

**WHITPAIN TOWNSHIP  
INFILTRATION TESTING PROCEDURE  
FALLING HEAD**

*Equipment*

Solid 3-inch to 4-inch PVC pipe, 18 to 36' long  
Bentonite clay  
Float type measuring device

*Site Preparation*

Prepare a level testing area, 12" above the bottom elevation of the proposed infiltration facility.

Excavate a post hole with a uniform diameter of 6 to 10-inches to the bottom elevation of the proposed infiltration facility.

Set the solid PVC tube in the center of the post hole by tapping it into the soil (maximum 1-inch). Fill around the outside of the tube with bentonite clay a depth of 2-inches and tamp. Add sufficient water to saturate the bentonite around the outside of the tube, then backfill with 6-inches of soil around the tube, and tamp.

Allow 30 minutes for the bentonite clay to set-up before starting presoak.

*Testing Procedure*

Presoak        Presoak should be conducted immediately prior to testing.

Fill the tube with 10-12-inches of water at intervals of 30 minutes for 1 hour. (All refills should be done to the original water depth.)

The drop in water level during the last 30 minute interval of the presoak should be utilized to determine the time interval between readings (record this reading), utilizing the following standards.

6-inches or more:     10 minute measurement intervals  
Less than 6-inches:   30 minute measurement intervals

Test            Obtain and record the drop in water level at the appropriate interval.

Refill tube to the original water depth after each reading for 8 consecutive readings, or until a stabilized rate is achieved. (A stabilized rate means a difference of ¼-inch or less of drop between the lowest and highest readings of four consecutive measurements.)

The drop that occurs in final interval, averaged with all of the test areas within that infiltration facility shall represent the average infiltration rate for that facility.