BUILDING OVER PIPELINES

HUTT CITY
TE AWA KAIRANGI

Council is not in favour of buildings being constructed over its wastewater and stormwater pipelines. (If proposing to build over a water pipeline, contact utility Wellington Water; if over a gas line, contact your mains supplier.) Council has the discretion to allow such work, but equally it has the right to say no if a building would compromise its ability to repair or replace any pipeline

Council's reluctance has a sound basis. Pipes, even disused ones, have been known to affect buildings and the land they stand on in the long term. The reverse can also happen: buildings can weaken pipes. And of course buildings can obstruct access and result in extra disruption and cost (a cost that must be borne by the property owner) in the event the pipe must be dug up.

If you propose to build over a pipeline, you must carry out the following steps before applying for a building consent:

- Fill in an application form (CAP-FORM-565), which you can get from Council offices or website. (Be sure to state clearly why you need to build over the pipeline. You may also use this form if you want to re-route a stormwater or sewer pipe.)
- Get a copy of the land's certificate of title, issued not more than three months ago. (These are available from the council's offices for $20.)
- Engage a registered drainlayer or engineer to establish the location, depth and condition of the pipeline.
- Identify all the service pipes and easements on your land and the utilities responsible for them. (An easement is a legal right to use land without actually owning it.)
- Satisfy Council that your building will not affect its ability to work on the pipeline, and that such work will not in turn affect your building.
- Accurately show the location of the proposed building relative to the pipeline. (This will require site investigation and measurement on your part.)
- Provide plans of the building's foundations or floor slab footings, which must demonstrate:
  - (i) how it will avoid potential loading on the pipeline;
  - (ii) how it will allow for reasonable access in the future; and
  - (iii) how it will avoid potential settlement of the building, which could occur because of backfilling that has already taken place or during or after any future excavation work.
- Get the written approval of the pipeline's owner if it is privately owned.

If Council approves your application, it will be on the basis that it assumes no risk or responsibility for the building, the legal or engineering work associated with the application, the work itself or any consequences arising from the work.

With that approval in hand, you may then seek a building consent for the building. (Do not start any work until you have this consent.) You will have to acknowledge and bear all risks associated with building over the pipeline. You will also have to register the building's encroachment on council's easement. This will be shown on your certificate of title in the form of a memorandum of encumbrance, which your lawyer will have to prepare at your expense. (You will also have to meet the cost of registering the memorandum of encroachment, along with any engineering and surveying costs.)

The memorandum of encumbrance will:

- Set out the background to the application.
- Detail the engineering requirements Council has imposed.
- State that Council will be able to go on to the land to carry out work on the pipeline, in accordance with its statutory obligations.
- State that Council will not be liable for any damage or loss incurred to the property as a result of any subsidence associated with the pipeline, or by any maintenance or replacement work connected with the pipeline, provided Council carries out that work and carries it out to appropriate standards of workmanship.
- State that Council will recover from you, the landowner, or from any subsequent landowner, any extra maintenance or replacement costs resulting from the building's encroachment over the pipeline, as well as, if necessary, the cost of enforcing this provision.

Footing design and pile depth: Council has set out rules for the design of footings and the depth of piles when you build near or over sewer and stormwater pipes. The diagram below shows, on the left, a pile within a metre of a pipe, and on the right, one more than one metre away. In both cases, there is no extra loading transmitted to the pipe and no undermining or settlement will occur if it is necessary to excavate.

Specifically, the rules state that:

- No pile or footing may be closer than a metre of a pipe (measured horizontally from the outside of the pipe).
- If any part of a pile or footing is a metre from a pipe, the bottom of the footing must be at least 300 millimetres below the bottom of the pipe (measured from the outside of the pipe).
- If the pile and footing are more than a metre away, the bottom of the footing must be at least 300 millimetres below wherever the pile intersects a line projecting at a 45-degree angle from the pipe to ground level. (Note that this line first projects a metre horizontally from where two other lines, from the bottom and nearer side of the pipe, meet.

Foundation design for construction adjacent to/over service pipes

The structure must be designed so that there is no additional loading transmitted to the pipeline and no undermining or settlement of the structure occurs when it is necessary to excavate the pipeline in future.

This requires

a. No pile or footing of the structure may be closer than 1.0m from the outside of the pipe (measured horizontally)
b. Any pile or footing of the structure which is situated 1.0m from the outside of the pipe (measured horizontally) must be constructed to a depth greater than 300mm below the invert of the pipe
c. Any pile or footing of the structure which is situated greater than 1.0m from the outside of the pipe (measured horizontally) must be constructed to a depth greater than 300mm below a 45^0 line projected from a point 1.0m horizontally outside of the pipe at the pipe invert, and projected up to the footing
d. The structure must be designed to be self-supporting between foundations when the structure is constructed over the pipeline