Construction Sequence
Lot Erosion & Sediment Control

Step 1. ***Evaluate the Site.***
Before construction begins, evaluate the entire site, marking for protection, any important trees and associated rooting zones, unique areas to be preserved, on-site septic system absorption fields, and vegetation suitable for filter strips, especially in perimeter areas.

Identify Vegetation To Be Saved-
Select and identify the trees, shrubs and other vegetation that you want to save.

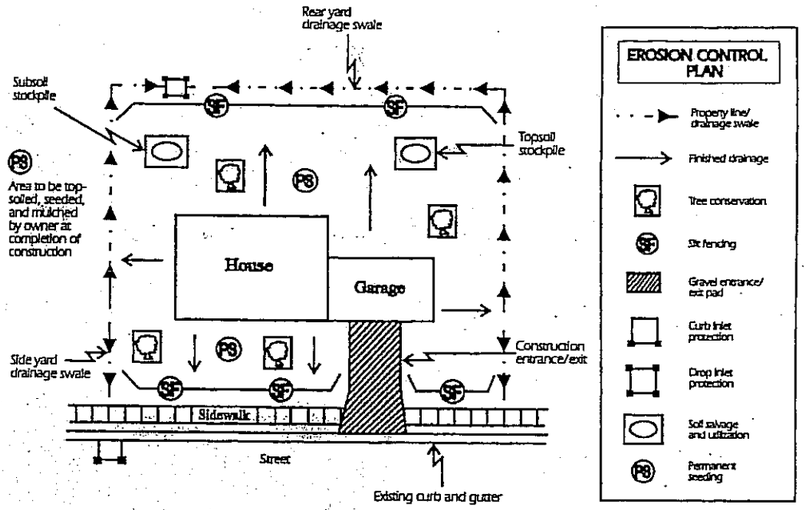
Protect Trees and Sensitive Areas-
To prevent root damage, do not grade, burn, place soil piles, or park vehicles near trees or in areas marked for preservation.
* Place plastic mesh or snow fence barriers around trees' dripline to protect the area below their branches.
* Place a physical barrier, such as plastic fencing, around the area designated for a septic system field(if applicable).

Step 2. ***Install Perimeter Controls.***
Identify the areas where sediment-laden runoff could leave the construction site, and install perimeter controls to minimize the potential for off-site sedimentation. It's important that perimeter controls are in place before any other earth-moving activities begin.

Protect Down-Slope Areas-
(With Vegetative Filter Strips)
* On slopes of less than 6%, preserve a 20-30 foot wide vegetative buffer strip around the perimeter of the property and use it as a filter strip for trapping sediment.
* Do not mow filter strip vegtation shorter than 4 inches.

With Silt Fence
Use silt fencing along the perimeter of the lot's downslope side(s) to trap sediment.

Example of Erosion & Sediment Control on a Building Lot



Notes: 1. Erosion/sediment control measures must be functional and be maintained throughout construction.
2. Maintain positive drainage away from the structure(s).

(Install Gravel Drive)
* Restrict all lot access- to this drive to prevent vehicles from tracking mud onto roadways(see Exhibit #4).

Protect Storm Sewer Inlets-
* Protect nearby storm sewer curb inlets with stone-filled or gravel-filled geotextile bags(see Exhibit #1), or equivalent measures before disturbing soil.
* Protect on site storm sewer drop inlets with silt fence material (see Exhibit #2), straw bales, or equivalent measures before disturbing soil.

Step 3. ***Prepare The Site For Construction.***
Prepare the site for construction and for installation of utilities.
Make sure all contractors (especially the excavating contractors) are aware of areas to be protected.

Salvage and Stockpile the Topsoil/Subsoil-
Remove topsoil (typically the upper 4-6 inches of soil material) and stockpile
* Remove subsoil and stockpile separately from the topsoil.
* Locate the stockpiles away from any downslope streets, driveway, stream, lake, wetland, ditch, or drainageway.
* Immediately after stockpiling, temporary-seed the stockpiles with annual rye or winter wheat and/or place sediment barriers around the perimeter of the piles.

Step 4. ***Build The Structures & Install The Utilities.***
Construct the home and install the utilities; also install the sewage disposal system and drill the water well(if applicable); then consider the following:

Install Downspout Extenders-
* Downspout extenders are highly recommended as a means of preventing lot erosion from roof runoff. Add the extenders as soon as the gutters and downspouts are installed(see Exhibit #5).
* Be sure the extenders have a stable outlet, such as the street, sidewalk, or a well vegetated area.

Step #5. ***Maintenance***
Maintain all erosion and sediment control practices until construction is completed and the lot is stabilized.

Step # 5. Maintenance(cont'd)
* Inspect the control practices a minimum of once a week and after each storm event, making any needed repairs immediately.
* Toward the end of each work day, sweep or scrape up any soil tracked onto roadways. *Do not flush areas with water.*
* By the end of the next work day after a storm event, clean up any soil washed off-site.

Step #6. ***Revegetate The Site.***
Immediately after all outside construction activities are completed, stabilize the lot with sod, or seed and mulch.

Redistribute the Stockpiled Subsoil and Topsoil.
* Spread the stockpiled subsoil to rough grade.
* Spread the stockpiled topsoil to a depth of 4-6 inches over the rough graded areas.
* Fertilize & lime according to soil test results or recommendations of a seed supplier or a professional landscaping contractor.

Seed or Sod Bare Areas-
* Contact local seed suppliers or professional landscaping contractors for recommended seeding mixtures and rates.
* Follow recommendations of a professional landscaping contractor for installation and rates.
* Water newly seeded/sodded areas every day or two to keep the soil moist; soak to 2 inches. Less watering is needed once grass is 2 inches tall.

Mulch Newly Seeded Areas-
* Spread straw mulch on newly seeded areas, using 2 - 3 bales of straw per 1,000 square feet.
* On flat or gently sloping land; anchor the mulch by crimping it 2 - 4 inches into the soil. On steep slopes, anchor the mulch with netting or tackifiers. An alternative to anchored mulch would be the use of erosion control blankets.

Step #7. ***Remove Remaining Temporary Control Measures.***
Once the sod and/or vegetation is well established, remove any remaining temporary erosion and sediment control practices, such as:
* Downspout extenders. (or shorten to outlet onto the vegetated areas, allowing for maximum infiltration)
* Storm sewer inlet protection measures.

Building Lot Drainage.
The best time to provide for adequate lot drainage is before construction begins. With proper planning, most drainage problems can be avoided, and that is important because correcting a problem after it occurs is usually much more difficult and costly. Here's what it takes to ensure good lot surface and subsurface drainage.

Surface Drainage
* Position the structure a minimum of 18 inches above street level.
* Divert stormwater runoff away from the structure by grading the lawn to provide at least 6 inches of vertical fall in the first 10 feet of horizontal distance.
* Avoid filling in existing drainage channels and roadside ditches, since that could result in wetness problems on someone else's property and/or damage to adjacent road surfaces.

Subsurface Drainage
* Provide an outlet for foundation or footer drains and for general lot drainage by using storm sewers (where allowed), or obtain drainage easements if you must cross adjoining properties.
* If you accidentally cut through an existing field tile, assume that it carries water even if currently dry; therefore, re-route it (using the same size tile) around the structure or septic field, then reconnect it.

Reference Materials

Every building is unique and poses its own potential erosion hazards. In many instances, additional or alternative control methods may be necessary if the lot is:
* Adjacent to a creek, river, lake or wetland.
* Has slopes in excess of 6%.
* Receives runoff from adjacent areas.
* Has more than one acre of disturbed ground.
* Poor soil conditions.

This pamphlet provides installation instructions on four of the more commonly used building site erosion and sediment control practices. For information on other related practices, refer to the ODNR, Division of Soil & Water Conservation Handbook, "Rainwater & Land Development-" Ohio's Standards for Stormwater Management, Land Development & Urban Stream Protection. Copies are available at the Stark County Soil & Water Conservation District Office, 2311 Columbus Rd. NE, Canton, Ohio 44705, (330)489-9764.

Investigating the land (or lot) before you buy is essential. Aerial photos, mine maps, soil survey, wetland and flood plain maps are all resources available at our office (appointments are recommended).

It is the responsibility of every developer, contractor & property owner to see that they are in compliance with all laws regarding construction site erosion/sediment control. Information, drawings & some materials in this pamphlet were taken in part from the Summit SWCD pamphlet "Erosion Control for Home Builders," revised 1/96.