



COLUMBIA COUNTY DEPARTMENT OF HEALTH  
 325 COLUMBIA STREET, SUITE 100  
 HUDSON, NY 12534  
 518-828-3358 ext.1299

**APPLICATION FOR PRIVATE SUBDIVISION REVIEW**

**\*This application cannot be used if the subdivision includes 5 or more lots under 5 acres\***

Applicant Info:

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_

Contractor or Engineer Info:

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_

**GENERAL INFORMATION REQUIRED FOR ALL SUBMISSIONS**

Subdivision Name: \_\_\_\_\_ Township: \_\_\_\_\_  
 # of Lots: Over 5 Acres \_\_\_\_\_ Under 5 acres \_\_\_\_\_ **Tax Map#** \_\_\_\_\_  
 DEC Wetlands on Parcel ( ) YES NO ( ) Location: \_\_\_\_\_  
 Flood Plain on Parcel ( ) YES NO ( ) \_\_\_\_\_  
 Surface Waters Present On Parcel ( ) YES ( ) NO Zoning District: \_\_\_\_\_  
 General description: (check all that apply)  
 ( ) Hilly ( ) Rolling ( ) Steep slope ( ) Moderate slope: ( ) Flat ( ) Shale

**REQUIRED FOR 5 OR MORE LOT SUBDIVISION**

**(An engineer is required for subdivisions of 5 or more lots)**

- 1 copy of a survey map showing the following: Proposed property lines, soil test locations, building sites, drainage sites, drainage easements, existing and proposed roadways, contours as required by local ordinance, natural barriers including wetlands, flood plans, watercourses, marsh, woodlines, hedgerows, open fields.

A drainage plan and erosion control plan meeting the latest guidelines of the U.S. Dept. of Environmental Conservation Storm Water Phase II regulations.

A Description of soil characteristics to a depth of 6 feet as identified from preliminary deep hole tests to be identified on the attached "DOH Form 1327 – Percolation Test Data."

A completed "DOH Form 1327-Percolation Test Data" indicating test data for each proposed lot.

**Number of total lots proposed \_\_\_\_\_ x \$550.00 (Application fee, & plan review).** Total fee required. Fees must be received with application and made payable to the Columbia County Health Department – we will only accept a certified check, money order or cash. This fee schedule does not apply for subdivisions with 5 or more lots under 5 acres each.

The percolation testing **MUST** be completed by the individual **PRIOR** to contacting the Health Department to witness the percolation test and the results of those tests entered on Form 1327 and submitted with your application and filing fee.

**Applications for private subdivision review may only be submitted during the period beginning April 1<sup>st</sup> through October 1<sup>st</sup>.** To assure that time constraints will allow our personnel to visit your site prior to the onset of freezing temperatures and winter weather, all applications should be received in our office by October 1<sup>st</sup>. Applications dated later than October 1<sup>st</sup> will be accepted, although there is no guarantee that we will be able to schedule a field visit during the current construction season.

Field visits will be scheduled according to program workloads, weather conditions and availability of other concerned agencies. Additional requirements for further soil testing, well data, etc., may be required after the initial field visit has been conducted.

Date submitted: \_\_\_\_\_ Applicant Signature: \_\_\_\_\_  
 (Signifies all information is true and correct to the best knowledge of the applicant).

**Please note that: Fees are non-refundable and Fees are not pro-rated**

## SOIL TEST REQUIREMENTS FOR SEWAGE DISPOSAL SYSTEMS

Two different types are required. Both must be conducted in the area of the proposed sewage disposal system. Soil tests should not be conducted in areas exceeding 10% slope, at the base of steep inclines, in well areas or with 25' below or 100' above proposed driveways.

- 1) SOIL PERCOLATION TEST – Must be performed by the applicant with results recorded on the application prior to submission to the Health Department. THE ATTACHED PERCOLATION TEST DATA FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE APPLICATION. AT LEAST TWO PERCOLATION TESTS ARE REQUIRED AT THE SITE OF EACH PROPOSED SEWAGE SYSTEM.

### SOIL PERCOLATION TEST INSTRUCTIONS

PROCEDURE: (also refer to Figure 3 attached).

- 1) At least two typical 24 to 30 inches in depth and two shallow 18 inches in depth percolation tests shall be performed within the proposed absorption area. At least one percolation test should be performed within the proposed absorption system expansion area.
- 2) Dig each hole with vertical sides approximately 12 inches in diameter. The sides of the percolation holes should be scraped to avoid smearing. Place washed aggregate in the lower two inches of each test hole to reduce scouring and silting action when water is poured into the hole.
- 3) Presoak the test holes by periodically filling the hole with water and allowing the water to seep away. This procedure should be performed for at least four hours and should be given one day before the test, except in clean coarse sand and gravel. After the water from the final presoaking has seeped away, remove any soil that has fallen from the sides of the hole.
- 4) Pour clean water into each test hole, with as little splashing as possible, to a depth of six inches above the bottom of the test hole.
- 5) Using the attached Percolation Test Data Worksheet (page 6), observe and record the time in minutes required for the water to drop from the six inch depth to the five inch depth for each hole.
- 6) Repeat steps (4) and (5) a minimum of three times until the time for the water to drop from six inches to five inches for two successive tests is approximately equal (i.e. 1 min. time drop differential for 1-30 minutes/inch. 2 min. for 31-60 min./inch). The longest time interval to drop one inch will be taken as the stabilized rate of percolation. Record the stabilized rate of percolation for each hole on the Percolation Data section of the application (page 1).
- 7) If different results are obtained for multiple holes in a proposed absorption area, the slowest stabilized rate shall be used for system design.

## DEEP HOLE TESTS, 4 CORNER (SEE DIAGRAM BELOW)

The purpose of these test pits is to view the different types of soil strata present in the immediate area. These tests will also allow us to observe if any bedrock or groundwater problems exist that may affect the operation of a sewage disposal system. The deep holes can be completed after the application has been submitted and the applicant has been in contact with the Health Department. It is recommended that your sewage contractor dig the deep test pits at the time when DOH personnel meet with you at your site by appointment. In this way, other areas of your property can be explored if problems arise in your chosen area and deep test pits can be backfilled following inspection.

### PROCEDURE

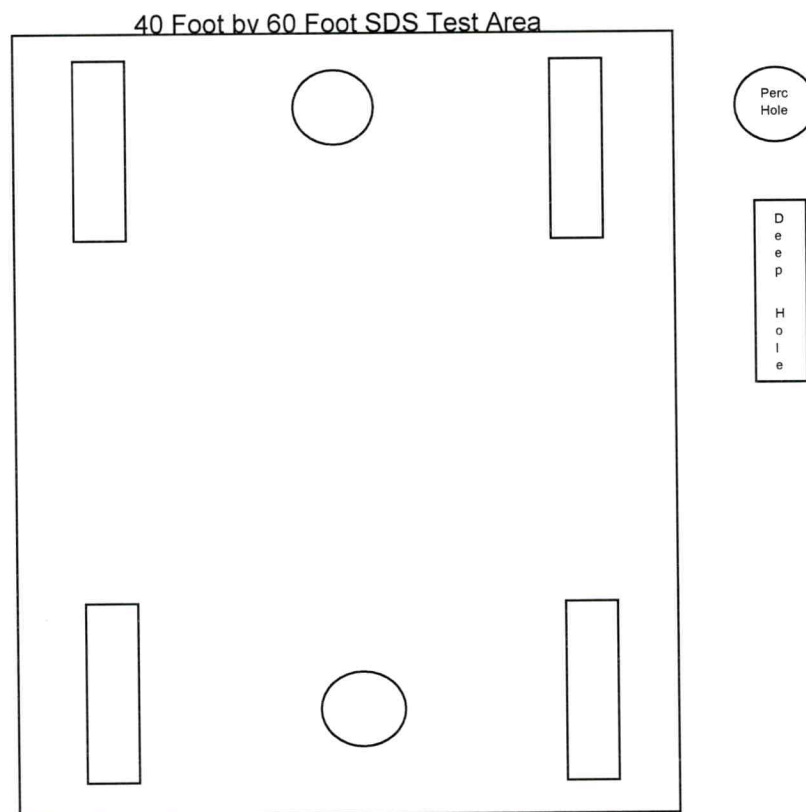
- 1) Dig 4 holes with vertical sides to bedrock, groundwater or a depth of six feet.
- 2) The width of the hole must be sufficient size to permit viewing the entire vertical face.

NOTE: No water or presoaking is required for the deep test holes.

### FOUR CORNER TESTING

The deep hole testing should be done on each corner of an area, approximately 60 feet by 40 feet in which the sewage disposal system is proposed to be installed.

### THE FOLLOWING DIAGRAMS ARE SELF-EXPLANATORY





For example, assume the following results were obtained from running a test (see “d” from page 1).

**(EXAMPLE ONLY)**

<u>RUN NO.</u>	<u>TIME IN MINUTES</u>
1.....	15
2.....	20
3.....	24
4.....	26
5.....	30
6.....	30

The stabilizer rate of percolation would then be taken as 30 minutes in this example.

**SPECIAL NOTE:**

- (f) If a perc rate stabilizes at 60min/inch or more, then the perc test must be repeated with a shallow hole not to exceed 18” deep and 8” in diameter.

.....

The percolation test is conducted to determine the rate at which the existing soil will absorb water. We must know the stabilizing percolation rate to determine the lineal feet of tile field required. To be satisfactory, the percolation rate must stabilize at a rate of less than 60 minutes per inch.

In instances where the percolation rate and/or the deep test pit is unsatisfactory, extensive testing in other areas on the property should be conducted or a professional engineer, proficient in sanitary engineering, should be engaged to design a more sophisticated type of system.

The above criteria pertain, **only** to the installation of septic tank, tile field systems. If seepage pits or other types of disposal system are proposed, you should contact our office for the testing procedures required.

**IMPORTANT**

The percolation testing **must** be completed by the individual prior to contacting the Health Department to witness the percolation test and the **results of the tests entered on Form 1327 and submitted with your application and filing fee.**

Applications for single lot sewage disposal system design may only be submitted during the period beginning **April 1<sup>st</sup> through October 1<sup>st</sup>**. To assure that time constraints will allow are personnel to visit your site prior to the onset of freezing temperatures and winter weather, all applications should be received in our office by **October 1<sup>st</sup>**. Applications dated later than October 1<sup>st</sup> will be accepted although there is no guarantee that we will be able to schedule a field visit during the current construction season.

# Percolation Test Data

(see instructions on reverse side)

Development Site: \_\_\_\_\_ (T/V/C): \_\_\_\_\_ County: \_\_\_\_\_

Date: \_\_\_\_\_ Tests Conducted By: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Test Hole No.	Test Hole Depth (inches)	Lot No.	Soil Profile Description and Groundwater Depth (if identified)	Presoaking Date & Time	Time	Percolation Test					
						1	2	3	4	5	6
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						

Begin time, end time, and result in minutes for a water elevation change from 6" to 5" above the bottom of the test hole.

# Percolation Test Data

(see instructions on reverse side)

Development Site: \_\_\_\_\_ (T/V/C): \_\_\_\_\_ County: \_\_\_\_\_

Date: \_\_\_\_\_ Tests Conducted By: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

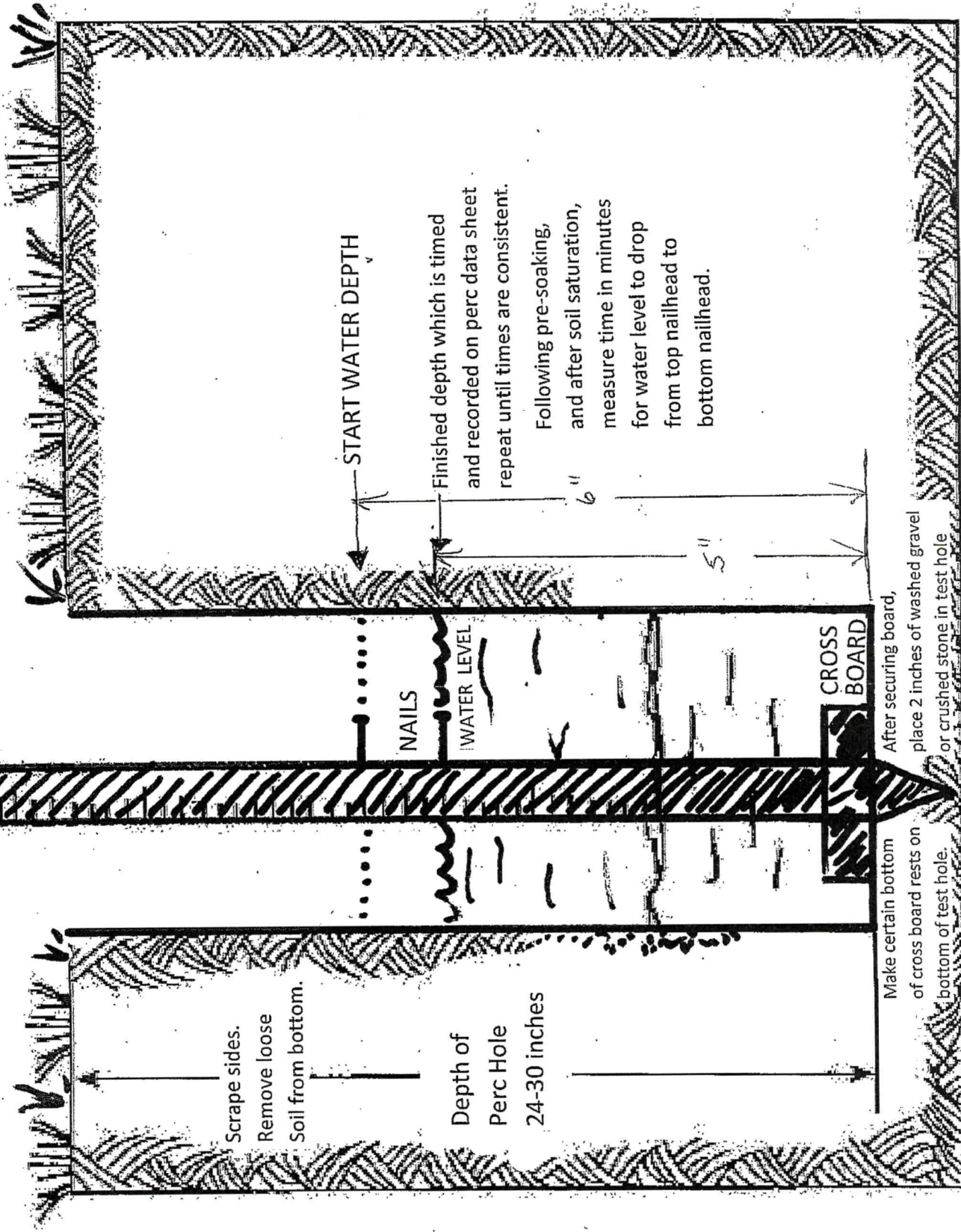
Test Hole No.	Test Hole Depth (inches)	Lot No.	Soil Profile Description and Groundwater Depth (if identified)	Presoaking Date & Time	Time	Percolation Test					
						1	2	3	4	5	6
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					Begin						
					Result						
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					Begin						
					Result						
					End						
					Begin						
					Result						

Begin time, end time, and result in minutes for a water elevation change from 6" to 5" above the bottom of the test hole.



PERC STICK

APPROXIMATELY 12 INCH  
SQUARE OR ROUND HOLE



Scrape sides.  
Remove loose  
Soil from bottom.

Depth of  
Perc Hole  
24-30 inches

START WATER DEPTH

Finished depth which is timed  
and recorded on perc data sheet  
repeat until times are consistent.

Following pre-soaking,  
and after soil saturation,  
measure time in minutes  
for water level to drop  
from top nailhead to  
bottom nailhead.

NAILS

WATER LEVEL

CROSS  
BOARD

After securing board,

place 2 inches of washed gravel  
or crushed stone in test hole.

Make certain bottom  
of cross board rests on  
bottom of test hole.



# Columbia County Department of Health

325 Columbia Street, Suite 100, Hudson, NY 12534  
(518) 828-3358 Fax (518) 828-2666  
www.columbiacountyny.com

## Fill Bed Percolation Data (Shallow stabilized rates)

1. finish \_\_\_\_\_ 2. finish \_\_\_\_\_  
start \_\_\_\_\_ start \_\_\_\_\_  
time \_\_\_\_\_ time \_\_\_\_\_

Yards of Permeable # \_\_\_\_\_ yards  
Fill Material used  
To construct Bed  
(5-30 min perc)

After final grading the fill bed will be top-soiled and seeded.

Signature of contractor or engineer \_\_\_\_\_

Date tests were performed \_\_\_\_\_

Property owner \_\_\_\_\_

Town \_\_\_\_\_

Tax Map# \_\_\_\_\_

Location \_\_\_\_\_



As construction season approaches, I would like to take the opportunity to remind you of several things with regard to alternate design type sewage disposal systems (commonly known as “fill systems”).

- 1) Appendix 75-A of Part 75 of Chapter 11 of 10 NYCRR establishes the standards for sewage disposal systems for individual households. “Fill systems” **must** be designed by either a New York State Licensed Design Professional or the Columbia County Department of Health Public Health Engineer which provides this service.
- 2) Alternative design systems are designed on site specific conditions, **but not all sites** are acceptable for “some kind of alternative design systems”. Once an alternative system has been designed for a lot, it **must** be built on the test site and the test site **must not** be disturbed by grading or topsoil removal unless specifically detailed in the sewage disposal design.
- 3) Before, a building permit is issued, the water supply location should be determined and the sewage disposal system should be designed. Planning for the sewage disposal system before constructing the house may save the owner much grief and money.