AMENDMENT NO. 3 TO CONTRACT FOR PROFESSIONAL SERVICES

The City of Corpus Christi, Texas hereinafter called "City", and FREESE AND NICHOLS, INC. hereinafter called "Engineer", agree to the following amendments to the Contract for Professional Services for Whitecap Wastewater Treatment Plant Ultra-Violet Disinfection System Upgrade (Project No. E10179), as authorized and administratively amended by:

Original Contract	June 19, 2012	Motion No. M2012-113	\$249,352.00
Amendment No. 1	December 11, 2012	Administrative Approval	\$46,922.00
Amendment No. 2	January 18, 2013	Administrative Approval	\$30,826.00

The original contract, Exhibit "A", Basic Services shall be amended to include basic and additional services as specified in Amendment No. 3 Exhibit "A" and Exhibit "A-1".

The original contract, Exhibit "A", Summary of Fees shall be modified as specified in Amendment No. 3 Exhibit "A" Summary of Fees, for a fee not to exceed \$416,540.00 (Four Hundred Sixteen Thousand Five Hundred Forty Dollars and Zero Cents), for a total restated fee not to exceed \$743,640.00 (Seven Hundred Forty-Three Thousand Six Hundred Forty Dollars and Zero Cents). Monthly invoices shall be submitted in accordance with Amendment No. 3 Exhibit "B".

All other terms and conditions of the June 19, 2012 contract between the City and Engineer and any amendment to that contract which are not specifically addressed herein shall remain in full force and effect.

Date

CITY OF CORPUS CHRISTI

Mark Van Vleck, P.E., Interim Assistant City Manager for Public Works and Utilities

RECOMMENDED

Daniel Biles, P.E.,

Executive Director of Public Works

Date

perating Department

APPROVED

Office of Management and Budget Date

ATTEST

City Secretary

FREESE AND NICHOLS, INC.

2·31·13 Date

Ron Guzman, P.E., Principal 800 N. Shoreline Blvd., Suite 1600N Corpus Christi, TX 78401 (361) 561-6500 Office (361) 561-6501 Fax

ENTERED DEC 30 2013 Jee

Project Number: E10179
Fund Source: 550950-4249-00000-E10179 (\$210,000.00)
Fund Name: Wastewater 2012B CIP (Rev Bds)
Fund Source: 550950-4252-00000-E10179 (\$206,540.00)
Fund Name: Wastewater 2013 CIP (Rev Bds)
Encumbrance Number:

K:\ENGINEERING DATAEXCHANGE\JENNIFER\WASTEWATER\E10179 WHITECAP WWTP ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE\AMENDMENT NO. 3\CONTRACT\CONTRACT W MARK VV SIGNATURE.DOCX

EXHIBIT "A" CITY OF CORPUS CHRISTI, TEXAS

WHITECAP WASTEWATER TREATMENT PLANT ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE PROJECT NO. E10179

I. SCOPE OF SERVICES

- A. Basic Services
 - 1. Preliminary Phase. N/A
 - 2. Design Phase.

Upon approval of the preliminary phase, designated by receiving authorization to proceed,

The Architect/Engineer-A/E will:

Additional Support to City:

- a. Preliminary Design Concise Letter:
 - i.Prepare a concise letter documenting the following:
 - 1) Screening of the available UV manufacturers based on experience, applicability and input from the City. The goal of the screening process is to select manufacturers on which the final design will be based on.
 - 2) Evaluation of the configuration of the re-lift pump station. The evaluation will take into account life cycle cost analysis for re-lift pump station following the secondary clarifiers and prior to effluent filters vs. the effluent pump station at the plant discharge.

ii.Incorporate City's comments and distribute the FINAL Letter.

- b. UV Structure Design a new UV Structure to house the disinfection equipment sized for 7.5 MGD at 60% transmittance and the current discharge permit disinfection requirements as well as all required process piping and electrical connections.
- c. Re-lift Pumping Station Disk filters are recommended to improve the quality of the clarifier effluent before it flows to the UV system. There is insufficient available head between the clarifiers and the UV channels. Therefore, a re-lift pump station or the effluent pump station (as recommended by TM in Section a) is required to operate the system and will be designed for a peak flow of 7.5 MGD with expansion capabilities.
- d. Canopies over UV Channels and Disk Filters– Canopies should be added over new UV and filter structures to prevent algae growth and to provide a sheltered working environment for operations staff. A crane over the new UV structure will be provided for maintenance purposes, if required.
- e. Design of the new facilities should include consideration of the land use to accommodate future expansions of the new and existing structures to handle the projected ultimate flow.
- f. Treatment Plant Electrical Improvements

AMEND. NO. 3 EXHIBIT "A" Page 1 of 4

- i. Design electrical systems to supply new UV system, re-lift pump station, clothdisk filters, and related appurtenances.
- ii. Design Power Control Room building, new electrical gear, automatic transfer switch, motor starters, and feeder breakers.
- iii. Demolish old plant generator and provide a design for a new 480V, 3-phase, diesel generator inside a weatherproof, sound-attenuating enclose to power to the plant.
- iv. Design wireless I/O SCADA system to monitor the new UV system and new relift pump station. New SCADA to interface with existing SCADA unit at the plant lift station. Design to include additional HMI screens at the Holly Road office for monitoring the UV system and re-lift pumps.
- v. Design electrical distribution system associated with the above improvements.
- 3. Bid Phase.

The Architect/Engineer-A/E will:

Support to City during Bid Phase for additional design phase services.

4. Construction Phase.

The Architect/Engineer-A/E will:

Support to City during Construction Phase for additional design phase services.

B. Additional Services

- Geotechnical Services in support of the additional design phase services. Geotechnical services include eight borings to termination depths of 50-feet within the footprint of the project site, soil sampling, shear strength determination, standard penetration depths (SPT), GPs locates of all boring locations, groundwater readings, GPs locates of all boring locations, groundwater readings, backfilling holes, laboratory testing, and a geotechnical report.
- 2. Surveying Services in support of the additional design phase services. Surveying services include topographic survey of two different areas (UV area and electrical/frontend of the plant) and production of AutoCAD and XML files.

2. SCHEDULE

Day	Date	Activity	
Tuesday	July 9, 2012	Begin Design	
Monday	September 10, 2012	Technical Memorandum	
Monday	October 15, 2012	City Review	
Friday	February 15, 2013	Begin On-line Testing	
Friday	March 22, 2013	Testing Phase Ends	
Monday	April 15, 2013	Testing Report Submittal	
Monday	February 7, 2014	Receive Amendment No. 3	
Monday	June 2, 2014	50% Submittal	
Monday	July 14, 2014	City Review	
Monday	October 13, 2014	100% Interim Design Submittal	
Monday	November 10, 2014	City Review	
Monday	November 8, 2014	100% "Issued to Bid" Final Design Submitt	
Friday	February 9, 2015	Bid Phase Ends	
Friday	September 16, 2016	Complete Construction	

3. FEES

- A. Fee for Basic Services. The City will pay the A/E a fixed fee for providing for all "Basic Services" authorized as per the table below. The fees for Basic Services will not exceed those identified and will be full and total compensation for all services outlined in Section I.A.1-4 above, and for all expenses incurred in performing these services. The fee for this project is subject to the availability of funds. The Engineer may be directed to suspend work pending receipt and appropriation of funds. For services provided in Section I.A.1-4, A/E will submit monthly statements for basic services rendered. In Section I.A.1-3, the statement will be based upon A/E's estimate (and City concurrence) of the proportion of the total services actually completed at the time of billing. For services provided in Section I.A.4, the statement will be based upon the percent of completion of the construction contract. City will make prompt monthly payments in response to A/E's monthly statements.
- **B. Fee for Additional Services.** For services authorized by the Director of Engineering Services under Section I.B. "Additional Services," the City will pay the A/E a not-to-exceed fee as per the table below:

Summary of Fees

WHITECAP WASTEWATER TREATMENT PLANT ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE

(Project No. E10179)

		Original Contract	Amend. No. 1	Amend No. 2	Amend. No. 3	Total
BASIC SERVICES						
1	Preliminary Phase	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	Design Phase	\$118,382.00	\$46,922.00	\$0.00	\$361,922.00	\$527,226.00
3	Bid Phase	\$18,760.00	\$0.00	\$0.00	\$5,999.00	\$24,759.00
4	Construction Phase	\$33,994.00	\$0.00	\$0.00	\$6,782.00	\$40,776.00
Sub-Total Basic Services		\$171,136.00	\$46,922.00	\$0.00	\$374,703.00	\$592,761.00
ADDITIONAL SERVICES						
1	Disc Filters - Design	\$56,583.00	\$0.00	\$0.00	\$0.00	\$56,583.00
2	Disc Filters - Bid	\$7,993.00	\$0.00	\$0.00	\$0.00	\$7,993.00
3	Disc Filters - Const.	\$7 <i>,</i> 080.00	\$0.00	\$0.00	\$0.00	\$7,080.00
4	SCADA	\$6,560.00	\$0.00	\$0.00	\$0.00	\$6,560.00
5	Effluent Testing	\$0.00	\$0.00	\$30,826.00	\$0.00	\$30,826.00
6	Geotechnical	\$0.00	\$0.00	\$0.00	\$33,350.00	\$33,350.00
7	Surveying	\$0.00	\$0.00	\$0.00	\$8,487.00	\$8,487.00
Sub-Total Additional Svcs.		\$78,216.00	\$0.00	\$30,826.00	\$41,837.00	\$150,879.00
Total		\$249,352.00	\$46,922.00	\$30,826.00	\$416,540.00	\$743,640.00
		M2012-113	Admin Approval	Admin Approval	M2014-	
		6/19/12	12/11/12	1/18/13		

SUMMARY OF FEES

The estimated cost of construction of Whitecap UV Disinfection Improvements is \$7,370,000. The total basic services fee proposal for this project is \$592,761. Therefore, the percentage of design cost to construction cost is 8.0%.

EXHIBIT "A-1" TASK LIST CITY OF CORPUS CHRISTI

WHITECAP WASTEWATER TREATMENT PLANT ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE PROJECT NO. E10179

Amendment No. 3

- 1. Preliminary Design Concise Letter:
 - a. Prepare a concise letter documenting the following:
 - i. Screening of the available UV manufacturers based on experience, applicability and input from the City. The goal of the screening process is to select manufacturers on which the final design will be based on.
 - ii. Evaluation of the configuration of the re-lift pump station. The evaluation will take into account life cycle cost analysis for re-lift pump station following the secondary clarifiers and prior to effluent filters vs. the effluent pump station at the plant discharge.
 - b. Incorporate City's comments and distribute the FINAL Letter.
- 2. UV Structure Design a new UV Structure to house the disinfection equipment sized for 7.5 MGD at 60% transmittance and the current discharge permit disinfection requirements as well as all required process piping and electrical connections.
- 3. Re-lift Pumping Station Disk filters are recommended to improve the quality of the clarifier effluent before it flows to the UV system. There is insufficient available head between the clarifiers and the UV channels. Therefore, a re-lift pump station or the effluent pump station (as recommended by TM in Section a) is required to operate the system and will be designed for a peak flow of 7.5 MGD with expansion capabilities.
- 4. Canopies over UV Channels and Disk Filters- Canopies should be added over new UV and filter structures to prevent algae growth and to provide a sheltered working environment for operations staff. A crane over the new UV structure will be provided for maintenance purposes, if required.
- 5. Design of the new facilities should include consideration of the land use to accommodate future expansions of the new and existing structures to handle the projected ultimate flow.
- 6. Treatment Plant Electrical Improvements
 - a. Design electrical systems to supply new UV system, re-lift pump station, cloth-disk filters, and related appurtenances.
 - b. Design Power Control Room building, new electrical gear, automatic transfer switch, motor starters, and feeder breakers.

AMEND. NO. 3 EXHIBIT "A-1" Page 1 of 2 c. Demolish old plant generator and provide a design for a new 480V, 3phase, diesel generator inside a weatherproof, sound-attenuating enclose to power to the plant.

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- d. Design wireless I/O devices for implementation throughout the plant. This will include new HMI screens at the Holly Road office and new SCADA equipment and programming.
- e. Design all feed wires and conduit for power distribution associated with the above improvements.

COMPLETE PROJECT NAME Project No. XXXX Invoice No. 12345 Invoice Date:

			•	Total	Amount	Previous	Totai	Percent
Basic Services:	Contract	Amd No. 1	Amd No. 2	Contract	Invoiced	Invoice	Invoice	Complete
Preliminary Phase	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$1,000	100%
Design Phase	2,000	1,000	0	3,000	1,000	500	1,500	50%
Bid Phase	500	0	250	750	0	0	0	0%
Construction Phase	2,500	0	1,000	3,500	0	0	0	0%
Subtotal Basic Services	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services:							:	
Permitting	\$2,000	\$0	\$0	\$2,000	\$500	\$0	\$500	25%
Warranty Phase	0	1,120	0	1,120	0	0	0	0%
Inspection	0	0	1,627	1,627	0	0	0	0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
Subtotal Additional Services	\$2,000	\$1,120	\$1,627	\$4,747	\$500	\$0	\$500	11%
Summary of Fees								
Basic Services Fees	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services Fees	2,000	1,120	1,627	4,747	500	0	500	11%
Total of Fees	\$8,000	\$2,120	\$2,877	\$12,997	\$1,250	\$1,500	\$3,000	23%





CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

COMPANY NAME:	Freese and Nichols, I	inc.			
P. O. BOX:			_		
STREET ADDRESS:	800 N. Shoreline Blvd., Sui	te 1600N CI	TY: Corpus C	hristi ZIP:	78401
FIRM IS: 1. Con 4. Ass	rporation X sociation	 Partnership Other 	3.	Sole Owner	
If additional space is nee 1. State the names of interest" constituting	DISCLOSURE cessary, please use the rev each "employee" of the 3% or more of the owner	QUESTIONS verse side of this City of Corpus rship in the above	page or attach se Christi having named "firm."	parate sheet. an "ownership	
Name		Job Title and Ci	ty Department (if	f known)	
2. State the names of ea constituting 3% or mo	ich "official" of the City of ore of the ownership in the	of Corpus Christi ne above named " Title	having an "owne firm."	ership interest"	
3. State the names of ea interest" constituting	ach "board member" of t 3% or more of the owner	he City of Corpu ship in the above	s Christi having named "firm."	an "ownership	
Name		Board, Commis	sion or Committe	ee	
F.5					
4. State the names of ea who worked on any interest" constituting	ach employee or officer matter related to the s 3% or more of the owner	of a "consultant" ubject of this co ship in the above	for the City of ontract and has a named "firm."	Corpus Christi an "ownership	
Name		Consultant			

FILING REQUIREMENTS

If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary. [Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person:	RON GUZMAN	Title:	Principal
Signature of Certifyi Person:	ng		Date: 12.3113

DEFINITIONS

- a. "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- c. "Employee." Any person employed by the City of Corpus Christi, Texas either on a full or part-time basis, but not as an independent contractor.
- d. "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- e. "Official." The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held, in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- g. "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.