DESIGN GUIDELINES FOR SMALL PROJECTS

For small residential projects, generally consisting of patios, home additions, and driveways, all with a proposed combined new impervious surface area less than 5000 square feet, the following minimum design guidelines for calculating the size of infiltration beds may be determined appropriate, depending upon individual site constraints:

For a hollow infiltration bed:

The volume of the bed (cubic feet) = 0.31 x impervious surface (square feet)

Mimimum bed area (square feet) = 0.05 x impervious surface (square feet)

For a stone (AASHTO No. 1 aggregate) infiltration bed:

The volume of the bed (cubic feet) = 0.78 x impervious surface (square feet)

Mimimum bed area (square feet) = 0.05 x impervious surface (square feet)

The bottom of the infiltration bed shall be a minimum of 2 feet above rock.

The bottom of the infiltration bed shall be a minimum of 2 feet above the seasonally high groundwater level.

The rate of infiltration of water into the in-situ subsurface materials at the bottom of the infiltration bed shall be a minimum of 1 inch per hour.

The location of the nearest part of the infiltration bed shall be no closer than 20 feet from a basement when the bed is down-gradient of the basement, and no closer than 100 feet from a basement when the bed is up-gradient of the basement.

The location of the nearest part of the infiltration bed shall be no closer than 50 feet from any and all septic drain fields.

The location of the nearest part of the infiltration bed shall be no closer than 100 feet from any and all ground wells used for potable water.