



## APPROVED INFILTRATION SYSTEMS

### INFILTRATION TRENCH SYSTEM

The following minimum lengths (linear feet) per 1,000 square feet of roof area based on soil type may be used for sizing downspout infiltration trenches.

Coarse sands and cobbles	20 LF
Medium sand	30 LF
Fine sand, loamy sand	75 LF
Sandy loam	125 LF
Loam	190 LF

Maximum length of trench must not exceed 100 feet from the inlet sump.

Minimum spacing between trench centerlines must be 6 feet.

Filter fabric must be placed over the drain rock as shown.

Infiltration trenches may be placed in fill material if the fill is placed and compacted under the direct supervision of a geotechnical engineer or professional civil engineer with geotechnical expertise, and if the measured infiltration rate is at least 8 inches per hour. Trench length in fill must be 60 linear feet per 1,000 square feet of roof area.

Infiltration trenches should not be built on slopes steeper than 25 percent (4:1). A geotechnical analysis and report may be required on slopes over 15 percent if located within 200 feet of the top of steep slope or landslide hazard area.

Trenches may be located under pavement if a small yard drain or catch basin with grate cover is placed at the end of the trench pipe such that overflow would occur out of the catch basin at an elevation at least one foot below that of the pavement, and in a location which can accommodate the overflow without creating a significant adverse impact to downhill properties or drainage systems. This is intended to prevent saturation of the pavement in the event of system failure.

### INFILTRATION DRYWELL SYSTEM

Drywell bottoms must be a minimum of 1 foot above seasonal high groundwater level or impermeable soil layers.

If using drywells, each drywell may serve up to 1000 square feet of impervious surface for either medium sands or coarse sands.

Typically drywells are 48 inches in diameter (minimum) and have a depth of 5 feet (4 feet of gravel and 1 foot of suitable cover material).

Filter fabric must be placed on top of the drain rock and on trench or drywell sides prior to backfilling.

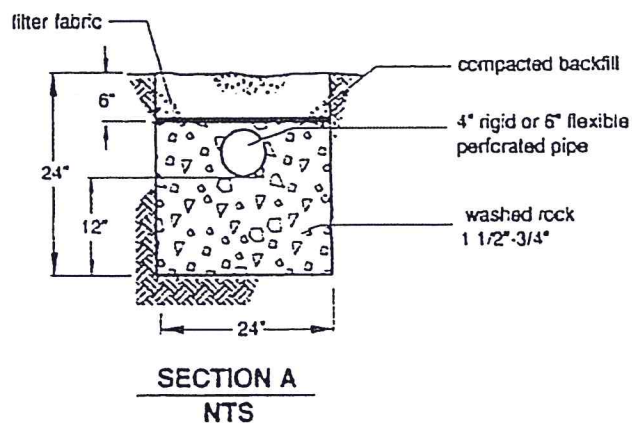
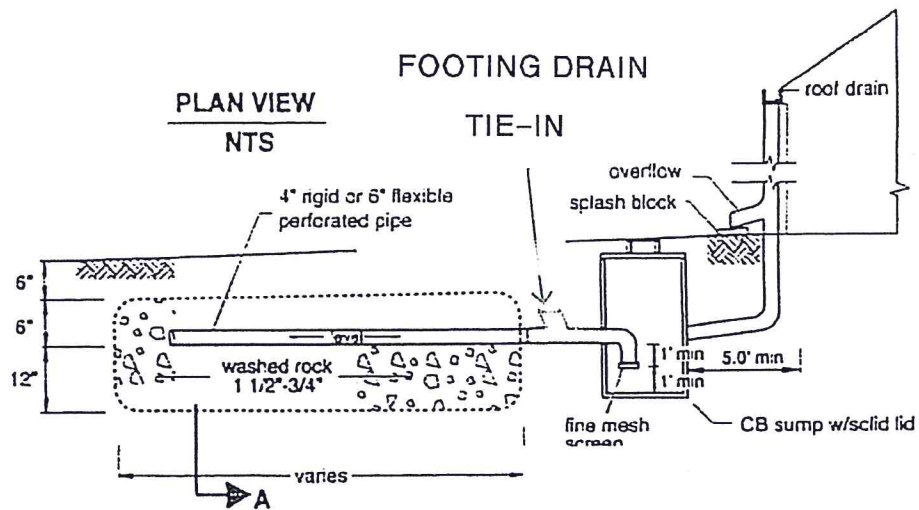
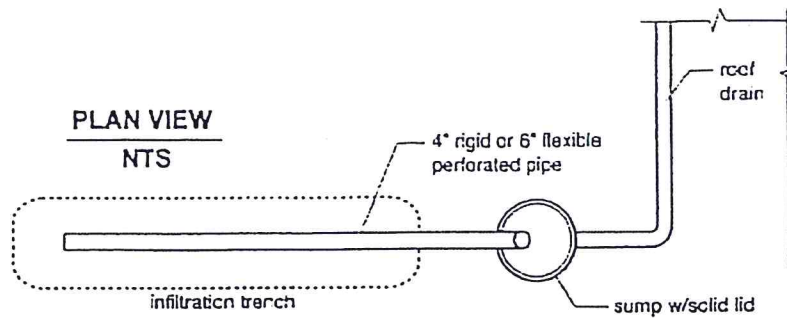
Spacing between drywells must be a minimum of 4 feet.

Downspout infiltration drywells must not be built on slopes greater than 25 percent (4:1). Drywells may not be placed on or above a landslide hazard area.

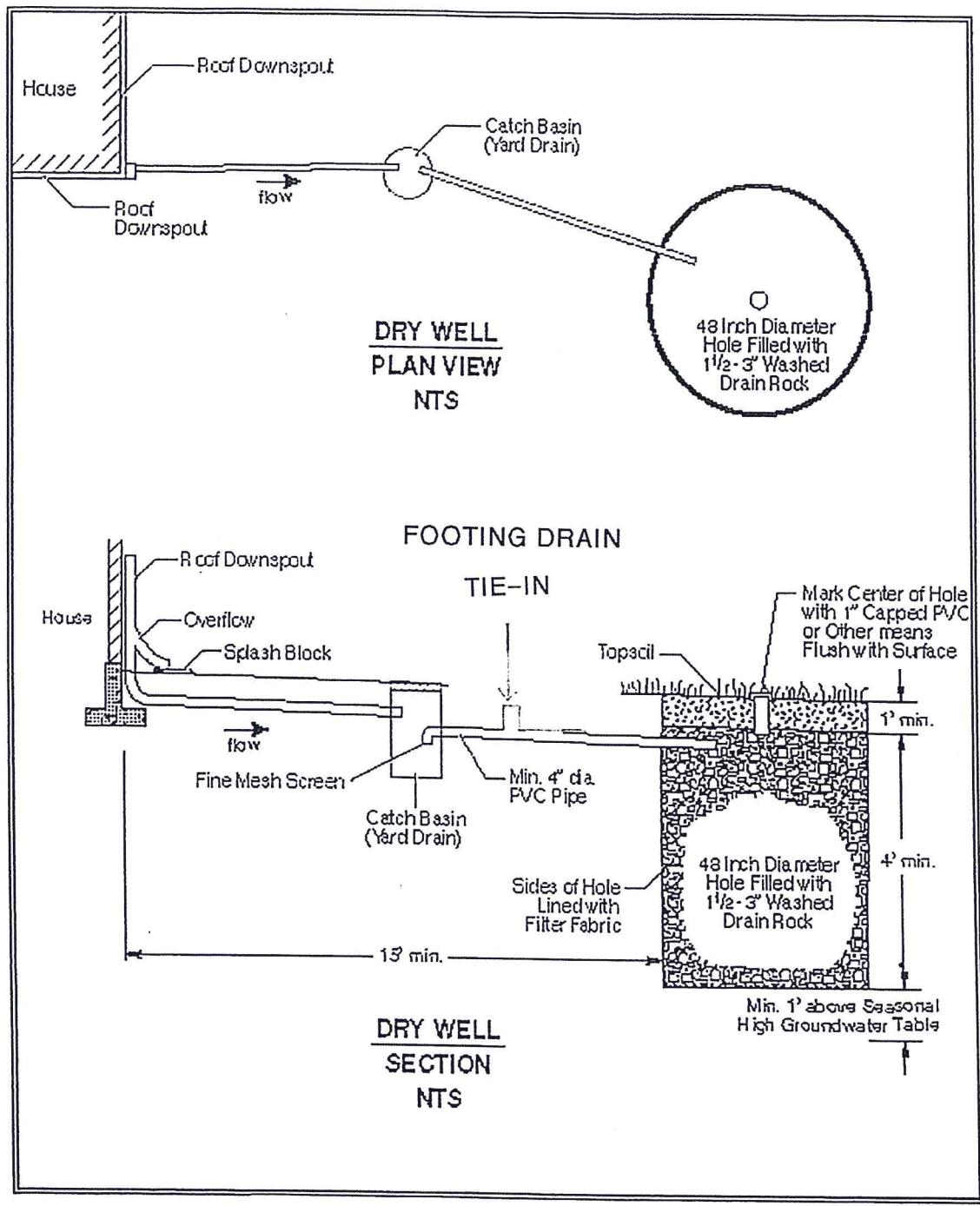
### SETBACKS FOR EITHER SYSTEM

Local governments may require specific setbacks in sites with steep slopes, landslide hazard areas, open water features, springs, wells, and septic tank drain fields. Adequate room for maintenance access and equipment should also be considered. Examples of setbacks commonly used include the following:

1. All infiltration systems should be at least 10 feet from any structure, property line, or sensitive area (except steep slopes).
  2. All infiltration systems must be at least 50 feet from the top of any sensitive area steep slope. This setback may be reduced to 15 feet based on a geotechnical evaluation, but in no instances may it be less than the buffer width.
  3. For sites with septic systems, infiltration systems must be downgradient of the drainfield unless the site topography clearly prohibits subsurface flows from intersecting the drainfield.
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## TRENCH SYSTEM



**DRYWELL SYSTEM**