

Preliminary Engineer Report (PER) for Meadows Apartments and Town of Montville WPCF

Due Date: October 15, 2026 @ 12PM

A. Project Overview

The Town of Montville (Town) is requesting proposals from qualified professional civil engineering firms to provide engineering services related to the preparation of a Preliminary Engineering Report (PER) which meets the requirements outlined by the United States Department of Agriculture (USDA) Water & Waste Disposal Predevelopment Planning Grant, from which this project is funded.

While the overriding goal is to complete the PER as a precursor to future funding, the scope generally includes:

1. A sanitary feasibility study for the properties located at 90 and 91 Leffingwell Road, also known as The Meadows Apartments,
2. Prepare conceptual plans for housing expansion on the Meadows Apartment Site, and
3. Understand expansion possibilities of the WPCF located at Pink Row, Uncasville, CT.

Following the completion of the PER and WPCF study, and Town concurrence to proceed, the Town may apply for a USDA Development Grant to fund the construction of the sanitary sewer extension to the Meadows Apartments and pursue funding for WPCF expansion, pending the outcome of this scope of work.

B. Pre-bid Meeting (Mandatory)

A mandatory site visit will be held at the Montville WPCA facility located on Pink Row on September 9th 10AM. The visit will include an overview of the facility and then relocate to the Meadows Apartments.

C. Context

The Meadows Apartments

The Meadows Apartment site is a privately-owned rental complex built in 1967 and consists of 114 units and 187 bedrooms. It is served by on-site septic and well. The septic is experiencing signs of deterioration. While any failure may not be immediate, it is likely imminent and thus potentially causing a public health matter and potential impact to Class A watercourse nearby. The owner and Town seek to be proactive.

Limited space for constructing new on-site systems is believed to be a constricting factor to an on-site solutions. Therefore, a connection to the Town system may be warranted. This study seeks to determine if on site system(s) can or cannot be achieved. The study also seeks to determine the feasibility of connecting to the existing system in Fitch Hill Road as an alternative. Both alternatives shall be studied and include associated opinion of probable construction costs.

As a first step, the selected Consultant is expected to conduct initial conservative evaluations of the existing site conditions as a ‘desktop level’ review. If such initial review clearly determines, with concurrence from the owner and Town, that no on-site system solutions are possible, no further such work shall be necessary and the focus to finding a solution for the Meadows Apartments shall be solely on a new sewer connection. Funds which would have been spent on field testing and further on-site solution would then be reallocated as necessary for other scope items described herein.

Also, the Town and Owner wish to determine if additional housing units can be achieved on site and to help the Town reach our mandated affordable housing goals which maximizing the ROI for a sewer extension, capitalizing upon the economy of scale and investment of federal funds, should a development grant be awarded following this initial work. New on-site systems would not be expected to accommodate housing expansion. The findings of this conceptual review will assist the Owner and Town in preparing for Spring submission to the Department of Housing for the Development Engagement Process (DEP), a precursor to obtaining funding.

Background information, including a conceptual force main routing, is provide in the attached 8-24 review conducted by Town staff.

The WPCF

The Town of Montville WPCA services approximately 4,600 sewer connections with facility permit/design capacity of 4.5 million gallons per day (MGP) influent flow and 30,000 lbs/day biochemical oxygen demand (BOD₅). The capacity is shared by contractual allocations with Rand Whitney Container Board (RWCB) and Mohegan Tribe Utility Authority (MTUA). The Town’s allocated Flow is 1.8 MGD with a BOD of 4,300 lbs/day. The Town is aware that some rain induced infiltration and inflow (I and I) is impacting allocations of the Town portion during wet seasons. Even without I and I, the Town’s allocated amount is nearing its capacity. Considering the recent interest in development, commercial and residential, we seek to understand methods to expand the Town’s allocation, through physical expansion, contractual negotiations, or both. This will inform the Town’s capital planning strategy as we embark on drafting a Housing Plan per PA 25-1, forming a new Plan of conservation and Development, and weigh the feasibility of connecting the Meadows Apartments to the system.

The wastewater collection system includes 75 miles of sewerage and 24 pumping stations. The Water Pollution Control Facility (WPCF) consists of preliminary treatment followed by a secondary (biological) treatment and (seasonal) disinfection. The WPCF discharges treated sanitary wastewater to the Thames River (Horton Cove) consistent with controls established in the assigned state and federal permits.

Proposed work at The Meadows would require significant infrastructure improvements including sanitary pipe installation for gravity/force main sewers, two new pump stations and renovations at existing pump stations.

D. Scope of Services

The project consists of three primary components. The selected firm shall utilize the requirements for a Preliminary Engineering Report (PER) as the basis for scoping Task 1.

NOTE: The Town and WPCA reserve the right to continue services with the selected firm beyond the services listed below.

1. Meadows Apartments Sanitary Feasibility Study

- a. Compile exiting condition information and prepare base mapping of the site and Leffingwell Road to point of likely connection. Town and owner will supply readily available file mapping and GIS data.
- b. Visit the site and documents relevant to work under items 1 and 2, soil mapping, wetlands, GIS etc.
- c. Conduct desktop review, with above initial research, to determine appropriateness for additional testing/evaluation of an on-site solution. Document findings with maps and text as necessary.
- d. Following the desktop study above, review findings with Owner and Town to determine next steps related to on site studies which may be necessary.
- e. If an onsite solution appears feasible, and following notice to proceed, perform field testing and feasibility study to determine if the site can support an on-site system or if it must connect to the Town's sanitary system. For the purposes of pricing this response, assume three days field time, six perc test and stand pipe installation. Consultant will coordinate with Health Department as necessary throughout this process for guidance on testing, including their presence. Evaluate possible solutions from traditional on-site leach system, and current technologies for treatment. Solutions which are appropriate for small space planning should be evaluated. Prepare one opinion of probable construction costs for one selected solution. Document all findings with maps, figures and narrative. The Owner will supply an excavator/back-hoe and operator. The Consultant will be responsible for all supplies and labors. Assume water is available on site.
- f. Concurrent with on-site reviews, if required, conduct additional evaluation and cost estimates for the sanitary sewer extension. Evaluate existing conditions for force main routing, connection point, existing pipe network and pump station(s). If necessary, propose order of magnitude upgrades that may be necessary to support the connection.
- g. The above sanitary connection shall be evaluated based upon existing housing density and possible future expansion as discussed in task 2 below.
- h. Summarize all findings, conclusion, assumptions and recommendations in a single document.

2. Meadows Apartments Housing Expansion Review

- a. Develop one draft conceptual plan and one final plan based upon owner and Town input depicting housing expansion potential based upon a floorplate determined by owner and as infill in location of existing septic. Plan shall address parking, open space, zoning, and pedestrian circulation. Final plan shall be black and white line drawing based upon existing conditions mapping prepared under task 1 above.
- b. Use the concept plan to assist with work in task 1 above.

3. WPCF Capacity and Strategic Positioning

- a. Compile existing condition information and prepare base mapping of the site and Leffingwell Road to point of likely connection. Town and owner will supply readily available file mapping and GIS data.
- b. Visit the site and document findings relevant to work under items 1 and 2.
- c. Review and summarize agreements with RWCB and MTUA.
- d. Gain a comprehensive understanding of the existing WPCF operations, equipment, operating status/conditions, and overall land upon the WPCF site
- e. Review land adjacent to the WPCF for possible expansion if acquisition may be appropriate.
- f. Understand potential environmental limitation; including natural resources and regulated waste.
- g. Collect up to four surface/subsurface soil samples in areas of work including the standard penetration test for geotechnical purposes.
- h. Review the existing conditions of the facility (building, infrastructure and land area) and prepare two expansion scenarios depicting 10-year and 20-year use projections.
- i. Develop order of magnitude costs for each scenario.
- j. Issue final executive summary report summarizing findings, recommendations and costs.

4. Preliminary Engineering Report

Prepare a final PER following the USDA requirements outlined as follows:

https://www.rd.usda.gov/files/UWP_Bulletin_1780-2.pdf

5. Meeting Attendance

In addition to routine correspondence (phone and email), assume attendance at four in person project meetings and one final presentation to Town Council. Include all preparation time.

6. Expenses

Outline all assumed expenses (mileage, materials, subconsultants such as labs and contractors, if any) which will be included in the lump sum fee.

Town Supplied Services/Materials

- Exiting reports
- GIS mapping and file mapping.
- Back hoe and operator for the Meadows Apartments site only.

E. Project Schedule

The goal is to have the project completed by April 1, 2027, or sooner. The Town is expecting the state of CT to release housing affordability targets which will guide the development of the Town Housing Plan as required by PA 25-1. The capacity and housing density on site will inform the Housing Plan development, which is scheduled for completion in the Summer of 2027.

F. Submission Requirements

Submit ten (10) bound copies and a USB drive by October 15, 2026 at noon addressed to:

Julie Chapman
Finance Director
Town of Montville
310 Norwich-New London Tpke
Uncasville, CT 06382

Submission shall include at minimum the following information:

- Letter of interest
- Project Understanding
- Detailed scope of work based upon above Tasks which outlines the work which the bidder proposes to achieve the goals and objectives outlined herein. This includes but is not limited to quantifying deliverables, meetings, testing (site/lab), assumptions, and equipment needs/provided. Clearly outline exclusions.
- Lump sum fee proposal itemized by Scope of Service items listed above; include all assumptions; quantify materials, hours per meetings and field time.
- Hourly rates
- Team resumes with roles and responsibilities. Identify the lead point of contact.
- Relevant project experience in housing development and wastewater planning and engineering
- Firm overview
- List of all subconsultants
- Three municipal/government/quasi-public agency references from relevant work completed in the last five years
- Project Schedule by task and milestones; outline suggested meeting dates

G. Questions & Selection Criteria/Process

Questions shall be received no later than September 22nd at 12pm via email, addressed to:
Dennis Goderre, Director of Land Use & Development
dgoderre@montville-ct.org

Proposals will be evaluated based on:

<u>Points</u>	<u>Criteria</u>
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15	Firm's technical expertise and team experience
15	Understanding of the project's constraints and goals
25	Scope of Work accuracy and thoroughness
25	Fee Proposal and Hourly Rates
25	Schedule
10	Ability to address the regulatory and planning requirements
10	Knowledge of USDA grant requirements