



Report 15.9  
Date 20 January 2015  
File N/03/18/01

Committee Strategy and Policy Committee  
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## Jim Cooke Park Stopbank Reconstruction Feasibility Study: Preferred Option

### 1. Purpose

- To advise the Strategy and Policy Committee (the Committee) of the outcomes of the Jim Cooke Park stopbank reconstruction feasibility study investigations and consultation undertaken with stakeholders.
- To seek endorsement from the Committee for a preferred option for the Jim Cooke Park stopbank.

### 2. Background

#### 2.1 Existing stopbank

The existing stopbank centred on Jim Cooke Park, extending from 75 Nimmo Avenue East to 19 Nimmo Avenue West, was originally constructed in 1957 as part of the 1955 Erosion and Flood Control Scheme works promoted by the Manawatu Catchment Board. The stopbank ties into naturally high ground at both ends.

The Waikanae River Floodplain Management Plan, developed in 1997, recommended that various stopbanks along the Waikanae River be constructed or reconstructed and the Waikanae River channel be realigned at a number of locations, in order to protect residential properties from a 1 in 100 year flood event. The next priority is the reconstruction of the Jim Cooke stopbank. The reason for reconstructing the stopbank is that it is not structurally sound, is not high enough to meet the 1 in 100 year flood event and is difficult to access for maintenance and emergency repairs.

During the 2005 flood the existing stopbank came close to being overtopped. Overtopping or failure of the existing stopbank or terrace to the north-west has the potential to cause major flooding in a large area of Waikanae (200 houses approximately).

## **2.2 The reconstruction project**

The proposed Jim Cooke Park stopbank reconstruction project extends from 73 Nimmo Avenue East to 37 Greenaway Road. This includes the existing stopbank (750m), an extension along the existing terrace to the north-west (390m) and topping up of the Chillingworth stopbank (80m). The project involves selecting and constructing a stopbank to a preferred alignment, extent and profile. The project will be completed in three phases: feasibility, consents/design and construction.

## **2.3 Strategy and Policy Committee Workshops**

A presentation was given at a Strategy and Policy Committee workshop on 17 June 2014 outlining the project background, problems with the existing stopbank, issues, option costs and comparison, ecological assessment, progress, next steps and consultation process. An update on the project, focusing on the consultation feedback received, was given at a Strategy and Policy Committee workshop on 28 October 2014. The feedback favoured the standard stopbank option; however, a number of local residents, supported by the Waikanae Community Board, requested that the alignment be modified at four locations to save existing mature trees along boundaries. It was agreed that staff would investigate a further option to modify the alignment to retain mature trees along the river side of the residential boundary.

## **3. Description of the Three Options**

The stopbanks for all options were designed to meet the Waikanae River recommended 100 year flood standard, including the recommended allowance for climate change. The following is a brief description of each of those options and the issues involved. Plans of the three options are shown in **Attachments 1, 2 and 3** respectively.

### **3.1 Option 1 - Standard stopbank with no amenity strip**

Option 1 is for a standard earth stopbank, 4m wide at the top, 3.5:1 batters and 5m access/buffer strips on either side. The landward 5m access/buffer strip is mostly located adjacent to the residential property boundaries. The proposal would require the removal of a significant number of mature native and exotic trees planted by adjoining landowners and others over the last 30-40 years. A plan of this option is shown in **Attachment 1**.

### **3.2 Option 2 - Standard stopbank and floodwall combination with no amenity strip**

Option 2 varies from Option 1 to include a flood wall alongside the Jim Cooke Park playing fields and along the eastern section. The purpose for Option 2 is to reduce the impacts on the existing Jim Cooke Park sports fields and on the existing exotic and native vegetation along the eastern section. A plan of this option is shown in **Attachment 2**.

### **3.3 Option 3 - Standard stopbank with amenity strip**

Option 3 varies from Option 1 to include an ‘amenity strip’, a strip in which existing mature trees will be retained between the stopbank and the boundary. The strip would be approximately 3 metres wide, but this will vary depending upon flood effects, impacts on sports fields and ensuring a smooth stopbank alignment. There will be no amenity strip along the majority of Jim Cooke Park because there is insufficient room on the river berm if the sports field sizes are to be retained. A plan of this option is shown in **Attachment 3**.

### **3.4 Jim Cooke Park Sports Fields**

All three options allow for the existing sports fields to either be repositioned towards the river (Options 1 and 3) or remain at its current location (Option 2), as requested by KCDC and the Waikanae Association Football Club.

### **3.5 Encroachments**

A significant number of adjoining residents have placed sheds, glasshouses, garden furniture, fences, trees and gardens over the boundary into the river corridor on land owned by Greater Wellington Regional Council (GWRC) (east section), Kapiti Coast District Council (KCDC) (mid section) and Kapiti Equestrian Centre and Vaulting Club (KVC) (west section).

Residents will be requested to relocate all encroachments along the river corridor where the stopbank is proposed and to share the cost of fencing along the true boundary. All trees within the proposed stopbank footprint and 5m access/buffer strips each side will need to be removed. In Option 3, allowance has been made for a narrow amenity strip to retain some of the existing mature trees between the stopbank access/buffer strip and the boundary. In some cases where there is a minor encroachment of a building into the amenity strip, which will be allowed to remain, subject to an encroachment licence being granted by GWRC.

### **3.6 Ecology**

The proposed stopbank requires that all existing trees within the stopbank footprint and 5m wide access/buffer strips be removed. The approximate areas for tree removal are:

Option 1 – 6270m<sup>2</sup>

Option 2 – 5550m<sup>2</sup>

Option 3 – 4520m<sup>2</sup>.

The recommendations of the ecological assessment report, supported by the GWRC Biodiversity Department, were that:

- Compensatory plantings are undertaken for the areas of vegetation which are lost, scaled to the values lost.
- That surveys be undertaken to assess the risk to long tailed bats, birds and lizards.

- A comprehensive monitoring and reporting component be added to the Restoration Plan which will make sure that successful biodiversity offsets are achieved.

An area for compensatory plantings between River Glade and Maple Lane has been identified by Friends of the Waikanae River, and we are seeking advice as to whether this is the most suitable site available.

### 3.7 Land

GWRC currently owns the footprint of the proposed stopbank and access/buffer strips from Nimmo Avenue East to Nimmo Avenue West. The section between Nimmo Avenue West and Charnwood/Paretao Grove is owned mostly by KCDC and the section between Charnwood/Paretao Grove and Greenaway Road is owned by the Kapiti Equestrian Centre and Vaulting Club (KVC). The Chillingworth stopbank is located on land owned by GWRC.

The whole area lies in the river corridor where fast flowing and deep water prevails during major floods.

A number of meetings have been held with KCDC to keep them informed of progress with the stopbank investigations. The main issues that have arisen are:

- KCDC preference is that the sports fields remain undisturbed. (Option 2 allows for this). Failing this the sports field sizes are to be retained (Options 1 and 3 allow for this).
- Proposed KCDC stormwater upgrading through the stopbank be undertaken at the same time the stopbank is built.

It is proposed that the details for construction, maintenance and ongoing protection of the preferred stopbank option be agreed in a detailed memorandum of agreement between GWRC and KDC.

Discussions have also been held with the KVC on the basis of the following two options:

- Acquire the whole property and relocate KVC to a new site prior to construction of the stopbank – This option would eliminate the need for the stopbank construction to work around the activities of the KVC and would remove unwanted structures from within the river corridor. However, it is reliant on the availability of a suitable alternative site and the cost to purchase a site and relocate and/or construct new improvements is high.
- Acquire the stopbank footprint and access/buffer strips only – This option would require construction to be staged to accommodate the operations of KVC and the provision of temporary grazing during construction. The stopbank and buffer would be owned by GWRC and the riverside buffer area could continue to be grazed by KVC. Compensation/reinstatement costs will need to be met.

A comparison of the two options is shown in **Attachment 4**.

Enquiries have been made to relocate the KVC to a similar suitable site nearby, but to date this has not been successful. Further enquiries are currently underway. Discussions with the KVC will be further progressed in the near future and reported to the Committee. It is too early to estimate land and compensation costs for the project. The two options for the KVC are common for all options, and can therefore be removed for the assessment and selection of a preferred option alignment.

### **3.8 Project costs and comparison**

The total estimated project costs for the three options are;

- Option 1           \$1.5 million
- Option 2           \$3.7 million
- Option 3           \$1.5 million.

The above estimated costs include supplying fill materials, constructing stopbanks, retaining walls (Option 2 only), tree removal, boundary fence contributions, ecological offsetting and sports field relocation. Any stormwater upgrades would be paid for by KCDC. Land purchase and compensation works are not included (refer to section 3.7 above).

A detailed comparison of the pros and cons of the 3 options are described in **Attachment 5**.

Flood Protection staff believe that Options 1 and 3 provide the most resilient, adaptable and cost effective stopbank to protect the community from the consequences of floods. Option 2 is not supported because of the high cost, lower performance and reduced amenity. Option 3 is preferred over Option 1 because there is a significant reduction in the number of existing mature trees that need to be removed along the residential boundary. The retention of a strip of trees will ecologically enhance the margins of the river corridor, screen houses and provide wind protection. This will also largely satisfy the numerous objections that have been received by adjoining land owners, supported by the Waikanae Community Board at a relatively low cost.

### **3.9 Construction**

The stopbank construction will be staged to allow the Kapiti Equestrian Centre and Vaulting Club to continue to operate depending on the land option chosen, minimise disturbance to residents and minimise disruption to sports field activities. A well established grass cover will be necessary before any of the disturbed areas are used. The construction period for Options 1 and 3 is about 12 months, and Option 2 about 18 months.

The main access for construction would be from Nimmo Avenue West. Depending on the option chosen, between 18,000 m<sup>3</sup> to 26,000 m<sup>3</sup> of fill will be imported to the site from the river berms or from local quarries.

## 4. Consultation

The consultation undertaken as part of the feasibility study has been extensive.

A consultation strategy was prepared in order to inform community groups, organisations, interested and affected residents and the general public of the findings of the review and invite feedback.

Newsletter #1 was distributed in February 2014, to inform stakeholders and the wider public of the project, key messages, timing, consultation dates and potential extent of the new stopbank. It also enabled the commencement of dialogue with key stakeholders regarding the project. 200 newsletters were sent to stakeholders including residents adjoining and close to the Jim Cooke Park Stopbank project area and further newsletters were placed in KCDC service centres and libraries.

Newsletter #2 was distributed in August 2014, to inform stakeholders and the wider public of proposed stopbank options, plans, costs, issues and mitigation measures. The newsletter included a postage paid feedback form for people to provide GWRC with their comments on the proposals. The newsletter was sent to all stakeholders identified in the consultation strategy. This included approximately 300 newsletters delivered to properties adjoining the Waikanae River and within the predicted 1 in 100 year floodable areas. Further newsletters were placed in KCDC service centres and libraries for the general public. Public notices were placed in two local newspapers on two occasions and information was also placed in “Our Region” publications. The newsletter and public notices provided methods of how people could obtain more information on the project such as speaking to Flood Protection staff, visit the GWRC web site or attend the open day on 16 August. The GWRC web site and open days included the following information:

- Copies of the newsletters
- The feasibility report
- Plans and cross section of two stopbank options (standard stopbank and standard stopbank and floodwall combination)
- The ecological assessment report.

Approximately 60 people attended the open day, at which three Flood Protection staff were available to answer questions about the project. Staff also arranged site visits with 15 property owners to discuss issues relating to the proposals near to their properties.

Thirty-four submissions were received from organisations and individuals in writing or during recorded discussions. Feedback received included:

- Widespread support for a standard stopbank rather than a floodwall.
- General support for tree removal along stopbank footprint and access/buffers strips and compensatory planting of native trees.

- Requests to modify alignment at 4 locations to save mature trees along residential boundaries and hence retain amenity and biodiversity values.
- General support for repositioning of the Jim Cooke Park playing fields to cater for the standard stopbank.

Further investigations were undertaken to by Flood Protection staff to determine the feasibility of redesigning or relocating the stopbank to provide an amenity strip adjacent to the boundary in order to retain existing established trees.

The outcomes of this investigation were:

- Moving the stopbank 3m towards the river results in a negligible increase in flood level.
- Retaining existing established trees along the boundary will result in a cost saving in removing and compensating for the loss of these trees and a cost increase in stopbank material volume. The overall cost of Option 3 is similar to Option 1.
- Retaining existing established trees along the boundary will provide a green belt along the northern edge of the river corridor which will screen houses, provide wind protection and retain existing biodiversity values.

The option to provide an amenity strip was discussed with the residents who objected to the original proposals, with the result that all (except 1 person) were supportive of the proposal.

Newsletter #3 was distributed in December 2014, to advise stakeholders and the wider public of feedback received regarding the stopbank options and the next steps. Information was also placed in the “Our Region” publication.

**Attachment 6** contains details of the consultation undertaken to date.

## 5. Where to from here

The proposed timeline up to completing construction is given below.

11 Feb 2015	Strategy and Policy Committee adopts the preferred option
Feb 2015	Newsletter #4 to stakeholders and the community advising of the decision regarding the preferred option
Feb – Sept 2015	Resource consents, detailed design and property negotiations
May – June	Report to Strategy and Policy Committee on KVC land purchase options
Sept – Dec 2015	Tender procedure (subject to KVC land purchase outcome)
Feb 2016 - June 2017	Construction (subject to KVC land purchase outcome)

## **6. Summary**

The purpose of the Jim Cooke Park stopbank is to protect Waikanae from the effects of a large and damaging flood and is considered to be of a regional benefit because of the significant reduction in flood risk to a large community.

Two options were originally considered, located as close to the residential properties as possible. These were for a standard stopbank and standard stopbank/floodwall combination. The standard stopbank/floodwall combination was considered so as to reduce the impacts on the KCDC football fields and on the mature vegetation over the eastern section. A third option to include a narrow amenity strip for retaining existing mature trees along the residential boundary was considered after a number of submissions were received from the local community.

The option for a standard stopbank/floodwall combination is not supported by Flood Protection staff and the large majority of stakeholders. The Committee agreed to reject this option at a workshop held on 28 October 2014. When considering the regional benefits of improved flood security, sustainability, biodiversity and the reduced impact on neighbours, the option for a standard stopbank that includes a narrow amenity strip along the residential boundary, is the preferred option (i.e. Option 3).

## **7. Communication**

Following the Strategy and Policy Committee meeting on 11 February 2015, a newsletter will be distributed advising stakeholders and the community on the decision regarding the preferred option. Discussions with the Kapiti Equestrian Centre and Vaulting Club will continue.

## **8. The decision-making process and significance**

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002. Part 6 sets out the obligations of local authorities in relation to the making of decisions.

### **8.1 Significance of the decision**

Part 6 requires GWRC to consider the significance of the decision. The term 'significance' has a statutory definition set out in the Act.

Officers have considered the significance of the matter, taking into account the Council's significance and engagement policy and decision-making guidelines. Officers recommend that the matter be considered to have low significance.

The Jim Cooke Park reconstruction project was approved by Council in the current Annual Plan.



Officers do not require that a formal record outlining consideration of the decision-making process is required in this instance.

## 8.2 Engagement

Engagement on the matters contained in this report aligns with the level of significance assessed. The engagement process followed is set out in section 4 of this report.

## 9. Recommendations

*That the Committee:*

1. **Receives** the report.
2. **Notes** the contents of the report.
3. **Endorses** Option 3 as the preferred stopbank option for Jim Cooke Park.
4. **Recommends** that officers proceed with the detailed design and obtaining statutory approvals for the Jim Cooke Park stopbank on the basis of implementing Option 3.
5. **Recommends** that officers continue to negotiate with the Kapiti Vaulting Club on options for securing ownership of the land necessary for Option 3 stopbank footprint.

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## Attachments

- Attachment 1: Option 1 - Standard stopbank with no amenity strip
- Attachment 2: Option 2 - Standard stopbank and floodwall combination with no amenity strip
- Attachment 3: Option 3 - Standard stopbank with amenity strip
- Attachment 4: Land purchase options for Kapiti Equestrian Centre and Vaulting Club property
- Attachment 5: Options costs and comparison
- Attachment 6: Consultation report