WORK ORDER NUMBER <u>10</u> 8TH STREET AND INDIAN RIVER BLVD SIGNALIZATION – MAST ARMS Project Number: IRC-1909

This Work Order Number 10 is entered into as of this ____ day of _____, 2019, pursuant to that certain Continuing Consulting Engineering Services Agreement for Professional Services entered into as of this 17th day of April, 2018 (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and KIMLEY-HORN AND ASSOCIATES, INC. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the fee schedule set forth in Exhibit B (Fee Schedule), attached to this Work Order and made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit C (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

EXHIBIT A – SCOPE OF WORK

8th Street & Indian River Blvd Signalization - Mast Arm Assembly

The COUNTY desires to improve the intersection by installation of a mast arm traffic signal, pedestrian crosswalks and curb ramps, including sidewalk ramps and landings, associated signage and miscellaneous pavement markings as needed. In addition to the proposed signalization improvements, the County desires to complete the sidewalk facilities connecting the existing sidewalks that are located north and south of the subject intersection along the west side of Indian River Boulevard.

It is understood that the COUNTY will provide the geotechnical investigation findings necessary to support the foundation design calculations.

A. <u>Topographic Design Survey:</u>

The Consultant shall provide topographic design survey services necessary to support and facilitate contemplated design and permitting activities associated with this project. This task will consist of the preparation of digital base map topographic surveys in accordance with the Florida Minimum Technical Standards set forth by the Florida Board of Professional Surveyors in Chapter 61G17-6, Florida Administrative Code, pursuant to Section 472.027,

Florida Statutes.

B. Signalization Plans:

The COUNTY desires to prepare traffic signalization plans associated with the 8th Street and Indian River Boulevard intersection. It is understood that the proposed signalization improvements will consist of a mast arm traffic signal assembly at the subject intersection which will be designed to meet current IRC and FDOT standards. The plans will include the design and layout of proposed signal poles, signal heads, video detection, conduit, and pull boxes.

The plans will include all call outs, controller timing chart, signal head details, sign details, controller notes, signal operating plan, overhead street name sign design details, pole schedules, tabulation of quantities. The set of plans will include the following sheets: key sheet; tabulation of quantities; general notes; plan sheet; sign work sheets (if necessary) and mast arm assemblies' data tables.

The set of plans shall consist of the following:

	40%	80%	100%
Cover Sheet	Р	S	F
General Notes/ Legend	Р	S	F
Tabulation of Quantities/ General	Р	S	F
Roadway Plan Sheets	Р	S	F
Signing & Pavement Marking Plans	Р	S	F
Signalization and Pay Item Notes	Р	S	F
Signalization Plans	Р	S	F
Fiber Optic Plan	Р	S	F
Standard Mast Arm Tabulation	Р	S	F
Standard Mast Arm Assemblies Data Table	Р	S	F
Sign Details	Р	S	F
Construction Cost Estimate and Quantities	Р	S	F

Notes: (P)-Preliminary, (S)-Substantially Complete, (F)-Final

The final design plans will be prepared in accordance with the Indian River County and Florida Department of Transportation (FDOT) standards to provide all elements necessary to accommodate the scope of work. This effort will include at a minimum; Key Sheet, General Notes Sheet, Plan Sheets, Cross Section Sheets, Erosion Control Sheets,

Signalization Sheets, Opinion of Probable Construction Cost and other detail sheets as necessary to produce the construction bid plans.

The following additional data shall be utilized for development of the plans:

- 1. The roadway plans sheets will be drawn at a scale of 1'' = 40' prepared on $11'' \times 17''$ sheets.
- 2. Plan sheets shall depict existing right-of-way, section lines, property lines, temporary construction easements, and centerline of construction. Horizontal control points with state plane coordinates for all PC's, PT's, curve radius, curve length and horizontal Pl's shall be included on the Plan or summarized in an alignment table.
- 3. Signing and Pavement Markings will be included within the Construction Documents. All signing and pavement markings are to be prepared in accordance with the latest design standards and practices (MUTCD), FDOT Standard Specifications, Indexes, and COUNTY standards.
- 4. Plans shall include spot grades adequate to describe any proposed grading.
- 5. Match lines shall not be located within the limits of an intersection.
- 6. If applicable, soil boring information shall be plotted on cross sections with soil classification and high season water table.
- 7. All quantities shall reference FDOT Pay Item Numbers.
- 8. All details shall reference FDOT Index Numbers, where applicable.
- All specifications shall reference the FDOT Specifications for Road and Bridge Construction. Any deviations or special specifications not included in FDOT Specifications will be provided in the Technical Specifications.
- 10. Initial (40% completion), interim (80% completion) and Final Plan (100% completion) Submittal shall include the following:
 - i. Three (3) Sets Plans.
 - ii. One (1) Opinion of Probable Construction Cost
 - iii. One (1) CD with drawings in PDF format.

The Consultant will be responsible for producing an opinion of probable cost (OPC) estimate and reviewing and updating the OPC when scope changes occur and/or at designated milestones of the project. A Summary of Pay Items sheet shall be prepared with all required Initial (40%), Interim (80%) and Final Plan (100%) submittals. The Final Plans will be provided signed and sealed. The plans will be prepared based upon English units. The design will be conducted in MicroStation and Geopak. The Final Plans will be provided in Autodesk Civil 3D format.

C. Signing and Pavement Marking Plans:

Signing and Pavement Marking plans shall include: Preparation of the plan layout, key map, quantities (including signing and pavement marking quantity), tabulation of quantities, and detail of major signs. Plans are to be prepared in accordance with the latest design standards and practices (MUTCD), FDOT Standard Specifications, Indexes, and shall be accurate, legible, complete in design and drawn at the same scale as the Roadway Plans, furnished in reproducible form.

D. Franchise Utility Coordination:

The Consultant will coordinate with franchise utility operators in the vicinity of the project such that the proposed construction activities can be developed to minimize impacts to existing utilities located within the project limits. Franchise utility adjustments, designed by the respective franchise utility, will be requested by the Consultant and reflected within the prepared construction documents.

The Consultant will coordinate with the electrical service provider relative to the location and infrastructure required to accommodate the proposed power supply location.

E. Jurisdictional Permits:

The Consultant will submit a request to St. Johns River Water Management District (SJRWMD) for verification of an Environmental Resource Permit (ERP) exemption as the proposed improvements are consistent with 62-330.051, F.A.C.

EXHIBIT B – FEE SCHEDULE

The COUNTY agrees to pay and the Consultant agrees to accept for services rendered pursuant to this Agreement fees inclusive of expenses in accordance with the following:

A. Professional Services Fee

The basic compensation mutually agreed upon by the Consultant and the COUNTY is as follows:

Lump Sum Components

<u>Task</u>	<u>Labor Fee</u>
Topographic Design Survey	\$ 5,200
Signalization Plans	\$ 34,400
Signing and Marking Plans	\$ 16,300
Franchise Utility Coordination	\$ 8,200
Jurisdictional Permits	\$ 3,100
Project Total	\$ 67,200

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EXHIBIT C – TIME SCHEDULE

Upon authorization to proceed by the COUNTY, final design documents are expected to take approximately seven (7) months from the Notice to Proceed (NTP).

NIP	contingent upon BOCC approval
Initial Submittal (40% Design Drawings)	3 months following NTP
Interim Submittal (80% Design Drawings)	5 months following NTP
Final Submittal (100% Design Drawings)	7 months following NTP

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IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONS	SULTANT:		BOARD OF COUNTY COMMISSIONERS
KIMLI	EY-HORN AND ASSOCIATES,		OF INDIAN RIVER COUNTY
INC. By:		By:	
Бy.	Brian Good, P.E.		Bob Solari, Chairman
Title:	Principal	_	
		BCC Appro	ved Date:
			rey R. Smith, Clerk of Court and Comptroller
		By:	
			Deputy Clerk
		Approved:	
		, ipprovou.	Jason E. Brown, County Administrator
	Approved as to form and lega	al sufficiency:	*
			Dylan T. Reingold, County Attorney

Summary

Project Name Task Summary

8th Street and Indian River Boulevard Signalization Manhours for project

Task	Principal	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
	\$225	\$200	\$145	\$110	\$130	\$60	
Design Analysis	0	22	14	22	2	2	
Utility Coordination	4	10	8	24	6	12	
Signing and Marking Plans	4	7	24	15	18	0	
Signalization Plans	8	44	80	20	80	0	
Total Hours =	16	83	126	81	106	14	
Labor Fee =	\$3,600	\$16,600	\$18,270	\$8,910	\$13,780	\$840	
Sub-Total Fee =	\$62,000						
Design Topo Fee =	\$5,200						
Project Total Fee =	\$67,200						

Activity: Design Analysis / Review

Task	Principal	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
Contract File		2				2	
Cost Estimate			6		6		Cost est. conducted at 40%, 80% and 100%
Coordination							_
IR County		16					Three review submittals to County
Field Review			. 8		8		Site Visits
Computation Book & Quantities				4	8		
QC/QA							,
Project Management		4					
							•
Subtotal	0	22	14	. 4	22	2	

Activity: Utility Plans

Task	Principal	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
E 11020 B							
Ex. Utility Reveiw			8	24		8	Coordination w/ Util Co.'s
							- Request as-built data
Electrical Service Provider Coordination Meeting	_	6			6	4	A
QC/QA	4						
Project Management		4					
Subtotal	4	10	8	24	6	12	

Activity: Signing and Marking Plans

Task	Principal	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
Signing and Marking Plans							
8th Street & Indian River Blvd		3	24	15	18		2 sheets @ 30 hrs/ sht
	······································						Includes sidewalk connectivity improvements
QC/QA	4						
Project Management		4					
Subtotal	4	7	24	15	18	0	

Activity: Signalization Design

Task	Principal	Senior Professional	Registered Professional	Professional	Designer	Support Staff	Remarks
		riolessional	FIULESSIULIAI		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Stall	
						1	
8th Street & Indian River Blvd							
Mast-Arm Signalization Design		20	80		80		
Foundation Structural Design		20		20			
			·				
QC/QA	8						
Project Management		4					
1							
1							
1							
1							
Subtotal	8	44	80	20	80	0	