



January 9, 2020

Bryan Gongre
Utilities Inc., of Florida
200 Weathersfield Ave.
Altamonte Springs, FL 32714

Re: Wekiva Headworks Replacement
Sanlando Service Area

Dear Bryan:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to Utilities Inc., of Florida ("Client") for providing services related to the design of the improvements to the Wekiva Hunt Club WRF.

Project Understanding

The Wekiva Hunt Club WRF headworks recently failed due to equipment failure in conjunction with increased loading on the facility. The Headworks screening facility is proposed to be replaced to provide increased capacity, redundancy, control, and monitoring. The improvements include a new influent structure containing two mechanical screens and a reconfiguration of the piping to use the existing channel as the passive bypass to the equalization tank.

Scope of Services

This scope is intended to describe the general methodology associated with the development of the plans and specification documents to complete this project.

Task 1 – Preliminary Design. This task includes equipment selection and the establishment of an overall configuration of the headworks to allow for proper access and maintenance. Equipment selection will include a review of the available types of screens with the Utility and site visits to facilities with the equipment to be considered. A selection of the specific type of screen will be made based on configuration, capital cost, maintenance, and service record. Once selected this will allow for the headworks channels and associated structure to be designed. A preliminary configuration will be drafted to include normal operational flow, bypass flows, maintenance access, and screenings removal access. This task will be completed for the lump sum fee of \$15,261.

Task 2 – Final Design. The final design of the project will include the civil/mechanical design required for the installation as well as the structural design of the headworks and the electrical design of the SCADA/Controls systems. The proposed facilities are anticipated to be placed beside the existing headworks and integrated into their operations. Additionally, the walkways

will be tied together and site improvements made to allow for dumpster pickup and maintenance access. The headworks will generally be configured as a two channel system with two mechanical screens. Bypassing will be designed to use the existing structure with a passive emergency bypass back to the equalization tank. The equalization pumping will be modified to allow direct pumping to each plant for flow proportional balancing.

The plans will be developed using the existing survey and as-built documents of the site. The sheet set will generally include the following:

- Cover Sheet
- General Notes
- Existing Site Plan
- Demolition Plan
- Site Piping Plan
- Grading and Layout Plan
- Structural Plans and Details (4 sheets)
- Headworks Mechanical Plan and Sections (4 sheets)
- Equalization Pumping Plan and Details (2 sheets)
- Civil/Mechanical Details (3 sheets)
- Electrical Plans (6 sheets)

Plans will be reviewed with staff at the 60% and 90% levels prior to completion for bidding and construction. Geotechnical borings will be taken at the proposed structure location to confirm soil bearing capacity. On site piping modifications will be made to coordinate with pending force main improvements and will be coordinated to maintain continuous operation of the facility.

Structural design will be a reinforced concrete structure, with a corrosion resistant coating. The walkways and platforms will be designed with aluminum grating and handrails design to be integrated into the concrete structure.

Electrical design will account for site electrical, lighting, controls, and instrumentation. The controls will be designed to integrate into the facility SCADA system allowing for advanced monitoring of the proposed equipment. Instrumentation includes flow metering, level monitoring and control, mechanical bar screen integration, and any associated sampling equipment.

Final design services can be completed for \$116,303. This includes subconsultant fees of \$33,000 for electrical and geotechnical work

Task 3 – Permitting. Permits will be required through the FDEP and Seminole County. The FDEP will require a minor modification permit for these improvements. A site plan permit will be required from Seminole County with building permitting support during the construction phase. This task is proposed to be completed for \$13,342 including the permitting fees for FDEP minor modification and the site plan application.

Task 4 – Construction Services. This project is preliminarily estimated at 2 million dollars and must be completed as quickly as possible. We are proposing construction administration services including bidding, shop drawing review, and record drawings preparation. Additionally, we are proposing part time construction services which will include monthly progress review and attendance at monthly meetings. This task is proposed to be completed for \$41,809 including \$15,000 in subconsultant fees.

Deliverables

The final deliverable will be a digital and hard copy set of plans and specifications to be used in design. Review sets will be provided at the conceptual stage, 60% complete, 90% complete, and final design. Kimley-Horn will provide plans and specifications for bidding purposes to the contractors and will provide construction sets to the selected contractor. At the end of the project, record drawings will be prepared and submitted digitally and in hard copy.

Schedule

We will provide our services as expeditiously as practicable with the goal completing the design and being bid ready within 6 months of authorization.

Fee and Expenses

Kimley-Horn will perform these services for the total lump sum fee of \$188,715.00.

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Very truly yours,
KIMLEY-HORN AND ASSOCIATES, INC.

Steve Romano, PE
Associate

Jon Martin, PE
Sr. Vice President

**ACCEPTED BY:
UTILITIES, INC. OF FLORIDA**



Date: 2/14/2020

REVISED BID COMPARISON
FOR
Wekiva Headworks
Utilities Inc of Florida

ITEM #	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	Original CO		FEC REVISION	GARNEY REVISION	TLC REVISION
					AMOUNT	TOTAL PRICE	TOTAL PRICE	TOTAL PRICE	
GENERAL									
1	Mobilization	LS	1	NA	NA	N/A		\$ 17,025.00	\$ 23,911.00
1A	General Requirements	LS	1	\$ 135,000.00	\$ 135,000.00		\$ 135,000.00	\$ 225,000.00	\$ 172,620.00
2	County Permit Fee (payable at actual cost)	LS	1	\$ 35,000.00	\$ 35,000.00		\$ 35,000.00	\$ 35,000.00	\$ 35,000.00
3	Project Closeout/Record Drawings	LS	1	\$ 25,000.00	\$ 25,000.00		\$ 25,000.00	\$ 1,800.00	\$ 8,250.00
4	Construction Testing	LS	1	\$ 20,000.00	\$ 20,000.00		\$ 20,000.00	\$ 56,750.00	\$ 7,991.00
SITE WORK									
5	Grading	LS	1	\$ 22,400.00	\$ 22,400.00		\$ 22,400.00	\$ 20,000.00	\$ 21,511.00
6	Asphalt Paving	SF	1,250	\$ 25.60	\$ 32,000.00		\$ 32,000.00	\$ 17,500.00	\$ 8,125.00
7	Concrete Paving	SF	400	\$ 9.50	\$ 3,800.00		\$ 3,800.00	\$ 11,600.00	\$ 5,200.00
8	Bollards	LS	1	\$ 8,000.00	\$ 8,000.00		\$ 8,000.00	\$ 7,800.00	\$ 5,850.00
9	Pipe Supports	LS	1	\$ 10,400.00	\$ 10,400.00		\$ 10,400.00	\$ 8,450.00	\$ 11,700.00
10	Flow Meter Assembly Pad (Concrete)	CY	3	\$ 2,000.00	\$ 6,000.00		\$ -	\$ -	\$ -
SITE PIPING, FITTINGS, VALVES, METERS									
11	Site Piping, Fittings & Valves	LS	1	\$ 431,310.00	\$ 431,310.00		\$ 438,522.00	\$ 705,650.00	\$ 675,500.00
12	16" Mag Meter - Strap On	EA	1	\$ 7,058.00	\$ 7,058.00		\$ 4,500.00	\$ 12,500.00	\$ 8,500.00
13	30" Plug Valve, MJ	EA	1	\$ 23,535.00	\$ 23,535.00		\$ -		
14	16" Plug Valve, FLG	EA	3	\$ 5,362.00	\$ 16,086.00		\$ -		
15	16" Plug Valve, MJ	EA	2	\$ 5,403.00	\$ 10,806.00		\$ -		
16	12" Plug Valve, FLG	EA	1	\$ 2,838.00	\$ 2,838.00		\$ -		
17	12" Plug Valve, MJ	EA	2	\$ 3,018.00	\$ 6,036.00		\$ -		
18	12" Check Valve	EA	1	\$ 5,055.00	\$ 5,055.00		\$ -		
19	2" ARV	EA	2	\$ 1,428.00	\$ 2,856.00		\$ -		
**Note: Items 13-19 are included in lump sum of Item #11									
HEADWORKS STRUCTURE									
20	Headworks Structure (Concrete structure, channels)	LS	1	\$ 501,400.00	\$ 501,400.00		\$ 422,000.00	\$ 296,500.00	\$ 345,600.00
21	Center Flow Screens, Washer/Compactor and Sluice System, Tankless Hot Water Heater (UIF to Direct Purchase. Item includes Installation)	LS	1	\$ 538,000.00	\$ 538,000.00		\$ 538,000.00	\$ 538,000.00	\$ 538,000.00
22	Manual Bar Screen (2 ft)	EA	1	\$ 10,000.00	\$ 10,000.00		\$ 10,000.00	\$ 3,500.00	\$ 3,734.00
23	Slide Gates	LS	1	\$ 41,625.00	\$ 41,625.00		\$ 27,750.00	\$ 24,000.00	\$ 31,732.00
24	Stop Gates	EA	2	\$ 13,875.00	\$ 27,750.00		\$ 27,750.00	\$ 32,000.00	\$ 23,520.00
25	Fiberglass Grating	SF	270	\$ 122.00	\$ 32,940.00		\$ 32,940.00	\$ 14,580.00	\$ 9,450.00
26	Hand Rails	LF	110	\$ 300.00	\$ 33,000.00		\$ 33,000.00	\$ 11,770.00	\$ 7,480.00
27	Stairs & Aluminum Walkway	LS	1	\$ 12,970.00	\$ 12,970.00		\$ 12,970.00	\$ 10,120.00	\$ 3,846.00
28	Hose Rack	EA	2	\$ 900.00	\$ 1,800.00		\$ 1,800.00	\$ 800.00	\$ 1,080.00
29	Existing Structure (Demo step screen, chute, conveyor, weirs, and gates, and connecting pipes and grating)	LS	1	\$ 31,000.00	\$ 31,000.00		\$ 31,000.00	\$ 22,000.00	\$ 10,081.00
SPLITTER BOX STRUCTURE									
30	Splitter Box Structure	CY	40	\$ 3,256.25	\$ 130,250.00		\$ 130,250.00	\$ 88,400.00	\$ 90,500.00
31	Slide Gates (6' x 2')	EA	3	\$ 11,667.00	\$ 35,001.00		\$ 35,001.00	\$ 39,000.00	\$ 39,900.00
32	Fiberglass Grating (including walkway)	SF	84	\$ 238.00	\$ 19,992.00		\$ 19,992.00	\$ 4,872.00	\$ 7,896.00
33	Hand Rails (including walkway)	LF	54	\$ 370.00	\$ 19,980.00		\$ 19,980.00	\$ 5,778.00	\$ 3,618.00
34	Pipe Connections (removing pipe from existing structure, pipe connections to plant, and temporary piping)	LS	1	\$ 25,000.00	\$ 25,000.00		\$ 25,000.00	\$ 25,000.00	\$ 24,245.00
35	Pump (FLYGT)	EA	1	\$ 65,375.00	\$ 65,375.00		\$ 65,375.00	\$ 65,375.00	\$ 65,375.00
36	Mechanical Hoist (1,200-lb)	EA	4	\$ 25,000.00	\$ 100,000.00		\$ -		
37	Removal of Hoists (UIF Staff)	LS	-	NA	NA		N/A		
38	Pump Concrete Pad	CY	3	\$ 1,500.00	\$ 4,500.00		\$ 4,500.00	\$ 4,185.00	\$ 3,690.00
39	Rehab and Clean Surge Tank	LS	1	\$ 235,000.00	\$ 235,000.00		\$ -		
40	30" Connection for influent pipe	EA	1	\$ 35,000.00	\$ 35,000.00		\$ 35,000.00	\$ 35,000.00	\$ 35,000.00
ELECTRICAL									
41	Electrical	LS	1	\$ 345,723.00	\$ 345,723.00		\$ 307,485.00	\$ 307,485.00	\$ 307,485.00
42	Instrumentation and Controls	LS	1	\$ 48,747.00	\$ 48,747.00		\$ 48,747.00	\$ 48,747.00	\$ 48,747.00
GRAND TOTAL					\$ 3,098,233.00	\$ 2,563,162.00	\$ 2,696,187.00	\$ 2,585,137.00	