



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.5.

5/27/2021

Subject:

Approval Re: Local Agency Program Supplemental Agreement Number 7 and Resolution, Interlocal Agreement with the City of West Melbourne, and Agreement to Amend and Extend the Professional Services Agreement for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening) - District 5

Fiscal Impact:

\$229,311 Additional grant funding will be provided by the Local Agency Program Supplemental Agreement No. 7 of which \$229,310.06 will be utilized for the consultant design services for Supplemental Agreement No. 7. Previously allocated grant funding will be utilized for the consultant design services for Supplemental Agreement Nos. 3-5. No County funds will be needed for the design services.

Dept/Office:

Public Works Department/Finance and Contracts Administration

Requested Action:

It is requested the Board of County Commissioners approve and authorize the Chair to execute the 1) Local Agency Program Supplemental Agreement Number 7 and Resolution for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening) with the Florida Department of Transportation (F.D.O.T.), 2) Interlocal Agreement with the City of West Melbourne for the utility relocation design; and 3) Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design upon F.D.O.T. concurrence. It is further requested the Board approve any necessary Budget Change Requests associated with this action.

Summary Explanation and Background:

On May 14, 2013, the Board of County Commissioners approved to execute the Local Agency Program Agreement with F.D.O.T. in the amount of \$2,370,971 for the design of widening Ellis Road from John Rodes Boulevard to west of Wickham Road. On July 8, 2014, the Board approved Supplemental Agreement Number 1 for an additional \$100,000 grant funds to be added to the design phase to expand the scope to provide title searches. On September 16, 2014, the Board approved Supplemental Agreement Number 2 for an additional \$25,000 grant funds to be added to the design phase for survey services. On August 23, 2016, the Board approved Supplemental Agreement Number 3 for an additional \$40,127 grant funds to be added to the design phase for drainage analysis services on the L-15 Canal Study. On April 10, 2018, the Board approved Supplemental Agreement Number 4 for an additional \$150,000 grant funds to be added to the design phase for additional services due to the required Project Development and Environment (P.D.&E.) re-evaluation and accompanying design concept alterations. On December 10, 2019, the Board approved Supplemental Agreement Number 5 for an additional \$44,920 grant funds to be added to the design phase to provide for additional services resulting from the required P.D.&E. re-evaluation and parcel review. On March 9, 2021, the Board approved Supplemental Agreement Number 6 to extend the Agreement expiration date to April 30, 2022 and incorporate current financial provisions to satisfy the Florida Department of Transportation Financial

Services. Supplemental Agreement Number 7 will provide for additional grant funding in the amount of \$229,311 for design services to address the Phase IV F.D.O.T. review, finalize Right-of-Way documents, and design the utility relocation for the City of West Melbourne. Total federal funding for the design phase of the project is now \$2,960,329.

The County requested supplemental funding to be included in Supplemental Agreement Number 7 for the costs to design the utility relocation of the City of West Melbourne's facilities impacted by the future widening of Ellis Road. Per the Interlocal Agreement, the City will be responsible for the design costs, in the amount of \$78,233.70, if, and to the extent that, either of the following occur: a) The County does not receive reimbursement from F.D.O.T. for the design of the City utility relocation Project or b) The costs exceeds the amount of funding provided by F.D.O.T. for the design of the City utility relocation. The City approved the Interlocal Agreement at their City Council meeting on May 4, 2021.

The County entered into agreement with Hanson Professional Services Inc. on November 21, 2014 in the amount of \$2,470,963.27 for the design of Ellis Road Widening. At that time, the scope and fees from F.D.O.T. Supplemental Agreement Numbers 1 and 2 were included in the design contract. As the design progressed, the consultant scope of work was expanded to include additional services from F.D.O.T. Supplemental Agreement Numbers 3-5. The Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design with Hanson Professional Services Inc. is needed to incorporate into Contract No. 2723 the services and fees identified in the consultant Scope of Services Ellis Road Widening - Supplemental Agreements #3-5 and 7. Lastly, Contract No. 2723 Compensation and Time of Completion provisions are updated as follows: Total Compensation - \$2,934,984.06 and Final Design Completion - December 31, 2021. The County will be reimbursed by the F.D.O.T. grant funding for the consultant services.

In accordance with Administrative Order 29, Supplemental Agreement Number 7 and Resolution and Interlocal Agreement with the City of West Melbourne for Ellis Road Widening have been reviewed by the County Attorney's Office and Risk Management. The agreement to amend and extend the professional services agreement will be executed contingent upon F.D.O.T. concurrence and review by the County Attorney's Office and Risk Management.

Clerk to the Board Instructions:

Please return Supplemental Agreement Number 7 and Resolution (for full execution by F.D.O.T) and Interlocal Agreement with the City of West Melbourne (for recording) for Ellis Road Widening to the Public Works Department.



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

June 16, 2021

MEMORANDUM

TO: Marc Bernath, Public Works Director

RE: Item F.5., Approval of Local Agency Program Supplemental Agreement No. 7, Resolution, Interlocal Agreement with the City of West Melbourne, and Agreement to Amend and Extend the Professional Services Agreement for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening)

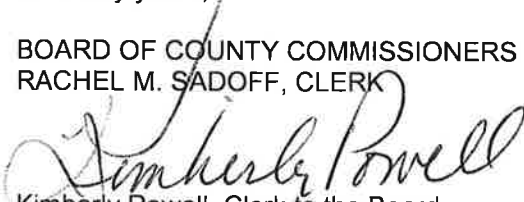
This is to correct the memorandum dated May 28, 2021. The Board of County Commissioners, in regular session on May 27, 2021, adopted Resolution No. 21-076, authorizing the execution of Local Agency Program Supplemental Agreement No. 7 with Florida Department of Transportation (FDOT) for St. Johns Heritage Parkway at Ellis Road; approved and authorized the Chair to execute the Local Agency Program Supplemental Agreement No. 7; approved **and authorized the Chair to execute** the Interlocal Agreement (ILA) with the City of Melbourne for the utility relocation design; approved **and authorized the Chair to execute** the Agreement to amend and extend the Professional Services Agreement for the Ellis Road Design upon FDOT concurrence; and approved any necessary Budget Change Requests associated with this action. Enclosed is a Supplemental Agreement, a fully-executed Interlocal Agreement, and a certified copy of the Resolution.

Upon execution by all parties, please return the fully-executed Supplemental Agreement and recorded ILA to this office for inclusion in the official minutes.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
RACHEL M. SADOFF, CLERK


Kimberly Powell, Clerk to the Board

/ns

Encls. (3)

cc: Contracts Administration
Finance
Budget



May 28, 2021

MEMORANDUM

TO: Marc Bernath, Public Works Director

RE: Item F.5., Approval of Local Agency Program Supplemental Agreement No. 7, Resolution, Interlocal Agreement with the City of West Melbourne, and Agreement to Amend and Extend the Professional Services Agreement for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening)

The Board of County Commissioners, in regular session on May 27, 2021, adopted Resolution No. 21-076, authorizing the execution of Local Agency Program Supplemental Agreement No. 7 with Florida Department of Transportation (FDOT) for St. Johns Heritage Parkway at Ellis Road; approved and authorized the Chair to execute the Local Agency Program Supplemental Agreement No. 7; approved the Interlocal Agreement (ILA) with the City of Melbourne for the utility relocation design; approved the Agreement to amend and extend the Professional Services Agreement for the Ellis Road Design upon FDOT concurrence; and approved any necessary Budget Change Requests associated with this action. Enclosed is a Supplemental Agreement, a fully-executed Interlocal Agreement, and a certified copy of the Resolution.

Upon execution by all parties, please return the fully-executed Supplemental Agreement and recorded ILA to this office for inclusion in the official minutes.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
RACHEL M. SADOFF, CLERK

Kimberly Powell
Kimberly Powell, Clerk to the Board

/ns

Encls. (3)

cc: Contracts Administration
Finance
Budget

**LOCAL AGENCY PROGRAM
SUPPLEMENTAL AGREEMENT**

SUPPLEMENTAL NO.

7

FEDERAL ID NO. (FAIN)

ST10 382 R

CONTRACT NO.

AR235

FEDERAL AWARD DATE

6/4/2013; 6/4/2014; 10/23/2014; 7/19/2016;
2/22/2018; 10/21/2019; 10/24/2019

FPN

426905-2-38-01

RECIPIENT DUNS NO.

78-324-8370

Recipient, Brevard County and the State of Florida Department of Transportation, desires to supplement the original Agreement entered into and executed on June 21, 2013, as identified above. All provisions in the original Agreement and supplements, if any, remain in effect except as expressly modified by this supplement.

The changes to the Agreement and supplements, if any, are described as follows:

PROJECT DESCRIPTION

Name St Johns Heritage Parkway at Ellis Road Length 1.7 miles

Termini From John Rhodes Boulevard to west of Wickham Road

Description of Work:

The project consists of designing four lanes along Ellis Road from John Rhodes Boulevard to just west of Wickham Road, a distance of approximately 1.7 miles. Signal plans, pavement marking plans, as well as utility coordination and permitting will be a part of this project. A detailed drainage analysis and final design to reduce the right-of-way cost is also a part of this project. The main elements of design will follow the PD&E recommendations prepared by the Florida Department of Transportation (FDOT) and approved by the Federal Highway Administration (FHWA).

Additional right of way, mapping, survey and title work for the Project are as follows:

- (a.) Preparation of (i) right of way maps, (ii) control maps in the Agency's name, (iii) legal descriptions, all of which must be developed to Department standards; and
- (b.) Obtaining title searches (developed to Department standards and going back to the earliest public record) for all property to be acquired; and
- (c.) Supporting the Department's review of the title searches; and
- (d.) Updating the title searches that are used to certify the right of way so long as the certification takes place within six (6) months of acceptance of the final right of way map prepared by the Agency, thereafter, the Department will be responsible to update the title searches as necessary; and
- (e.) Support the Agency's Engineer of Record through all phases of the Project, including, but not limited to, appraisal support, post design services*, utility relocation and litigation support in the event litigation is necessary to acquire property interests necessary for the Project.

* Post design survey is to meet the Department's requirements, including parcel staking as required for appraisal and acquisition needs. The basic expectation would be to stake all parcels, take pictures and to consider a percentage of staking based on improvements in the corridor that may need to be relocated upon acquisition.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**LOCAL AGENCY PROGRAM
SUPPLEMENTAL AGREEMENT**

525-010-32
PROGRAM MANAGEMENT
08/19

Page 2 of 4

PD&E re-evaluation and design effort resulted from the prior L-15 Canal Study analysis, and include an update to the existing CRAS, adjustments to the widened roadway alignment, pond location alterations and increased acreage, further access management and traffic analysis, and additional geotechnical analysis and survey.

Reason for Supplement and supporting engineering and/or cost analysis:

1. Federal funding in the amount of \$229,311.00 is being added for additional design services related to sub-surface utility exploration, utility relocation, retaining walls, access management changes, right-of-way map revisions, and legal description revisions/additions. Said revisions are reflected in the Adjusted Schedule of Financial Assistance, attached hereto and incorporated herein, as Exhibit "B", and in Exhibit E, Federal Financial Assistance (Single Audit Act).
2. The Recipient Resolution authorizing entry into this Supplemental Agreement is attached and incorporated into this Supplemental Agreement as Exhibit D.

**LOCAL AGENCY PROGRAM
SUPPLEMENTAL AGREEMENT
ADJUSTED EXHIBIT "B" SCHEDULE OF FINANCIAL ASSISTANCE**

RECIPIENT NAME & BILLING ADDRESS: Brevard County
2725 Judge Fran Jamieson Way, Suite A201
Viera, FL 32940

FINANCIAL PROJECT NUMBER:

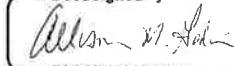
PHASE OF WORK By Fiscal Year	FUNDING				T
	(1) PREVIOUS TOTAL PROJECT FUNDS	(2) ADDITIONAL PROJECT FUNDS	(3) CURRENT TOTAL PROJECT FUNDS	(4) TOTAL LOCAL FUNDS	
Design					
FY: 2012-2013 (LAP)	\$2,370,971.00	\$0.00	\$2,370,971.00	\$0.00	
FY: 2014-2015 (LAP)	\$125,000.00	\$0.00	\$125,000.00	\$0.00	
FY: 2016-2017 (LAP)	\$40,127.00	\$0.00	\$40,127.00	\$0.00	
FY: 2017-2018 (LAP)	\$150,000.00	\$0.00	\$150,000.00	\$0.00	
FY: 2019-2020 (LAP)	\$44,920.00	\$0.00	\$44,920.00	\$0.00	
FY: 2020-2021 (LAP)	\$0.00	\$229,311.00	\$229,311.00	\$0.00	
FY: ()					
FY: ()					
FY: ()					
Total Design Cost	\$2,731,018.00	\$229,311.00	\$2,960,329.00	\$ 0.00	
Right-of-Way					
FY: ()					
FY: ()					
FY: ()					
Total Right-of-Way Cost	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Construction					
FY: ()					
FY: ()					
FY: ()					
Total Construction Cost	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Construction Engineering and Inspection (CEI)					
FY: ()					
FY: ()					
FY: ()					
Total CEI Cost	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
()					
FY: ()					
FY: ()					
FY: ()					
Total Phase Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
TOTAL COST OF THE PROJECT	\$2,731,018.00	\$229,311.00	\$2,960,329.00	\$ 0.00	

COST ANALYSIS CERTIFICATION AS REQUIRED BY SECTION 216.3475, FLORIDA STATUTES:

I certify that the cost for each line item budget category has been evaluated and determined to be allowable, reasonable, and necessary as required by Section 216.34 methodology used and the conclusions reached.

Allison M. Godwin

DocuSigned by:



6/9/2021 | 11:54 AM EDT

District Grant Manager Name

Signature

Date

**LOCAL AGENCY PROGRAM
SUPPLEMENTAL AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Agreement on the date last ascribed herein.

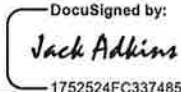
RECIPIENT BREVARD COUNTY

By: See Attached Signature Page

Name:

Title:

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By:  1752524FC337485...

Name: C. Jack Adkins

Title: Interim Director of Transportation Development
6/9/2021 | 2:43 PM EDT

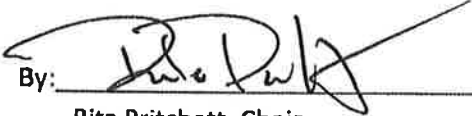
Date: _____

Legal Review:

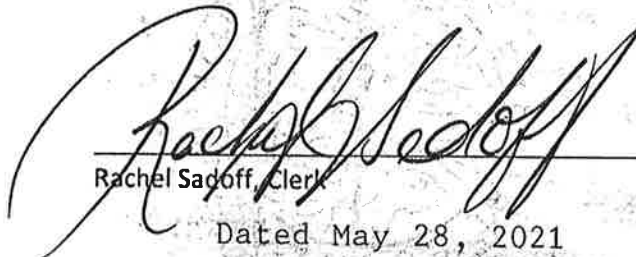
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Local Agency Program
Supplemental Agreement
FPN#426905-2-38-01

Signature Page: Brevard County (Recipient)

By: 
Rita Pritchett, Chair
As approved by the Board on May 27, 2021

Attest:


Rachel Sadoff, Clerk
Dated May 28, 2021

Reviewed for legal form and content for Brevard County:

 5/19/21
Alex Essee, Assistant County Attorney

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
LOCAL AGENCY PROGRAM AGREEMENT

EXHIBIT D

RECIPIENT RESOLUTION

The Recipient's Resolution authorizing entry into this Agreement is attached and incorporated into this Agreement.

Resolution No. 2021- 076

A Resolution authorizing the execution of Local Agency Program Supplemental Agreement Number 7 with the Florida Department of Transportation for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening)

WHEREAS, the State of Florida Department of Transportation and Brevard County desire to facilitate the design of the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening) and,

WHEREAS, the State of Florida Department of Transportation has requested Brevard County to execute and deliver to the State of Florida Department of Transportation the Local Agency Program Supplemental Agreement Number 7 for the aforementioned project, FPN 426905-2-38-01.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Brevard County, Florida, that Rita Pritchett, Chair, of the Board of County Commissioners, is hereby authorized to make, execute, and deliver to the State of Florida Department of Transportation the Local Agency Program Supplemental Agreement Number 7 for the aforementioned project, FPN 426905-2-38-01.

DONE AND RESOLVED in regular session this 27th day of May, 2021.

ATTEST:

BREVARD COUNTY, FLORIDA



Rachel Sadoff, Clerk



Rita Pritchett, Chair

As approved by the Board on May 27, 2021

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
LOCAL AGENCY PROGRAM AGREEMENT**EXHIBIT E****FEDERAL FINANCIAL ASSISTANCE (SINGLE AUDIT ACT)****FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:**

CFDA No.: 20.205
CFDA Title: Highway Planning and Construction
Federal-Aid Highway Program, Federal Lands Highway Program
CFDA Program Site: https://beta.sam.gov/fal/1093726316c3409a8e50f4c75f5ef2c6/view?keywords=20.205&sort=-relevance&index=cfda&is_active=true&page=1
Award Amount: \$2,960,329.00
Awarding Agency: Florida Department of Transportation
Award is for R&D: No
Indirect Cost Rate: N/A

FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE SUBJECT TO THE FOLLOWING:

2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles & Audit Requirements for Federal Awards

<http://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1>

FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT MAY ALSO BE SUBJECT TO THE FOLLOWING:

Title 23 – Highways, United States Code

<http://uscode.house.gov/browse/prelim@title23&edition=prelim>

Title 49 – Transportation, United States Code

<http://uscode.house.gov/browse/prelim@title49&edition=prelim>

Map-21 – Moving Ahead for Progress in the 21st Century, Public Law 112-141

<http://www.gpo.gov/fdsys/pkg/PLAW-112publ141/pdf/PLAW-112publ141.pdf>

Federal Highway Administration – Florida Division

<http://www.fhwa.dot.gov/fldiv/>

Federal Funding Accountability and Transparency Act (FFATA) Sub-award Reporting System (FSRS)

<https://www.fsrc.gov/>

INTERLOCAL AGREEMENT

(Ellis Road Widening – City of West Melbourne Utility Relocation Design Project)

This Interlocal Agreement is made and entered into the date of last signature below by and between Brevard County, Florida, a political subdivision of the State of Florida, hereinafter referred to as the "County," and the City of West Melbourne, a Florida municipal corporation, hereinafter referred to as the "City."

WHEREAS, the County is engaged in an improvement and widening project on Ellis Road between John Rhodes Boulevard and Wickham Road; and

WHEREAS, the Ellis Road widening will require that certain City public utilities within the Project area be relocated; and

WHEREAS, the City and the County desire to cooperate in the relocation of the City's utilities, hereinafter referred to as the "Project"; and

WHEREAS, the Project will be performed in conjunction with the Ellis Road widening project in order to promote efficiency, to prevent unnecessary duplication of effort, and to prevent further inconvenience to the citizens of Brevard County.

NOW, THEREFORE, the County and City covenant and agree that they have full power and authority to enter into this Agreement and bind their respective governmental entities as follows:

Section 1 – Recitals. The above recitals are true and correct and by this reference are hereby incorporated into and made an integral part of this Agreement.

Section 2 – Statutory Authority. This Agreement shall be considered an Interlocal Agreement pursuant to authority of Florida Statutes, Chapter 163, Part 1.

Section 3 – Project. The Project consists of the engineering design of the affected City utilities. Phase I of the Project will be the design, which shall be performed by the County's engineer of record for the Ellis Road widening project (Hanson Professional Services Inc.). The Project will be performed in accordance with the approved Proposal from Hanson Professional Services Inc., which is attached as Exhibit "A", incorporated and specifically made a part of this Agreement.

Section 4 – Approval of Plans. The City and County agree that the County shall be the lead agency to manage, and oversee the Project. The City shall be afforded the opportunity to review and approve all plans and specifications prior to any bid solicitation or construction being undertaken by the County. The County shall be responsible for ensuring that any plans which are submitted to the City will be submitted in a timely fashion. Whenever plans are submitted to the City for review, the City shall return said plans in "marked up" form with comments to the County within fourteen (14) calendar days. If the City does not return the "marked up" plans and comments within that time, the plans shall be deemed to have been approved by the City as submitted.

Section 5 – City's Financial Contribution for the Project. The Ellis Road widening project design is fully funded through the Florida Department of Transportation Local Agency Program. Through the Space Coast Transportation Planning Organization, the County has requested supplemental funding to include the costs of the Project from the Local Agency Program in the amount of \$78,233.70. The City shall only be responsible for the cost of the Project if, and to the extent that, either of the following occur:

- (a) The County does not receive reimbursement from FDOT for the design of the City utility relocation Project.
- (b) The cost of the Project exceeds the amount of funding provided by FDOT for the design of the City utility relocation Project.

Section 7 – Notices. All notices required under this Agreement shall be in writing and delivered to the parties by mail or electronic delivery, as follows:

City Representative

Scott Morgan, City Manager
2240 Minton Road
West Melbourne, Florida 32904
smorgan@westmelbourne.org

County Representative

John Denninghoff
Assistant County Manager
2725 Judge Fran Jamieson Way, Suite C-301
Viera, FL 32940
John.Denninghoff@brevardfl.gov

With a copy to:

Tammy Thomas-Wood
Support Services Manager
2725 Judge Fran Jamieson Way, Suite A-201
Viera, Florida 32940
Tammy.Thomas-Wood@brevardfl.gov

Section 8 – Indemnification. To the extent allowed by law and subject to the provisions set forth in Sec. 768.28, Florida Statutes, each party is responsible for the negligent or wrongful acts or omissions of its own employees, agents or other representatives while acting within the scope of their employment or otherwise within their authorized capacity, arising from the activities encompassed by this Agreement. Nothing contained within this Agreement requires either party to indemnify the other party for any losses, damages or injuries caused by or otherwise arising from the negligent or wrongful act or omission of its employees, agents or representatives. Neither party, by execution of this Agreement, will be deemed to have waived its statutory right/defense of sovereign immunity, or to have increased its limits of liability under Sec. 768.28, Florida Statutes, as may be amended from time to time. Each party shall retain all rights, defenses, and

remedies under Florida law in the event of any claims, suits or other disputes arising from its performance of the obligations under this Agreement. Nothing in this Agreement shall be interpreted to create any causes of action for any third parties not a party to this Agreement.

Section 9 – Default. Either party to this Agreement, in the event of any act of default by the other, shall have all remedies available to it under the laws of the State of Florida.

Section 10 – Venue and Non-Jury Trial. Venue for any action brought by any party to this agreement to interpret, construe or enforce this agreement shall be in a court of competent jurisdiction in and for Brevard County, Florida and ANY TRIAL SHALL BE NON-JURY.

Section 11 – Attorney's Fees. In the event of any legal action to enforce the terms of this Agreement, each party shall bear its own attorney's fees and costs.

Section 12 – Severability. If any part of this Agreement is found invalid or unenforceable by any court, such invalidity or unenforceability shall not affect the other parts of this Agreement if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can still be accomplished.

Section 13 – Entirety. This Agreement represents the understanding and agreement of the parties in its entirety. There shall be no amendments to the Agreement unless such amendments are in writing and signed by both parties.

Section 14 – Effective Date and Recording. Pursuant to Chapter 163, Florida Statutes, the effective date of this Agreement shall be the date on which it is recorded with the Clerk of the Circuit Court in and for Brevard County. The County shall be responsible for recording a fully executed original of this Agreement in the public records of Brevard County, and shall return a recorded original of the Agreement to the City Representative identified herein.

Section 15 – Counterparts. This Agreement may be executed in counterparts, each of which so executed shall be deemed to be an original and such counterparts, together, shall constitute one in the same instrument.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK. SIGNATURES TO FOLLOW.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on the day and year written below.

ATTEST:

CITY OF WEST MELBOURNE

Cynthia Hanscom
Cynthia Hanscom, City Clerk

Hal Rose

Hal Rose, Mayor

As approved by the City Council on May 4, 2021

Approved as to legal form and sufficiency

Morris Richardson
Morris Richardson, City Attorney

ATTEST:

Rachel Sadoff
Rachel Sadoff, Clerk

BREVARD COUNTY, FLORIDA

Rita Pritchett
Rita Pritchett, Chair

As approved by the Board on May 27, 2021

Reviewed for Legal Form and Content

for Brevard County

Alex Greene 5/4/21
Assistant County Attorney

SCOPE OF SERVICES – Joint Project Agreement

City of West Melbourne Utility Improvements

For

Ellis Road Widening

FPID# 426905-2-38-01

FAN# ST10-382-R

I. BACKGROUND

The Hanson Professional Services Inc., hereinafter referred to as the CONSULTANT, was retained by the County for the design and preparation of utility relocation plans associated with the Ellis Road widening project.

This Joint Project Agreement provides for the CONSULTANT to perform OPTIONAL SERVICES which include utility adjustments and relocations. The services performed under this Supplemental Amendment are for utility adjustments and relocations associated with the Ellis Road widening project.

II. PROJECT DESCRIPTION

The utility improvements to be designed are summarized below:

A. Relocate Sanitary Lift Station

- Currently, there is a Lift Station located at 9001 Ellis Road within the existing southern right-of-way. The roadway improvements will impact the lift station. A new lift station will be constructed nearby, outside of the new southern right-of-way. The new lift station will be designed to adhere with the latest utility standards provided by the City. The new lift station will be designed with SCADA, since it appears that the existing lift station has SCADA.

B. Gravity Sanitary Sewer

- Existing sanitary sewer (gravity) will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

C. Sanitary Sewer Forcemain

- Existing sanitary sewer forcemain will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

D. Water Main Adjustments

- Existing water mains will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

III. OBJECTIVES

Since the objective is to design this project in a relatively short time span, the submittals and reviews will be limited to 90%, 100% and Final.

IV. DESIGN SERVICES

The CONSULTANT shall perform the following tasks:

A. Project Management and Meeting Attendance

Coordinate the project with County and City of West Melbourne staff and attend up to 3 project management related meetings during the design phase of the project.

B. Water and Sewer Plans Preparation

Prepare and submit a 90%, 100% and a Final submittal, that adhere to City of West Melbourne standards for the design of water and sewer utilities. Plans will be 11 x 17 in size and will be signed and sealed electronically per FDOT requirements. Plans will include Key Sheet, General Notes, Plan and Profile Views, Cross Sections, Traffic Control, City Water and Sewer Notes and Details along with other miscellaneous detail sheets. Up to 40 sheets are anticipated for this work.

C. Preparation of Technical Special Provisions

Prepare and submit draft and final 100% Technical Special Provisions (TSP's).

D. Preparation of Schedule of Values

Prepare and submit draft and final 100% schedule of values including item descriptions and quantity take-off. A template in Microsoft Excel format as approved by City of West Melbourne will be used in the development of the Schedule of Values. FDOT pay items will not be used in this effort.

E. Permitting

It is understood that due to the lift station reconfiguration, permitting will be required with the Florida Department of Environmental Protection. City of West

Melbourne will provide fees and input to the CONSULTANT for completing the application form. City of West Melbourne will be listed as the Permittee, Owner and Wastewater Facility Operator on the application, while the CONSULTANT will be listed as the Engineer. The construction documents will request that the Construction Contractor secure all permits related to the dewatering operation from Federal, State and Local agencies.

F. Opinion of Probable Costs

The CONSULTANT shall prepare an opinion of probable costs at the plan submittal milestones.

V. EXCLUSIONS

The following services are excluded from this supplemental scope of work:

1. Geotechnical Engineering Services.
2. Detailed Horizontal Directional Drilling Design. Where required, the horizontal directional drilling limits and depths will be defined and specified in the design documents; however, shop drawing submittals shall be used to approve the final details for construction.
3. Cathodic protection design.
4. Environmental permits or any additional permits other than specified herein.
5. Bid Administration Services.
6. Construction Administration Services.
7. Construction Inspection Services.

VI. City RESPONSIBILITIES

City of West Melbourne will provide the following:

1. Review and comment on CONSULTANT submittals.
2. Information on existing City utilities in the area
3. Attend scheduled project meetings.
4. Assistance in Technical Special Provisions.
5. Assistance in Schedule of Values.
6. Provide Signature of Permit Applications.

VII. SCHEDULE

The CONSULTANT shall coordinate the utility design with the Roadway design schedule.

VIII. SUMMARY OF COMPENSATION

A summary of compensation is included in attached staff hours.

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME: Hanson Professional Services Inc.
ESTIMATOR NAME: Daryl Myers
DATE: 1/31/2021
PROJECT NAME: Ellis Road Widening - From John Rodas Blvd. to West of Wickham Road

TASK ITEM		SCALE 1" =	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
1	Preliminary Engineering							
	Field Review		LS	1		32	32	
	Data Collection		LS	1		32	32	
					SUBTOTAL		64	
2	Construction Plans							
	Task 2.1 - 60% Plans							
	Cover Sheet		LS	1	1	4	4	
	General Notes		LS	1	1	4	4	
	Existing Site Plans		LS	1	9	8	8	
	Relocation Plans		LS	1	9	28	28	
	Cross Sections		LS	1	9	36	36	
	Lift Station Section and Profile		LS	1	2	32	32	
	Standard Details		LS	1	1	8	8	
	Electrical Plans		LS	1	1	16	16	
	Electrical Details		LS	1	2	16	16	
	Controls/SCADA Plans		LS	1	2	16	16	
	Opinion of Probable Costs		LS	1		8	8	
	Task 2.2 - 90% Plans							
	Cover Sheet		LS	1	1	2	2	
	General Notes		LS	1	1	2	2	
	Existing Site Plans		LS	1	9	4	4	
	Relocation Plans		LS	1	9	14	14	
	Cross Sections		LS	1	9	16	16	
	Lift Station Section and Profile		LS	1	2	16	16	
	Standard Details		LS	1	1	4	4	
	Electrical Plans		LS	1	1	8	8	
	Electrical Details		LS	1	2	8	8	
	Controls/SCADA Plans		LS	1	2	8	8	
	Preliminary Specifications		LS	1		40	40	
	Opinion of Probable Costs		LS	1		8	8	

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME: Hanson Professional Services Inc.
ESTIMATOR NAME: Daryl Myers
DATE: 1/31/2021

PROJECT NAME: Ellis Road Widening - From John Rodas Blvd. to West of Wickham Road

TASK ITEM		SCALE 1"=	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
Task 2.3 - Final Plans	Final Plans		LS	1	37	24	24	
	Contract Documents		LS	1		16	16	
	Technical Specifications		LS	1	22	40	40	
	Opinion of Probable Costs		LS	1		8	8	
					SUBTOTAL		394	
3 Permitting	Task 3.1 - Pre-Application Meeting		LS	1		16	16	
	Pre-Application Meeting & Minutes							
	Task 3.2 - Permit Applications		LS	1		8	8	
	FDEP Permit Application		LS	1		16	16	
	RAI Responses		LS	1		12	12	
	As-Built Drawings		LS	1		8	8	
	Certificate of Completion				SUBTOTAL		60	
GRAND TOTALS							518	

Resolution No. 2021- 076

A Resolution authorizing the execution of Local Agency Program Supplemental Agreement Number 7 with the Florida Department of Transportation for the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening)

WHEREAS, the State of Florida Department of Transportation and Brevard County desire to facilitate the design of the St. Johns Heritage Parkway at Ellis Road (Ellis Road Widening) and,

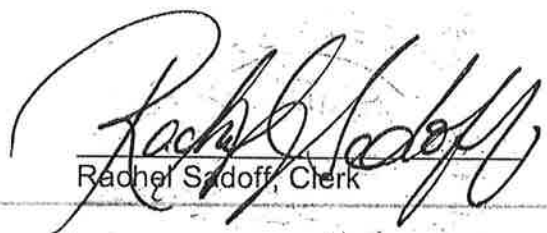
WHEREAS, the State of Florida Department of Transportation has requested Brevard County to execute and deliver to the State of Florida Department of Transportation the Local Agency Program Supplemental Agreement Number 7 for the aforementioned project, FPN 426905-2-38-01.

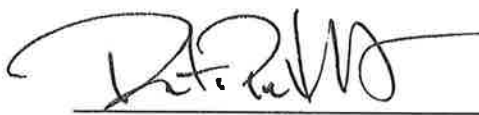
NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Brevard County, Florida, that Rita Pritchett, Chair, of the Board of County Commissioners, is hereby authorized to make, execute, and deliver to the State of Florida Department of Transportation the Local Agency Program Supplemental Agreement Number 7 for the aforementioned project, FPN 426905-2-38-01.

DONE AND RESOLVED in regular session this 27th day of May, 2021.

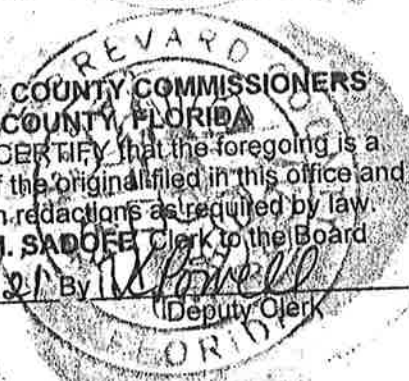
ATTEST:

BREVARD COUNTY, FLORIDA


Rachel Sadoff, Clerk


Rita Pritchett, Chair

As approved by the Board on May 27, 2021


**BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDA**
I HEREBY CERTIFY that the foregoing is a true copy of the original filed in this office and may contain redactions as required by law.
RACHEL M. SADOFF Clerk to the Board
Date 6/1/21 By [Signature]
(Deputy Clerk)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
LOCAL AGENCY PROGRAM AGREEMENT**EXHIBIT E****FEDERAL FINANCIAL ASSISTANCE (SINGLE AUDIT ACT)****FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:**

CFDA No.: 20.205
CFDA Title: Highway Planning and Construction
Federal-Aid Highway Program, Federal Lands Highway Program
CFDA Program https://beta.sam.gov/fal/1093726316c3409a8e50f4c75f5ef2c6/view?keywords=20.205&sort=-relevance&index=cfda&is_active=true&page=1
Site: https://beta.sam.gov/fal/1093726316c3409a8e50f4c75f5ef2c6/view?keywords=20.205&sort=-relevance&index=cfda&is_active=true&page=1
Award Amount: \$2,960,329.00
Awarding Agency: Florida Department of Transportation
Award is for: No
R&D:
Indirect Cost: N/A
Rate:

FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE SUBJECT TO THE FOLLOWING:

2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles & Audit Requirements for Federal Awards

<http://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1>

FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT MAY ALSO BE SUBJECT TO THE FOLLOWING:

Title 23 – Highways, United States Code

<http://uscode.house.gov/browse/prelim@title23&edition=prelim>

Title 49 – Transportation, United States Code

<http://uscode.house.gov/browse/prelim@title49&edition=prelim>

Map-21 – Moving Ahead for Progress in the 21st Century, Public Law 112-141

<http://www.gpo.gov/fdsys/pkg/PLAW-112publ141/pdf/PLAW-112publ141.pdf>

Federal Highway Administration – Florida Division

<http://www.fhwa.dot.gov/fldiv/>

Federal Funding Accountability and Transparency Act (FFATA) Sub-award Reporting System (FSRS)

<https://www.fsr.gov/>

To: Stephen.Anderson@dot.state.fl.us

FLORIDA DEPARTMENT OF TRANSPORTATION FUNDS APPROVAL

AR235

6/9/2021

CONTRACT INFORMATION

Contract:	AR235
Contract Type:	AH - GRANT IN AID-SURFA (GRANT-SURF)
Method of Procurement:	G - GOVERNMENTAL AGENCY (287.057,F.S.)
Vendor Name:	BREVARD COUNTY BOCC
Vendor ID:	F596000523164
Beginning Date of This Agreement:	06/21/2013
Ending Date of This Agreement:	04/30/2022
Contract Total/Budgetary Ceiling:	ct = \$2,960,329.00
Description:	The designing of four lanes along Ellis Road referred to as the St. Johns Heritage Parkway

FUNDS APPROVAL INFORMATION

FUNDS APPROVED/REVIEWED FOR ROBIN M. NAITOVE, CPA, COMPTROLLER ON 6/9/2021

Action:	Supplemental
Reviewed or Approved:	APPROVED
Organization Code:	55053010541
Expansion Option:	AY
Object Code:	780000
Amount:	\$229,311.00
Financial Project:	42690523801
Work Activity (FCT):	215
CFDA:	20.205
Fiscal Year:	2021
Budget Entity:	55100100
Category/Category Year:	088849/21
Amendment ID:	S006
Sequence:	00
User Assigned ID:	7
Enc Line (6s)/Status:	0007/04

Total Amount: \$229,311.00

Certificate Of Completion

Envelope Id: CBE22E4918D144EFB54624F7F55C8FF3

Status: Completed

Subject: Please DocuSign: SA7 426905-2-38-01 SJHP at Ellis Rd-County Signed.pdf

Contract Number (ex. C9A12, optional): AR235

Document Contains Confidential Information?: No

Fin Proj Num (ex.123456-1-32-01, Optional): 426905-2-38-01

Office (contact Procurement if add is needed):

Program Management

Source Envelope:

Document Pages: 9

Signatures: 3

Envelope Originator:

Certificate Pages: 2

Initials: 0

Allison Godwin

AutoNav: Enabled

605 Suwannee Street

EnvelopeId Stamping: Enabled

MS 20

Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Tallahassee, FL 32399-0450

allison.godwin@dot.state.fl.us

IP Address: 156.75.252.6

Record Tracking

Status: Original

Holder: Allison Godwin

Location: DocuSign

6/9/2021 11:23:17 AM

allison.godwin@dot.state.fl.us

Signer Events

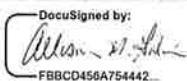
Allison Godwin

allison.godwin@dot.state.fl.us

Florida Department of Transportation

Security Level: Email, Account Authentication
(None)**Signature**

DocuSigned by:



FBBCD456A754442...

Signature Adoption: Uploaded Signature Image
Using IP Address: 156.75.252.6

Timestamp

Sent: 6/9/2021 11:28:29 AM

Viewed: 6/9/2021 11:30:07 AM

Signed: 6/9/2021 11:54:35 AM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Daniel McDermott

Daniel.McDermott@dot.state.fl.us

Senior Attorney

FL DOT

Signing Group: D5 General Law Legal Group

Security Level: Email, Account Authentication
(None)

DocuSigned by:



5B5E81E26BBA45C...

Signature Adoption: Pre-selected Style
Using IP Address: 156.75.252.6

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Viewed: 6/9/2021 2:31:23 PM

Signed: 6/9/2021 2:33:16 PM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Jack Adkins

jack.adkins@dot.state.fl.us

Interim Director of Transportation Development

FDOT

Security Level: Email, Account Authentication
(None)

DocuSigned by:



1752524FC337485...

Signature Adoption: Pre-selected Style
Using IP Address: 156.75.252.6

Sent: 6/9/2021 2:33:18 PM

Viewed: 6/9/2021 2:43:18 PM

Signed: 6/9/2021 2:43:26 PM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

In Person Signer Events**Signature****Timestamp****Editor Delivery Events****Status****Timestamp****Agent Delivery Events****Status****Timestamp**

Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Carbon Copy Events	Status	Timestamp
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Kim Kipp
kim.kipp@dot.state.fl.us
Paralegal Specialist
Florida Department of Transportation
Security Level: Email, Account Authentication (None)
Electronic Record and Signature Disclosure:
Not Offered via DocuSign

COPIED

Sent: 6/9/2021 11:54:37 AM

Linda Lee
linda.lee@dot.state.fl.us
FDOT
Security Level: Email, Account Authentication (None)
Electronic Record and Signature Disclosure:
Not Offered via DocuSign

COPIED

Sent: 6/9/2021 11:54:37 AM
Viewed: 6/9/2021 12:08:49 PM

Lisa Buscher
lisa.buscher@dot.state.fl.us
Allison Godwin
allison.godwin@dot.state.fl.us
Teresa Hutson
Teresa.Hutson@dot.state.fl.us
Precious L. Lewis
Precious.Lewis@dot.state.fl.us
Kevin Powell
Kevin.Powell@dot.state.fl.us
Local Program Coordinator
Florida Department of Transportation
Signing Group: D5 Local Government Agreements
Security Level: Email, Account Authentication (None)
Electronic Record and Signature Disclosure:
Not Offered via DocuSign

COPIED

Sent: 6/9/2021 2:43:28 PM

Witness Events	Signature	Timestamp
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Notary Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
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Envelope Sent	Hashed/Encrypted	6/9/2021 11:28:29 AM
Certified Delivered	Security Checked	6/9/2021 2:43:18 PM
Signing Complete	Security Checked	6/9/2021 2:43:26 PM
Completed	Security Checked	6/9/2021 2:43:28 PM

Payment Events	Status	Timestamps
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INTERLOCAL AGREEMENT

(Ellis Road Widening – City of West Melbourne Utility Relocation Design Project)

This Interlocal Agreement is made and entered into the date of last signature below by and between Brevard County, Florida, a political subdivision of the State of Florida, hereinafter referred to as the "County," and the City of West Melbourne, a Florida municipal corporation, hereinafter referred to as the "City."

WHEREAS, the County is engaged in an improvement and widening project on Ellis Road between John Rhodes Boulevard and Wickham Road; and

WHEREAS, the Ellis Road widening will require that certain City public utilities within the Project area be relocated; and

WHEREAS, the City and the County desire to cooperate in the relocation of the City's utilities, hereinafter referred to as the "Project"; and

WHEREAS, the Project will be performed in conjunction with the Ellis Road widening project in order to promote efficiency, to prevent unnecessary duplication of effort, and to prevent further inconvenience to the citizens of Brevard County.

NOW, THEREFORE, the County and City covenant and agree that they have full power and authority to enter into this Agreement and bind their respective governmental entities as follows:

Section 1 – Recitals. The above recitals are true and correct and by this reference are hereby incorporated into and made an integral part of this Agreement.

Section 2 – Statutory Authority. This Agreement shall be considered an Interlocal Agreement pursuant to authority of Florida Statutes, Chapter 163, Part 1.

Section 3 – Project. The Project consists of the engineering design of the affected City utilities. Phase I of the Project will be the design, which shall be performed by the County's engineer of record for the Ellis Road widening project (Hanson Professional Services Inc.). The Project will be performed in accordance with the approved Proposal from Hanson Professional Services Inc., which is attached as Exhibit "A", incorporated and specifically made a part of this Agreement.

Section 4 – Approval of Plans. The City and County agree that the County shall be the lead agency to manage, and oversee the Project. The City shall be afforded the opportunity to review and approve all plans and specifications prior to any bid solicitation or construction being undertaken by the County. The County shall be responsible for ensuring that any plans which are submitted to the City will be submitted in a timely fashion. Whenever plans are submitted to the City for review, the City shall return said plans in "marked up" form with comments to the County within fourteen (14) calendar days. If the City does not return the "marked up" plans and comments within that time, the plans shall be deemed to have been approved by the City as submitted.

Section 5 – City's Financial Contribution for the Project. The Ellis Road widening project design is fully funded through the Florida Department of Transportation Local Agency Program. Through the Space Coast Transportation Planning Organization, the County has requested supplemental funding to include the costs of the Project from the Local Agency Program in the amount of \$78,233.70. The City shall only be responsible for the cost of the Project if, and to the extent that, either of the following occur:

- (a) The County does not receive reimbursement from FDOT for the design of the City utility relocation Project.
- (b) The cost of the Project exceeds the amount of funding provided by FDOT for the design of the City utility relocation Project.

Section 7 – Notices. All notices required under this Agreement shall be in writing and delivered to the parties by mail or electronic delivery, as follows:

City Representative

Scott Morgan, City Manager
2240 Minton Road
West Melbourne, Florida 32904
smorgan@westmelbourne.org

County Representative

John Denninghoff
Assistant County Manager
2725 Judge Fran Jamieson Way, Suite C-301
Viera, FL 32940
John.Denninghoff@brevardfl.gov

With a copy to:

Tammy Thomas-Wood
Support Services Manager
2725 Judge Fran Jamieson Way, Suite A-201
Viera, Florida 32940
Tammy.Thomas-Wood@brevardfl.gov

Section 8 – Indemnification. To the extent allowed by law and subject to the provisions set forth in Sec. 768.28, Florida Statutes, each party is responsible for the negligent or wrongful acts or omissions of its own employees, agents or other representatives while acting within the scope of their employment or otherwise within their authorized capacity, arising from the activities encompassed by this Agreement. Nothing contained within this Agreement requires either party to indemnify the other party for any losses, damages or injuries caused by or otherwise arising from the negligent or wrongful act or omission of its employees, agents or representatives. Neither party, by execution of this Agreement, will be deemed to have waived its statutory right/defense of sovereign immunity, or to have increased its limits of liability under Sec. 768.28, Florida Statutes, as may be amended from time to time. Each party shall retain all rights, defenses, and

remedies under Florida law in the event of any claims, suits or other disputes arising from its performance of the obligations under this Agreement. Nothing in this Agreement shall be interpreted to create any causes of action for any third parties not a party to this Agreement.

Section 9 – Default. Either party to this Agreement, in the event of any act of default by the other, shall have all remedies available to it under the laws of the State of Florida.

Section 10 – Venue and Non-Jury Trial. Venue for any action brought by any party to this agreement to interpret, construe or enforce this agreement shall be in a court of competent jurisdiction in and for Brevard County, Florida and ANY TRIAL SHALL BE NON-JURY.

Section 11 – Attorney's Fees. In the event of any legal action to enforce the terms of this Agreement, each party shall bear its own attorney's fees and costs.

Section 12 – Severability. If any part of this Agreement is found invalid or unenforceable by any court, such invalidity or unenforceability shall not affect the other parts of this Agreement if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can still be accomplished.

Section 13 – Entirety. This Agreement represents the understanding and agreement of the parties in its entirety. There shall be no amendments to the Agreement unless such amendments are in writing and signed by both parties.

Section 14 – Effective Date and Recording. Pursuant to Chapter 163, Florida Statutes, the effective date of this Agreement shall be the date on which it is recorded with the Clerk of the Circuit Court in and for Brevard County. The County shall be responsible for recording a fully executed original of this Agreement in the public records of Brevard County, and shall return a recorded original of the Agreement to the City Representative identified herein.

Section 15 – Counterparts. This Agreement may be executed in counterparts, each of which so executed shall be deemed to be an original and such counterparts, together, shall constitute one in the same instrument.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK. SIGNATURES TO FOLLOW.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals on the day and year written below.

ATTEST:



CITY OF WEST MELBOURNE

Cynthia Hanscom
Cynthia Hanscom, City Clerk

Hal Rose
Hal Rose, Mayor

As approved by the City Council on May 4, 2021

Approved as to legal form and sufficiency

Morris Richardson
Morris Richardson, City Attorney

ATTEST:

BREVARD COUNTY, FLORIDA

Rachel Sadoff, Clerk

Rita Pritchett, Chair

As approved by the Board on _____

Reviewed for Legal Form and Content

for Brevard County

Alex G. [Signature] 5/4/21
Assistant County Attorney

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on the day and year written below.

ATTEST:

CITY OF WEST MELBOURNE

Cynthia Hanscom
Cynthia Hanscom, City Clerk

Hal Rose
Hal Rose, Mayor

As approved by the City Council on May 4, 2021

Approved as to legal form and sufficiency

Morris Richardson City Attorney

Rachael Sadoff Clerk

BREVARD COUNTY, FLORIDA

Rita Pritchett, Chair

As approved by the Board on May 27, 2021

Reviewed for Legal Form and Content

for Brevard County

Alex Hesse 5/4/21
Assistant County Attorney

Exhibit "A"

SCOPE OF SERVICES – Joint Project Agreement

City of West Melbourne Utility Improvements

For

Ellis Road Widening

FPID# 426905-2-38-01

FAN# ST10-382-R

I. BACKGROUND

The Hanson Professional Services Inc., hereinafter referred to as the CONSULTANT, was retained by the County for the design and preparation of utility relocation plans associated with the Ellis Road widening project.

This Joint Project Agreement provides for the CONSULTANT to perform OPTIONAL SERVICES which include utility adjustments and relocations. The services performed under this Supplemental Amendment are for utility adjustments and relocations associated with the Ellis Road widening project.

II. PROJECT DESCRIPTION

The utility improvements to be designed are summarized below:

A. Relocate Sanitary Lift Station

- Currently, there is a Lift Station located at 9001 Ellis Road within the existing southern right-of-way. The roadway improvements will impact the lift station. A new lift station will be constructed nearby, outside of the new southern right-of-way. The new lift station will be designed to adhere with the latest utility standards provided by the City. The new lift station will be designed with SCADA, since it appears that the existing lift station has SCADA.

B. Gravity Sanitary Sewer

- Existing sanitary sewer (gravity) will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

C. Sanitary Sewer Forcemain

- Existing sanitary sewer forcemain will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

D. Water Main Adjustments

- Existing water mains will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

III. OBJECTIVES

Since the objective is to design this project in a relatively short time span, the submittals and reviews will be limited to 90%, 100% and Final.

IV. DESIGN SERVICES

The CONSULTANT shall perform the following tasks:

A. Project Management and Meeting Attendance

Coordinate the project with County and City of West Melbourne staff and attend up to 3 project management related meetings during the design phase of the project.

B. Water and Sewer Plans Preparation

Prepare and submit a 90%, 100% and a Final submittal, that adhere to City of West Melbourne standards for the design of water and sewer utilities. Plans will be 11 x 17 in size and will be signed and sealed electronically per FDOT requirements. Plans will include Key Sheet, General Notes, Plan and Profile Views, Cross Sections, Traffic Control, City Water and Sewer Notes and Details along with other miscellaneous detail sheets. Up to 40 sheets are anticipated for this work.

C. Preparation of Technical Special Provisions

Prepare and submit draft and final 100% Technical Special Provisions (TSP's).

D. Preparation of Schedule of Values

Prepare and submit draft and final 100% schedule of values including item descriptions and quantity take-off. A template in Microsoft Excel format as approved by City of West Melbourne will be used in the development of the Schedule of Values. FDOT pay items will not be used in this effort.

E. Permitting

It is understood that due to the lift station reconfiguration, permitting will be required with the Florida Department of Environmental Protection. City of West

Melbourne will provide fees and input to the CONSULTANT for completing the application form. City of West Melbourne will be listed as the Permittee, Owner and Wastewater Facility Operator on the application, while the CONSULTANT will be listed as the Engineer. The construction documents will request that the Construction Contractor secure all permits related to the dewatering operation from Federal, State and Local agencies.

F. Opinion of Probable Costs

The CONSULTANT shall prepare an opinion of probable costs at the plan submittal milestones.

V. EXCLUSIONS

The following services are excluded from this supplemental scope of work:

1. Geotechnical Engineering Services.
2. Detailed Horizontal Directional Drilling Design. Where required, the horizontal directional drilling limits and depths will be defined and specified in the design documents; however, shop drawing submittals shall be used to approve the final details for construction.
3. Cathodic protection design.
4. Environmental permits or any additional permits other than specified herein.
5. Bid Administration Services.
6. Construction Administration Services.
7. Construction Inspection Services.

VI. City RESPONSIBILITIES

City of West Melbourne will provide the following:

1. Review and comment on CONSULTANT submittals.
2. Information on existing City utilities in the area
3. Attend scheduled project meetings.
4. Assistance in Technical Special Provisions.
5. Assistance in Schedule of Values.
6. Provide Signature of Permit Applications.

VII. SCHEDULE

The CONSULTANT shall coordinate the utility design with the Roadway design schedule.

VIII. SUMMARY OF COMPENSATION

A summary of compensation is included in attached staff hours.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project
County
FPA
FPA No.

Elks Road Widening - From John Rodes Blvd to West of Wickham Road
Briard
428405-2-08-01
1110-25-25

Consultant Name: Hanson Professional Services Inc
Consultant No: 1310181
Date: 4-15-2021
C1-13-25

Staff Classification	Total Staff Hours From Bid	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Intern	Senior Asst	Secretary/Clerk	Staff Total	Staff Total	Staff	Staff	Average Rate Per Hour
1. Preliminary Engineering	64	3	3	4	9	15	10	10	2	3	4	3	0	64	64	13,400	\$54.20
2. Construction Plans	384	20	18	24	20	0	60	60	20	77	0	0	0	364	364	\$18,810	\$50.70
3. Permitting	67	3	2	6	3	0	15	15	5	12	0	0	0	60	60	\$3,000	\$50.01
Total Staff Hours	515	26	23	34	29	15	124	124	47	82	4	3	0	515	515		
Total Staff Cost		\$1,113.50	\$1,275.00	\$2,442.06	\$1,023.25	\$221.25	\$6,434.30	\$5,201.00	\$1,009.72	\$2,042.44	\$182.26	\$180.04	\$0.00			\$24,285.29	\$20.74

GALARY RELATED COSTS

OVERHEAD

OPERATING MARGINS

PCCM (Policies Capital Drive Money)

EXPENSES

Survey Field A by Plans

SUBTOTAL ESTIMATED FEE

Subcontract

Subcontract

SUBTOTAL ESTIMATED FEE

Discretionary Field and Lab Testing

SUBTOTAL ESTIMATED FEE

Optional Services

GRAND TOTAL ESTIMATED FEE

Check # 175,295.29

175,295.29



4-man crew days 13

1 day

\$0.00

\$78,703.70

\$0.00

\$78,703.70

\$0.00

\$78,703.70

\$78,703.70

\$78,703.70

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME: Hanson Professional Services Inc.
ESTIMATOR NAME: Daryl Myers
DATE: 1/31/2021

PROJECT NAME: Ells Road Widening - From John Rodes Blvd. to West of Wickham Road

TASK ITEM		SCALE 1"=	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
1	Preliminary Engineering							
	Field Review		LS	1		32	32	
	Data Collection		LS	1		32	32	
					SUBTOTAL		64	
2	Construction Plans							
	Task 2.1 - 60% Plans							
	Cover Sheet		LS	1	1	4	4	
	General Notes		LS	1	1	4	4	
	Existing Site Plans		LS	1	9	8	8	
	Relocation Plans		LS	1	9	28	28	
	Cross Sections		LS	1	9	36	36	
	Lift Station Section and Profile		LS	1	2	32	32	
	Standard Details		LS	1	1	8	8	
	Electrical Plans		LS	1	1	16	16	
	Electrical Details		LS	1	2	16	16	
	Controls/SCADA Plans		LS	1	2	16	16	
	Opinion of Probable Costs		LS	1		8	8	
	Task 2.2 - 90% Plans							
	Cover Sheet		LS	1	1	2	2	
	General Notes		LS	1	1	2	2	
	Existing Site Plans		LS	1	9	4	4	
	Relocation Plans		LS	1	9	14	14	
	Cross Sections		LS	1	9	16	16	
	Lift Station Section and Profile		LS	1	2	16	16	
	Standard Details		LS	1	1	4	4	
	Electrical Plans		LS	1	1	8	8	
	Electrical Details		LS	1	2	8	8	
	Controls/SCADA Plans		LS	1	2	8	8	
	Preliminary Specifications		LS	1		40	40	
	Opinion of Probable Costs		LS	1		8	8	

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME: Hanson Professional Services Inc.
ESTIMATOR NAME: Daryl Myers
DATE: 1/31/2021

PROJECT NAME: Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road

TASK ITEM	SCALE 1"=	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
Task 2.3 - Final Plans							
Final Plans		LS	1	37	24	24	
Contract Documents		LS	1		16	16	
Technical Specifications		LS	1	22	40	40	
Opinion of Probable Costs		LS	1		8	8	
				SUBTOTAL		394	
3 Permitting							
Task 3.1 - Pre-Application Meeting							
Pre-Application Meeting & Minutes		LS	1		16	16	
Task 3.2 - Permit Applications							
FDEP Permit Application		LS	1		8	8	
RAI Responses		LS	1		16	16	
As-Built Drawings		LS	1		12	12	
Certificate of Completion		LS	1		8	8	
				SUBTOTAL		60	
GRAND TOTALS						518	

**BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS**

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor:		2. Amount: \$229,311.00
3. Fund/Account #: Grant Fund 1700	4. Department Name: Public Works	
5. Contract Description: Local Agency Program Supplemental Agreement for Ellis Road Widening		
6. Contract Monitor: Jeanette Scott	8. Contract Type: GRANT	
7. Dept/Office Director: Marc Bernath		
9. Type of Procurement: Other		

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☐
☐

Purchasing

☐
☐

Risk Management

☐
☐

County Attorney

☐
☐

SECTION III - REVIEW AND APPROVAL TO EXECUTE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☒
☐

Thomas-Wood, Tammy

Digitally signed by Thomas-Wood, Tammy
DN: cn=Thomas Wood, o=Brevard County, ou=Public Works, email=Thomas.Wood@brevard.gov, date=2021.05.07 13:15:40

Purchasing

☐
☐

Risk Management

☒
☐

Lairsey, Matt

Digitally signed by Lairsey, Matt
Date: 2021.05.07 08:09:19 -04'00'

County Attorney

☒
☐

Esseesse, Alexander

Digitally signed by Esseesse, Alexander
Date: 2021.05.07 09:31:56 -04'00'

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

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

**BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS**

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor:		2. Amount: \$0
3. Fund/Account #:	4. Department Name: Public Works	
5. Contract Description: Interlocal Agreement with City of West Melbourne re: Ellis Rd Widening		
6. Contract Monitor: Jeanette Scott		8. Contract Type: INTERGOVT/LOCAL
7. Dept/Office Director: Marc Bernath		
9. Type of Procurement: Other		

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☐
☐

Purchasing

☐
☐

Risk Management

☐
☐

County Attorney

☐
☐

SECTION III - REVIEW AND APPROVAL TO EXECUTE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

☒
☐

Thomas-Wood, Tammy

Purchasing

☐
☐

Risk Management

☒
☐

Lairsey, Matt

Digitally signed by Lairsey, Matt
Date: 2021.05.19 13:38:53 -04'00'

County Attorney

☒
☐

Esseesse, Alexander

Digitally signed by Esseesse, Alexander
Date: 2021.05.19 13:53:26 -04'00'

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

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



BOARD OF COUNTY COMMISSIONERS

Public Works Department
2725 Judge Fran Jamieson Way
Building A, Room 201
Viera, Florida 32940
321-617-7202

Inter-Office Memo

TO: Clerk to the Board

TO: Commissioner Rita Pritchett, Chair

THRU: Frank Abbate, County Manager

THRU: John P. Denninghoff, Assistant County Manager

THRU: Marc Bernath, Public Works Director

FROM: Tammy Thomas-Wood, Support Services Manager

RE: Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design

DATE: June 21, 2021

On November 21, 2014, the County entered into agreement with Hanson Professional Services Inc., Contract No. 2723, in the amount of \$2,470,963.27 for the design of Ellis Road Widening. Since then, the County has required continued engineering services. The Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design (Agreement) will incorporate the services and fees identified in the attached Scope of Services Ellis Road Widening – Supplemental Agreements #3-5 and 7. These additional services total \$464,020.79. Included in Supplemental Agreement #7 are design services for the relocation of the City of West Melbourne's utilities in the amount not to exceed \$78,233.70. The County and the City of West Melbourne have entered into Interlocal Agreement to facilitate these design services as approved by the Board on May 27, 2021. In summary, the Agreement will update Contract No. 2723 Compensation and Time of Completion provisions as follows: Total Compensation - \$2,934,984.06 and Final Design Completion - December 31, 2021. The County will be reimbursed by the Florida Department of Transportation (FDOT) Local Agency Program grant funding (Fund 1700/344931/5650000 Internal Order 6932504) for these additional design services, including the utility relocation design for the City.

On May 27, 2021, the Board approved and authorized the Chair to execute the Agreement upon FDOT concurrence which was received on June 10, 2021. This Agreement was reviewed and approved in accordance with Administrative Order 29. E-Verify is included in the original contract which meets BCC-25. Staff is respectfully requesting the Chair to **sign and date** the attached Agreement.

Clerk to the Board Instructions: Upon action by the Clerk, please contact Jeanette Scott at 321-617-7202 or by email at jeanette.scott@brevardfl.gov for return of the fully executed Agreement.

Please feel free to contact our office if you have any questions or concerns.

Encl: Clerk's Memorandum Board Approval
Contract Review and Approval Form
Agreement to Amend and Extend the Professional Services Agreement

Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design

This Agreement to Amend and Extend the Professional Services Agreement for the Ellis Road Design – Contract Number 2723 (hereinafter referred to as the “Agreement”) is made by and between Brevard County, a political subdivision of the State of Florida (hereinafter referred to as “County”), and Hanson Professional Services Inc. (hereinafter referred to as “Contractor”), a Florida Profit Corporation licensed to do business in the State of Florida.

Witnesseth:

Whereas, the County has previously entered into agreement with Contractor on November 21, 2014 under Contract Number 2723 in the amount of \$2,470,963.27 for the design of Ellis Road Widening (hereinafter referred to as “Contract Number 2723”); and

Whereas, the County required continued engineering services for the design of the Ellis Road Widening Project; and

Whereas, on August 23, 2016, the County approved an additional \$40,127 in funds to be added to the design phase for drainage analysis services on the L-15 Canal Study; and

Whereas, on April 10, 2018, the County approved an additional \$150,000 in funds to be added to the design phase for additional services due to the required Project Development and Environment (P.D.&E.) Study re-evaluation and accompanying design concept alterations; and

Whereas, on December 10, 2019, the County approved an additional \$44,920 in funds to be added to the design phase to provide for additional services resulting from the required P.D.&E. study re-evaluation and parcel review; and

Whereas, these aforementioned additional services are further described in the attached Scope of Services Ellis Road Widening – Supplemental Agreements #3-5, which are incorporated herein by reference; and

Whereas, the Scope of Services Ellis Road Widening – Supplemental Agreements #3-5 total \$234,710.73 in additional fees; and

Whereas, the County requested additional design services to address project scope needs, as described in the Scope of Services Ellis Road Widening – Supplemental Agreement #7, a copy of which is attached to this Agreement and incorporated herein by reference; and

Whereas, the Scope of Services Ellis Road Widening – Supplemental Agreement #7 totaled an amount not to exceed \$229,310.06; and

Whereas, on behalf of the City of West Melbourne, the Contractor has agreed to design the relocation of the City's utilities as described in the Scope of Services Ellis Road Widening - Supplemental Agreement #7 in an amount not to exceed \$78,233.70 of the \$229,310.06; and

Whereas, the City of West Melbourne will enter into an interlocal agreement with the County to facilitate the design and future relocation of the City's utilities; and

Whereas, the parties hereto desire to enter into this Agreement in order to incorporate into Contract No. 2723 the services and fees identified in the attached Scope of Services Ellis Road Widening – Supplemental Agreements #3-5 and 7.

Now, therefore, in consideration of the premises and mutual covenants contained herein, the parties agree as follows:

1. Recitals. The above recitals are true and correct and are incorporated into this Agreement by this reference.
2. Section IV – Time of Completion is hereby amended to update the completion date for Phase II – Final Design and shall read as follows:

Phase II – Final Design: Completed by December 31, 2021

3. Section V – Compensation is hereby amended to update the Total Compensation amount, which includes the amounts from Scope of Services Ellis Road Widening – Supplemental Agreements #3-5 and 7, for the Ellis Road Widening and shall read as follows:

Phase I- Drainage Analysis- \$70,000.00

Phase II- Final Design (Inc. Geotech)- \$2,864,984.06

Total Compensation - \$2,934,984.06

4. Exhibit "A" of Contract No. 2723 is hereby amended to include the Scope of Services Ellis Road Widening – Supplemental Agreements #3-5 and 7, a copy of which is attached to this Agreement to Amend and Extend, Engineering Design Services Contract, Ellis Road Widening and made part thereof by this reference.
5. Pursuant to Section XVIII – Duration of Agreement is hereby amended to read as follows:

This Agreement shall remain in full force and effect in accordance with Section IV above, unless it is terminated by mutual consent of the parties as otherwise provided herein.
6. All terms and conditions of Contract 2723 that are not inconsistent with the provisions of this Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, on the date last signed below, the parties have caused this Agreement to be executed by their duly authorized representatives.

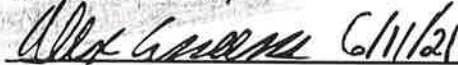
ATTEST:


Rachel Sadoff, Clerk

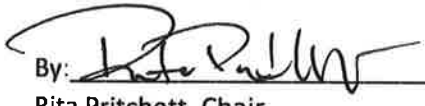
07-07-2021

Date

Reviewed for legal form and content
for Brevard County:


Assistant County Attorney

BREVARD COUNTY, FLORIDA

By: 

Rita Pritchett, Chair

Date: 6/25/21

As approved by the Board on: May 27, 2021

HANSON PROFESSIONAL SERVICES INC.

By: 

Jeffrey L. Bowen, Sr. Vice President

STATE OF Florida

COUNTY OF Duval

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 21st day of June, 2021 by Jeffrey L. Bowen, Sr. Vice President of Hanson Professional Services Inc a Foreign Profit Corporation, on behalf of the corporation. He is personally known to me or has produced _____ as-
identification.

[Notary Seal]




Notary Public

Michele Y. Clark

Name typed, printed or stamped

My Commission Expires: July 27, 2023

Exhibit "A"
SCOPE OF SERVICES

Ellis Road Widening – Supplemental Agreement #3

Brevard County Public Works Department
Project Name: Ellis Road Design
FPID# 426905-2-38-01
FAN# ST10-382-R

I. DESCRIPTION

This Exhibit forms an integral part of the agreement between Brevard County (hereinafter referred to as the COUNTY) and Hanson Professional Services Inc. (hereinafter referred to as the CONSULTANT) relative to the contract for the above-referenced project.

II. BACKGROUND

The Ellis Road Widening project scope includes widening of Ellis Road to a four lane urban section from John Rodes Boulevard to just west of Wickham Road, a distance of approximately 1.7 miles. Initial project efforts were focused on a detailed drainage study of the L-15 Canal and acceptance of an alternative to minimize ROW impacts due to the canal. The original scope document assumed a final design configuration featuring the PDE preferred typical roadway section with dual 48-inch culverts to enclose and convey the flow of the L-15 Canal. It also assumed that the PD&E- preferred regional pond alternative would be selected for final design.

Additional Drainage Study Scope has been requested for the L-15 Canal. The County is interested in developing other drainage alternatives that can achieve a "no-rise" level of performance for the widening of Ellis Road within the study limits.

III. OBJECTIVES

A stand alone technical memo will be developed for this analysis that will serve as an addendum to the original L-15 Canal Study prepared for this project. The objective of this supplemental analysis is to investigate three additional alternatives that will meet the "no-rise" criteria described above.

For the purpose of this study, "no-rise" is defined as 0.05' or less increase in stage over the existing conditions. The additional alternatives to be investigated under this scope are:

1. Enhancing the preferred alternative model from the canal study by adding storage volume in the two proposed regional ponds and optimizing the proposed pipe trunkline sizes to achieve a "no-rise" condition.

2. Adding storage volume to the current proposed condition model by utilizing one or more of the pond sites adjacent to Ellis Road as identified in the Final Pond Siting Report. Pond storage volume will be added until the “no-rise” condition is achieved.
3. Development of a proposed alternative that features an open ditch section for the L-15 Canal that can achieve the “no-rise” performance criteria. The intent for the proposed open ditch section will be to match the cross sectional area of the existing L-15 channel section.

Additional topographic survey will be acquired for the existing canal to support the modeling. The existing and preferred alternative models from the L-15 Canal study will be updated with the topographic canal study.

IV. EXCLUSIONS

Specifically excluded from this scope are the following:

- Updates to the original report.
- Field data collection, other than specific purpose survey referenced above.
- Revisions to the ICPR model that are outside the Ellis Road study limits as defined above and in the original contract documents.
- Calibration and verification of models to actual storm events.

V. COMPENSATION

Compensation rates will be in accordance with the Master Agreement and the total fee to complete the work as described above is summarized below:

<u>Description</u>	<u>Fee</u>
Additional Modeling Analysis	\$28,502.24
Canal Survey	\$11,623.95

Staff-hour estimation forms are attached as back-up documentation for these fee amounts. Professional services will be invoiced on a percentage basis.

The total LUMP SUM fee is **Forty Thousand One Hundred and Twenty Six Dollars and 19/100 cents (\$40,126.19).**

VI. DELIVERABLES TO INCLUDE:

- Technical Memorandum.
- One ICPR model for each alternative.
- L-15 Canal Graphic for use in upcoming TPO meeting.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Ellis Road Widening - Additional L-15 Canal Modeling Analysis
 County: Breward
 FPN: 426605-2-38-01
 FAP No: ST10-392-R
 Consultant Name: Hanson Professional Services Inc.
 Consultant No.: 13L0191
 Date: 5/12/2016
 Estimator: Clint Smith

Staff Classification	Total Staff Hours From SH Summary - FPN	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Inform	Senior Asst.	Secretary/Clinal	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	\$30.51	\$25.39	\$22.35	\$18.47	0.00	0	\$0	#DNV01
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
6. Drainage Analysis	161	26	7	64	0	0	0	64	0	0	0	0	0	161	\$9,226	\$57.30
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
9. Structures - Misc. Tasks, Design, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DNV01
Total Staff Hours	161	26	7	64	0	0	0	64	\$2,435.64	\$0.00	\$0.00	\$0.00	\$0.00	161	\$8,226.52	\$57.30

Total Staff Cost	\$1,875.12	\$560.00	\$4,354.56	\$0.00	\$0.00	\$0.00	\$0.00	\$2,435.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	161	\$8,226.52	\$57.30
Check =	\$8,226.52															
Notes:	1. This sheet to be used by Prime Consultant to calculate the Grand Total fee. 2. Manually enter fee from each subcontractant. Unused subcontractant rows may be hidden.															
Salary Related Costs:	OVERHEAD: 167.17% OPERATING MARGIN: 32% FCOM (Facilities Capital Cost Money): 0.41% EXPENSES: 9.37% Survey (Field - if by Prime) 0 4-man crew days @ \$ / day SUBTOTAL ESTIMATED FEE: \$28,562.34 Subcontractant: MCKIM & CREED \$11,623.95 Subcontractant: \$0.00 Subcontractant: \$0.00 Subcontractant: \$0.00 Subcontractant: \$0.00 SUBTOTAL ESTIMATED FEE: \$40,126.19 Geotechnical Field and Lab Testing \$0.00 SUBTOTAL ESTIMATED FEE: \$40,126.19 Optional Services: GRAND TOTAL ESTIMATED FEE: \$40,126.19															

Project Activity 6: Drainage Analysis

Estimator:

Ellis Road Widening - Additional L-15 Canal Modeling Analysis
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Basin	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	0	0	0	
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6.7	Design of Flood Plain Compensation	Per Flood-plain Basin	0	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.8	Design of Storm Drains	EA	0	0	0	
6.9	Optional Culvert Material	LS	0	0	0	
6.10	French Drain Systems	Per Cell	0	0	0	
6.11	Drainage Wells	EA	0	0	0	
6.12	Drainage Design Documentation Report	LS	0	0	0	
6.13	Bridge Hydraulic Report	EA	0	0	0	
6.14	Temporary Drainage Analysis	LS	0	0	0	
6.15	Cost Estimate	LS	0	0	0	
6.16	Technical Special Provisions	LS	0	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.17	Other Drainage Analysis	LS	1	120	120	L-15 Canal Drainage Study. Includes 3 new alternatives to achieve no-rise condition. 20 hours to update existing and proposed models from original Canal Study with canal topographic survey. Assume 20 hours per alternative. 20 hours for report preparation. 20 hours for Canal Modeling Graphic for use in TPO Meeting.
Drainage Analysis Technical Subtotal					120	
6.18	Field Reviews	LS	0	0	0	
6.19	Technical Meetings	LS	1	24	24	Meetings are listed below
6.20	Quality Assurance/Quality Control	LS	%	5%	6	
6.21	Independent Peer Review	LS	%	0%	0	
6.22	Supervision	LS	%	5%	6	
Drainage Analysis Nontechnical Subtotal					36	
6.23	Coordination	LS	%	3%	5	
6. Drainage Analysis Total					161	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Technical Meetings						
	Base Clearance Water Elevation	EA	0	0	0	
	Pond Siting	EA	0	0	0	
	Agency	EA	0	0	0	
	Local Governments (cities, counties)	EA	0	0	0	
	Drainage Reviews	EA	2	6	12	Coordination meeting with Brevard County to review results of additional modeling. 1 meeting 2 people. Attendance at TPO Meeting. 1 meeting 2 people.
	Other Meetings	EA	2	6	12	
	Subtotal Technical Meetings				24	
	Progress Meetings (if required by FDOT)	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	
	Total Meetings				24	
	Carries to 6.19					

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: ELLIS RD FROM CR 511 TO WICKHAM RD
 County: BREVARD
 FPN: 998998-1-52-01
 FAP No.: 1/01900

Consultant Name: MCKIM & CREED
 Consultant No.: enter consultants proj. number
 Date: 5/12/2016

Staff Classification	Total Staff Hours	PLS	TECH	CLERICAL	Staff Classification 4	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	\$113.36	\$81.74	\$68.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	36	3	30	3	0	0	0	0	0	0	0	0	0	36	\$3,287	\$91.60
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	36	3	30	3	0	0	0	0	0	0	0	0	0	36	\$3,287.45	\$91.60
Total Staff Cost		\$340.08	\$2,752.20	\$205.17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$3,287.45	

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:

OVERHEAD:

OPERATING MARGIN:

FCCM (Facilities Capital Cost Money):

EXPENSES:

SUBTOTAL ESTIMATED FEE:

Survey (Field)

Geotechnical Field and Lab Testing

SUBTOTAL ESTIMATED FEE:

Optional Services

GRAND TOTAL ESTIMATED FEE:

0%

0%

0.00%

0.00%

5

3-man crew da \$

1,665.30 / day

\$3,287.45

\$0.00

\$0.00

\$0.00

\$3,287.45

\$6,326.50

\$11,623.95

\$0.00

\$0.00

\$11,623.95

27. Survey

Estimator:

ELLIS RD FROM CR 511 TO WICKHAM RD
999999-1-52-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.3	Alignment and Existing RW Lines									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.6	Topography/DTM (3D)									

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
		Mile	1.00	4.50	4.50		0.00	8.00	36.00	TOPO FROM N EP TO 50' N OF CANAL FROM EAST OF CR 511 TO NORTH OF E TECHNOLOGY DR (INCLUDES DRAINAGE STRUCTURES WITHIN CANAL AND TRACKING STRUCTURES FROM CANAL). THIS WORK IS ESTIMATED TO TAKE 10 CREW DAYS AND 40 OFFICE HOURS AND IS ALREADY INCLUDED IN THE ORIGINAL SCOPE AND FEE. THIS ESTIMATE IS INTENDED TO QUANTIFY THE EXTRA COST TO PERFORM THIS PORTION OF THE ORIGINAL SCOPE AS A SEPERATE EXPEDITED EXPENSE. 1 EXTRA CREW DAY FOR MOT 25 HOURS ADDITIONAL MOBILIZATION (3 HOURS PER DAY x 10 CREW DAYS) 1 ADDITIONAL CREW DAY FOR ADDITIONAL EQUIPMENT SETUP AND BREAKDOWN 40 HOURS OFFICE (30 ADDITIONAL TECH HOURS, 3 ADDITIONAL HOURS CLERICAL, 3 HOURS PLS)
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									
		Mile			0.00		0.00		0.00	
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		0%	0.00	0.00		0.00		0.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained RW									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									
					0.00					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				Crew Days	5	Field Support Hours	0	Office Support Hours	36	
27.29	Supplemental Surveys									THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR
27.30	Document Research	Units		5	0	0	0		0	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.31	Field Reviews	Units							0	
27.32	Technical Meetings	LS							0	
27.33	Quality Assurance / Quality Control	LS	0.00						0	
27.34	Supervision	LS						0%	0	BUILT INTO THE 40 OFFICE HOURS FROM 27.6
27.35	Coordination	LS						0%	0	BUILT INTO THE 40 OFFICE HOURS FROM 27.6
								0%	0	BUILT INTO THE 40 OFFICE HOURS FROM 27.6
27. Survey Total										
					5	Field Support Hours	0	Office Support Hours	36	

SPLS =
PLS =
Office Support =
Total Hours = 36

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	**	--
Phase Review Meetings	EA	0	0	0	**	--
Total Meetings				0	Total PM Mtgs (carries to Tab 3)	0

Carries to 27.32
Carries to Tab 3

** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Exhibit "A"
SCOPE OF SERVICES

Ellis Road Widening – Supplemental Agreement #4

Brevard County Public Works Department
Project Name: Ellis Road Design
FPID# 426905-2-38-01
FAN# ST10-382-R

I. DESCRIPTION

This Exhibit forms an integral part of the agreement between Brevard County (hereinafter referred to as the COUNTY) and Hanson Professional Services Inc. (hereinafter referred to as the CONSULTANT) relative to the contract for the above-referenced project.

II. BACKGROUND

The Ellis Road Widening project scope includes widening of Ellis Road to a four lane urban section from John Rodes Boulevard to just west of Wickham Road, a distance of approximately 1.7 miles. Initial project efforts were focused on a detailed drainage study of the L-15 Canal and acceptance of an alternative to minimize ROW impacts due to the canal. The original scope document assumed a final design configuration featuring the PDE preferred typical roadway section with dual 48-inch culverts to enclose and convey the flow of the L-15 Canal.

Additional scope needs have become identified during coordination efforts related to development of the project design. Additional scope needs are primarily related to requirements associated with the PD&E Re-evaluation and changes to the design concept based on the results of the approved L-15 Canal Study analysis effort and report document.

III. OBJECTIVES

The additional project scope items to be added to the design services for this contract are summarized below:

- 1. Management and Coordination** – Additional meetings and coordination associated with the additional scope needs mentioned below.
- 2. Cultural Resource Assessment Survey (CRAS) Update** – An update to the original approved CRAS for this project is required since the valid time window of the previous version has passed.
- 3. Access Management/Traffic Analysis** – Perform comparative traffic analysis to review the current proposed PD&E design concept with an alternative configuration that features a signalized intersection at Distribution Drive West. The PD&E design concept features a

proposed signalized intersection at East Drive and a closed median at Distribution Drive West. Traffic analysis and recommendations will include operational analysis of intersections impacted under the alternative configuration using Synchro. The analysis will utilize traffic data from the original PD&E documentation. The traffic at the intersections will be redistributed to match with the alternative configuration. No additional traffic will be collected or developed as part of this exercise. The analysis of the alternative configuration will be performed for the PD&E design year and results compared with the PD&E design concept. The FDOT access management criteria will be referenced and its compliance with the alternative configuration will be checked. Summary of operational analysis and access management findings along with recommendations will be included in a technical memorandum.

4. **Additional Drainage Design** – The proposed design concept layout features additional pond site acreage and additional proposed pond sites in comparison with the original project scope. The increased pond footprint is needed to conform to the preferred alternative resulting from the approved L-15 Canal Study Report.
5. **Geotechnical & Contamination Analysis** – Additional geotechnical borings and investigation related to increased proposed pond footprint. An update to the original approved Contamination Screening Evaluation Report (CSER) for this project is required since the valid time window of the previous version has passed.
6. **Topographic Design Survey** - Additional survey related to increased proposed pond footprint.

IV. DELIVERABLES TO INCLUDE:

- CSER Update report document.
- CRAS Update report document.
- Roadway Construction plans and design documentation as summarized in the main agreement contract documents.
- Traffic Analysis Technical Memorandum.

V. COMPENSATION

Compensation rates will be in accordance with the Master Agreement. The total LUMP SUM fee is **One Hundred Forty Nine Thousand, Six Hundred Sixty Five and 27/100 cents (\$149,665.27)**. Staff-hour estimation forms and sub-consultant scope documentation are attached as back-up documentation for these fee amounts. Professional services will be invoiced on a percentage basis.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project:
County:
FPN:
FAP No.:

Elita Road Widening - From John Rodas Blvd. to West of Wickham Road
Brevard
426905-2-38-01
ST10-382-R

Consultant Name: Hanson Professional Services Inc.
Consultant No.: 160918
Date: 1/8/2018

Staff Classification	Hours From Summary - Firm	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Intern	Senior Asst	Secretary/Clerical	Staff Classification	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	16	1	1	1	2	4	3	2	1	1	0	0	0	16	\$758	\$47.41
4. Roadway Analysis	113	6	5	7	6	0	28	28	11	22	0	0	0	113	\$4,770	\$42.21
5. Roadway Plans	52	3	2	3	3	0	13	13	5	10	0	0	0	52	\$2,189	\$42.10
6. Drainage Analysis	103	6	4	5	5	0	26	26	10	21	0	0	0	103	\$4,287	\$41.63
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Mac. Tasks, Dwg, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Territorial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	284	16	12	15	16	4	70	69	27	54	0	0	0	284	\$12,005.11	\$42.27
Total Staff Cost		\$1,153.92	\$860.00	\$1,068.64	\$765.12	\$180.56	\$3,035.90	\$2,626.14	\$823.77	\$1,371.06	\$0.00	\$0.00	\$0.00		\$12,005.11	

Check = \$12,005.11

SALARY RELATED COSTS:

OVERHEAD:

OPERATING MARGIN:

FOCM (Facilities Capital Cost Money):

EXPENSES:

Survey (Field - if by Prime)

SUBTOTAL ESTIMATED FEE:

Subconsultant: MCKIM & CREED

Subconsultant: NADIC

Subconsultant: SEARCH

Subconsultant:

Subconsultant:

Subconsultant:

Subconsultant:

SUBTOTAL ESTIMATED FEE:

Geotechnical Field and Lab Testing

SUBTOTAL ESTIMATED FEE:

Optional Services:

12%
0.41%
0.27%
4-man crew days @ / day

\$12,005.11
\$20,068.94
\$3,841.64
\$49.22
\$1,124.86
\$0.00
\$37,088.79
\$56,251.45
\$33,087.58
\$21,903.44
\$149,665.27
\$0.00
\$149,665.27

Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Survey Field Days by Subconsultant
4 - Hanson Crew

Project Activity 3: General Tasks

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	0	0	0	
3.1.2	Notifications	LS	0	0	0	
3.1.3	Prepare Mailing Lists	LS	0	0	0	
3.1.4	Median Modification Letters	LS	0	0	0	
3.1.5	Driveway Modification Letters	LS	0	0	0	
3.1.6	Newsletters	LS	0	0	0	
3.1.7	Renderings and Fly Throughs	LS	0	0	0	
3.1.8	PowerPoint Presentation	LS	0	0	0	
3.1.9	Public Meeting Preparations	LS	0	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	0	0	0	
3.1.11	Other Agency Meetings	LS	0	0	0	
3.1.12	Web Site	LS	0	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	3.1 Public Involvement Subtotal				0	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	0	0	0	
3.4	Contract Maintenance and EDMS	LS	0	0	0	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	0	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	16	16	
3.7	Plans Update	LS	0	0	0	
3.8	Post Design Services	LS	0	0	0	
3.9	Electronic/Digital Delivery	LS	0	0	0	
3.10	Risk Assessment Workshop	LS	0	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	0	0	0	
3.12	Other Project General Tasks	LS	0	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3. Project Common and Project General Tasks						
					16	

3.6 - List of Project Manager Meetings

Roadway Analysis	EA	0	0	0	0
Drainage	EA	1	4	4	4
Utilities	EA	0	0	0	0
Environmental	EA	1	4	4	4
Structures	EA	0	0	0	0
Signing & Pavement Marking	EA	0	0	0	0
Signalization	EA	0	0	0	0
Lighting	EA	0	0	0	0
Landscape Architecture	EA	0	0	0	0
Survey	EA	1	4	4	4
Photogrammetry	EA	0	0	0	0
ROW & Mapping	EA	0	0	0	0
Terrestrial Mobile LiDAR	EA	0	0	0	0
Architecture	EA	0	0	0	0
Noise Barriers	EA	0	0	0	0
ITS Analysis	EA	0	0	0	0
Geotechnical	EA	1	4	4	4
Progress Meetings	EA	0	4	4	0
Phase Reviews	EA	0	0	0	0
Field Reviews	EA	0	0	0	0

Total Project Manager Meetings **4** **16**

Carries to 3.6

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to column D except for Photogrammetry.

Project Activity 4: Roadway Analysis

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	0	0	0	
4.2	Pavement Type Selection Report	LS	0	0	0	
4.3	Pavement Design Package	LS	0	0	0	
4.4	Cross-Slope Correction	LS	0	0	0	
4.5.1	Horizontal /Vertical Master Design Files	LS	0	0	0	
4.5.2	Horizontal /Vertical Master Design Files (skeletal plans)	LS	0	0	0	
4.6	Access Management	LS	1	100	100	Traffic Modeling and analysis for signal location alternatives. Analysis results and recommendations summarized in technical memorandum.

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.7	Cross Section Design Files	LS	0	0	0	
4.8	Traffic Control Analysis	LS	0	0	0	
4.9	Master TCP Design Files	LS	0	0	0	
4.10	Design Variations and Exceptions	LS	0	0	0	
4.11	Design Report	LS	0	0	0	
4.12	Quantities	LS	0	0	0	
4.13	Cost Estimate	LS	0	0	0	
4.14	Technical Special Provisions	LS	0	0	0	
4.15	Other Roadway Analysis	LS	0	0	0	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis Technical Subtotal						
4.16	Field Reviews	LS	0	0	0	
4.17	Technical Meetings	LS	0	0	0	Meetings are listed below
4.18	Quality Assurance/Quality Control	LS	%	5%	5	
4.19	Independent Peer Review	LS	%	0%	0	
4.20	Supervision	LS	%	5%	5	
Roadway Analysis Nontechnical Subtotal						
					10	
4.21	Coordination	LS	%	3%	3	
4. Roadway Analysis Total						
					113	

Technical Meetings

Typical Section	EA	0	0	0
Pavement	EA	0	0	0
Access Management	EA	0	0	0
15% Line and Grade	EA	0	0	0
Driveways	EA	0	0	0
Local Governments (cities, counties, MPO)	EA	0	0	0
Work Zone Traffic Control	EA	0	0	0
30/60/90/100% Comment Review Meeting:	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings (if required by FDOT)	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				0
Carries to 4.17				

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 5: Roadway Plans

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	0	
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	0	0	0	
5.3	Drainage Map (Including Interchanges)		Sheet	0	0	0	0	
5.4	Typical Section Sheets				0			
5.4.1	Typical Sections		EA	0	0		0	
5.4.2	Typical Section Details		EA	0	0		0	
5.5	General Notes/Pay Item Notes		Sheet	0	0	0	0	
5.6	Summary of Quantities		Sheet	0	0	0	0	
5.7	Box Culvert Data Sheet		Sheet	0	0	0	0	
5.8	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	
5.9	Summary of Drainage Structures		Sheet	0	0	0	0	
5.10	Optional Pipe/Culvert Material		Sheet	0	0	0	0	
5.11	Project Layout		Sheet	0	0	0	0	
5.12	Plan/Profile Sheet		Sheet	0	0	0	0	
5.13	Profile Sheet		Sheet	0	0	0	0	
5.14	Plan Sheet		Sheet	0	0	0	0	
5.15	Special Profile		Sheet	0	0	0	0	
5.16	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.17	Interchange Layout Sheet		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.18	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	
5.19	Intersection Layout Details		Sheet	0	0	0	0	
5.20	Special Details		EA	0	0		0	
5.21	Drainage Structure Sheet (Per Structure)		EA	0	0	0	0	
5.22	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	
5.23	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	
5.24	Lateral Ditch Cross Sections		EA	0	0	0	0	
5.25	Retention/Detention Ponds Detail Sheet		Sheet	4	12	3	48	For additional pond sites. Assumes 3 sheets for added regional pond and 1 sheet for added attenuation-only pond.
5.26	Retention Pond Cross Sections		EA	0	0	0	0	
5.27	Cross-Section Pattern Sheet		Sheet	0	0	0	0	
5.28	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.29	Cross Sections		EA	0	0		0	
5.30	Temporary Traffic Control Plan Sheets		Sheet	0	0	0	0	
5.31	Temporary Traffic Control Cross Section Sheets		EA	0	0		0	
5.32	Temporary Traffic Control Detail Sheets		Sheet	0	0	0	0	
5.33	Utility Adjustment Sheets		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.34	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.35	Erosion Control Plan		Sheet	0	0	0	0	
5.36	SWPPP		Sheet	0	0	0	0	
5.37	Project Network Control Sheet		Sheet	0	0	0	0	
5.38	Environmental Detail Sheets		LS	0	0		0	
5.39	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal								
						3	48	
5.40	Quality Assurance/Quality Control		LS	%	5%		2	
5.41	Supervision		LS	%	5%		2	
5. Roadway Plans Total								
						3	52	

Project Activity 6: Drainage Analysis

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Basin	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	0	0	0	
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	1	90	90	Additional Regional Pond and attenuation-only pond needed based on Canal Study Modeling and design coordination. Assume 60 hours for regional pond and 30 hours for attenuation-only pond.
6.6	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6.7	Design of Flood Plain Compensation	Per Flood-plain Basin	0	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.8	Design of Storm Drains	EA	0	0	0	
6.9	Optional Culvert Material	LS	0	0	0	
6.10	French Drain Systems	Per Cell	0	0	0	
6.11	Drainage Wells	EA	0	0	0	
6.12	Drainage Design Documentation Report	LS	0	0	0	
6.13	Bridge Hydraulic Report	EA	0	0	0	
6.14	Temporary Drainage Analysis	LS	0	0	0	
6.15	Cost Estimate	LS	0	0	0	
6.16	Technical Special Provisions	LS	0	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.17	Other Drainage Analysis	LS	0	0	0	
Drainage Analysis Technical Subtotal						
6.18	Field Reviews	LS	0	0	0	
6.19	Technical Meetings	LS	0	0	0	
6.20	Quality Assurance/Quality Control	LS	%	5%	5	
6.21	Independent Peer Review	LS	%	0%	0	
6.22	Supervision	LS	%	5%	5	
Drainage Analysis Nontechnical Subtotal						
6.23	Coordination	LS	%	3%	3	
6. Drainage Analysis Total						
					103	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Technical Meetings						
	Base Clearance Water Elevation	EA	0	0	0	
	Pond Siting	EA	0	0	0	
	Agency	EA	0	0	0	
	Local Governments (cities, counties)	EA	0	0	0	
	Drainage Reviews	EA	0	0	0	
	Other Meetings	EA	0	0	0	
	Subtotal Technical Meetings				0	
	Progress Meetings (if required by FDOT)	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	
	Total Meetings				0	
	Carries to 6.19					

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Ellis Road Widening - From John Rodas Blvd. to West of Wickham Road
 County: Brevard
 FPN: 426905-2-38-01
 FAP No.: ST10-382-R
 Consultant Name: McKim Creed
 Consultant No.:
 Date: 1/8/2018
 Estimator: Corey Mayhew

Staff Classification	Total Staff Hours From SH Summary - Firm	SR PLS	PLS	TECH	CLERICAL	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg's, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	82	15	24	37	6	0	0	0	0	0	0	0	82	\$9,200	\$112.19
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	82	15	24	37	6	0	0	0	0	0	0	0	82	\$9,199.56	\$112.19
Total Staff Cost		\$2,674.20	\$2,720.64	\$3,394.38	\$410.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$9,199.56	

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:

OVERHEAD: 0%

OPERATING MARGIN: 0%

FCCM (Facilities Capital Cost Money): 0.00%

EXPENSES: 0.00%

SUBTOTAL ESTIMATED FEE: 23

Survey (Field) 1,665.30 / day

SUBTOTAL ESTIMATED FEE: \$38,301.90

Subconsultant: AGS (Title Searches) \$8,750.00

GRAND TOTAL ESTIMATED FEE: \$56,251.46

27. Survey

Estimator: Corey Maylone

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
428905-2-38-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile	0.50	2.00	1.00		0.00	2.00	2.00	Establish survey control and survey baselines for topo within heavily wooded and wet proposed pond site
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile	0.50	1.00	0.50		0.00	2.00	1.00	establish vertical control for proposed pond sites
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.3	Alignment and Existing ROW Lines									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.6	Topography/DTM (3D)									
		acres	16.50	1.00	16.50		0.00	4.00	66.00	Addition of two proposed pond sites totaling 16.5 acres. Larger pond site (14.6 acres) is heavily wooded and wet. (0.5 acre additional survey needed in pond south of Ellis/West of CR 511) (The acreage used contains a 25' addition around the perimeter of the pond limits identified by the EOR)
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									
		Mile			0.00		0.00		0.00	
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		0%	0.00	0.00		0.00		0.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile	1.00	2.00	2.00		0.00	2.00	4.00	Locate Approximately 1 mile of wetland as flagged by others for additional pond sites
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained RW									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									
			20	0.125	2.50					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal										
				Crew Days	23	Field Support Hours	0	Office Support Hours	73	
27.29	Supplemental Surveys			23	0		0		0	THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR
27.30	Document Research	Units							0	
27.31	Field Reviews	Units							0	

27. Survey

[illegible]

SPLS =
PLS =
Office Support =
Total Hours = 82

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	**	**
Phase Review Meetings	EA	0	0	0	**	**
Total Meetings				0	Total PM Mtgs (carries to Tab 3)	0

Carriers to Tab 3

Carries to 27.32

**** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3**

MCKIM & CREED WORKSHEET FOR AMERICAN GOVERNMENT SERVICES UPDATED CORPORATION PARCEL FEES (LA)

THE ORIGINAL QUOTE FROM 10/01/2015 STATED THE RATES WERE GOOD THROUGH 2016. THE PROJECT WAS ON HOLD FOR ONE YEAR. THE \$9,750 IS THE ADDITIONAL AMOUNT NEEDED TO COVER AGS 2018 RATES.

SEARCH TYPE	#	FEE/EACH (10/01/2015 QUOTE)	TOTAL (10/01/2015 QUOTE)	#	FEE/EACH (12/17/2017 QUOTE)	TOTAL (12/17/2018 QUOTE)	ADDITIONAL FEE PER AGS 2018 RATES
COMMERCIAL SEARCH	49	\$550.00	\$26,950.00	49	\$675.00	\$33,075.00	
RESIDENTIAL SEARCH	21	\$550.00	\$11,550.00	21	\$675.00	\$14,175.00	
COMMERCIAL SEARCH UPDATE	98	\$75.00	\$7,350.00	98	\$75.00	\$7,350.00	
RESIDENTIAL SEARCH UPDATE	42	\$75.00	\$3,150.00	42	\$75.00	\$3,150.00	
TOTAL			\$49,000.00			\$57,750.00	\$8,750.00

MCKIM & CREED PARCEL TRACKING FEE FORM (EXAMPLE)

[illegible]



AMERICAN GOVERNMENT SERVICES CORPORATION

Wednesday, December 13, 2017

Reports and Invoice

To: Corey Malone
McKim & Creed
505 E. New York Avenue, Ste. 3
Deland, FL 32724
Office: 386-873-4517
Cell: 386-837-0171
Email: CMaylone@mckimcreed.com

RE: Parcels on Ellis Road from John Rhodes Blvd to Wickman Rd
Brevard County

Dear Mr. Malone:

Please accept this letter as confirmation that we can provide approximately 70 Title Search Reports for the above referenced project. Reports to be completed within a pre-determined schedule upon notice to proceed, price structure good through the end of **2018** on the requested project. In accordance with your request, I am pleased to submit the following price proposal:

Title Searches to be provided in the form specified at a rate of:

- 50 year + TIITF to District 5 Standards – for Residential, Commercial & Vacant \$ 675.00 per parcel
- Updates if requested (within 5 years of effective date) \$ 75.00 per report
- All reports will include copies of all supporting instruments.
- Deliverables include 1 hard copies and 1 CD

Estimate of 70 parcels @ \$675.00 ea. (\$47,250.) and 2 updates ea. (\$10,500.). Estimated total not to exceed \$57,750.00.

Our services are provided on a per parcel basis, therefore do not require a quote on an hourly or any other rate basis. DOT Title Research Reports are per report and are charged at per parcel rate. These charges are customary and ordinary.

This is to certify that the billing rates contained herein are our normal rates for such services and that the method used to arrive at the rates are the same as for both public and private sector clients. If inflationary increases are requested, this further certifies that proposed increases are consistent with billing rate increases over the past year.

I appreciate the opportunity to work with you on this exciting project. If you have any further questions or need additional information, please don't hesitate to contact me at (813) 933-3355, ext 236.

Sincerely,
Tammy Mehl
Tammy Mehl
Senior Vice President

3812 West Linebaugh Avenue
Tampa, Florida 33624
Phone: (813) 933-3355 ext 236 Fax: (813) 594-0471 tmehl@agsres.com

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: ELLIS ROAD WIDENING
 County: Brevard County
 FPN: 426905-2-3801
 FAP No.: ST10-382-R

Consultant Name: Hanson/Nedic
 Consultant No.: R14011
 Date: 1/8/2018
 Estimator: Goodwin Nnadi

Staff Classification	Total Staff Hours From Firm	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Staff Engineer	Cadd/Computer Tech	Sr. Engineer Tech.	Secretary	Staff Classification	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
9. Structures - Misc. Tasks, Dwg. Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
35. Geotechnical	93	5	0	10	30	40	14	28	4	0	0	0	0	131	\$4,512.29	\$34.44
Total Staff Hours	93	5	0	10	30	40	14	28	4	0	0	0	0	131	\$4,512.29	\$34.44
Total Staff Cost		\$298.05	\$0.00	\$652.10	\$1,416.30	\$1,157.60	\$341.88	\$641.48	\$66.66	\$0.00	\$0.00	\$0.00	\$0.00		\$4,512.29	

SALARY RELATED COSTS:

OVERHEAD: 233%
 OPERATING MARGIN: 16%
 FCOM (Facilities Capital Cost Money): 1.13%
 EXPENSES: 34.74%
 SUBTOTAL ESTIMATED FEE: 0
 Survey (Field) 4-man crew d \$ / day
 Geotechnical Field and Lab Testing \$15,720.00
 SUBTOTAL ESTIMATED FEE: \$33,087.58
 Optional Services \$0.00
 GRAND TOTAL ESTIMATED FEE: \$33,087.58

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

Project Activity 35: Geotechnical

Estimator: Godwin Nhadi - Nadic

ELLIS ROAD WIDENING
426905-2-3801

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway						
35.1	Document Collection and Review	LS	1	0	0	Review available printed literature and reports (FDOT Hrs/unit range = 4 to 40)
35.2	Develop Detailed Boring Location Plan	LS	1	1	1	Additional Pond Area 25.56 ac.: Total SPT Borings - 5 SPT @ 20' = 100 LF. (FDOT= 2 to 32) Borings from critical walls will be utilized.
35.3	Stake Borings/Utility Clearance	Boring	5	0.3	2	Site Recon. and stake 5 SPT @ 20'. (FDOT =0.2 to 0.5)
35.4	Coordinate and Develop MOT Plans for Field Investigation	EA	1	1	1	
35.5	Drilling Access Permits	Location	0	0	0	FDOT Range 3 to 16
35.6	Property Clearances	EA	2	0	0	
35.7	Groundwater Monitoring	EA	0	0	0	FDOT Range 3 to 8
35.8	LBR/Resilient Modulus Sampling	EA	0	0	0	Collect MR samples and ship to SMO (FDOT LBR Sampling only 0.33 to 0.67)
35.9	Coordination of Field Work	100 lf of boring	1	1	1	
35.10	Soil and Rock Classification - Roadway	100 lf of boring	1	2	2	
35.11	Design LBR	LS	1	0	0	MR from SMO, if LBR (FDOT range 4 to 16)
35.12	Laboratory Data	100 lf of boring	1	0.8	1	FDOT Range 0.5 to 1
35.13	Seasonal High Water Table	Boring	5	0.3	2	FDOT Range 0.1 to 1
35.14	Parameters for Water Retention Areas	EA	2	2	4	FDOT Range 1 to 4
35.15	Delineate Limits of Unsuitable Material	Cross-section	10	0.3	3	FDOT Range 0.25 to 1
35.16	Electronic Files for Cross-Sections	100 lf of boring	1	1.25	1	FDOT Range 1 to 2

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.17	Embankment Settlement and Stability	Embankment Boring	0	0	0	FDOT Range 1 to 4
35.18	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	2	6	12	FDOT Hrs/unit range = 2 to 6
35.19	Geotechnical Recommendations	LS	1	2	2	FDOT Hrs/unit range = 4 to 40
35.20	Pavement Condition Survey and Pavement Evaluation Report	LS	1	0	0	
35.21	Preliminary Roadway Report	LS	1	2	2	FDOT Hrs/unit range = 7 to 20
35.22	Final Report	EA	1	8	8	
35.23	Auger Boring Drafting	100 lf boring	0	4	0	FDOT Hrs/unit range = 2 to 6
35.24	SPT Boring Drafting	100 lf boring	1	5	5	FDOT Hrs/unit range = 3 to 8
Roadway Geotechnical Subtotal					47	
Structures						
35.25	Develop Detailed Boring Location Plan	LS	1	0	0	Signals: 5 SPT @ 40' = 200LF. (FDOT Hrs/unit range = 2 to 32)
35.26	Stake Borings/Utility Clearance	Boring	5	0.4	2	Signals: 5SPT @ 40' = 200LF. (FDOT Hrs/unit range = 0.2 to 0.5)
35.27	Coordinate and Develop MOT Plans for Field Investigation	EA	1	2	2	FDOT Hrs/unit range = 2 to 8
35.28	Drilling Access Permits	Location	0	0	0	
35.29	Property Clearances	EA	0	0	0	
35.30	Collection of Corrosion Samples	EA	2	0.5	1	FDOT Hrs/unit range = 0.25 to 1
35.31	Coordination of Field Work	100 lf of boring	2	1	2	FDOT Hrs/unit range = 0.75 to 1.5
35.32	Soil and Rock Classification - Structures	100 lf of boring	2	2	4	
35.33	Tabulation of Laboratory Data	100 lf of boring	2	0.8	2	
35.34	Estimate Design Groundwater Level for Structures	EA	5	0.5	3	5 signal structures (FDOT Hrs/unit range = 0.25 to 2)
35.35	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	FDOT Hrs/unit range = 4 to 5
35.36	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	FDOT Hrs/unit range = 6 to 12

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.37	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	
35.38	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	
35.39	Walls	Wall Boring	0	0	0	FDOT Hrs/unit range = 1.5 to 4
35.40	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	
35.41	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	5	1	5	Signals: 12 SPT @ 40' = 480LF. (FDOT Hrs/unit range = .25 to 1.5)
35.42	Box Culvert Analysis	EA	1	2	2	FDOT Hrs/unit range = 4 to 8
35.43	Preliminary Report - BDR	EA	0	0	0	
35.44	Final Report - Bridge and Associated Walls	EA	0	0	0	
35.45	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	1	4	4	
35.46	SPT Boring Drafting	100 lf of boring	2	5	10	FDOT Hrs/unit range = 3 to 10
35.47	Other Geotechnical	LS	1	0	0	
Structural Geotechnical Subtotal					37	
Geotechnical Technical Subtotal					84	
35.48	Technical Special Provisions	EA	0	0	0	
35.49	Field Reviews	LS	0	0	0	
35.50	Technical Meetings	LS	1	0	0	Meetings listed below
35.51	Quality Assurance/Quality Control	LS	%	3%	3	
35.52	Supervision	LS	%	3%	3	
Geotechnical Nontechnical Subtotal					6	
35.53	Coordination	LS	%	3%	3	
35.54	Update Contamination Screening Evaluation	LS	1		40	
35. Geotechnical Total					133	

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
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Technical Meetings

Kickoff Meeting with FDOT	EA	1	0	0	0	
Boring Layout Approval	EA	1	0	0	0	
Attend in BDR Review Meeting	EA	0	0	0	0	
30/60/90% Submittal Review	EA	0	0	0	0	
Other Meetings	EA	0	0	0	0	
Subtotal Technical Meetings					0	

Progress Meetings	EA	3	0	0	0	
Phase Review Meetings	EA	3	0	0	0	

Total Meetings					0	
					Carries to 35.50	

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3



Scope of Services

Cultural Resource Assessment Survey of Ellis Road from John Rhodes to West of Wickham Rd, Brevard County, Florida

FM Number: 426905-2

December 4, 2017

Project Description

SEARCH will conduct a Cultural Resource Assessment Survey (CRAS) update in support of Ellis Road reevaluation. SEARCH conducted a CRAS in support of the Ellis Road Project Development and Environment (PD&E) Study in 2012; the current study will provide an architectural history survey update for the project corridor and archaeological and architectural history survey of one new proposed 13-acre regional pond not included in the previous CRAS.

The Phase I CRAS will consist of archaeological fieldwork and a historic structure survey, the results of which will be presented in a Phase I CRAS report that meets the guidelines of Part 2, Chapter 8 of the FDOT PD&E Manual (revised June 2017) and Chapter 1A-46 of the Florida Administrative Code. The field methods will follow the recommendations presented in Chapter 3 (Site Identification) of the FDOT Cultural Resource Management Handbook and Section 2 (Cultural Resource Assessment Surveys) of the FDHR's Cultural Resource Management Standards & Operations Manual.

A Phase I CRAS is designed to identify and evaluate cultural resources within a project's Area of Potential Effect (APE). Should additional work (Phase II Site Assessment, Determination of Eligibility, Section 106 Case Report, etc.) be requested by the State Historic Preservation Officer (SHPO) or other agency subsequent to the review of the Phase I CRAS results, such work will be conducted under a separate scope and cost agreement.

Area of Potential Effect (APE) Recommendation

For corridors, SEARCH generally recommends that the APE be defined to include parcels adjacent to the corridor, extending to the back or side property lines or a distance no greater than 100 meters (330 feet) to either side of the existing/proposed right-of-way. For proposed ponds, SEARCH generally recommends that the APE be defined to include the proposed pond footprint and a 100-foot buffer.

The archaeological survey will be limited to the project construction area (i.e., the existing and/or proposed right-of-way or pond footprints). The architectural survey will include the entire APE.



Buried Utility Location Law Compliance

In compliance with the "Underground Facility Damage Prevention and Safety Act," Chapter 556, Florida Statutes, SEARCH will use the Sunshine State One Call of Florida, Inc. (SSOCOF) system to coordinate for the location of buried utilities within the proposed project area. This effort will include at minimum the application for one locate ticket per mile of right of way, telephone coordination with the individual locators assigned to the project by SSOCOF, and the marking of proposed testing areas in the field.

Project Duration

The duration of this project will not exceed 12 months from contract execution.

Project Staff

SEARCH key personnel all exceed the qualifications presented in *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (Federal Register V.48 N. 190 Part IV p. 44738-44739, September 30, 1983).

Deliverables

<u>Quantity</u>	<u>Deliverable</u>	<u>Via</u>
1	Certificate of Insurance ¹	Fax
1	End of Fieldwork memo ¹	Email
1	Draft Report PDF	Email
1	Draft Report (bound) ¹	UPS
1	Final Report PDF	UPS
2	Final Reports (bound)	UPS
1	Final Report with SHPO Project Packet	UPS
1	Recovered cultural material to FDOT	UPS

¹ Upon Request

Project Tasks

The following tasks and subtasks generally comprise the level of effort required to complete this project. Staffhours associated with each task are shown on the attached Cost Proposal and Staffhour Estimate.

1. Mobilization/Demobilization

- Buried utility location coordination
- Buried utility locator field meeting
- Landowner coordination
- Equipment and vehicle preparation
- Health and Safety preparation and meeting
- Transport to and from the project area



2. Background Research

- Florida Master Site File (FMSF) cultural resource database review
- FMSF cultural resource survey database review
- Literature review
- Historic USGS, USDA, GLO, state, county, and roadway map review
- Historic aerial review
- Environmental review
- Local informant interviews
- Certified Local Government representative coordination
- County Property Appraiser database review
- Archaeological site probability model development
- Historic structure probability model development

3. Fieldwork

- Archaeological survey (pond only)
- Architectural History survey (corridor and pond)

4. Data Analysis

- Field data analysis
- Laboratory analysis
- Curation preparation
- Artifact delivery to permanent curation facility

5. GIS

- Field map production
- GPS data processing
- Report map production

6. Report Preparation and Production

- Progress reports
- Draft report
- Final report
- FDHR Submission Packet
- FMSF forms
- Florida Survey Log form
- Quality Control

7. Meetings

- Agency coordination via telephone
- Client teleconference

8. Project Administration

- Project and contract setup
- Risk management
- Contract management
- Project management



Insurance

SEARCH carries insurance for the following policies and will deliver a Certificate of Insurance to the Client upon request. Should the Client require increased limits, endorsements or additions for this contract, the associated costs for any additional insurance requirements will be billed to the Client.

Policy Type	Limits Each Occurrence	Aggregate
Workers Compensation, including United States Harbor Workers and Longshoremen's Act (USL&H*)	Statutory Limits	Statutory Limits
Employers' Liability	\$1,000,000	\$1,000,000
General Liability	\$1,000,000	\$2,000,000
Professional Liability/ Contractors	\$2,000,000	\$2,000,000
Pollution Liability	\$1,000,000	\$1,000,000
Automobile Liability	\$3,000,000	\$3,000,000
Umbrella	\$1,000,000	\$1,000,000
Maritime Employers Liability (Jones Act)*	\$25,000	\$25,000
Valuable Papers		
Defense Base Act Coverage as needed on a project by project basis		

* Jones Act and USL&H policies apply to any work that is conducted in, on, or around navigable waters. Claims resulting from injuries in these areas typically are not covered by conventional Workers Compensation insurance policies, and can expose employers and landowners to certain federal laws in respect to employee injuries. SEARCH's policies protect against these claims.

Change Management Plan

SEARCH will submit a Project Modification Form (attached) to the Client for authorization for project changes that exceed the limitations of this Scope of Services. Project changes may include adjustments to the project description, duration, deliverables, tasks, staffhours estimate (attached), or the assumptions listed below.

Assumptions

Mobilization/Demobilization

- Delays to the project due to lack of performance by buried utility location contractors will be considered a project change.
- The Client will secure permission from the current landowner(s) allowing SEARCH field team's access to the project area.
- Preparation and distribution of fieldwork notification letters to property owners will not be the responsibility of SEARCH under this Scope of Services. The Client will distribute such letters and provide SEARCH with a copy to carry in the field.
- The Client will notify SEARCH of any environmental or physical hazards that may exist on the project area.
- The project area does not include State- or Federally-owned lands that would require the application for State or Federal archaeological research permits.



Fieldwork

- Fieldwork will be conducted during one field session; return trips at the request of the client or agency will be considered a project change.

Data Analysis

- This Scope of Services includes the cost of collecting, processing, analyzing, temporarily curating, and shipping up to 100 artifacts; laboratory work for any additional artifacts will be considered a project change.
- Upon project completion, any artifacts recovered during the project will be transferred to the appropriate FDOT facility for permanent curation.

Report Preparation

- Requests for deliverables in addition to those listed in the Deliverables section will be considered a project change. This includes additional report copies, interim reports, report sections, progress reports, technical memoranda, digital media (including GIS data), press releases, or agency or Tribal correspondence.
- SEARCH will receive all comments from all reviewers for the Draft Report as one submittal. Additional comment submittals will be considered a project change.

Meetings

- No meeting or public hearing attendance will be conducted.
- Only one field meeting will be conducted with buried utility location contractors.
- Consultation with federally recognized Native American Tribes will not be the responsibility of SEARCH under this scope of work.

Staffhours and Lump Sum Cost

SEARCH will complete this project with the hours and fee as shown in the attached staffhours estimate workbook.



PROJECT MODIFICATION # _____

Financial Management # _____

SEARCH Project # _____

Date: _____

Project Title

--

Modification Description

--

Modification Staffhours and Cost

--

Total Contract Value (including Modifications)

--

**PROJECT DEVELOPMENT & ENVIRONMENT
PROJECT DATA**

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project:	Ellis Road from John Rhodes to West of Wickham	Consult Name:	SEARCH
County:	Brevard	Consult No.:	enter consultants proj number
FPN:	426905-2	Date:	1/7/2018
FAP No.:	0	Estimator:	Insert name

Staff Classification	Total Staff Hours From "Staff Summary" - Firm"	Project Manager	Chief Archaeologist	Sr. Specialist	Specialist	Sr. Archaeologist	Archaeologist	GIS Specialist	Secretary/Clerical	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
Project Description and Objectives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Engineering Analysis & Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Environmental Analysis & Reports	223	8	16	33	66	61	1	17	21	0	0	0	0	223	\$7,297	\$32.72
Environmental Document	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	223	8	16	33	66	61	1	17	21	0	0	0	0	223		
Total Staff Cost		\$418.08	\$673.44	\$1,374.45	\$1,830.18	\$2,014.83	\$21.52	\$397.63	\$567.00	\$0.00	\$0.00	\$0.00	\$0.00		\$7,297.13	\$32.72

Check = \$7,297.13

SALARY RELATED COSTS:

OVERHEAD:	114.54%	\$7,297.13
OPERATING MARGIN:	28.00%	\$8,358.13
FCCM (Facilities Capital Cost Money):	0.315%	\$2,043.20
EXPENSES:	57.31%	\$22.99
SALARY RELATED SUBTOTAL:		\$4,181.99
Survey (Field - if by Sub)	0.00	\$21,903.44
SUBTOTAL - SUBCONSULTANT		\$0.00
Optional Services		\$0.00
SUBCONSULTANT TOTAL ESTIMATED FEE:		\$21,903.44

Note:

1. This sheet to be used by Subconsultant to calculate its fee.

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

Estimator:

Ellis Road from John Rhodes to West of Wickham
426905-2

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	# of Units	Hours / Unit	Hours	Comments
NOTE: * subject to QC						
5.1	Sociocultural Effects					
5.2	Cultural Resources					
	5.2.1 Archeological and Historic Resources					
	Research Design Methodology	LS	1	0	0	Included in CRAS.
	Cultural Resource Assessment Survey (CRAS) *	LS	1	212	212	CRAS update for corridor and ponds. Archeological survey of additional 13-ac pond not included in PD&E CRAS. Architectural history survey fieldwork, preparation of Historic Resources Table, and development of significance evaluations (15 historic parcels). 1 Resource Form (including required maps and photos) for each identified site/structure + 1 Survey Log sheet for project = est. 16 forms. Includes coordination for utility locates, background research, preparation of report text, field and report graphics, laboratory analysis of recovered artifacts, technical editing, quality control, quality assurance, clerical support, project administration (progress reports, team teleconferences).
	CRAS Addendum or Technical Memo. for Pond Sites	LS	1	0	0	Not anticipated.
	Determination of Eligibility (DOE) As Required	LS	1	0	0	Not anticipated.
	Case Study Report *	LS	1	0	0	Not anticipated.
	Memorandum of Agreement (MOA) *	LS	1	0	0	Not anticipated.
	Section 4(f) Evaluation for Historic Resources	LS	1	0	0	Not anticipated.
	Section 106 Consultation Meetings	LS	1	0	0	Not anticipated.
	Native American Coordination Meeting	LS	1	0	0	Not anticipated.
	Section 106 Public Involvement	LS	1	0	0	Not anticipated.
	5.2.2 Recreation Section 4(f) *					
	Section 4(f) Determination of Applicability	EA	0	0	0	
	Section 4(f) "de minimis" documentation *	EA	0	0	0	
	Section 4(f) Evaluation *	EA	0	0	0	
	5.2 Cultural Resources Total				212	
5.3	Natural Resources					
5.4	Physical Effects					
5.5	Cumulative Effects Evaluation *	EA	0	0	0	
5.6	Project Commitments Record *	LS	1	0	0	
	Environmental Analysis and Report Subtotal				212	
	Hours Subject to QC				212	

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

Task No.	Task	Units	# of Units	Hours / Unit	Hours	Comments
	Quality Assurance / Quality Control	LS	%	5%	11	
ENVIRONMENTAL ANALYSIS AND REPORT TOTAL HOURS					223	

Exhibit “A”
SCOPE OF SERVICES

Ellis Road Widening – Supplemental Agreement #5

Brevard County Public Works Department
Project Name: Ellis Road Design
FPID# 426905-2-38-01
FAN# ST10-382-R

I. DESCRIPTION

This Exhibit forms an integral part of the agreement between Brevard County (hereinafter referred to as the COUNTY) and Hanson Professional Services Inc. (hereinafter referred to as the CONSULTANT) relative to the contract for the above-referenced project.

II. BACKGROUND

The Ellis Road Widening project scope includes widening of Ellis Road to a four lane urban section from John Rodes Boulevard to just west of Wickham Road, a distance of approximately 1.7 miles. Initial project efforts were focused on a detailed drainage study of the L-15 Canal and acceptance of an alternative to minimize ROW impacts due to the canal. The original scope document assumed a final design configuration featuring the PDE preferred typical roadway section with dual 48-inch culverts to enclose and convey the flow of the L-15 Canal.

Additional scope needs have become identified during coordination efforts related to development of the project design. Additional scope needs are primarily related to requirements associated with the PD&E Re-evaluation. An update to the Contamination Screening Evaluation Report was performed. The update recommended that a Level 2 Contamination Investigation be performed at one location along the project. Additionally, through the development of control maps and ROW maps it has been determined that 10 additional title searches are needed for the mapping activities.

III. OBJECTIVES

The additional project scope items to be added to the design services for this contract are summarized below:

- 1. Management and Coordination** – Additional meetings and coordination associated with the additional scope needs mentioned below.
- 2. Level 2 Contamination Investigation** – As recommended in CSER Update performed for the project. Also referred to as Preliminary Contamination Assessment (PCA).
- 3. 10 Additional Title Searches** – Needed to complete ROW mapping for the project.

IV. DELIVERABLES TO INCLUDE:

- Preliminary Contamination Assessment report document.
- Title search for 10 additional properties.

V. COMPENSATION

Compensation rates will be in accordance with the Master Agreement. The total LUMP SUM fee is **Forty Four Thousand Nine Hundred Nineteen and 27/100 cents (\$44,919.27).**

Staff-hour estimation forms and sub-consultant scope documentation are attached as back-up documentation for these fee amounts. Professional services will be invoiced on a percentage basis.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Ellis Road Widening - From John Rhodes Blvd. to West of Wickham Road
 County: Broward
 FPN: 426005-2-38-01
 EAP No.: ST10-382-R

Consultant Name: Hansen Professional Services Inc.
 Consultant No.: 1310191
 Date: 10/15/2019
 Estimator: Clint Smith

Staff Classification	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Intern	Senior Asst.	Secretary/Clrical	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	16	0	0	0	0	0	0	0	0	0	0	0	16	\$1,154	\$72.12
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	22	\$559	\$25.39
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg. Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	16	0	0	0	0	0	0	0	22	0	0	0	38	\$1,712.50	\$45.07

Check = \$1,712.50

Notes:

- This sheet to be used by Prime Consultant to calculate the Grand Total fee.
- Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Subconsultant Fee Summary:

Subconsultant	Survey Field Days by Subconsultant	4 - Person Crew	167.17%	32%	0.41%	9.37%	4-man crew days @ \$ / day	SubTOTAL ESTIMATED FEE:
Subconsultant: NADIC								\$44,918.27
Subconsultant: McGin & Creed								\$0.00
Subconsultant:								\$30,045.50
Subconsultant:								\$0.00
Subconsultant:								\$0.00
Subconsultant:								\$0.00
Subconsultant:								\$0.00
Subconsultant:								\$0.00
SUBTOTAL ESTIMATED FEE:								\$44,918.27
SUBTOTAL ESTIMATED FEE:								\$44,918.27

Optional Services:

Project Activity 3: General Tasks

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	0	0	0	
3.1.2	Notifications	LS	0	0	0	
3.1.3	Prepare Mailing Lists	LS	0	0	0	
3.1.4	Median Modification Letters	LS	0	0	0	
3.1.5	Driveway Modification Letters	LS	0	0	0	
3.1.6	Newsletters	LS	0	0	0	
3.1.7	Renderings and Fly Throughs	LS	0	0	0	
3.1.8	PowerPoint Presentation	LS	0	0	0	
3.1.9	Public Meeting Preparations	LS	0	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	0	0	0	
3.1.11	Other Agency Meetings	LS	0	0	0	
3.1.12	Web Site	LS	0	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1 Public Involvement Subtotal						
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	0	0	0	
3.4	Contract Maintenance and EDMS	LS	0	0	0	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	0	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	16	16	
3.7	Plans Update	LS	0	0	0	
3.8	Post Design Services	LS	0	0	0	
3.9	Electronic/Digital Delivery	LS	0	0	0	
3.10	Risk Assessment Workshop	LS	0	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	0	0	0	
3.12	Other Project General Tasks	LS	0	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3. Project Common and Project General Tasks Total						
					16	

3.6 - List of Project Manager Meetings

Roadway Analysis	EA	0	0	0	0	
Drainage	EA	1	4	4	4	
Utilities	EA	0	0	0	0	
Environmental	EA	1	4	4	4	
Structures	EA	0	0	0	0	
Signing & Pavement Marking	EA	0	0	0	0	
Signalization	EA	0	0	0	0	
Lighting	EA	0	0	0	0	
Landscape Architecture	EA	0	0	0	0	
Survey	EA	1	4	4	4	
Photogrammetry	EA	0	0	0	0	
ROW & Mapping	EA	0	0	0	0	
Terrestrial Mobile LIDAR	EA	0	0	0	0	
Architecture	EA	0	0	0	0	
Noise Barriers	EA	0	0	0	0	
ITS Analysis	EA	0	0	0	0	
Geotechnical	EA	1	4	4	4	
Progress Meetings	EA	0	4	4	0	
Phase Reviews	EA	0	0	0	0	
Field Reviews	EA	0	0	0	0	
Total Project Manager Meetings		4			16	

Carries to 3.6

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to column D except for Photogrammetry.

September 25, 2019

Hanson Professional Services, Inc.
8075 Gate Parkway West
Jacksonville, FL. 32216

Attention: Mr. Clinton Smith, P.E., CFM

Re: Proposal for Preliminary Contamination Assessment (PCA)
Ellis Road Widening from John Rodes Blvd. to West of Wickham Road
Brevard County, Florida
Nadic Project No.: R14011

Dear Mr. Smith:

In accordance to your request, **Nadic Engineering Services, Inc. (NADIC)** is pleased to submit this proposal to perform a Preliminary Contamination Assessment (PCA) of a facility located along the referenced roadway alignment. The Contamination Screening Evaluation (CSE) investigation completed for the referenced project alignment revealed a recognized environmental conditions (RECs) associated with Sunrise Food Mart#43, a facility along Ellis Road. The Contamination Screening Evaluation Report (CSER) recommended that a Preliminary Contamination Assessment of the site be conducted prior to the roadway construction.

Based on the CSER, Sunrise Food Mart # 43 (Facility #8521094) is located at 450 South Wickham Road, approximately 50 feet South of Ellis Road. The facility is reported to have four USTs (Underground Storage Tank); two 10,000 gallons unleaded, one 10,000-gallon leaded and one 10,000-gallon diesel. A discharge report form (DRF) was submitted on October 21, 1985, based on free product observed in all four compliance wells. The DRF estimated 8,700 gallons were discharged, however, cleanup efforts are reported to be currently in progress.

Scope of Services

The PCA will be conducted based on the above recommended REC and will be conducted to determine if there are significant amounts of contaminants that will require monitoring, remediation, or create land use limitations for the proposed roadway construction. **NADIC** will evaluate the risk of encountering petroleum or hazardous substance contamination of soil and groundwater that could adversely affect permitting and construction near the subject site. **NADIC** proposes to perform the PCA in general accordance with ASTM E1903-11 Standard Guide for Environmental Site Assessment. Soil and groundwater will be tested for presence of the following: RCRA Metals, Volatile Organic Compounds (VOC), Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), Total Recoverable Petroleum Hydrocarbons (TRPH) and ethylene glycol

NES

Offices:

601 N. Hart Blvd.
Orlando, FL. 32818

Phone:

(407) 521 4771

Fax:

(407) 521 4772

Nadic@Nadicinc.com

15291 NW 60th Avenue
Miami Lakes, FL. 33014
(305) 548 8451

Identification of potential problem areas early in the project development process will allow time to make informed decisions regarding avoidance or management of impacts.

This study will include the following:

- Characterize existing soil and groundwater quality
- Determine the potential presence of contamination within the roadway limit near the subject facility
- Evaluate contamination impact, if any
- Provide site-specific recommendations based on the PCA results

The PCA investigation will be performed as follows:

- **Task 1 – Collection of surficial soil and water samples**
Soil and water samples will be collected where there is an oil stain on the soil or a sheen on a puddle of water. This will provide an initial indication of presence or absence of contamination which will be followed with laboratory testing to determine if the soil or water quality complies with Florida and/or Federal standards.
- **Task 2 – Subsurface Soil Assessment**
To evaluate the potential concerns identified above, including CSER recommendation on the need for additional investigation, NADIC plans to perform three (3) soil borings by using a hand auger or GeoProbe direct-push drill rig to the groundwater table or a maximum depth of 10 feet below existing ground. Soil samples will be collected at a 2-foot interval to a maximum depth of 10 feet. The Volatile Organic Compounds (VOCs) samples will be obtained at each depth interval with an Inert mini-core sampler from hand auger or the split spoon samples. The VOCs samples will be placed in the appropriate laboratory containers for preservation.

A total of 9 soil samples will be laboratory analyzed based on VOC results from borings. Soil samples will be analyzed for VOC's, TRPHs, Metals, PCBs, PAHs, Chlorinated Pesticides and Herbicides through the following test methods: FL-PRO, EPA 6010, EPA 7471, EPA 8270, EPA 8260 and ASTM D2974-87 depending on where the soils were obtained.

- **Task 3 – Groundwater Assessment**
NADIC will install one (1) temporary monitoring wells within the roadway right-of-way near the subject facility. The well in add to any existing well at the facility will be used to evaluate the groundwater quality at the site. The new well will be installed using a GeoProbe drill rig and will be constructed of 2-inch diameter schedule 40 PVC to 15 feet below existing grade. A 10-foot, 0.010-inch slotted 2-inch diameter PVC well factory screen coupled with a solid PVC monitoring cap bottom will be attached to a five (5) foot solid PVC riser to assemble each well.

NADIC representative will collect the groundwater samples using quiescent sampling techniques in accordance with FDEP's Standard Operating Procedure (SOP) 001/01, and

approved variances. The well will be purged a minimum of five well volumes or until three consecutive readings of pH, temperature, conductivity, dissolved oxygen, and turbidity were within DEP-SOP specifications, indicating stabilization. The well will be purged using a low flow, variable speed, battery-powered peristaltic pump and new polyethylene and silicone tubing. The inlet of the tubing will be positioned within the top 2 feet of the water column for each shallow well. The wells will be sampled for the same parameters as the soil. Both filtered and unfiltered samples will be collected for metals analysis.

- **Task 5 – Report Preparation**

Based on the results of the field investigation, the results of analytical tests on recovered soils and groundwater samples a PCA Report will be prepared including tables and exhibits. Recommendations will be made based on the result of our evaluation.

Project Schedule

NADIC's standard turnaround time is approximately four (4) weeks after authorization to proceed has been received. An expedited turnaround time may be facilitated if required. Completion of the project may be affected by access to the properties, the availability of information, and other factors.

Fee Schedule:

In accordance with the proposed scope of services and unit prices, we estimate the total cost of our geotechnical services is a Not-to-Exceed fee of **\$30,045.50**.

NADIC appreciates the opportunity to work with you, Hanson Professional Services, Inc. and Brevard County on this project and look forward to a continued association. Please contact us if you have any questions or concern about the report, or if we may be of further assistance.

Sincerely,

NADIC ENGINEERING SERVICES, INC.



Godwin N. Nnadi, Ph.D., P.E.
Principal Engineer

Attachment:

Field and Lab Spreadsheet – Geotechnical Computation for Geo-Environmental
FDOT Staffhour Estimate Spreadsheet – Geo-Environmental

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: ELLIS ROAD WIDENING - PCA
 County: Brevard County
 FPN: 426905-2-3801
 FAP No.: ST10-382-R

Consultant Name: Hanson/Nadic
 Consultant No.: R14011
 Date: 9/25/2019
 Estimator: Goodwin Nhadi

Staff Classification	Total Staff Hours From Summary Form	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Staff Engineer	Cadd/Computer Tech	Sr. Engineer Tech.	Secretary	Staff Classification	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	\$24.42	\$22.91	\$16.72	0	0	0	0	0	\$0	#DW/01
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
9. Structures - Misc. Tasks, Dwg's, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DW/01
35. Geotechnical	97	4	0	8	23	32	9	19	3	0	0	0	0	98	\$3,428	\$34.98
Total Staff Hours	97	4	0	8	23	32	9	19	3	0	0	0	0	98	\$3,428.86	\$34.98
Total Staff Cost		\$26.84	\$0.00	\$473.68	\$1,095.83	\$926.08	\$219.78	\$435.29	\$50.16	\$0.00	\$0.00	\$0.00	\$0.00		\$3,427.86	\$34.98

Check = \$3,427.86

SALARY RELATED COSTS:
 OVERHEAD: 233%
 OPERATING MARGIN: 16%
 FCOM (Facilities Capital Cost Money): 1.13%
 EXPENSES: 34.74%
SUBTOTAL ESTIMATED FEE: \$13,192.90
 Survey (Field) 0
 Geo-Environmental (PCA) Field and Lab Testing 4-man crew d \$ / day
SUBTOTAL ESTIMATED FEE: \$30,045.50
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$30,045.50

SALARY RELATED COSTS:

OVERHEAD: 233%
 OPERATING MARGIN: 16%
 FCOM (Facilities Capital Cost Money): 1.13%
 EXPENSES: 34.74%
SUBTOTAL ESTIMATED FEE: \$13,192.90
 Survey (Field) 0
 Geo-Environmental (PCA) Field and Lab Testing 4-man crew d \$ / day
SUBTOTAL ESTIMATED FEE: \$30,045.50
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$30,045.50

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

Component/Unit Description	UNIT	SITE (1)	QTY	RATE	SITE (1)	TOTAL COST
I. FIELD EXPLORATION:						
1. Crew & Equipment Mobilization:						
a. Truck-Mounted Equipment Geoprobe Rig	Ea.	1	1	\$550.00	\$550.00	\$550.00
b. - Mudbug	Ea.		0	\$600.00		\$0.00
c. MOT/Field Support Vehicle	Hr	10	10	\$48.00	\$480.00	\$480.00
2. Soil and Water Sampling:						
Direct Push Soil Sampling (3 locations)		3	3			
a. - 0 to 50 ft. depths	Hr	10	10	\$385.60	\$3,856.00	\$3,856.00
3. Site Reconnaissance/Utility Corodination:						
a. - Project Engineer	Hr		0			\$0.00
b. -Engineering Intern	Hr		0			\$0.00
4. PCA Water Sampling:	Ea.	1	1	\$87.00	\$87.00	\$87.00
5. OVA Headspace Analysis, Senior Engineering Technician:	Hr		0			\$0.00
6. OVA Headspace Analysis:	Days	1	1	\$208.00	\$208.00	\$208.00
7. Monitor Wells - 2 inch (50mm):						
a. - 0 to 50 ft. depths	LF	15	15	\$35.09	\$526.35	\$526.35
8. MOT - Signs & Barricades:	Days	1	1	\$150.00	\$150.00	\$150.00
9. MOT- Flashing Arrow Board/Advance Warning Vehicle:	Days	1	1	\$120.00	\$120.00	\$120.00
10. MOT- Law Officer/Trooper:	Hr	8	8	\$55.00	\$440.00	\$440.00
11. GPS Rental	Days	1	1	\$80.00	\$80.00	\$80.00
12. Equipment Decontamination	Ea.	4	4	\$225.00	\$900.00	\$900.00
Totals for Field Exploration					\$7,397.35	\$7,397.35
II. LABORATORY TESTING:						
1. EPA 8260 Soil	Ea.	9	9	\$242.75	\$2,184.75	\$2,184.75
2. EPA 8270 (PAH) Soil	Ea.	9	9	\$226.00	\$2,034.00	\$2,034.00
3. RCRA metal (As, Ba, Cd, Cr, Pb, Hg, Se, and Ag) - Total (Soil) Ea.		9	9	\$200.00	\$1,800.00	\$1,800.00
4. FL-PRO (TRPH) -Soil	Ea.	9	9	\$182.50	\$1,642.50	\$1,642.50
5. EPA 8260 Water	Ea.	2	2	\$240.00	\$480.00	\$480.00
6. EPA 8270 (PAH) Water	Ea.	2	2	\$226.00	\$452.00	\$452.00
7. RCRA metal (As, Ba, Cd, Cr, Pb, Hg, Se, and Ag) - Total (Diss) Ea.		2	2	\$200.00	\$400.00	\$400.00

Component/Unit Description	UNIT	SITE (1)	QTY	RATE	SITE (1)	TOTAL COST
8. Lead - Dissolved	Ea.	2	2	\$48.50	\$97.00	\$97.00
9. FL-PRO (TPH) -Water	Ea.	2	2	\$182.50	\$365.00	\$365.00
Totals for Laboratory Testing					\$9,455.25	\$9,455.25
III. ENGINEERING AND TECHNICAL SERVICES:						
1. Project Manager:	Hr		0			\$0.00
2. Senior Engineer:	Hr		0			\$0.00
3. Project Engineer:	Hr		0			\$0.00
4. Engineer:	Hr		0			\$0.00
5. Engineer Intern	Hr		0			\$0.00
6. Cadd Technician:	Hr		0			\$0.00
7. Senior Engineering Technician:	Hr		0			\$0.00
8. Secretarial/Clerical:	Hr		0			\$0.00
Totals for Engineering and Technical Services			0		\$0.00	\$0.00
Totals for all Services					\$16,852.60	\$16,852.60

Project Activity 35: Geotechnical

Estimator: Godwin Nhadi - Nadic

ELLIS ROAD WIDENING - PCA
426905-2-3801

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway						
35.1	Document Collection and Review	LS	1	0	0	Review available printed literature and reports (FDOT Hrs/unit range = 4 to 40)
35.2	Develop Detailed Boring Location Plan	LS	1	0	0	(FDOT= 2 to 32)
35.3	Stake Borings/Utility Clearance	Boring	0	0	0	(FDOT =0.2 to 0.5)
35.4	Coordinate and Develop MOT Plans for Field Investigation	EA	1	0	0	
35.5	Drilling Access Permits	Location	1	0	0	FDOT Range 3 to 16
35.6	Property Clearances	EA	0	0	0	
35.7	Groundwater Monitoring	EA	0	0	0	FDOT Range 3 to 8
35.8	LBR/Resilient Modulus Sampling	EA	0	0	0	Collect MR samples and ship to SMO (FDOT LBR Sampling only 0.33 to 0.67)
35.9	Coordination of Field Work	100 lf of boring	0	0	0	
35.10	Soil and Rock Classification - Roadway	100 lf of boring	0	0	0	
35.11	Design LBR	LS	0	0	0	MR from SMO; if LBR (FDOT range 4 to16)
35.12	Laboratory Data	100 lf of boring	1	0	0	FDOT Range 0.5 to 1
35.13	Seasonal High Water Table	Boring	0	0	0	FDOT Range 0.1 to 1
35.14	Parameters for Water Retention Areas	EA	0	0	0	FDOT Range 1 to 4
35.15	Delineate Limits of Unsuitable Material	Cross-section	0	0	0	FDOT Range 0.25 to 1
35.16	Electronic Files for Cross-Sections	100 lf of boring	0	0	0	FDOT Range 1 to 2
35.17	Embankment Settlement and Stability	Embankment Boring	0	0	0	FDOT Range 1 to 4
35.18	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	FDOT Hrs/unit range = 2 to 6
35.19	Geotechnical Recommendations	LS	1	0	0	FDOT Hrs/unit range = 4 to 40
35.20	Pavement Condition Survey and Pavement Evaluation Report	LS	1	0	0	
35.21	Preliminary Roadway Report	LS	1	0	0	FDOT Hrs/unit range = 7 to 20
35.22	Final Report	EA	1	0	0	
35.23	Auger Boring Drafting	100 lf boring	0	0	0	FDOT Hrs/unit range = 2 to 6

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.24	SPT Boring Drafting	100 lf boring	0	0	0	FDOT Hrs/unit range = 3 to 8
Roadway Geotechnical Subtotal						0
Structures						
35.25	Develop Detailed Boring Location Plan	LS	1	0	0	Signals: 5 SPT @ 40' = 200LF. (FDOT Hrs/unit range = 2 to 32)
35.26	Stake Borings/Utility Clearance	Boring	0	0	0	Signals: 5SPT @ 40' = 200LF. (FDOT Hrs/unit range = 0.2 to 0.5)
35.27	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	FDOT Hrs/unit range = 2 to 8
35.28	Drilling Access Permits	Location	0	0	0	
35.29	Property Clearances	EA	0	0	0	
35.30	Collection of Corrosion Samples	EA	0	0	0	FDOT Hrs/unit range = 0.25 to 1
35.31	Coordination of Field Work	100 lf of boring	0	0	0	FDOT Hrs/unit range = 0.75 to 1.5
35.32	Soil and Rock Classification - Structures	100 lf of boring	0	0	0	
35.33	Tabulation of Laboratory Data	100 lf of boring	0	0	0	
35.34	Estimate Design Groundwater Level for Structures	EA	0	0	0	5 signal structures (FDOT Hrs/unit range = 0.25 to 2)
35.35	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	FDOT Hrs/unit range = 4 to 5
35.36	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	FDOT Hrs/unit range = 6 to 12
35.37	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	
35.38	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	
35.39	Walls	Wall Boring	0	0	0	FDOT Hrs/unit range = 1.5 to 4
35.40	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	
35.41	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	0	0	0	Signals: 12 SPT @ 40' = 480LF. (FDOT Hrs/unit range = .25 to 1.5)
35.42	Box Culvert Analysis	EA	0	0	0	FDOT Hrs/unit range = 4 to 8
35.43	Preliminary Report - BDR	EA	0	0	0	
35.44	Final Report - Bridge and Associated Walls	EA	0	0	0	
35.45	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	0	0	0	

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.46	SPT Boring Drafting	100 if of boring	0	0	0	FDOT Hrs/unit range = 3 to 10
35.47	Other Geotechnical: Preliminary Contamination Assessment	LS	1	85	85	Task includes both field and office work. Activities include calls to utility companies, travel time to and from site, soil sampling and groundwater samples for analyses, determination of boring locations, staking of borings, Organic Vapor Analyzer (OVA) screening, report writing, review report, word processing, report documentation and report revision. One PCA will require at least 90 hours.
Structural Geotechnical Subtotal					85	
Geotechnical Technical Subtotal					85	
35.48	Technical Special Provisions	EA	0	0	0	
35.49	Field Reviews	LS	0	0	0	
35.50	Technical Meetings	LS	1	3	3	Meetings listed below
35.51	Quality Assurance/Quality Control	LS	%	3%	3	
35.52	Supervision	LS	%	3%	3	
Geotechnical Nontechnical Subtotal					9	
35.53	Coordination	LS	%	3%	3	
35.54		LS	1	0	0	
35. Geotechnical Total					97	

Technical Meetings

Kickoff Meeting with FDOT	EA	1	0	0
Boring Layout Approval	EA	1	1	1
Attend in BDR Review Meeting	EA	0	0	0
30/60/90% Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				1
Progress Meetings	EA	1	2	2
Phase Review Meetings	EA	3	0	0
Total Meetings				3
Carries to 35.50				

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Ellis Road Widening
 County: Brevard
 FPN: 426905-2-38-01
 FAP No.: ST10-382-R
 Consultant Name: McKim & Creed
 Consultant No.:
 Date: 10/15/2019
 Estimator: C. Mayhew

Staff Classification	Total Staff Hours From Summary Form	SR PLS	PLS	TECH	CLERICAL	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dugs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	#DIV/0!

Check = \$0.00

SALARY RELATED COSTS:
 OVERHEAD: 0%
 OPERATING MARGIN: 0%
 FCCM (Facilities Capital Cost Money): 0.00%
 EXPENSES: 0.00%
SUBTOTAL ESTIMATED FEE: 0
 Survey (Field) 3-person crew \$ 1,665.30 / day
 TITLE SEARCHES (AGS) \$8,250.00
SUBTOTAL ESTIMATED FEE: \$8,250.00
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$8,250.00

Notes:
 1. This sheet to be used by Subconsultant to calculate its fee.



AMERICAN GOVERNMENT SERVICES CORPORATION

Tuesday, October 15, 2019

Reports and Invoice

To: Corey Malone
McKim & Creed
505 E. New York Avenue, Ste. 3
Deland, FL 32724
Office: 386-873-4517
Cell: 386-837-0171
Email: CMaylone@mckimcreed.com

RE: FP 426905-2
Supplemental Parcels on Ellis Road from John Rhodes Blvd to Wickman Rd
Brevard County LAP Project

Dear Mr. Malone:

Please accept this letter as confirmation that we can provide approximately 70 Title Search Reports for the above referenced project. Reports to be completed within a pre-determined schedule upon notice to proceed, price structure good through the end of **2024** on the requested project. In accordance with your request, I am pleased to submit the following price proposal:

Title Searches to be provided in the form specified at a rate of:

- 50 year + TIITF to District 5 Standards – for Residential, Commercial & Vacant \$ 675.00 per parcel
- Updates if requested (within 5 years of effective date) \$ 75.00 per report
- All reports will include copies of all supporting instruments.
- Deliverables include 1 hard copies and 1 CD

Estimate of 10 ADDITIONAL parcels @ \$675.00 ea. (\$6,750.) and 2 updates ea. (\$1,500.). Estimated additional total not to exceed \$8,250.00.

Our services are provided on a per parcel basis, therefore do not require a quote on an hourly or any other rate basis. DOT Title Research Reports are per report and are charged at per parcel rate. These charges are customary and ordinary.

This is to certify that the billing rates contained herein are our normal rates for such services and that the method used to arrive at the rates are the same as for both public and private sector clients. If inflationary increases are requested, this further certifies that proposed increases are consistent with billing rate increases over the past year.

I appreciate the opportunity to work with you on this exciting project. If you have any further questions or need additional information, please don't hesitate to contact me at (813) 933-3355, ext 236.

Sincerely,
Tammy Mehl
Tammy Mehl
Senior Vice President

3812 West Linebaugh Avenue
Tampa, Florida 33624
Phone: (813) 933-3355 ext 236 Fax: (813) 594-0471 tmehl@agsres.com

SCOPE OF SERVICES

Ellis Road Widening – Supplemental Agreement #7
Brevard County Public Works Department
Project Name: Ellis Road Design
FPID# 426905-2-38-01
FAN# ST10-382-R

I. DESCRIPTION

This Exhibit forms an integral part of the agreement between Brevard County (hereinafter referred to as the COUNTY) and Hanson Professional Services Inc. (hereinafter referred to as the CONSULTANT) relative to the contract for the above-referenced project. Additional scope needs have become identified during development of the project design.

II. SERVICES TO BE PROVIDED

Additional services are summarized below:

By Hanson Professional Services

1. **Contract Maintenance** – Additional effort due to duration of project.
2. **Management and Coordination** – Additional meetings and coordination regarding FDOT comments, ROW coordination, Utility coordination.
3. **Design Analysis** – Additional modifications and revisions per coordination with FDOT, County, Utility agencies, and Stakeholders. Includes access management changes at Universal Contracting Construction driveway connection.
4. **Utility Design and Plans** – Utility relocation plans will be performed for the City of West Melbourne as part of a Interlocal Agreement (ILA) with Brevard County. See attached detailed design scope and staff hour summary.

By Consor Engineers

1. **Structural Design** – Structural design services to support the project are outside of the original structural design scope as summarized in the attached summary provided by Consor Engineers.

By McKim & Creed

1. **Subsurface Utility Exploration** – Supplement includes effort for 15 additional VVH's of existing utilities within project limits to support utility coordination efforts. Additional ROW Map revisions and Legal Description revisions/additions per 2/4/21 ROW coordination meeting.

By Nadic Inc.

1. **Geotechnical Exploration and Evaluation** – One additional boring required for structural analysis of proposed ITS pole at John Rodes Boulevard.

III. COMPENSATION

Compensation rates will be in accordance with the Master Agreement. The total LUMP SUM fee is **\$229,310.06**). Staff-hour estimation forms and sub-consultant scope documentation are attached as back-up documentation for these fee amounts. Professional services will be invoiced on a percentage basis.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Ellis Road Widening - From John Rodas Blvd. to West of Wickham Road
 County: Brevard
 FPN: 426905-2-38-01
 FAP No.: ST110-392-R

Consultant Name: Hanson Professional Services Inc.
 Consultant No.: 1310191
 Date: 4/13/2021
 Estimator: Clint Smith

Staff Classification	Total Staff Hours From SH	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Intern	Senior Asst.	Secretary/Clrical	Staff Classification 12	By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	240	12	12	14	24	58	38	36	10	12	14	10	0	240	\$13,133	\$54.72
4. Roadway Analysis	159	8	6	10	8	0	40	40	0	31	0	0	0	159	\$7,980	\$50.19
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	50	13	7	3	3	0	6	3	5	8	0	0	0	50	\$3,162	\$63.24
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Digs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	449	33	25	27	35	58	86	78	31	51	14	10	0	449	\$24,274.59	\$54.06
Total Staff Cost		\$2,692.90	\$2,375.00	\$2,060.91	\$2,272.90	\$3,369.22	\$4,462.54	\$3,377.25	\$1,290.84	\$1,688.57	\$429.65	\$266.80	\$0.00		\$24,274.59	

Check = \$24,274.59

SALARY RELATED COSTS:
 OVERHEAD: 156.24%
 OPERATING MARGIN: 32%
 FCM (Facilities Capital Cost Money): 0.433%
 EXPENSES: 8.96%
 Survey (Field - if by Prime) 0 \$ / day
 4-man crew days @

Survey Field Days by Subconsultant
 4 - Person Crew

Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SUBTOTAL ESTIMATED FEE:
 Subconsultant: Hanson Utility Design JPA \$72,248.19
 Subconsultant: McKim & Creed \$79,233.70
 Subconsultant: Constar \$14,577.06
 Subconsultant: Nadic \$57,592.83
 Subconsultant: \$5,364.28
 Subconsultant: \$0.00
 Subconsultant: \$0.00
SUBTOTAL ESTIMATED FEE: \$229,310.06
 Geotechnical Field and Lab Testing \$0.00
SUBTOTAL ESTIMATED FEE: \$229,310.06
 Optional Services:
GRAND TOTAL ESTIMATED FEE: \$229,310.06

Project Activity 3: General Tasks

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Prepare Mailing Lists	LS	1	0	0	
3.1.4	Median Modification Letters	LS	1	0	0	
3.1.5	Driveway Modification Letters	LS	1	0	0	
3.1.6	Newsletters	LS	1	0	0	
3.1.7	Renderings and Fly Throughs	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Public Meeting Preparations	LS	1	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	3.1 Public Involvement Subtotal				0	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	1	0	0	
3.4	Contract Maintenance and EDMS	LS	1	192	192	4 hrs/mo. X 48 months. Original staff hours included 36 months. Time between contract execution date (11/21/14) and 12/2021 is 84 months.
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	48	48	See list of meetings below
3.7	Plans Update	LS	1	0	0	
3.8	Post Design Services	LS	1	0	0	
3.9	Electronic/Digital Delivery	LS	1	0	0	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.12	Other Project General Tasks	LS	1	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3. Project Common and Project General Tasks Total						
					240	

3.6 - List of Project Manager Meetings

Roadway Analysis	EA	8	1	8	Additional coordination
Drainage	EA	8	1	8	Additional coordination
Utilities	EA	8	1	8	Additional coordination
Environmental	EA	0	0	0	
Structures	EA	16	1	16	Additional coordination. Specifically related to sheet pile walls
Signing & Pavement Marking	EA	0	0	0	
Signalization	EA	0	0	0	
Lighting	EA	0	0	0	
Landscape Architecture	EA	0	0	0	
Survey	EA	0	0	0	
Photogrammetry	EA	0	0	0	
ROW & Mapping	EA	8	1	8	Additional coordination. Plans in hand field review TBD requested by FDOT
Terrestrial Mobile LIDAR	EA	0	0	0	
Architecture	EA	0	0	0	
Noise Barriers	EA	0	0	0	
ITS Analysis	EA	0	0	0	
Geotechnical	EA	0	0	0	
Progress Meetings	EA	0	0	0	
Phase Reviews	EA	0	0	0	
Field Reviews	EA	0	0	0	

Total Project Manager Meetings 48 48

Carries to 3.6

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to column D except for Photogrammetry.

Project Activity 4: Roadway Analysis

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	0	0	0	
4.2	Pavement Type Selection Report	LS	0	0	0	
4.3	Pavement Design Package	LS	0	0	0	
4.4	Cross-Slope Correction	LS	0	0	0	
4.5.1	Horizontal /Vertical Master Design Files	LS	1	140	140	Additional design/coordination per FDOT/County/Stakeholder comments. Includes access management change at Universal Contracting site.
4.5.2	Horizontal /Vertical Master Design Files (skeletal plans)	LS	0	0	0	
4.6	Access Management	LS	0	0	0	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.7	Cross Section Design Files	LS	0	0	0	
4.8	Traffic Control Analysis	LS	0	0	0	
4.9	Master TCP Design Files	LS	0	0	0	
4.10	Design Variations and Exceptions	LS	0	0	0	
4.11	Design Report	LS	0	0	0	
4.12	Quantities	LS	0	0	0	
4.13	Cost Estimate	LS	0	0	0	
4.14	Technical Special Provisions	LS	0	0	0	
4.15	Other Roadway Analysis	LS	0	0	0	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis Technical Subtotal						
4.16	Field Reviews	LS	0	0	0	
4.17	Technical Meetings	LS	1	0	0	Meetings are listed below
4.18	Quality Assurance/Quality Control	LS	%	5%	7	
4.19	Independent Peer Review	LS	%	0%	0	
4.20	Supervision	LS	%	5%	7	
Roadway Analysis Nontechnical Subtotal						
					14	
4.21	Coordination	LS	%	3%	5	
4. Roadway Analysis Total						
					159	

Technical Meetings

Typical Section	EA	0	0	0
Pavement	EA	0	0	0
Access Management	EA	0	0	0
15% Line and Grade	EA	0	0	0
Driveways	EA	0	0	0
Local Governments (cities, counties, MPQ)	EA	0	8	0
Work Zone Traffic Control	EA	0	0	0
30/60/90/100% Comment Review Meeting:	EA	0	8	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings (if required by FDOT)	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				0
Carries to 4.17				

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 7: Utilities

Estimator:

Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road
426905-2-38-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	
7.2	Identify Existing UAO(s)	LS	1	0	0	
7.3	Make Utility Contacts	LS	1	0	0	
7.4	Exception Processing	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	
7.6	Individual/Field Meetings	LS	1	0	0	
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	0	0	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	0	0	
7.11	Utility Coordination/Followup	LS	1	50	50	Additional review/coordination/meetings. High number of potential conflicts on widening project. High degree of coordination between design disciplines and working with Utility coordination subconsultant.
7.12	Utility Constructability Review	LS	1	0	0	

Project Activity 7: Utilities

7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	1	0	0	
7.16	Certification/Close-Out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
7. Utilities Total					50	

Technical Meetings

Kickoff	EA	0
Preliminary Meeting	EA	0
Individual UAO Meetings	EA	0
Field Meetings	EA	0
Design Meeting	EA	0
Other Meetings	EA	0

Total Technical Meetings

0

SCOPE OF SERVICES – Joint Project Agreement

City of West Melbourne Utility Improvements

For

Ellis Road Widening

FPID# 426905-2-38-01

FAN# ST10-382-R

I. BACKGROUND

The Hanson Professional Services Inc., hereinafter referred to as the CONSULTANT, was retained by the County for the design and preparation of utility relocation plans associated with the Ellis Road widening project.

This Joint Project Agreement provides for the CONSULTANT to perform OPTIONAL SERVICES which include utility adjustments and relocations. The services performed under this Supplemental Amendment are for utility adjustments and relocations associated with the Ellis Road widening project.

II. PROJECT DESCRIPTION

The utility improvements to be designed are summarized below:

A. Relocate Sanitary Lift Station

- Currently, there is a Lift Station located at 9001 Ellis Road within the existing southern right-of-way. The roadway improvements will impact the lift station. A new lift station will be constructed nearby, outside of the new southern right-of-way. The new lift station will be designed to adhere with the latest utility standards provided by the City. The new lift station will be designed with SCADA, since it appears that the existing lift station has SCADA.

B. Gravity Sanitary Sewer

- Existing sanitary sewer (gravity) will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

C. Sanitary Sewer Forcemain

- Existing sanitary sewer forcemain will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

D. Water Main Adjustments

- Existing water mains will be adjusted, where conflicts have been identified in the Utility Conflict Matrix. These conflicts are of various sizes and locations throughout the project limits.

III. OBJECTIVES

Since the objective is to design this project in a relatively short time span, the submittals and reviews will be limited to 90%, 100% and Final.

IV. DESIGN SERVICES

The CONSULTANT shall perform the following tasks:

A. Project Management and Meeting Attendance

Coordinate the project with County and City of West Melbourne staff and attend up to 3 project management related meetings during the design phase of the project.

B. Water and Sewer Plans Preparation

Prepare and submit a 90%, 100% and a Final submittal, that adhere to City of West Melbourne standards for the design of water and sewer utilities. Plans will be 11 x 17 in size and will be signed and sealed electronically per FDOT requirements. Plans will include Key Sheet, General Notes, Plan and Profile Views, Cross Sections, Traffic Control, City Water and Sewer Notes and Details along with other miscellaneous detail sheets. Up to 40 sheets are anticipated for this work.

C. Preparation of Technical Special Provisions

Prepare and submit draft and final 100% Technical Special Provisions (TSP's).

D. Preparation of Schedule of Values

Prepare and submit draft and final 100% schedule of values including item descriptions and quantity take-off. A template in Microsoft Excel format as approved by City of West Melbourne will be used in the development of the Schedule of Values. FDOT pay items will not be used in this effort.

E. Permitting

It is understood that due to the lift station reconfiguration, permitting will be required with the Florida Department of Environmental Protection. City of West

Melbourne will provide fees and input to the CONSULTANT for completing the application form. City of West Melbourne will be listed as the Permittee, Owner and Wastewater Facility Operator on the application, while the CONSULTANT will be listed as the Engineer. The construction documents will request that the Construction Contractor secure all permits related to the dewatering operation from Federal, State and Local agencies.

F. Opinion of Probable Costs

The CONSULTANT shall prepare an opinion of probable costs at the plan submittal milestones.

V. EXCLUSIONS

The following services are excluded from this supplemental scope of work:

1. Geotechnical Engineering Services.
2. Detailed Horizontal Directional Drilling Design. Where required, the horizontal directional drilling limits and depths will be defined and specified in the design documents; however, shop drawing submittals shall be used to approve the final details for construction.
3. Cathodic protection design.
4. Environmental permits or any additional permits other than specified herein.
5. Bid Administration Services.
6. Construction Administration Services.
7. Construction Inspection Services.

VI. City RESPONSIBILITIES

City of West Melbourne will provide the following:

1. Review and comment on CONSULTANT submittals.
2. Information on existing City utilities in the area
3. Attend scheduled project meetings.
4. Assistance in Technical Special Provisions.
5. Assistance in Schedule of Values.
6. Provide Signature of Permit Applications.

VII. SCHEDULE

The CONSULTANT shall coordinate the utility design with the Roadway design schedule.

VIII. SUMMARY OF COMPENSATION

A summary of compensation is included in attached staff hours.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Ellis Road Widening - From John Rodas Blvd. to West of Wickham Road
 County: Brevard
 FPN: 426905-2-38-01
 FAP No.: ST10-382-R

Consultant Name: Hanson Professional Services Inc.
 Consultant No.: 13L0191
 Date: 4/13/2021
 Estimator: Clint Smith

Staff Classification	Total Staff Hours From Summary - SH	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Planner	Senior Designer	Engineer	Designer	Engineer Intern	Senior Asst.	Secretary/Clerical	Staff Classification 12		SH By Activity	Salary Cost By Activity	Average Rate Per Task
													01.00	02.00			
1. Preliminary Engineering	64	3	3	4	6	15	10	10	3	3	4	3	0	0	64	\$3,469	\$54.20
2. Construction Plans	394	20	16	24	20	0	99	89	39	77	0	0	0	0	394	\$19,618	\$50.30
3. Permitting	60	3	2	4	3	0	15	15	6	12	0	0	0	0	60	\$3,000	\$50.01
Total Staff Hours	518	26	21	32	29	15	124	124	48	92	4	3	0	0	518	\$26,285.29	\$50.74
Total Staff Cost		\$2,113.60	\$1,995.00	\$2,442.56	\$1,663.26	\$871.35	\$6,434.36	\$5,301.00	\$1,998.72	\$3,042.44	\$122.76	\$80.04	\$0.00	\$0.00		\$26,285.29	

Check = \$26,285.29

SALARY RELATED COSTS:
 OVERHEAD: 155.24%
 OPERATING MARGIN: 32%
 FCM (Facilities Capital Cost Money): 0.433%
 EXPENSES: 8.98%
 Survey (Paid - if by Prime) 0 4-man crew days @ \$ / day
 SUBTOTAL ESTIMATED FEE:
 Subconsultant:
 SUBTOTAL ESTIMATED FEE:
 Geotechnical Field and Lab Testing
 SUBTOTAL ESTIMATED FEE:
 Optional Services:
 GRAND TOTAL ESTIMATED FEE:

\$26,285.29
 \$41,085.14
 \$8,411.29
 \$113.82
 \$2,355.16
 \$0.00
 \$78,233.70
 \$0.00
 \$78,233.70
 \$78,233.70
 \$78,233.70

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME:
ESTIMATOR NAME:
DATE:

Hanson Professional Services Inc.
Daryl Myers
1/31/2021

PROJECT NAME: Ellis Road Widening - From John Rodes Blvd. to West of Wickham Road

TASK ITEM		SCALE 1"=	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
1	Preliminary Engineering							
	Field Review		LS	1		32	32	
	Data Collection		LS	1		32	32	
2	Construction Plans				SUBTOTAL		64	
	Task 2.1 - 60% Plans							
	Cover Sheet		LS	1	1	4	4	
	General Notes		LS	1	1	4	4	
	Existing Site Plans		LS	1	9	8	8	
	Relocation Plans		LS	1	9	28	28	
	Cross Sections		LS	1	9	36	36	
	Lift Station Section and Profile		LS	1	2	32	32	
	Standard Details		LS	1	1	8	8	
	Electrical Plans		LS	1	1	16	16	
	Electrical Details		LS	1	2	16	16	
	Controls/SCADA Plans		LS	1	2	16	16	
	Opinion of Probable Costs		LS	1		8	8	
	Task 2.2 - 90% Plans							
	Cover Sheet		LS	1	1	2	2	
General Notes		LS	1	1	2	2		
Existing Site Plans		LS	1	9	4	4		
Relocation Plans		LS	1	9	14	14		
Cross Sections		LS	1	9	16	16		
Lift Station Section and Profile		LS	1	2	16	16		
Standard Details		LS	1	1	4	4		
Electrical Plans		LS	1	1	8	8		
Electrical Details		LS	1	2	8	8		
Controls/SCADA Plans		LS	1	2	8	8		
Preliminary Specifications		LS	1		40	40		
Opinion of Probable Costs		LS	1		8	8		

DESIGN, PERMITTING, & CONSTRUCTION PLANS

CONSULTANT NAME:

Hanson Professional Services Inc.

ESTIMATOR NAME:

Daryl Myers

DATE: 1/31/2021

PROJECT NAME: Ellis Road Widening - From John Rodes

Blvd. to West of Wickham Road

	TASK ITEM	SCALE 1"=	UNIT	NO. OF UNITS	NO. OF SHEETS	HRS PER UNIT	TOTAL STAFF-HOURS	COMMENTS
	Task 2.3 - Final Plans							
	Final Plans		LS	1	37	24	24	
	Contract Documents		LS	1		16	16	
	Technical Specifications		LS	1	22	40	40	
	Opinion of Probable Costs		LS	1		8	8	
					SUBTOTAL		394	
3	Permitting							
	Task 3.1 - Pre-Application Meeting							
	Pre-Application Meeting & Minutes		LS	1		16	16	
	Task 3.2 - Permit Applications							
	FDEP Permit Application		LS	1		8	8	
	RAI Responses		LS	1		16	16	
	As-Built Drawings		LS	1		12	12	
	Certificate of Completion		LS	1		8	8	
					SUBTOTAL		60	
GRAND TOTALS							518	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Ellis Road Widening
 County: Brevard
 FPN:
 FAP No.:
 Consultant Name: McKim & Creed
 Consultant No.: enter consultants proj. number
 Date: 3/19/2021
 Estimator: insert name

Staff Classification	Total Staff Hours From Firm*	SR PLS	SR Utility Coordinator	Utility Coordinator	CLERICAL	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	\$178.26	\$161.89	\$94.71	\$68.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg's, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	17	3	8	7	1	0	0	0	0	0	0	0	0	17	\$2,238	\$131.62
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	44	4	0	40	0	0	0	0	0	0	0	0	0	44	\$4,502	\$102.31
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	61	7	6	47	1	0	0	0	0	0	0	0	0	61	\$4,739.06	\$110.48
Total Staff Cost		\$1,247.96	\$871.34	\$4,451.37	\$68.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$4,739.06	

Check = \$4,739.06

SALARY RELATED COSTS:

OVERHEAD: 0%

OPERATING MARGIN: 0%

FCCM (Facilities Capital Cost Money): 0.00%

EXPENSES: 0.00%

SUBTOTAL ESTIMATED FEE: \$6,739.06

Survey (Field) 4 3-person crew \$ 1,959.50 / day

Geotechnical Field and Lab Testing \$7,838.00

SUBTOTAL ESTIMATED FEE: \$14,577.06

Optional Services \$0.00

GRAND TOTAL ESTIMATED FEE: \$14,577.06

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

27. Survey

Estimator:

Enter project name & description
999999-1-52-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.3	Alignment and Existing RW Lines									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.6	Topography/DTM (3D)									
		acres			0.00		0.00		0.00	
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									
		Mile			0.00		0.00		0.00	
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	Designate - NONE.
	Locates	Point	15	0.2	3.00	1.00	3.00	3.00	9.00	Locate - Perform additional VVH as requested.
	Survey		30%	3.00	0.90	1.00	0.90	3.00	2.70	Budget 15 VVHs for potential conflicts.
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained RW									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	RW Staking / RW Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	RW Monumentation									
		Point			0.00		0.00		0.00	
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									
					0.00					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal										
				Crew Days	4	Field Support Hours	4	Office Support Hours	12	
27.29	Supplemental Surveys			4	0		0		0	
27.30	Document Research	Units								
									0	
27.31	Field Reviews	Units							0	

THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.32	Technical Meetings	LS								
			0.00						0	
27.33	Quality Assurance / Quality Control	LS								
								5%	1	
27.34	Supervision	LS								
								5%	1	
27.35	Coordination	LS								
								3%	0	
27. Survey Total										
				Crew Days	4	Field Support Hours	4	Office Support Hours	13	

SPLS =	
PLS =	
Office Support =	
Total Hours =	17

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	**	**
Phase Review Meetings	EA	0	0	0	**	**
Total Meetings				0	Total PM Mtgs (carries to Tab 3)	0

Carries to Tab 3

Caries to 27.32

**** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3**

29. Mapping

Estimator:

Enter project name & description
999999-1-52-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Master CADD File						
29.1	Alignment	Mile	0	0		0	
29.2	Section and 1/4 Section Lines	Section	0	0		0	
29.3	Subdivisions / Property Lines	EA	0	0		0	
29.4	Existing R/W	Mile	0	0		0	
29.5	Topography	Mile	0	0		0	
29.6	Parent Tract Properties/Existing Easements	Parcel	0	0		0	
29.7	Proposed R/W Requirements	Parcel	0	0		0	
29.8	Limits of Construction	Mile	0	0		0	
29.9	Jurisdictional/Agency Lines	Linear Mile	0	0		0	
	Sheet Files						
29.10	Control Survey Cover Sheet	Sheet	0	0		0	
29.11	Control Survey Key Sheet	Sheet	0	0		0	
29.12	Control Survey Detail Sheet	Sheet	0	0		0	
29.13	R/W Map Cover Sheet	Sheet	0	0		0	
29.14	R/W Map Key Sheet	Sheet	0	0		0	
29.15	R/W Map Detail Sheet	Sheet	1	10		10	Revise ROW Maps & Tab Sheets to accommodate parcel revisions note below on item 29.29
29.16	Maintenance Map Cover Sheet	Sheet	0	0		0	
29.17	Maintenance Map Key Sheet	Sheet	0	0		0	
29.18	Maintenance Map Detail Sheet	Sheet	0	0		0	
29.19	Reference Point Sheet	Sheet	0	0		0	
29.20	Project Network Control Sheet	Sheet	0	0		0	
29.21	Table of Ownership Sheet	Sheet	0	0		0	

29. Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Miscellaneous						
29.22	Parcel Sketches	Parcel	0	0		0	
29.23	TIITF Sketches	Parcel	0	0		0	
29.24	Other Specific Purpose Survey Map	EA	0	0		0	
29.25	Boundary Survey(s) Map	EA	0	0		0	
29.26	R/W Monumentation Map	Sheet	0	0		0	
29.27	Title Search Map	LS	1	0		0	
29.28	Title Search Report	LS	1	0		0	
29.29	Legal Descriptions	Parcel	16	2		32	Break existing legal descriptions into 2 parts for parcels 124, 125, 126, 131, 156. Prepare legal descriptions for newly added parcels 160 A/B, 714, 815, 135A Revise descriptions for parcels 123B.
29.30	Final Maps/Plans Comparison	Sheet	0	0		0	
Mapping Technical Subtotal							
29.31	Field Reviews	EA	1	0		0	
29.32	Technical Meetings	LS	1	0		0	
29.33	Quality Assurance/Quality Control	EA	%	5%		2	
29.34	Supervision	EA	%	0%		0	
Mapping Nontechnical Subtotal							
29.35	Coordination	LS	%	0%		0	
29.36	Supplemental Mapping	LA	%	0%		0	
29. Mapping Total							
							44

Technical Meetings	Units	No. of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff meeting	EA	0	0	0		0
Control map review	EA	0	0	0		0
45/60/90/final map review	EA	0	0	0		0
Other meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to Tab 3

Carries to 29.32



April 29, 2021

To: Mr. Clint Smith, PE., CFM
Project Manager
Hanson Professional Services, Inc.
8075 Gate Parkway West
Jacksonville, FL 32216

RE: Ellis Road Design, Brevard County
Supplemental 01 - Additional Design Services for Structures and Signalization (Revised)
FPID No. 426905-2-38-01
CONSOR Project No. 14024FL00.00

CONSOR Engineers, LLC is requesting a supplemental fee for additional design services, pertaining to preparation of contract documents for structures and signalization, that were not covered by the original Scope of Services fee. Please see the attached Staff Hour Estimate spreadsheet for full documentation of the requested supplement. Below is a summary of the key differences between the original staff hour estimate and the supplemental staff hour estimate.

Revisions:

Please note that this revised request is based on the County's responses to CONSOR's initial request as well as on the most recent FDOT ERC comments.

1. The hours for technical meetings previously shown in Tab 9 of the attached Staff Hour Estimate (SHE) have been removed since CONSOR is currently at the 100% submittal phase and no technical meetings have been required to date.
2. Based on ERC Comment No. 31, hours have been added to Tab 18 of the SHE for the Ancillary Structures Report for the evaluation of the existing mast arm structures (Structures E, G, and W) that will be reconfigured with additional loading.

Retaining Walls:

The original estimate assumed that 6,000 LF of permanent proprietary walls would be required and that the walls would be either MSE walls or gravity walls. Both types of walls only require the engineer to produce control drawings, no design or structural detailing is required since those items are covered by the FDOT Standard Plan indexes and the fabricator's design calculations.

The current set of plans includes approximately 1,200 LF of precast prestressed concrete sheet pile walls with CIP bulkhead caps and CIP wall panels where there are pipe penetrations in the walls. These sheet pile walls require control drawings, full retaining wall analysis and design, and full structural design and detailing of the CIP components. Extensive modelling of the walls was performed. There were 6 unique walls, and each wall was analyzed for two different retained heights (max and min), resulting in 12 different design cases since each wall location had unique soil parameters. Each of the 12 design cases was analyzed for 3 different load cases with varying water table elevations on each side of the wall since most of the walls are in ponds or swales. As



per the FDOT Structures Manual, each load case required 3 different types of runs – one to determine the required embedment, one to check the maximum wall deflection, and one to check the maximum flexural load on the wall. In addition, each sheet pile wall that had a pipe penetration that needed to have a CIP wall panel that could be penetrated without damaging the precast prestressed concrete sheet piles. Additional runs were required to consider the load effects on the piles that were adjacent to the CIP panels used as lagging. The resulting design and detailing effort required for this type of wall is much higher than what is required to produce control drawings as previously noted.

Strain Poles:

The original estimate did not have any hours for this item.

The current set of plans include 3 concrete strain poles for proposed ITS that were designed for current wind load requirements to determine the required pole sizes and embedment depths in the foundations.

Mast Arms:

The original estimate had 9 mast arm structures.

The current set of plans has 13 new mast arm structures and 3 existing mast arm structures that will be reconfigured with additional loading.

Estimated Fees:

The original structural fee estimate was \$67,228.86.

The current structural fee estimate was determined by preparing a new structural staff hour estimate based on the current scope requirements and then subtracting the original structural fee estimate from the new structural fee estimate.

The new staff hour estimate is \$124,781.69.

The resulting fee difference is \$57,552.83.

Therefore, CONSOR is requesting a supplemental fee of \$57,552.83.

If you have any additional questions, please give me a call.

Thank you,
Rodrigo C. Rodriguez, PE
EOR – Structures Plans

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Ellis Road Design - Final Structures Scope of Work
 County: Brevard
 FPN: 426905-2-38-01
 FAP No.: NA

Consultant Name: CONSOR Engineers, LLC
 Consultant No.: 14024FL00
 Date: 4/29/2021
 Estimator: R. Rodriguez, PE

Staff Classification	Total Staff Hours From Firm*	Project Manager	Chief Eng	Sr. Engineer	Sr. Designer	Engineer Intern	CADD Tech	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg, Non-Tech.	214	0	21	86	0	64	43	0	0	0	0	0	0	214	\$8,280	\$38.69
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	478	0	48	190	0	143	95	0	0	0	0	0	0	478	\$18,498	\$38.78
18. Structures - Miscellaneous	286	0	29	114	0	86	57	0	0	0	0	0	0	286	\$11,096	\$38.60
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	38	0	0	19	11	0	8	0	0	0	0	0	0	38	\$1,461	\$38.44
22. Signalization Plans	12	0	0	2	5	0	5	0	0	0	0	0	0	12	\$366	\$33.03
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	1,026	0	98	411	16	293	208	0	0	0	0	0	0	1,026	\$39,690.98	\$38.69
Total Staff Cost		\$0.00	\$7,613.82	\$18,735.36	\$568.48	\$7,471.50	\$5,304.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$39,690.98	

SALARY RELATED COSTS:		Check =	\$39,690.98
OVERHEAD:			
OPERATING MARGIN:	161.90%		\$39,690.98
FCCM (Facilities Capital Cost Money):	27%		\$64,259.70
EXPENSES:	0.233%		\$10,716.56
EXPENSES:	25.25%		\$92.48
STRUCTURES ESTIMATED FEE:			\$10,021.97
ORIGINAL - STRUCTURES ESTIMATED FEE:			\$124,781.69
SUPPLEMENTAL - STRUCTURES ESTIMATED FEE:			\$67,228.86
			\$0.00
			\$57,552.83

Notes:
 1. Original Structures Estimated Hours (Tasks 9, 17 & 18) = 555 HRS
 2. Supplemental Structures Estimated Hours (Tasks 9, 17 & 18) = 471 HRS
 3. This supplement is predominantly for structures services but also includes some services for signalization.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Ellis Road Design, Brevard County
 County: Brevard Co.
 FPN: 426905-2-38-01
 FAP No.: 01/001/1900

Consultant Name: Infrastructure Engineers, Inc.
 enter consultants proj. number
 Consultant No.: 02/25/2020
 Date: 02/25/2020
 Estimator: insert name

Staff Classification	Total Staff Hours From Summary	Project Manager	Chief Eng	Sr. Engineer	Sr. Designer	EI	CADD Tech	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwg. Non-Tech.	101	0	10	40	0	31	20	0	0	0	0	0	0	101	\$3,901	\$38.62
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	338	0	30	139	0	101	68	0	0	0	0	0	0	338	\$12,976	\$38.39
18. Structures - Miscellaneous	116	0	12	46	0	35	23	0	0	0	0	0	0	116	\$4,508	\$38.86
19. Signaling & Pavement Marking Analysis																
20. Signaling & Pavement Marking Plans																
21. Signalization Analysis																
22. Signalization Plans																
23. Lighting Analysis																
24. Lighting Plans																
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	555	0	52	225	0	187	111	0	0	0	0	0	0	555	\$21,394.38	\$38.53

Survey Field Days by Subconsultant
 4 - Person Crew

Check = \$21,394.38

SALARY RELATED COSTS:
 OVERHEAD: 162%
 OPERATING MARGIN: 27%
 FCM (Facilities Capital Cost Money): 0.23%
 EXPENSES: 25.25%
 4-man crew days @ \$ / day

SUBTOTAL ESTIMATED FEE: \$67,228.86
SUBTOTAL ESTIMATED FEE: \$67,228.86
 Geotechnical Field and Lab Testing
SUBTOTAL ESTIMATED FEE: \$67,228.86
 Optional Services
GRAND TOTAL ESTIMATED FEE: \$67,228.86

Notes:
 1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
 2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator: Rodrigo C. Rodriguez, PE

Ellis Road Design - Final Structures Scope of Work
426905-2-38-01

Representing	Print Name	Signature / Date
FDOT District 5		
CONSOR		1/27/2021

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Key Sheet and Index of Drawings	Sheet	1	6	1	6	Structures component key sheet and index of dwgs				
9.2	Project Layout	Sheet	0	0	0	0	N/A				
9.3	General Notes and Bid Item Notes	Sheet	1	16	1	16	General notes, bid item notes, surface finish details				
9.4	Miscellaneous Common Details	Sheet	0	0	0	0	N/A				
9.5	Incorporate Report of Core Borings	Sheet	6	0.5	6	3	For the walls, assume 1 to 2 borings per wall location for 6 walls. For the mast arms, assume 1 to 2 borings per intersection for 4 intersections. For the ITS poles, assume 1 sheet. Assume 4 borings per sheet. No. sheets = (2*6)/4 + (2*4)/4 + 1 = 6.0 sheets.				
9.6	Standard Plans- Bridges	LS	1	1		1	Incorporate standard plans for precast concrete sheet pile walls, pedestrian railings, and reinforcing bar bends.				
9.7	Existing Bridge Plans	LS	1	0		0	N/A				
9.8	Assemble Plan Summary Boxes and Quantities	LS	1	8		8	Low range				
9.9	Cost Estimate	LS	1	4		4	Low range				
9.10	Technical Special Provisions and Modified Special Provisions	LS	1	0		0	N/A				
Structures - Summary and Miscellaneous Tasks and Drawings											
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	0	0	0	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									

[illegible]

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	0	0	0			0
90/100% Comment Review	EA	0	0	0			0
Aesthetics Coordination	EA	0	0	0			0
Regulatory Agency	EA	0	0	0			0
Local Governments (cities, counties)	EA	0	0	0			0
Utility Companies	EA	0	0	0			0
Other Meetings	EA	0	4	0			0

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

[illegible]

Project Activity 17: Retaining Walls

Estimator: Rodrigo C. Rodriguez, PE

Ellis Road Design - Final Structures Scope of Work
428905-2-38-01

Representing	Print Name	Signature / Date
FDOT District 5		
CONSOR		2/20/2020

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Requirements							
17.1	Key Sheet	Sheet	0	0	0	0	Already included in Tab 9.
17.2	Horizontal Wall Geometry	Per Wall	6	4		24	Have 6 precast prestressed concrete sheet pile walls with some taper and some bends. No temporary walls.
Permanent Proprietary Walls							
17.3	Vertical Wall Geometry	Per Wall	0	0		0	N/A
17.4	Semi-Standard Drawings	Sheet	0	0	0	0	N/A
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.6	Details	Sheet	0	0	0	0	N/A
Temporary Proprietary Walls							
17.7	Vertical Wall Geometry	Per Wall	0	0		0	N/A
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	N/A
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.10	Details	Sheet	0	0	0	0	N/A
Cast-In-Place Retaining Walls							
17.11	Design	EA Design	0	0		0	N/A
17.12	Vertical Wall Geometry	EA Wall	0	0		0	N/A
17.13	General Notes	Sheet	0	0	0	0	N/A
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.15	Sections and Details	Sheet	0	0	0	0	N/A
17.16	Reinforcing Bar List	Sheet	0	0	0	0	N/A

Project Activity 17: Retaining Walls

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Other Retaining Walls and Bulkheads							
17.17	Design	EA Design	6	13		78	Have 6 precast prestressed concrete sheet pile walls. All 6 walls are cantilevered. Four of the walls each have 1 or 2 pipe penetrations requiring custom CIP wall panels tying into the precast walls at the pipe penetrations. As per the FDOT SHE guidelines, hours include design and quantity computation. Assumed hrs = (2 walls)(11 hrs ea) + (4 walls)(14 hrs ea) = 78 hrs. Average = 78 hrs/6 walls = 13 hrs per wall.
17.18	Vertical Wall Geometry	EA Wall	6	13		78	Have 6 permanent walls. Four of the walls require additional vertical geometry calculations for the CIP panels that tie into the precast walls at the pipe penetrations. Assumed hrs = (2 walls)(12 hrs ea) + (4 walls)(13.5 hrs ea) = 78 hrs. Average = 78 hrs/6 walls = 13 hrs per wall.
17.19	General Notes, Tables and Misc. Details	Sheet	3	8	3	24	Provide 2 sheets for the "Concrete Sheet Pile Wall Cantilever Data Table" semi-standard assuming 3 walls per sheet. Provide one sheet for the "Geotechnical Information Data Table" semi-standard assuming all 6 walls on one sheet. Total = 3 sheets.
17.20	Wall Plan and Elevations	Sheet	7	16	7	112	Have 1 sheet per wall for 6 precast prestressed concrete sheet pile walls (6 sheets). Show layout of starter piles and each additional unique pile type. Show pipe penetrations and locations of CIP concrete wall panels that tie into the precast piles at each pipe penetration. Add an overall plan view wall location layout sheet as per the FOOT SDM 19.1.H.
17.21	Details	Sheet	10	16	10	160	Provide 2 sheets for the sheet pile wall "Wall Table of Elevations" assuming 3 walls per sheet. Provide 2 sheets for the CIP concrete panel reinforcing details at the pipe penetrations (currently have 4 unique pipe penetrations). Provide 2 sheets with typical details for the precast concrete sheet pile walls (concrete cap details, handrail details, etc., etc.). Provide 3 sheets for the CIP concrete wall cap reinforcing layout assuming 2 walls per sheet. Provide one sheet for the CIP concrete wall cap bar list. Total = 10 sheets.
17. Structures - Retaining Walls Total						476	

Project Activity 18: Miscellaneous Structures

Estimator: Rodrigo C. Rodriguez, PE

Ellis Road Design - Final Structures Scope of Work
426905-2-38-01

Representing	Print Name	Signature / Date
FDOT District 5		
CONSOR		1/27/2021

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0		0	
18.2	Concrete Box Culverts Extensions	EA Extension	1	8		8	Design structural details for CBC/Dual 48" connection at John Rodas
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Strain Poles							
18.5	Steel Strain Poles	Initial Config EA Add'l Config	0 0	0 0		0 0	
18.6	Concrete Strain Poles	Initial Config EA Add'l Config	1 2	24 4		24 8	Have 3 poles for ITS use, all are single-pole locations. Initial configuration - create a custom Excel spreadsheet to analyze the wind load and the ITS load on a single pole, to determine the reactions at the top of the foundation, and to determine the required pole embedment in the foundation. Configurations for the other 2 locations. Use the custom spreadsheet to analyze the other 2 pole locations. Produce design calculation book for submittal.
18.7	Strain Pole Data Table Plan Sheets	Sheet	1	6	1	6	Fill out the data table, add notes, provide typical concrete pole elevation detail.
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	
Mast Arms							
18.9	Mast Arms	EA Design	13	12		156	Special Pole configuration and designs w/multiple arms, luminaires, drilled shafts. Have 13 mast arm structures.
18.10	Mast Arms Data Table Plan Sheets	Sheet	2	6	2	12	Assume 6 mast arm structures per sheet.
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Overhead/Cantilever Sign Structures							
18.12	Cantilever Sign Structures	EA Design	0	0		0	
18.13	Overhead Span Sign Structures	EA Design	0	0		0	

Project Activity 18: Miscellaneous Structures

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0		0	
18.15	Monotube Overhead Sign Structure	EA Design	0	0		0	
18.16	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0		0	
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	0	0	0	0	
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	0	0	0	0	
High Mast Lighting							
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0		0	
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	
Noise Barrier Walls (Ground Mount)							
18.21	Horizontal Wall Geometry	EA Wall	0	0		0	
18.22	Vertical Wall Geometry	EA Wall	0	0		0	
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	
18.24	Control Drawings	Sheet	0	0	0	0	
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0		0	
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0		0	
18.27	Aesthetic Details	LS	1	0		0	
Special Structures							
18.28	Fender System	LS	1	0		0	
18.29	Fender System Access	LS	1	0		0	
18.30	Special Structures	LS	1	0		0	
18.31	Other Structures	LS	1	0		0	
Ancillary Structures Report							
18.32	Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles	EA structure	3	4	3	12	Evaluation of Existing Mast Arm Structures E, G, and W per ERC Comment No. 31. Added January 27, 2021.
18.33	Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles (No As built or Design Plans Available)	EA structure	0	0	0	0	N/A
18.34	Analytical Evaluation of Signal and Sign Structures, and High Mast Light Poles	EA structure	3	16	3	48	Evaluation of Existing Mast Arm Structures E, G, and W per ERC Comment No. 31. Added January 27, 2021.
18.35	Ancillary Structures Report	LS	1	12		12	Evaluation of Existing Mast Arm Structures E, G, and W per ERC Comment No. 31. Added January 27, 2021.
18. Structures - Miscellaneous Total						3	286

Project Activity 21: Signalization Analysis

Estimator: Bill Umlauf, PE

Ellis Road Design - Final Structures Scope of Work
426905-2-38-01

Representing	Print Name	Signature / Date
FDOT District 5		
CONSOR		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
21.1	Traffic Data Collection	LS	1	2	2	Review As-Built Plans (Wickham Road)
21.2	Traffic Data Analysis	PI	0	0	0	
21.3	Signal Warrant Study	LS	1	0	0	
21.4	System Timings	LS	1	0	0	
21.5	Reference and Master Signalization Design File	PI	1	24	24	Design Layout for Wickham Road Intersection (Partial Intersection)
21.6	Reference and Master Interconnect Communication Design File	LS	1	2	2	Interconnect Modifications (Wickham Road)
21.7	Overhead Street Name Sign Design	EA	0	0	0	
21.8	Pole Elevation Analysis	LS	1	2	2	Modification of Mast Arm for Wickham Road
21.9	Traffic Signal Operation Report	LS	1	0	0	
21.10	Quantities	LS	1	2	2	Update quantities (Wickham Road)
21.11	Cost Estimate	LS	1	0	0	
21.12	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	
21.13	Other Signalization Analysis	LS	1	2	2	Pedestrian Signal Modification (Wickham Road)
Signalization Analysis Technical Subtotal					34	
21.14	Field Reviews	LS	1	0	0	
21.15	Technical Meetings	LS	1	0	0	Meetings are listed below
21.16	Quality Assurance/Quality Control	LS	%	5%	2	
21.17	Independent Peer Review	LS	%	0%	0	
21.18	Supervision	LS	%	5%	2	
Signalization Analysis Nontechnical Subtotal					4	

Project Activity 21: Signalization Analysis

21.19	Coordination	LS	%	0%	0	
21. Signalization Analysis Total						38
Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	Comments
FDOT Traffic Operations		EA	0	0	0	
FDOT Traffic Design		EA	0	0	0	
Power Company (service point coordination)		EA	0	0	0	
Maintaining Agency (cities, counties)		EA	0	0	0	
Railroads		EA	0	0	0	
Other Meetings		EA	0	0	0	
Subtotal Technical Meetings					0	Subtotal Project Manager Meetings
Progress Meetings (if required by FDOT)		EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3
Phase Review Meetings		EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3
Total Meetings					0	Total Project Manager Meetings (carries to Tab 3)
						0

Carries to Tab 3

Carries to 21.15

Project Activity 22: Signalization Plans

Estimator: Bill Umiauf, PE

Ellis Road Design - Final Structures Scope of Work
426905-2-38-01

Representing	Print Name	Signature / Date
FDOT District 5		
CONSOR		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	0	0	0	0	
22.2	Summary of Pay Items Including Designer Interface Input		Sheet	0	0	0	0	
22.3	Tabulation of Quantities		Sheet	0	0	0	0	
22.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	
22.5	Plan Sheet		Sheet	1	8	1	8	Wickham Road
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0		0	
22.8	Guide Sign Worksheet		EA	0	0		0	
22.9	Special Details		Sheet	0	0	0	0	
22.10	Special Service Point Details		EA	0	0		0	
22.11	Mast Arm/Monotube Tabulation Sheet		PI	1	2		2	Wickham Road
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TTCP Signal		EA	0	0		0	
22.14	Temporary Detection Sheet		PI	0	0		0	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	1	0		0	
Signalization Plans Technical Subtotal							10	
22.17	Quality Assurance/Quality Control		LS	%	5%		1	
22.18	Supervision		LS	%	5%		1	
22. Signalization Plans Total							12	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: ELLIS ROAD WIDENING - ADDITIONAL ITS BORING
 County: Brevard County
 FPN: 428905-2-3801
 FAP No.: ST110-382-R

Consultant Name: Hanson/Nadic
 Consultant No.: R14011
 Date: 11/10/2020
 Estimator: Godwin Nadi

Staff Classification	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Staff Engineer	Cadd/Computer Tech	Sr. Engineer Tech.	Secretary	Staff Classification	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	\$59.21	\$59.21	\$59.21	\$47.21	\$28.94	\$24.42	\$22.31	\$16.72	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Mac. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	1	0	2	6	8	2	5	1	0	0	0	0	25	\$673	\$34.90
Total Staff Hours	25	0	2	6	8	2	5	1	0	0	0	0	25	\$673	\$34.90
Total Staff Cost	\$59.21	\$0.00	\$118.42	\$283.26	\$231.52	\$48.84	\$114.55	\$16.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$872.52	\$34.90

SALARY RELATED COSTS:
 OVERHEAD: 233%
 OPERATING MARGIN: 16%
 FCCM (Facilities Capital Cost Money): 1.13%
 EXPENSES: 34.74%
SUBTOTAL ESTIMATED FEE: 0
 Survey (Field) 4-man crew d \$ / day
 Geotechnical Field and Lab Testing
SUBTOTAL ESTIMATED FEE:
 Optional Services
GRAND TOTAL ESTIMATED FEE:

Notes:
 1. This sheet to be used by Subconsultant to calculate its fee.

Project Activity 35: Geotechnical

Estimator: Godwin Nnadi - Nadic

ELLIS ROAD WIDENING - ADDITIONAL ITS BORING
426905-2-3801

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway						
35.1	Document Collection and Review	LS	1	1	1	Review available printed literature and reports (FDOT Hrs/unit range = 4 to 40)
35.2	Develop Detailed Boring Location Plan	LS	1	0	0	(FDOT= 2 to 32)
35.3	Stake Borings/Utility Clearance	Boring	0	0	0	(FDOT =0.2 to 0.5)
35.4	Coordinate and Develop MOT Plans for Field Investigation	EA	1	0	0	
35.5	Drilling Access Permits	Location	0	0	0	FDOT Range 3 to 16
35.6	Property Clearances	EA	2	0	0	
35.7	Groundwater Monitoring	EA	0	0	0	FDOT Range 3 to 8
35.8	LBR/Resilient Modulus Sampling	EA	0	0	0	
35.9	Coordination of Field Work	100 lf of boring	0	0	0	
35.10	Soil and Rock Classification - Roadway	100 lf of boring	0	0	0	
35.11	Design LBR	LS	1	0	0	MR from SMO; if LBR (FDOT range 4 to16)
35.12	Laboratory Data	100 lf of boring	0	0	0	FDOT Range 0.5 to 1
35.13	Seasonal High Water Table	Boring	0	0	0	FDOT Range 0.1 to 1
35.14	Parameters for Water Retention Areas	EA	0	0	0	FDOT Range 1 to 4
35.15	Delineate Limits of Unsuitable Material	Cross-section	0	0	0	FDOT Range 0.25 to 1
35.16	Electronic Files for Cross-Sections	100 lf of boring	0	0	0	FDOT Range 1 to 2

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.17	Embankment Settlement and Stability	Embankment Boring	0	0	0	FDOT Range 1 to 4
35.18	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	FDOT Hrs/unit range = 2 to 6
35.19	Geotechnical Recommendations	LS	1	0	0	FDOT Hrs/unit range = 4 to 40
35.20	Pavement Condition Survey and Pavement Evaluation Report	LS	1	0	0	
35.21	Preliminary Roadway Report	LS	1	0	0	FDOT Hrs/unit range = 7 to 20
35.22	Final Report	EA	0	0	0	
35.23	Auger Boring Drafting	100 lf boring	0	0	0	FDOT Hrs/unit range = 2 to 6
35.24	SPT Boring Drafting	100 lf boring	0	0	0	FDOT Hrs/unit range = 3 to 8
Roadway Geotechnical Subtotal					1	
Structures						
35.25	Develop Detailed Boring Location Plan	LS	1	0	0	ITS: 1 SPT @ 40' = 200LF. (FDOT Hrs/unit range = 2 to 32)
35.26	Stake Borings/Utility Clearance	Boring	1	4	4	ITS: 1SPT @ 40'. (FDOT Hrs/unit range = 0.2 to 0.5)
35.27	Coordinate and Develop MOT Plans for Field Investigation	EA	1	1	1	FDOT Hrs/unit range = 2 to 8
35.28	Drilling Access Permits	Location	0	0	0	
35.29	Property Clearances	EA	0	0	0	
35.30	Collection of Corrosion Samples	EA	1	0.5	1	FDOT Hrs/unit range = 0.25 to 1
35.31	Coordination of Field Work	100 lf of boring	0.4	2	1	FDOT Hrs/unit range = 0.75 to 1.5
35.32	Soil and Rock Classification - Structures	100 lf of boring	0.4	2	1	
35.33	Tabulation of Laboratory Data	100 lf of boring	0.4	2	1	
35.34	Estimate Design Groundwater Level for Structures	EA	1	0.5	1	1 ITS structure (FDOT Hrs/unit range = 0.25 to 2)
35.35	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	FDOT Hrs/unit range = 4 to 5
35.36	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	FDOT Hrs/unit range = 6 to 12

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.37	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	
35.38	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	
35.39	Walls	Wall Boring	0	0	0	FDOT Hrs/unit range = 1.5 to 4
35.40	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	
35.41	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	1	1	1	ITS: 1 SPT @ 40' = 40LF. (FDOT Hrs/unit range = .25 to 1.5)
35.42	Box Culvert Analysis	EA	0	0	0	FDOT Hrs/unit range = 4 to 8
35.43	Preliminary Report - BDR	EA	0	0	0	
35.44	Final Report - Bridge and Associated Walls	EA	0	0	0	
35.45	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	1	8	8	
35.46	SPT Boring Drafting	100 lf of boring	0.4	5	2	FDOT Hrs/unit range = 3 to 10
35.47	Other Geotechnical	LS	1	0	0	
Structural Geotechnical Subtotal					21	
Geotechnical Technical Subtotal					22	
35.48	Technical Special Provisions	EA	0	0	0	
35.49	Field Reviews	LS	0	0	0	
35.50	Technical Meetings	LS	1	0	0	Meetings listed below
35.51	Quality Assurance/Quality Control	LS	%	3%	1	
35.52	Supervision	LS	%	3%	1	
Geotechnical Nontechnical Subtotal					2	
35.53	Coordination	LS	%	3%	1	
35.54	Update Contamination Screening Evaluation	LS	1	0	0	
35. Geotechnical Total					25	

Project Activity 35: Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
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Technical Meetings

Kickoff Meeting with FDOT	EA	1	0	0	0	
Boring Layout Approval	EA	1	0	0	0	
Attend in BDR Review Meeting	EA	0	0	0	0	
30/60/90% Submittal Review	EA	0	0	0	0	
Other Meetings	EA	0	0	0	0	
Subtotal Technical Meetings					0	

Progress Meetings	EA	3	0	0	0	
Phase Review Meetings	EA	3	0	0	0	

Total Meetings					0	
					Carries to 35.50	

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

GEOTECHNICAL FIELD AND LABORATORY COST ESTIMATE
ADDITIONAL ITS BORING
ELLIS ROAD WIDENING, BREVARD COUNTY.
FPID: 426905-2-38-01, FAN: ST10-382-R

Component/Unit Description	UNIT	MISCEL STRUCTURE	QTY	RATE	MISCEL STRUCTURE	COST
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I. FIELD EXPLORATION:

1. Crew & Equipment Mobilization:

a.	- Truck-Mounted Equipment	Ea.	1	1	\$450.00	\$450.00	\$450.00
b.	- Mudbug	Ea.		0	\$600.00		\$0.00
c.	MOT/Field Support Vehicle	Ea.	1	1	\$75.00	\$75.00	\$75.00

2. Standard Penetration Test Borings(ASTM D-1586):

	Truck/ME No of Borings		8	8			
a.	- 0 to 50 ft. depths	LF	40	40	\$12.40	\$496.00	\$496.00
b.	- 50 to 100 ft. depths	LF	0	0	\$15.00	\$0.00	\$0.00
c.	- 100 to 150 ft. depths	LF		0	\$19.50		\$0.00
d.	150 to 200 ft. depths	LF		0	\$25.00		\$0.00

3. Grout Seal Boreholes:

	Truck/MB:						
a.	- 0 to 50 ft. depths	LF	40	40	\$5.00	\$200.00	\$200.00
b.	- 50 to 100 ft. depths	LF		0	\$6.00		\$0.00
c.	- 100 to 150 ft. depths	LF		0	\$8.00		\$0.00
d.	150 to 200 ft. depths	LF		0	\$10.00		\$0.00

4. Casing Allowance:

	Truck/MB:						
a.	- 0 to 50 ft. depths	LF		0	\$8.00		\$0.00
b.	- 50 to 100 ft. depths	LF		0	\$10.00		\$0.00
c.	- 100 to 150 ft. depths	LF		0	\$11.00		\$0.00
d.	150 to 200 ft. depths	LF		0	\$12.50		\$0.00

6. Auger Borings(ASTM D-1452) - Truck/MB:

	- 0 to 50 ft. depths	LF		0	\$10.00		\$0.00
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7. Truck/MB 2 Crew/Clearing/Difficult Access:

a.	Land	Hr		0	\$150.00		\$0.00
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7b.	Drill Rig and Crew: -2 man crew	Hr		0	\$150.00		\$0.00
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8.	MOT - Signs & Barricades:	Hr	2	2	\$150.00	\$300.00	\$300.00
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9. Soil Probing:

a.	- 2 person crew	Days		0	\$950.00		\$0.00
b.	3 person	Days		0	\$1,300.00		\$0.00

10.	Per Diem for Drill Crew: -2 man crew	Hr		0	\$150.00		\$0.00
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11.	Double Ring Infiltration (ASTM D-3385): Ea.			0	\$450.00		\$0.00
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12. Thin-Walled Tube Samples (ASTM D-1587):

	Land:						
a.	- 0 to 50 ft. depths	LF		0	\$150.00		\$0.00
b.	- 50 to 100 ft. depths	LF		0	\$200.00		\$0.00
c.	- 100 to 150 ft. depths	LF		0	\$250.00		\$0.00

GEOTECHNICAL FIELD AND LABORATORY COST ESTIMATE
ADDITIONAL ITS BORING
ELLIS ROAD WIDENING, BREVARD COUNTY.
FPID: 426905-2-38-01, FAN: ST10-382-R

Component/Unit Description	UNIT	MISCEL STRUCTURE	QTY	RATE	MISCEL STRUCTURE	TOTAL COST
13. Site Reconnaissance/Utility Corodination:						
a. Engineer	Hr		0			\$0.00
b. Senior Engineering Tech	Hr		0			\$0.00
14. Extra Split Spoon Samples:						
Land:						
a. - 0 to 50 ft. depths	LF		0	\$25.00		\$0.00
b. - 50 to 100 ft. depths	LF		0	\$28.00		\$0.00
c. - 100 to 150 ft. depths	LF		0	\$32.00		\$0.00
15. Piezometer 2" 0 to -50 ft depths	LF		0	\$25.00	\$0.00	\$0.00
16. Ground Monitor Wells - 2 inch (50mm):						
a. - 0 to 50 ft. depths	LF		0	\$35.09		\$0.00
17. Pavement Coring:	Ea		0	\$300.00	\$0.00	\$0.00
18. MOT- Flashing Arrow Board/Advance W Days			0	\$120.00	\$0.00	\$0.00
19. MOT- Crash Attenuator Truck/Energy Abs Days			0	\$1,400.00	\$0.00	\$0.00
20. MOT- Law Officer/Trooper:	Hr		0	\$55.00	\$0.00	\$0.00
21. GPS Rental	Days		1	\$80.00	\$80.00	\$80.00
Totals for Field Exploration					\$1,601.00	\$1,601.00
II. LABORATORY TESTING:						
1. Visual Ex - Engineer	Hr		0			\$0.00
2. Grain Size Analysis:						
a. Full Grad. Grain Analyses(FM 1- Ea.			0	\$80.00		\$0.00
b. Single Sieve Grain Analysis(FM Ea.		2	2	\$40.00	\$80.00	\$80.00
3. Hydrometer(FM 1-T 88):	Ea.		0	\$145.00		\$0.00
4. Organic Content(FM 1-T 267):	Ea.	1	1	\$40.00	\$40.00	\$40.00
5a. Liquid Limit -Atterberg Limits (FM 1-T 89 Ea.		1	1	\$40.00	\$40.00	\$40.00
5b. Plastic Limit -Atterberg Limits(FM 1-T 89 Ea.		1	1	\$40.00	\$40.00	\$40.00
6. Natural Moisture (FM 1-T 265):	Ea.	3	3	\$15.00	\$45.00	\$45.00
8. Consolidation Test (FM 1-T 216):	Ea.		0	\$650.00		\$0.00
10. Corrosion Series: (pH, Sulfate, Chloride, Resistivity)	Ea.	1	1	\$160.00	\$160.00	\$160.00
13. Limerock Bearing Ratio(FM5-515):	Ea.		0	\$300.00		\$0.00
Totals for Laboratory Testing					\$405.00	\$405.00

GEOTECHNICAL FIELD AND LABORATORY COST ESTIMATE
ADDITIONAL ITS BORING
ELLIS ROAD WIDENING, BREVARD COUNTY.
FPID: 426905-2-38-01, FAN: ST10-382-R

Component/Unit Description	UNIT	MISCEL STRUCTURE	QTY	RATE	MISCEL STRUCTURE	TOTAL COST
III. ENGINEERING AND TECHNICAL SERVICES:						
1. Project Manager:	Hr		0	\$194.62		\$0.00
2. Senior Engineer:	Hr		0	\$181.94		\$0.00
3. Project Engineer:	Hr		0	\$157.87		\$0.00
4. Engineer:	Hr		0	\$101.10		\$0.00
5. Engineer Intern	Hr		0			\$0.00
6. Cadd Technician:	Hr		0	\$85.31		\$0.00
7. Senior Engineering Technician:	Hr		0	\$77.38		\$0.00
8. Secretarial/Clerical:	Hr		0	\$58.13		\$0.00
Totals for Engineering and Technical S			0		\$0.00	\$0.00
Totals for all Services					\$2,006.00	\$2,006.00