

**CITY OF CORPUS CHRISTI
CONTRACT FOR PROFESSIONAL SERVICES**

The City of Corpus Christi, a Texas home rule municipal corporation, P.O. Box 9277, Corpus Christi, Nueces County, Texas 78469-9277 (City) acting through its duly authorized City Manager or Designee (Director of Engineering Services) and **Freese and Nichols, Inc. (FNI)**, a Texas corporation, (Architect/Engineer – A/E), hereby agree as follows:

1. SCOPE OF PROJECT

Whitecap Wastewater Treatment Plant Ultra-Violet (UV) Disinfection System Upgrade (Project No. E10179) - The proposed project will replace the existing low-intensity low-pressure UV disinfection equipment with new UV disinfection equipment. The new UV equipment is needed to comply with the future enterococcus bacteria permit limits. The improvements will include electrical and instrumentation improvements required to support the UV disinfection improvements along with all the related accessories and appurtenances.

Recommendations for improvements in addition to the UV disinfection equipment to comply with the future enterococcus bacteria permit limits will also be provided.

2. SCOPE OF SERVICES

The A/E hereby agrees, at its own expense, to perform professional services necessary to review and prepare plans, specifications, and bid and contract documents. In addition, A/E will provide monthly status updates (project progress or delays, Gantt charts presented with monthly invoices) and provide contract administration services, as described in **Exhibit "A"** and **"A-1"**, to complete the project. Work will not begin on Additional Services until requested by the A/E (provide breakdown of costs, schedules), and written authorization is provided by the Director of Engineering Services.

A/E services will be "Services for Construction Projects"- (Basic Services for Construction Projects") which are shown and are in accordance with "Professional Engineering Services- A Guide to the Selection and Negotiation Process, 1993" a joint publication of the Consulting Engineer's Council of Texas and Texas Society of Professional Engineers. For purposes of this contract, certain services listed in this publication as Additional Services will be considered as Basic Services.

3. ORDER OF SERVICES

The A/E agrees to begin work on those authorized Basic Services for this contract upon receipt of the Notice to Proceed from the Director of Engineering Services. Work will not begin on any phase or any Additional Services until requested in writing by the A/E and written authorization is provided by the Director of Engineering Services. The anticipated schedule of the preliminary phase, design phase, bid phase, and construction phase is shown on **Exhibit "A"**. This schedule is not to be inclusive of all additional time that may

be required for review by the City staff and may be amended by or with the concurrence of the Director of Engineering Services.

The Director of Engineering Services may direct the A/E to undertake additional services or tasks provided that no increase in fee is required. Services or tasks requiring an increase of fee will be mutually agreed and evidenced in writing as an amendment to this contract. A/E shall notify the City of Corpus Christi within three (3) days of notice if tasks requested requires an additional fee.

4. INDEMNITY AND INSURANCE

A/E agrees to the mandatory contract indemnification and insurance requirements as set forth in **Exhibit "B"**.

5. FEE

The City will pay the A/E a fee, as described in **Exhibit "A"**, for providing services authorized, a total fee not to exceed \$249,352.00 (Two Hundred Forty Nine Thousand Three Hundred Fifty Two Dollars and 00/100). Monthly invoices will be submitted in accordance with **Exhibit "D"**.

6. TERMINATION OF CONTRACT

The City may, at any time, with or without cause, terminate this contract upon seven days written notice to the A/E at the address of record. In this event, the A/E will be compensated for its services on all stages authorized based upon A/E and City's estimate of the proportion of the total services actually completed at the time of termination.

7. LOCAL PARTICIPATION

The City Council's stated policy is that City expenditures on contracts for professional services be of maximum benefit to the local economy. The A/E agrees that at least 75% of the work described herein will be performed by a labor force residing within the Corpus Christi Metropolitan Statistical Area (MSA). Additionally, no more than 25% of the work described herein will be performed by a labor force residing outside the Corpus Christi Metropolitan Statistical Area (MSA.)

8. ASSIGNABILITY

The A/E will not assign, transfer or delegate any of its obligations or duties in this contract to any other person without the prior written consent of the City, except for routine duties delegated to personnel of the A/E staff. If the A/E is a partnership, then in the event of the termination of the partnership, this contract will inure to the individual benefit of such partner or partners as the City may designate. No part of the A/E fee may be assigned in advance of receipt by the A/E without written consent of the City.

The City will not pay the fees of expert or technical assistance and consultants unless such employment, including the rate of compensation, has been approved in writing by the City.

**EXHIBIT A
CITY OF CORPUS CHRISTI
WHITECAP WASTEWATER TREATMENT PLANT
ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE
(PROJECT NO. E10179)**

1. SCOPE OF SERVICES

A. Basic Services.

Basic Services will include the following in addition to those items shown on **Exhibit "A-1" Task List.**

1. Design Phase. The A/E Consultant will perform the following services under the design phase:
 - a. Confer with the City staff regarding the design parameters of the Project. The A/E Consultant will participate in up to seven (7) formal meetings (as described in greater detail in Exhibit A-1) with the City's staff to initiate the project, discuss the progress on design items, provide agenda and purpose for each formal meeting; document and distribute meeting minutes and meeting report within seven (7) working days of the meeting. The A/E Consultant will participate in discussions with the operating department and other agencies (such as the Texas Commission of Environmental Quality (TCEQ)) as required to satisfactorily complete the Project. The A/E Consultant will also participate in up to one (1) formal enterococcus bacteria permit limit coordination meeting with TCEQ to discuss anticipated future stringent enterococcus bacteria permit limit for the City of Corpus Christi WWTPs.
 1. Confer, discuss, and meet with City operating department(s) and Engineering Services staff to produce a cohesive, well-defined final design and probable cost estimate for construction.
 2. Identify and analyze requirements of governmental authorities having jurisdiction to approve design of the project and permitting, environmental, historical, construction, and geotechnical issues; and meet with pertinent authorities.
 3. Identify results of site field investigation including site findings, existing conditions, potential right of way/easements, and probable project design solutions; (which are common to municipalities).
 4. Review and investigate available records, archives, and pertinent data related to the project including taking photographs of the project site, list of potential problems and possible conflicts, intent of design, and improvements required, and conformance to relevant Master Plan(s).
 5. Review of the project with the respective Operating Department(s) and discussions including clarification and definition of intent and execution of the project; The A/E Consultant will meet with City staff to collect data, discuss materials and methods of construction, and identify design and construction requirements.

6. Attend and participate in a maximum of up to two (2) client coordination meetings and two (2) UV disinfection equipment manufacturer coordination meetings to gather requirements from the City to discuss planning and conceptual design. Gather information and perform close coordination with the City's staff via phone and e-mails.
- b. The City will identify testing, handling and disposal of any hazardous materials and/or contaminated soils that may be discovered during construction (to be included under additional services).
- c. Prepare final quantities and estimates of probable costs.
- d. Furnish a technical memorandum identifying the problems associated with the existing UV disinfection equipment and the recommendations for the proposed UV equipment improvements to meet the future enterococcus bacteria permit limits for the Whitecap Wastewater Treatment Plant (WWTP). Additional details on this technical memorandum are provided in Exhibit A-1.
- e. Furnish one (1) set of the 50% half size plans (half-size plans only-identify needed front-end and technical specifications) to the City staff for review and approval purposes with the opinion of probable construction cost. The City will be responsible for reproduction for additional sets of 50% half-size plans per the requirement of the City. Upon receipt of the 50% set of half-size plans and list of front-end and technical specifications, the City will promptly review the submittal and provide their comments to the A/E Consultant in electronic e-mail or CDROM. There will be one (1) 50% submittal review coordination meeting to discuss comments on the 50% half size plans and specifications list.
- e. Assimilate all review comments, modifications, additions/deletions and proceed to 100% completion of Interim Design Submittal.
- f. Furnish one (1) copy of the 100% Interim Design Submittal [half size plans and front-end documents and technical specifications] to the City staff for review and approval purposes with one (1) copy of revised opinion of probable construction costs. 100% half size plans shall be submitted, dated, and stamped "NOT FOR CONSTRUCTION". There will be one (1) 100% Interim Design Submittal review coordination meeting to discuss comments on the 100% Interim Design Submittal. Upon approval of the 100% Interim Design Submittal by the City, the words "NOT FOR CONSTRUCTION" shall be removed and the original seals of the responsible professional engineer will be provided on the plans and the seals will be signed and dated. The required no. of Final 100% Contract Documents sets will be forwarded to Texas Commission on Environmental Quality (TCEQ) for review and approval.
- g. Upon receipt of comments from TCEQ, the A/E Consultant will make necessary modifications to the 100% Contract Documents. The stamp "ISSUED FOR BID" and original seals of the professional engineers will be placed on the 100% plans and dated. One (1) copy of the completed 100% Contract Documents will be forwarded to the City. The City will be responsible for reproduction for any additional sets of the completed Contract Documents per the requirement of the City. The A/E Consultant will also furnish one (1) CDROM with an electronic file copy of the "ISSUED FOR BID" plans in AutoCAD and Front-End Documents and Technical Specifications in MS Word to the City. The said "ISSUED FOR

BID" Contract Documents henceforth become the sole property and ownership of the City of Corpus Christi.

- h. Provide Quality Assurance/Quality Control (QA/QC) measures to ensure that submittal of the 50% and 100% Interim and Final Design Submittal accurately reflect the percent completion designated and do not necessitate an excessive amount of revision and correction by City Staff. The A/E Consultant shall submit a letter declaring that all engineering disciplines of all phases of the submittals have been checked, reviewed, and are complete prior to submission, and include signature of all disciplines including but not limited to civil, mechanical, electrical, etc.
- i. The City agrees that any modifications of the submitted "ISSUED FOR BID" plans (for other uses by the City) will be evidenced on the plans and be signed and sealed by a professional engineer prior to re-use of modified plans.
- j. Prepare and submit monthly status reports with action items developed from coordination and review meetings.
- k. Provide the services above authorized in addition to those items shown on **Exhibit "A-1" Task List**.

City staff will provide one set only of the following information (as applicable):

- a. Record drawings, record information of existing facilities, and utilities (as available from City Engineering files).
- b. The preliminary budget, specifying the funds available for construction.
- c. Aerial photography for the Project area.
- d. Through separate contract, related GIS mapping for existing facilities.
- e. A copy of existing studies and plans. (As available from City Engineering files).
- f. Field location of existing City utilities. (A/E Consultant to coordinate with City Operating Department).
- g. Copy of Geotechnical Survey and Findings.
- h. Provide applicable Master Plans.

The City staff will:

- a. Designate an individual to have responsibility, authority, and control for coordinating activities for the Bid and Construction Phase. In addition, the individual shall also coordinate all activities necessary to award and execute the construction contract.
- b. The individual will be responsible to initiate contact and coordinate exchange of information (relevant plans and specifications and change orders) from previous A/E Consultant who assisted the City with the design of Whitecap WWTP UV Disinfection Facility.
- c. Provide the budget for the Project specifying the funds available for the construction contract.

2. Bid Phase. The A/E will:

- a. Participate in the pre-bid conference and provide a recommended agenda for critical construction activities and elements impacting the project.
- b. Assist the City in solicitation of bids by identification of prospective bidders, and review of bids by solicited interests.
- c. Review all pre-bid questions and submissions concerning the bid documents and prepare, in the City's format, for the Engineering Services' approval, any addenda or other revisions necessary to inform CONTRACTORS of approved changes prior to bidding.
- d. Conduct one (1) pre-bid conference for the construction projects and coordinate responses with the City. Response to the pre-bid conference will be in the form of addenda issued after the bid-bid conference. The A/E Consultant will also attend the tour of the project site along with the prospective CONTRACTORS after the pre-bid conference.
- e. Attend bid opening, analyze bids, evaluate, prepare bid tabulation, and make recommendation concerning award of the contract.
- f. Furnish one (1) hard paper copy set of the 100% "ISSUED FOR CONSTRUCTION" Conformed Documents (full size drawings on bond paper and front-end documents and technical specifications on 8.5" x 11" paper) to the City staff. The original seals of the responsible professional engineer will be replaced with "ISSUED FOR CONSTRUCTION" seals. The City will be responsible for reproduction for any additional sets of the Conformed Documents per the requirements of the City and the Construction Contractor. The A/E Consultant will also furnish one (1) CDROM with an electronic file copy of the Conformed Drawings in AutoCAD and Conformed Specifications in MS Word to the City.

The City staff will:

- a. Arrange and pay for printing of all Contract Documents and addenda to be distributed to prospective bidders.
- b. Advertise the Project for bidding, maintain the list of prospective bidders, receive and process deposits for all bid documents, issue (with the assistance of the A/E Consultant) any addenda, prepare and supply bid tabulation forms, and conduct bid opening.
- c. Receive the A/E Consultant's recommendation concerning bid evaluation and recommendation and prepare agenda materials for the City Council concerning bid awards.
- d. Prepare, review and provide copies of the contract for execution between the City and the CONTRACTOR.

3. Construction Phase. The A/E will perform construction contract administration to include the following:
- a. Participate in one (1) pre-construction meeting conference and provide a recommended agenda for critical construction activities and elements impacting the project.
 - b. Review for conformance to Contract Documents, shop and working drawings, materials and other submittals.
 - c. Review field and laboratory tests.
 - d. Provide interpretations and clarifications of the Contract Documents for the CONTRACTOR and authorize required changes, which do not affect the CONTRACTOR's price and are not contrary to the general interest of the City under the contract.
 - e. Attend and participate in a maximum of up to three (3) periodic site visits (when needed) to the site of the project to confer with the City project inspector and CONTRACTOR to observe the general progress and quality of work, and to determine, in general, if the work is being done in accordance with the Contract Documents. This will not be confused with the project representative observation or continuous monitoring of the progress of construction. Visits to the site in excess of the specified number are an additional service.
 - f. Attend and participate in a maximum of up to six (6) periodic construction meetings (when needed) to the site to attend the Monthly Construction Progress Meeting. These meetings shall be coordinated by the City prior to the meeting dates. Visits to the site for Monthly Construction Progress Meetings in excess of the specified number of meetings are an additional service.
 - g. Attend and participate in a maximum of up to two (2) final walkthrough/punchlist site visits to the site (separate from the site visits) in company with ONWER's representative to observe whether the improvements have been completed in accordance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the CONTRACTOR before issuing the FINAL Certificate of Acceptance. The City's representative will be responsible to track the completion of all the punchlist items. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the CONTRACTOR. The A/E Consultant will issue FINAL Certification of Acceptance upon the completion of all the punchlist items. Provide recommendation for final payment to the CONTRACTOR. Visits to the site in excess of the specified number are an additional service.
 - h. Prepare change orders as authorized by the City (coordinate with the City's construction division); provide interpretations and clarifications of the plans and specifications for the CONTRACTOR and authorize minor changes which do not affect the CONTRACTOR's price and are not contrary to the general interest of the City under the contract.
 - i. As applicable, review and assure compliance with Contract Documents, the preparation of operating and maintenance manuals updates (by the CONTRACTOR) for all equipment installed on this Project. These manuals will be in a "multimedia format" suitable for viewing with Microsoft's Internet Explorer, version 3.0. As a minimum the Introduction, Table of Contents, and

Index will be in HTML (HyperText Markup Language) format, with HyperText links to the other parts of the manual. The remainder of the manual can be scanned images or a mixture of scanned images and text. Use the common formats for scanned images - GIF, TIFF, JPEG, etc. Confirm before delivery of the manuals that all scanned image formats are compatible with the image-viewing software available on the City's computer - *Imaging for Win95* (Wang) and Microsoft Imaging Composer. Deliver the manuals on a CD-ROM, not on floppy disks.

- j. Review construction "red-line" drawings, prepare record drawings of the Project as constructed (from the "red-line" drawings, inspection, and the CONTRACTOR provided plans) and deliver to the Engineering Services one (1) full-size reproducible drawing set (full size drawings on bond paper) and all electronic files (AutoCAD r.14 or later) of the record drawings. All drawings will be CAD drawn using dwg format in AutoCAD, and graphics data will be in dxf format with each layer being provided in a separate file. Attribute data will be provided in ASCII format in tabular form. All electronic data will be compatible with the City GIS system.

The City staff will:

- a. Prepare applications/estimates for payments to CONTRACTOR.
- b. Conduct the final acceptance inspection with the A/E Consultant.

B. Additional Services (ALLOWANCE)

This section defines the scope (and ALLOWANCE) for compensation for additional services that may be included as part of this contract, but the A/E Consultant will not begin work on this section without specific written approval by the Director of Engineering Services. Fees for Additional Services are an allowance for potential services to be provided and will be **negotiated** by the Director of Engineering Services as required. The A/E Consultant will, with written authorization by the Director of Engineering Services, do the following:

1. Assist the City with the design, bid and construction phase services of any additional improvements that may be required to comply with the future revised enterococcus bacteria permit limits.

The additional improvement design may specifically anticipate the incorporation of filters and/or any additional biological or chemical processes upstream of UV disinfection equipment and any additional equipment selection and design, structural improvements, electrical, instrumentation and SCADA design and integrator's documentation requirements and would be completed after City's authorization for this additional service item. All the additional improvement design items will be completed in accordance with the recommendations provided in the technical memorandum. Details of items that will be included in the technical memorandum are provided in Exhibit A-1. This additional design will be added to the bid package for UV Disinfection Improvements Project and will be bid and constructed

- simultaneously with the designed Whitecap WWTP UV Disinfection Improvements.
2. Assist the City for all the required coordination with the state and the federal agencies. The A/E Consultant will prepare and submit all documents for review as **applicable** to the appropriate local, state, and federal authorities, including, but not limited to:
 - a. Texas Commission for Environmental Quality (TCEQ)
 3. Provide SCADA and instrumentation updates for the proposed electrical and instrumentation improvements in this project.
 4. Provide the services above authorized in addition to those items shown on **Exhibit "A-1" Task List**.
 5. Site and factory visits associated with factory testing of equipment to be provided for the project and other special equipment and materials related to this improvement project.
 6. Additional services that are required to comply with local, state, or federal regulations that becomes effective after the date of this Contract.
 7. Providing services to investigate existing conditions or facilities, or to make measured drawings thereof, or to verify the accuracy of drawings or other information furnished by the City.
 8. Making revisions to drawings, specifications or other documents when such revisions are not consistent with approvals or instructions previously given by the City or due to other causes not solely within the control of the A/E Consultant.
 9. Providing shop, mill, field or laboratory inspection of materials and equipment. Observe factory tests of equipment at any site remote to the project or observing tests required as a result of equipment failing the initial test.
 10. Design, contract modifications, studies or analysis required to comply with local, state, federal, or other regulatory agencies that become effective after the date of this Contract.
 11. Visits to the site in excess of the number of trips for periodic site visits, monthly construction progress meetings, or contract completion activities.
 12. Any services required as a result of default of the Contractor(s) or the failure, for any reason, of the Contractor(s) to complete the work within the contract time.
 13. Providing Basic Engineering Services or Additional Services on an accelerated time schedule. The scope of this service includes cost for overtime wages of employees and consultants, inefficiencies in work sequence, and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the City.

14. Providing follow-up construction observation services during the Contractor's warranty period.
15. Participation by the A/E Consultant in facility startup planning meetings and warranty inspections.

2. SCHEDULE

PROPOSED PROJECT SCHEDULE

DAY	DATE	ACTIVITY
Monday	April 2, 2012	Begin Design Phase
Monday	June 11, 2012	Technical Memorandum
Monday	August 6, 2012	50% Submittal
Friday	August 17, 2012	City Review
Friday	October 12, 2012	100% Interim Design Submittal
Friday	October 26, 2012	City Review
Friday	November 9, 2012	100% Submittal to TCEQ
Friday	February 8, 2013	TCEQ Review
Friday	February 22, 2013	100% "ISSUED TO BID" Final Design Submittal
Wednesday	May 1, 2013	Bid Phase Ends
Friday	November 30, 2013	Construction Phase Ends

3. FEES

- A. **Fee for Basic Services.** The City will pay the A/E Consultant 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 1 above, and for all expenses incurred in performing these services. For services provided in Section 1, A/E Consultant will submit monthly statements for basic services rendered. In Section 1, the statement will be based upon A/E Consultant's estimate (and City Concurrence) of the proportion of the total services actually completed at the time of billing.
- 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 Consultant a not-to-exceed fee as per the table presented in Section 3.C. Summary of Fees.

C. Summary of Fees

Fee for Basic Services	
1. Preliminary Phase	\$0.00
2. Design Phase	118,382.00
3. Bid Phase	18,760.00
4. Construction Phase	33,994.00
Subtotal Basic Services Fees (Authorized)	171,136.00
Fee for Additional Services (Allowance)	
1. Disk Filters and Chemical Feed Improvements – Design Phase	56,583.00
2. Disk Filters and Chemical Feed Improvements – Bid Phase	7,993.00
3. Disk Filters and Chemical Feed Improvements – Construction Phase	7,080.00
4. Provide SCADA Documentation/Integration	6,560.00
Sub-Total Additional Services Fees	78,216.00
Total Project Fee	\$249,352.00

The estimated cost of construction for **Whitecap Wastewater Treatment Plant Ultra-Violet (UV) Disinfection System Upgrade (Project No. E10179)** is \$2,150,000. The basic services fee for the project is \$171,136. Therefore, the percentage of basic engineering services cost to construction is 7.96%.

**EXHIBIT A-1
TASK LIST
CITY OF CORPUS CHRISTI
WHITECAP WASTEWATER TREATMENT PLANT
ULTRA-VIOLET (UV) DISINFECTION SYSTEM UPGRADE
(PROJECT NO. E10179)**

Phase I – Final Design Phase

- 1) The A/E Consultant shall submit a technical memorandum identifying the problems associated with the existing UV disinfection equipment and the recommendations for the proposed UV equipment improvements to meet the future enterococcus bacteria permit limits for the Whitecap Wastewater Treatment Plant (WWTP). Only **one (1)** hard paper copy and **one (1)** electronic copy of this technical memorandum will be submitted to the City for their records. This technical memorandum will be submitted within the first **75 days** after the receipt of "Authorization to Proceed" from the City and will include the discussion on the following items:
 - a. Analysis of the collimated beam test results for Whitecap WWTP effluent samples that were conducted by Carollo Engineers for the new Broadway WWTP UV Disinfection Improvements.
 - b. Analysis of the enterococcus bacteria sampling data from Whitecap WWTP.
 - c. Analysis of the future permit limits for enterococcus bacteria in coordination with TCEQ.
 - d. Limitations associated with the existing UV disinfection equipment to meet the future enterococcus bacteria permit limits.
 - e. Identification of appropriate UV disinfection equipment and any additional improvements such as filters or any other biological or chemical processes needed to comply with the future enterococcus permit limits.
 - f. Analysis of the plant hydraulics with respect to the changes at the UV disinfection facility and any additional improvements.
 - g. Recommendations for the proposed UV disinfection equipment, flowmeter and any additional improvements.
 - h. Analysis of additional chemical disinfection system to achieve sufficient disinfection during peak flow or flooding events or when needed.
- 2) Perform field investigation in a site visit (**1 site visit**) as required to define specific areas for the replacement of existing UV equipment with new UV equipment, locations, tie-in point(s), additional improvements needed for compliance with the future WWTP permit limits, and other applicable parameters required to complete the items as shown on this Task List.
- 3) Attend and participate in client initiation meeting (**1 meeting**), design phase client coordination meeting (up to **1 meeting**), UV disinfection equipment manufacturer coordination meetings (up to **2 meetings**), 50% Design Submittal review meeting (**1 meeting**) and 100% Interim Design Submittal review meeting (**1 meeting**) with pertinent City's Engineering and Wastewater Department staff to discuss planning and conceptual design. Gather information and perform close coordination with the City's staff via phone and e-mails.

- 4) Attend and participate in one enterococcus bacteria permit limit coordination meeting (1 meeting) with TCEQ for anticipated future stringent enterococcus bacteria permit limit for City of Corpus Christi WWTPs.
- 5) The A/E Consultant will be responsible for the design of the new UV disinfection equipment and related accessories and appurtenances for a complete UV disinfection operational system that will enable full operational permit compliance for enterococcus bacteria removal.
- 6) If the technical memorandum recommends filters or other biological or chemical processes, the City can choose to retain the same A/E Consultant to design the additional improvements upstream of UV disinfection equipment and any additional equipment selection and design necessary to meet the future enterococcus permit limits. These additional improvements will be considered as an additional service item and will need to be authorized by the City in order to proceed to complete the design. Any civil, mechanical, geotechnical, electrical, instrumentation, SCADA design and integrator's documentation requirements related to these additional improvements will also be completed after this additional service item has been authorized by the City.
- 7) The A/E Consultant will be responsible for providing electrical and instrumentation design for the operation of the disinfection equipment and related appurtenances that will be installed under the scope of this project. In addition, details of any civil, mechanical, piping or structural improvements resulting due to the installation of new UV equipment will be provided by the A/E Consultant.
- 8) Provide specification for integrator's documentation requirements for Supervisory Control and Data Acquisition (SCADA), Operator, and Engineering manuals for the SCADA and Human Machine Interface (HMI) systems including HMI screen shots and operator level instruction for normal operator task with-in the control systems. A/E shall review Integrator's submittal and work with Integrator to assure documentation requirements are met and integrated into plant manuals and documentation systems. A/E shall provide "as-built" Electrical, Instrumentation, and SCADA system drawings and documentation after the completion of the construction of the proposed improvements. City will provide all existing UV Disinfection Facility drawings in AutoCAD format for use by the A/E to make revisions as required for this project.
- 9) The A/E Consultant shall prepare one (1) set of 50% design submittal (design drawings only) for the UV Disinfection Improvements Project using FNI standard Contract Documents. The 50% review drawings shall be delivered to the City Staff in half size along with a list of front-end and technical specifications. The proposed design components for the project are as follows:
 - a. Design of new UV Disinfection Equipment and related accessories and appurtenances
 - b. Design of additional biological or chemical treatment processes improvements required for compliance with the future enterococcus bacteria permit limits (only after authorization by the City)
 - c. Design of new civil, mechanical and structural improvements required to support the UV disinfection improvements along with related accessories and appurtenances
 - d. Design of electrical improvements consisting of two (2) transformers, two (2) operator interface control panels and all associated electrical for two disinfection channels.

Transformer feeds will also include manual transfer switches to allow swapping of transformer feeders to each channel for redundancy. UV system circuit breaker panels will be installed separate from UV control panels. Panels, transformers, and switches will be installed adjacent to existing structure at three (3) feet above grade

- e. Design of new ultrasonic flowmeter at inlet of UV channels with flow signal routed to new UV system for flow paced control
 - f. Design of new SCADA RTU with antenna on pole for communicating to Greenwood WWTP and to Central Office on Holly Road
 - g. Design of area lighting to be installed to illuminate UV structure
 - h. Control System Logic Documentation
 - i. Specifications for HMI and SCADA System Operator and Engineering Manual Documentation
- 10) There will be one (1) review workshop to discuss the 50% design submittal. The City will be responsible to provide comments to the A/E Consultant on electronic e-mail or CDROM. Upon receipt of all the electronic comments, the A/E Consultant will assimilate all review comments, modifications, additions/deletions and proceed to prepare a 100% Interim Design Submittal [Final Design Drawings, Front-End and Technical Specifications]for the UV Disinfection Improvements Project.
- 11) The A/E Consultant shall prepare one (1) set of 100% Interim Design Submittal for the City to review at 100% completion. There will be one (1) 100% Interim Design Submittal review coordination workshop to discuss the 100% Interim Design Submittal. The City will be responsible to provide follow-up comments to the A/E Consultant on electronic e-mail or CDROM. Assimilate all review comments, modifications and additions/deletions and proceed to completion of 100% Final Design Submittal. The original seals of the responsible professional engineer will be provided on the 100% Final Design Submittal and dated and the required no. of sets will be forwarded to TCEQ for review and approval. The A/E Consultant will be responsible for coordination of 100% Contract Documents submittal to TCEQ for review. In addition, the A/E Consultant will also be responsible for addressing TCEQ comments related to the A/E Consultant's 100% Contract Documents.
- 12) The A/E Consultant will prepare the final opinion of probable construction cost based on the 100% Contract Documents.
- 13) The A/E Consultant will submit 100% Contract Documents for FNI constructability review. The A/E Consultant will also make final modifications to the 100% Contract Documents per the comments provided during the constructability review.
- 14) Upon receipt of comments from TCEQ and FNI Construction Services, the A/E Consultant will make necessary modifications to the 100% Contract Documents. After the incorporation of all the comments, the stamp "ISSUED FOR BID" will be placed on the 100% full-size plans from the A/E Consultant and the original seals of the professional engineers will be placed on the drawings and dated. One (1) copy of the completed 100% "ISSUED FOR BID" Final Design Submittal will be forwarded to the City. The City will be responsible for reproduction for any additional sets of the completed "ISSUED FOR BID" Final Design Submittal per the requirement of the City. The A/E Consultant will also furnish one (1) CDROM with an

electronic file copy of the "ISSUED FOR BID" plans in AutoCAD and specifications in Word to the City.

Phase II – Bid Phase

- 1) The A/E Consultant will assist the City in securing bids. The City will issue Notice to Bidders to prospective CONTRACTORS and vendors listed in their database of prospective bidders and to selected plan rooms.
- 2) The A/E Consultant will assist the City by responding to questions and interpreting bid documents. The A/E Consultant will prepare and issue addenda and forward the addenda to the City for distribution to the prospective bidders.
- 3) The A/E Consultant will assist the City in conducting one (1) pre-bid conference for the construction project and coordinate CONTRACTOR's responses with the City. Response to the pre-bid conference will be in the form of addenda issued after the conference. The A/E Consultant will also attend the tour of the project site along with the prospective contractors after the pre-bid conference.
- 4) The A/E Consultant will assist the City in the opening, tabulating, and analyzing the bids received. The A/E Consultant will review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified (based on City requirements) to construct the project. The A/E Consultant will submit to the City a written recommendation to award of contracts or other actions as appropriate to be considered by the City.
- 5) The A/E Consultant will make necessary modifications to the 100% "ISSUED FOR BID" Contract Documents based on the addenda issued during the Bid Phase. After the incorporation of all the comments, the stamp "ISSUED FOR CONSTRUCTION" will be placed on the 100% Contract Documents from the A/E Consultant. One (1) copy of the completed 100% "ISSUED FOR CONSTRUCTION" Contract Documents will be forwarded to the City. The City will be responsible for reproduction for any additional sets of the completed 100% "ISSUED FOR CONSTRUCTION" Contract Documents per the requirement of the City. The A/E Consultant will also furnish one (1) CDROM with an electronic file copy of the "ISSUED FOR CONSTRUCTION" plans in AutoCAD and specifications in Word to the City.

Phase III – Construction Observation Services

Upon completion of the Bid Phase Services, FNI will proceed with the performance of construction phase services as described as follows. FNI will endeavor to protect City in providing these services; however, it is understood that FNI does not guarantee the CONTRACTOR's performance, nor is FNI responsible for supervision of the CONTRACTOR's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the CONTRACTOR, or any safety precautions and programs relating in any way to the condition of the premises, the work of the CONTRACTOR or any subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

The City agrees to include provisions in the Construction Contract Documents that will require the Construction CONTRACTOR to include FNI and their subconsultant(s) on this project to be listed as an additional insured on CONTRACTOR's insurance policies.

- 1) Assist City in conducting one (1) pre-construction conference with the CONTRACTOR, review construction schedules prepared by the CONTRACTOR pursuant to the requirements of the construction contract.
- 2) Attend and participate in up to a maximum of six (6) periodic construction meetings to the site to attend the Monthly Construction Progress Meeting. Visits to the site for Monthly Construction Progress Meetings in excess of the specified number are an additional service.
- 3) Attend and participate in up to a maximum of three (3) periodic site visits to the site (as distinguished from the continuous services of a Resident Project Representative) to observe whether the improvements have been completed in accordance with the Construction Contract Documents. The estimated construction time for this project is 9 months. FNI will endeavor to protect the City against defects and deficiencies in the work of CONTRACTOR and will report any observed deficiencies to the City. Visits to the site in excess of the specified number are an additional service.
- 4) Review quality related documents provided by the CONTRACTOR such as shop drawings, test reports, equipment installation reports or other documentation required by the Construction Contract Documents.
- 5) Process contract modifications and negotiate with the CONTRACTOR on behalf of the City to determine the cost and time impacts of change orders. Prepare change order documentation for approved changes for execution by the City. Documentation of field orders, where cost to City is not impacted, will also be prepared. Investigations, analyses, studies or design for substitutions of equipment or materials, corrections of defective or deficient work of the CONTRACTOR or other deviations from the construction Contract Documents requested by the CONTRACTOR and approved by the City are an additional service. Substitutions of materials or equipment or design modifications requested by the City are an additional service.
- 6) Conduct, in company with City's representative, a final review of the Project for conformance with the Contract Documents of the Project and general compliance with the Construction Contract Documents. Attend and participate in up to a maximum of two (2) final walkthrough/punchlist site visits to the site (separate from site visits) to observe whether the improvements have been completed in accordance with the Construction Contract Documents. The City's representative will be responsible to track the completion of all the punchlist items. The A/E Consultant will issue FINAL Certificate of Completion upon the completion of all the punchlist items. Visits to the site in excess of the specified number are an additional service. Prepare a list of deficiencies to be corrected by the CONTRACTOR before issuing the FINAL Certificate of Completion. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the CONTRACTOR. Make recommendation for final payment to the CONTRACTOR.

- 7) Prepare an Operation and Maintenance (O&M) Manual updates for the UV disinfection improvements and associated electrical and instrumentation appurtenances in accordance with provisions of TCEQ regulatory guidance document 217.16, Operations and Maintenance Manual for Wastewater Treatment Facility. The City will be responsible to incorporate these O&M manual updates to their overall plant O&M manual.

- 8) Revise the construction drawings in accordance with the information furnished by Construction CONTRACTOR and the construction inspector reflecting changes in the Project made during construction. One (1) set of full-size prints of "RECORD DRAWINGS" and one (1) CDROM with an electronic file copy of the plans in AutoCAD after the completion of the Construction Project will be provided to the City. The City will be responsible for making additional sets of hard-copy prints and electronic copies per the requirement of the City.

EXHIBIT "B"
INSURANCE REQUIREMENTS

Insurance Requirements

- A. Consultant must not commence work under this agreement until all insurance required herein has been obtained and such insurance has been approved by the City. The Consultant must not allow any subcontractor to commence work until all similar insurance required of the subcontractor has been obtained.
- B. Consultant must furnish to the City's Risk Manager, two (2) copies of Certificates of Insurance with applicable policy endorsements, showing the following minimum coverages by insurance company(s) acceptable to the City's Risk Manager. The City must be named as an additional insured for all liability policies (except Workers Compensation/EL and Professional Liability), and a blanket waiver of subrogation is required on all applicable policies (except Professional Liability).

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE
30-Day Written Notice of Cancellation, or reduction in coverage or limits required on all certificates or by policy endorsements	Bodily Injury & Property Damage Per occurrence - aggregate
COMMERCIAL GENERAL LIABILITY including: 1. Broad Form 2. Premises - Operations 3. Products/ Completed Operations 4. Contractual Liability 5. Independent Contractors 6. Personal Injury / Advertising Injury	\$1,000,000 COMBINED SINGLE LIMIT Per Occurrence and in the aggregate
AUTOMOBILE LIABILITY to include: 1. Owned vehicles 2. Hired – Non-owned vehicles	\$1,000,000 COMBINED SINGLE LIMIT
UMBRELLA – EXCESS LIABILITY Must follow form	\$1,000,000 COMBINED SINGLE LIMIT
PROFESSIONAL LIABILITY including: Coverage provided shall cover all employees, officers, directors and agents 1. Errors and Omissions	\$2,000,000 per claim / \$2,000,000 aggregate (Defense costs not included in face value of the policy) If claims made policy, retro date must be prior to inception of agreement; have extended reporting period provisions and identify any limitations regarding who is an Insured
WORKERS' COMPENSATION	Applicable to paid employees while on City property Which Complies with the Texas Workers Compensation Act
EMPLOYERS' LIABILITY	\$500,000/\$500,000/\$500,000

- C. In the event of accidents of any kind related to this agreement, Consultant must furnish the Risk Manager with copies of all reports within (10) ten days of accident.
- D. Consultant must obtain workers' compensation coverage through a licensed insurance company in accordance with Texas law. The contract for coverage must be written on a policy and endorsements approved by the Texas Department of Insurance. The coverage provided must be in amounts sufficient to assure that all workers' compensation obligations incurred will be promptly met.
- E. Consultant's financial integrity is of interest to the City; therefore, subject to Successful Consultant's right to maintain reasonable deductibles in such amounts as are approved by the City, Consultant shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis (except for Professional Liability), by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A-VII.
- F. City shall be entitled, upon request and without expense, to receive Certificates of Insurance and all endorsements thereto as they apply to the limits required by the City. All notices under this Article shall be given to City at the following address:

City of Corpus Christi
Attn: Risk Management
P.O. Box 9277
Corpus Christi, TX 78469-9277
Fax: (361) 826-4555

- G. **Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:**
- i. Name the City and its officers, officials, employees, volunteers, and elected representatives as additional insured by endorsement, as respects operations and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation and professional liability policies;
 - ii. Provide for an endorsement that the "other insurance" clause shall not apply to the City of Corpus Christi where the City is an additional insured shown on the policy;
 - iii. Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City; and
 - iv. Provide thirty (30) calendar days advance written notice directly to City on CGL and Auto policies of any suspension, cancellation, non-renewal or reduction in coverage or limits in coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium. Consultant shall provide this notice to City on Workers Compensation and Professional Liability policies.
- H. Within five (5) calendar days of a suspension, cancellation, or non-renewal of coverage, Successful Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this agreement.

- I. In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to stop work hereunder, and/or withhold any payment(s) which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.
- J. Nothing herein contained shall be construed as limiting in any way the extent to which Successful Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractors' performance of the work covered under this agreement.
- K. It is agreed that Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self insurance carried by the City of Corpus Christi for liability arising out of operations under this agreement.
- L. It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this agreement.

INDEMNIFICATION AND HOLD HARMLESS

Consultant shall indemnify, save harmless and defend the City of Corpus Christi, and its agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorneys' fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to any property, which may arise or which may be alleged to have arisen out of or in connection with the negligent performance of Consultant's services covered by this contract. The foregoing indemnity shall apply except if such injury, death or damage is caused by the sole or concurrent negligence of the City of Corpus Christi, its agents, servants, or employees or any other person indemnified hereunder.



City of
Corpus
Christi

SUPPLIER NUMBER
TO BE ASSIGNED BY CITY
PURCHASING DIVISION

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, Inc.

P. O. BOX: _____

STREET ADDRESS: 800 N. Shoreline, Suite 1600N **CITY:** Corpus Christi **ZIP:** 78401

FIRM IS: 1. Corporation 2. Partnership 3. Sole Owner
4. Association 5. Other

DISCLOSURE QUESTIONS

If additional space is necessary, please use the reverse side of this page or attach separate sheet.

1. State the names of each "employee" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Job Title and City Department (if known)
<u>N/A</u>	_____
_____	_____
_____	_____
_____	_____

2. State the names of each "official" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Title
<u>N/A</u>	_____
_____	_____
_____	_____
_____	_____

3. State the names of each "board member" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Board, Commission or Committee
<u>N/A</u>	_____
_____	_____
_____	_____
_____	_____

4. State the names of each employee or officer of a "consultant" for the City of Corpus Christi who worked on any matter related to the subject of this contract and has an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Consultant
<u>N/A</u>	_____
_____	_____
_____	_____
_____	_____

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, P. E. **Title:** Principal
(Type or Print)

Signature of Certifying Person:



Date: 3-7-12

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.

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

	Contract	Amd No. 1	Amd No. 2	Total Contract	Amount Invoiced	Previous Invoice	Total Invoice	Percent Complete
Basic Services:								
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%