

7 December 2007

Carisbrook Stadium Trust

INFRASTRUCTURE CAPACITIES - PROPOSED SPECTATOR EVENTS AND EDUCATION ZONE

As requested, I can confirm the capacity and capability of the wastewater, stormwater and water infrastructure to service development of a proposed multipurpose stadium with a seating capacity of 35,000 and 13,500 m² of university teaching and recreation space within the proposed Spectator Events and Education Zone in the Awatea Street area of Dunedin City.

Wastewater

The main wastewater pipeline along Parry Street is 300 mm diameter in size. This discharges to a pump station which has a rising main 300mm in diameter. I note that existing services will need to be shifted if the proposed multipurpose stadium is to go ahead.

Previous industries in the area consisted of a milk treatment station and a woollscour. Both these industries had very high discharge volumes to the wastewater system. The issues of capacity of the existing wastewater reticulation for the activities permitted in the proposed zone will not be a problem.

Water Supply

There is an existing 300 mm diameter watermain laid down Awatea Street, along Parry Street and back out to Ravensbourne Road. There are smaller watermains also present in this area. Again, a number of watermains may need to be relocated to accommodate any proposed development.

The existing water reticulation has been designed and installed to meet minimum requirements in terms of the fire hazard classification associated with oil depots. Previous industries using this water supply consisted of the milk treatment station and the woollscour. Both were very high water users.

As a comparison I have looked at the average daily consumption for water usage for events that were held at Carisbrook. One of the higher months recorded was in September 2005 when the monthly water usage was 2.4 million litres. This equates to an average daily usage of 70,647 litres, based on a 34 day reading period.

It is expected that any new buildings constructed in the proposed zone would incorporate water saving devices by way of low flow shower heads, dual flush toilets and flush controlled urinals, to name but a few.

There is no issue in respect to water supply to serve activities within the proposed zone for daily usage, one off events, servicing of fire sprinkler systems or water systems for the grounds. There is ample flow and pressure for fire fighting purposes.

Stormwater

I have reviewed David Hamilton's report on flooding and stormwater issues for the proposed multipurpose stadium. Mr Hamilton has covered the issue of stormwater and the associated issues in his report and therefore no further comment is required.

I assume that stormwater from the site will be directed to the Water of Leith. If so, some comment may be required from the Otago Regional Council in respect to quality and discharge rate of the stormwater.

In summary, there are no capacity and pressure issues within the wastewater and water reticulation to serve the proposed development that would be permitted in the proposed Spectator Events and Education Zone at the Awatea site.

Yours sincerely



David Dewhirst

SYSTEMS AND COMPLIANCE TEAM LEADER