gas infrastructure.

all gas infrastructure.

infrastructure from centerline.

QUALIFICATION CHECKLIST

Yo	u must apply for a review only if your project includes one or more of the following:
	work over or within 3.0 metres of a transmission pressure gas main;
	work over or within 3.0 metres of a high-pressure gas main;
	work over or within 1.0 metre of a distribution pressure main of 168.3 mm size or larger;
	work over or within 3.0 metres of a distribution pressure main existing outside of public right-of-way;
	soft-exposed the gas facilities in your project area and discover you cannot maintain the minimum depth of cover for the final grade of your project for any size gas main:
	 1.0 metre is required over transmission pressure gas mains;
	 900 mm is required over high-pressure gas mains;
	 900 mm is required over distribution pressure gas mains of 168.3 mm diameter or larger;
	 600 mm is required over distribution pressure gas mains of 114.3 mm diameter or smaller.
	wheeled vehicles heavier than highway-rated (14,500 kg axle load) cross a gas main outside a paved municipal roadway;
	tracked vehicles cross a gas main outside a paved municipal roadway;
	any equipment crosses a high-pressure or transmission pressure gas main outside a paved municipal roadway;
	blasting is necessary or your project must be subjected to any unique situation that may affect existing gas infrastructure;
	screw piles installed within 3.0 metres of a gas main;
	driven piles installed within 5.0 metres of a gas main;
	if you cannot meet the minimum separation requirements after exhausting all design options:
	 New underground structures must maintain a minimum separation of 100 mm from gas service lines and 300 mm from gas mains.
	New deep underground utilities must maintain a minimum horizontal offset of 1.25 metres from all

• New building foundation installations must maintain a minimum horizontal offset of 2.5 metres from

• New tree or shrub installation must maintain a minimum horizontal offset of 1.9 metres from all gas



Mandatory guidelines for all projects

All projects must follow these guidelines:

- All construction operations around natural gas pipelines must not damage natural gas pipeline in any way.
- Any damages to the coating must be reported to and repaired by Manitoba Hydro prior to backfilling.
- The resident inspector must inform all site supervisory personnel, equipment operators, and any new personnel about the risks involved with working around and over any natural gas pipelines.

Installations outside of public right-of-way

If your project needs infrastructure construction outside of public right-of-way, you must include a description of the items to be installed.

Work that is close to gas infrastructure

The safe working distance for mechanical excavation is 1.0 metre away from all gas infrastructure. Any ground disturbance within 1.0 metre of a gas main or service line is required to be completed by hand or hydro excavation.

Minimum separation requirements to be maintained:

- New underground structures: 100 mm from gas service lines and 300 mm from gas mains. If these clearances cannot be met, plans to install an underground rigid foam barrier for gas infrastructure protection must be included in your application.
- New deep underground utilities: horizontal offset of 1.25 metres from all gas infrastructure.
- Building foundation installation: horizontal offset of 2.5 metres from all gas infrastructure.
- New tree or shrub installation: minimum horizontal offset of 1.9 metres from all gas infrastructure from centerline. Removals of trees and roots within 3.0 metres of natural gas facilities require the roots to be exposed by hand to ensure it does not affect pipe integrity or coating.

Request a line locate or safety watch

You must complete a line locate request form prior to any excavation or construction operations. Work must start within 14 days of the completed underground locate. If the nature of the work changes or the marks become displaced, stop work and get a new locate.

Minimum notices required

Line locate request: 3 business days Manitoba Hydro safety watch: 3 business days

What to do if minimum depth of cover requirements are not met

Relocations or lowerings may be needed if the final grade of your project cannot meet the minimum depth of cover requirements over a gas mainline. Timelines for work:

- 12 to 20 weeks will be needed for steel distribution and polyethylene (PE) plastic main relocation.
- 6 to 12 months will be needed for steel 168.3 mm or larger distribution pressure, high pressure, and transmission pressure main relocations. This work typically occurs between May 15 to October 31.

Gas service line relocations

The minimum depth of cover for gas service lines is 450 mm. If this cannot be maintained or if service lines will exist in the road base, contact us at 1-888-624-9376 or contact your <u>Customer Service Centre</u>.

Time required to mobilize for this work is typically 2 to 3 weeks.

Vehicle and equipment crossing

Vehicles are approved to cross natural gas mains if driving on a paved municipal road.

If highway-rated (14,500 kg axle load) wheeled vehicles or tracked equipment cross a distribution-pressure natural gas main outside of a paved municipal road, the minimum depth of cover must be met before crossing.

If the minimum depth of cover cannot be met, then earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 metre on either side of the crossing location. An application for review is still required if this is completed.

If any equipment is crossing high-pressure or transmission pressure mains outside a paved municipal roadway, you must apply for a review.

Utility crossing requirements

- Crossings should be punched, bored, or horizontally directionally drilled (HDD). Open cut or trenched crossings may be authorized under special circumstance but will need to be reviewed for our approval.
- Directional drills, punches, and bored crossings should be a minimum of 600 mm between the external surface of high pressure and distribution pressure pipelines. Bored crossings shall maintain the greater of a minimum of 1.0 metre or 1.5 times the bore diameter separation between external surface of transmission pressure pipelines. Bores must be drilled beneath the existing Manitoba Hydro pipeline. Crossings above our pipeline are not permitted.
- For directional drills, punches, and bored crossings, the clearance space around the installation must be kept to a minimum and postinstallation soil settling of the clearance space must not reduce the support or soil compaction of our pipeline above.

- The new installation must maintain the same elevation and alignment for the width of the crossing, with no bends or changes in elevation.
- The crossing must be made in order for the installation to cross our pipeline as close to perpendicular as possible.
- No joints must be made directly over or under our pipeline. No bell and spigot joints shall be made within 3.0 metres of our pipeline.
- Cathodically protected foreign facilities must be designed and tested to ensure no adverse interference with the existing pipeline cathodic protection.
- A viewing hole must be soft-dug by hand or hydro-vac, as outlined in our <u>Safe Excavation</u> and <u>Safety Watch Guidelines</u> to confirm alignment and elevation of drill head during crossing.

Contact us:

Phone: 1-888-624-9376 (toll-free)

Email: GasDesign@hydro.mb.ca

Visit: hydro.mb.ca/accounts_and_services/permits_and_inspections/

