



EXHIBIT A SCOPE OF WORK

CITY OF CORPUS CHRISTI **O. N. Stevens Water Treatment Plant Sedimentation Basin Improvements Amendment No. 6** CITY PROJECT NO. 18130A

PROJECT BACKGROUND AND PURPOSE

The City of Corpus Christi (City) previously contracted Hazen and Sawyer (Hazen) and Ardurra (formerly known as LNV, LLC) to perform design, bid and construction services for two projects at the O.N. Stevens Water Treatment Plant (ONS WTP) under separate bid packages. The first bid package included the design of a new solids collector system to replace the existing Trac-Vac system. This part of the project is completed.

The second bid package included design, bid, construction services, post-survey and quantity verification associated with dredging the pre-sedimentation basin to restore its original capacity. Restoring this capacity is critical to the operation of the ONS WTP because the pre-sedimentation basin provides emergency storage and initial settling for highly turbid waters. Although the construction phase of this project started in January 2021, the contractor did not complete the specified work and only dredged a portion of the basin. The City has since then re-bid the project to complete dredging of the pre-sedimentation basin. The purpose of this amendment is to provide services for construction services associated with re-bidding the second bid package.

Post-dredging residual survey tasks are included as an additional service will only be executed upon the City's approval.

Construction Phase Services

The Construction Administration Phase services will assist the City in confirming that the project construction is carried out in accordance with the contract requirements and to help facilitate work progress in an efficient and cost-effective manner, while maintaining facility operations. The anticipated level of effort is based on a 15-month construction period.

4.01 Project Management and Coordination

The ENGINEER will assist the City during the construction phase, by providing the following:

- Perform project management tasks including schedules, status update reports and invoices.
- Attend pre-construction meeting conference and provide a recommended agenda for critical construction activities and elements impacted by the project.
- Provide general construction administration, coordination with City departments, monitor project schedule, assist the City in managing documents on City preferred web platform (E-Builder)
- Provide construction administration and quality control support to City Inspector

Scope Item Assumptions:

- City to arrange for a site inspector for continuous monitoring of the progress of construction and coordination.
- ENGINEER will not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor(s) (except as otherwise specified in the Contract Documents) or the safety precautions and programs incident to the Work of the Contractor(s).
- ENGINEER to provide regular construction administration and site visits to ensure conformance with design.

Meetings:

- One (1) two-hour meeting pre-construction conference with the City

Deliverables:

- Recommended agenda for pre-construction meeting and minutes as necessary

4.02 Review Submittals

The ENGINEER will:

- Receive, log and distribute for review and approval the submittals, shop drawings, samples, test results, operations and maintenance manuals, and other data that Contractor is required to submit.
- Distribute and file the submittals after review action has been taken. The ENGINEER will follow-up to verify that revisions are made and resubmitted as required and will verify that such required submittals are received and approved prior to installation or payment for the materials covered.
- Review the schedule of shop drawing submissions and schedule of values prepared by Contractor and will discuss status of the submittals at construction progress

meetings. The ENGINEER will be responsible for completing the submittal reviews within two weeks and for monitoring the status and timeliness of responses.

- Maintain a submittal log showing dates of submittal, transmittal action to other sub-consultants, dates of return and review action.

Deliverables:

- Updated Submittals Log, at the City's request

4.03 Issue Interpretations and Clarifications (RFIs)

The ENGINEER will:

- Act as a point of contact for interpretation of the requirements of the Contract Documents and judge of the acceptability of the work based on the requirements shown or specified.
- Respond to Requests for Information (RFIs) within five (5) business days and for monitoring the status and timeliness of responses.
- Maintain a RFI log showing dates of submittal, transmittal action to other sub-consultants, dates of return, and a summary of the response.

Deliverables:

- Updated RFI Log, at the City's request
- RFI Responses
- Contract Document Interpretations and Clarifications as necessary

4.04 Site Visits

The ENGINEER will conduct regular site visits (up to 2 per month) or progress meetings to familiarize themselves with the status of work, make spot checks of work-in-progress, verify conformance with the design intent, and conduct detailed coordination of construction issues. It is assumed that site visits and progress meetings will be conducted consecutively on the same day.

Meetings:

- Up to thirty (30) 2-hour site visits or progress meetings as needed

4.05 Pay Application Review

ENGINEER will assist the City with review the payment applications prior to releasing payment to the Contractor.

Scope Item Assumptions:

The City will be responsible for reviewing contractor's proposed percentages of work completed and process applications/estimates for payments to Contractor. Engineer will provide feedback when requested by the City based on their observations.

4.06 Change Orders

ENGINEER will review cost and time estimates for change orders and for Contractor's claims for additional cost or compensation due to differing site conditions, force majeure, material or equipment shortages, or other causes in order to determine whether they are justified under the Contract. The ENGINEER will also provide an estimate of the additional Design Consultant costs (if any) that would be incurred as a result of the change order. The proposed level of effort under this amendment is based on reviewing and assisting the City with one (1) change order.

4.07 Substantial Completion/Final Acceptance Inspection

Following notice from the Contractor, the ENGINEER and other Project Team members will conduct an inspection to determine if the Project is substantially complete in accordance with the construction documents. If the ENGINEER and City agree that the work substantially complete, then the ENGINEER will conduct a walkthrough with the City and submit a list of observed items requiring completion or correction (punch list).

Project Team members will conduct a final inspection to determine if the finished Work has been completed to the standard required by the Contract Documents and that Contractor has fulfilled its obligations as required. If necessary, a final list of items to be completed or corrected in accordance with the requirements of the construction documents will be prepared and submitted to the Contractor.

After the Contractor has completed all work required on the punch list, they shall notify the ENGINEER so they can conduct final verification that all outstanding work items have been addressed. The ENGINEER will then provide a recommendation concerning acceptance and final payment.

Scope Item Assumptions:

- ENGINEER will maintain the punch-list of final construction items.
- The City will conduct the final inspection with the Engineer.
- It is assumed that there are no known hazardous waste contaminated areas, wetlands, endangered species, or other environmentally sensitive flora or fauna which may require additional efforts during design, permitting or construction management.

Deliverables:

- Substantial Completion Punch List
- Final Completion Punch List

Additional Services**Post Dredging Residuals Survey**

The ENGINEER's survey team will measure the level of residuals at an average distance of 200' in the Pre-sedimentation basin. This level will be used to generate a topographic surface that assists in quantifying the volume of solids after dredging is complete. The ENGINEER will prepare necessary exhibits for City's record to show conditions after dredging is completed.

Tracking Residual Quantities

This task will help in tracking the project progress and sludge removal rates. The ENGINEER will provide the following services.

- Track progress, expenditures and available project funds by compiling Contractor pay requests and sludge removal quantities from contractor daily logs and provide the data to the City monthly.
- Track and tabulate daily percent solids testing and landfill tickets to calculate total Contractor production in Dry Tons and Wet Tons.
- Review and log percent solids lab test results.
- Provide monthly reports to the City on quantity dredged, quantity remaining, funds allocated and funds remaining.

The services described under this task are based on a duration not to exceed fifteen months.

Scope Item Assumptions:

- The City (Cefe Valenzuela Landfill staff) will provide weekly trip ticket/scale reports showing the weight of each individual load of ONS WTP residuals received at Cefe Valenzuela.
- The Contractor shall provide summary reports showing the DT dredged and hauled, trip ticket/scale reports showing the weight of each individual load of ONS WTP residuals received at Cefe Valenzuela or at the land application site.

The Contractor daily logs should include dredging progress, quantities and characteristics of residuals dredged and dewatered, moisture content of the solids at various stages of dewatering, residuals level, average residual removal rate, and dewatering rates.

FEE

Construction Phase Services will be provided on a time and materials (T&M) basis for a total not-to-exceed amendment amount of \$72,427. Should the City decide to authorize the Additional Services, the total not-to-exceed amendment amount will be \$164,032.

Task Description	Billing Terms	Fee
Basic Services		
Construction Phase Services	Time & Materials	\$72,427
Additional Services		
Post-construction Residuals Survey	Lump Sum	\$18,511
Residuals Quantity Tracking and Verification	Lump Sum	\$73,094
	Total	\$164,032

Invoices will be submitted to the City on a monthly basis as a percentage complete based on project progress. Invoices will be provided with a cover letter summarizing the actions and meetings performed during the invoice period.

If you have any questions or if you would like to discuss in more detail, please feel free to contact us at 214-382-5750.

Sincerely,

Hazen and Sawyer
TBPE Firm No. F-13618



Chamindra Dassanayake, Ph.D, P.E.
Vice President



Ana Maria Garcia, PE
Senior Associate

**ONSWTP Sedimentation Basin Improvements
CITY PROJECT NO. 18130A
SUMMARY OF FEES**

Description	Original Contract	Amendment 1 Part A	Amendment 1 Part B	Amendment No. 1	Amendment No. 2	Amendment No. 3	Amendment No. 4	Amendment No. 5	Amendment No. 6	Total Contract
Basic Services:										
1 Preliminary Phase	\$49,800		\$160,080	\$160,080						\$209,880
2 Design Phase		\$70,797	\$322,816	\$393,613			\$38,905	\$9,029		\$441,547
3 Bid Phase		\$7,367	\$9,714	\$17,081			\$11,063			\$28,144
4 Construction Admin Phase		\$57,612	\$178,926	\$236,538	\$33,924	\$11,795	-\$33,924		\$72,427	\$320,760
Subtotal Basic Services	\$49,800	\$135,776	\$671,535	\$807,311	\$33,924	\$11,795	\$16,044	\$9,029	\$72,427	\$1,000,330
Additional Services:										
1 Permit Preparation										\$0
2 Topographic Survey		\$14,784		\$14,784						\$14,784
3 ROW Acquisition Survey										\$0
4 Environmental Issues										\$0
5 Public Meetings										\$0
5 Construction Observation										\$0
5 Traffic Control										\$0
6 Signalization Improvements										\$0
7 Warranty Phase										\$0
8 Construction Inspection (T&M)										\$0
9 Platting Survey										\$0
10 O & M Manuals										\$0
11 SCADA										\$0
12 Pre-Sedimentation Basin Residuals		\$40,293		\$40,293						\$40,293
13 Post-Dredging Residuals Survey									\$18,511	\$18,511
14 Residual Quantity Tracking									\$73,094	\$73,094
Subtotal Additional Services	\$0	\$55,077	\$0	\$55,077	\$0	\$0	\$0	\$0	\$91,605	\$146,682
Summary of Fees:										
Basic Services Fees	\$49,800	\$135,776	\$671,535	\$807,311	\$33,924	\$11,795	\$16,044	\$9,029	\$72,427	\$1,000,330
Additional Services Fees	\$0	\$55,077	\$0	\$55,077	\$0	\$0	\$0	\$0	\$91,605	\$146,682
Total Authorized Fees	\$49,800	\$190,853	\$671,535	\$862,388	\$33,924	\$11,795	\$16,044	\$9,029	\$164,032	\$1,147,012
	Admin Approval 10/26/2018			Council Approval 4/21/2020	Admin Approval 8/23/2022	Admin Approval 8/19/2022	Admin Approval 1/25/2023	Admin Approval 9/15/2023	Pending	

Note: Funds from Amendment No. 2 were unused and are applied to Amendment No. 4.

CITY OF CORPUS CHRISTI
O.N. Stevens Water Treatment Plant Sedimentation Basin Improvements and Pre-Sedimentation Basin Dredging
Amendment No. 6

		HAZEN		LNV								
		Project Director	Project Manager	Principal	Project Manager	Engineer III	Designer III	CADD Tech III	CADD Tech III	RPLS II	Survey Crew (2-man)	Project Total
TASK 4: Construction Phase												
4.02	Engineering Services During Construction											\$ -
	Project Management and Coordination	1	4	4	30							\$ 9,696
	Construction Administration (Email Coordination, Logs, e-Builder Management)			4	30	30						\$ 12,874
	Shop Drawing/Submittal Review				17	26						\$ 8,818
	Interpretations, Clarifications and RFI Responses		2	2	10	15						\$ 5,842
	Site Visits (2/month for 15 months)		8	16	36	36						\$ 21,100
	Progress Reports and Pay App Assistance			2	30							\$ 7,571
	Change Order Review (up to 1)		1	1	4	4						\$ 2,141
	Substantial Completion/Final Acceptance Inspection	1	1	2	8	8						\$ 4,386
TASK 4 SUBTOTAL		2	16	31	165	119	0	0	0	0	0	\$ 72,427
TASK 5: Additional Services												
5.02	Post-dredging Residuals Survey				8	12	12	12			60	\$ 18,511
5.03	Residual Quantity Tracking and Verification (24 hrs/month for 15 months)				72	360						\$ 73,094
TASK 5 SUBTOTAL		0	0	62	410	610	12	12	0	0	60	\$ 91,605
TASKS 4-5 TOTAL												\$ 164,032