

**WORK ORDER 8**

**North County Water Treatment Plant 2021 Discharge Permit Renewal**

This Work Order Number 8 is entered into as of this 19 day of April 2022, pursuant to that certain Continuing Contract Agreement, dated April 17, 2018, renewed and amended as of May 18, 2021 (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 the pertinent paragraph (Time Schedule), within 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:**

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

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

**By:** \_\_\_\_\_  
, Chairman

**Print Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

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

**Attest: Jeffrey R. Smith, Clerk of Court and Comptroller**

**By:** \_\_\_\_\_  
Deputy Clerk

**Approved:** \_\_\_\_\_  
Jason E. Brown, County Administrator

**Approved as to form and legal sufficiency:** \_\_\_\_\_  
Dylan T. Reingold, County Attorney

**EXHIBIT #A**

**Work Order Number 8**

**Spoonbill Marsh Industrial Wastewater Facility Permit Renewal**

**for**

**North Hobart Rd Water Treatment Plant**

**PROJECT UNDERSTANDING**

Indian River County Utilities (IRCU) owns and operates a membrane (NF) water treatment plant currently rated at 17.14 mgd maximum daily flow based on treatment capacity, but limited to 11.44 mgd based on the existing industrial wastewater facility permit for demineralized concentrate disposal rated for 2.0 mgd maximum daily flow currently. The existing industrial wastewater facility permit FL0166511-006-IW5A/NR expires **July 23, 2023**, and IRCU desires to request an uprating to 3.0 MGD, and renew the operating permit in a timely manner. The renewal application and fees are due to be submitted to FDEP Southeast District 180 days in advance, or by **January 24, 2023**. The application process can take up to 6 months, and therefore, should be started before June 2022.

The facility includes a brackish water wetland treatment and disposal site named Spoonbill Marsh (D-003), where concentrate from the Hobart water treatment plant is transmitted via a 16-inch diameter pipe and blended with Indian River Lagoon water, then discharged to a 69+ acre marsh (designated Class II Outstanding Florida Water body) before exiting through flowway breeches and runnels to the Indian River Lagoon, a Class III marine body. A river water intake structure, including debris baffle, static mixer, transmission piping, and series of four man made ponds with upwelling structures and other appurtenances. The spoonbill marsh is located east of Isles of Grand Harbor subdivision and west of the Indian River Lagoon.

The permit allows for concentrate flow capacity to be increased from 2.0 mgd up to 3.0 mgd (MDF) contingent upon demonstration of a net environmental benefit is achieved, defined as a net reduction of nutrients (nitrogen and phosphorus). Part of this application will include a review of the data and a request to increase the permitted capacity.

The following scope of services consists of preparing and submitting a request to increase the permitted capacity, an operating permit renewal, and responding to requests for additional information from the Florida Department of Environmental Protection.

**SCOPE OF SERVICES**

The scope of services will consist of collecting and reviewing the existing operating data since the last renewal (5-years) and operation of the Spoonbill Marsh system, preparation and submittal of permit application including existing information furnished by IRCU which will be updated as part of the application package, concentrate water quality, and responding to FDEP requests for additional information (RFI).

Consultant will attend a kick-off meeting to discuss the operation of the existing treatment system since the previous permit renewal, collect data, and discuss potential revisions to the permit through the application renewal. Consultant will conduct a site visit with operations staff to review the operation of the existing Spoonbill Marsh and stormwater pump station, and attend a pre-application/site meeting with FDEP staff, if required as suggested in their notice of permit renewal.

Consultant will prepare applicable applications and supporting information to maintain the existing rated capacity. Application forms including 62-620.910(1) and 2DC 62-620.910 (18) forms will be prepared and submitted along with supporting tables, graphs, and process flow diagram. Consultant will update the existing engineering report prepared for the previous up-rating.

Consultant will prepare a list of data and documentation needed for the preparation of the permit renewal application. Information such as background water quality data, treatment plant water quality, MOR's, daily plant flow data, non-compliance notices, historical concentrate water characteristic data, etc., as a minimum, will be provided by IRCU for use in preparing the permit application.

The following parameters are included as part of the existing operating permit and will be reviewed as part of the permit application. Almost all of these parameters are measured at the effluent location (EFF-003, INT-003) of the treatment system. Where practical and if desired, the frequency and/or elimination of testing will be requested in the permitting process.

- Flow
  - pH
  - Phosphorus (Total)
  - Nitrogen (Total)
  - Chromium, Hex (Cr6)
  - Copper
  - Hydrogen Sulfide
  - Dissolved Oxygen
  - Fluoride
  - Chronic Whole Effluent Toxicity – Mysid Shrimp (*Americamysis* (*Mysidopsis*) *bahia*)
  - Chronic Whole Effluent Toxicity – Silverside (*Menidia beryllina*)
- |                         |
|-------------------------|
| Chlorine                |
| Temperature             |
| Ortho-phosphorus        |
| Mercury                 |
| Ammonia Nitrogen        |
| Iron                    |
| Gross Alpha             |
| Radium 226/228          |
| Conductivity (Salinity) |

Consultant will rely on the calculations for Total Daily Mass Load (TMDL) and Spoonbill Marsh system performance as outlined in the permit.

Consultant will prepare a draft application with supporting tables, graphs, trends, and explanations to the permit application renewal and submit draft copies to IRCU staff for review one month prior to submittal deadline. Consultant will attend a review meeting to

discuss the draft application and supporting information, and revise the permit application based on comments developed in review meeting.

It is assumed that only minor adjustments to the best management plan and standard operating protocols will need to be provided, and Consultant will update the existing Best Management Practices (BMP) and Standard Operating Procedure (SOP) provided and prepared previously by IRCU.

We do not anticipate more than two requests for additional information which will be addressed under this scope. Should the permitting process involve extensive coordination and additional responses beyond what is listed herein with FDEP, this should be considered additional scope and services.

A permit application fee of \$6,000 will be paid for by IRCU when permit is submitted in December 2022 and is NOT included in this scope of services.

### **TIME SCHEDULE**

Consultant will complete these tasks in a timely and mutually agreed upon schedule, and intends on submitting the permit application and supporting information by the submittal deadline of **January, 2023.**

### **FEE SCHEDULE**

We will provide these services in accordance with our Continuing Consulting Engineering Services Agreement for Professional Services dated April 17th, 2018, 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 for Task 1 through Task 7 on a lump sum fee basis as follows: :

<b>Task No.</b>	<b>Task</b>	<b>Task Fee</b>
<b>Task 1</b>	<b>Collect &amp; Review Data</b>	<b>\$ 7,903</b>
<b>Task 2</b>	<b>Meetings</b>	<b>\$ 6,934</b>
<b>Task 3</b>	<b>Review &amp; Evaluate Results</b>	<b>\$ 9,462</b>
<b>Task 4</b>	<b>Prepare Application</b>	<b>\$ 7,763</b>
<b>Task 5</b>	<b>Prepare Supporting Information</b>	<b>\$ 9,742</b>
<b>Task 6</b>	<b>Submit Permit Package &amp; Coordination</b>	<b>\$ 5,306</b>
<b>Task 7</b>	<b>Respond to RAI's</b>	<b>\$ 21,800</b>
	<b>Total Lump Sum Fee =</b>	<b>\$ 68,910</b>

Consultant will invoice the Client \$34,455.00 before September 30, 2022 and \$34,455.00 invoiced between October 1,2022 and December 30, 2022.

### **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:

- Additional coordination and responses to FDEP or other agencies (ACOE, IRFWCD)
- Preparation of Operating Protocols and Best Management Practices
- Design drawings

### EXHIBIT B - FEE SCHEDULE

PROJECT: North Hobart RO Plant Industrial Wastewater Facility Permit Renewal 2022							SHEET	1	OF	1
CLIENT: Indian River County Utilities							FILE NO.			
ESTIMATOR: MDM							DATE: 3/25/22			
DESCRIPTION:		DIRECT LABOR (MAN-HOURS)						Dir Exp	LINE	
		PRINC	SEN PROF	REG PROF JL/FH	DES/ P2 (TS/NB)	CLK P1	EXP SUB		TOTAL	
NO.	TASK									
<b>1</b>	Collect data, Review existing permit & site visit		12	12	18	4		229	\$7,903	
<b>2</b>	Kickoff, Pre-application site meeting, review meeting		16	6	12	4		200	\$6,934	
<b>3</b>	Review water quality results, data & summarize		4	20	30	6		416	\$9,462	
<b>4</b>	Prepare application - Uprating & Renewal		8	16	16	8		195	\$7,763	
<b>5</b>	Prepare supporting docs, update BMP		6	20	30	4		428	\$9,742	
<b>6</b>	Submit permit package & coordination		6	6	18	2		254	\$5,306	
<b>7</b>	Respond to RAI's (2)		12	24	40	12	8000	288	\$21,800	
TOTAL HOURS		0	64	104	164	40	8000	\$2,010	<b>\$68,910</b>	
LABOR (\$/HOUR)		245	230	175	135	96		\$0	\$0	
SUBTOTAL		0	14720	18200	22140	3840	0	\$58,900	\$0	

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