

On Wednesday 23 October 2019 10:57:06 Kimberley Graham wrote:

> Hello,  
>  
> My name is Kim Graham and I am the Project Manager for a proposed pathway  
> in Onepoto Domain. The proposal is to install a 2.5m wide pathway setback  
> from the pond along the west side from the carpark turnaround to the  
> existing pathway. I have attached a concept plan depicting this.  
>  
> The proposal will keep most of the pond pathway intact, with the exception  
> of the initial section from the carpark. As this is the piece typically  
> inundated, this will be removed and replaced with planting. The access to  
> the pond and picnic tables would remain overall.  
>  
> As noted, I have attached the concept plan and kindly ask for your  
> feedback. Please let me know if you have any questions.  
>  
> Kind regards,  
> Kim

Thank you for the opportunity to respond.

As users of the pond for sailing model yachts, we welcome the plan to add an additional footpath for cyclists and pedestrians. While sailing we tend to stand and walk as a group on the current path and this, sometimes, may inadvertently hinder other users of the pond, especially as we concentrate on the yachts.

However, the removal of the initial section and replacing it with planting may not be our preferred option.

## **Flooding**

As you say, this part of the path has sunk over the years and is the first to be inundated when the pond level rises. The pond is about 2.2 metres relative to tide base while the high tides may go to 3.7 metres or more. The tide is restrained from flooding the pond by flap valves at the estuary end of the pond. These valves are held closed (when they work properly) for several hours each tide. While there is some leakage during high tide (and this prevents stagnation during summer months), the main cause of the pond flooding is long periods of rain running into the pond while the flap valves are closed.

The crater catchment area is about 40 hectares and the area of the ponds and streams is about 2 hectares. All rainfall in the crater must run out to the estuary via the ponds. When the ground is sodden after a period of rain then during high tide when the flaps are closed each centimetre of rainfall can give 20 cm flood water in the pond. I have measured a flood level of 800 mm above normal pond level and there are indications that it went to a full metre, at which point one of the picnic tables at the time floated off.

The plantings would need to be resistant to being inundated for several hours by brackish water (up to SG 1.020) as that area is known to be one that is covered by flooding.

## Settlement forebay

There is a forebay at the north end of the pond where the culvert crosses under the road. This needs to be cleared every year or two as it fills with silt and sediment. Heavy machinery needs to be able to access the area. I attach a photo of such a vehicle on that particular position last March.

In fact the planning map (drawing no 28016 sheet 10) drawn when the pond was dredged a couple of years ago showed that area as being a hard standing for those vehicles plus a silt drying area.



## Onepoto Management Plan

The management plan recognizes the pond as being a resource for sailing model yachts and has several requirements including that the "Footpath continue around the pond" and "Free flow of air near pond i.e.: no large trees nearby to disturb airflow."

Richard Plinston  
NZRYS President