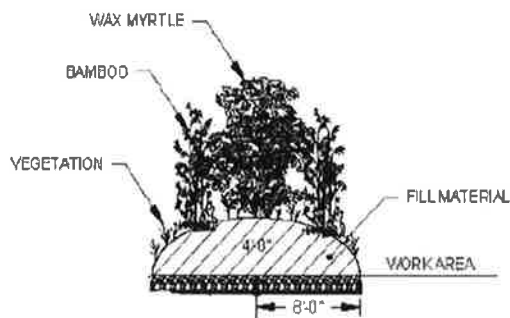
The CONSULTANT will prepare a written engineering report that summarizes the CONSULTANT's evaluation and provides the following recommendations:

- General site preparation and the compaction of fills or backfills discussion
- An assessment of the acceptability of excavated soils for use in the earthen berm proposed as a sight and sound barrier during and after construction (**Figure 3** and **Figure 4**)
- An estimate of soil porosity of the surficial aquifer in the stormwater pond area
- Some general suggestions for the planned jack-and-bore pipeline installation procedure, including excavation support requirements, temporary groundwater control, anticipated soil types, etc.
- Detailed recommendations for required pavement subgrade preparation of the driveway apron and during possible use as a DMWF (**Figure 5**)

**Figure 3 – Proposed Site Plan, Brevard County, Florida**



**Figure 4 – Preferred Noise Barrier Typical Details, Brevard County, Florida.**



NOTE: Vegetation is Illustrative of Buffer Design  
and May Require Site Appropriate Substitutions

1 VEGETATED EARTHEN BERM  
NOT TO SCALE



REFERENCE IMAGE FOR DETAIL 1  
PHOTO SOURCE: USDOT FEDERAL HIGHWAY ADMINISTRATION  
NOISE BARRIER DESIGN HANDBOOK, PHOTO No. 2584

**Figure 5 – Completed Project, Brevard County, Florida**



### **TASK B-3: Data Collection – Natural Resource Survey**

The CONSULTANT will perform various natural resource investigations listed below, which are required by the various relevant regulatory agencies.

#### Wetland Delineation and Functional Evaluation

The CONSULTANT will delineate wetlands and other surface waters within the project area. This investigation will include a review of available topographic survey information, soil maps, and historical aerial photographs. The wetland delineation will be conducted under the guidelines, and using the methodology, presented in the Atlantic and Gulf Coastal Plain Region US Army Corps of Engineers (USACE) Regional Supplemental Guidance and Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), as well as Chapter 62-340, Florida Administrative Code, Delineation of the Landward Extent of Wetlands and Surface Waters. CONSULTANT will identify and map wetlands within the project site. Field data will be collected using a sub-meter GPS. The CONSULTANT will later translate the field data into Geographic Information System (GIS) data layer(s) that will be included in the wetland delineation map. The CONSULTANT will flag wetland boundaries in the field. This effort also provides for the preparation of appropriate wetland data forms for the wetlands within the project area.

The CONSULTANT will schedule and conduct one site meeting with SJRWMD and USACE to verify the wetland lines. The CONSULTANT will also perform a functional evaluation of the delineated wetlands using the Uniform Mitigation Assessment Method (UMAM).

#### Wildlife Survey

The CONSULTANT's biologists will conduct a site visit and assess the project area for potential Threatened and Endangered (T&E) species and their habitat. According to US Fish and Wildlife Service (USFWS) county lists, several federally listed species are known to occur within the COUNTY.

The CONSULTANT will conduct a literature search of known species occurrences within the vicinity of the subject property. Field methodology will include pedestrian visual surveys. The CONSULTANT's observations will be recorded, including visual and auditory identifications of species encountered, as well as evidence of habitation such as scat, tracks, nests, dens, and burrows. Natural upland and wetland communities will be reviewed to determine their condition and dominant vegetation.

This effort does not include intensive species-specific investigations such as scrub jay call surveys. The CONSULTANT will recommend additional studies that may be required by the permitting agencies.

#### Gopher Tortoise Burrow Survey and Permitting

The CONSULTANT will conduct a minimum 20% gopher tortoise burrow survey of the project site. All burrows discovered will be marked with flagging tape or pin flags, and their position recorded using a Trimble GPS unit with sub-meter accuracy. This survey will be used to estimate the tortoise population within the project site.

The COUNTY will prepare and submit any necessary relocation permit applications for gopher tortoises found on the site and supporting documentation to the Florida Fish and Wildlife Conservation Commission (FWC) for the project. The COUNTY will coordinate and manage any additional gopher tortoise relocation requirements including fees and letters of reservation directly with FWC.

#### Cultural Resources Overview

The CONSULTANT's ability to adequately provide the services outlined below is contingent upon the following critical assumptions:

- The boundary limits depicted on the boundary survey of the Nandivada Property by the COUNTY, dated September 25, 2019, depict an accurate map of the project area
- No in-person meetings would be required with the Florida Division of Historical Resources (FL-DHR)

The Cultural Resources Overview will comply with the FL-DHR Guidelines for Historic Preservation Professionals, Module Three. The CONSULTANT will execute a technical approach to complete this Cultural Resources Overview that centers on identifying previously recorded archaeological sites within the project area and its vicinity. The overview will consist primarily of archival research and a thorough review of the available Florida Master Site File (FMSF) information housed at the FL-DHR in Tallahassee. The overview will characterize previously recorded sites (if any) as it pertains to eligibility and integrity for the National Register of Historic Places (NRHP). Florida and the National Register of Historic Places (NRHP) listings and any other pertinent resources, such as historic highway or area maps, soil maps, and lidar maps, will also be examined during this research.

The CONSULTANT's cultural resources services will include the following efforts:

- Determine if known archaeological sites are located within the project area and its immediate vicinity
- Determine if any previously recorded historic properties eligible, or potentially eligible, for listing on the National Register are within the project area
- Assess the archaeological potential/sensitivity of the project area for additional archaeological sites or historic resources. This sensitivity assessment will be based on previously recorded sites, historic maps, and environmental factors.

#### **TASK B-4: Stormwater and Site Development Analysis**

The CONSULTANT will use information obtained from the COUNTY to define the North Banana River Drive drainage catchment area from which stormwater can be diverted onto the site for retrofit-level treatment. The analysis will include performing flood routing calculations using mean annual, 5-year/24 hour, 10-year/24-hour, 25-year/24-hour, and 100-year/24-hour design storms to ensure any stormwater conveyance improvements do not adversely impact the adjacent properties. The CONSULTANT will use the 1D H&H module within ICPR® 4 to perform the modeling analyses. Approximately twenty structures appear to exist within the modeling analyses limits.

For water quality improvement calculations, the CONSULTANT will use historical rainfall information to determine, on an annual basis, the estimated nutrient pollutant load currently discharging from that part of the MS4 drainage area serving North Banana River Drive at the subject site location. Event mean concentrations (EMCs) used by the COUNTY will be used in the analysis as no site-specific information is available. The same analysis will be performed for the post (retrofit) condition to determine the pollutant load captured as a result of the improvements. The cost/benefit analysis on a cost per pollutant pound basis (20-year present worth cost) will be provided as well. Conservative values for pollutant removal efficiency, and in particular nitrogen removal, will be used.

An outfall from the site will be designed to discharge easterly under North Banana River Drive to an existing canal that discharges to the Milford Point canal. The discharge

structure will most likely be installed via directional drilling or jack and bore methodologies. This outfall will give the COUNTY flexibility on the discharge of treated waters (stormwater, geotextile tube seepage, surface waters) off-site to the east. It also could serve as a future dredge pipeline conduit as well. The CONSULTANT has assumed that the COUNTY has an existing drainage easement from North Banana River Drive to the canal. The coordination with landowners for on-site access is not included in this scope of services.

The site is located on a curve on North Banana River Drive. While site access is not ideal, the CONSULTANT will work with COUNTY transportation staff to develop the safest passive access connection possible considering the limited traffic expected from this site. The COUNTY intends to have the full access apron only during future potential spoil material management activities.

The CONSULTANT will provide construction drawings at 30%, 60%, and 100% design effort levels to COUNTY staff for input. The 30% plans will include existing conditions and the conceptual improvements proposed at the site. Upon receiving COUNTY input on the conceptual improvements, the CONSULTANT will advance plans through the design and permitting stages.

Utility investigations will be coordinated using design tickets and the information obtained through SUE identification of underground utilities provided by others. Should utilities within the existing COUNTY right-of-way require relocation, CONSULTANT will coordinate with said utility owners (including Brevard County Utilities for sewer, City of Cocoa for water, and Florida Power and Light for electrical) to acquire Utility Relocation Schedules (URs) as well as the associated relocation design plans (provided by those utilities). "No Conflict" or "URS" letters will be requested of all utilities within the path of the constructed works.

Wood will install one rainfall monitoring station and three continuous water table elevation monitoring stations at piezometer locations PZ1, PZ-2, and PZ-3 installed as part of the geotechnical evaluation as shown in **Figure 2**. The CONSULTANT has assumed the adjacent Walmart stormwater pond will have some effect on the water table at the site. Therefore, one of the three water table monitoring stations will be established adjacent to the Walmart pond. The other two water table monitoring stations will be located on the east and west sides of the site in locations outside of areas where earthwork is anticipated. Data collected by these monitoring stations will provide crucial information on the existing site's hydraulic performance under seasonal meteorological conditions. Data will be collected through telemetry, and only occasional maintenance/inspection will be required of the equipment. Equipment will be charged as a monthly reimbursable cost.

The assumptions for the telemetric station include installation and maintenance of the following for one year:

- Tipping Bucket Rain Gauge (1)

- Data Logger (3)/Cell Phone Modem
- Pressure Transducer (3)
- Solar panels/Marine Batteries/Accessories/Enclosure

## **TASK B-5: Permitting**

### Draft Permit Application

The CONSULTANT will coordinate, prepare for, and attend a pre-application meeting with St. Johns River Water Management District (SJRWMD) regulatory staff for the project. The 30% design plans will be reviewed at the pre-application meeting. It is assumed this project will be permitted for Environmental Resource Permit (ERP) considerations as a General Permit for Stormwater Retrofits (62-330.451, FAC). However, this permit will not allow any wetland impacts, and this would have to be vetted during the pre-application meeting.

In conjunction with the 60% design effort, the CONSULTANT will prepare a draft ERP with the COUNTY as the applicant. Should wetland mitigation be required, the CONSULTANT will provide sufficient information in the permit application to facilitate the COUNTY'S purchase of appropriate credits from a permitting mitigation bank located within the impacted basin. All mitigation fees will be paid directly by the COUNTY to the mitigation bank (as applicable). The ERP will include sufficient hydrologic and hydraulic calculations to demonstrate that there are no adverse impacts as a result of the proposed improvements. The draft application will be provided to the COUNTY Project Manager for review. If considered sufficient for signature, the COUNTY will sign the application and return it to the consultant.

### Final Permit Application

Following the completion of revisions to the 60 percent plan set, CONSULTANT will finalize the permit application, obtain COUNTY signatures, and submit the required electronic forms to the respective permitting agency (SJRWMD). The CONSULTANT will prepare a National Pollutant Discharge Elimination System (NPDES) Stormwater Erosion and Sediment Control Plan (a.k.a. Stormwater Pollution Prevention Plan or SWPPP) to identify off-site conveyances, on-site construction activities, and the proper sequencing of preventative steps for erosion and sediment control.

The CONSULTANT will prepare an application for authorization under the NPDES General Stormwater Permit for Construction Activities to the Florida Department of Environmental Protection (assuming construction area of disturbance exceeds one acre). It is noted that the COUNTY will likely have the Contractor sign, execute, pay for, and submit the Notice of Intent (NOI) as the Operator. The CONSULTANT will prepare a written Maintenance Manual for the completed system(s) that explains the maintenance methods and maintenance schedule for the completed BMP system(s).

For budgetary purposes, the CONSULTANT has assumed the permit application fee for the ERP is \$250, and this assumes no wetland permitting issues will occur. The COUNTY is responsible for permit fees beyond this amount as well as any required "noticing" expenses associated with publishing the application or permit in the local newspaper.

#### COUNTY Development Review

The CONSULTANT has assumed two pre-application meetings will be held with the COUNTY's Planning and Development Department to ensure the project meets the requirements of all COUNTY departments. CONSULTANT will submit right-of-way and site fencing permit applications to COUNTY Planning and Development Department for the proposed project and will participate in one meeting if required. The COUNTY will be responsible for any associated Planning and Development Department permit fees.

The CONSULTANT, on behalf of the COUNTY, will respond to up to two (2) requests for additional information (RAI) from permitting agencies on the completed ERP. CONSULTANT will provide the COUNTY with copies of all correspondence with and between all permitting agencies regarding the project.

#### **TASK B-6: Technical Specifications and Bid Package**

The CONSULTANT will prepare the technical specifications for the project. The COUNTY will use the bid specifications developed in this project to solicit and select a qualified Contractor. The COUNTY may coordinate a pre-bid meeting in which the CONSULTANT will attend. The CONSULTANT will assist the COUNTY staff in providing answers to any questions during the bid review process. Upon receiving responsive bids, CONSULTANT will assist the COUNTY in selecting the most qualified bidder for a recommendation of award to the COUNTY Commission.

### **END OF SCOPE OF SERVICES**

## SECTION II SCHEDULE

The CONSULTANT will initiate the scope of services described below within ten (10) workdays after receiving the notice to proceed (NTP). The table below summarizes the schedule for the subtasks noted below.

| Task                                                                                                                | Basic Services                                         | Estimated Time <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Project Administration Services (Task A)</b>                                                                     |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| A-1                                                                                                                 | Project Administration, Project Schedule, and Meetings | Length of the contract period                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Stormwater Retrofit of North Banana River Drive MS4 Drainage Area to Treat Stormwater Runoff Onsite (Task B)</b> |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| B-1                                                                                                                 | Data Collection - Survey                               | Survey Documents - within four (4) weeks of receiving completed geotechnical and natural resource data collection                                                                                                                                                                                                                                                                                                               |
| B-2                                                                                                                 | Data Collection - Geotechnical                         | Geotechnical Report - within eight (8) weeks of NTP                                                                                                                                                                                                                                                                                                                                                                             |
| B-3                                                                                                                 | Data Collection - Natural Resource Survey <sup>2</sup> | Natural Resource Documents - within eight (8) weeks of NTP                                                                                                                                                                                                                                                                                                                                                                      |
| B-4                                                                                                                 | Stormwater and Site Development Analysis               | 30% Plan Set- within four (4) weeks of receiving Survey<br>Engineering Design Report- within four (4) weeks of receiving completed Survey and geotechnical data collection<br>60% Plan Set- within six (6) weeks of receiving COUNTY input on 30% submittal<br>100% Plan Set- within four (4) weeks of receiving COUNTY input on 60% submittal<br>Water table and rainfall data collection and evaluation for up to 12 months   |
| B-5                                                                                                                 | Permitting <sup>2</sup>                                | Coordinate the Pre-Application Meeting within two (2) weeks of receiving COUNTY approval on 30% plans. Deliver the Permit Application packages for COUNTY review/signature- within eight (8) weeks of receiving COUNTY input on 30% submittal. Wetland mitigation design, if required, will be provided through the purchase of appropriate credits from a permitting mitigation bank, as needed during the permitting process. |
| B-6                                                                                                                 | Technical Specifications and Bid Package               | Technical Specifications- within four (4) weeks of receiving COUNTY input on 60% submittal<br>Bid Package Assistance- To be determined by COUNTY schedule for bidding                                                                                                                                                                                                                                                           |

<sup>1</sup> Note: Schedule is dependent on COUNTY reviews/data provision schedule.

<sup>2</sup> Note: Schedule is dependent on permitting agency review.

### SECTION III DELIVERABLES

The specific deliverables for the Task Work order's scope of services as described in Exhibit "A" will be completed as follows:

**Task A-1:** The CONSULTANT will complete a project schedule within one week of receiving the Notice to Proceed.

The CONSULTANT will supply the COUNTY with up to six (6) updates to the project schedule approximately every two months or as requested by COUNTY staff.

The CONSULTANT will create up to three (3) brief summarization of any team coordination events, including any new responsibilities or relevant project changes assigned during meetings, etc., as requested by COUNTY staff.

The CONSULTANT will generate up to four (4) status reports/memorandums, as required by COUNTY staff. For budgeting purposes, the CONSULTANT has assumed a maximum of four (4) summaries of any team coordination events or status report/memos.

The CONSULTANT will plan, attend, and participate in up to four (4) meetings with COUNTY staff and the public to review project status (e.g., schedule issues, pending deliverables, etc.) during this phase of the project.

**Task B-1:** The CONSULTANT will provide one (1) signed and sealed survey drawings (Map of Topographic Survey) and both CAD and PDF files. All work performed will be in accordance with the Standards of Practice as defined in Chapter 5J-17, Florida Administrative Code, Pursuant to Chapter 472, Florida Statutes. The COUNTY will also be supplied with up to electronic file containing scanned documents

**Task B-2:** The CONSULTANT will produce one (1) signed/sealed hard copies on 8.5 x 11-inch standard-sized sheets, and an electronic (PDF) copy of the geotechnical data collection report. The COUNTY will also be supplied with up to one one (1) electronic file with scanned documents.

**Task B-3:** The CONSULTANT will produce one electronic (PDF) copy of the natural resources report.

**Task B-4:** The CONSULTANT will generate one hard copy of the Engineering Design Report.

The CONSULTANT will submit an electronic (PDF) file of the construction plans to the COUNTY for its review and comment at the 30%, 60%, and 100% completion points. Three (3) sets of full-size final (100%) plans and specifications will be delivered to the COUNTY. Wood will also provide an electronic copy including the ICPR 4 model output and the pre vs. post hydrologic and nutrient loading spreadsheets with appropriate land use and EMC data.

**Task B-5:** The CONSULTANT will submit a PDF electronic copy of the pre-application meeting notes from the pre-application meeting with COUNTY's Planning and Development Department.

The CONSULTANT will create and transmit an electronic copy of the final permit package to the COUNTY.

The CONSULTANT will respond to up to two permit-related requests for information (RAI) each from any necessary regulatory agencies.

**Task B-6:**

The CONSULTANT will provide an electronic copy of the technical specifications and supporting bid document information. The CONSULTANT will assist in the bidding process, including attendance at the pre-bid meeting, assistance with requests for information during bidding, as well as assistance in the selection of the most qualified bidder.

**EXHIBIT B**  
**FEE ESTIMATE**

Date: Wednesday, February 10, 2021  
 Word Project Number: 600733X1  
 Client: Broward County

Project Name: Northwinds Stormwater Treatment Bay

| Task No.               | Class                                    | PM         | Principal  | Asst. PM    | Engineer 1 | Engineer 2 | Engineer 3  | Staff Proj. | AutoCAD Tech. | Sr. CAD Analyst | Sr. GIS Analyst | GIS Technician | Survey Crew - 2 person | Survey Crew 3 person | Hydrographic Survey Crew 2 person | Hydrographic Survey Crew 3 person | Sr. Engineer | Jr. Engineer | Sr. Field Tech. | Const. Admin. | Const. Inspector | Field Crew 2 | Field Crew 3 | Admin Support | Total Profit Labor Hours | Prof Labor | Expenses | Non-Labor Direct Unit Costs | Labor Direct Unit Costs | Total Unit Costs | Total     |           |          |
|------------------------|------------------------------------------|------------|------------|-------------|------------|------------|-------------|-------------|---------------|-----------------|-----------------|----------------|------------------------|----------------------|-----------------------------------|-----------------------------------|--------------|--------------|-----------------|---------------|------------------|--------------|--------------|---------------|--------------------------|------------|----------|-----------------------------|-------------------------|------------------|-----------|-----------|----------|
| A-1                    | Project Administration Meetings          | \$194.00   | \$210.00   | \$135.00    | \$94.00    | \$119.00   | \$135.00    | \$90.00     | \$86.00       | \$103.00        | \$117.00        | \$90.00        | \$135.00               | \$172.00             | \$198.00                          | \$245.00                          | \$148.00     | \$109.00     | \$77.00         | \$128.00      | \$108.00         | \$145.00     | \$192.00     | \$65.00       |                          |            |          |                             |                         | \$0              | \$0       | \$17,352  | \$17,352 |
| B-1                    | Data Collection - Survey                 |            | 2.00       | 58.00       |            |            |             |             |               |                 |                 |                | 188.00                 |                      | 20.00                             |                                   |              |              |                 |               |                  |              |              |               |                          | 268.00     | \$38,628 | \$0                         | \$0                     | \$0              | \$0       | \$38,634  |          |
| B-2                    | Data Collection - Geotechnical           | 17.00      |            |             |            | 62.50      |             |             | 6.00          |                 |                 |                |                        |                      |                                   |                                   |              | 95.00        | 62.00           | 78.00         |                  |              |              | 4.00          | 89.50                    | \$9,824    | \$8,828  | \$2,484                     | \$9                     | \$2,484          | \$21,286  |           |          |
| B-3                    | Natural Resource Survey                  | 4.00       |            |             |            |            |             |             |               |                 |                 | 12.00          |                        |                      |                                   |                                   |              |              |                 |               |                  |              |              | 10.00         | 262.00                   | \$28,914   | \$0      | \$610                       | \$0                     | \$610            | \$29,524  |           |          |
| B-4                    | Stormwater and Site Development Analysis | 4.00       | 2.00       | 12.00       |            |            | 120.00      |             | 80.00         | 160.00          | 4.00            |                |                        |                      |                                   |                                   |              |              | 112.00          |               |                  |              | 5.00         | 520.00        | \$57,945                 | \$0        | \$3,294  | \$0                         | \$3,294                 | \$60,340         |           |           |          |
| B-5                    | Permitting                               | 2.00       |            |             |            |            | 24.00       |             | 2.00          | 2.00            | 2.00            |                |                        |                      |                                   |                                   |              | 16.00        |                 |               |                  |              | 20.00        | 82.00         | \$10,118                 | \$0        | \$250    | \$0                         | \$250                   | \$10,368         |           |           |          |
| B-6                    | Technical Specifications and Bid Package | 6.00       | 2.00       | 12.00       |            |            | 90.00       |             |               |                 |                 |                |                        |                      |                                   |                                   |              |              |                 |               |                  |              | 8.00         | 58.00         | \$7,990                  | \$0        | \$10     | \$0                         | \$10                    | \$8,000          |           |           |          |
| Project Totals - Hours |                                          | 48.00      | 6.00       | 202.00      | 82.50      | 0.00       | 174.00      | 0.00        | 86.00         | 160.00          | 6.00            | 12.00          | 188.00                 | 8.00                 | 20.00                             | 0.00                              | 112.00       | 194.00       | 78.00           | 0.00          | 0.00             | 0.00         | 0.00         | 48.00         | 1,993.50                 | \$10,378   | \$9,928  | \$6,658                     | \$0                     | \$6,658          | \$185,364 |           |          |
| Project Totals - Cost  |                                          | \$4,342.00 | \$1,280.00 | \$50,906.00 | \$5,710.00 | \$0.00     | \$23,490.00 | \$0.00      | \$7,568.00    | \$15,480.00     | \$702.00        | \$1,080.00     | \$25,380.00            | \$0.00               | \$3,960.00                        | \$0.00                            | \$16,352.00  | \$19,982.00  | \$6,006.00      | \$0.00        | \$0.00           | \$0.00       | \$0.00       | \$0.00        | \$3,120.00               | \$193.50   | \$10,378 | \$9,928                     | \$6,658                 | \$0              | \$6,658   | \$185,364 |          |

**BREVARD COUNTY  
BOARD OF COUNTY COMMISSIONERS**

# CONTRACT REVIEW AND APPROVAL FORM

## SECTION I - GENERAL INFORMATION

|                                                               |  |                                       |  |
|---------------------------------------------------------------|--|---------------------------------------|--|
| 1. Contractor: Wood Inc.                                      |  | 2. Amount: \$185,964                  |  |
| 3. Fund/Account #: 1700/343961                                |  | 4. Department Name: Natural Resources |  |
| 5. Contract Description: TASK ORDER NO. 20-4615-002-DSR SOIRL |  |                                       |  |
| 6. Contract Monitor: Matt Culver                              |  | 8. Contract Type:<br><br>CONSULTANT   |  |
| 7. Dept/Office Director: Virginia Barker                      |  |                                       |  |
| 9. Type of Procurement: Other                                 |  |                                       |  |

## SECTION II - REVIEW AND APPROVAL TO ADVERTISE

### APPROVAL

| COUNTY OFFICE   | YES                                 | NO                       | SIGNATURE |
|-----------------|-------------------------------------|--------------------------|-----------|
| User Agency     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |           |
| Purchasing      | <input type="checkbox"/>            | <input type="checkbox"/> |           |
| Risk Management | <input type="checkbox"/>            | <input type="checkbox"/> |           |
| County Attorney | <input type="checkbox"/>            | <input type="checkbox"/> |           |

## SECTION III - CONTRACTS MANAGEMENT DATABASE CHECKLIST

### APPROVAL

| COUNTY OFFICE   | YES                                 | NO                       | SIGNATURE                                                                                                           |
|-----------------|-------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| User Agency     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Culver, Matt<br><small>Digitally signed by Culver, Matt<br/>Date: 2021.03.23 08:16:35 -04'00'</small>               |
| Purchasing      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Darling, Steven<br><small>Digitally signed by Darling, Steven<br/>Date: 2021.02.15 12:36:04 -05'00'</small>         |
| Risk Management | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Lairsey, Matt<br><small>Digitally signed by Lairsey, Matt<br/>Date: 2021.02.18 07:47:39 -05'00'</small>             |
| County Attorney | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Esseesse, Alexander<br><small>Digitally signed by Esseesse, Alexander<br/>Date: 2021.02.25 09:14:41 -05'00'</small> |

## SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

| CM DATABASE REQUIRED FIELDS                                                                                                                     | Complete ✓               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Department Information                                                                                                                          | <input type="checkbox"/> |
| Department                                                                                                                                      | <input type="checkbox"/> |
| Program                                                                                                                                         | <input type="checkbox"/> |
| Contact Name                                                                                                                                    | <input type="checkbox"/> |
| Cost Center, Fund, and G/L Account                                                                                                              | <input type="checkbox"/> |
| Vendor Information (SAP Vendor #)                                                                                                               | <input type="checkbox"/> |
| Contract Status, Title, Type, and Amount                                                                                                        | <input type="checkbox"/> |
| Storage Location (SAP)                                                                                                                          | <input type="checkbox"/> |
| Contract Approval Date, Effective Date, and Expiration Date                                                                                     | <input type="checkbox"/> |
| Contract Absolute End Date (No Additional Renewals/Extensions)                                                                                  | <input type="checkbox"/> |
| Material Group                                                                                                                                  | <input type="checkbox"/> |
| Contract Documents Uploaded in CM database (Contract Form with County Attorney/ Risk Management/ Purchasing Approval; Signed/Executed Contract) | <input type="checkbox"/> |
| "Right To Audit" Clause Included in Contract                                                                                                    | <input type="checkbox"/> |
| Monitored items: Uploaded to database (Insurance, Bonds, etc.)                                                                                  | <input type="checkbox"/> |