TOOLBOX TALK #6

Critical Risks – Existing Services

Updated October 2017

Identifying, Assessing, Managing and reviewing critical risks is a Canterbury Safety Charter commitment. Remember I AM Safe on site where it’s up to everyone on site to understand and manage the critical risks you’ll come across.

What are existing services?
Existing services cover every service that is present on site. This includes underground (or buried) services such as electricity, gas and water cables and lines, and overhead services including telecommunications and overhead power lines.

If you hit an existing service it could be fatal, even at low voltage. It could also cause an explosion or fire, and serious injury. An interruption in service can also cause damage to the site and networks and delays to the project you’re working on. That’s why it’s crucial you manage this critical risk on site.

You may also want to look at Safety Charter toolbox talk #5 Critical Risks - Electricity.

In an emergency – If you hit an underground or overhead cable or line then you should:
- Get back at least 10 metres – treat the line or cable as live
- If someone is seriously hurt, or you hit or smell gas then call the emergency services on 111 immediately
- Evacuate the immediate area
- If you’re in a machine, stay put
- Don’t try to fix the line or cover it up
- Call the service provider immediately.

This toolbox talk is intended to help start a health and safety conversation and raise awareness about existing services. It is not designed as a complete risk management tool for the activity.
1. IDENTIFY buried and overhead services

Before work begins on a site, you must identify any existing services that could be present. If you are removing or demolishing a building ensure all services are disconnected before work begins.

Buried services - any digging on any site - not just excavations – needs to be carefully planned to avoid contact with any underground or buried services. Expect to find services at any depth!

1. As a first step – check with the service owners and ask for plans or reference maps of the buried services on the site. These may include electricity, water or gas lines. You may also want to check the plans even if you’re not planning any digging on site. Not all services are marked on maps, so identification and care is important.

2. You can also use electronic location devices to help identify where services may be.

3. Then as a final step, to confirm exactly where the services are, you should hand dig where possible to expose the exact location of cables and pipes – as sometimes they are at different depths to where the plans may suggest.

Overhead services – if you’re planning on working near overhead cables or lines you also need to follow safe working practices:

1. Check where the live lines are and how close they are to the site and ground (note you should not work within four metres of an overhead line or power pole). If you do need to work close you’ll need to get a Close Approach Consent.

2. Ask yourself – will we have high vehicle loads coming through this site (generally for loads over 4.75m high)? And if so, could they come into contact with the lines?

3. Ensure minimum safe distances are being used near the lines.

2. ASSESS the risk on the site plan

Once you’ve worked out where the services are located on site – both buried and overhead – it’s important to mark them properly on the site plan. Mark out where they are in relation to the work you’re doing – in some cases there may be no or very low risk if you’re working well away from services.

3. MANAGE and share the plan with everyone on site

Where you may be working closely to lines or cables, you may choose to temporarily disconnect electricity or gas supplies while some work is being carried out.

Remember, if you’re digging within five metres of a power pole, or working within four metres of an overhead line you will need a close approach consent before you start. See the link above for information from Orion on this consent.

When dealing with existing services it’s really important that everyone on site, no matter if they’re working for different companies or contractors, works together safely. Everyone should have access to the updated site plan where the existing services are clearly marked and the controls in place (whether they include disconnection or not) are set out.

If the plan changes everyone on site should be consulted and then advised of any changes.

Where do we get more information?

There are laws and regulations that clarify the requirements around working with existing services. These are:

- Electricity Act 1992 and amendments
- Gas Act 1992 and amendments
- Health and Safety at Work Act 2015
- 34:2001 Electrical Safe Distances

The Safety Charter’s Critical Risk Existing Services webpage has more information, which is regularly updated. You can view it here or by clicking on Improve Health and Safety – Critical Risks – Existing Services from the homepage.

If you want toolbox talks on the other 12 critical risks you can check them out online.

Employee issues raised:

Date to be resolved by:

This toolbox talk was written with information from Orion, Vector and WorkSafe New Zealand. Thank you.