

EXCAVATED DROP INLET PROTECTION

5.7 EXCAVATED DROP INLET PROTECTION

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

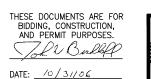
6. MATERIAL SPECIFICATIONS -

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

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks, & Conway, L.L.P.

This record drawing is a compilation of the sealed engineering drawing for this project; modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Carter, L.L.P.

BY <u>J.W.B.</u> DATE <u>05/04/2010</u>





TOWN OF ADDISON, TEXAS

ADDISON ROAD IMPROVEMENTS
BELT LINE ROAD TO ARAPAHO ROAD PHASE
STORM WATER POLLUTION PREVENTION PLAN DETAILS

BIRKHOFF, HENDRICKS & CONWAY L. L. P. CONSULTING ENGINEERS