



Jones & Henry
ENGINEERS, LTD.

2

Fluid thinking®

3103 Executive Parkway, Suite 300, Toledo, OH 43606
Phone: 419.473.9611 JHEng.com

Attachment 1

April 13, 2022

Ms. Jennifer L. Escott
Lenawee County Drain Commissioner
320 Springbrook Avenue, Suite 102
Adrian, Michigan 49221

Subject: Proposal for Engineering Services for
Wamplers Lake, Franklin Township and Cambridge Township
Wastewater System Improvements
Condition and Capacity Study

Dear Ms. Escott:

Jones & Henry is pleased to provide you with this proposal for engineering services associated with the Wamplers Lake, Franklin Township, and Cambridge Township condition and capacity analysis.

Statement of Understanding

The Lenawee County Drain Commissioner (LCDC) is operating the wastewater collection system and treatment system for the Wamplers Lake, Franklin Township and Cambridge Township. The collection system is a low-pressure sewer that consists of the following:

- Individual grinder pump stations (GPS) located on private property.
- GPS discharge into a force main sewer which is typically operated at low pressure (Typically under 100 PSI).
- The force main collection system discharges into wastewater pumping stations which re-pump the flow to the wastewater treatment lagoons.

The collection system was placed into operation approximately 20 years ago, and the LCDC is responsible for the overall operation of the system. While the LCDC has done well to maintain the system, they wish to assess the existing condition of the system. Through the years, they have had some operational problems from force main breaks, air release valve replacements, grinder pump replacements/retrofits, damaged grinder pump wet well, and suspected inflow and infiltration (I/I). The LCDC has also been approached by the Townships to begin discussions about extending the sewer collection to surrounding areas, both developed and undeveloped.

The LCDC wishes to perform a condition assessment and capacity evaluation of the existing system. As a part of this evaluation, the LCDC would like to review the residential equivalent units (REU) system for the existing service area. After the condition and capacity evaluation is completed, the LCDC would like to study the options for extending sewer service to the adjacent developed areas and review the REU for the new areas.

Ms. Jennifer L. Escott
April 13, 2022
Page 2

Project Approach

Our approach will involve separating the project into two phases:

1. Condition and Capacity Evaluation of the Existing System.
2. Evaluation of Expanded Service Area – Providing sewer collection service to developed areas (outside current service area).

Phase 1 – Condition and Capacity Evaluation of the Existing System

Jones & Henry proposes that a kick-off meeting be held at the LCDC's office. The purpose of the meeting is to familiarize the participants with each other and to discuss the project's specifics including all attributes and amenities to be incorporated into the design.

The scope of engineering services for the condition and capacity evaluation will include:

- We will perform a site visit to the wastewater plant, and various pump station sites as well as familiarize ourselves with the service area of the collection system.
- We will review the LCDC's monthly operating reports (MORs), drawings, records, previous evaluations/reports, and O&M Manuals. A key document that will be utilized is the original planning document if the LCDC has it. Additionally, we will review available ordinances, agreements, and associated information related to the current REU system.
- Following our initial meeting and project discussion, we will prepare a design memorandum document detailing the scope of our services and approach to evaluation to achieve a mutual understanding of work effort and deliverables.
- Utilizing the LCDC's existing GIS information, mapping, property records, and GPS locations, we will perform a capacity analysis. We will utilize the MOR (flow information) to determine the maximum-day flow conditions in the system and the potential impact I/I may be having on the operation. We will review the piping system with respect to the maximum-day flow condition to assess the capacity of the piping system, pump stations, and GPS.
- If there is a need to redistribute or adjust the REUs with the existing system, this can be included in the capacity analysis. The LCDC would take the lead in coordinating this task.
- As part of the condition assessment, we will review the LCDC records, and meet with the operations group to discuss the history of the system regarding the maintenance, operations, repairs, replacements, and improvements that have been completed.
- We will meet with the LCDC to present our findings and recommendations for the condition and capacity evaluation of the existing facilities. We will summarize our findings and recommendations in the report at the conclusion of the project.

Ms. Jennifer L. Escott
April 13, 2022
Page 3

- We will summarize the current REU system, address any deficiencies, and provide recommendations for addressing the noted deficiencies and adjustments or redistribution of the REUs.
- We will seek the LCDC's agreement with the findings and recommendations of the Phase 1 part of the project prior to proceeding with Phase 2 or the draft report.

Phase 2 – Evaluation of Expanded Service Area

We will work with the LCDC to establish the initial boundaries of the expanded service area.

- Based on the expanded service area, we will review the population and number of REUs in each Township within the expanded service area. We will review with the LCDC (and Townships) the undeveloped areas to be included in the sewer service area (additional REUs).
- We expect the LCDC to take the lead in this task of developing the location of the expanded service areas and the anticipated number of REUs. This would include contacting various officials from the involved Townships to obtain input on the location of the needed wastewater service. We will provide services as requested to accomplish this task.
- We will develop the basis of design, for the identified service area, which will establish the anticipated flows and flow distribution for the identified REUs.
- Utilizing the basis of design, we will provide recommendations for the force main routing, connections to the existing system, and needed improvements to the existing system to support the expanded service area.
 - We are assuming the expanded service area will be low-pressure sewers similar to the existing system, thus, we will not review alternative collection systems.
 - An Engineer's Opinion of Probable Construction Cost will be prepared for each recommendation, along with non-monetary considerations.

Report

- We will prepare a report summarizing both Phase 1 Condition and the Capacity Evaluation and Phase 2 Expanded Service Area. The report will document deficiencies, and provide recommendations for addressing the noted deficiencies with an Engineer's Opinion of Probable Construction Cost for each recommendation. We will discuss the non-monetary considerations for each recommendation.
- We will summarize the current REU distribution within the existing system by location and Township, identify any deficiencies, and provide recommendations for addressing the noted deficiencies.
- We will summarize the REU distribution by location and Township for the expanded service area.
- We will provide the LCDC with a draft of the report. We will meet with the LCDC to present the draft findings and discuss the findings and recommendations. After the LCDC provides their review comments, we will address the comments and provide a final report.

Ms. Jennifer L. Escott
 April 13, 2022
 Page 4

Project Fee

Our estimated fee for the engineering services to complete the scope of work listed above is as follows:

Phase 1 Condition and Capacity Evaluation	\$40,800
Phase 2 Expanded Service Area Evaluation	<u>\$14,800</u>
Total	\$55,600

Actual charges will be based upon time and expenses, not to exceed the proposed fee without approval by the LCDC. Detailed invoices outlining hours and expenses consumed will be provided monthly for review and approval by the LCDC.

The standard of care for all professional engineering and related services performed or furnished by Jones & Henry under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Jones & Henry makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Jones & Henry.

Schedule

Task	Approximate Date
Kick-off Meeting, Site Investigation, and Document Collection	June 1, 2022*
Phase 1 Condition and Capacity Evaluation	June 2022 – December 2022
Phase 2 Expanded Service Area Evaluation	January 2023 – March 2023
Draft Report	March 2023
Final Report	April 2023

* Scheduled start date is dependent upon other projects with the LCDC.

We want to thank you for the time provided to discuss the project, and we appreciate the LCDC's consideration of Jones & Henry for this work. If you have any questions, please contact me. We would be happy to meet with you and the LCDC to discuss our proposal.

Sincerely,

JONES & HENRY ENGINEERS, LTD.



Peter A. Latta, CDT®, CSI
 Toledo Office Director

PAL/bjm

This is Task Order No. 2,
consisting of 7 pages.

Task Order

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated _____ ("Agreement"), Owner and Engineer agree as follows:

1. Background Data

- a. Effective Date of Task Order:
- b. Owner: Lenawee County Drain Commission
- c. Engineer: Jones & Henry Engineers, Ltd.
- d. Specific Project (title): Wamplers Lake, Franklin and Cambridge Townships Wastewater System Improvements Condition and Capacity Study
- e. Specific Project (description): Engineering Services Associated with the Condition and Capacity Analysis.

2. Services of Engineer

A. The specific services to be provided or furnished by Engineer under this Task Order are:

- The Scope of Services as detailed in the proposal letter Wamplers Lake, Franklin and Cambridge Townships Wastewater System Improvements Condition and Capacity Analysis, dated April 13, 2022 and the services (and related terms and conditions) set forth in the following sections of Exhibit A, as attached to the Agreement referred to above, such sections being hereby incorporated by reference:
 - Study and Report Services (Exhibit A, Paragraph A1.01)
 - ~~Preliminary Design Phase (Exhibit A, Paragraph A1.02) – Not Used~~
 - ~~Final Design Phase (Exhibit A, Paragraph A1.03) – Not Used~~
 - Bidding or Negotiating Services (Exhibit A, Paragraph A1.04) – Not Used
 - ~~Construction Phase Services (Exhibit A, Paragraph A1.05) – Not Used~~
 - ~~including Resident Project Representative (RPR) services (A1.05.A.2) – Not Used~~
 - ~~Post-Construction Phase Services (Exhibit A, Paragraph A1.06) – Not Used~~

Task Order Form

EJCDC® E-505, Agreement Between Owner and Engineer for Professional Services – Task Order Edition.
Copyright © 2014 National Society of Professional Engineers, American Council of Engineering Companies,
and American Society of Civil Engineers. All rights reserved.

دوره اول آزمون استخدامی مهندسی عمران
شماره ۱۳۰۲/۱۳۰۳

~~*—Commissioning Services (Exhibit A, Paragraph A1.07) – Not Used~~

- B. ~~Resident Project Representative (RPR) Services – Not used.~~
- C. Other Services – Not used.
- D. All of the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order.

3. Additional Services – Not used.

4. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement and in Exhibit B, subject to the following: No modifications.

5. Task Order Schedule

In addition to any schedule provisions provided in Exhibit A or elsewhere, the parties shall meet the following schedule: Scheduling will be coordinated with the Owner as described in Attachment 1.

6. Payments to Engineer

- A. Owner shall pay Engineer for services rendered under this Task Order as follows: Owner will be billed on Direct Labor Times a Factor (time and expense) not to exceed fees shown in Attachment 1.

7. Consultants retained as of the Effective Date of the Task Order: – None.

8. Other Modifications to Agreement and Exhibits: – None.

9. Attachments: Proposal for Wampers Lake, Franklin and Cambridge Townships Wastewater System Improvements Condition and Capacity Analysis, dated April 13, 2022.

10. Other Documents Incorporated by Reference: – None.

11. Terms and Conditions

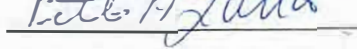
Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____.

OWNER: Lenawee County Drain Commission

ENGINEER: Jones & Henry Engineers, Ltd.

By: _____

By: 

Print Name: Jennifer L. Escott

Print Name: Peter A. Latta, CDT®, CSI

Title: Drain Commissioner

Title: Toledo Office Director

By: 

Print Name: Jake Meinerding, PE

Title: Cincinnati Office Director

Engineer License or Firm's
Certificate No. (if required): _____
State of: _____

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Jennifer L. Escott

Name: Peter A. Latta, CDT®, CSI

Title: Drain Commissioner

Title: Toledo Office Director

Address: 320 Springbrook Avenue
Suite 102
Adrian, Michigan 49221

Address: 3103 Executive Parkway
Suite 300
Toledo, Ohio 43606

E-Mail Address: Jenny.escott@lenawee.mi.us

E-Mail Address: platta@JHEng.com

Phone: 517-264-4696

Phone: 567-661-0251