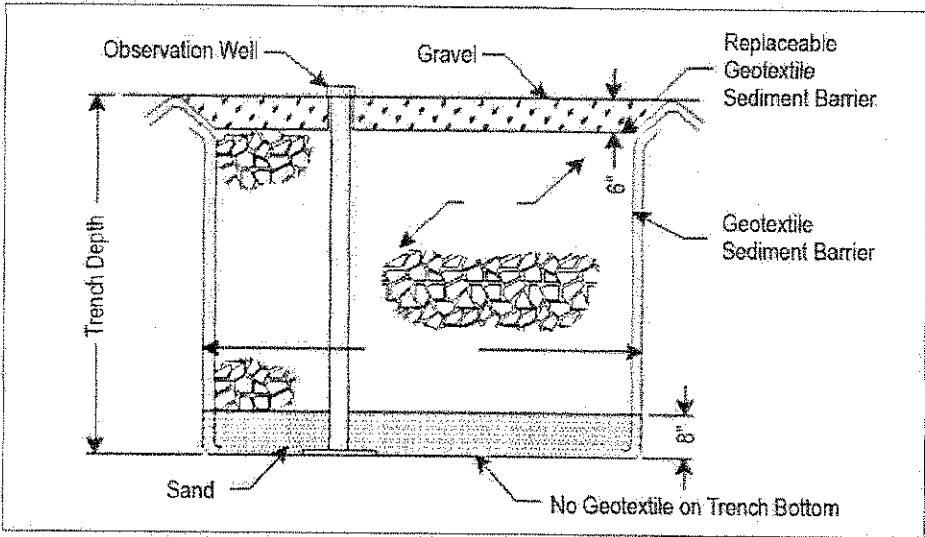


Specifications
for
Infiltration Trench



1. SEDIMENT SHALL BE PREVENTED FROM ENTERING THE INFILTRATION TRENCH. Sediment clogging and sealing off the permeable soil is the most common cause of infiltration trench failure. Runoff from the construction site shall NOT be allowed to flow to the trench until construction is complete and upslope areas have been stabilized. If storm drains enter the infiltration trench directly and cannot be rerouted, they shall be sealed with a masonry plug until all contributing drainage areas are stabilized.
2. The infiltration trench design shall include a system for removing sediment from stormwater before it enters the infiltration structure. However, this system shall NOT be used to control sediment during construction.
3. Trench excavation and backfilling of sand and rock shall be done when the soil moisture is low enough to allow the soil to crack or fracture. No trench excavation or fill shall occur on wet soil to prevent compaction and maintain soil permeability.
4. Bottom Sand Filter - The bottom of the trench shall be covered with an 8-inch layer of clean sand. The sand layer shall be placed the same day excavation is completed.
5. Observation Well - A 4-inch diameter, rigid perforated vertical pipe shall be installed in the trench. The vertical pipe shall be securely and permanently attached to a base to prevent upward movement. The top of the vertical pipe shall have a secure removable cap. The original depth shall be permanently marked on the top of the observation well.
6. Geotextile - The sides and top of the trench shall be lined with geotextile. The bottom of the trench shall NOT be covered with geotextile.
7. Rock - Rock fill shall be clean, well-graded, uniform size crushed washed rock. Poorly graded rock has less void space available for runoff storage and shall not be accepted.
8. Gravel Top Layer - The top layer of the geotextile shall be covered by 6 inches of gravel (0.75-inch diameter).

INFORMATION OBTAINED FROM THE 2006
EDITION OF THE STATE OF OHIO'S "RAINWATER
AND LAND DEVELOPMENT MANUAL".

Larry Luffich
CITY OF NORTH RIDGEVILLE, ENGINEER

REV No.	DATE	BY	DESCRIPTION
CITY OF NORTH RIDGEVILLE, OHIO			
DEPARTMENT OF ENGINEERING			
INFILTRATION TRENCH			
SCALE: NOT TO SCALE			SWP-1
DATE: 10/01/08 DRWN BY: JAB/TEB			

Specifications
for
Grass Filter Strip

NOTE: See Specifications for Permanent Seeding.

1. Filter strips shall be graded to prevent runoff from concentrating. Depressions, ridges and swales shall be graded out to achieve a uniform slope having a level grade across the slope.
2. To assure that runoff remains as sheet flow through the filter strip, a level spreader shall be used at the top of the slope. The rock or grass level spreader must be placed on a contour, and shall have a minimum width and depth of 1 foot.
3. Soil compaction shall be minimized in the filter strip area. Work shall be performed only when the soil moisture is low.
4. A subsoiler, plow or other implement shall be used to decrease soil compaction and allow maximum infiltration. Subsoiling shall be done when the soil moisture is low enough to allow the soil to crack or fracture.
5. Because a dense vegetation is critical for effective filter strips, only a dense stand of vegetation without rills or gullies shall be acceptable. If rills or gullies form or if vegetative cover is not dense, a new seedbed shall be prepared and replanted.
6. The filter strip shall be seeded no later than September 30th to assure that vegetation establishes prior to the onset of winter weather.

INFORMATION OBTAINED FROM THE 2006
EDITION OF THE STATE OF OHIO'S "RAINWATER
AND LAND DEVELOPMENT MANUAL".

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REV No.	DATE	BY	DESCRIPTION
CITY OF NORTH RIDGEVILLE, OHIO DEPARTMENT OF ENGINEERING			
GRASS FILTER STRIP			
SCALE: NOT TO SCALE			SWP-2
DATE: 10/01/08 DRWN BY: JAB/TEB			