

## 5: Proposed Outline Design (2 of 2)



Figure 6: Typical established flood embankment

### Flood Defence Type

In general, flood embankments have been proposed for areas where they can be integrated into the existing landscape. Flood walls are proposed in areas where less space is available.

### Flood Walls

Flood walls provide an effective barrier to floodwater where space is restricted. Walls usually require foundations to ensure stability and prevent seepage, depending on ground conditions. While new walls would be constructed with reinforced concrete to withstand the forces from flood water, they can be clad in stone or brick to provide a suitable finished appearance. Figure 8 shows an example of flood wall construction.

Approximately 1190m of insitu and 435m of pre-cast reinforced concrete walls are planned. Approximately 400m of sheet piled walls are proposed for the main parts of the town.



Figure 8: Flood wall construction

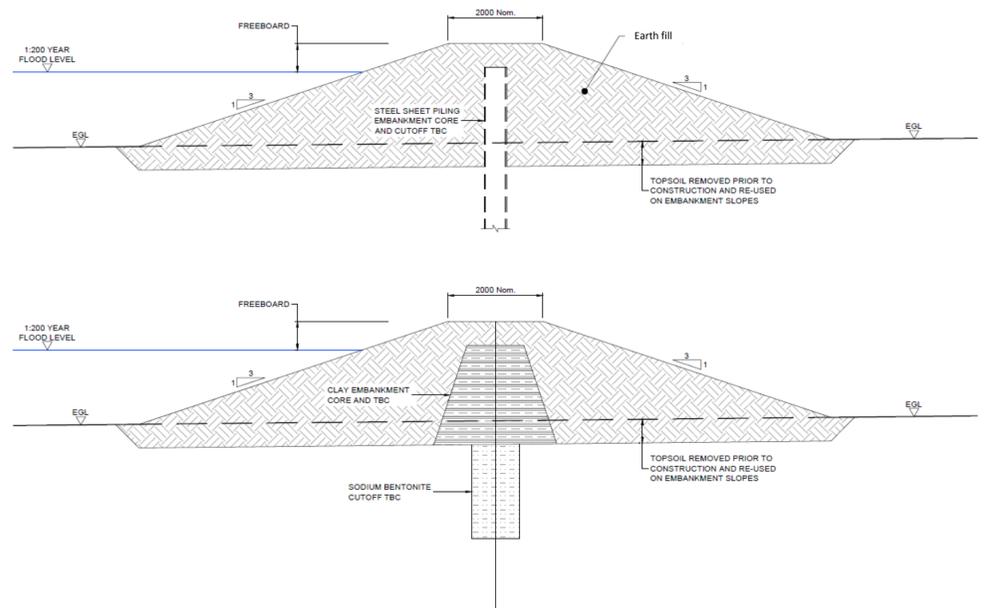


Figure 7: Cross section of typical flood embankment

### Flood Embankments

Flood embankments are a cost effective form of defence where there is sufficient space to construct them. They are usually constructed with an impermeable core and some form of groundwater cut off to prevent flood water seeping through, or underneath them. The finished embankments are covered in earth and are vegetated to give them a natural appearance and complement their surroundings.

Figures 6 & 7 show a photograph and a cross section through a typical flood embankment.

Approximately 810m of flood embankments are proposed for the upstream and downstream extents of the flood scheme.

### River Access

Access to the river banks will be maintained to allow the community to continue to enjoy the green riverside areas of the town for leisure activities, fishing, etc. Stairs and ramps over the flood defences have therefore been included in the outline design of the flood scheme and will be subject to discussion with the appropriate landowner.

Figure 9 shows a flood wall with provision for access to the river beyond.



Figure 9: Typical flood wall & river access