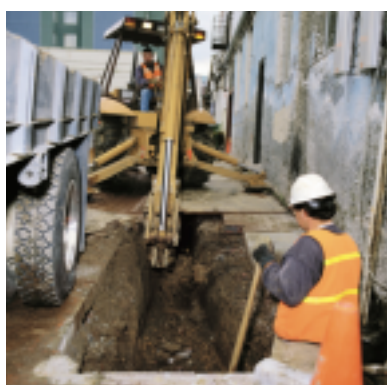


Avoid damaging water & sewer pipelines



Background information

Sydney Water provides water, sewerage and some stormwater services to four million people in the Sydney, Blue Mountains and Illawarra regions. We operate and maintain over 42,000 km of underground pipelines.

Our services are vital to the health and wellbeing of the community and to protecting the environment. Any disruption to our services can have significant consequences.

Careless digging can cause:

- death or serious injury to workers and the general public
- serious disruption to emergency services
- inconvenience to utility network users
- expensive financial losses to business
- project delays

and may lead to damages claims and criminal prosecution.

What do I need to do?

As part of the **design process** for every project, it is important that you:

- ✓ determine the location of all underground services, including water, sewer and stormwater pipelines, and then design accordingly
- ✓ obtain Sydney Water approval to build over or adjacent to sewer and water pipelines and any stormwater conduit owned by Sydney Water.

For further information, visit the *Your Business* section of Sydney Water's website at www.sydneywater.com.au or one of our Customer Service Centres.

Before you start excavating:

- ✓ reconfirm with owners the locations of underground services
- ✓ make all workers aware of the possible hazards
- ✓ ensure excavations are carried out manually until all Sydney Water and other services are located
- ✓ be aware of what steps to take in the event of damage to a pipeline.



DIAL 1100
BEFORE YOU DIG

to locate pipelines

Who can I call for pipeline location details?

Dial Before You Dig is a national one-call help service established by a number of utilities to assist you in determining the location of underground services.






For information on the location of Sydney Water's pipelines and other services in the vicinity of your planned excavation site:



or visit www.dialbeforeyoudig.com.au

Most Sydney Water pipe location plans provided in response to a **Dial Before You Dig** enquiry are supplied free of charge.

The legend below may help you to understand some of the key symbols used on Sydney Water plans.

 Water Hydrant	 Sewer Maintenance Hole
 Water Stop Valve	 Sewer Maintenance Shaft
	 Sewer Vent Shaft Educt

What to look for on site

Whilst it is important to obtain plans, other useful indicators to look for on site are:

Above ground

Surface fittings that may provide a guide to the location of pipelines including:

Water stop valve and hydrant surface boxes (and associated marker plates) and valve chambers



Water Stop Valve



Water Hydrant

Sewer maintenance holes (access chambers), maintenance shafts, lampholes, vent shafts.



Sewer Maintenance Hole



Sewer Vent Shaft

Below ground

Detectable tape above non-metallic water mains.

Pipe materials include:

Water PVC, GRP, cast iron, ductile iron (DI pipes may be sleeved in green plastic), steel, asbestos cement

Sewer vitreous clay, PVC, polyethylene, concrete.



Some helpful hints

The following information is to be used as a guide only:

- water mains are generally located in the footway or road shoulder
- sewer and stormwater pipelines may be located in private property as well as roads, reserves and other public spaces
- water mains are generally laid at 'standard' depths, however the depth of sewer and stormwater pipelines varies significantly
- locations and depths shown on Sydney Water plans should be taken as a guide only
- Sydney Water plans may not show all individual property service connection lines at a site
- suitable protection of Sydney Water pipelines may include timbering, sheet piling, support and/or bracing or tommying to prevent movement
- details of space allocations for utility services in road reserves can be obtained from the NSW Streets Opening Conference on **(02) 9267 6677** or visit www.ipwea.org.au/streets



Call **13 20 90** immediately in the event of damage to a Sydney Water pipeline.

How to dig safely

- Plan** In the planning/design stage of your project, obtain pipe location details.
- Pothole** Once you have indicative information on pipe locations, excavate carefully by hand to expose the services.
- Protect** Provide protection of Sydney Water's assets. Protection also benefits worker safety. Any movement in a pipeline could result in joint failure, flooding and injury.
- Proceed** Proceed with your project **only** when you have successfully completed the first three steps **and** pipeline location plans are on site.

Clearances

As part of both design and construction, ensure that sufficient clearances are maintained between water, sewer and stormwater pipelines and any other services and structures to allow for proper inspection, maintenance and repair of Sydney Water's assets in the future.

For further information, visit the *Your Business* section of Sydney Water's website at www.sydneywater.com.au or one of our Customer Service Centres.