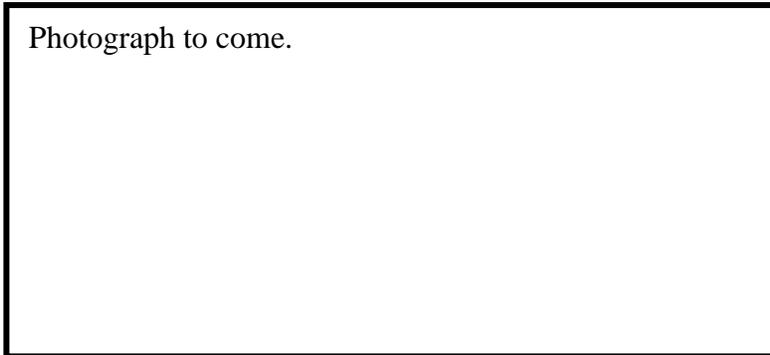


PC-36 WATER QUALITY INLET OIL/GRIT SEPARATOR

Reference: Georgia Stormwater Management Manual.



BMP Objectives

- Perimeter Control
- Slope Protection
- Borrow and Stockpiles
- Drainage Areas
- Sediment Trapping
- Stream Protection
- Temporary Stabilizing
- Permanent Stabilizing

Definition and Purpose

A water quality inlet oil/grit separator is similar to a standard curb inlet, with modifications made to the underground portion of the structure to separate oil and grit into discrete chambers. This BMP generally consists of a three-chamber system designed to remove heavy particulates and absorb hydrocarbons from stormwater runoff.

Appropriate Applications

- This BMP is generally used at sites expected to receive heavy vehicular traffic. It is also used at sites where oils, grease, and petroleum products could be carried by stormwater.
- Inlets are often placed in parking lots, service stations, or in truck loading areas.
- Inlets can be used to reduce the maintenance required at downstream BMPs.
- The BMP consists of a multi-stage underground retention system: upstream chamber traps sediments, center chamber traps oils and other heavy substances, downstream chamber discharges flows.
- Although flows are only detained for a short time, the inlet can be used as an effective first stage of treatment by removing oil, grease, and sediments from stormwater before the flows enter a larger BMP, such as a basin.
- Inlets can be installed in most areas, and the drainage area to inlet is generally less than 1 acre.

Limitations

Because flows are only detained for a short time, pollutants are not removed as effectively as with facilities that retain runoff for longer periods.

Design Parameters

- Inlets can be installed in any soil or terrain and are best used when they are installed at or near the impervious area that generates stormwater runoff.

- The area above the inlet needs to be large enough for maintenance access.
- The inlet should be designed with a permanent pool approximately 4 feet deep with a total chamber volume of 400 cubic feet of water per acre of contributing drainage area.
- Higher levels of pollutants can be removed by incorporating surface skimmers in the structure.

Maintenance and Inspection

- Conduct inspections as required by the NPDES permit or contract specifications during construction.
- Periodic inspection and maintenance will be required based on post-construction site conditions.
- Make any repairs necessary to ensure the measure is operating properly.
- The structure should be cleaned at least twice per year to remove sediment, oil, grease, and other pollutants.