

5.7 EXCAVATED DROP INLET PROTECTION

1. DESCRIPTION - An excavated area surrounding a storm drain drop inlet.

2. PURPOSE - To remove sediment from storm runoff before it enters into the storm drain system.

3. APPLICATIONS - Where storm drain drop inlets are to be used prior to final stabilization of the area draining to the structure. This method is used where the inlet will collect relatively heavy flows and overflow capability is needed. Weep holes or other methods of de-watering the storage area must be provided. This method can also be used in conjunction with other drop inlet protection methods (block and gravel or silt fence barriers) to provide more efficient sediment removal.

4. LIMITATIONS - Ponding will occur around the inlet with possible localized flooding as the result. Final stabilization and cleanout may be difficult if the finished area around the drop inlet is to be paved. This method is not applicable to use around existing inlets in a paved area.

5. DESIGN CRITERIA -

A. Drainage Area - 5.0 acres or less.

B. Depth - 1 foot minimum, 2 feet maximum, measured from crest of inlet.

C. Volume - 1800 cubic feet per acre of drainage area.

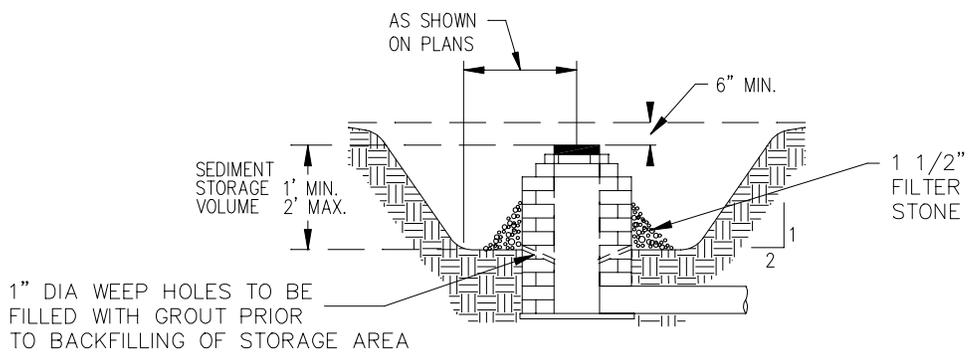
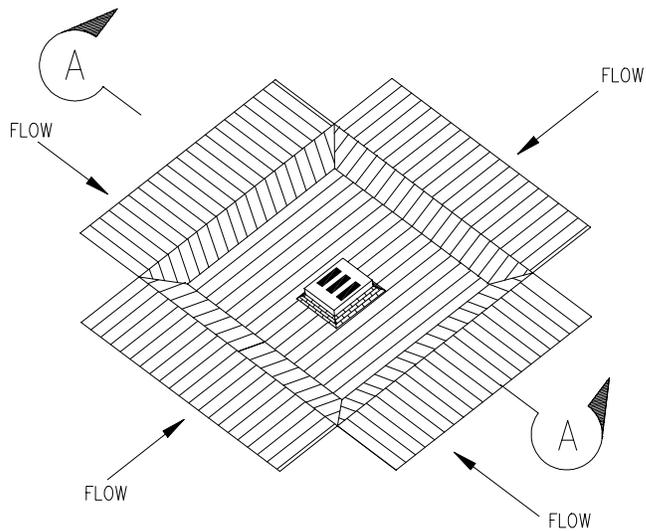
D. Side Slopes - 2H:1V or flatter.

E. De-watering Time - 48 hours or less. Size and number of holes as needed.

6. MATERIAL SPECIFICATIONS -

A. Filter Stone - NCTCOG Specification 2.1.8.(e)

7. MAINTENANCE REQUIREMENTS - Excavated drop inlet protection should be inspected weekly and after major rain events to ensure that the device is functioning properly. Remove sediment from the excavation when the depth of sediment has built up to one-half of the design depth. If de-watering of storage volume is not occurring, clean or replace filter stone surrounding weep holes. Clean the stone surface the first few times by raking. Repeated sediment build-up will require filter stone replacement.



SECTION A-A

EXCAVATED DROP INLET PROTECTION

N.T.S.

[NEXT PAGE >](#)