New Installer basics

THE most important thing is, stake the lines out ON-CONTOUR before you start. If you do not currently have one, I would suggest renting a laser level at a tool rental place (or, approximately $400.00 to purchase the complete kit at Lowes, etc.) With that tool, one person can lay the system out very easily. Buy the wire flags for markers (100 in a bundle for $8-10.00)

Once the lines are staked on-contour, you simply dig the same depth along the length of each line, and the trench bottom will then be level, as required. This way, you will not have to continually check the trench bottom level as you dig. The lines will curve to remain on contour, sometimes dramatically. This is extremely important.

The septic tank should only be as deep as needed to allow fall in the building sewer (minimum of 1/8” per foot, or 1%). Do not dig the tank hole deeper than necessary, so that the drain lines can be shallow (18-24”). Shallow systems work much better than deeper trenches, and are much easier to install (less time, less fuel). You need a good bottom in the tank hole to support the tank. If it is a plastic tank, you MUST follow the manufacturer’s instructions for THAT tank (all are different). Even for a concrete tank, you need a smooth level “pad” to set the tank on, or it may crack due to uneven settling.

Note the drain lines in the photo above, installed on-contour. The lines are wider apart in the foreground, where the ground is not so steep, and closer together in the distance, where the slope is steeper. You MUST shoot the lines (all lines) in on-contour before you begin any digging, so that the minimum separation distance (6’) is not violated. The lines should never be straight and parallel; they must follow the ground surface contours and be the same depth all along their length!

Let me know if there are any questions: Rick Hertges 304-356-4340 or Rick.A.Hertges@wv.gov