

Protected Service Trenches



'Do it right on site' is a project to help the construction industry protect the environment and achieve the many benefits that come from doing so.

Protected Service Trenches

What are they?

This refers to installing phone, power, water and drainage services in a manner that does not pollute the stormwater system.

Why are they important?

Underground service connections can concentrate runoff into rivulets and channels that cause rapid soil erosion and pollution of discharged waters.

This sediment has significant impacts on our waterways. It smothers animals and plants that live on the bottom of creek beds. It settles and makes the creeks shallower. This results in the sun's rays heating the water. Many native plants and animals can not survive in this hotter water and die.

Even though mud and dirt are natural they are still serious pollutants that must be prevented from entering our waterways.

What do I need to do?

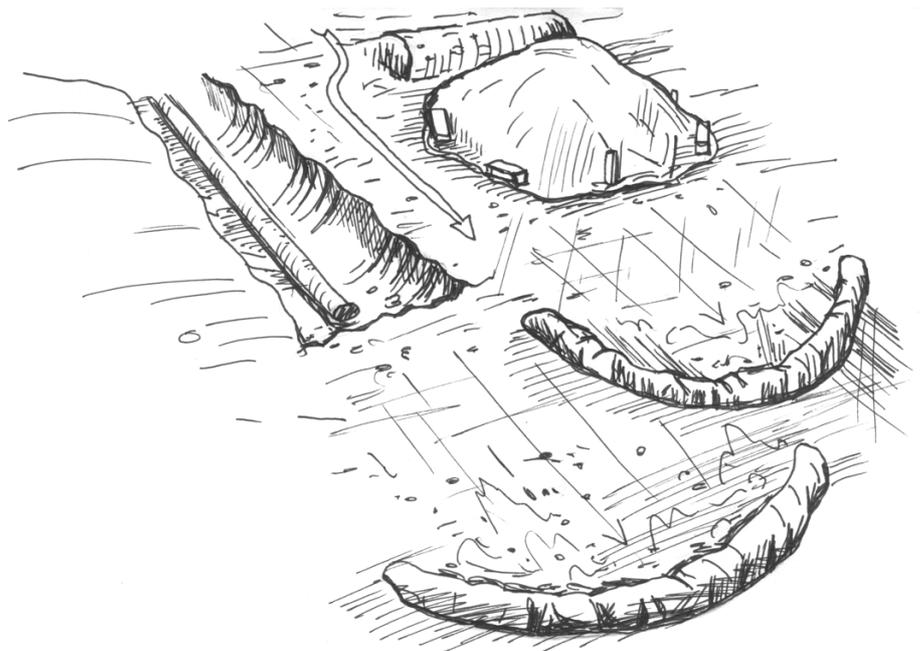
Before building commences:

Decide where the service trenches will need to go. Document them on your Soil and Water Management Plan. Ideally they should be away from areas where water flow is likely to concentrate. Plan to coordinate the various service connections so that a single trench can be used and schedule work to periods when rainfall is low.

Installing the controls:

1. Remove and store vegetated topsoil so that it can be replaced after works to provide immediate erosion protection.
2. Place the soil on the uphill side of trenches to divert water flow away from the trench line. Temporary bunds can also be used.
3. The trench should be open for a maximum of 6 days. Once completed, backfill subsoil and compact.
4. Replace topsoil and any grass / vegetation to match surrounding ground levels. If trench runs are steep place sediment barriers at 5 metre intervals to prevent erosion.

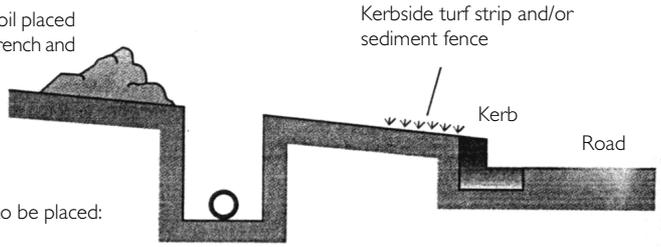
If cutting of pavement is required, ensure that proper measures are taken to prevent 'cuttings' entering the stormwater - see Fact Sheet 5 on 'Protected Concrete, Brick and Tile Cutting' in this series.



Minimise the width of cut and the time trenches are open - then quickly stabilise the backfill.

When Excavating Trench...

Excavated soil placed upslope of trench and covered



Excavated soil not to be placed:

- on road
- in areas of concentrated runoff
- within 1 metre of kerb

Maintenance of the controls:

If using temporary bunds, sediment will need to be collected from them to maintain their effectiveness. This material can be re-stockpiled, used on site or collected by an Earth Moving Company. The stockpile of excavated sediment that will be reused to cover the trench should also be checked regularly to ensure it is compacted and not being washed away - see Fact Sheet 8 on 'Protected Stockpiles' in this series for more information.

Remember:

Everyone has a responsibility to protect the environment. The site supervisor is required to make sure that all workers, including sub-contractors are doing the right thing and all workers are required to notify their supervisors and Council if they see pollution occurring.

It is illegal for any substance other than rainwater to enter the stormwater system. If you do have an accident and pollution occurs you are required by law to notify the Council so that they can work with you to minimise any harm to the environment.

Penalties for polluting the stormwater system range from \$750 on the spot fines to \$1 million and seven years in gaol. Both companies and individuals can be fined.

Council Officers and the EPA enforce the environmental legislation and do routine inspections of building sites. They can issue notices to make companies clean up sites, change the way they are managing the sites and if necessary, cease work. They will attempt to work with you but penalties will be issued if a satisfactory environmental outcome is not achieved.

List of fact sheets available from Council:

1. Diversion of Upslope Water
2. Dust Control
3. Early installation of Roof Drainage
4. Excavation Pump Out
5. Protected Concrete, Brick and Tile Cutting
6. Protected Concrete Delivery
- 7. Protected Service Trenches**
8. Protected Stockpiles
9. Protected Wash Areas
10. Protected Waste Management and Chemical Storage
11. Protecting Vegetation
12. Protection of Gutter and Street Stormwater Drains
13. Protection of Site Stormwater Pits
14. Sediment Controls
15. Soil and Water Management Plans
16. Stabilised Site Access

For further information on preventing pollution from building and construction sites contact your local council:

'Do it right on site' is funded by the Natural Heritage Trust and the Southern Sydney Regional Organisation of Councils – Bankstown, Botany Bay, Canterbury, Hurstville, Kogarah, Marrickville, Randwick, Rockdale, South Sydney, Sutherland Shire, Waverley and Woollahra.

THE DRAIN IS JUST FOR RAIN



Southern Sydney Regional Organisation of Councils