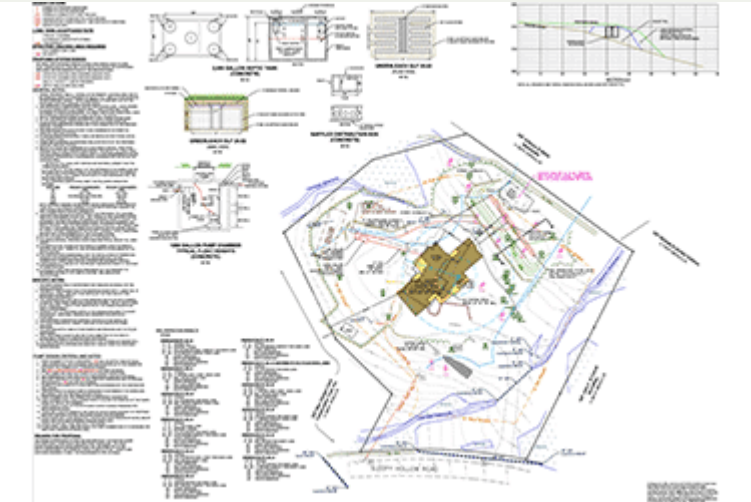


Services: Septic System Design

Even though Connecticut is the 4th most densely populated state in the United States, most houses are still serviced by private septic systems. Other uses such as schools, restaurants, and other commercial buildings found in non-urban areas also commonly make use of septic systems. **An adequately designed septic system that is constructed and maintained properly provides a safe and effective way of disposing of domestic sewage.** Since domestic sewage contains disease causing organisms, it is essential that it be disposed of properly in order to prevent health hazards and nuisance conditions. Oversight of on-site septic systems for sewage flows of 5,000 gallons per day or less lies with the State and Local Health Departments and is regulated by Section 19-13-B103 of the Public Health Code and the associated Technical Standards.



Knowledge, Experience, & Working Relationships

Since septic systems sizes and types vary based on needs and environmental conditions it is extremely important to have qualified professionals who are familiar with pertinent septic system regulations and can draw from past experiences as well as work with regulatory agencies to obtain health approvals their client. The staff of engineers and designers here at Arthur H. Howland & Associates, P.C. offer many years experience in the design subsurface sewage disposal systems (septic systems) in the State of Connecticut. Over the years we have forged many great working relationships with various state and local regulating agencies associated with the oversight of septic system design, construction, and maintenance. We have also built many strong relationships with contractors and septic installers over the years. These relationships have allowed us to offer our clients septic design services that are designed properly, cost effective, and that can be installed with minimal headaches.

Preliminary Stages

The design of a new septic system or the repair of an existing system begins with the needs and wants of the client. Here at Arthur H. Howland & Associates, P.C, we begin every project by personally meeting with the client to discuss their vision for the overall project. For residential projects, we sit down with the client to discuss the desired location, size, and number of bedrooms for the house. On commercial, institutional, and other non-residential projects, we discuss various factors associated with the proposed development that will contribute to the daily sewage flows. Based on our conversations with the client, we are then able to determine the anticipated daily flows to the proposed septic system. Since the size of a septic system in the State of Connecticut is based on the daily flow being directed to it, we are then able to approximate the size of the septic system needed. Once the size of the septic system is approximated, we then work with the client to determine a desirable area on the property where a septic system can feasibly be installed.

Soil Testing & Site Investigation

Following the preliminary septic system sizing and once the desired location for the septic system is selected, it is then necessary to conduct a soil investigation with the local health department in the potential septic area to ensure that it is adequate to treat the daily sewage flows being directed. During the soil investigation, soil test pits are dug and each pit is analyzed and documented with regard to soil characteristics and evidence of groundwater or bedrock. The results of the soil investigation are then used to determine the soil constraints of the site which in turn allows us to determine the required length and area of the septic system. By conducting the soil investigation in several locations, we are able to design to the client's needs and chose the best area for the septic system. Proper placement of a septic system can result in a substantial cost savings and a quality system that will last for many years.

Data Collection & Septic System Design

After the soil testing is complete, our survey field crew will locate the soil test pits, adjacent property lines, neighboring wells, on-site topography, and any other information that may be needed to design the site improvements and obtain the necessary permits. This field data is then compiled and used by our surveyors to generate the existing conditions and survey mapping. Following the creation of the existing conditions mapping, the engineering design staff of Arthur H. Howland & Associates, P.C. is then able to design the subsurface sewage disposal system (septic system) for the project. Since there are many different types of septic system products on the market, we always strive to design the most cost effective system that achieves the client's needs and goals. As part of every septic system plan we also design the site for the proposed house, driveway, well, grading, and other improvements to ensure that the site will function adequately over time.

Health Approval Process

Once the septic system design and associated plans are completed, they are then submitted to the local health department for health approval. During this process, the health department will typically either request revisions or approve the plans as submitted. Following health department approval, the client is then able to continue the site planning and building process. If requested, the staff of Arthur H. Howland & Associates, P.C can also submit your plans to local septic installers to receive competitive bids on your project.

We Like a Good Challenge

Not every site is easy develop. As more and more land continues to be developed, the vacant land which remains for development tends to be ever increasingly more difficult to build on. At Arthur H. Howland & Associates, P.C we understand this and enjoy the challenge of designing on difficult lots. Our knowledge of the public health code and of the most up to date technology gives us the ability to design successfully on lots that others might not be able to. The State of Connecticut Department of Public Health sets the minimum requirements and standards for soil testing and septic systems. These requirements can be viewed at www.ct.gov/dph. In addition to these requirements some local health departments have additional or more stringent regulations.

The staff at Arthur H. Howland & Associates, P.C. is always available to meet with you to discuss your property and how the local and state regulations influence your project. [Contact us](#) at (860) 354-9346 to discuss how Arthur H. Howland & Associates can play a key role in taking your septic project from the initial planning stages through the health approvals process and eventually into construction.

Company

Services

Markets

Careers

Regulations

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Howland Updates:

Howland & Associates Helps New Milford Parks & Rec

Our office recently helped the Town of New Milford Parks and Recreation Department. The Department,...

Girl Scout Camp Almost Ready to Open!

It was a pleasure to work with the Girl Scouts of America and Westchester Modular...

Danbury, CT Apartments Rise From the Ashes

As you may be aware, a fire ran rampant through the apartment complex at 7...

'Green' Solution Found for Proposed Library Parking – Porous Asphalt

From Susan Tuz of the New Milford Spectrum: "Municipalities throughout the state and New England...