

Jim Anderson and Dave Gustafson are connected with the University of Minnesota onsite wastewater treatment education program. Dave is extension onsite sewage treatment educator. Jim is former director of the university's Water Resources Center and is now an emeritus professor, as well as education program coordinator for the National Association of Wastewater Transporters. Readers are welcome to submit questions or article suggestions to Jim and Dave. Write to ander045@umn.edu.

Protecting the Site

Make sure that other contractors working on your installation site do not cause damage or make decisions that will jeopardize your ability to position the system properly

By Jim Anderson, Ph.D., and Dave Gustafson, P.E.

As an installer there are at least two potential situations where you need to be concerned about protecting the site for the soil treatment and dispersal area.

The first is when a house is under construction and the system is to be installed after the house plumbing and more importantly the house sewer line elevation is established. The second is where a secondary site is to be set aside to use either as the primary site or for future replacement of the current site.

In either case, working with the designer and owner is necessary. If the site under consideration is the primary site for installation, it is your responsibility to review the site and its site characteristics to make sure the system proposed for the site will actually work there. It is much easier to move lines on paper than to move water wells or structures.

You should evaluate the site lay-

out both on paper and in the field. The layout must allow for the installation to occur. There may be natural features that will conflict with the installation: streams, wetlands, large trees or boulders, and other obstructions.

Often overlooked

Two items are sometimes overlooked by inexperienced designers. First, does the shape of the lot and the natural slope allow installation of the soil treatment and dispersal area on the contour? We have found that pie-shaped lots can pose particular difficulties with the location of one area, much less two if required by code.

Second, what are the elevations? While the first to be concerned with is the elevation of the house sewer, there are other situations where there can be problems with elevation. An example is where a house is to be located on the front



An example of a disturbed site that now is not suitable for onsite system installation.

of the lot and the system is designed to be in the back of the lot — requiring a large cut to run the piping from the house to the system.

If proposed structures are going to limit access to the site or impede the movement of equipment in and out for installation, including delivery of the tank, it may be important to start planning early with the other contractors working on those structures.

Installation may need to be staged to fit your need and their need to access the building site. While you must consider how and where to stockpile materials and equipment to protect and maintain an undisturbed treatment site, the other contractors also need to be consulted.

There is nothing worse than to

Material and equipment placed over the site can result in soil compaction that damages system performance.

come back to the site to begin your installation and find that another contractor has used the site to stockpile materials or equipment, and the site is now damaged through compaction and smearing. Discuss these logistics with the other contractors. Consider sending them a letter or having a signed agreement to protect the site. You should also physically stake or cord off the area in question.

Make it stick

Methods we have seen used to mark off the site include staking and using yellow caution tape to mark the area, and using fencing material and posting “keep off” signs around the area.

From our perspective something more substantial than yellow tape needs to be used. The tape can easily be removed and is not an adequate deterrent to crossing the boundary. If an agreement is signed, one useful provision is a payment





Backfill or spoil should not be placed over the installation site.



Identification flags can be used to mark the site.

or penalty for crossing the boundary and creating problems.

One common complaint from installers concerns well drillers. Installers say these contractors drill the well too close to the system, and sometimes damage sites while moving equipment onto and around

the lot. Here is where it is important not only to review the plan but also to review lot lines and distances before any construction or installation takes place.

We recently had a situation where the property owner had to purchase an additional 20-foot strip of property from a neighbor to make everything fit after the well was installed. The good news for the homeowner was that he could actually purchase that property. Think of how many times this would not be an option!

It is interesting how often we go to a site for a planning visit and the lot lines are not well defined. It is in your best interest to make sure you know exactly where those lot lines are and what setbacks are required. It is a part of protecting the area where you must install your system.

Remember, it is much easier to protect your site from damage or encroachment than to try and fix problems on the site after damage has been done, or to move to a different location on the lot where installation will be more difficult. ■