

9.6 treatment units more than the minimum necessary to be considered suitable for a standard alternative drainfield. To determine installation depth, use the upper layer of the soil profile where the system will be installed and determine the treatment units per inch of soil. Once the treatment units per inch are known, the depth of allowable installation can be determined.

- 24 treatment units /12 inches of B-2 soil = 2 treatment units per inch
- Installation depth = 9.6 excess treatment units /2 treatment units per inch
- Installation depth = 4.8 inches

In this example, a standard basic alternative system can be permitted. The system design would be a capping fill trench with a maximum installation depth of 4.5 inches below grade.

2.2.5.2 In-Trench Sand Filters and the Method of 72

The method of 72 may also be used in determining the necessary depth of medium sand required for installation between a drainfield and the native soils overlying a limiting layer. Installation of medium sand may be necessary to access suitable soils below an unsuitable layer. Medium sand may be installed to any depth necessary to reach suitable soils as long as the excavation and installation of the medium sand meet the requirements in section 4.23. For porous limiting layers or normal high ground water, the drainfield installation depth must be sufficient to meet the method of 72. For impermeable limiting layers (e.g., bedrock), the drainfield installation depth must be sufficient to meet the minimum separation distance to impermeable layers required by IDAPA 58.01.03.008.02.c or Table 2-6 if the approval conditions can be met. Separation distances to impermeable layers cannot be reduced to less than the requirements above through the method of 72. The following example is based on the soil profile identified in Figure 2-4.

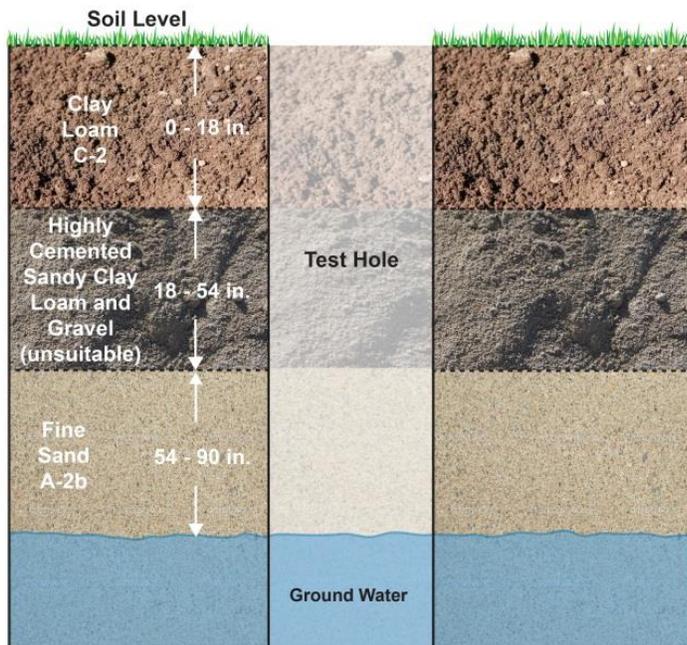


Figure 2-4. Test hole profile used in example 2.