

# NOISE AND VISUAL BUFFERS

Newcombe Road Sand will operate mainly during the day, so the daytime noise limit will apply. We expect the noise to be within acceptable levels set by the Waipā District Plan or as specified through the resource consent.

Along the western boundary of the site, a 2.5 m high earth bund will be built to reduce noise. Most of the time, there'll be fewer machines working than what's been modelled, so actual noise may be lower than estimated.

## EARTH BUND

Building an earth bund using material from within the site boundary will be part of the first stage of the quarry development to help reduce noise and visual impacts on neighbours.

The bund will partially obscure existing views across the landscape, however the tops of the stockpiles and the washing and processing plant may be visible above the surrounding natural landform.

An earth bund has been selected due to its ability to integrate with the existing rural landscape.

### WHAT IS AN EARTH BUND?

An earth bund is sloped embankment or bund constructed using sand and topsoil used as a noise and visual buffer. The bund will be planted with native plants to stabilise the bunds and provide screening.

A good local example of an earth bund is between Cambridge North subdivision and Waikato Expressway.



**BUND CONTINUED OVERLEAF**



The bund will be built along the Stage boundaries to help reduce noise and visual impacts. Once the stages are complete, the material will be returned to the land as it is rehabilitated back to pasture.

## WHERE WILL THE BUND BE LOCATED?

The bund at the proposed Newcombe Road Sand site will be around the processing and stockpile area and along the western and southern boundaries of the site, using material from within the Stage 1 area.

As the land is quarried and lowered into the landscape, site activity will become increasingly out of view.

The processing and stockpile area will have an earth bund and visual screen throughout the entire the duration of the quarry operations (approx. 25 years).

As quarrying progresses through each stage, the site will be rehabilitated back to pasture using topsoil and overburden materials from the next quarry stage.

Once the final stage (Stage 5) has been completed, materials from the earth bunds will be removed and used to remediate the site to pasture.

An erosion and sediment control pond will be located at the base of Stage 1, enabling stormwater settling to take place well below the existing ground level, reducing potential noise effects during construction and maintenance and screening any visual effects.

## NEIGHBOURING VIEWS

The view for traffic passing the proposed Newcombe Road Sand site will change over the 25-year period from flat open pasture to a quarry sandpit, which will be progressively lowered and returned to pasture.

Once the earth bunds along the western and southern site boundaries are in place, the majority of the proposed quarry works will be screened from view. The bunds will be created in a similar style to those between Cambridge North subdivision and Waikato Expressway.

The backdrop of vegetation located along the Karāpiro Stream and the steeply undulating land associated with Sanatorium Hill will help the quarry blend into the surrounding landscape. Some taller sand stockpiles and the tops of buildings and some larger machinery may be visible from above the bund. Machinery used will be of a similar size to common farm machinery and that of earthworks in the surrounding landscape.

