## Stormwater and Drainage Management Committee

**Retention and Detention Areas** 

#### **Detention Areas**

There are two types of detention areas.

Underground system

Open air system

# Underground Detention Areas

An underground detention area collects rainwater in an underground leaching field which has an outlet that could run into another drainage system.

The collected water passes through filter paper before it goes into an existing drainage system or outlet to a stream.

#### Construction of Underground Detention Area



Filter paper and stone has been installed.

#### Construction of Underground Detention Area

#### Half moon drainage pipes are installed



#### Construction of Underground Detention Area

#### Stone covers entire area.



#### Completed underground detention area



7/15/2022

## **Open Air Detention Areas**

An open air detention area is an open pit dug into the soil. There is a header built into one wall with a pipe to drain into an existing stream. The open air detention area does not contain a filter. The water runs into the stream unfiltered.

#### **Open Air Detention Area**



12/3/2009



#### 1/27/2010

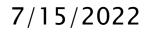


## **Open Air Detention Area**



#### Photos of open air detention area on Christopher Lane in Hanson

#### 12/3/2009



#### **Retention Areas**

A retention area is an area built into the ground similar to the underground detention area, but there is no outlet. One hundred percent of the water seeps back into the ground.

### **Construction of Retention Area**



11/7/2008

## **Construction of Retention Area**



11/7/2008



7/15/2022

# Specifications for Underground Detention and Retention Areas

- An 11 feet deep test hole must be dug to insure that there is ample space above the water table.
- The 11 feet includes:
  - 8 feet for the tank
  - 3 feet of cover to go on top of the tank (this includes the asphalt road)