

## **Sediment Basin**

### **PURPOSE:**

A sediment basin is a controlled storm water release structure formed by excavation or by construction of an earthen embankment across a waterway or low drainage area. Sediment basins collect and temporarily detain storm water runoff to provide settling time before runoff is discharged.

### **IMPLEMENTATION:**

- Construct prior to wet season and construction activities.
- Locate where a low embankment can be constructed across a swale or excavation.
- If possible, locate where a permanent detention basin will be constructed.
- Access to the sediment detention basin needs to be available for maintenance purposes.

### **DESIGN:**

- The maximum designed depth of a sedimentation basin should be 2 ½ feet.
- The maximum drainage area for a sedimentation basin is 5 acres. If a drainage area is larger than 5 acres, multiple basins or other sediment control measures may have to be considered.
- An armored outfall must be constructed.
- A matrix providing the drainage area and capacity for a sediment basin is shown in Chapter 59 of the Bureau of Design and Environment Manual.
- Locate away from traffic lanes or provide a barrier between traffic and the basin.

### **INSPECTION/MAINTENANCE:**

- Sediment basins are to be inspected by the resident engineer and contractor every 7 calendar days and after a storm event of ½" or greater (including snowfall).
- The basin should be cleaned of silt when the basin becomes 50% filled. The material removed must be disposed of in accordance with good housekeeping practices, incorporated into the fill material, or disposed of in accordance with IEPA regulations.
- Inspect the outlet for erosion and any needed stabilization.
- Inspect the outlet for any sediment discharge and discolored water.
- Inspect the basin for any seepage.
- If sediment is discharged or other pollutants are identified at the discharge point, other BMPs, such as sand filters, may be required to filter pollutants.