

Public Excluded

Report PE-99.498

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Report to the Utility Services Committee
from Murray Kennedy, Strategy and Asset Manager

Waiwhetu Tunnel Easement to Hutt City Council

1. Purpose

To obtain the Committee's approval for the valuation method to determining the cost of a tunnel easement to Hutt City Council (HCC).

2. Exclusion of the Public

Grounds for exclusion of the public under section 48(1) of the Local Government Official Information and Meetings Act 1987 are:

That the public conduct of the whole or relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reasons for withholding exist, i.e. commercial negotiations.

3. Background

Hutt City Council, on behalf of Upper Hutt City Council and itself, invited tenders for a new sewerage treatment plant at Seaview and upgrading an existing plant at Wainuiomata.

Since tenders were received the Cities have re-evaluated population growth rates and taken account of information submitted by tenderers. Economics now favour abandoning the Wainuomata sewerage treatment plant and pumping the sewage from Wainuiomata to the proposed Seaview plant.

Although Seaview is at a lower elevation than the Wainuiomata valley floor, the top of the Wainuiomata hill is at a higher elevation than the Wainuiomata valley.

The Water Group of the Wellington Regional Council (WRC) owns two tunnels through the Wainuiomata hill but only one is currently used for water supply purposes. Both

tunnel portals are relatively close at the Wainuiomata end. However, the Waiwhetu tunnel, which is the one not in use, was built on a very slight gradient. The other tunnel is referred to as the Wainuiomata tunnel and is on a relatively steep grade. Because of the difference in grades the tunnel portals are at different elevations at the Seaview end.

Hutt City Council has approached the WRC about using the Waiwhetu tunnel for a sewerage pipeline, thereby avoiding pumping the sewage to the top of the hill. A saving in elevation of approximately 30 meters though some pumping is still required. With a daily volume of sewage of about 3400 cu. m, the annual saving in energy costs are significant. There is also a saving in initial capital costs as the pipeline route through the tunnel would be shorter than over the hill.

4. **Tunnel History**

The Waiwhetu tunnel was completed in the 1880s as part of the original Wainuiomata scheme. As a tunnel it is very compact in cross section, making even basic repairs to the pipeline difficult. In the late 1970s a decision was made to replace the original pipeline through the Wainuiomata hill. A new tunnel (Wainuiomata) was constructed, utilising a road tunnel partly constructed in the 1930s, for about a third of the distance. This enabled a pipe 1100 mm diameter to be laid, in excess of what was possible in the Waiwhetu tunnel. Subsequently, the Waiwhetu tunnel pipeline was decommissioned but the tunnel still remains in the ownership of the WRC. There is no foreseeable use for this tunnel for water supply purposes. Also the portion of the Orongorongo to Karori main, which was laid over the top of the Wainuiomata hill, has been abandoned.

5. **Hutt City Council Proposal**

Hutt City Council requires a pipeline of approximately 350 mm diameter to convey the sewage. A pipe of this size is less than the 750 mm dia abandoned water pipe in the Waiwhetu tunnel. Although the tunnel is of a small cross section it is adequate for HCC's needs.

Hutt City Council has presented the WRC with a draft agreement. Initially the WRC would grant HCC an option to use the tunnel upon payment of an option fee. An option period of six months is stated. If the option is exercised within this time frame the WRC then grants the City Council an easement, which provides the right to lay a pipeline in the Waiwhetu tunnel.

Essentially the draft agreement follows established practice for this type of transaction and no difficulties are expected. Our legal advisors are currently reviewing the draft agreement.

Hutt City Council has stated a preference for purchasing the land which then provides exclusive use of the tunnel. There are some survey difficulties with this, but no doubt these could be overcome.

Our objection to a sale is on the grounds of making best use of the two tunnels for the benefit of all utility operators. This maximises the benefits to society as a whole. If HCC lays its pipeline there will be four utility operators using the two tunnels. Other users are possible over a period of time. By retaining control of both tunnels the WRC

would be in the best position to try and ensure the needs of all operators are met. In particular services which are potentially incompatible can still be accommodated.

6. Valuing the Easement

At present there are two communications cables running through the Wainuiomata tunnel. The agreements for these are styled as a “right to lay a cable” and are for ten-year periods with rights of renewal.

As the sewerage pipeline will be a long life asset, HCC naturally requires some certainty. For this reason an easement is seen as an appropriate way of recording the transaction as HCC’s rights are then registered on the land titles.

Traditional methods of valuing easements evaluate the loss of enjoyment by the landowner. For example, a one metre drainage easement adjacent to the boundary of a residential section is worth far less than an easement through the centre of a section which may restrict the house design. The loss in value is reflected in a reduced land value. An attachment letter from Peter O’Brien, Property Consultant, explains this in more detail (see Attachment 1).

What distinguishes this particular easement is that it is subterranean and comes with a pre-dug hole. The value is not in the land but in the tunnel itself. Established valuation methods for easements are not seen as being appropriate. Two approaches to the valuation are:

6.1 Market Approach

This says that there are no other buyers for the easement at present but there may be buyers at sometime in the future. There is still spare capacity in the Wainuiomata tunnel for other services. Also, the WRC has no foreseeable need for the tunnel for water supply or any other purpose. On this basis anything the WRC can get for granting an easement is a windfall and the WRC should take it. Hutt City Council then captures nearly all the benefits from granting an easement.

6.2 Economic Value Approach

It is known that the project will still be viable without the use of the WRC tunnel. Essentially if the tunnel did not exist, a pipeline would be constructed over the Wainuiomata hill. Hence, HCC always has this option available to it. Therefore the price of the easement, if an agreement is to be concluded, cannot exceed the difference in life cycle costs (capital plus operating costs) between going through the tunnel and over the hill. Using this methodology the WRC would price the easement so it is just less than the life cycle cost difference. It then captures most of the benefits rather than HCC. It values the easement according to the economic benefits derived from it. An economic value approach has been used successfully for the communication cable agreements.

On the basis of these two valuation approaches the issue is relatively straightforward: what is the value of the benefits and how are they to be shared? The first part of the question is an engineering issue and is not considered further in this report.

Hutt City Council will no doubt tend more to the market approach in that they will pay for the easement, but the amount will probably not be significant. From a WRC point of view any amount received has not been budgeted for. It would be used to pay off water supply debt. This, in turn, benefits all our customers including HCC. Accordingly, if the amount received is considered to be too low it represents an indirect wealth transfer from our three other customers to HCC.

It is suggested that HCC receives half the economic benefits from granting an easement and our other customers indirectly receive the other half. There is no rationale to arrive at these proportions, rather as a judgement call it is suggested it is fair as only local authorities are involved. For the communications cables, most of the economic benefit has been captured by the WRC.

Hutt City Council, as a water supply customer, receives part of the benefit from any reduction in water supply debt. Hence, the proportionate benefit to HCC on the sewerage side of their business is reduced to take account of this. Hutt City Council's portion of our wholesale water supply sales is 26.2%.

Easement benefits are therefore shared:

HCC	=	32.2%
WRC	=	67.8%

(HCC receives benefits of $32.2\% + 67.8\% \times 0.262 = 50\%$)

7. **Surface Water Consents**

At present HCC discharges treated effluent into the Wainuiomata river several kilometres downstream of our raw water intake. Their discharge is about 40 litres a second under dry conditions. This is about one quarter of the river flow immediately downstream of the discharge point under flow summer flow conditions in the river. Currently the Water Group is consulting with interested parties about renewal of our resource consent for the Wainuiomata water catchment.

The potential loss of contribution to the flow in the lower reaches of the river, from the sewerage treatment plant, is expected to impact on our application. At worst it will bring forward the development of another water source.

Although there will be positive environmental benefits from the closure of the Wainuiomata sewerage treatment plant the potential negative benefits to the Water Group should not be overlooked.

8. Recommendations

That the Utility Services Committee:

- (1) Approve continuing negotiations with HCC for the granting by the WRC of a Wainuiomata tunnel easement in favour of HCC.*
- (2) Approve valuing the easement so that approximately two thirds of the life cycle savings from using the tunnel instead of the top of the hill route accrue to the WRC and one third to HCC.*
- (3) Receive the report and note the contents.*

Report prepared by

Approved for submission by

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Attachment: Letter from O'Brien Property Consultancy Ltd