

PCU55570

Sydney
WATER

08 September 2014

Attention: Thomas Mithen

Mr Daniel Keary

Director – Industry, Key Sites and Social Projects

Department of Planning and Environment

GPO Box 39

Sydney NSW 2001

Department of Planning
Received

9 SEP 2014

Scanning Room

RE: Site 67 Residential Development, Sydney Olympic Park (SSD6246)

Dear Mr Mithen,

Thank you for your letter notifying Sydney Water of the proposed development referenced above we have reviewed the application and provide the following comments for your consideration.

Water Main Amplification Advice

Existing site specific details

- Water supply system: Silverwater Gravity (Model Calibration completed 03/09/2012)
- The immediate development area has frontage to an existing dual feed 150 mm DICL main in Bennelong Pkwy, laid in 1996
- Approximately 90% of Bennelong Parkway is developed with buildings ranging from 5-8 storeys.

Development details

- Local environmental plans support SEPP (Major Development) along the route of the proposed amplification
- Maximum permitted building heights along the route of the proposed amplification is subject to the SEPP (Major Development 2005) – See council website.

WSA Code Requirements

- The proposed development falls into the category requiring a minimum 200mm main frontage as specified in the WSA code (Minimum Pipe Size Section 3.1.2 / table 3.1)
- A reticulation solution to provide 200mm water main frontage to the development area would require approximate 300m of main amplification from the existing 250 mm in Bennelong Parkway

System Capability advice

- A review of the existing system capacity (minimum operating licence requirement > 15m) to service the proposed development and existing customers in the local area shows that the minimum pipe size amplification is not required under this case
- The existing 150mm main in Bennelong Parkway has adequate capacity to service 352 residential apartments (based on current default demand rates Table SW 2.1).
- Future renewal of the 150 mm main would be sized as specified in the WSA code. (Minimum Pipe Size (Section 3.1.2 / table 3.1)
- No significant impact to Fire flow capability was identified when comparing the existing and ultimate demands within Bennelong Parkway.

Figure 1 – 2009 Land Zoning



Figure 3 & 4 – Aerial photos



Figure 5 Internal use only: Existing 10 l/s & 20 l/s v's Future 15 l/s & 25 l/s

Statement of Available Pressure and Flow

E-Dev Case Number 136102
100 Bennelong Parkway
Sydney Olympic Park, 2066

WMS No: 314970
Contact No: 88493531
Fax No: 88493071

Attention: Cassie

Date: 09/12/2013

Pressure & Flow Application Number: 8627782

Four Pressure Inquiry Dated: Mon December 9 2013

Property Address: 100 Bennelong Pkwy Sydney Olympic Park 2127

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

ASSUMED CONNECTION DETAILS

Street Name: Bennelong Parkway	Side of Street: East
Distance & Direction from Nearest Cross Street	225 metres Northeast from Australia Avenue
Approximate Ground Level (AHD):	6 metres
Nominal Size of Water Main (DN):	150 mm

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	69 metre head
Minimum Pressure	33 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	33
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5	40
	10	40
	15	39
	25	38
	30	37
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	5	33
	10	32
	15	32
	25	30
	30	29
Maximum Permissible Flow	37	27

(Please refer to reverse side for Notes)

Robert Wickham
Principal Planner
Urban Growth - Asset Services

Wastewater

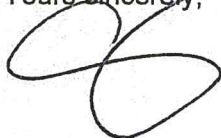
- The proposed development can connect to 225 mm inlet on the 900 mm trunk main located on the property
- Where proposed works are in close proximity to a Sydney Water asset, the developer may be required to carry out additional works to facilitate their development and protect the wastewater main. Subject to the scope of development, servicing options may involve adjustment/deviation and or compliance with the Guidelines for building over/adjacent to Sydney Water assets. Refer to your WSC for details of requirements.

Recycled Water

- The 90 mm recycled water main in Bennelong Parkway does not have sufficient capacity to serve the proposed development
- The proposed development will be served by an extension off the 300 mm main in Australia Avenue, which will provide full frontage to development
- The extension will be sized as a 150m recycled water main as per the Water Supply Code of Australia (Sydney Water Edition WSA 03-2002)
- Detailed requirements will be provided at Section 73 phase.

Further advice and requirements for this proposal are at attachment 1 (overleaf). If you require any further information, please contact Hannah Gilvear of the Urban Growth Branch on 02 8849 5296 or e-mail hannah.gilvear@sydneywater.com.au.

Yours sincerely,



Greg Joblin
A/Manager, Growth Strategy

Attachment 1

Sydney Water Servicing

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water.

Make an early application for the certificate, as there may be water and wastewater pipes to be built that can take some time. This can also impact on other services and buildings, driveways or landscape designs.

Applications must be made through an authorised Water Servicing Coordinator. For help either visit www.sydneywater.com.au > Plumbing, building and developing > Developing > Land development or telephone 13 20 92.

Attachment 2

Requirements for Business Customers for Commercial and Industrial Property Developments

If this property is to be developed for Industrial or Commercial operations, it may need to meet the following requirements:

Trade Wastewater Requirements

If this development is going to generate trade wastewater, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. You must wait for approval of this permit before any business activities can commence.

The permit application should be emailed to Sydney Water's Business Customer Services at businesscustomers@sydneywater.com.au

It is illegal to discharge Trade Wastewater into the Sydney Water sewerage system without permission.

A **Boundary Trap** is required for all developments that discharge trade wastewater where arrestors and special units are installed for trade wastewater pre-treatment.

If the property development is for Industrial operations, the wastewater may discharge into a sewerage area that is subject to wastewater reuse. Find out from Business Customer Services if this is applicable to your development.

Backflow Prevention Requirements

Backflow is when there is unintentional flow of water in the wrong direction from a potentially polluted source into the drinking water supply.

All properties connected to Sydney Water's supply must install a testable **Backflow Prevention Containment Device** appropriate to the property's hazard rating. Property with a high or medium hazard rating must have the backflow prevention containment device tested annually. Properties identified as having a low hazard rating must install a non-testable device, as a minimum.

Separate hydrant and sprinkler fire services on non-residential properties, require the installation of a testable double check detector assembly. The device is to be located at the boundary of the property.

Before you install a backflow prevention device:

1. Get your hydraulic consultant or plumber to check the available water pressure versus the property's required pressure and flow requirements.
2. Conduct a site assessment to confirm the hazard rating of the property and its services. Contact PIAS at NSW Fair Trading on **1300 889 099**.

For installation you will need to engage a licensed plumber with backflow accreditation who can be found on the Sydney Water website:
<http://www.sydneywater.com.au/Plumbing/BackflowPrevention/>

Water Efficiency Recommendations

Water is our most precious resource and every customer can play a role in its conservation. By working together with Sydney Water, business customers are able to reduce their water consumption. This will help your business save money, improve productivity and protect the environment.

Some water efficiency measures that can be easily implemented in your business are:

- Install water efficiency fixtures to help increase your water efficiency, refer to WELS (Water Efficiency Labelling and Standards (WELS) Scheme, <http://www.waterrating.gov.au/>
- Consider installing rainwater tanks to capture rainwater runoff, and reusing it, where cost effective. Refer to <http://www.sydneywater.com.au/Water4Life/InYourBusiness/RWTCalculator.cfm>
- Install water-monitoring devices on your meter to identify water usage patterns and leaks.
- Develop a water efficiency plan for your business.

It is cheaper to install water efficiency appliances while you are developing than retrofitting them later.

Contingency Plan Recommendations

Under Sydney Water's **customer contract** Sydney Water aims to provide Business Customers with a continuous supply of clean water at a minimum pressure of 15meters head at the main tap. This is equivalent to 146.8kpa or 21.29psi to meet reasonable business usage needs.

Sometimes Sydney Water may need to interrupt, postpone or limit the supply of water services to your property for maintenance or other reasons. These interruptions can be planned or unplanned.

Water supply is critical to some businesses and Sydney Water will treat vulnerable customers, such as hospitals, as a high priority.

Have you thought about a **contingency plan** for your business? Your Business Customer Representative will help you to develop a plan that is tailored to your business and minimises productivity losses in the event of a water service disruption.

For further information please visit the Sydney Water website at: <http://www.sydneywater.com.au/OurSystemsandOperations/TradeWaste/> or contact Business Customer Services on **1300 985 227** or businesscustomers@sydneywater.com.au

