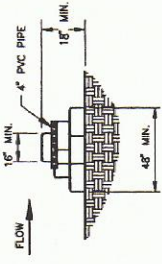


TxDOT (7/2002)

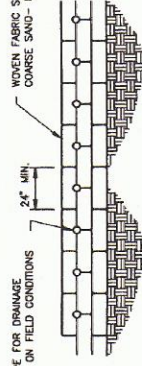
5.0 Sediment control BMPs

- Sandbags should be stacked in at least three rows abutting each other, and in staggered arrangement.
- The base of the berm should have at least 3 sandbags. These can be reduced to 2 and 1 bag in the second and third rows respectively.
- For each additional 6 inches of height, an additional sandbag must be added to each row width.
- A bypass pump-around system, or similar alternative, should be used in conjunction with the berm for effective dewatering of the work area.



CROSS SECTION
N.T.S.

4" PVC PIPE FOR DRAINAGE
DEPENDENT ON FIELD CONDITIONS



PROFILE VIEW
N.T.S.

Figure 5.1 - Schematic of a Sandbag Berm (NCTCOG, 1993).

Storm Water Management Guidelines for Construction Activities

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TxDOT (7/2002)

5.0 Sediment control BMPs

5.1.1 Sandbag Berm

Description: The purpose of a sandbag berm is to detain sediment carried in runoff from disturbed areas. This objective is accomplished by intercepting runoff and causing it to pool behind the sandbag berm. Sediment carried in the runoff is deposited on the upstream side of the sandbag berm due to the reduced flow velocity. Excess runoff volumes are allowed to flow over the top of the sandbag berm. Sandbag berms are used only during construction activities in streambeds when the contributing drainage area is between 5 and 10 acres and the slope is less than 15%, i.e., utility construction in channels, temporary channel crossing for construction equipment, etc. Plastic facing should be installed on the upstream side and the berm should be anchored to the streambed by drilling into the rock and driving in "T" posts or rebar (#5 or #6) spaced appropriately (see Figure 5.1).

Materials:

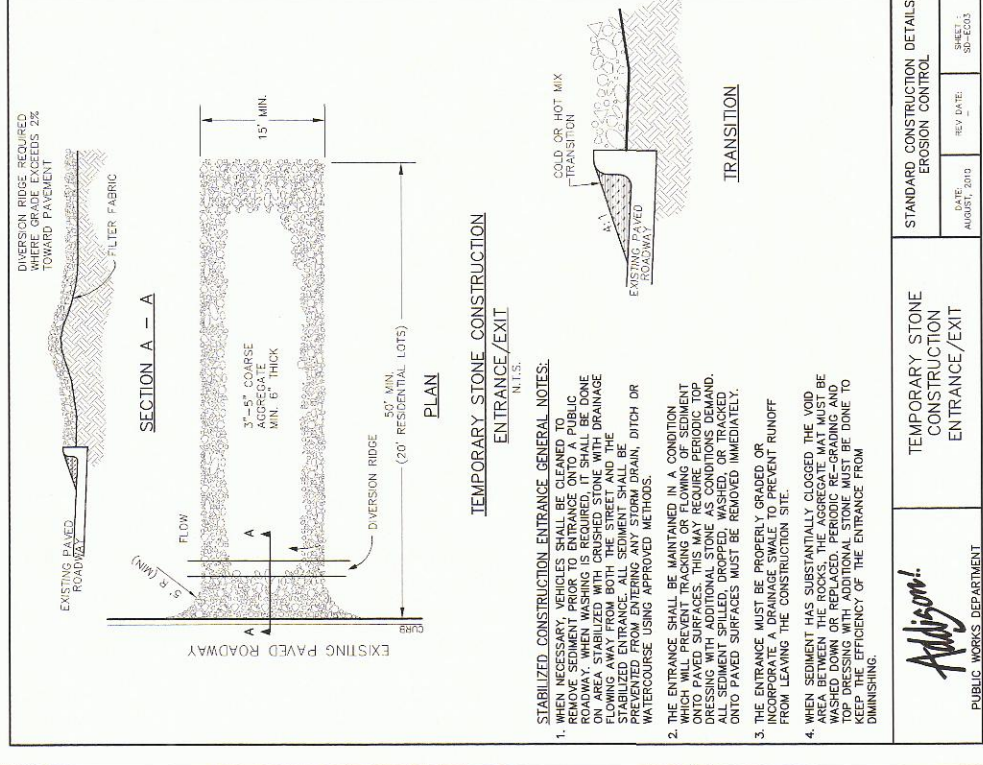
- The sandbag material should be polypropylene, polyethylene, polyamide or cotton burlap woven fabric; minimum unit weight 4 oz/yd², mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70 percent.
- The bag length should be 24 to 30 inches, width should be 16 to 18 inches and thickness should be 6 to 8 inches.
- Sandbags should be filled with coarse grade sand and free from deleterious material. All sand should pass through a No. 10 sieve. The filled bag should have an approximate weight of 40 pounds.
- Outlet pipe should be schedule 40 or stronger polyvinyl chloride (PVC) having a nominal internal diameter of 4 inches.

Installation:

- The berm should be a minimum height of 18 inches, measured from the top of the existing ground at the upslope toe to the top of the berm.
- The berm should be sized as shown in the plans but should have a minimum width of 48 inches measured at the bottom of the berm and 16 inches measured at the top of the berm.
- Runoff water should flow over the tops of the sandbags or through 4-inch diameter PVC pipes embedded below the top layer of bags.
- When a sandbag is filled with material, the open end of the sandbag should be stapled or tied with nylon or poly cord.

Storm Water Management Guidelines for Construction Activities

5-4



TEMPORARY STONE CONSTRUCTION
ENTRANCE/EXIT
N.T.S.

- STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:**
- REMOVE ALL EXISTING SEDIMENT FROM THE ENTRANCE PRIOR TO ENTRANCE ON TO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE CAPABILITY. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT FROM THE ENTRANCE TO THE EXISTING ROADWAY. DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
 - THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
 - WHEN SEDIMENT HAS SUBSTANTIALLY CLOGGED THE VOID AREA BETWEEN THE ROCKS, THE AGGREGATE MAT MUST BE WASHED DOWN WITH PRESSURIZED WATER. PERIODIC AND REGULAR WASHING WITH ADDITIONAL STONE MUST BE DONE TO KEEP THE EFFICIENCY OF THE ENTRANCE FROM DIMINISHING.

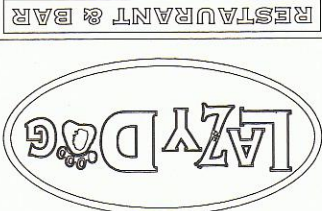
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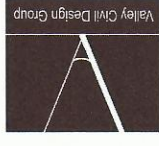
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 BUILDING DEPT. 2nd SUBMITTAL / BID SET
 PROJECT #: C-LDR-004
 ISSUE DATE: 10-22-2014

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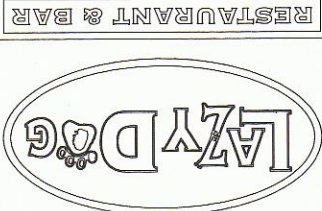
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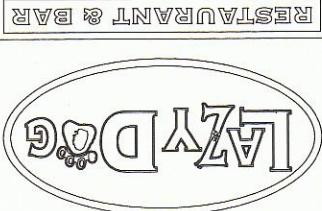
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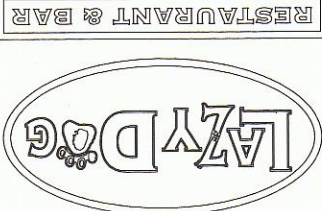
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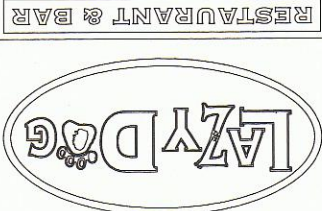
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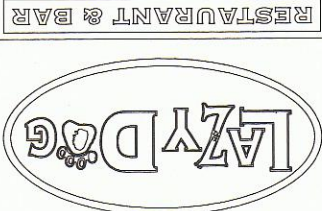
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