Erosion & Sedimentation Control on Building Sites

What is it?

Erosion and sediment control involves a range of products installed across drainage flows to filter sediment out of water and to slow down water flow. They include sediment fences, straw bales, grass/vegetation strips and sediment traps/basins. The most common form of sediment and erosion control on construction sites in the Camden LGA is the use of geo textile sediment fencing.

Why is it important?

- Sediment on building sites causes problems not only for the environment but also for builders. A dirty site not only is unsightly but can cause difficulties in wet weather. It can increase site costs by having to replace stockpiles that are washed away, increase clean up costs, penalties and potential damage to your company's reputation if fined for polluting.
- The environmental impact of sediment such as mud and dirt is significant. They smother animals and plants that live on the bottom of creek beds. They settle and make the creeks shallower. Many native plants and animals cannot survive this and die. Even though mud and dirt are natural they are still serious pollutants that must be prevented from entering our waterways.



Well maintained building site, stabilised driveway, sediment fencing in place around low point.



No erosion and sediment controls in place, resulting in sediment running off into the gutter.

Maintenance of the sediment controls:

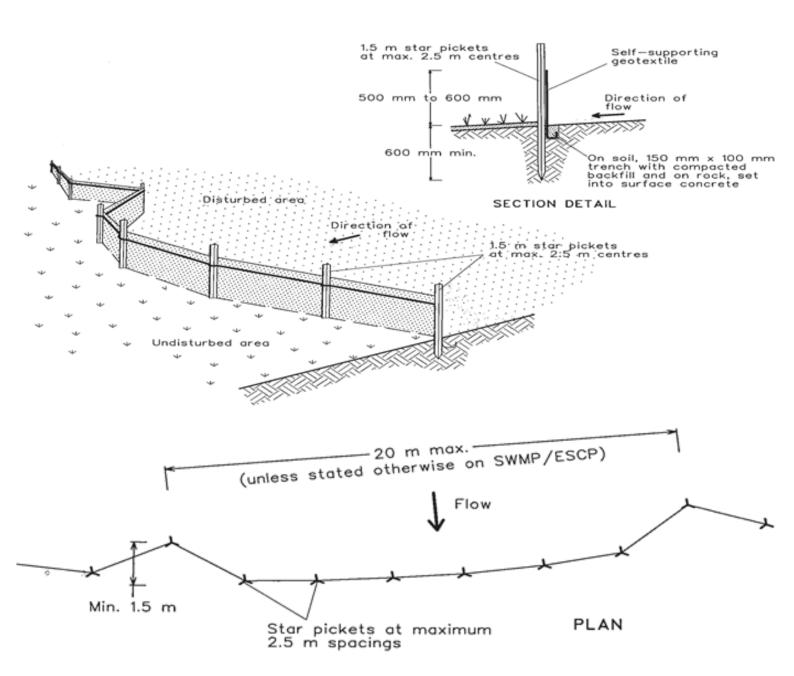
Sediment and erosion controls need to be in place prior to the commencement of building works. The sediment fencing will fill up with sediment over time and will need to be maintained to stay effective. This involves removing the built up sediment as well as ensuring that they are still in good working condition eg. collapsed or damaged fencing will need replacing.

Often sediment controls will be moved during works and should be checked daily to ensure they have been put back in place properly. Soil and water controls should be kept in place until works are completed. If landscaping is not completed prior to handover, ensure that the new owners are aware of their responsibility to prevent pollution from entering the stormwater system.



Sediment Fencing Installation Best Practice:

- 1. Construct sediment fences as close as possible to being parallel to the contours of the site, with small returns as shown in the drawing, to limit the catchment area of any one section.
- 2. Cut a 150mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
- 3. Drive 1.5 metre long star pickets into the ground at 2.5m intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
- 4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Use wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing, shade cloth is not satisfactory.
- 5. Join sections of fabric at a support post with a 150mm overlap.
- 6. Backfill the trench over the base of the fabric and compact well.



(From: Managing Urban Stormwater; Landcom 2004)