Sanitation District No. 1
1045 Eaton Drive
Ft. Wright, KY 41017

Best Management Practices (BMPs) Featured at Public Service Park

Vegetated Roof

The District has installed a section of vegetated roof over its main office building. This roof consists of a six-inch soil medium, planted with decorative grasses and other drought resistant plants. The purpose of this technology is to minimize the amount of runoff that occurs from rain falling on a rooftop. The soil and vegetation serve as a natural sponge that absorbs smaller rain events without allowing any runoff.

Permeable Paver System

As we develop land, we tend to replace natural surfaces that allow infiltration of rainfall with hard, impervious surfaces such as roadways and rooftops. The result is an increase in the amount of rainfall that turns into runoff. The runoff from these man-made surfaces often contains pollutants such as heavy metals and hydrocarbons. Alternative paving materials can be used to minimize the amount of runoff and pollution that reach our local waterways.

Permeable Asphalt

Unlike conventional asphalt pavement, permeable asphalt is a porous pavement that allows water to drain through it. This pavement can be designed to handle traffic loadings and has been successfully used in many parts of the country, particularly in parking lot applications. Permeable asphalt pavements achieve their porous characteristics by removing the fine aggregates from the mix design.

Biofiltration Swale

Biofiltration is a natural process by which living organisms remove pollution. Certain plants, bacteria, and other soil-living microbes are able to remove and break down some types of water pollutants. Biofiltration can reduce the amount of toxic metals, oil, gasoline, and particulates carried by runoff. The District is using biofiltration to filter runoff from the parking areas before it reaches the wetland and pond.

Cistern

A cistern is a tank that stores collected rainwater. People around the world have been using rainwater cisterns for thousands of years. Cisterns remain a valuable way for homes and businesses to conserve water today. Collected rainwater can be used for landscape watering, vehicle washing, and other uses that don't require treated water.

Storm Water Pond & Wetland

A wetland is an area where the water level remains near or above the ground surface for most of the year. Marshes and swamps are examples of wetlands. Wetlands are usually found in a landscape's low spots where water naturally pools and the water table is high. Most wetlands also contain soils that drain slowly, which further retains the water.

Wetlands are home to an amazing diversity of plants and animals, including many endangered species. Many migrating birds depend on wetlands for food and water stopover points while making their long journeys. Wetlands are also natural water treatment facilities. Wetlands improve water quality by absorbing pollutants, slowing down rainwater runoff, and capturing sediment.

Permeable Concrete

Permeable concrete pavement is another form of porous material that allows water to pass through it. This system has been designed to handle traffic loadings. Porosity of this pavement is likewise achieved through selective use of aggregate material that creates void spaces between the larger stone material.

Wet Retention Basin

A retention pond is a constructed pond that maintains a permanent pool of water. Pollutant removal comes primarily by way of sedimentation. Solids, metals, nutrients in particulate form and organics are the target pollutants. Removal efficiencies are dependent upon the amount of time that runoff remains in the pond.

Oil/Water Separator

The District has installed an oil/water separator in the rear parking lot of the site. The separator tank is buried under the pavement and connected to the catch basins in the parking lot. Collecting runoff from the parking lot, this multi-chamber device is designed to remove solids such as silt and trash in the first chamber. The runoff then passes through a vertical baffle system, which separates oil from the water prior to discharging into the stream. The oil/water separator is designed with access so that it can be cleaned as necessary.

Dry Detention Basin

A dry detention basin is dry until a storm event occurs. Depending on the intensity and duration of the storm, the basin is designed to control the peak rate of storm water runoff from the site to a level that does not exceed pre-development conditions.

Urban Forest

Located on the trails of Public Service Park, the District's urban forest is a prime example of how easy it is to help clean our environment. By intercepting rainwater on their leaves, soaking up polluted water around their trunks, and reducing erosion by holding soil in place with their roots, urban forests (individual trees, parks, green space, woods and forests within an urban area) not only help control the quantity of storm water runoff, but also improve its quality.

Sanitation District No. 1's Public Service Park is located at the District's administrative office site:

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