Miniature Man-made Whitewater River

Abstract

The **Miniature Man-made Whitewater River 100** is designed such that it can be built on a small piece of elevated land that slopes down, with a gradient of around 300m/km to serve as a whitewater rafting facility. The overview of the **Miniature Man-made Whitewater River 100** is shown in **Figure 1**.

The elevated land area sloping down will be terraced, to create horizontal platforms to reduce the gradient of the slope gradually. The horizontal platforms then serve as channels to contain water, which form the course of the **Miniature Man-made Whitewater River 100**. Each platform will also slope downwards (**Figure 2**), to reduce the gradient. Abrupt descents link one platform to the next. It is an important feature to bring the whole course of the **Miniature Man-made Whitewater River 100** from the peak to reach the bottom given the height of the elevated land.

The width of the river varies over its course to create narrowing and widening path. The entire **Miniature Man-made Whitewater River 100** is around 500-1000m in length. This translates to a raft ride that would last for around 5 to 10 minutes.

There will be a huge finishing pool **107** at the bottom of the **Miniature Man-made Whitewater River 100**. This huge pool stores the water that is released down from the course of the **Miniature Man-made Whitewater River 100** and also acts as a recreation pool.

Finally, there will be various obstacles incorporated in the **Miniature Man-made Whitewater River 100** to make this whitewater rafting experience as life-like as possible.

Figure 1