Inlet Protection - Type 1

Plan

Attach GD-II geotextile fabric securely to 2"x4" wood frame; provide overlap at last section

12" Min., 18" Max.  36" Max.

Top frame required

2"x4" wood frame w/wire mesh backing, all 4 sides

Ponding height

NOTE: Pre-manufactured products installed in accordance with manufacturer’s recommendations may be used as an equivalent substitute with Departmental approval.

Section A-A

Source:
Adapted from Erosion Draw Manual J. McCullah & Assoc.

Symbol: IP-1

Detail No. DE-ESC-3.1.5.1
Sheet 1 of 2
Effective FEB 2019
Construction Notes:

1. Excavate completely around inlet to a depth of 18" below grate elevation.

2. Drive 2" x 4" post 1’ into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2" x 4" frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.

3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.

4. Stretch geotextile fabric tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet grate elevation. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.

5. Backfill around inlet in compacted 6" layers until at least 12" of geotextile fabric is buried.

6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).

7. This structure must be inspected frequently and the filter fabric replaced when clogged.

Materials:

1. Wooden frame is to be constructed of 2” x 4” construction grade lumber.

2. Wire mesh must be of sufficient strength to support filter fabric with water fully impounded against it.

3. Geotextile fabric: Type GD-II