## **CHANGE ORDER**

No.\_\_\_1

PROJECT: North County Water Treatment Plant Well N7 Formation Water Disposal Measures and Gopher Tortoise Management									
DATE OF ISSUANCE March , 2022	EFFECTIVE DATE March , 2022								
OWNER <u>Indian River County</u>									
OWNER's Contract No. <u>Agreement Dated July 13, 2021</u> Project No. <u>04457210</u>									
CONTRACTOR <u>All Webbs Enterprises, Inc.</u> ENG	SINEER Kimley-Horn and Associates								
You are directed to make the following changes in the Contract Documents:  Description: Install 800 linear feet of silt fence and pipe ramps for gopher tortoise management; add turbidity controls to formation water disposal to meet 0 NTU above background in G7 canal (in accordance with IRFWCD Discharge permit No. 22-07). Modify configuration to blend discharge with raw water, add settling tanks, add floc logs, furnish dissipation structure in canal (install by owner). Change Order 1 includes an increase in contract price for Well N7 (\$92,435) and a net reduction of the total Contract Price for work not performed on Well S1 (\$211,465).									
Reason for change order: Meet discharge permit reque requirements for gopher tortoise relocation.	airements for IRFWCD and FWC permit								
Attachments: (List documents supporting change)									
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME								
Original Contract Price	Original Contract Times								
\$992,100.00	Substantial Completion: 270 (April 9, 2022) Ready for final payment: 300 (May 9, 2022) Days or dates								
Net changes from previous Change Orders	Net change from previous Change Orders								
\$N/A	N/Adays								
Contract Price prior to this Change Order	Contract Time prior to this Change Order								
	Substantial Completion: July 8, 2022								
\$992,100	Ready for final payment: August 7, 2022								
	Days or dates								
Net Increase (decrease) in this Change Order	Net Increase in this Change Order								
\$(211,465)	118								
	days								
Contract Price with all approved Change Orders	Contract Time with all approved Change Orders								
¢ 700.635	Substantial Completion: 388								
\$	Ready for final payment: 418  Days or dates								
RECOMMENDED: APPROVED:	ACCEPTED:								
By: All Grimaldi By:	By:								
Engineer (Authorized Signature) Owner (Authorial Grimaldi, Kimley-Horn and Associates	ized Signature) Contractor (Authorized Signature								
Date: Date:	Dave Webb, Jr. All Webbs, Inc. Date: _ フィフ8/ スロユユ								

Date: \_\_\_\_



February 25, 2022

Jon Friedrichs Principal Hydrogeologist JLA Geosciences, Inc. CELL: (561) 459-9355

Dear Jon,

RE: IRC N7 Request for Change Order Discharge Requirements and Tortise Impact

## Reason

The recently issued IRFWCD discharge permit #22-07 and the special conditions in that permit as the reason for the additional costs and time. The Special Conditions for Permit No. 22-07 for temporary discharge of formation water associated with deepening IRCDUS existing production well N7 from the UFA to the APPZ/Lower Floridan Aquifer, into Sublateral G-7 (81st Street) Canal Located in NW ¼ of SE ¼ of Section 32-31-39 include:

- (1) Off-site discharge of formation water associated with proposed well deepening shall not exceed 1,250 PPM total dissolved solids (TDS), and turbidity shall not exceed existing background Nephelometric Turbidity Units (NTU) of receiving wasters within canal system.
- (2) TDS and turbidity of said off-site discharge water shall be monitored several times daily. If/when above limits of TDS and turbidity are exceeded, Permittee is to notify David E. Gunter, Superintendent of Indian River Farms Water Control District, of remedial action taken to bring operation within permit limits.
- (3) Permittee shall advise the District (Phone: 772-562-2141) in advance of commencement and upon completion of proposed well deepening operations.

The discharge requirements in the permit are extremely high, the system proposed below is an attempt to meet the requirements. Additional work may be required depending on the water quality encountered during deepening and David Gunter's remedial actions.

## **Pricing**

Description	Quantity	Units		Unit Cost	Extended Cost				
Silt Fence	1	LS	\$	4,000.00	\$	4,000.00			
Frac Tanks	4	LS	\$	5,778.75	\$	23,115.00			
Freight Tanks	4	LS	\$	2,673.75	\$	10,695.00			
Cleanout Tanks	4	LS	\$	2,673.75	\$	10,695.00			
Settling Tank	1	LS	\$	7,935.00	\$	7,935.00			
Filter Sand	1	LS	\$	5,520.00	\$	5,520.00			
Pumps	1	LS	\$	13,340.00	\$	13,340.00			
Pipe Ramps	50	LS	\$	144.90	\$	7,245.00			
Box	1	LS	\$	4,830.00	\$	4,830.00			
Floc Logs	10	LS	\$	506.00	\$	5,060.00			
subtotal					\$	92,435.00			

Additional Contract Time: 118 days for tortoise impact and discharge requirements.

Please contact me with any questions or concerns

Sincerely,

David Webb, Jr. Vice President

Good



February 24, 2022

Mr. Terry Southard
Operations Manager
Indian River County, Department of Utility Services
4350 41st Street
Vero Beach, Florida 32960

RE: Wellfield Feasibility Expansion - Change Order No. 1

All Webbs Enterprises

Dear Mr. Southard:

In July 2021, All Webbs Enterprises, Inc. (AWE) was contracted to assist with a Wellfield Feasibility Expansion Study that included deepening two of the County's existing production wells from the Upper Floridan Aquifer (UFA) to the Avon Park Production Zone (APPZ)/Lower Floridan Aquifer (LFA). The goal of the project was to deepen production wells S1 (south wellfield) and N7 (north wellfield) to obtain representative water quality and production data from the lower aquifer, to facilitate long-term water supply planning efforts.

AWE began the process of deepening S1 in October 2021; however, it was quickly discovered that the well was producing high volumes of sand during the drilling process and the well was determined to be unsuitable for further use. Given the condition of the well during drilling activities and the overall age of the well (constructed in 1982), the decision was made to halt the deepening activities and to plug and abandon the well. Well S1 has now been plugged and the County is making arrangements to drill a replacement well (S1R) under a separate contract. As a result, the work completed to date, through restoration for the abandoned well site, totals \$273,900 less than the originally budgeted amount.

Plans were made in December 2021 to mobilize to Well N7 to complete the scope of work associated with deepening the well. It was discovered that three gopher tortoise burrows were located within 25 feet of the planned work area limits, and therefore required relocation of the tortoises. The permitting and relocation activities were performed by others under separate authorization; however, AWE agreed to set the silt fence required to exclude the tortoises from returning to the work area. The additional work associated with the silt fence installation is \$4,000.

In the course of permitting the discharge for the N7 deepening, the Indian River Farms Water Control District indicated that the permit would be contingent upon meeting two strict water quality parameters. Total dissolved solids (TDS) would not be permitted to exceed 1,250 ppm, and turbidity of the discharge would not be permitted to exceed the background turbidity of the receiving canal at the end of pipe (0 NTU above background). Complying with these conditions will require that discharge water be blended with raw water from the surrounding wells (via the raw water main) and require the installation of additional turbidity measures that were not accounted for in the original



AWE bid for this project. The summary of additional measures and resulting costs are presented in **Table 1**.

Table 1 - Summary of Additional Services

Description	Quantity	Units	Unit Cost	Ex	tended Cost
Silt Fence Installation	800	LF	\$ 5.00	\$	4,000
Frac Tanks	4	LS	\$ 5,778.75	\$	23,115
Freight Tanks	4	LS	\$ 2,673.75	\$	10,695
Cleanout Tanks	4	LS	\$ 2,673.75	\$	10,695
Settling Tank	1	LS	\$ 7,935.00	\$	7,935
Filter Sand	1	LS	\$ 5,520.00	\$	5,520
Pumps	1	LS	\$ 13,340.00	\$	13,340
Pipe Ramps	50	LS	\$ 144.90	\$	7,245
Box	1	LS	\$ 4,830.00	\$	4,830
Floc Logs	10	LS	\$ 506.00	\$	5,060
	\$	92,435			

As noted above, approximately \$273,900 of the previously approved budget for S1 was unused and will not be invoiced to the County. Additionally, the \$50,000 allowance (see **Table 2**, Item 2) was only partially used. The remaining \$30,000 will not be invoiced to the County, for a total of \$303,900 in funds that will not be incurred on S1. Table 1 identifies \$92,435 in additional measures required to address the gopher tortoises and discharge limitations.

Kimley-Horn recommends increasing the contract value for N7 from \$474,800 to \$567,235 (a net increase of \$92,435) to address the additional permit requirements. Adjusting for the unused balance on the Well S1 work, the total contract value shall also be reduced from \$992,100 to \$780,635.

Table 2 - Summary of Funds

Item	Description	Au	Original thorization	Incurred to Date		Unused Balance		Work Change Directive No. 1		Updated Total	
1	Bonds/Insurance/General Conditions	\$	25,000	\$	25,000	\$	-	\$	-	\$	25,000
2	Unidentified Conditions Allowance (S1 Drill Bit)	\$	50,000	\$	20,000	\$	30,000	\$	(30,000)	\$	20,000
3	Well S1 Deepening	\$	442,300	\$	168,400	\$	273,900	\$	(273,900)	\$	168,400
4	Well N7 Deepening	\$	474,800	\$	-	\$	474,800	\$	92,435	\$	567,235
	Total	\$	992,100	\$	213,400	\$	778,700	\$	(211,465)	\$	780,635

<sup>\*</sup>Full budget for Well N7 is anticipated to be incurred completing original scope of work.



Change Order No. 1, executed by the contractor and Kimley-Horn, is attached for County approval. AWE is also requesting an additional 118 days to complete the work (beyond the original completion date, due to delays in permitting and coordinating these efforts).

Please contact me at (772) 794-4146 or <u>jill.grimaldi@kimley-horn.com</u> should you have any questions or require additional information.

Sincerely,

Jill Grimaldi, BCES
Project Manager

cc: Harrison Youngblood, Indian River County Mark Miller, Kimley-Horn and Associates

Jon Friedrichs, JLA Geosciences