TABLE 3.31-B (Revised June 2003) TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS

SEED					
APPLICATION DATES	SPECIES	APPLICATION RATES 50 -100 (lbs/acre)			
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (Iolium multi- florum) & Cereal (Winter) Rye (Secale cereale)				
Feb. 16 - Apr. 30	Annual Ryegrass (Iolium multi-florum)	60 - 100 (lbs/acre)			
May 1 - Aug. 31	German Millet	50 (lbs/acre)			

FERTILIZER & LIME

 Apply 10-10-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means. 3 - When applying Slowly Available Nitrogen, use rates available in <u>Frosion & Sediment Control Technical Bulletin</u> # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

> **TEMPORARY SEEDING** SPECIFICATIONS

TABLE 3.32-C (Revised June 2003) PERMANENT SEEDING SPECIFICATIONS FOR APPALACHIAN/MOUNTAIN AREA

SEED ¹					
LAND USE	SPECIES	APPLICATION RATES			
Minimum Cara Laura	Tall Fescue ¹	90-100%			
Minimum Care Lawn	Perennial Ryegrass ²	0-10%			
(Commercial or Residential)	Kentucky Bluegrass ¹	.0-10% TOTAL: 200-250 lbs.			
High-Maintenance Lawn	Minimum of three (3) up to five (5) varieties of Kentucky Bluegrass from approved list for use in Virginia ¹	TOTAL: 125 lbs.			
	Tall Fescue ¹	128 lbs.			
General Slope (3:1 or less)	Red Top Grass or Creeping Red Fescue	2 lbs.			
Contrat Close (San Oricos)	Seasonal Nurse Crop ³	<u>20 lbs.</u>			
		TOTAL: 150 lbs.			
	Tall Fescue ¹	108 lbs.			
Low-Maintenance Slope	Red Top Grass or Creeping Red Fescue	2 lbs.			
(Steeper than 3:1)	Seasonal Nurse Crop ³	20 lbs.			
COLORD WALLS. IT	Crownvetch ⁴	20 lbs.			
		TOTAL: 150 lbs.			

turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html 2 - Perennial Ryegrass will germinate faster and at lower soil temperatures than Tall Fescues, thereby providing

cover and erosion resistance for seedbed. 3 - Use seasonal nurse crop in accordance with seeding dates as stated below:

March, April - May 15th Foxtail Millet May 16th - August 15th. August 16th - September, October Annual Rye

November - February Winter Rye 4 - All legume seed must be properly inoculated. If Flatpea is used, increase to 30 lbs/acre. If Weeping ovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to

FERTILIZER & LIME

 Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means. When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

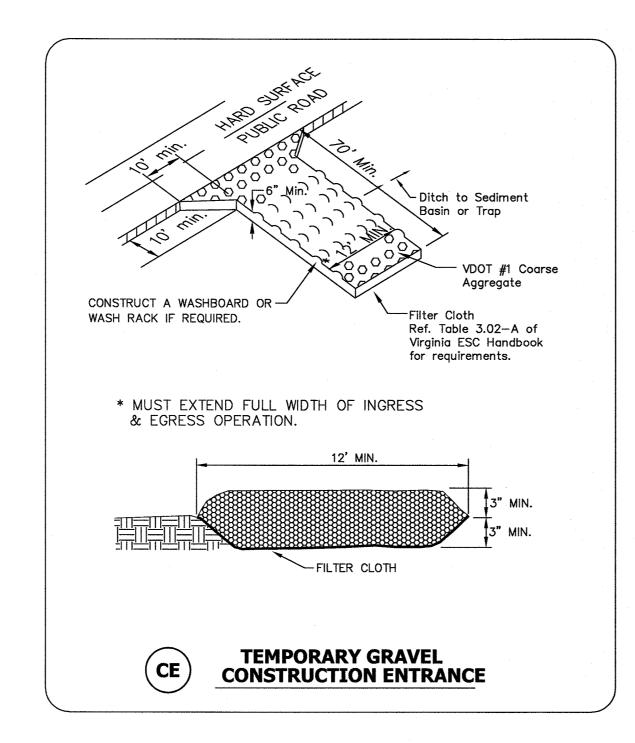
> PERMANENT SEEDING SPECIFICATIONS

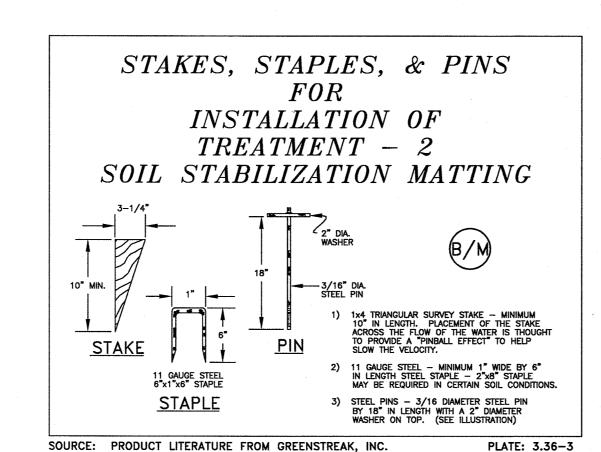
Erosion & Sediment Control Technical Bulletin No. 4 **Nutrient Management for Development Sites**

C. When applying maintenance fertilizer on established sod,

	Type of Grass				
Month	Tall Fescue Perennial Rye	Kentucky Bluegrass	Bermudagrass	Zoysiagrass	
September	1	1	.0:	0	
October	1	1	Ô.	0	
Early November	Ö	0	0	0	
April	0	0	0	0	
May	0-0.5	0-0.05	1	1	
June	0	0	1	Ò	
July/August	0	0	0	1	
early Lbs, N/1000 sf	2.5	2.5	2	2	
Januala of nitrogen	4 000 # 1	and contain			
Tourius or nitrogen	oer 1,000 sq. rt. i	f the fertilize	er is more than 5	0 percent WIN	
	er 1,000 sq. n. i		er is more than 5 e of Grass	0 percent WIN	
Month	Tall Fescue Perennial Rye	Type Kentucky	of Grass		
	Tall Fescue	Type Kentucky	of Grass	bening with a second second	
Month	Tall Fescue Perennial Rye	Type Kentucky Bluegrass	e of Grass Bermudagrass	Zoysiagrass	
Month August 15	Tall Fescue Perennial Rye 1.5	Type Kentucky Bluegrass 1.5	Bermudagrass	Zoyslagrass 0	
Month August 15 October 1	Tall Fescue Perennial Rye 1.5 1.5	Type Kentucky Bluegrass 1.5 1.5	Bermudagrass 0 0	Zoysiagrass 0 0	
Month August 15 October 1 April	Tall Fescue Perennial Rye 1.5 1.5	Kentucky Bluegrass 1.5 1.5	Bermudagrass 0 0 1.5	Zoysiagrass 0 0 0 1.5	

FERTILIZER SPECIFICATIONS AND RATES FOR MANAGEMENT





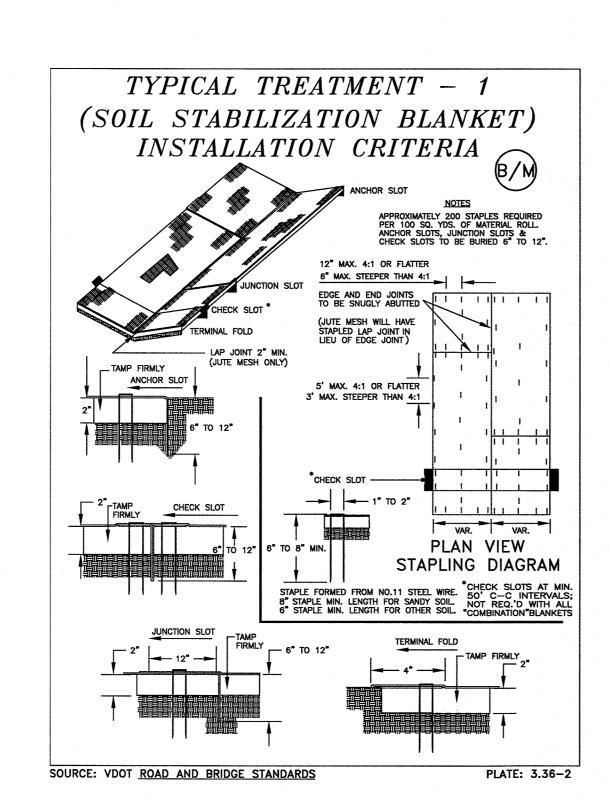
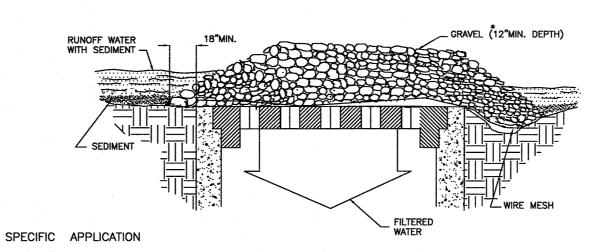


TABLE 3.35-A ORGANIC MULCH MATERIALS AND APPLICATION RATES RATES: NOTES: MULCHES: Per Acre Per 1000 sq. ft. 70 - 90 lbs. Free from weeds and coarse Straw or Hay 1½ - 2 tons matter. Must be anchored. Spread with mulch blower tons for or by hand. winter cover) Do not use as mulch for Fiber Mulch Minimum winter cover or during hot, dry periods.* Apply as Corn Stalks | 4 - 6 tons | 185 - 275 lbs. | Cut or shredded in 4-6" lengths. Air-dried. Do not use in fine turf areas. Apply with mulch blower or by Wood Chips 4 - 6 tons 185 - 275 lbs. Free of coarse matter. Airdried. Treat with 12 lbs nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand. 1-2 cu. yds. | Free of coarse matter. Air-Bark Chips 50 - 70 cu. dried. Do not use in fine Shredded turf areas. Apply with mulch blower, chip handler Bark or by hand. * When fiber mulch is the only available mulch during periods when straw should be used, apply at a minimum rate of 2000 lbs./ac. or 45 lbs./1000 sq. ft.

Source: Va. DSWC

MULCHING SPECIFICATIONS

III - 353



This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or #5 coarse aggregate.

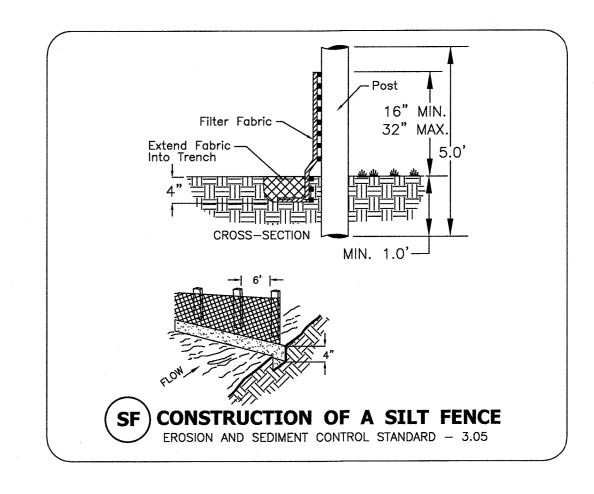
(IP) GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

EROSION & SEDIMENT CONTROL COST ESTIMATE

ALL COSTS GIVEN ARE COMPLETE IN PLACE

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA	1	\$ 1,200.00	\$ 1,200.00
SILT FENCE	LF	1,000	4.00	4,000.00
INLET PROTECTION	EA	4	150.00	600.00
CULVERT INLET PROT.	EA	2	400.00	800.00
OUTLET PROTECTION	EA	. 3	250.00	750.00
TEMP SEEDING	SF	139,000	0.04	5,560.00
PERM SEEDING	SF	139,000	0.05	6,950.00
BLANKET MATTING	SF	16,200	0.25	4,050.00
DIVERSION DIKE	LF	40	5.00	200.00
SUB-TOTAL				\$ 24,110.00
10% CONTINGENCY	\$ 2,411.00			
TOTAL PROJECT COST	\$ 26,521.00			
				. \ /FDIFIGATION /

NOTE: THIS COST ESTIMATE TABLE IS PROVIDED FOR BONDING PURPOSES ONLY. VERIFICATION OF ALL QUANTITIES AND PRICES FOR BIDDING PURPOSES SHALL BE THE RESPONSIBILITY OF THE BIDDER.



WIDE BY 10' LONG AND SIZED TO CONTAIN ALL LIQUID AND SOLID WASTE. A MINIMUM OF 12" FREEBOARD SHALL BE

2. THE CONCRETE WASHOUT SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS.

4. INSPECTORS SHALL USE THE WASHOUT FACILITY OR PLASTIC

CHECK ALL CONCRETE WASHOUT FACILITIES DAILY TO DETERMINE IF THEY HAVE BEEN FILLED TO 75% CAPACITY. THE FACILITY SHALL BE CLEANED OUT OR CHANGED WHEN 75%

INSPECT LINERS DAILY TO ENSURE THAT LINERS ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. LINERS SHALL BE REPLACED IF THERE ARE HOLES OR TEARS OBSERVED.

5. INSTALL A NEW PLASTIC LINER AFTER EVERY CLEANING.

SHEET NO. JOB NO. 04180095.00

REFLECTING TOMORRO

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New River Valley

RESIDENTIAL LAND DEVELOPMENT ENGINEERIN

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Balzer and Associates, Inc.

1208 Corporate Circle

Roanoke, VA 24018

540-772-9580

FAX 540-772-8050

PARK

TECHNOLOGY FOR THE IMPROVEMENTS
SC DETAILS

WOOD HAVEN

DRAWN BY

SCALE

REVISIONS:

4/18/2019

5/16/2019

DESIGNED BY

CHECKED BY SMH

2/25/2019

AS NOTED

ESC

- 10 MIL PLASTIC (2 PER BALE) LINING - WOOD STAKE (2 PER BALE) SECTION B-B 一 ½" DIA.

STAPLE DETAIL

- STAKE (TYP) _10' (MIN)____ • | • • | • | • • • STRAW BALE 10 MIL PLASTIC LINING STEEL WIRE <u>PLAN</u>

> **CONCRETE TRUCK** WASHOUT DETAIL

1. ACTUAL SIZE TO BE DETERMINED IN FIELD. A MINIMUM OF 10' INCLUDED.

EXCESS AND SLUMP TEST SOLIDS SHALL BE PLACED ON PLASTIC LINER UNTIL HARDENED. CONTRACTOR MAY CONSIDER INSTALLING WIRE OR REBAR HOOD FOR LATER PICKUP

FOR CLEANING OF THEIR TOOLS.

MAINTENANCE NOTES:

3. CONCRETE WASTE SHALL BE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN. THE HARDENED CONCRETE SHALL BE BROKEN UP AND DISPOSED OF OFFSITE PER APPLICABLE VA. DEQ RULES AND REGULATIONS. LIQUIDS SHALL NOT BE DISCHARGED DIRECTLY INTO WATERWAYS, STORM DRAINS, SWALES, OR DIRECTLY ONTO THE GROUND.

4. REMOVE LIQUIDS OR COVER STRUCTURE BEFORE PREDICTED STORMS TO PREVENT OVERFLOWS.