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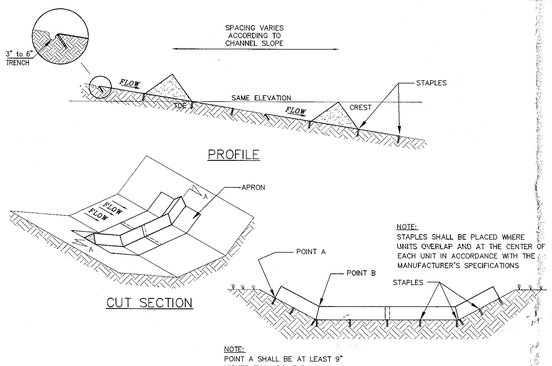


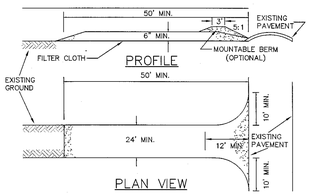
SECTION A–A

NOTES:

1. INSTALL CHECK DAMS IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A IN ALL TEMPORARY OR PERMANENT DRAINAGE SWALES ON SITE.
2. CHECK DAMS SHALL REMAIN IN PLACE UNTIL THE DRAINAGE SWALE IS STABILIZED.
3. PREFABRICATED UNIT TO BE TRIANGULAR SILT DIKE™OR APPROVED EQUAL.
4. SET SPACING OF CHECK DAMS SO THAT THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
5. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SUPERSEDED BY THESE PLANS OR THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL."

PREFABRICATED CHECK DAM DETAIL

NOT TO SCALE

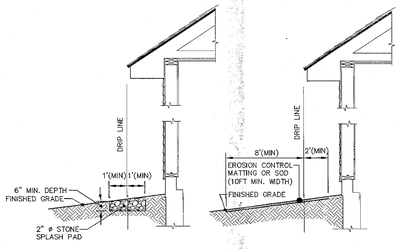


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FEET MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY – FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5 : 1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS – OF – WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS – OF – WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAILS

NOT TO SCALE

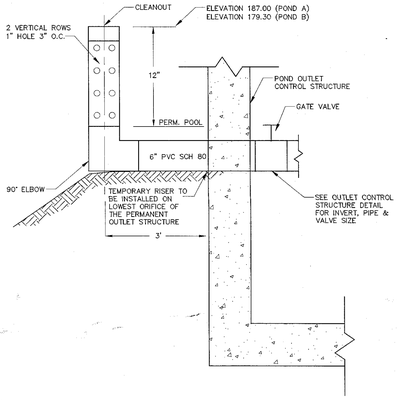


NOTES:

1. EROSION CONTROL MATTING, SOD OR STONE SPLASH PAD SHALL BE INSTALLED EVERYWHERE ROOF RUNOFF FLOWS FREELY ONTO A GRASS SURFACE.
2. EROSION CONTROL MATTING SHALL BE INSTALLED WITH SEAMS PARALLEL TO THE DIRECTION OF FLOW OF RUNOFF.
3. WHERE ROOF RUNOFF DRAINS TO A GREEN AREA UPSLOPE FROM A PAVEMENT EDGE OR SIDEWALK LESS THAN 8 FT FROM THE DRIP LINE, STABILIZE THE SLOPE AS SHOWN TO THE PAVEMENT EDGE. IF RUNOFF CROSSES A SIDEWALK ONTO ANOTHER GREEN AREA, IT MAY BE NECESSARY TO INSTALL ADDITIONAL MATTING OR SOD ON THE DOWNSLOPE GREEN AREA TO PREVENT EROSION.

TYPICAL SLOPE PROTECTION FROM ROOF RUNOFF

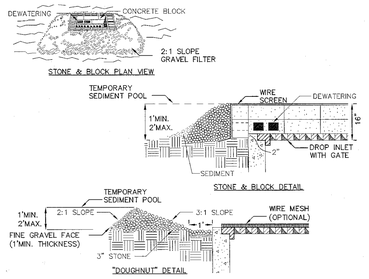
NOT TO SCALE



TEMPORARY SEDIMENT BASIN RISER DETAIL

NOT TO SCALE

1. SHALL BE INSTALLED ON OUTLET STRUCTURE OF EACH POND UNTIL CONTRIBUTING DRAINAGE AREA IS STABILIZED



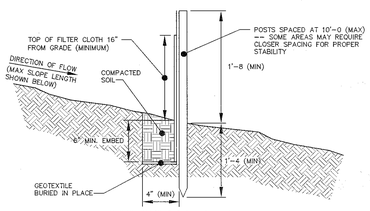
CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

MAXIMUM DRAINAGE AREA 1 ACRE

STONE & BLOCK DROP INLET PROTECTION DETAILS FOR PAVED AREAS

NOT TO SCALE



MAXIMUM ALLOWABLE SLOPE LENGTH

MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUNOFF TO A SECTION OF SILT FENCE SHALL BE AS FOLLOWS:

SLOPE STEEPNESS:	MAX. SLOPE LENGTH:
1:2	25 FT
1:3	50 FT
1:4	75 FT
1:5 OR FLATTER	100 FT

NOTE:
MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO SILT FENCE SECTION SHALL NOT EXCEED 1/4 ACRE PER 100 FT OF FENCE. CONCENTRATED DISCHARGE OF SEDIMENT LADEN WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO THE FENCING.

SILT FENCE DETAIL

NOT TO SCALE

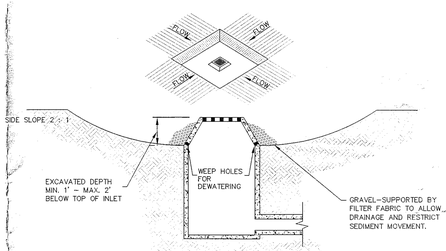
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. INSTALL SILT FENCE IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID S
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER DETAIL 4 ON THIS PAGE.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN "BULGES" DEVELOP IN FENCING.

POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APP L.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.



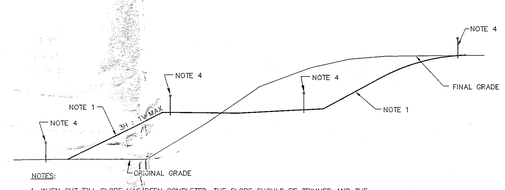
EXCAVATED DROP INLET PROTECTION DETAILS FOR UNPAVED AREAS

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
6. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

MAXIMUM DRAINAGE AREA 1 ACRE

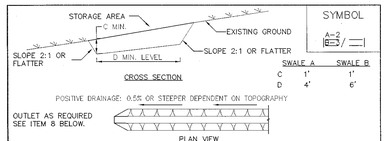


NOTES:

1. WHEN CUT/FILL SLOPE HAS BEEN COMPLETED, THE SLOPE SHOULD BE TRIMMED AND THE PERMANENT EROSION CONTROL MEASURES OF SEEDING AND MULCHING SHOULD BE CARRIED OUT. IF THE CUT/FILL IS TRIMMED OUT OF "SEASON" (FROM NOV. 1 THROUGH APRIL 1), MULCH THE SLOPE AND SEED ON TOP OF THE MULCH IN THE NEXT SEEDING SEASON.
2. IF THE SLOPE CANNOT BE COMPLETED BECAUSE PAVING IS REQUIRED OR FOR OTHER REASONS, THE SEEDING AND MULCHING SHOULD BE COMPLETED TO THE MAXIMUM EXTENT POSSIBLE.
3. WHEN THE CUT/FILL CANNOT BE BROUGHT TO FINAL GRADE IN A REASONABLE LENGTH OF TIME IT SHOULD BE MULCHED PER GP–10–01.
4. PROVIDE A CONTINUOUS LINE OF SILT FENCE AT THE PERIMETER OF SLOPES UNTIL THE FINAL STABILIZATION HAS BEEN APPROVED BY THE DESIGN ENGINEER OR THE INSPECTING PROFESSIONAL.
5. ALL FILL SLOPES AND CONSTRUCTED EMBANKMENTS SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS SECTION 203 (EXCAVATION AND EMBANKMENT).
6. TEMPRORARY AND PERMANENT SEEDING AND MULCHING SELECTION AND APPLICATION RATES SHALL BE IN ACCORDANCE WITH THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, CHAPTER 3.

SEEDING AND MULCHING GUIDES – CUT/FILL SLOPES

NOT TO SCALE



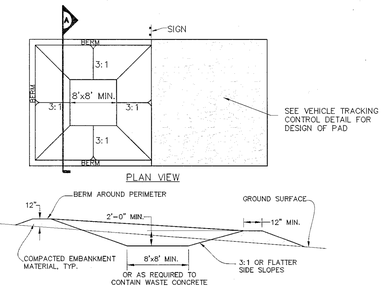
CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON–EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

TYPE OF TREATMENT	CHANNEL GRADE	A(5 AC OR LESS)	B(5 AC –10AC)
1	0.5–3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1–5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1–8.0%	SEED WITH JUTE OR EXCELSIOR, SOD	LINED WITH 4–6" RIP–RAP OR RECYCLED CONCRETE EQUIVALENT ENGINEERED DESIGN
4	8.1–20.%	LINED WITH 4–6" RIP–RAP	

9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	TEMPORARY SWALE



CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, DRILL SEED AND CRIMP MULCH OR OTHERWISE STABILIZE IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

CONCRETE WASHOUT AREA DETAIL

NOT TO SCALE

STANDARD AND SPECIFICATIONS FOR TEMPORARY CRITICAL AREA PLANTINGS

Definition

Providing erosion control protection at a critical area for an interim period. A critical area is any disturbed, defoiled slope subject to erosion.

Purpose

To provide temporary erosion and sediment control. Temporary control is achieved by covering all bare ground areas that allow as a result of concentration of a natural event.

Conditions Where Practice Applies

Temporary seedings may be necessary on concentrated areas to protect an area of concern. Where final stabilization is complete, which particular for winter both stabilization, or to provide cover when permanent seedings are likely to fail due to poor moisture and climate. This practice is to provide temporary protection cover during temporary shutdown of construction and is while waiting for optimal planting time.

Criteria

Water management practices must be installed as appropriate for site conditions. Use seed mixes for rough graded and slopes moderately stable. Large areas and areas are usually connected. Seedbed must be loosed within 24 hours of disturbance, or installation of the soil erosion will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or the 2 lb./1000 sq. ft.)

IF: Late fall or early winter, then use a Cereal (Winter) variety (cereal rye or wheat) at 168 lbs. per acre (3.9 lbs./1000 sq. ft.).

Any seeding method may be used that will provide uniform application of seed to the area and result in maximum germination and to meet criteria.

Mulch for new stands or cover at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Opens or lay or cover against. Mulches will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or erosion of concentrated areas are of concern. Wood cellulose fiber mulch may be used on steep slopes and areas where mulch anchoring is difficult but its use is applied according to manufacturer specifications. Caution: Wood cellulose mulch may form an impervious surface. This may be difficult to remove prior to final seeding.

August 2001 | Page 3.2 | New York Standards and Specifications For Erosion and Sediment Control

Table 3.1
Permanent Critical Area Planting Mixture Recommendations

Seed mixtures	Variety	Rate in lbs. per acre	Rate in lbs. Per 1000 sq. ft.
Mix #1			
Creeping red fescue	Ruby, Pennlawn, Jamestown	20	.25
Perennial ryegrass	Pennfine, Linn	10	.25
*This mix is used extensively for shaded areas.			
Mix #2			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	20	.5
*This mix is to pass low cost, this would be an excellent choice along the upland edge of a wetland to filter runoff and provide wildlife benefits. In areas where erosion may be a problem, a companion seeding of tall fescue should be added to provide quick cover as soon as it dies. (10 lbs. per 1000 sq. ft.)			
Mix #3			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	4	.1
Big bluestem	Niagara	4	.1
Little bluestem	Aldous or Camper	2	.05
Indiangrass	Rumsey	2	.05
Coastal panicgrass	Atlantic	2	.05
Indiangrass grass	El Reno or Tomboy	2	.05
Wildbeesweed		1	.02
*This mix has been successful on mine area gravel plantings. It is very difficult to cross wildland a warm season grass seeder such as a Truax seed drill. Broadcasting this seed is very difficult due to the fluffy nature of some of the seed, such as bluestem and indiangrass.			
Mix #4			
Switchgrass	Shelter, Pathfinder Trailblazer, or Blackwell	16	.35
Coastal panicgrass	Atlantic	16	.35
*This mix is well tolerant, a good choice along floodplains edge of tidal areas and roadsides.			
Mix #5			
Sethscoulee ecotypes (Spartina pectinata)—This grass is used for tidal shoreline protection and tidal marsh restoration. It is planted by vegetative seed/rhizomes.			
*Use Attention headlights: this be planted for tidal dune rehabilitation where the saltwater/low contiguous zones.			
Mix #6			
Creeping red fescue	Ensylva, Pennlawn, Jamestown	20	.46
Tall fescue	KY 31, Barbel	20	.46
Perennial ryegrass	Pennfine, Linn	5	.10
Birdsfoot trefoil	Empire, Fletcher	10	.46
*Domestic ryegrass annuals control stain. Not to be used for a seed planting or play ground.			

August 2001 | Page 3.3 | New York Standards and Specifications For Erosion and Sediment Control

Table 3.8
Mulch Anchoring Guide

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
1. Peg and Twine	Hay or straw	After mulching, divide area into blocks approximately 1 sq. yd. in size. Drive 4-6 pegs per block to within 2" to 3" of soil surface. Secure mulch in center by stretching twine between pegs in criss-cross pattern on each block. Secure twine around each peg with 2 or more right turns. Drive pegs flush with soil. Driving stakes into ground injures the twine.
2. Mulch netting	Hay or straw	Staple the light-weight paper, jute, wood fiber, or plastic netting to soil surface according to manufacturer's recommendations. Should be biodegradable. Most products are for outside but heat traffic.
3. Wood cellulose fiber	Hay or straw	Apply with hydromulcher immediately after mulching. Use 500 lbs. wood fiber per acre. Some products contain an adhesive material ("mulcher"), possibly environmental.
4. Mulch anchoring tool	Hay or straw	Apply mulch and pull a mulch anchoring tool (disc; straight disks) over mulch in rear to the contour to possible. Mulch material should be "anchor" into soil surface about 2"
5. Tackifier	Hay or straw	Mix and apply polymers that gum mulchers according to manufacturer's instructions. Avoid application during rain. A 24-hour curing period and a mid temperature higher than 40° Fahrenheit are required.

August 2001 | Page 3.31 | New York Standards and Specifications For Erosion and Sediment Control

Table 3.7
Guide to Mulch Materials, Rates, and Uses

Mulch Material	Suitable for Seeding or Mulching	Depth of Application	Rate per Acre	Rate per 1000 Sq. Ft.	Cover, Anchoring, Special Features	Remarks
Hay or straw	Yes	2"-3"	2 tons	90 lbs.	Cover difficult to maintain. Anchoring difficult. Use netting or tackifier. Will not blow. Will not hold moisture. Will not hold seed. Will not hold fertilizer. Will not hold pesticides. Will not hold lime. Will not hold other mulches. Will not hold other materials. Will not hold water. Will not hold air. Will not hold heat. Will not hold light. Will not hold sound. Will not hold odor. Will not hold color. Will not hold texture. Will not hold shape. Will not hold size. Will not hold weight. Will not hold density. Will not hold viscosity. Will not hold elasticity. Will not hold plasticity. Will not hold resistance. Will not hold conductivity. Will not hold capacity. Will not hold volume. Will not hold area. Will not hold length. Will not hold width. Will not hold height. Will not hold depth. Will not hold time. Will not hold temperature. Will not hold pressure. Will not hold speed. Will not hold velocity. Will not hold acceleration. Will not hold force. Will not hold mass