

beyond the area required. Since sediment control features such as filter fences, sediment traps, stone filters, check dams, and sediment basins are designed according to the size of the disturbed area, the smaller the area disturbed, the lower the cost of site control.

Sediment control is, in effect, planned damage control. These efforts are geared entirely toward collecting, directing, capturing, filtering, and releasing sediment-laden runoff, after erosion has occurred. Practically speaking, in most cases erosion control is not among the first things a site designer or a builder is concerned with. Their attention is drawn to many issues in the course of the project, and erosion control is usually dealt with as part of these issues. Erosion and sediment control consists of both temporary and permanent measures. Permanent measures are provided to prevent erosion from occurring after construction is completed. These permanent measures include stabilized and established vegetation and paving.

Initial erosion and sediment control operations consist of the construction of ingress/egress controls, which include tire scrubbers or a stabilized construction entrance that remains in place and in working order until earth-moving activities are completed and a driveway or entrance is stabilized. Erosion and sediment controls should be constructed and stabilized and functional before general site disturbance begins. Only limited disturbance is permitted, so allow for the proper function of sediment basins, sediment traps, diversion terraces, interceptor channels, and/or channels of conveyance.

After completion of the site work and the grading of all disturbed banks, open areas are seeded, fertilized, and prepared in accordance with specifications and cultural requirements of the site. Temporary erosion and sediment pollution controls should be maintained throughout the duration of the work and until the site is stabilized. After a rain, the devices should be checked and inspected for condition and integrity. Devices that require maintenance, repair, clean-out, or replacement shall be addressed.

Silt fences must be installed parallel to existing contours or constructed level alignments. Ends of fences must be extended 10 ft, traveling up slope at 45° to align with the main fencing section. Sediment must be removed where accumulations reach halfway above the ground height of silt fencing. Any silt fence that has been undermined or topped should be replaced with rock filter outlets immediately. In long sections of fence, stone filter outlets might be used where water collects or flows concentrate behind the filter fence. Storm water inlets must be protected until the tributary areas are stabilized. Sediment must be removed from inlet protection after each storm event.

Sediment must be removed from traps when storage capacities are reduced to 1334 ft<sup>3</sup>/acre. Most regulations require that sediment be removed from the basins when storage capacities are reduced to 5000 ft<sup>3</sup>/tributary acre. Stakes located in the trap and marked with the clean-out elevation are required in some jurisdictions. The stakes should be placed at about halfway between points of concentrated inflows to the basin risers or outlet. When sediment has accumulated to the clean-out elevations on half the stakes, it must be removed to restore basin capacity.