



Report **06.362**
Date 24 July 2006
File N/06/23/03

Committee **Landcare**
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Chrystalls Extended Stopbank - Selection of the Preferred Alignment

1. Purpose

The purpose of this report is to:

- Advise the Committee of the outcome of the analysis of the stopbank alignment options and to recommend a preferred alignment.
- Advise the Committee of the proposed programme of work and that the target completion date of June 2008 is unlikely to be achieved.
- Update the committee on the project cost estimate.

2. Significance of the decision

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

3. Background

The need to upgrade the Chrystalls stopbank is an outcome of the Otaki Floodplain Management Plan adopted by Council and the Community in 1998. Floods in 1998 and 2000 prompted a request from the Kapiti Coast District Council to expedite the second stage of the upgrade, the construction of the Chrystalls Extended stopbank. This request was accepted by Council through its 2003 – 2013 Long Term Council Community Plan round with agreement that KCDC would provide additional local share to minimise the impact of bringing the expenditure forward in the LTCCP. Report 02.296 details the background to the decision.

The 2003 – 2013 LTCCP allowed for the project to be implemented over 3 financial years from July 2005 through to June 2008. Progress on the Chrystalls Extended Stopbank was last reported to Landcare in March 2006 in Report PE 06.85. One of the recommendations of that report was that:

“a further report recommending the final preferred alignment is proposed for both Landcare Committee and Kapiti Coast District Council consideration before we proceed with the formal resource consent application and land acquisition procedures”

Since March a detailed analysis of the two stopbank alignment options has been completed, an updated project cost estimate prepared and the programme of work required to achieve construction of the stopbank considered.

The next steps to ensure progress is made to achieve construction of this stopbank are:

- Greater Wellington approval of the recommended alignment taking into account the updated project timing and the updated cost estimate.
- Approval to forward the report to KCDC seeking their endorsement of the recommended alignment.
- Approval to proceed with the formal Notice of Requirement (Designation), resource consent applications and land acquisition, subject to KCDC endorsement of the alignment and budget.

4. The Recommended alignment

Two alignments nominally called the “River alignment” and the “Landward alignment” have been considered in detail for the Chystralls Extended Stopbank. **Attachment 1** shows the location of the two alignments. The upstream section of the stopbank, (approximately 600m) extending from downstream of the existing Chystralls stopbank to the downstream boundary of Ashford Stud, of both alignments is identical.

The River alignment follows the existing haul road immediately adjacent to the river and links into the North Island Main Trunk (NIMT) railway line at the northern abutment of the Otaki Rail Bridge.

The Landward alignment, is located on the landward side of the Stresscrete yard and Winstone Aggregates extraction site, and joins into the NIMT railway line approximately 300m north of the Otaki River Bridge.

Both alignments also require a small section of stopbank to be built between the Railway line and the SH1 Bridge abutment.

The assessment of options was undertaken using a multi criteria approach so that a range of attributes could be considered in the decision making process. A summary of the findings of the assessment is contained in **Attachment 2** to this report. Each of the attributes considered has been evaluated in separate component reports that have then been summarised into a technical report titled “Chystralls Extended Stopbank – Alignment Options Assessment Report” Report No GW/FP/T/06/145. The report has been prepared in such a way that it will be used as the basis for the designation and consent application. A copy of this report is available from the Manager, Flood Protection.

The assessment showed that the Landward alignment is the favoured option. The primary reasons for this are:

- The total construction costs and maintenance are cheaper for the landward option once the necessary river protection works are taken into account to achieve an approximately equivalent level of security.
- The landward alignment is considered a more sustainable long term option (remember a stopbank is a permanent feature that has an indefinite life) as the majority of its length follows a natural river terrace well away from the river, it will be behind rather than in front the Winstones lake, and provides a better “river corridor” boundary than the river alignment. The Landward alignment can also be more readily upgraded should future demands require.
- The Landward alignment better achieves the environmental outcomes of the Otaki Floodplain Management Plan (OFMP) and the subsequent Otaki River Environmental Strategy. One of the key environmental outcomes of the OFMP is to integrate the river and the river corridor into its wider landscape setting. The OFMP sets out to achieve this by ensuring we minimise the impacts of works, enhance the environmental values, provide a diverse habitat and enhance public access whenever we can.
- Iwi and community groups consulted over the stopbank alignment all favour the Landward alignment.

The Landward alignment is however more difficult to implement because it involves a private landowner and has greater impacts on the lease’s of the Crown land held by Land Information New Zealand. Officers have discussed the matter in detail with the immediately affected parties and there is agreement that the landward alignment is the preferred option. However further work is required to achieve a compensation agreement for the land required for the new stopbank.

Officers believe that the formal Public Works Act process involving the designation of the land and if necessary compulsory acquisition of the land, may be required to achieve a fair and equitable settlement. Following this process will provide certainty about the outcomes but could take up to 24 months longer to reach a final settlement than simple negotiation.

5. Consultation

The alignment options have been widely consulted on over the last 12 months with support overall being for the landward option. The groups consulted with included:

- Ontrack
- Transit New Zealand
- Land Information New Zealand
- JL Andrews Limited

- Ngati Ruakawa
- Nga hapu o Otaki
- Winstone Aggregates
- Stresscrete
- Kapiti Coast District Council
- Friends of the Otaki River
- Otaki Community Board

Once a preferred alignment has been confirmed we will undertake further consultation with the wider community and the adjacent landowners as part of the designation and resource consent application process. A brief summary of the consultation completed to date is provided in **Attachment 2**.

6. The next steps

There are four key steps in the process from here before construction can commence:

- GW approval of the recommended river alignment, noting the increased project cost estimate.
- Obtaining endorsement from Kapiti Coast District Council (KCDC) of the preferred alignment, understanding the timing and costs involved. We intend seeking endorsement from KCDC at its meeting on 24 August 2006.
- The next step is to proceed with the formal Notice of Requirement (designation) and resource consent applications.
- Lastly is to proceed with the land acquisition noting we may have to proceed using the compulsory purchase procedures in the Public Works Act. We will be working to achieve negotiated agreements if at all possible.

Once the planning permission is obtained and access to land agreed we will be able to follow the normal process of design, tendering and construction. Where possible we will run these processes in parallel. The activity milestone dates associated with the project are set out in Table 6.1 below. The milestones are based on the designation process being straight forward, no appeals being lodged but with the land acquisition completed using the compulsory purchase procedures in the Public Works Act.

Table 6.1: Milestone Dates

Activity Milestones	Date
Endorsement of the preferred alignment by KCDC	24 August 2006
Consult with affected landowners	September 2006
Lodge consent and designation documents	November 2006
Proceed with negotiations for land purchase	November 2006
Complete detailed design and tender documents	April 2007
Designation confirmed	June 2007
Land agreements and purchase through the formal process	June 2009
Appoint Contractor	August 2009
Complete Construction	June 2010

The above timeframe is considered a worst case scenario. With the good will of the landowners and lessees we may be able to achieve the June 2008 completion date.

7. Budget

The just completed investigations have included some more site specific survey and design work that has enabled an updated project costs to be prepared. The previous estimates reported in March 2006 were based on the initial feasibility work undertaken in 2002.

Table 7.1: Summary of Costs

	Current Budget	Estimated Cost	
		Landward Alignment	River Alignment
Stopbank	\$1.5M	\$2.11M	\$1.53M
Additional river works to achieve full 100 year stopbank security	\$0.75M	\$0.75M	\$3.0M
Total	\$2.25M	\$2.86M	\$4.53M

The key points to note in the above table are that:

- The cost of constructing the landward alignment is now estimated at \$2,110,000 or \$610,000 more than the project budget approved as part of the recently completed 2006 – 2016 LTCCP. A more detailed breakdown of the estimated costs for the two options is contained in **Attachment 3**.
- Most of the cost increase over the previous estimate for the landward alignment is due to increased rates for earthworks (\$350,000). The

increased rates are in part due to market increases in earthworks rates and in part due to the estimate allowing for a greater proportion of the impervious material required being imported from off site. The balance of the increase is due to higher contractor establishment costs, contingency sum and land purchase estimates.

- The river alignment can be constructed for very close to the current budget, but an additional \$3 million worth of river stabilisation works is required to achieve full stopbank security from river erosion or course change. Overall this is a more expensive option to achieve an approximately equivalent level of security for Otaki township. We do not believe this is the best way to proceed.
- Most of the river works required for the landward alignment have already been completed. An estimated additional \$750,000 worth of work of river works is required but there is provision in the Flood Protection 10-year plan to achieve this within the next 5 or so years.
- The project budget does include an amount for some, as yet undetermined, environmental enhancement work that will likely follow once the construction work is completed

The current budget for the construction of the stopbank is \$1.5 million so there is an estimated shortfall of \$610,000 dollars with the Landward alignment. This additional funding will require approval from both Greater Wellington and Kapiti Coast District Council as funding partners.

The Greater Wellington share of the increased project cost is \$407,000 however this cost will not be incurred until 2007/08 or beyond. The increased cost would need to be approved as part the of the 2007/08 Annual Plan update process. It may be possible to accommodate this by deferring other Kapiti improvement works to keep the 10-year Kapiti capital spend within the currently approved \$5.3 million budget.

8. Project Implementation Risks

The primary risks relate to the project are costs and programme.

Project Costs

Project costs fall into two categories - construction costs and the designation/consent and land purchase costs.

The construction costs to date are based on the preliminary design work just undertaken and are accurate to within +/- 25%. There are always risks associated with earthwork construction projects, however we are confident we have robust cost estimates on which decisions can be made.

For this project the consenting and land purchase process are where the major risks exist. The costs included for the consents are based on no appeals being

made to the designation. If an appeal was made then there could be extra costs with legal fees, preparation of evidence and additional hearings.

We have had to make some assumptions in estimating the land acquisition costs which are more significant for the landward alignment. The cost to purchase the private land is based on a valuation undertaken in October 2005. Land values in Otaki are increasing more rapidly than average at this time and they are also very dependant of the likely future use of the land.

We have no specific valuation on the LINZ land. We have however included a sum based on our understanding of the rental returns from the property. In including this cost in the project it should be noted that there will also be a matched income stream that we have not included in the budgets at this stage but will do so through the annual plan review.

Programme

The programme timing has some risks associated with the designation process and with the land purchase negotiations as discussed above. There is clear community support for the project to be done as quickly as possible. We therefore do not anticipate any appeal to be lodged from the general public.

We may be able to negotiate access to construct the works prior to finalising the negotiation which would also help to shorten the programme. Our discussions to date with LINZ and Iwi have indicated that there should be no impediments to LINZ being able to clear the land for transfer to GW.

9. Communication

A joint press release with KCDC will be prepared following the 24 August 2006 KCDC Council meeting advising of the alignment selected and the programme for implementation.

10. Recommendations

That the Committee:

1. ***Receives the report.***
2. ***Notes the content of the report.***
3. ***Approves the Landward alignment for construction of the Chrystalls Extended Stopbank.***
5. ***Seeks the endorsement of the Kapiti Coast District Council for the Landward alignment, noting that the current project completion date is now June 2010 and noting the increased project estimate of which the Kapiti Coast District Council share is a further \$203,000.***

4. ***Recommends** that the Policy & Finance Committee approves the project budget being increased by \$610,000, and that officers make provision for Greater Wellingtons share of the increase of \$407,000 through the 2007/08 annual plan update process.*

6. ***Gives approval** to officers to lodge the necessary Notice of Requirement and Resource Consents applications subject to the agreement by Kapiti Coast District Council to the Landward alignment, to their funding of their increased share of expenditure of \$203,000, and the Policy & Finance Committee approval of the increased project budget cost of \$610,000.*

Report prepared by:

Report approved by:

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Attachment 1: Stopbank alignment plan

Attachment 2: Summary of alignment options assessment:

Attachment 3: Summary of estimated costs