

rock, where the original soil texture is sand or loamy sand (sand that has very few fine particles of silt or clay), may be filled with the same soil texture as the natural soil or coarser material up to and including medium sand in an attempt to overcome the site limitations. The fill material shall not be of a finer texture than the natural soil.

2. High groundwater. Sites that have less than 56 inches of soil over high groundwater or estimated high groundwater, where the original soil texture is sand or loamy sand (sand that has very few fine particles of silt or clay), may be filled following the criteria noted in this subsection.

3. Natural soil. Sites with soils finer than sand or loamy sand shall not be approved for systems in fill.

4. Monitoring. Sites that will have 36 inches of soil or less above high groundwater after the topsoil is removed shall be monitored for high groundwater levels in the filled area in accordance with s. ILHR 83.09 (7).

5. Inspection of fill. Placement of the fill material shall be inspected by the county or the department.

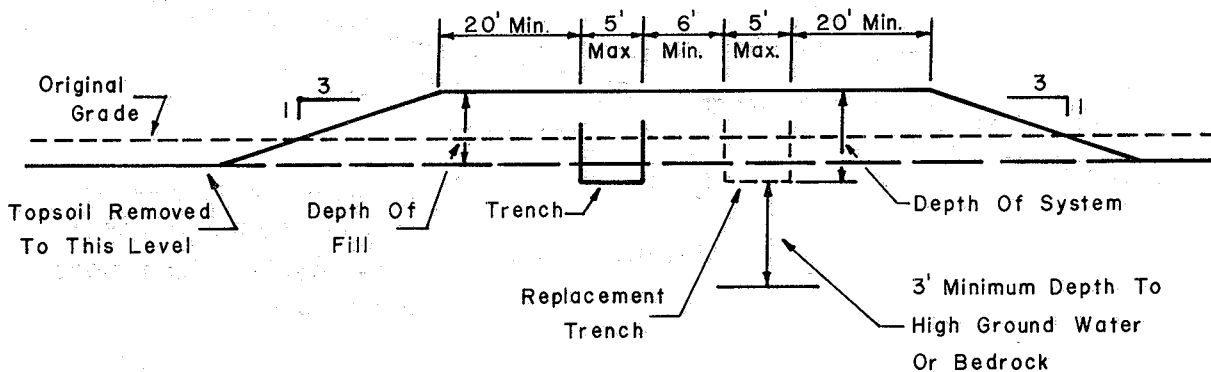
(d) *Design requirements.* 1. Size. A filled area shall be large enough to accommodate a shallow trench system and

a replacement system. The size of the filled area shall be determined from the percolation tests or soil infiltration rate as determined from Table 0, based on natural soil and use of the building. When any portion of the trench system or its replacement is in the fill, the fill shall extend to 2 feet beyond all sides of both systems before the side slope of the fill begins.

2. Soil test. Soil borings and percolation tests shall be conducted before filling to determine soil textures and depth to high groundwater or bedrock.

3. Topsoil. Vegetation and topsoil shall be removed prior to filling.

4. Side slope. Slopes at the edge of the filled areas can be a maximum 3 to 1 ratio, providing the 2 foot separating distance is maintained. See following sketch.



(7) ALTERING SLOPES. (a) *General.* In some cases, areas with slopes exceeding those specified in s. ILHR 83.09 (3) may be graded and reshaped to provide soil absorption sites. Care must be taken when altering any natural landscapes. Successful site alteration may be accomplished in accord with the following:

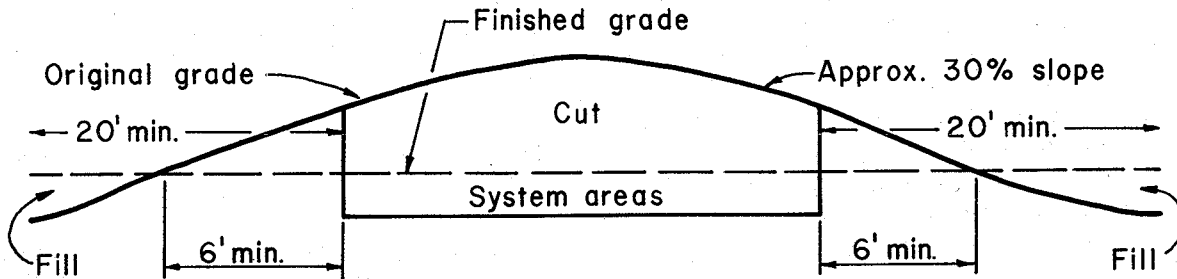
(b) *Site investigation.* Soil test data shall show that a sufficient depth of suitable soil material is present to provide the required amount of soil over bedrock and groundwater after alteration. In addition, a complete site evaluation as specified in s. ILHR 83.09 shall be performed after alteration of the site.

(c) *System location.* A soil absorption system must be installed in the cut area of an altered site. A soil absorption

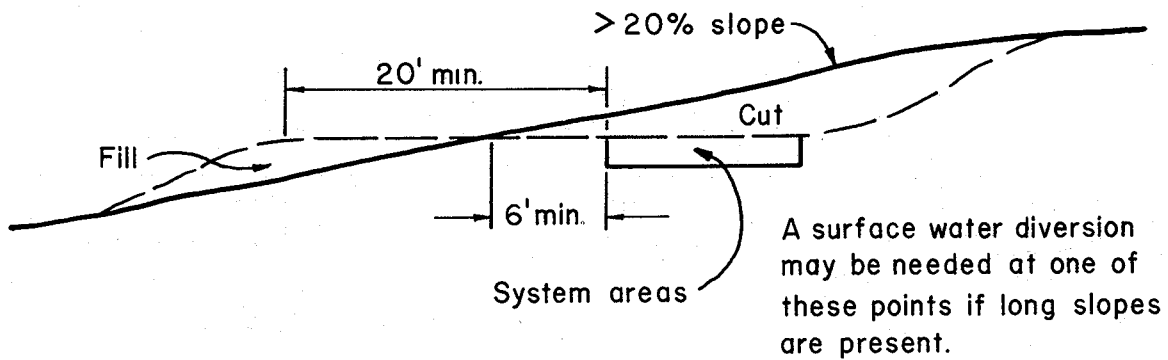
system shall not be installed in the fill area of an altered site. The area of fill on an altered site may be used as a portion of the required 20 foot separating distance from the crown of a critical slope. There shall be a minimum of 6 feet of natural soil between the edge of a system area and the downslope side of the altered area.

(d) *Site protection.* All altered slope areas shall be altered such that surface water drainage will be diverted away from the system areas. In some cases this may require the use of grassed waterways or other means of diverting surface waters. All disturbed areas shall be seeded or sodded with grass and appropriate steps must be taken to control erosion. Conceptual design sketches for altering slopes follow.

A. Excavation of complete hilltop



B. Excavation into hillside



C. Regrade of hillside

