Installing a septic system
Apple blossoms in the Catskills mean construction season has arrived, time to replace failed septic systems.
The Catskill Watershed Corporation’s Septic Rehabilitation and Replacement Program helps homeowners and businesses fix failed on-site wastewater systems in order to protect water quality in the NYC Watershed West of the Hudson River.
So what is an on-site wastewater treatment system?

A conventional system includes a septic tank to hold solids, and a leach (drain) field where liquids are returned to the earth.

Primary settlement happens in the tank.

Biological treatment (cleansing) happens in the ground.
CWC Staff has determined the property is eligible for funding, the old system has been declared substandard, and an engineer has designed a new system.

IT’S TIME TO GET TO WORK.
The drain field is excavated downslope of the house, well and septic tank. A curtain drain is installed on the upslope perimeter to intercept groundwater and direct it away from the field.

Perforated pipe is measured, cut and installed.

The homeowner is engaged during the process.

Curtain drain outlet
Six trenches are dug. The size of the field depends on the capacity of the soil to absorb water and the number of bedrooms in the house.

Trenches are lined with gravel . . .

. . . depth is calibrated . . .
... pipe is laid, topped with more gravel, and covered with protective fabric before trench is filled with dirt.
A distribution box (D Box) is installed to equalize the wastewater flow to the individual trenches.

Meanwhile, the septic tank pit is being dug across the road.
The pit is excavated, measured and lined with gravel.
The old plastic tank has been removed, and the new concrete tank awaits placement.
The new tank is lowered into the pit, with NYC DEP inspector present.

The top of the tank is put in place and sealed to the bottom.
Access ports, to be used for future inspection and clean out, are closed.

Tank is covered.
A trench is dug to lay pipe from the septic tank to the drain field.

The road must be closed temporarily to do this work.

The connection is made, and the road regraded.
The tank site is graded, raked and seeded.
The drain field and access road are also restored.
Equipment is loaded and transported to the next job site.
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