ALMOST EVERYTHING YOU WANT TO KNOW ABOUT SEPTIC SYSTEMS

As a Real Estate Agent, we are constantly learning and then sharing our knowledge with our clients. We must even expand our knowledge into some related industries that are not comfortable to discuss with a client, such as septic systems and their functions. The real estate industry isn’t just cars and contracts; it includes other really interesting stuff as well.

SEPTIC DESIGN AND INSTALLATION. The process starts off with unimproved land. A property owner or buyer must find out where on their site they should install the system and what type of system will be required by State regulations. There are various types of system options to select from. The latest technology includes systems that are considered mini sewage processing plants. Those manufactures claim that the effluent is nearly potable by the time it is pumped to the drain field. I am not convinced to that level but my opinion is based on the “ick factor” not science.

The system selection process includes hiring a licensed on-site designer who will complete a site and soil analysis and submit a design to the County for their approval and permit. The permits have a validity period of four years and the cost is around $1,250, but add $500 if a backhoe is needed for the holes. The two most commonly used designers are Jack Cory 360-378-4900 and Rick Petro 360-376-2762. A full list of approved designers is available via the link shown below.

https://fortress.wa.gov/dol/dolprod/bpdLicenseQuery/LqsSearchResults.aspx
If the parcel is under a Purchase Agreement, the design and permit process is typically done by the buyer as part of the Feasibility Contingency, which is processed prior to closing.

Another aspect of the Feasibility Study is to confirm that the property is not located in an archeological sensitive area such as Indian Midden or near a cemetery. If the property does contain sensitive materials, you need to know where they are located. To confirm this information you need to contact Nadine Cook at San Juan County at 360-370-7585. Being located in an archeological sensitive area will add thousands to the cost of installing a septic system as reports must be filed and an archeologist must be present during installation.

All new systems are required to have a reserve drain field area in the event the first drain field fails. This can be difficult on smaller lots that have other restrictions such as being on the shoreline. Further, some lots are unbuildable due to inability to install a septic system; they become buffer or recreation lots. Their value is typically 50% of market.

The system is installed by an excavation firm licensed for installation. The service provider should be screened based on the type of system to be installed. Asking your designer for a reference is a good plan. The cost to install a new system will vary based on the type, size, and conditions of the site; the range is $15,000-$40,000, with the typical being $22,000-$25,000. It is prudent to photograph the site during the installation process so that you have documentation on the component locations; this makes servicing in the future easier. A list of installers is available via the County website.

The size of your system should be based on your future home building plans; i.e., the number of bedrooms in the plans should match the size of your system. Years back, some property owners felt that the systems were over engineered; hence the practice of building a 3 bedroom home with a 2 bedroom septic system presented itself. The result of this faulty logic is notable when a property owner decides to sell and markets the home. Real Estate Agents are only able to advertise the maximum number of bedrooms per the septic permit, not the floor plan. These rules impose creative marketing remarks such as “home offers 2 bedrooms and a den with a closet”. This lack of detail impairs the marketing of the home. Of course, if you have a 7 bedroom system and a 3 bedroom house, the marketing remarks remain at 3 bedrooms.

If you want to check the size of your system, you can find a copy of your permit at the County site that is shown via the link below. If your system is older, and the permit fails to disclose the number of bedrooms in the text, you can usually rely on the permit
number. The last numeric digit of the permit number represents the size the system was installed for, i.e., Permit Number 2004-052-R3 is a 3 bedroom system.

http://www.sanjuanco.com/432/Septic-System-Permit-and-Inspection-Sear

**INSPECTIONS.** The County is mandated by the State to enforce the monitoring and regular inspections of septic systems. The frequency of the inspection is based on the type of system you have and varies from annually to every 3 years. The County does this by mailing out post cards that suggest it may be time for your septic to be inspected and pumped if necessary. Most property owners promptly file the post card in the “to do” pile which often doesn’t get “to done”.

When a property owner lists their home for sale, they are advised by their Coldwell Banker San Juan Islands agent that pursuant to SJC ordinance 8.16.160, a septic inspection is required and a pump may be necessary. A seller must evidence the compliance of their system to a buyer as part of the purchase contract. The evidence consists of a copy of the report completed by the inspector and a copy of the receipt for upgrades, repairs and pumping, if applicable. The purchase contract requires that the evidence must be less than 12 months old, however; if a lender is involved, the evidence may need to be less than 90 days.

An inspection is also necessary should a property owner apply for a remodeling permit. The cost of an inspection is in the range of $95-$300 and will vary subject to the type of system that is being inspected.

Further, if you are listing your property for sale and your system is older, the inspection results may require you to upgrade the maintenance components to become compliant. Required updates may include: access risers on tank and pump chamber, access risers on distribution box, observation ports, and clean-outs on laterals, audible alarms and effluent filters. Cost to upgrade your system is in the range of $600-$3,000, subject to the amount of work.

Cost to pump your tank is in the range of $750-$1200, subject to size of tank. As you may be aware, the content of your tank is disposed of off island which has a direct impact on the cost to pump. The inspectors do not recommend a pump-out until the accumulated solids reach a determined threshold, which may range from 25% to 40% of the working depth of the tank, in most tanks that equates to 16 inches. Ultimately, unless a third party is involved, such as a lender, the decision to pump-out is at the homeowner’s discretion. When the levels reach the threshold, a pump-out is highly recommended as part of proper operation and maintenance.

Generally, most systems installed after year 2000 have the required maintenance components. The two most commonly used inspectors/pumpers are Ted Leiker 622-
6338 and Craig Starr 378-8060. Both of these service providers can also install the maintenance components if needed. If the upgrades require a backhoe, then additional excavation contractors are hired. The complete list of licensed wastewater inspectors is available via the County website.

**INFORMATION SOURCE.** The County now has a great website for searching septic inspections and permits by tax parcel number. The site is very convenient for agents to use when representing clients as all historic inspections and permits are filed on the site and therefore accessible throughout the day. 

http://www.sanjuanco.com/432/Septic-System-Permit-and-Inspection-Sear

**DO-IT-YOURSELF INSPECTIONS.** If you want to thoroughly understand how your system functions, you too can become a septic inspector for your own system. Do-it-yourself inspections are not allowed on the fully self-contained units such as the Advantech systems. Those must be inspected by one of the licensed designers on an annual basis due to the high level of technology. However, the Whitewater system may be self-inspected, if the property owner has taken the County class and been approved by the local Whitewater representative.

It is recommended that you **do not conduct a self-inspection** if you are processing it for the purpose of a sale on your property. That final inspection should be left up to the professionals due to the liability associated with do-it-yourself inspections and purchase contracts. Further, the County will not accept homeowner inspections for those inspections done as part of a real estate transaction.

If you desire to conduct your own inspections, classes are taught regularly at the County. You can contact the Health Department at 378-4474 to reserve your place in the class.

**SYSTEM FAILURE.** If your system fails, you will typically be granted a repair permit. Failed septic systems cause great damage to our environment so the repair permit process is regularly expedited. Systems fail for a variety of reasons; a few of the most common include surface damage, roots, lack of maintenance, and the worst is toilet paper and grease.

We can’t consider all aspects of a septic system without a riveting discussion about toilet paper. I know that TV ads claim that “Brand X” is great for your bum but it is a major problem for your septic system. Any of the soft cushy brands may fill up your tank. The thin types that break down easier may cause problems for your drain field. One expert was quoted to say “you should select a brand like Goldie Locks, not too
thick and not too thin”. One should note that it is less expensive to pump out a tank than it is to repair a drain field.

Other preventive measures include using your garbage disposal sparingly, (if at all) use environmental safe bleach and cleaning products, don’t flush or rinse your paint equipment into the system; even water based paints are a problem. Don’t let a leaky toilet or faucet saturate your system. Protect your drain field from groundwater with a curtain drain that diverts the water. Don’t plant deep rooted shrubs or trees on or near the drain field or tank. Just like a boat, don’t flush anything not eaten first. Don’t pump unless needed.

**The goal is to not kill off nature’s bacteria.** There are numerous additives marketed for septic systems which according to some experts are a waste of money.

All newer systems that have a pump also have an alarm that lets you know immediately if your system is unhappy 24-7.

**REMODEL.** If you desire to enlarge the size of your system, it is a fairly easy project as long as the soil conditions support the expansion. Further, if your system is non-conforming due to location or age, it will be possible to repair should the need arise, but you may not be able to grow the size as that will increase the non-conformity, unless a different location on the site is available that will meet current code requirements.

I know that reading an article about septic systems and their functions isn’t the best entertainment but it is important that property owners and buyers understand the importance of the systems. Unless you live in town or at the Roche Harbor Resort; you are served by an on-site sewage system.

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