

CONSULTANT WORK ORDER

Date:	1/9/23
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1. PROJECT INFORMATION:

Project Title:	MS & NE WRF Digester Covers Eval & Repairs	
City Project Number:	<u>21-0022-UT</u>	
City Plan Set Number:	<u>N/A</u>	
Consultant Project Number:	<u>41160-008</u>	

2. SCOPE OF SERVICES:

PROJECT DESCRIPTION

The City of Clearwater (CITY) owns and operates three water reclamation facilities (WRFs), two of which are the Marshall Street WRF (MS WRF) and the Northeast WRF (NE WRF). These facilities have anaerobic digesters that require an evaluation to address apparent biogas leaks and mechanical imbalances with the covers. Hazen was solicited by the CITY to perform engineering consulting services to implement immediate corrective actions of these anaerobic digesters with the assistance of the CITY's emergency repair contractor. These services are covered under the existing PO. 22000444. The emergency repair efforts for the MS WRF digester cover have been more extensive than initially anticipated. Therefore, a supplemental scope of work is requested from Hazen to continue providing engineering consulting services to complete the corrective repairs, prepare and oversee a seeding plan, place the anaerobic digester back into service, and prepare a final technical memorandum.

Since the commencement of this project, Hazen has been supporting the City and the City's contractor with the installation of a bypass system, removal of tank contents, providing overall direction, and overseeing the repairs. This supplemental scope allows Hazen to continue providing consultant services to complete the emergency repairs. The supplemental work is anticipated to last an additional 4 months and will be completed on an as-needed basis using the rates included in existing 2019 Agreement for Professional Services between the City and Hazen.

1.2.2 Final Technical Memorandum: The CONSULTANT will incorporate the review comments from the draft Technical Memorandum into the final submittal. The CONSULTANT will hold a meeting with the CITY to discuss CITY comments on the Final technical memorandum that require additional clarification. The CONSULTANT will provide a summary of the meeting to document major discussion topics and action items, add outstanding responses to the comment log, incorporate the remaining comments into the document, and issue the final technical memorandum.

Key Assumptions:

- Anaerobic digesters are being evaluated for mechanical operation and capacity only. No forensic structural evaluation is being conducted.
- CITY will provide assistance to operate all equipment necessary to perform proper conditions assessment.

3. PROJECT GOALS:

The CITY seeks to repair the existing digester tank cover at the Marshal WRF to reduce biogas leakage.

The goals of this project are as follows:

- Assist the city's contractor with placing the existing anaerobic digester tank back into service.
- Provide a technical memorandum to document efforts performed to date in repairing the anaerobic digester.

The final deliverable will be the final Technical Memorandum in paper and Adobe PDF format which will include corrective repair efforts.

4. FEES:

See Attached Schedule "A"

The price includes all labor and expenses anticipated to be incurred by Hazen and Sawyer for the completion of these tasks in accordance with Professional Services Method "A" – Hourly Rate, for a fee not to exceed one hundred eleven thousand and wo hundred twenty Dollars (\$111,220).

5. SCHEDULE:

The project is to be completed **120 days** from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Task 110 – Project Management 120 calendar days

Task 120—Digester Field Start-up and Site Observations 120 calendar days

Task 130—Analysis & Development of Recommendations 120 calendar days

6. STAFF ASSIGNMENT:

Hazen and Sawyer (Consultant) Staff

Andre Dieffenthaler, P.E., Vice President, Project Director

Nestor S. Sotelo, P.E. Project Manager

Jorge Calabria P.E, Project Engineer

Aidan McCabe, EI, Project Engineer

Kurt Pfeffer, P.E., Subject Matter Experts (SME), QA/QC

City of Clearwater Staff

Ivan Tamayo, EI, Project Manager

Jeremy J. Brown, P.E., Utilities Engineering Manager

Richard G. Gardner, P.E., Public Utilities Director

Michael Flanigan, Public Utilities Assistant Director

Christina Goodrich, Wastewater Env'tl Tech Manager

Travis Teuber, W.E.T. Assistant Manager

Kervin St. Aimie, Infrastructure Maintenance Manager

Catherine Borden, Northeast WRF Chief Operator

Ryan Alexander, Marshall St WRF Chief Operator

7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to:

Andre Dieffenthaler (adieffenthaler@hazenandsawyer.com), and Nestor Sotelo (nsotelo@hazenandsawyer.com)

All City project correspondence shall be directed to:

City's project manager with copies to the Utilities Engineering Manager, Public Utilities Director, and Public Utilities Assistant Director.

ENGINEER shall provide a minimum of forty-eight (48) hours' notice prior to conducting fieldwork/site visits. ENGINEER shall provide a minimum of seven (7) days notification for site visits requiring the assistance of City Operations and Maintenance personnel.

ENGINEER acknowledges that all City directives shall be provided by the City Project Manager.

In addition to the original copies delivered as stated in the scope of work, all project deliverables will be submitted in electronic format on CD or other City approved device prior to approval of final invoice.

8. INVOICING/FUNDING PROCEDURES:

For work performed, invoices shall be submitted monthly to the:

**City of Clearwater, Public Utilities Department
Att. PU ACCOUNTING
1650 No Arcturas Ave Bldg C
Clearwater, Florida 33765-1945.**

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

City Invoicing Code: _____

9. INVOICING PROCEDURES:

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- a. Purchase Order, Project and Invoice Numbers and Contract Amount.
- b. The time period (begin and end date) covered by the invoice.
- c. A short narrative summary of activities completed in the time period
- d. Contract billing method – Lump Sum or Cost Times Multiplier
- e. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).

MS & NE WRF Digester Covers Eval & Repairs Supplemental

Hazen and Sawyer

21-0022-UT

City of Clearwater

12. SPECIAL CONSIDERATIONS:

13. SIGNATURES:

PREPARED BY:



Andre Dieffenthaler, P.E.
Vice President
Hazen and Sawyer

Date

1-9-23

APPROVED BY:

Richard Gardner, P.E.
Public Utilities Director
City of Clearwater

Date

ATTACHMENT "A"

CONSULTANT WORK ORDER – PROJECT FEES TABLE

MS & NE WRF Digester Covers Eval & Repairs

Hazen and Sawyer

21-0022-UT

City of Clearwater

**CONSULTANT WORK ORDER
PROJECT FEES TABLE**

Task	Description	Total
I. Preliminary Engineering Phase		
1.0	Project Management	
1.11	Project Schedule	\$1,120
1.12	Monthly Status Reports	\$1,120
1.13	Project Meetings	\$9,640
Subtotal		\$11,880
1.2	Digester Field Start-up and Site Observation	
1.21	Site Visits and Seeding Effort	\$65,700
Subtotal		\$65,700
1.3	Digester Start-up and As-built Services	
1.31	Draft Technical Memorandum	\$17,340
1.32	Final Technical Memorandum	\$6,300
Subtotal		\$23,640
Total Without Allowance		\$101,220
Allowance (10%)		\$10,000
Grand Total		\$111,220

CONSULTANT WORK ORDER

CITY DELIVERABLES

1. FORMAT:

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. DELIVERABLES:

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard release of Autodesk, Inc. software. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562-4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (including CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.