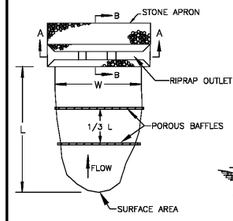
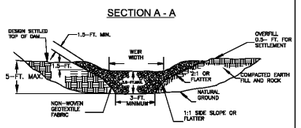
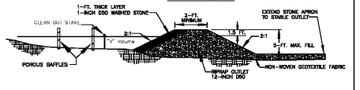
SEDIMENT TRAP PLAN VIEW



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
	2.5'	5'	6'	2:1	4'

SECTION B - B DIMENSIONS

Trap #	Riprap Bottom Length	Riprap Top Length	Side Slopes	Stone Apron Length	"V" Volume
	14'	2'	2:1	4.5'	14389c.f.

South Carolina Department of Health and Environmental Control

SEDIMENT TRAP

STANDARD DRAWING NO. SC-02 Page 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE

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

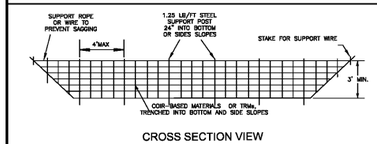
1. The key to a functional sediment trap is weekly inspections, routine maintenance and regular sediment removal.
2. Attention to sediment accumulations within the trap is extremely important. Accumulated sediment deposition should be continually monitored in the trap and removed when necessary.
3. Remove 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.

South Carolina Department of Health and Environmental Control

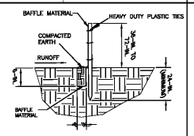
SEDIMENT TRAP

STANDARD DRAWING NO. SC-02 Page 2 of 2

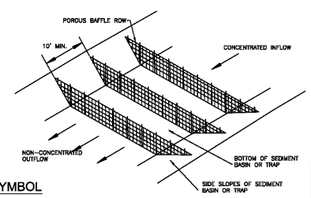
GENERAL NOTES — FEBRUARY 2014 DATE



CROSS SECTION VIEW

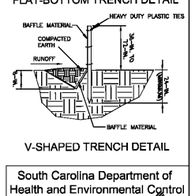


FLAT-BOTTOM TRENCH DETAIL



PLAN SYMBOL

PERSPECTIVE VIEW



V-SHAPED TRENCH DETAIL

—PB—PB—

BAFFLES — POST REQUIREMENTS

1. Porous baffle posts must be 50-inch to 58-inch long steel posts that meet, at a minimum, the following physical characteristics:
   - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
   - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
   - Weigh 1.25 pounds per foot (± 8%)
2. Posts shall be equipped with projections to aid in fastening of baffle material.
3. Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
4. Post spacing shall be at a maximum of 4-feet on center.

BAFFLES — MATERIAL REQUIREMENTS

1. Baffle material must be composed of coir-based materials or Turf Reinforcement Matting (TRM) that consists of the following requirements:
   - Have a light penetration (% openings) between 10-35%;
   - Free of loose straw material;
   - Have a minimum tensile strength of 145 lb/ft; and,
   - Have a minimum width of 48-inches.
2. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled or baffle material may be stapled to the ground by using 12-inch staples with a maximum spacing of 12-inches.
3. Baffle material shall be purchased in continuous rolls cut to the length of the sediment basin or trap to avoid joints.

BAFFLES — INSTALLATION

1. Attach baffles to the steel posts using heavy-duty wire ties that are evenly spaced along the above ground portion of each post.
2. Install the baffle rows perpendicular to the direction of the stormwater flow and place each baffle the proper distance from the toe and extend to allow access for maintenance and clean-out.

BAFFLES — INSPECTION & MAINTENANCE

1. The key to functional porous baffles is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of porous baffles shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations along each row of baffles is extremely important. Accumulated sediment deposition should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the baffle row or when it reaches the clean-out height of the sediment basin or trap, whichever is reached first.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed areas. Stabilize the removed sediment after it is relocated.
6. Check for gaps where storm water runoff has eroded a channel beneath each row of baffles, or where the baffle has been bagged or collapsed due to runoff overtopping the baffle.
7. Collector tears/rips within the baffles, areas where the baffle has begun to decompose, and locations of other circumstance that may render the baffle ineffective shall be repaired/replaced baffles and reinstall new baffles immediately.
8. Porous baffles should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

POROUS BAFFLES

STANDARD DRAWING NO. SC-15 PAGE 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE

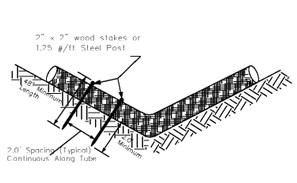
South Carolina Department of Health and Environmental Control

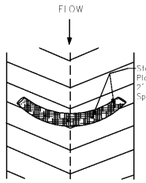
POROUS BAFFLES

STANDARD DRAWING NO. SC-15 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE

SEDIMENT TUBE INSTALLATION





PLAN SYMBOL

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

South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE

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 polysthylene 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

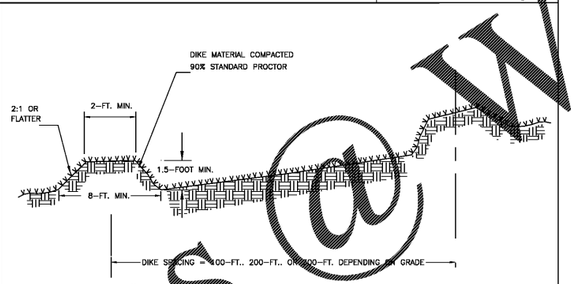
1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
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

STANDARD DRAWING NO. SC-05 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE



DIVERSION DIKES AND BERMS

Installation

Slopes shall be stabilized immediately using vegetation, sod, and erosion control blankets or turf reinforcement mats to prevent erosion.

The upslope side of the dike should provide positive drainage so no erosion occurs at the outlet. Provide energy dissipation measures as necessary.
Sediment-laden runoff must be released through a sediment trapping facility.

Sediment-laden runoff shall be directed to a sediment trapping facility.

Minimize construction traffic over diversion dikes and berms.

Inspection and Maintenance:

Dikes and Berms should be inspected, every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation and repairs made as necessary.

Damage caused by construction traffic or other activity must be repaired before the end of each working day.

South Carolina Department of Health and Environmental Control

DIVERSION DIKE OR BERM

STANDARD DRAWING NO. RC-02 PAGE 1 of 2

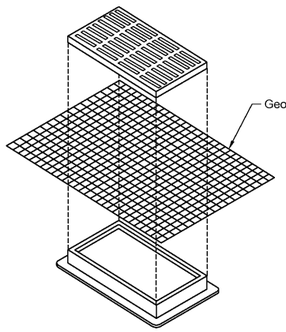
NOT TO SCALE — JULY 31, 2008 DATE

South Carolina Department of Health and Environmental Control

DIVERSION DIKE OR BERM

STANDARD DRAWING NO. RC-02 PAGE 2 of 2

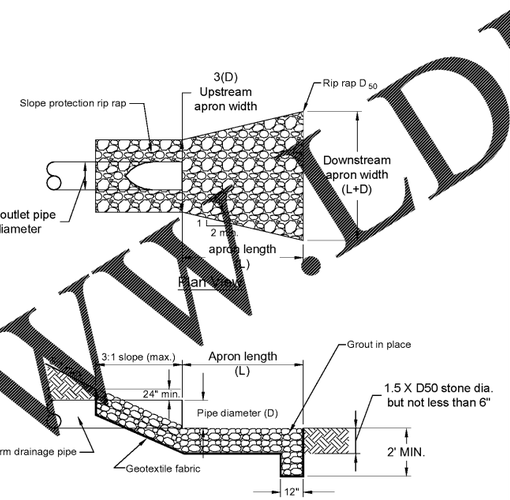
GENERAL NOTES — JULY 31, 2008 DATE



Note:
Finished size, including flap pockets where required, shall be extend a minimum of 10" around the perimeter to facilitate maintenance or removal.

Inlet Protection After Pavement Detail

Not to scale



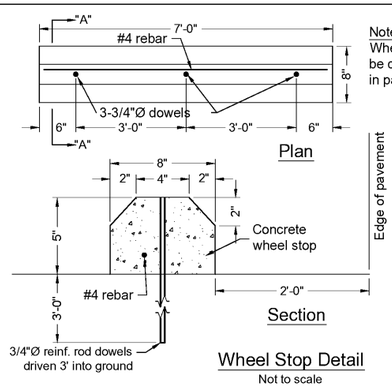
Section

Notes:
The design is based on South Carolina DHEC standard detail and specifications with modifications to include toedown across the end of the apron and slope protection rip rap

Pipe Size	D_{50} Stone dia.	Upstream Apron width	Apron Length	Downstream Apron width
12"	5"	3.0'	8'	9.0'
15"	7"	3.8'	10'	12.0'
18"	8"	4.5'	12'	13.5'
24"	10"	6.0'	18'	20.0'
30"	12"	7.5'	22'	24.5

Rip-Rap Pipe Protection Detail

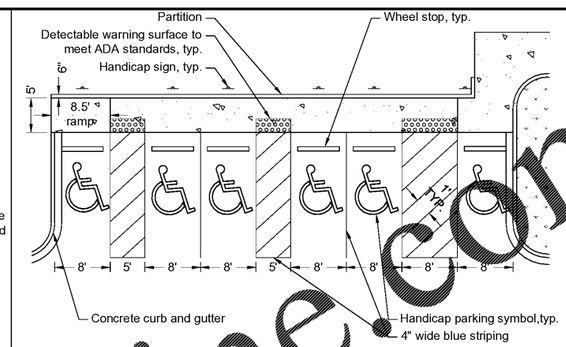
Not to scale



Note:
Wheel stop to be centered in parking space

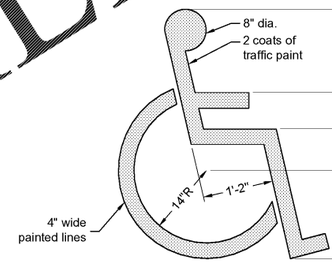
Wheel Stop Detail

Not to scale



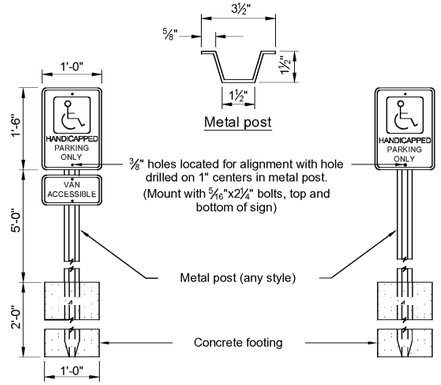
Handicap Parking Layout

Not to scale



Handicap Parking Symbol Detail

Not to scale



Notes:
1. Metal post to be galvanized. All bolts, nuts, washers and screws must be rustproof. (Post may be any style.)
2. Concrete for footing shall be of portland cement and have a minimum compressive strength of 3,000 PSI.
3. Signs will be fabricated by using a reflecting coating in the symbol, message and borders applied to a sheet aluminum backing (0.80) in thickness.
4. Message lettering shall be upper case (white, series b) 2" high in accordance with manual on Uniform Traffic Control Devices.
5. The symbol is composed of two elements; a white wheelchair figure (which should always face right) on a square background, international blue in color (FED. STD. 595A, Color #15180).
6. Sign post shall be minimum of 2'-0" clear from back of sidewalk, except where otherwise shown. see plans for location of signs.

Handicap Sign

Not to scale

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21629 REGISTERED

SOUTH CAROLINA CHAO & ASSOCIATES No. C00357 CERTIFICATE OF AUTHORIZATION

CPS1707

Construction Details
Pinewood Lake Phase 2A
Prepared For:
Richland County
Near Hopkins, South Carolina

Drawn: HMC Checked: GAL
Revised:

File: 399935D - Details.dwg Project No.: 399935D

C7.1
Sheet Number
August 11, 2017
Date