



# SAFETY NEAR OUR NETWORK

0800 800 935 | [wel.co.nz](http://wel.co.nz)



# ABOUT WEL NETWORKS

**WEL Networks has been serving the Waikato for 100 years, distributing power from the national grid, currently connecting over 160,000 people to electricity services through over 90,000 connection points.**

We employ approximately 240 staff with a range of expertise; from Live Line Mechanics, Faults Technicians and Technical Planners, to in-house Engineers, Health & Safety professionals, Financial Accountants and Human Resources.

At WEL Networks, the safety of our staff and our communities is our highest priority.

Our commitment – ensure everyone makes it home safely, every day.

We do this by; having equipment and safety practices that are industry leading, engaging an award-winning field services team who are highly skilled in safety procedures, and working in our communities to educate people on safety near our network.

## BEFORE STARTING WORK NEAR OUR NETWORK

Whether you're a commercial contractor or homeowner, it's important that you take the time to accurately locate power cables before you start any work near

our network. From excavation to transporting high loads, we need you to be safe near our network.

# YOUR LEGAL REQUIREMENTS

The *WorkSafe Excavation Safety Good Practice Guidelines* have minimum requirements for carrying out any work near underground cables and overhead power lines, communications lines, pipes and any other utility services. Other useful documents are *WorkSafe's Guide for Safety with Underground Services* and the *New Zealand Utilities Advisory Group Guide*.

Obtain underground service plans and locate underground services using industry recognised techniques including hand digging and hydrovacating, before any excavation can be carried out with machinery.

*NZEC 34:2001 Electrical Code of Practice for Electrical Safe Distances* sets out minimum safe distance requirements for excavation, construction and work near power poles and overhead power lines.

Scaffolding should not be erected within 4 metres of our overhead electric lines unless you obtain a close approach consent from us and a safety observer is appointed to oversee the work.

## **Other laws and regulations specifying safe working practices to be followed are:**

- Health and Safety at Work Act 2015
- Electricity Act 1992
- Electricity (Safety) Regulations 2010
- NZECP34:2001 Electrical Safe Distances

If we consider that anyone has breached any of the above laws and regulations we may refer the matter to WorkSafe for investigation.

WEL Networks is required to report notifiable events to WorkSafe.

# KEEPING YOU SAFE NEAR POWER LINES

If you hit a cable or overhead power line there is a risk of:

- fatal electrocution or critical injury
- arcing and fire causing serious burns
- loss of critical supply to other users including medically dependant customers and businesses

If an electricity cable is cut by an excavator, or contact is made with an overhead line, anyone touching the metal parts of the machine may receive an electric shock.

Electricity can also travel through the ground, or any metal object in contact with the ground, causing the surrounding areas to become live.

---

## SERVICE PLANS

Visit [beforeUdig.co.nz](https://beforeUdig.co.nz) to obtain service plans that indicate the approximate location of WEL Networks equipment, underground cables and overhead power lines.

## MOVING HIGH LOADS?

Any load above five metres passing under power lines, will require prior approval from WEL Networks. Call us on **0800 800 935** or visit [wel.co.nz](https://wel.co.nz)

## PLAN AHEAD

As a guide you should allow a minimum of:

- two working days for close approach consents
- five working days for high load consents
- two working days for a temporary disconnection
- five working days for a cable location
- five working days for on-site assistance

# KEEPING YOU SAFE NEAR CABLES

If there is any doubt as to where cables are located, stop work immediately and consult with WEL Networks.

Cables should be considered as live at all times. Do not use cables as hand or footholds to climb in or out of the trench, especially around cable joint positions.

## HOW TO DIG AROUND CABLES

Best practice hand digging, is to expose the cable using the spade parallel to the cable not at right angles. Hand-held power tools or excavators should not be used within 1 metre of any underground cable. When a cable has been exposed by 'pot holing', best practice is to then dig away from the exposed cable, not towards it with excavators.

Directional drilling or thrusting parallel to WEL's 11kV or 33kV cables shall be at least 1 metre from the proven location of

the cables. The cables must be marked out by a competent cable location technician, and trial holes by careful hand excavation must be undertaken at regular intervals prior to the commencement of the work to prove the cable is parallel to the drill shot.

Underground cables are normally laid in trenches between 300mm and 1 metre deep, but these levels may change over time through earthmoving and road works. Cables can be found at any depth.

If buried cables have been found to be too shallow, or if the plans or other information have proved to be inaccurate, contact us, preferably before the excavation is back-filled to allow the cables to be re-laid at the correct depth and/or the cable records to be amended accordingly.

Cables uncovered in an excavation may need to be supported or protected. WEL must be contacted as soon as this situation arises. Any cables lying in the bottom of an excavation should be

protected by sandbags or appropriate nail free protection device. Precautions should be taken to prevent access to exposed cables by members of the public or unauthorised people.

Cables should not be moved under any circumstances. Moving live cables can cause them to fault and a fatality could result. If a cable needs to be moved, the request should be made to WEL, who will arrange for the cable to be made safe prior to their relocation.

---

## EXCAVATING WITHOUT PLANS

Plans should be obtained before excavation begins. Section 23 of the WorkSafe Guide for Safety with Underground Services publication provides further guidance on excavating without plans during emergency and unforeseen work however WEL plans can be obtained through the beforeUdig website, 24 hours a day, seven days a week.

It normally takes less than 10 minutes to submit an enquiry.



## BACKFILLING

Back-filling of any excavation where cables have been exposed should only proceed following advice from WEL. Fill containing items likely to damage the cables, such as large pieces of rock and hard-core or other sharp objects, shall not be used. Cables should be backfilled with fine material such as sand.

## CABLE DAMAGE

If a buried underground cable suffers damage, however slight, WEL must be informed immediately.

Arrangements must be made to keep the public well clear of the area until the damaged cable has been repaired or otherwise made safe.

## WHAT TO DO IN AN EMERGENCY

If you hit an overhead power line:

- Treat the cable or overhead line as live – stay at least 10 metres clear.
- Evacuate the immediate area.
- If you are in a machine, stay there.
- Leave damaged cables exposed for us to fix.
- Call WEL Networks immediately **0800 800 935**.
- If you are at serious risk from another hazard, such as fire, and must leave the machine, jump well clear. Do not touch metal surfaces or the machine and ground at the same time.
- In the event of an electric shock don't touch the person until you are certain the source of electricity has been removed **Call 111**.



## CONTACT US

**Freephone:** 0800 800 935

**Main Office:** 07 850 3100

114 Maui St, Te Rapa, Hamilton 3200

PO Box 925, Hamilton 3240

[wel.co.nz](http://wel.co.nz)