

Wt 33 N. K. O. W.

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The levee consists of 1:3 batters on the canal side and 1:4 batters on the landward side with a crest width of 2m. A typical design section is given in Figure 2. It has been assumed that the levee would be compacted, topsoiled and re-turfed. To ensure that the design standard is maintained it is recommended that an annual inspection of the levee be carried out.

1.4 Adverse Hydraulic Impacts

Construction of levees around eastern and western South Golden Beach would raise flood levels by a maximum of 17mm (Reference 1). The only buildings which are affected by this minor increase in flood levels are at New Brighton and South Ocean Shores. In a 1% flood up to 30" buildings in New Brighton upstream of Orana bridge are flooded. Any increase in flood levels will cause an increase in flood damages, although an impact of 17mm is at the lower limit of what can reasonably be determined from this type of modelling.

There are no cost-effective schemes which can mitigate this adverse impact unless the proposed dredging of the creek proceeds at the same time. A number of measures for protecting New Brighton were considered in Reference 1, but none of the measures appear to be easy to achieve or have high economic benefits.

An increase of 17 mm in a building which is already flooded would cause only a nominal increase in flood damages (if any) as carpets, furniture and other such items would already be damaged. However, an increase of 17mm is significant if a house would not have been flooded in a particular flood, and because of the construction of the levees, gets flooded. In order to compensate the limited number of residents who may fall into this category in future floods it is recommended that Council establish a flood compensation fund.