

22 September 2016

Adam Goff
Senior Project Manager
Campus Infrastructure & Services
The University of Sydney

Reference no. 15119.01

Dear Adam,

RE: City of Sydney Comments on ESD DA Report – Faculty of Arts and Social Sciences Building, University of Sydney

We understand that the City of Sydney made the following comments on the ESD Report prepared by Surface Design as part of the Development Application:

Water Conservation

There is inconsistency between Sections 3.3 and 3.3.2 of the ESD Report – in the later, use of rainwater for toilet flushing is not a clear commitment. A clear commitment to dual plumbing or other design solution to ensure toilet flushing by non-potable source (using the 110kl water tank that has been designed in) with mains potable back up should be provided. It is also unclear why the proponent is not opting for waterless urinals in Section 3.3.1.

In response to the comments received from the City of Sydney we are able confirm the following:

1. Waterless urinals are not proposed for the building as these are considered a maintenance issue for University of Sydney Facilities Management team and a hygiene issue for education buildings which has large volumes of students who will use the facility on a daily basis.

Urinals with a flow rate of 0.7 L per flush have been specified for the project which are considered to be water efficient and will reduce potable water consumption within the building.

2. The building will incorporate a water harvesting system that will capture rainwater from the Level 6 roof and fire test water expelled during maintenance tests. Non-potable water and potable water sources are to be installed to the Toilets, End of Trip facilities, Irrigation and Cooling Tower plant within the building. As such dual plumbing will be provided to these areas.

The rainwater harvesting and reuse tank size has been optimised to 85kL based on additional water balance studies being completed by the qualified Hydraulic consultant. The water collected into this tank will serve irrigation, toilet and urinal flushing and cooling tower makeup demands. On an annual basis the captured non-potable water is expected to meet the following demands within the building:

Water Use	Total Water Demand (kL per annum)	Expected Demand Met by Non-potable Water Sources (kL per annum)	% Demand Met by Non- potable Water Sources
Irrigation	115.7	25.8	22.3%
Toilet and Urinal Flushing	4,603.7	1,027.5	22.3%
Cooling Tower Water Makeup	1,759.5	392.7	22.3%
Total	6,478.90	1,445.8	22.3%

We trust that this response addresses the City of Sydney's queries.

Please do not hesitate to call should you wish to discuss any aspect of it further. We look forward to working with you on this project.

Regards,

A handwritten signature in black ink, appearing to read 'Belinda', with a stylized flourish at the end.

Belinda Konopka
Sustainable Design Engineer
Surface Design

Ph: (02) 9249 1401

Email: b.konopka@surfacedesign.com.au

Encl:

Attachments: