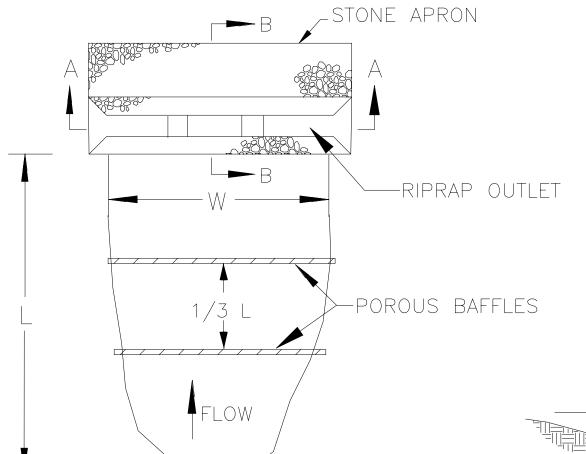
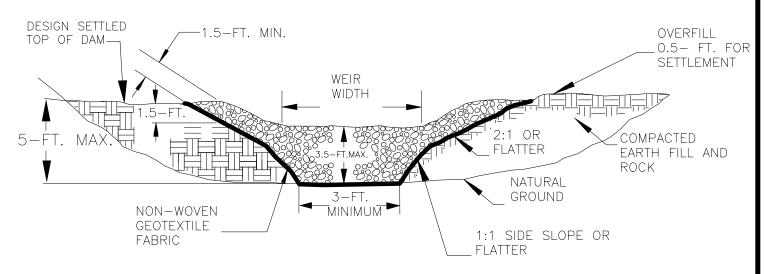


## SEDIMENT TRAP PLAN VIEW

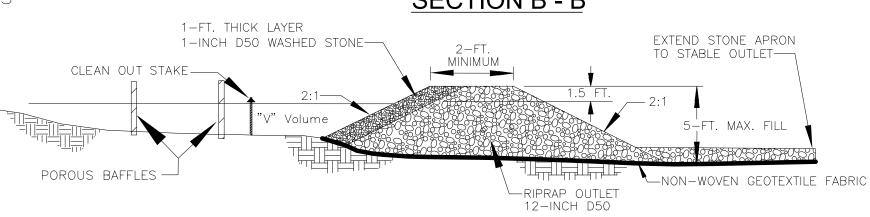


SURFACE AREA

## SECTION A - A



## SECTION B - B



## PLAN SYMBOL

### **SECTION A - A DIMENSIONS**

Trap #	Riprap Outlet Height	Riprap Bottom Width	Riprap Top Width	Side Slopes	Embankment Height

## **SECTION B - B DIMENSIONS**

Trap #	Riprap Bottom Length	Riprap Top Length	Side Slopes	Stone Apron Length	"V" Volume

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SEDIMENT TRAP

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NOT TO SCALE

### SEDIMENT TRAP - GENERAL NOTES

- 1. Sediment traps should not be placed in Waters of the State or USGS blue—line streams (unless approved by Federal Authorities).
- 2. The rock outlet structure shall consist of 12—inch D50 riprap. The upstream face of this outlet shall consist of a 1—foot thick layer of 1—inch D50 washed stone. The maximum steepness of the rock outlet structure shall be 2:1.
- 3. Both the rock outlet and the stone apron shall have an underlying layer of non-woven geotextile filter fabric.
- 4. All internal side slopes of the sediment trap should be 3:1 or flatter.
- 5. A sediment cleanout stake should be installed and marked to remove sediment at 50% of the sediment storage volume.
- 6. At least two (2) porous baffles shall be installed within the sediment trap. There should be at least 10 linear feet between each baffle and between any row of baffles and any of the sediment trap's inlets/outlets.
- 7. After construction of each sediment trap, the area disturbed to construct the trap should be promptly stabilized, including all side slopes.
- 8. The following sediment trap requirements shall be maintained:
  - Maximum embankment height shall be 5-feet.
  - Maximum riprap outlet height shall be 3.5-feet.
  - Minimum width at bottom of riprap outlet shall be 3-feet.
  - Minimum flow length at top of riprap outlet shall be 2-feet.

#### SEDIMENT TRAP - INSPECTION AND MAINTENANCE

- 1. The key to a functional sediment trap is weekly inspections, routine maintenance and regular sediment removal.
- 2. Attention to sediment accumulations within the trap is extremely important. Accumulated sediment deposition should be continually monitored in the trap and removed when necessary.
- 3. Remove accumulated sediment when it reaches 50% of the designed sediment storage volume as marked by the cleanout stake.
- 4. Removed sediment from the trap shall be placed in stockpile storage areas or spread thinly across the disturbed area. Stabilize the removed sediment after it is relocated.
- 5. Regular inspections of sediment traps should be conducted once every calendar week and, as recommended, within 24—hours after each rainfall event that produces ½—inch or more of precipitation.
- 6. Disturbed areas resulting from the removal of the sediment trap should be permanently stabilized and additional BMPs, such as silt fence, should be utilized to handle stormwater runoff from this disturbed area until final stabilization is reached.

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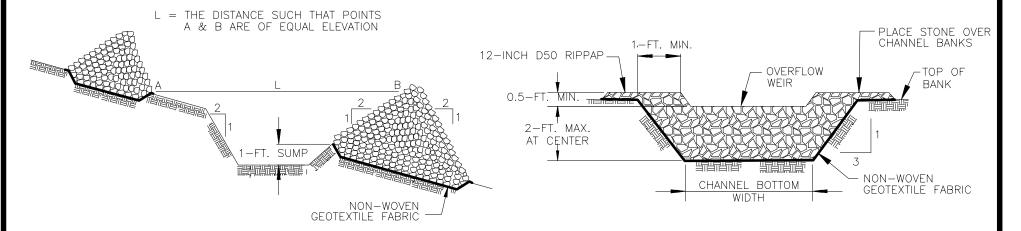
SEDIMENT TRAP

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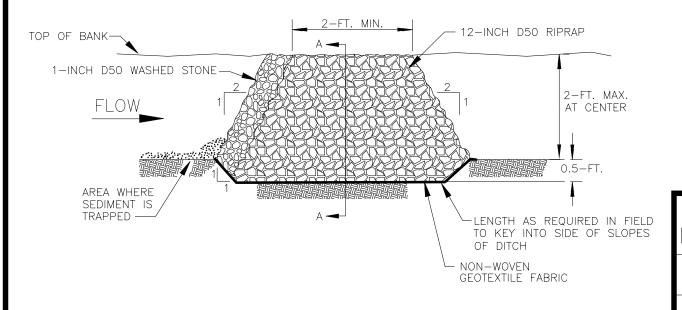
GENERAL NOTES

#### SPACING BETWEEN DITCH CHECK

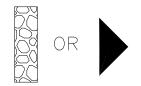
## CROSS SECTION A-A THRU STONE DITCH CHECK



#### TYPICAL DITCH CHECK SECTION



#### PLAN SYMBOL



## South Carolina Department of Health and Environmental Control

ROCK DITCH CHECK

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#### ROCK DITCH CHECK - GENERAL NOTES

- Rock Ditch Checks should not be placed in Waters of the State or USGS blue—line streams (unless approved by Federal Authorities).
- Rock Ditch Checks should be installed in steeply sloped channels where adequate vegetation cannot be established. This BMP measure should only be used in small open channels.
- 3. A non-woven geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.
- 4. The body of the rock ditch check shall be composed of 12-inch D50 Riprap. The upstream face may be composed of 1-inch D50 washed stone.
- 5. Rock Ditch Checks should not exceed a height of 2—feet at the centerline of the channel.
- 6. Rock Ditch Checks should have a minimum top flow length of 2—feet.
- 7. Riprap should be placed over channel banks to prevent water from cutting around the ditch check.
- 8. The riprap should be placed by hand or mechanical placement (no dumping of rock to form dam) to achieve complete coverage of the channel. Doing so will also ensure that the center of the check is lower than the edges.
- 9. The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

#### ROCK DITCH CHECK - INSPECTION & MAINTENANCE

- 1. The key to functional rock ditch check is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of rock ditch checks shall be conducted once every calendar week and, as recommended, within 24—hours after each rainfall even that produces 1/2—inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the rock ditch check is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the rock ditch check.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Inspect Rock Ditch Checks' edges for erosion and evidence of runoff bypassing the installed check. If evident repair promptly as necessary to prevent erosion and bypassing.
- 7. In the case of grass—lined ditches, channels, and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4%.
- 8. After construction is completed and final stabilization is reached, the entirety of the rock ditch check should be removed if vegetation will be used for permanent erosion control measures. The area beneath the removed rock ditch check must be addressed with permanent stabilization measures.

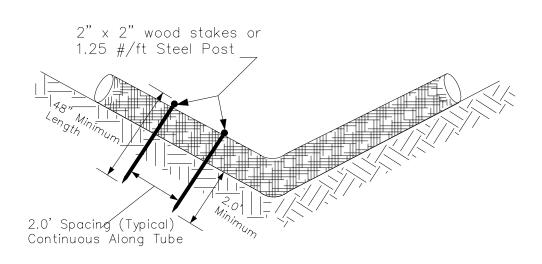
South Carolina Department of Health and Environmental Control

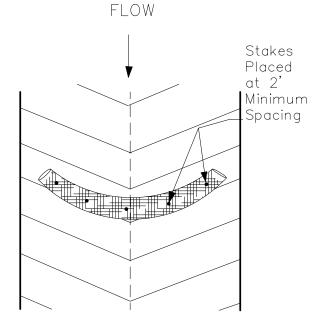
ROCK DITCH CHECK

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GENERAL NOTES

## SEDIMENT TUBE INSTALLATION





## SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING				
LESS THAN 2%	150-FEET				
2%	100-FEET				
3%	75-FEET				
4%	50-FEET				
5%	40-FEET				
6%	30-FEET				
GREATER THAN 6%	25-FEET				

## PLAN SYMBOL



# South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

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NOT TO SCALE

FEBRUARY 2014
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#### SEDIMENT TUBES — GENERAL NOTES

- 1. Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent off—site discharge of sediment—laden stormwater runoff.
- 2. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
- 3. The outer netting of the sediment tube should consist of seamless, high—density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high—density polyethylene non—degradable material.
- 4. Sediment tubes, when used as checks within channels, should range between 18—inches and 24—inches depending on channel dimensions. Diameters outside this range may be allowed where necessary when approved.
- 5. Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
- 6. Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
- 7. Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before installation.
- 8. The ends of adjacent sediment tubes should be overlapped 6—inches to prevent flow and sediment from passing through the field joint.
- 9. Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
- 10. Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
- 11. Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
- 12. Install stakes at a diagonal facing incoming runoff.

#### SEDIMENT TUBES - INSPECTION & MAINTENANCE

- 1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Large debris, trash, and leaves should be removed from in front of tubes when found.
- 7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.
- 8. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

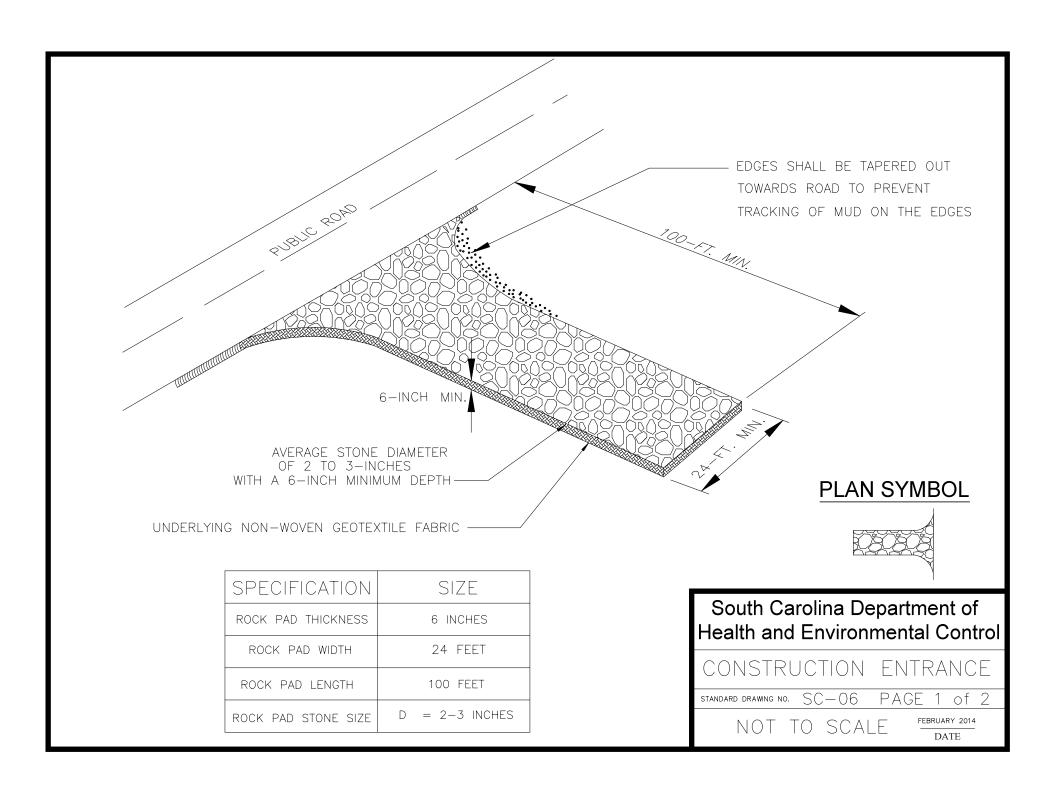
## South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

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GENERAL NOTES

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#### CONSTRUCTION ENTRANCE - GENERAL NOTES

- 1. Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
- 2. Install a non-woven geotextile fabric prior to placing any stone.
- 3. Install a culvert pipe across the entrance when needed to provide positive drainage.
- 4. The entrance shall consist of 2—inch to 3—inch D50 stone placed at a minimum depth of 6—inches.
- Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
- 6. The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
- 7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
- 8. Limestone may not be used for the stone pad.

#### CONSTR. ENTRANCE - INSPECTION & MAINTENANCE

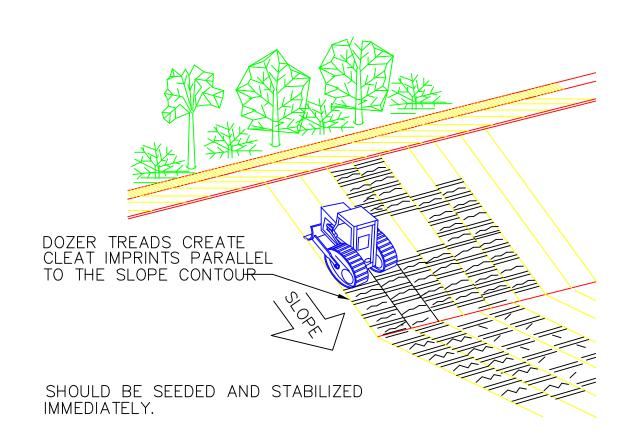
- 1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
- 4. Reshape the stone pad as necessary for drainage and runoff control.
- 5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off—site by vehicles. Frequent washing will extend the useful life of stone pad.
- 6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
- 7. During maintenance activities, any broken pavement should be repaired immediately.
- 8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post—construction.

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CONSTRUCTION ENTRANCE

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GENERAL NOTES



### **TRACKING**

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TRACKING

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APPROVED BY: AUGUST, 2005