Stormwater Discharges

erosion and sediment control (ESC) practices wetlands, rivers, bays, and lakes through the use of in New York State's efforts to protect our streams, The construction industry is a critical participant

quality and aquatic habitat. picks up soil, debris, and over a construction site, it into our water resources. chemicals and washes them The result is degraded water As stormwater flows

significant financial impact on a construction project. It tation, clean repair gullies, replace vegecosts money and time to

and repair damage to other installed ESC practices, sediment-clogged storm drains, replace poorly

people's property or to natural resources



Rough graded or terraced slopes help keep

Don't use silt

Uncontrolled erosion degrades water quality and costs time and money to repair

Soil Erosion Prevention and Sediment Control

An important responsibility on all construction sites REQUIREMEN

Minimize the area of exposed soil on site:

- easier and cheaper it will be to control erosion subject to erosion. The less soil exposed, the to minimize the amount of area that is bare and To the extent possible, plan the project in stages
- Seed disturbed areas with permanent or reaching final grade. temporary groundcover immediately upon
- Seed or cover stockpiles that will not be used immediately.

adequate to handle expected storm flows: Protect defined channels with ESC practices

- Use stabilization measures such as sod geotextile, natural fiber, or riprap to allow channels to carry water without causing erosion.
- Use softer measures like geotextile or vegetation where possible to prevent downstream impacts

Reduce the velocity of stormwater:

- Use ESC practices such as vegetated ject site away from the protravels across and stormwater as it dams to slow down buffers and check
- ditches in streams or never install them velocity of runoff; filters to reduce the types of perimeter fences or other



Keep sediment on

Maintain a minimum clean stone at access date large vehicles. points to accommo-50-foot length of



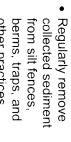
- Sweep the construction entrance road often to prevent soil and debris from entering storm
- Do not hose paved areas
- Use temporary sediment traps and basins with other permanent measures to retain sediment.

Divert clean water from disturbed soil

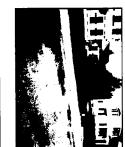
 Use interceptors and diversion structures to stable portions of the site direct flow away from exposed areas toward

effectiveness during the life of the project: Maintain all ESC practices to ensure their

collected sediment berms, traps, and from silt fences, other practices.



 Maintain sediment controls that protect and silt fences as diversion structures sensitive areas such



 Keep geotextiles and established vegetation is well mulch in place until





Description

areas preventing the sediment from leaving the used to intercept sediment laden flow from small A temporary barrier of straw or similar material

CAUTION:

where concentrated flow is anticipated. or permanent streams, channels, or any location DO NOT install straw bales across intermittent

Installation Details

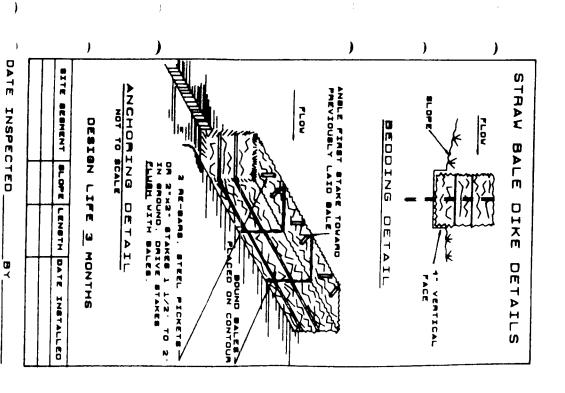
- 1. Bales shall be placed at the toe of a slope or abutting the adjacent bales. on the contour, and in a row with ends tightly
- 2. Each bale shall be embedded in the soil a string or wire is horizontal. minimum of (4) inches, and placed so the
- 3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the driven towards the previously laid bale at an bale. The first stake in each bale shall be

61

angle to force the bales together. Stakes shall be driven flush with the top of the bale.

Maintenance

- Inspect straw bale dikes periodically and after each rainfall event
- Replace broken or defective bales promptly.
- next rainfall event. immediately to maintain capacity for the Remove built up sediment deposits
- Once the contributing area is stabilized the area in accordance with the vegetative remove all materials and grade and stabilize



62

Entrance Stabilized Construction

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Description

eliminate the tracking of sediment onto public construction traffic access to the site to reduce or right-of-ways or streets. filter cloth, that is located at all points of A stabilized pad of aggregate underlain with

Installation Details

- Grade entrance by removing sod down to firm subgrade.
- 2. Place filter cloth over the entrance subgrade
- Minimum width 12 feet
- Minimum length 50 feet
- 3. Construct aggregate pad with positive drainage a minimum of 6 inches thick using 2

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equivalent. inch stone or reclaimed or recycled concrete

- 4. Surface water flowing to the entrance must be roadway. The berm shall have slopes no piped under the entrance or controlled by a steeper than 5:1. mountable berm to direct flow away from the
- 5. If required, wash stations will be constructed an appropriate sediment trapping device. in the same manner with drainage provided to

Maintenance

- manner that will prevent tracking of sediment into public right-of-ways or The entrance shall be maintained in a streets.
- Inspect all entrances after a rain.
- aggregate may be required. Periodically top dressing with additional
- All sediment and aggregate spilled dropped, or washed onto public immediately. right-of-ways must be removed
- entering storm drains, ditches, or water All sediment shall be prevented from

) DETAILS Z H Y . 8 EXTOUTING PAVEMENT 12 MIN ZHI EXIS

CONSTRUCTION **ENTRANCE** STABLIZED (MIN. 50 · ;; STONE --MIN PLAN VIEW EXISTING GROUND -TING SLOPE MIN PROFILE FILTER CLOTH JNTABLE BEAM COPTIONAL

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LOCATIONS

DATE

INSPECTED



Description

A temporary barrier of geotextile fabric (filter cloth) used to intercept sediment laden runoff from small drainage areas with disturbed soil.

CAUTION:

DO NOT install sediment fence across intermittent or permanent streams, channels, or any location where concentrated flow is anticipated.

Installation Details

- Locate the silt fence at least 10 feet from the toe of steep slopes and nearly level throughout its length.
- Dig a trench approximately 6 inches deep and 4 inches wide, or a V-trench, in the line of the fence.
- 3. Drive posts securely at least 16 inches into the ground on the downslope side of the trench. Space posts a maximum of 10 feet apart if fence is supported by wire; 6 feet if extra strength fabric is used without support wire.

65

Adjust spacing to place posts at low points along the fenceline.

- 4. Fasten support wire fence to upslope side of posts, extending 6 inches into the trench. attach continuous length of fabric to upslope side of fence posts. Avoid joints, particularly at low points in the fence line. Where joints are necessary, fasten fabric securely to support posts and overlap to the next post.
- 5. Place the fabric in the trench so the bottom folds across the bottom of the trench. Place backfill in the trench over the fabric to the groundline and compact with a power tamper

Maintenance

- Inspect sediment fences periodically and after each rainfall event.
- Should fabric tear, decompose, or in any way become ineffective, replace it immediately.
- Remove sediment deposits promptly to provide adequate storage volume for the next rain and reduce pressure on fence.

 Take care to avoid undermining fence during cleanout.
- Remove all fencing materials and unstable sediment deposits after the contributing drainage area has been properly stabilized, inspected, and approved. Grade and stabilize the disturbed area as shown in the vegetation plan.

