

EROSION AND SEDIMENT CONTROL FOR HOME BUILDERS



SECOND EDITION, SEPTEMBER 2001



Erosion is a costly problem

Eroding construction sites are a leading cause of water quality problems in Georgia. For every acre under construction, about a dump truck and a half of soil washes into a nearby lake or stream unless the contractor uses erosion controls.

Problems caused by this sediment include:

Local Taxes - Cleaning up sediment in streets, storm drains and ditches adds extra cost to County budgets.

Dredging - The expense of dredging sediment from lakes, and detention ponds is a heavy burden for both the County and private property owners.

Lower property values - Neighboring property values are damaged when a lake or stream fills with sediment. Shallow areas encourage weed growth and create boating hazards.

Poor fishing - Muddy water drives away fish that rely on sight to feed. As it settles, sediment smothers gravel beds where fish like small mouth bass find food and lay their eggs.

Nuisance growth of weeds and algae - Sediment carries fertilizers that fuel algae and weed growth.

Controlling Erosion and Sedimentation

Erosion control is important for all construction sites. The materials needed are easy to find and relatively inexpensive—straw bales or silt fence, stakes, rock, slope drains, grass seed, mulch or geo-textiles. Putting these materials to use is a straight forward process. Only a few controls are needed on most sites, however all erosion controls must be maintained daily.

- Use of a silt fence.
- Use of a construction exit.
- Slope drains and stilling basins on all vertical drops.
- Temporary mulching/grassing.
- State waters buffer protective fencing.
- Rip rap at the outflow end of all storm drains and stilling basins shall be installed.

Penalties

- Court imposed penalties for violations carry a minimum \$1,000 fine (for most sites), a maximum \$2,500 fine, or both a fine and jail term up to 60 days.

Soil Piles

- Locate away from any down slope street, driveway, stream, lake, wetland, ditch, or drainage way.
- Stabilize with mulch and/or vegetation. Temporary seed such as annual rye or winter wheat is recommended for topsoil piles.

State Waters Buffers

- Land disturbing (clearing, grubbing or grading) within 25 feet of the banks of **ALL** creeks, streams, ponds, lakes, and wetlands is prohibited.
- Buffers shall be protected with “orange” plastic safety fencing; and two rows of state approved “Type C” silt fencing outside the buffer.

Sediment Cleanup

- By the end of each work day, sweep or scrape up soil tracked onto the road. Stabilize with mulch and/or vegetation on all areas at finish grade while maintaining normal erosion controls.

Preserving Existing Vegetation

- Wherever possible, preserve existing trees, shrubs and other vegetation.
- To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
- Place plastic mesh buffer/tree save or snow fence barriers around trees at dripline, to protect the root areas below their branches.

Mulch or Temporary Grassing Requirement for Inspection

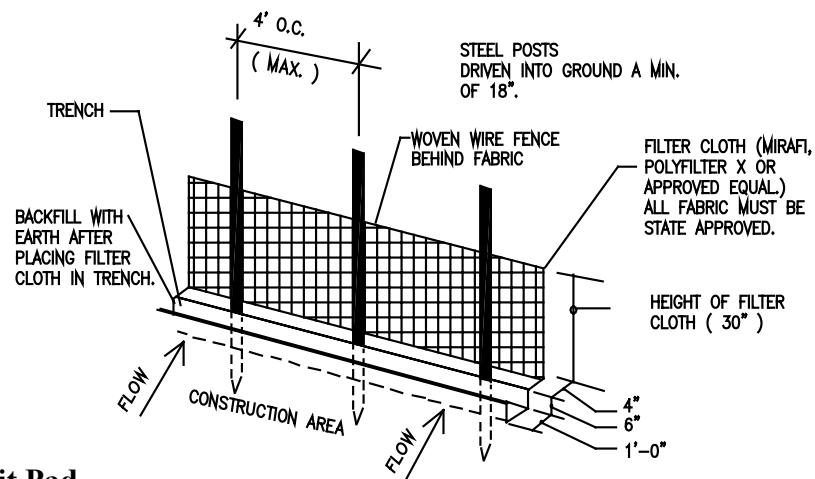
Mulch or temporary grassing must be used on all disturbed areas on a building lot and maintained daily. Beginning with a request for any type of slab inspection, or any other type of inspection thereafter (or within 14 days of land disturbance, whichever is earlier), disturbed soil areas must be mulched at a depth of 2 to 3 inches, or seeded with temporary vegetation (except within 5 feet (+/- one foot) of the slab or foundation walls). If not, the inspection will be turned down, a “red tag” issued, and a possible re-inspection fee assessed (silt fencing, gravel pads with geo-textile underliner and orange plastic buffer safety fencing must also be in place).

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Common Bermuda (hulled)			■	■	■	■	■					
Bermuda Sprigs			■	■	■	■	■					
Common Bermuda (hulled) & Sericea or Virgata Lespedeza			■	■	■	■						
Common Bermuda (unhulled) & Virgata or Sericea Lespedeza Seed Hay	■	■								■	■	■
Tall Fescue								■	■	■		
Tall Fescue & Clean Combins Run Virgata or Sericea Lespedeza									■	■		
Weeping Lovegrass & Virgata or Sericea Lespedeza			■	■	■	■						
Sericea Lespedeza Seed Bearing Hay overseeded with Weeping Lovegrass	■	■								■	■	■
Centipede Sod				■	■	■	■					
Shrub Lespedeza	■	■	■									
Maidencane	■	■	■	■								
Reed Canary Grass								■	■	■		
Switchgrass			■	■	■							
Wilmington Bahiagrass (w/ Sericea Lespedeza or Weeping Lovegrass)			■	■	■	■	■	■	■	■	■	■
Crownvetch (w/Tall Fescue or Rye)									■	■		
Pankgrass (w/Sericea Lespedeza)		■	■	■	■	■						
Sunflower (w/ Weeping Lovegrass or other low growing grasses or legumes)				■	■	■						
Pine Seedlings	■	■	■									■

Legend: Optimum Dates
 Permissible But Marginal Dates

Silt Fence

- Install prior to land disturbance.
- Install on down slope sides of site parallel to contour of land.
- Extend ends up slope enough to allow water to pond behind fence.
- Bury fabric in trench 6 inches deep with a 2 inch lip.
- Leave no gaps. Overlap sections of silt fence, or twist ends of silt fence together.
- Inspect and repair daily. Remove sediment if deposits reach half the fence height.
- Maintain daily until vegetation is established.
- Use 2 rows of Type C silt fence adjacent to state waters, lakes, wetlands, identifying and maintaining the State waters 25' buffer zone.
- Hay bales can be used for temporary erosion control in low flow areas. They should be removed within 30 days and silt fence should be installed for long term use.
- A mid-afternoon "walk through inspection" should be made at critical areas leaving time for repair.



Home Building Construction Exit Pad

- Maintain daily until vegetation is established.
- Install a construction exit using 1.5 to 3.5 inch diameter aggregate.
- Lay stone 6 inches thick, at least 20 feet long from the back of the curb or edge of the pavement, and a minimum 16 feet wide.
- Use geo-textile underliner for entire pad.
- Use to prevent tracking mud onto the road by all vehicles.
- Maintain daily throughout construction.

