

**SEDIMENT BASIN****DEFINITION AND PURPOSE:**

A temporary settling pond designed to slowly release runoff, detaining it long enough to allow most of the sediment to settle out. Basins should be used in conjunction with additional BMPs, such as temporary seeding, velocity dissipaters, perimeter controls, inlet protection, etc., to reduce the total amount of sediment washing into them. Sediment basins may also be designed to be converted to permanent storm water detention basins after construction has ended.

APPROPRIATE APPLICATIONS:

Should be located as close to the sediment source as possible. A sediment basin should not be used in areas of continuously running water (live streams) or areas where failure of the embankment will result in loss of life, damage to homes or structures, or prevent the use of roadways or utilities.

CONDITIONS FOR EFFECTIVE USE:

Type of Flow: Sheet flow and concentrated flow.

Basin Volume: See *Storm Water Design Criteria Manual*.

WHEN BMP IS TO BE INSTALLED:

Prior to disturbance of natural vegetation.

STANDARDS AND SPECIFICATIONS:

A qualified professional engineer experienced in designing dams should complete the basin design. Excavate basin to length, width, depth and slopes specified on plans. Place and compact fill to construct dam to elevation at least 1 foot above crown of outlet pipe. Install outlet pipe and compact clayey soil around pipe. Install the perforated riser pipe, wrap with fabric, and surround with uniformly graded gravel. Install BMP at downstream end of outlet pipe. Grade and stabilize spillway. Install monitoring post near outlet of basin. Mark maximum allowable sediment depth.

OPERATION AND MAINTENANCE PROCEDURES:

Inspect every week and after every ½” storm event. Remove trash accumulation at outlet. Remove sediment accumulations once sediment reaches design depth, as indicated on monitoring posts. Repair and revegetate any erosion damage on spillway. Repair settlement, cracking, piping holes, or seepage at embankment. Replace gravel around riser if basin does not drain properly.

SITE CONDITIONS FOR REMOVAL:

Remove after upstream areas are stabilized. Regrade as appropriate and vegetate immediately.

TYPICAL DETAILS:

SC-5.1, SC-5.2, SC-5.3, and SC-5.4