

EROSION CONTROL PRACTICES FOR SINGLE FAMILY RESIDENCES AND SMALL SITES

This Appendix contains the step-by-step instructions needed by builders on most home sites to control offsite migration of soils and materials and to prevent undesired onsite migration of sediments. Additional controls may be needed for sites that have steep slopes, are adjacent to lakes and streams, receive a lot of runoff from adjacent land, or are larger than an acre.

The homeowner is encouraged to review the information herein, pass it along to his/her contractor, and prepare an erosion control plan similar to the following Detail located in this Appendix as required for an Abbreviated Plan.

All sites shall comply with the *2005 Stormwater Management Manual for Western Washington* and Title 9, Chapter 5 of the Orting Municipal Code.

Preventing Erosion is Easy:

Erosion control is important even for home sites of an acre or less. The materials needed are easy to find and relatively inexpensive – straw bales or silt fencing, stakes, gravel, plastic tubes, and grass seed. Proper use and placement is a straightforward process. Most sites only need a few controls. The following is a brief description of what to do to prevent erosion problems:

- Silt fencing or straw bales to trap sediment on the downslope side of the lot;
- Locate soil piles away from any roads or watercourses;
- Use a construction entrance for all vehicles to limit tracking of mud onto streets;
- Cleanup sediments carried offsite by vehicles or storms;
- Use infiltration trenches or downspout extenders to prevent erosion from roof runoff;
- Preserve existing trees and vegetation where possible to prevent erosion and decrease the amount of runoff from your site; and
- Revegetate the site as soon as possible.

Use of these common sense measures will greatly reduce or eliminate erosion off the site and reduce any impacts to the surrounding environment and stormwater conveyance system.

STEP-BY-STEP EROSION CONTROL PRACTICES

Following these steps will reduce erosion on- and off-site.

Filter Fabric Fencing or Straw Bales:

- Install prior to any other work being done.
- Install on downslope side(s) of site with ends extended up side slopes a short distance.
- Place parallel to the contour of the land to allow water to pond behind the fence.
- Entrench into the ground.
- Stake (1 stake every 3 feet for filter fabric fencing or 2 stakes per bale).
- Leave no gaps between bales or sections of filter fabric fencing.
- Inspect and repair once a week and after every large rainfall. Remove sediment if deposits reach more than 6 inches.
- Maintain until a lawn or permanent landscaping is in place.

Soil Piles:

- Locate away from any downslope street, stream, lake, wetland, ditch, or drainageway.
- Temporary seed such as annual rye is recommended for topsoil piles which will not be moved through the winter.

Construction Entrances:

- Install a construction entrance.
- Use to prevent tracking of dirt onto the road by all vehicles.
- Maintain throughout construction.

Sediment Cleanup:

- By the end of each work day, sweep or scrape up soil tracked onto the road.
- By the end of the next work day after a storm, cleanup soil washed offsite.

Revegetation:

- Seed, sod, or mulch bare soil as soon as possible.

Seeding and Mulching:

- Spread 4 to 6 inches of topsoil, till into native material to a depth of 12 inches.
- Fertilize according to soil test (or apply 10 pounds per 1,000 square feet of 20-10-10 or 10-10-10 fertilizer).
- Seed with an appropriate mix for the site (discuss with a lawn expert or home gardening center).
- Rake lightly to cover seed with 1/4" of soil. Roll lightly.
- Mulch with hay or straw (70 to 90 pounds, or one bale per 1,000 square feet).
- Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall. Do not over water so that soil runs off lawn.

Sodding:

- Spread 4 to 6 inches of topsoil.
- Fertilize according to soil test (or apply 10 pounds per 1,000 square feet of 20-10-10 or 10-10-10 fertilizer).
- Lightly water the soil.
- Lay sod. Tamp or roll lightly.
- On slopes, lay sod starting at the bottom and work toward the top. Peg each piece down in several places.
- Initial watering should wet soil 6 inches deep (or until water stands 1 inch deep in a straight-sided container). Then water lightly every day or two for 2 weeks.

Preserving Existing Vegetation:

- Whenever 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 or snow fence barriers around trees to protect the area below their branches.

Reference: Washington State Department of Ecology. 2005. Stormwater Management Manual for Western Washington. February 2005. Publication Numbers 05-10-029 through 05-10-033.