

Package guide



Provincial regulations require hand digging to expose buried utility lines. Thoroughly read this entire package as the safety instructions are based on provincial regulations.

Your responsibilities when excavating

- 1** Hand dig to expose the line at several locations to determine its exact location and depth. Only from hand digging can you determine the mechanized equipment safety zone. (page 4)
- 2** Mechanized excavation equipment cannot be used within the **no mechanized dig zone**, or one metre in any direction of the line.
- 3** If you have hand dug within one metre in any direction of the indicated gas line and you still cannot locate the gas line, please contact FortisBC at **1-888-822-6555**.
- 4** Keep gas line location information on-site **at all times**. Ensure BC 1 Call ticket validity is current.
- 5** Keep the FortisBC 24/7 emergency number, **1-800-663-9911**, at hand at all times.
- 6** Follow all provincial laws, including WorkSafeBC regulations, for excavating near buried utilities.
- 7** If work has not started within 10 working days of the BC 1 Call request, you must verify the information before commencing the activity. Contact BC 1 Call at **1-800-474-6886** or by placing an online "Relocate" ticket at bc1c.ca.

Safety first

Always practise caution when working around gas lines. Contact can result in:

- personal injury or death to you or those around you
- equipment and property damages
- loss of essential services in the area
- cost of damages, fines or legal action

Review the FortisBC gas line location information before you begin work

To ensure accuracy, review the following:

- **Ticket confirmation page**—data you submitted to BC 1 Call
- **Safe digging guidelines**—instructions regarding safe excavation, what to do if you hit a gas line, safety and permit information, and provincial Gas Safety Regulation and Occupational Health and Safety Regulation
- **Map(s)**—gas line location map(s) that show the location of gas main line(s) in the area(s) where you've indicated you'll be digging
- **Sketch package/list**—service drawing of where the gas service line(s) can be found in the area you'll be digging
- **Letter(s) and all other additional attachments**—important letters or other documents that may also be provided with specific instructions or guidance

If the information provided does not correspond to the area in which you intend to work, please call FortisBC at **1-888-822-6555**.

Help & support

If you need help understanding the map or information provided, call FortisBC at **1-888-822-6555** Monday to Friday, 7 a.m. to 4 p.m.

We'll help you make sense of the information, and in some cases we'll come out as soon as possible, at no cost, to help you find the line.

When in doubt, reach out—we're here to help keep you safe.

You can also visit our website for more information at fortisbc.com/digsafe.

More info and how-to videos

Homeowners

An overview of how to safely expose and work around gas lines for homeowners.

Contractors

An overview of how to safely expose and work around gas lines for contractors.

How to find gas line(s) in your package

Follow the steps outlined below to find the location of the gas line. This is important preparation work that must be done **before** digging.

In your package, you'll find:

- Pipeline Location Map(s)
- Service Sketch Package/List

We recommend printing the above documents in advance and setting aside time to review them.

Start with the review of the Pipeline Location Map(s) to identify the location of gas main line(s) in the area(s) where you've indicated you'll be digging. Then, review any gas service line(s) by referring to the documents in the Service Sketch Package/List provided. If your work extends beyond the fence/property line, update your **BC 1 Call** request to include additional areas to avoid missing service records.

Note: a service record is a scan of the original gas service line installation sketch. Legibility and complexity will vary due to the age and hand-drawn nature of most of these documents (some may be in another format rather than hand-drawn).

How to read and interpret service records

1 Get familiar

The sketch shows how the gas service line is connected to the gas main line in the indicated area. A sketch typically shows structures, property lines and street names. If applicable, there may be visual guidance in the form of arrows.

2 Find the main line

On the sketch, find the main line, which will be marked as DP (distribution pressure), IP (intermediate pressure) or TP (transmission pressure).

3 Find the service line

On the sketch, find where the service line branches off from the main line. In most cases, the service line will run from the main line to the meter at the service address.

4 Cross-reference

Make sure to cross-reference the sketch against the Pipeline Location Map(s) to help situate the sketch to the surrounding area.

5 Highlight the line

Once you've identified the gas line on the sketch, highlight it for easy reference and note down important measurements.

We're here to help

If you need help understanding the sketch or finding the gas line, have your BC 1 Call ticket number ready, then call FortisBC at **1-888-822-6555**. Our lines are open Monday to Friday, 7 a.m. to 4 p.m. Or, scan the QR code to view our interactive service map for help understanding the sketch.



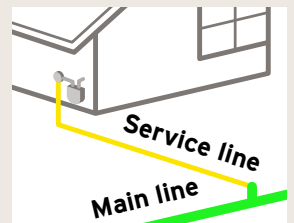
Scan

How to read the installation sketch

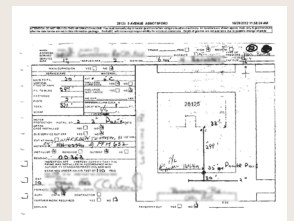
Situate the sketch by looking at street names and the north arrow. You can also refer to the Pipeline Location Map(s) at the same time.



Gas is delivered via service lines that are connected to a gas main line. A main line will be marked DP, IP or TP.



Hand-drawn details on a sketch may not be to scale. Pay special attention to measurements and don't try to 'eyeball' the location.



Visit us [here](#) for a step-by-step walkthrough on how to use the service record(s).

How to safely expose buried gas lines

Follow the steps outlined below to ensure site safety. You can also view instructional videos for [homeowners](#) and [contractors](#).

Before you start

- Thoroughly read this entire package as the safety instructions are crucial.
- Have this package on hand before and during your digging activity. Ideally, print the package or download the documents and view them on a suitably-sized device such as a tablet.
- Make sure to have the FortisBC 24-hour emergency number, **1-800-663-9911**, ready to quickly dial if an emergency occurs.

What to look for



What does a gas line look like? Most of our gas lines look like a yellow plastic pipe.

But depending on where you are in the province or the age of the system that you're working around, you may also find:

- blue-, black- or orange-coloured lines
- steel or gas lines wrapped in tape



You may also see a "tracer" wire or a type of insulated wire that's attached to our plastic pipes. It aids in the detection or tracing of our gas lines. If you discover damaged wrapper or tracer wire, notify FortisBC at **1-888-822-6555** to perform the repair.

Prepare the site for digging

- Look around your work site. Is there anything you see that indicates a need for extra caution, such as yellow right of way signs that indicate a high-pressure pipeline is nearby?
- Consider the timing of your project. Will it last a few days or more? Can the site, and any holes/trenches, be left safely overnight or longer? To ensure site safety, you may need to use plywood sheets (as a protective barrier), orange marker cones or safety netting.
- Use the the Gas Main Map(s) and/or Service Record(s) to measure and mark the location of the gas line on the ground with flags or spray paint.

Note: we do not dictate how exposed utilities should be protected. We defer the ground disturbance community to reference best practices documents, such as the [Best Practices document from BC Common Ground Alliance](#) and [WorkSafeBC's OHS Regulations](#).

Digging tools: safe or not?

Not all tools are safe to use when working around gas lines. Before using a tool, ask yourself:



Is it pointy?



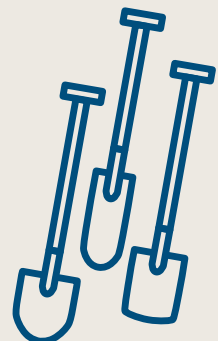
Is it mechanized?



Does it require strong physical force to use?

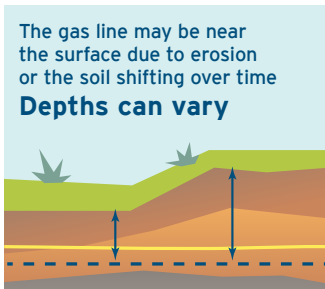
If you answered yes to any of the above descriptions, avoid using the tool to dig, as there is increased potential to damage a buried utility line.

These types of tools are the safer options:



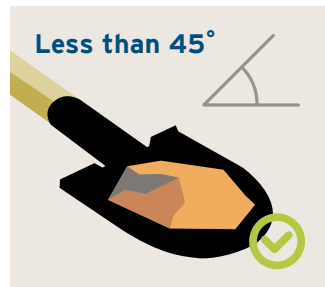
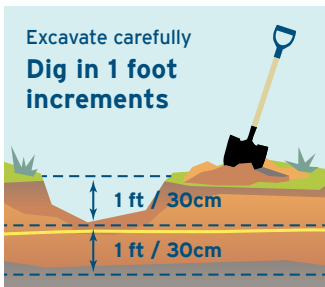
Important considerations before digging

- Erosion and shifting landscape mean that gas lines can potentially be very close to the surface.
- Hand dig within one metre **in any direction** of the indicated gas line. Don't assume gas lines run in a straight line.



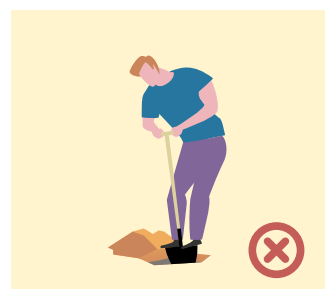
How to dig safely

- Carefully dig in increments of one foot (30 cm) and make sure your shovel is at a shallow angle (less than 45°).
- Remove small amounts of dirt at a time until the gas lines are visible.
- When the gas line has been located, brush dirt away manually—not with a power tool or mechanized equipment.



How *not* to dig

- Avoid rushing. Set aside time to excavate carefully.
- Do not use mechanized or powered equipment to expose gas lines. Only use a safe hand tool to dig—even a sharp shovel can sever a gas line.
- Do not poke or prod the ground to locate the gas line.
- Do not step or jump aggressively on your digging tool.
- Do not use excessive force that could break a plastic pipe.



When in doubt, reach out

We're here to help keep you safe. If you need help understanding the information in this package, call us at **1-888-822-6555** Monday to Friday 7 a.m. to 4 p.m.

Want an overview of how to safely expose and work around gas lines? See our [how-to videos for homeowners and contractors](#).



How to detect a gas leak and what to do



Call the FortisBC emergency line at 1-800-663-9911 if you damage a gas line.

There could be a gas leak if you:

- smell an odour like rotten eggs
- see shovel impact on a gas line
- hear a hissing sound
- see bubbles in wet areas or dust from the ground
- see open flames on the ground

What to do if you damage a gas line

- Call the FortisBC 24-hour emergency line at **1-800-663-9911** or call **911**.
- Remove all sources of ignition, including lit cigarettes, cell phones, power tools and equipment.
- Keep your distance, approximately 100 m (or 300 ft) from the gas line.

What *not* to do if you hit a gas line

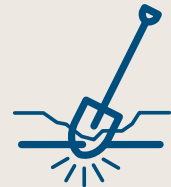
- Never try to locate the leak yourself.
- Never attempt to make temporary repairs to a damaged gas line.
- Do not operate any gas valves unless instructed to do so by FortisBC.
- Never bury or backfill over ruptured or damaged gas pipes.

Recognize a leak

Use your senses and keep the signs in mind!



Smell rotten eggs



Shovel impact



Tire hissing sound



Bubbles in wet areas



Dust from dry ground



Open flames

Permit and other authorization requirements

Depending on the type of gas lines in the vicinity of your site, a permit or written permission may be required when working around FortisBC facilities. Determine line types and rights of way using the Pipeline Location Map(s).

High-pressure (HP) pipelines

- **Within 30 metres:** you must contact and receive written permission from FortisBC before proceeding with your activity.
- **Within 10 metres:** you must obtain a permit if your activity is **within 10 metres of a transmission-pressure (TP) pipeline or two metres of an intermediate-pressure (IP) pipeline.** Both TP and IP are types of HP pipelines.

Right of Way (ROW)

If your activity is within a FortisBC right of way, or crossing a high-pressure pipeline, you must obtain a permit.

Distribution Pressure (DP) pipelines

A permit is not required when work or activity takes place in the area of DP pipelines.

An inspection may be required if your site work or activity is within two metres (6 1/2 ft) adjacent to, over or crossing a DP pipeline, and with a DP pipeline diameter of 273 mm (10 inches) or greater. Please call **604-576-7212** to arrange for an inspector.

Contacting FortisBC for a permit

Contact the FortisBC Permit Desk to request a permit, a letter of authorization or for other inquiries.

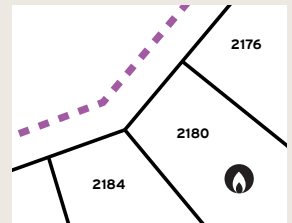
protectionandpermitting@fortisbc.com

fortisbc.com/rightofway

Not obtaining a permit may result in fines, penalties or other legal action.

What to look for

HP lines are marked as dotted purple lines:

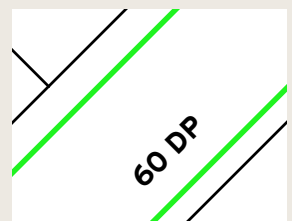


If you see a yellow sign, like this one, on or near your proposed dig site, it indicates a high-pressure gas line is at that approximate location, which may or may not fall within a right of way.



A right of way is a defined corridor that contains one or more high-pressure gas lines and passes through private property, Crown lands or Indigenous lands.

When reviewing your Pipeline Locations Map(s), you'll find DP lines are marked as a solid green line:



Provincial regulations

The following regulations and procedures from the Gas Safety Regulations and the Occupational Health and Safety Regulations must be followed by anyone who plans to excavate around buried utilities. For complete safety regulations, visit the websites listed on the right-hand side.

Gas Safety Regulations

Procedures for a gas installation in vicinity of underground structures

- 37 (1)** A person must not install a gas installation or allow one to be installed so that the gas installation passes through or interferes with any underground structure that is not solely for the use of a gas installation without the written permission of the owner of the underground structure.

Duties of persons intending to construct near gas installation

- 38** A person who intends to construct an underground structure within one metre of a gas installation must notify the gas company operating in the area at least 3 business days before starting the excavation for the structure.

Procedures for excavations

- 39 (2)** A person who intends to excavate must, at least 2 business days before the person intends to excavate, request from the gas company serving that area, or its agent, information on the location of all underground gas installations in the vicinity of the proposed excavation.

Hand digging to confirm location

- 39 (7)** The indicated location of gas installations must be confirmed by the excavator by means of hand digging and the excavator must expose the gas installations at a sufficient number of locations to determine their exact positions and depths before using mechanized excavation equipment for any purpose other than breaking the surface cover.

Gas installation not where indicated

- 39 (9)** If an excavator finds that the gas installation is not within the limits described by the gas company,
- (a) the excavator must so advise the gas company,
 - (b) the gas company must immediately assist in locating and exposing the installation for the excavator,
 - (c) mechanized excavation must not be carried on in the vicinity until the installation has been located and exposed.

No probing to locate gas installations

- 40** A person must not probe with pointed tools to locate gas installations.

[Gas Safety Regulations](#)



Scan

[Occupational Health & Safety Regulation](#)



Scan

Provincial regulations

Blasting

Section 41 of the Gas Safety Regulation governs the requirements for blasting in the vicinity of gas installations.

The blasting notification period does not start until after a blasting plan has been provided to, and accepted by, FortisBC. A blasting plan must be submitted by the contractor's blasting engineer and contain the following information:

- blasting location relative to FortisBC facilities
- type and size of the charge and its delay
- declaration that the blasting plan is based on the utility information provided, local ground concerns and theory
- confirmation that the blasting will not damage the utility

Requirements for blasting in vicinity of gas installation

- 41 (1)** A person who intends to blast in the vicinity of a gas installation must
- (a) comply with sections 37 to 39, and
 - (b) notify the relevant gas company at least 3 business days before blasting.
- (2)** If a person has already complied with sections 37 to 39 and discovers in the process of construction that blasting is required, the person must notify the relevant gas company at least 24 hours, counted only on business days, before blasting is to start.

Occupational Health and Safety Regulation

20.79 Underground utilities

- (1)** Before excavating or drilling with powered tools and equipment, the location of all underground utility services in the area must be accurately determined, and any danger to workers from the services must be controlled.
- (2)** Excavation or drilling work in proximity to an underground service must be undertaken in conformity with the requirements of the owner of that utility service.
- (3)** Pointed tools must not be used to probe for underground petroleum and electrical utility services.
- (4)** Powered equipment used for excavating must be operated so as to avoid damage to underground utility services, or danger to workers.