

**AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER  
RESOURCES ENGINEERING SERVICES RFQ2019070  
WORK ORDER #6 Amendment #1**

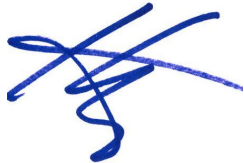
**Indian River County Department of Utility Services  
South Oslo WTP Improvements Construction Phase Services Amendment**

This Work Order Number 6 Amendment #1 is entered into as of this \_\_\_ day of \_\_\_\_\_, 202\_, pursuant to that certain AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER RESOURCES ENGINEERING SERVICES RFQ2019070 entered into as of this 5<sup>th</sup> day of November, 2019 (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.

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

**CONSULTANT:**



**By:** \_\_\_\_\_

**Print Name:** Michael F. Schwartz, P.E.

**Title:** Senior Vice President

**BOARD OF COUNTY COMMISSIONERS  
OF INDIAN RIVER COUNTY**

**By:** \_\_\_\_\_

**, Chairman**

**BCC Approved Date:** \_\_\_\_\_

**Attest:** \_\_\_\_\_ **, Clerk of Court and Comptroller**

**By:** \_\_\_\_\_

**, Deputy Clerk**

**Approved:** \_\_\_\_\_

**, County Administrator**

**Approved as to form and legal sufficiency:** \_\_\_\_\_

**, County Attorney**

## **EXHIBIT #A**

### **South Oslo Rd Water Treatment Plant Improvements**

#### **Construction Phase Services**

#### **Work Order No. 6 Amendment #1**

### **PROJECT UNDERSTANDING**

Kimley-Horn and Associates, Inc. (“CONSULTANT”) was authorized under Work Order #6 to provide construction phase services on June 8, 2021 for the South Oslo Road Water Treatment Plant Improvement Project. TLC Diversified, Inc., the general contractor for this project was issued a Notice to Proceed on August 4, 2021 which yielded a final completion date of November 2, 2023. Over the course of the project, several process components have failed that were outside TLC’s construction contract and needed to be addressed via change order. These change orders due to failed equipment resulted in over \$1,000,000 in unforeseen costs. The additional work coupled with supply chain issues that have transpired since the COVID-19 pandemic have resulted in unexpected delays in the project schedule. TLC Diversified recently submitted a Work Change Directive to Indian River County Department of Utility Services (IRCDUS or Owner) that requested an additional 197 days to yield a final completion date of May 17, 2024.

Due to the extension of the construction schedule, the Consultant has conducted more progress meetings and expended more effort than originally scoped to assist with this project completion. Additional time on site is anticipated along with additional payment application reviews, Davis-Bacon Wage Act interviews and wage reviews, shop drawing reviews, etc. The project extension will result in additional time and effort by Consultant to assist with project delivery. In addition to the time extension, the Owner has requested several other services be provided including asset management, record drawing development. This amendment presents the additional services requested by Indian River County Department of Utility Services (IRCDUS) of the Consultant to aid in completion of this project.

### **SCOPE OF SERVICES**

#### **TASK 1 – CONSTRUCTION PHASE SERVICES - AMENDED**

Consultant will provide additional construction phase services for this project consisting of;

- shop drawing review,
- coordination and progress meeting attendance, and preparation of meeting minutes
- construction observations, including inspector and engineer observations
- review of contractor’s applications for payment

Consultant will review and /or take other appropriate action with respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs. Consultant has reviewed one hundred forty-eight (148) shop drawings to date. The original scope of services included one hundred and fifty (150) shop drawing reviews. The Contractor has yet to submit information on the cleaning system and there are approximately outstanding shop drawings that require re-submittal. Consultant anticipates approximately ten (10) additional shop drawings for review.

Consultant will utilize the services of C&W Engineering for professional services related to electrical engineering for this project. C&W proposal is included herein for reference.

Consultant original scope included thirty (30) monthly progress meetings for this project. To date, Consultant has attended thirty-five (35) progress meetings. Consultant anticipates an additional twenty (20) progress meetings beyond the original 30 scoped will be held through project completion. Consultant will prepare meeting agenda for each progress meeting and within one week of each respective progress meeting, Consultant will prepare and distribute meeting minutes that summarize the major discussion topics from the meeting.

Consultant will provide additional on-site construction observation services during the construction phase. Consultant's original proposal included two-hundred fifty site visits and 24-month construction duration. The project schedule is anticipated to extend by ten (10) months based on Contractor's latest schedule submittal. Consultant assumes this 10-month period of construction will require approximately three to four (2 - 3) visits per week per month to observe the work for conformance with the Contract Documents. Consultant anticipates an additional one hundred (100) site visits will also be required. Such visits and observations by the Consultant representative are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on Consultant representative's exercise of professional judgment. Based on information obtained during such visits and such observations, Consultant's representative will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and Consultant will keep Owner informed of the general progress of the Work.

Consultant's inspector will prepare field reports of each site visit describing observations witnessed during site visits. Consultant will prepare field reports for the additional one-hundred (100) site visits performed through project completion.

The purpose of Consultant representative's site visits will be to enable Consultant to better carry out the duties and responsibilities specifically assigned in this Agreement, and to provide the OWNER a greater degree of confidence that the completed Work will conform in general to the Contract Documents. Consultant shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall the Consultant have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work.

Consultant will recommend to the Owner that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, Consultant believes that such work will not produce a completed Project that conforms generally to Contract Documents.

Consultant's original proposal included twenty-four (24) contractor payment application reviews. Based on Contractor's recent schedule, Consultant will review up to four (4) additional contractor payment applications. The Contractor has not submitted pay applications every month which justifies need for only four additional payment application reviews. Based on its observations and on review of applications for payment and accompanying supporting documentation, Consultant will review the amounts that the Consultant recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Consultant's representation to

Client, based on such observations and review, that, to the best of Consultant's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents.

Consultant's original proposal included review of the record drawings and notation of substantial deviations. IRCDUS has requested the Consultant provide record drawings to in AutoCAD (.dwg) format. Consultant will update original design files based on Contractor prepared redlined drawings and site observations. Consultant will electronically transmit record drawings to Owner upon completion of record drawing set.

Consultant's original proposal did not include services to support Davis-Bacon Wage Act requirements. As part of the contract negotiation between the Owner and Contractor, provisions in the Construction Contract were added to include Davis-Bacon Wage Act requirements. IRCDUS requested Consultant conduct interviews and review wage information on a routine basis through project completion. Consultant will review monthly payroll information submitted by the Contractor and subcontractor(s) to determine if requirements for Davis Bacon wage requirements are met. Consultant will conduct labor interviews with the Contractor's personnel throughout the construction duration. Consultant anticipates a total of eighteen (18) interviews will be conducted throughout the course of the project.

Consultant will provide project management consisting of coordination of Consultant's staffing on project, QA/QC, review of Contractor schedule, coordination with subconsultants, administrative work including filing of all documentation, meeting minutes, letters, etc. It is estimated that approximately 40 hours of additional administration time and 20 hours of professional time will be required for this task.

Consultant will prepare IRCDUS requested "Asset Change List," or "ACL". The ACL will outline the major components or assets installed or removed as part of the work including new process equipment. The list will be prepared and submitted to IRCDUS to be used for updates to the IRCDUS's Computerized Maintenance Management System (CMMS) and Financial Information System (FIS). Assets will be identified at the lowest practical level for maintenance where work orders (WO) are assigned to carryout various maintenance tasks. The ACL will also include spare parts that are provided by the project and must be identified as such. Other key requirements for the ACL are as follows:

1. An electronic database deliverable provided at completion of the project. There is no specific requirement for the software, application, or tool used to prepare the ACL; however, the final data must be submitted in a common tabular format such as .csv or .xls.
2. Each row or record in the database shall represent a single (discrete) asset and its applicable data and attributes.
3. The Consultant will coordinate and manage the completion of the ACL which is carried through to the construction phase for further updates and eventual completion.
4. New assets added will include data and notable attributes for each asset to include but may not be limited to:
  - a. Basic Asset Type – pump, tank, control valve, MCC, analyzer, PLC, etc.
  - b. General Data – manufacturer/vendor, model, serial no.
  - c. Physical Data – voltage, TDH, capacity, diameter, material, etc.
  - d. Service Data – date installed/in-service, warranty period/start date, expected useful life
  - e. Financial Data – estimated installed cost (allocation of OPCC to the assets)

## TASK 2 – PROGRAMMING AND INTEGRATION – NO CHANGES

### TIME SCHEDULE

Consultant’s original proposal anticipated construction duration of twenty-four (24) months will be required. This amendment is provided to account for initial contractor NTP of August 4, 2021 and a revised final completion date of May 17, 2024. The updated construction duration is thirty-four (34) months.

### FEE SCHEDULE

We will provide these services in accordance with our Agreement for Professional Services for Water Plant and Water Resources Engineering Services – RFQ 2019070, dated November 5, 2019, by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida (“COUNTY”) and Kimley-Horn and Associates, Inc., (“Consultant”).

The Consultant will provide professional services on a lump sum fee basis as follows:

Task No.	Task	WO #6 (Previously Authorized)	Amendment 1	Revised Total
Task 1	Construction Phase Services	\$865,774	\$263,133	\$1,128,907
Task 2	Programming and Integration	\$356,772	\$0	\$356,772
	Total Lump Sum Fee	\$1,222,546	<b>\$263,133</b>	\$1,485,679

### ADDITIONAL SERVICES

The following services are not included in the Scope of Services for this project but may be required depending on circumstances that may arise during the execution of this project. Additional services include, but may not be limited to the following:

- Construction phase services beyond what is described herein
- Re-design or integration beyond what is described herein

ESTIMATE FOR ENGINEERING SERVICES													
PROJECT: IRC Oslo WTP CPS - Amendment													
CLIENT: Indian River County Utilities													
ESTIMATOR: NB													
DESCRIPTION:		DIRECT LABOR (MAN-HOURS)											
		MDM/TJ	NB		BK		JF				Dir Exp	WORK ORDER 6	AMENDMENT 1
IRCU Oslo WTP CPS Amendment		PRINC	SEN PROF	REG PROF	PROF 2	PROF 1	DESIGN INSP	SEN SUPP	SUPP STAFF	EXP SUB	4.6%	TOTAL	TOTAL
NO.	TASK												
<b>1</b>	<b>CONSTRUCTION PHASE SERVICES</b>												
	Site Visits (up to 250)	60	60	1040		600	1600			\$2,400	\$21,073	\$481,572.60	
	<b>Additional: 100 Site Visits &amp; Field Reports</b>	<b>12</b>	<b>80</b>		<b>100</b>		<b>600</b>				<b>\$4,983</b>		<b>\$113,299</b>
	Progress Meetings (30)	48		60		30			48		\$1,275	\$25,718.57	
	<b>Additional: 20 progress meetings</b>	<b>12</b>	<b>40</b>		<b>40</b>		<b>40</b>				<b>\$1,004</b>		<b>\$22,840</b>
	Clarifications, Recommendations, Substitutes	40	40	60		40	60		24		\$1,910	\$34,310.47	
	Shop Drawing Review (x 150 w/ 1 resubmittal each)	40		300		300			240		\$4,896	\$95,016.24	
	<b>Additional: 10 shop drawings</b>		<b>20</b>		<b>40</b>		<b>20</b>				<b>\$553</b>		<b>\$12,573</b>
	Review Payment Applications and Change Order Requests	20		60					30		\$753	\$15,093.48	
	<b>Additional: Pay Application Review (x4)</b>		<b>8</b>		<b>16</b>		<b>20</b>		<b>6</b>		<b>\$309</b>		<b>\$7,025</b>
	Start-up & Witness Testing (x20 days)	60	60	240		120					\$3,629	\$82,529.40	
	Substantial Completion Site Visit Punchlist	12		40		40	60		24		\$1,047	\$14,683.33	
	Final Completion	4		12		20	20		4		\$361	\$5,428.64	
	Review record drawings and O&Ms	8		30		60			24		\$686	\$13,970.14	
	<b>Additional: AutoCAD Record Drawings</b>		<b>12</b>		<b>60</b>	<b>80</b>					<b>\$880</b>		<b>\$20,000</b>
	Submit Construction Completion Certifications (FDEP)	8	12	20		40			12		\$596	\$12,740.16	
	Attend FDEP Project Walkthrough & Prep	8		12		16			8		\$283	\$5,882.62	
	Permitting (site plan admin approval)	4		12					8		\$157	\$3,024.95	
	Admin (invoicing, reports, etc.)			24					24		\$287	\$6,527.04	
	<b>Additional: Admin for 10 more months</b>		<b>20</b>						<b>40</b>		<b>\$328</b>		<b>\$7,448</b>
	C&W - Electrical	8	12	20		40			6	\$56,555	\$577	\$69,276.39	
	<b>Additional: C&amp;W Time &amp; Effort (see sub proposal)</b>		<b>10</b>						<b>12</b>	<b>\$22,265</b>	<b>\$139</b>		<b>\$25,420</b>
	<b>Additional: Davis-Bacon Wage Review</b>		<b>18</b>		<b>50</b>		<b>30</b>				<b>\$649</b>		<b>\$14,759</b>
	<b>Additional: Davis-Bacon Interviews</b>		<b>4</b>		<b>80</b>		<b>20</b>				<b>\$627</b>		<b>\$14,247</b>
	<b>Additional: Asset List</b>		<b>30</b>		<b>100</b>		<b>40</b>				<b>\$1,122</b>		<b>\$25,522</b>
<b>2</b>	<b>PROGRAMMING AND INTEGRATION</b>												
	CSD	24		40		60			12	\$343,440	\$900	\$356,772.13	
	TOTAL HOURS	368	426	1970	486	1446	2510	24	498	424660	\$49,024	<b>\$1,222,546</b>	<b>\$263,133</b>
	LABOR (\$/HOUR)	243	220	158	128	110	125	102	68		\$0	\$0	\$0

# C & W engineering Inc.

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Consulting Engineers – Electrical • HVAC • Plumbing

6903 Vista Parkway North, #10  
West Palm Beach, FL 33411  
(561) 642-5333

August 9, 2023

Nick Black, P.E.  
Kimley Horn & Associates  
1920 Wekiva Way  
Suite 200  
West Palm Beach, FL 33411

Subject: IRC Oslo WTP Improvements for HSPS/Nano Train/Wells and PLC-SCADA  
Tasks 4 thru 8- Additional Services  
Electrical Construction Additional Services Proposal  
C&W Ref. 66428.CS WTP/HSPS/Wells/PLC/SCADA

Dear Nick:

I am pleased to submit this proposal for additional services for the Engineering Services during construction for the IRC Oslo WTP – this request for additional services is to cover the upcoming monthly meetings (we will not attend meetings every two weeks, instead we will attend monthly progress meetings), We will also attend major equipment startups, substantial completion startups, monthly meetings, and final punch list check.

**We will have exhausted the fee for the GE switchgear replacements (shop drawings, coordination meetings, initial installation, temporary power and ATS, and final installation and revision of the oneline and equipment plan drawings (original fee of \$6,540.) in the coming weeks.**

**We will also exhaust the construction services fee of \$56,555 for the Oslo plant improvements by end of August 2023 – this is due to the number of monthly progress meetings that started late last year as every two weeks, and continue through end of August of 2023; please refer to the attachments.**

The additional constructions services will cover the following:

1. Attend remaining monthly meetings, we currently anticipate 8 more meetings starting in September 2023 till May 2024.
2. Attend startups in September and October of the Well sites 2,3,5, and 6; this

- shall include having the fiber terminated and communications established with the plant PLC via FO cable (new and existing including terminations and splices). Expected completion dates between September and October, by 10/26
3. HSP 1-3 completion, provide inspection (this is covered mostly by the original CS proposal).
  4. Acid and scale inhibitor improvements to be completed by 8-30-23 (this is covered by the original CS proposal).
  5. Feedwater and concentrate piping @ CTF (this would include all VFD equipment including replacing the feed water pump soft starters for VFD. Expected completion date 9-12-23.
  6. NF Train 2 begin performance testing and checking controls and NF RIO PLC Panel along with motorized valves and NF instruments. 9-15-23 expected completion date.
  7. NF Train 3 begin performance testing and checking controls and NF RIO PLC Panel along with motorized valves and NF instruments. 11-2-23 expected completion date.
  8. NF Train 4 begin performance testing and checking controls and NF RIO PLC Panel along with motorized valves and NF instruments. 12-11-23 expected completion date.
  9. NF Train 1 begin performance testing and checking controls and NF RIO PLC Panel along with motorized valves and NF instruments. 1-18-24 expected completion date.
  10. Attend a substantial completion walk through and provide a punch list of the findings, expected date 3-15-24
  11. Attend a final completion walk through and provide a punch of the findings, expected date 5-17-24
  12. Provide as-built drawings based on Contractor provided redlines.

## **CONSTRUCTION SERVICES**

### Coordination

Kimley Horn and Associates

Owner

Contractor

Progress Monthly Meetings

Startups and Progress field inspections, some during equipment startups

Attend a startup and testing field visit and provide a punch list to each well Site including confirming FO communications between each well PLC panel and the plant SCADA.

Attend a startup and testing field visit and provide a punch list to each NF Train skid and its field instruments, actuators, and RIO NF PLC panels.

Attend startup and testing of various PLC and control panels, like the



instruments and signals from the finish water panel, the various chemical systems, and the CIP panel and components.

Provide as-built drawings based on redlines from the Contractor.

<b>Fee Services From previous proposal/IPO</b>	<b>TOTAL Fee:</b>
<b><u>ORIGINAL ELECTRICAL CONSTRUCTION SERVICES:</u></b> (This will be exhausted by end of September billing period) <b>From March 1<sup>st</sup> Previous Proposal IPO # Work Order #6</b>	\$56,555 lump sum.
<b><u>HIGH SERVICE PLC PART A CONSTRUCTION SERVICE FEE:</u></b> (We will be exhausting the budgeted amount by end of September) <b>From February 18<sup>th</sup> Previous Proposal IPO # Work Order #4</b>	\$ 6,000 lump sum.
<b><u>ADDITIONAL ELECTRICAL CONSTRUCTION SERVICES:</u></b> (We have prepared an additional service proposal)	<b>\$ 16,625 lump sum</b>
<b><u>SWITCHGEAR RELATED CONSTRUCTION SERVICES FEE:</u></b> (We will invoice 90% for the month ending in July) (From February 2022 Prev Proposal work performed without IPO)	\$ 5,640 lump sum.
<b>Total Amount of construction service needing approval:</b>	<b>\$22,265 lump sum</b>

I trust the scope and fee are in agreement with your needs and expectations.  
Please contact me with questions or comments. Thanks for this opportunity.

Very truly yours,

**C&W Engineering, Inc.**



Michael Guida, PE

**Additional Services Proposal from September 2023 to May 2024**

IRC Oslo WTP Improvements for HSPS/Nano Train/Wells and PLC-SCADA Tasks 4 thru 8 CONSTRUCTION SERVICES, task hour estimate

DESCRIPTION	MAG	JLR	AD	NL
<b>Testing and Startups of systems, PLC panels, chemical systems, pumps, VFDs and instruments</b>				
Attend monthly progress meetings (total of 8 meetings from Sept 2023 to May 2024)	1	20		2
Attend Well 2 PLC/RTU and confirm FO terminations and startup, provide punch list	1	6	6	
Attend Well 3 PLC/RTU and confirm FO terminations and startup, provide punch list	1	6		
Attend Well 5 PLC/RTU and confirm FO terminations and startup, provide punch list		6	6	
Attend Well 6 PLC/RTU and confirm FO terminations and startup, including Well 6 Soft starter, provide punch list.		6		
Attend the Feedwater and concentrate piping @CTF including Feedwater VFD equipment after its been programmed to operate as VFD no soft starter This shall include the finished water panel startup, check field instruments and signals from HSP 4 and 5		5	5	
Attend the RO Skid 2 demo and installation progress and attend the startup of the Skid No 2 Status panel and RIO PLC panel and its instruments and motorized valves., provide punch list		6	6	2
Review that all signals with CP-1 and HSP-PLC control panels have been completed and picked up in SCADA	1	5		
Attend the RO Skid 3 demo and installation progress and attend the startup of the Skid No 3 Status panel and RIO PLC panel and its instruments and motorized valves., provide punch list		6		
Attend the RO Skid 1 demo and installation progress and attend the startup of the Skid No 1 Status panel and RIO PLC panel and its instruments and motorized valves, provide punch list		6	6	2
Attend the RO Skid 4 demo and installation progress and attend the startup of the Skid No 4 Status panel and RIO PLC panel and its instruments and motorized valves, provide punch list		6		
Miscellaneous walk through plant systems, CO2, bulk storage tank, CIP cleaning system, Acid		6	6	
Provide As-built drawings based on Contractor redlines	1	2	10	

MAN HOUR TOTALS	5	86	45	6
MAN HOUR RATES				
ENGINEER	\$ 180	\$ 130		
AUTO CAD DRAFTING			\$ 95	
SECRETARIAL				\$ 45
<b>LABOR COST SUBTOTALS</b>	<b>900</b>	<b>11180</b>	<b>4275</b>	<b>270</b>
<b>LABOR COST TOTAL</b>				<b>\$ 16,625</b>

**Fee**

**\$16,625**