

**Report**            **04.538**  
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**Committee**       **Hutt River Advisory**  
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## **Hutt River Floodplain Management Plan: Whirinaki Crescent stopbank upgrade - preliminary design**

### **1. Purpose**

- To seek the Advisory Committee's endorsement of the preliminary design
- To update the Advisory Committee on the proposed work programme and refined cost estimate for the project

### **2. Background**

The preliminary design for the Whirinaki Crescent stopbank upgrade is now complete. Report 04.318 presented on 24 June 2004, updated the Advisory Committee on progress with the preliminary design.

The report also noted that the final alignment of the north east section of stopbank needed confirming and the cost estimate refined before seeking endorsement for the preliminary design.

### **3. Preliminary design**

The preliminary design provides for the following works to upgrade the stopbank:

- Upgrading the existing stopbank to the 2300 cumec design level with a, 3m wide crest, 2.5(H):1(V) batters and 0.75m buffer strips along each side
- Constructing a small berm and section of edge protection along the Mawaihakona Stream
- Purchasing a strip of land from St Patrick's College to contain the upgraded profile
- Realigning the north east section of the stopbank to also protect the proposed Wellington Golf Club development
- Environmental enhancement of the stopbank land parcel and stream bank

#### **4. Stopbank alignment**

The upgraded stopbank will follow the existing stopbank alignment on the southern and western sides. The north east section currently runs along the Golf Course boundary and the upgrade of this section would require purchasing a strip of Golf Club property. The Golf Club instead that we proposed to realign this north east section to protect their proposed development.

At a meeting on 26 August 2004, representatives of the Wellington Golf Club confirmed they would like to go ahead with the stopbank realignment. (Refer **Attachment 1**), showing the layout plan for the preliminary alignment).

The Flood Protection Department is supportive of this realignment as it allows a robust stopbank to be constructed at a reduced cost to the Council. Realigning the stopbank through Golf Club land contributes to savings for GWRC, by a reduction in length of the existing stopbank, savings on not having to purchase land, reduced landscaping costs and the opportunity to share the project costs for this portion of the stopbank. The stopbank however is proposed to be constructed through a grove of established trees which may pose some difficulties and the detailed design stage.

The following provides a summary of the proposed responsibilities between GWRC and the Golf Club for this section of stopbank:

- Golf Club will continue to own the land but grant an easement to GWRC for the stopbank land parcel.
- Golf Club will undertake routine maintenance of the stopbank such as grass mowing.
- GWRC will be responsible for the structural integrity of the stopbank.
- Golf Club will construct the stopbank in 2005/06 with GWRC direction.
- Cost sharing responsibilities are still being negotiated between both parties.

#### **5. Upper Hutt Forest and Bird**

Barry Wards, chair of the Upper Hutt Forest & Bird wrote to comment on the report for the June Advisory Committee meeting, unfortunately this was not received in time to be tabled at the meeting. The Chairperson of the Advisory Committee has since replied to this letter and officers have followed up with a meeting to update Barry on the design and get further feedback on Forest and Bird's concerns.

Barry is overall accepting of the project, however he is concerned with the ecological health of the Mawaihakona Stream and is keen to curb any further degradation and restore life back into the stream and its riparian margins. It is likely there will be opportunities to link Forest & Bird's proposals for the

stream with this project. It was agreed Forest & Bird will be initially consulted during the preparation of the preliminary landscape design.

## 6. Cost estimate

The preliminary design cost estimate for the project is \$671,000.

Opus consultants were engaged to carry out a limited review of the cost estimate to provide some confidence in the estimate. It was noted from this review that construction costs, particularly earthworks costs are very buoyant at present due to the amount of work available. Re-estimation in 1-2 year's time could see a considerable difference in cost if the situation continues. A higher than normal contingency has been applied to allow for this unknown.

The estimate is greater than the amount estimated in the 1999 Beca Carter Hollings & Ferner, upgrade concept design. The increased cost is due to the more detailed estimate of quantities, the use of today's professional and construction rates, an allowance for the restricted site access and work areas, land purchase and the inclusion of significant landscaping/environmental enhancement costs.

## 7. Proposed Budget & Programme

The Golf Club proposes to construct the realigned section of the stopbank one year earlier than the current work programme. The Flood Protection Department is not ready to bring forward the work programme for the entire stopbank upgrade project to match the Golf Club's programme. Reasons for this are a lack of staff resources this financial year and we believe there would be inadequate time to complete the detailed design, consultation and construction in the 05/06 financial year. However the Golf Club stopbank can go ahead separately, as it is unlikely a comprehensive consultation process will be required. The proposed work programme is detailed in **Attachment 2**.

The budget that is provided for the upgrade project in the Council's 2003-2013 ten-year plan is \$544,000. The required budget to complete this upgrade project, as per the preliminary design, is \$674,000.

We propose to seek Council approval to allocate more funds for the upgrade project through the 2005/06 Annual Plan update process. The proposed work programme also includes \$50,000 unbudgeted expenditure in the current 2004/05 year. It is proposed to seek approval for this through the 6 month review. The table below shows a summary of the proposed work programme and Budget.

	<b>Total Cost</b> <b>\$'000</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>05/06</b>
Current Budget Allocation	<b>544</b>	40	0	41	463
Required Budget	<b>671</b>	40	50	139	442

## 8. Communications

A letter was sent to the Silverstream Board of Proprietors updating them on the project and advising we would get back to them in October this year.

A letter has been sent to Wellington Golf Club, formally seeking their confirmation and agreement to the discussions outlined in Section 4 of this report.

A news release will be issued informing the public of the preliminary design and proposed programme for the project.

The preliminary design report will be submitted to UHCC officers for their comment.

## 9. Recommendations

*That the Hutt River Advisory Committee:*

1. *receive the report.*
2. *note the contents of the report.*
3. *endorse the construction of a new stopbank through the Wellington Golf club land and negotiation of the necessary agreement.*
4. *endorse the overall preliminary design and the proposed programme of work.*
5. *recommend to GWRC that the project budget increase from \$544,000 to \$671,000 with amended cashflows as outlined.*

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**Attachment 1** Layout plan

**Attachment 2** Proposed budget and work programme