



**MARION COUNTY PUBLIC WORKS
BUILDING INSPECTION DIVISION**
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SITE EVALUATION to SYSTEM INSTALLATION

This document will explain the steps involved in obtaining a permit to install an onsite wastewater treatment and disposal system on your property. There are basically three steps involved: Site Evaluation, Permit Issuance and System Installation.

SITE EVALUATION:

A site evaluation is the process of determining if a particular property is acceptable for the installation of an onsite wastewater disposal system. This is the first step in the process of obtaining a Construction-Installation permit for a septic system.

Wastewater (or sewage) contains disease-causing organisms and other pollutants that can cause adverse impacts to human health and the environment. An onsite wastewater disposal system must treat and dispose of sewage in a way that will not cause a public health hazard, contaminate drinking water supplies, or pollute public waters.

Proper treatment in an onsite system begins with primary treatment in the septic tank. The septic tank separates the solid particles in sewage from the liquid. The liquid that comes out of the septic tank is called effluent. The effluent may then be dispersed in the soil for further treatment or discharged into a secondary treatment device such as a sand filter or other alternative treatment technology prior to dispersal in the soil. For proper treatment, the effluent must slowly infiltrate into the underlying soil. Dissolved wastes and bacteria in the effluent are trapped or adsorbed to soil particles or decomposed by microorganisms. This process removes disease-causing organisms, organic matter, and most nutrients. Effluent that comes to the ground surface (through poor soils or other problems with the system) can be a possible health hazard because it may still contain some disease-causing organisms. Soil that drains too quickly may not give the effluent enough treatment and may result in groundwater contamination.

The purpose of the evaluation is to locate suitable soils in an area that is large enough for both the initial drainfield area and the replacement drainfield area. The criteria used for this site evaluation can be found in Oregon Administrative Rules (OAR) 340-071.

Soil test pits and the following site features are evaluated during the site visit:

- Soil types - how well they drain and other evidence of good soil structure for treatment
- Depth to evidence of high groundwater
- Wells located on the site or adjacent sites
- Slopes, escarpments, ground surface variations, topography
- Creeks or springs on the site or adjacent properties
- Whether the soils have been disturbed
- Setbacks from property lines, buildings, water lines, and other utilities
- Other site features that could affect the placement of your on-site system.

Onsite wastewater system site evaluations include considerably more than just the soil feasibility study. Varying soil conditions; lot size; slopes; surface water; landforms; and placement of the house, accessory structures and wells will often determine whether the property can be approved for onsite wastewater disposal. Conditions on the parcel proposed for development and on parcels adjacent to the development can have a significant impact on whether the proposal is feasible.

APPLICATION REQUIREMENTS:

All applications must be completed in full, signed by the owner or the owner's authorized representative, and be accompanied by all required exhibits and the appropriate fee. Incomplete applications shall be returned to the applicant to be completed.

Each fee paid for a site evaluation entitles the applicant to as many site inspections on a single parcel as are necessary to determine site suitability for a single system. If the site that is initially proposed for evaluation is denied, the applicant may request additional site inspections within 90 days of the initial site evaluation denial, at no extra cost.

Separate fees shall be required if site inspections are to determine site suitability for more than one system on a single parcel of land. Subdivisions or other land partitions require a site evaluation on each proposed parcel.

A site evaluation denied by Marion County may be reviewed by the Department of Environmental Quality at the request of the applicant. The application for review shall be submitted to the DEQ in writing, within 30 days of the site evaluation report issue date and must be accompanied by the review fee. The review shall be conducted and a report prepared by the DEQ.

SITE PLAN REQUIREMENTS:

The site plan is a very critical part of your application. It provides information that aids our determination of site suitability. The site plan must be drawn to scale, show all proposed development as well as existing and proposed utilities, structures, wells, roadways, wet areas, etc. Please refer to the back of the site plan form for detailed instructions.

DEQ has very specific setback requirements from septic systems to certain natural and manmade features. A copy of the DEQ setback requirements is available in our office.

TEST PIT REQUIREMENTS:

Soil test pits must be provided on each parcel proposed for development and must be located within the areas of the proposed drainfield. An area of suitable soil, meeting all required setbacks, is necessary for both the initial and a future replacement drainfield.

In order to adequately evaluate the soils, it is necessary to prepare test pits for easy access to examine the soil layers.

Test pits are dug to a depth of 5 feet and are to be prepared according to the directions on the **Test Pit Requirements** handout.

The location and measurements to the test pits must be indicated on the site plan. The orange site card from our office must be posted at the road access to the property and the test pits must be clearly flagged.

TEST PIT LOCATION:

Care should be taken in choosing a location for the test pits. The location of your on-site sewage system may be the critical consideration in locating your homesite.

- a) Avoid depressions and natural surface drainageways. Soils in these areas are frequently unsuitable for disposal fields.
- b) Avoid steep ground. Slopes in excess of 30% are not acceptable for standard on-site sewage systems.
- c) Avoid areas where rock outcrops are obvious or areas where there is shallow soil depth to rock or rock-like material. Soil depth may also be limited by heavy clays or other poorly drained materials, which would limit the movement of sewage through the soil.

Each proposed parcel must have sufficient usable area available to accommodate an initial and replacement system. The useable area is normally located on the same parcel as the proposed house or other facility that is generating the sewage. If it becomes necessary to locate the system on an adjacent property, a properly recorded easement is required prior to the installation of the system. Sample easement forms are available in our office.

It is preferable to locate the homesite on higher ground than the septic system so that gravity flow may be utilized to the septic tank and disposal field. If the approved disposal field area is above the house, an effluent pump will be necessary to pump the septic tank effluent up to the level of the disposal field.

SITE APPROVAL:

Once the site has been inspected and it has been determined that the site meets all of the Department of Environmental Quality Onsite Wastewater Treatment System Rules, an approval report will be sent to the applicant. That report will remain valid until an onsite sewage system Installation permit is applied for and issued from this office and the system is installed. The site evaluation approval runs with the property and will automatically benefit subsequent landowners.

A site evaluation approval is given with the condition that the lot or parcel will not be further partitioned or subdivided and that conditions on the property and on adjacent properties are not altered in any manner that would prohibit the issuance of a permit. Soils in the approved area must not be altered or modified by cutting, filling or other developmental activities that would be detrimental to the successful operation of the septic system disposal field. Failure to comply with the above items may void the site evaluation approval.

INSTALLATION PERMIT:

When the site evaluation is approved, and the applicant is ready to install the septic system, an application must be submitted for a Construction-Installation Permit. A detailed site plan is required with the application showing all proposed development. The area proposed for the septic system must match the area approved in the Site Evaluation.

- a) If the area proposed for the system is within the area approved by the Site Evaluation and it meets all conditions of the Site Evaluation, the permit can be issued without further field review.
- b) If conditions were set in the Site Evaluation for further work prior to permit issuance, that additional work must be completed before the permit can be issued.
- c) If the area proposed for the wastewater system is outside the area approved by the Site Evaluation, a new Site Evaluation approval will be required before the permit can be issued.
- d) If the area proposed for the wastewater system has been compromised with excavations, well placement or other activities, a new Site Evaluation approval will be required before the permit can be issued.

SYSTEM INSTALLATION:

The final step in obtaining a septic system is the actual installation of the system on the property. The system must be installed by a DEQ licensed septic installer or by the property owner. Any person hired to work on the septic system must be licensed by DEQ.

- a) The system must be installed in the approved area and according to the instructions specified on the permit. All materials must meet the requirements in OAR 340, Divisions 71 and 73.
- b) The system must be inspected by our office after the installation has been completed. Please review the Pre-cover requirements document sent with the permit.
- c) The As-Built drawing must be completed and on the job at the time of inspection. This form requires a detailed drawing of the installed system and shows the exact location of the system in relation to existing landmarks/buildings on the property. It also requires details on all materials used in the construction of the system.
- d) If the system installation is denied, an inspection report will be left on the job stating the violations and the corrective action needed to complete the system.
- e) If the system is approved, an inspection report will be left on the job for the installer. The homeowner will receive paperwork in the mail documenting the approval of the system.

The proper placement of an onsite wastewater system is a very critical matter. It is our intention to have a system installed that will function properly and provide service for many years. The above-listed procedures will provide us with complete information so that we may make a competent decision as to the best and most effective onsite system for the property based on existing conditions. At the same time, we want to be able to require the least expensive system available that will function properly.

At Marion County, we want the steps from Site Evaluation to System Installation to run as smoothly as possible. Please feel free to call us at (503) 588-5147 if you have any questions about the processes or specific requirements.

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