



Report PE-05.301
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Committee Utility Services
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Contract No. 1241 - Kaitoke Water Main Duplication, State Highway 2 to State Highway 58, Haywards

1. Purpose

To obtain approval to accept a Tender for Contract No. 1241 for the duplication of the Kaitoke water main from State Highway 2 to State Highway 58.

2. Significance of Decision

The matters in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3) of the *Local Government Act 2002*.

3. 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 reason for withholding would exist, i.e., commercial negotiations.

4. Background

The Kaitoke main supplies water from Te Marua Water Treatment Plant to Upper Hutt, Porirua, and the northern and western suburbs of Wellington, including Kelburn and Karori.

There is a major risk of significant damage to the Kaitoke main adjacent to the junction of State Highways 2 and 58. The existing pipeline route traverses a steep hillside above Haywards Stream. This hillside is vulnerable to earthquake induced landslides. It is estimated that 360 m of pipeline would be damaged when the Wellington Fault ruptures.

The topography of the area will make pipeline repair difficult. It is estimated it would take 90 to 120 days to repair the 360 m of damaged pipeline. This delay to the reinstatement of reticulated water supply to a large area of the Wellington Region is highly undesirable.

Report No. 03.146, *Possible Kaitoke Water Main Diversion State Highway 2 to State Highway 58*, which outlined the proposal, was presented to the Utility Services Committee on 25 March 2003. This report is attachment 1.

Report No. PE-04.651, *Duplication of Kaitoke Water Main, State Highway 2 to State Highway 58 - Purchase of Pipe*, which requested approval to purchase the steel concrete lined pipe, was presented to the Utility Services Committee on 30 November 2004. The pipe has subsequently been purchased and is stored at Manor Park. This report is attachment 2.

Greater Wellington Water's business plan includes the construction of a new pipeline from State Highway 2 to State Highway 58 over two financial years 2004/5 and 2005/6.

5. Tenders Received

The Contract was advertised for tender in *The Dominion Post* on Wednesday, 25 May and Saturday, 28 May 2005. Tenders closed on Monday, 13 June 2005. The following Tenders were received:

Tenderer	Tender Price \$
E Carson and Sons Ltd	1,277,165.00
Tatana Contracting Ltd	1,478,215.00
Construction Services Company (Wellington) Ltd	1,657,686.50
E N Ramsbottom Ltd	1,829,000.00
C M Contracting Ltd	1,956,425.00
N Forsyth Ltd	2,682,860.00

The Engineer's estimate for this Contract was \$1,291,345. The Tender prices received are within the expected range. All prices exclude GST.

6. Tender Analysis

Tenders were evaluated using a weighted attribute system, as specified in the Tender Documents. The Tenderers' overall scores and rankings are:

Tenderer	Score	Ranking
E Carson and Sons Ltd	80	1
Tatana Contracting Ltd	70	2
Construction Services Company (Wellington) Ltd	63	3
E N Ramsbottom Ltd	59	4
C M Contracting Ltd	52	5
N Forsyth Ltd	24	6

7. Discussion on Highest Ranking Tenderer

E Carson and Sons Ltd is a well established Wellington based pipelaying contractor. Although the company has not had any recent experience installing large diameter steel water supply pipe, it has sufficient resources to manage and install this pipeline. Their recent experience has been with large diameter concrete drainage pipes and smaller PE sewer pipes. They propose employing a subcontractor, Rees Engineering, for the welding of the pipeline joints and fabrication of the mitre bends. This subcontractor is experienced in this type of work. E Carson and Sons Ltd inspected the site of the proposed works during the tendering period and appears to have a reasonable understanding of the work involved.

8. Finance

When the budget for this project was confirmed in October 2004, the estimated cost was \$1,800,000 spread over two financial years. It had been expected that the Contract would have been let before the end of the current financial year and a reasonable start made on laying the pipeline. However, because the time taken to gain approval for access through the Transpower land has taken longer than expected, some of the funds from the current year have been budgeted into next year.

The current estimated total cost of this project is \$2,332,165. This sum is made up of:

	\$
Contract No. 1241 lowest Tender price	1,277,165
Material purchase, including pipe and valves	620,000
Construction of valve chambers, end connections and the culvert crossing (estimate)	300,000
External consultants, including geotechnical and electrical hazards assessment	40,000
Project management, investigation, design and Contract supervision	95,000

Total	2,332,165

This means that there is a shortfall in the project funding of \$532,000. The main contribution to this shortfall is the significant increase in the cost of the valve chambers and end connections, and the culvert crossing. These were not designed when the estimate was prepared and an inadequate allowance was made. Additionally, the construction cost within Transpower land was not fully appreciated at that time. There have also been general construction cost increases. Note, however, that the Contract Sum contains a Contingency Sum of \$100,000, which is unlikely to be fully spent.

The shortfall was identified too late in the 2005/6 Annual Plan process to allow an alteration to the capital works budgets.

The options available are as follows:

- Defer the whole project and rebudget for the following financial year. This is not recommended, because the pipes have been purchased and the coatings will deteriorate when exposed to sunlight. In addition, the enhanced security to the water supply network provided by this duplication warrants continuing with the project.
- Accept the Tender and proceed with laying the pipeline. This will give the opportunity to reassess the details of the connections to determine if a simpler arrangement can be achieved. Because the Contract Period is six months, there will be the opportunity to readjust overall priorities at the half year review. If necessary, part or all of the connection work could be reprogrammed for early in 2006/7.

The balance of the shortfall for this project can be funded from within the \$5.937 million for the 2005/6 capital works programme. For example, a sum of \$100,000 has been allowed for additional aquifer monitoring wells on the Petone Foreshore. It would take a reasonable part of the year to obtain the resource consent for these following the investigations and, therefore, the wells can be drilled early in 2006/7, with an expected saving of \$90,000. A provision of \$200,000 has been made for ordering seismic repair stocks. The exact details of the requirements are still being formulated and the purchase of the stocks could be deferred to early 2006/7. There is also the possibility of either savings or deferment of other projects. These proposed adjustments will be considered by the Committee during the year as necessary.

9. Environmental Considerations

The foremost environmental impacts from the duplication of the Kaitoke main are:

- Removal of vegetation on Transpower land
- Construction noise and dust
- Traffic flow disruption
- Silt discharge from groundwater control

The impacts will be minor to moderate. They will be temporary with a short duration. The design of the pipeline and requirements specified in the Tender Documents aim to control and minimise the environmental impacts of this work. Boffa Miskell Ltd was engaged to advise on the impact of removing the vegetation on Transpower land. They concluded that there will be some minor isolated effects on the visual screen provided by this vegetation. The screen is a visual barrier between the residents in Hugh Duncan Street and the Haywards Substation. Boffa Miskell Ltd has prepared landscaping details to mitigate the effect of the vegetation removal. The pipeline route through Transpower land was chosen to avoid significant trees.

The emissions of noise and dust, traffic control and silt control will be managed by the Contractor and monitored by Greater Wellington Regional Council staff.

The proposed work is permitted under the Hutt City District Plan and Greater Wellington Regional Council's regional plans.

The work does not require a resource consent.

10. Communications

A press release will be prepared giving general information on this project. Residents in the vicinity of the route of the pipeline have been advised that this work is proposed.

Further notification will be provided by letter drop of the proposed start date for the work and contact persons to address any issues that may arise during the course of the works.

11. Recommendations

That the Committee:

- (1) *Receive the report and note the contents.*
- (2) *Accept the Tender received from E Carson and Sons Ltd for the sum of \$1,277,165, excluding GST, for Contract No. 1241.*

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Attachments

- 1 Report No. 03.146, *Possible Kaitoke Water Main Diversion State Highway 2 to State Highway 58*
- 2 Report No. PE-04.651, *Duplication of Kaitoke Water Main, State Highway 2 to State Highway 58 - Purchase of Pipe*