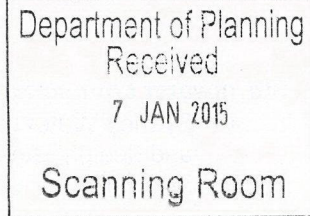


PCU057770

06 January 2015

Attention: Simon Truong
Mr Cameron Sargent
A/Manager – Key Sites
GPO Box 39
Sydney NSW 2001



RE: 23-33 and 35-39 Bridge Street, Sydney (SSD 6751)

Dear Mr Truong,

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.

Stormwater

- There is insufficient information at this stage to provide advice on the proposed development
- There are several Sydney Water stormwater assets that may be impacted, particularly heritage. These must be identified and addressed.

City Area 29

- Castlereagh St, stormwater branch- Oviform 711x1070 brick
- Pitt St, stormwater branch -300mm Concrete

1. Asset Impacts & Protection

Constructing an access bridge over stormwater assets

- Sydney Water's guidelines for constructing bridges outline the process and design requirements for such activities.

Constructing a building over or adjacent to stormwater assets

- Sydney Water's guidelines for constructing buildings over or adjacent to stormwater assets outline the process and design requirements for such activities. As per the guidelines, the applicant is advised of the following:
 - No building or permanent structure is to be constructed within 1m from the outside wall of the stormwater asset.
 - Sydney Water requires a Flood Impact Assessment (FIA) to support such works – the FIA must demonstrate that there are no potential adverse flood impacts offsite due to the development and evaluate the impacts of flooding on the proposed development.

Stormwater connections to existing built assets

- The applicant is advised of the following:
 - The connection angle is to be no greater than 30 degrees in the direction of the channel flow.
 - Proposed connections that are 300mm or more in diameter require a qualified structural engineer to design the connection. A structural engineer's certificate is to be attached with the design drawings.
 - Proposed connections that are less than 300mm in diameter can use Sydney Water's standard drawings to design the connection drawings.
 - All drawings are to be submitted in AutoCad to the Water Servicing Coordinator. The title of the drawings shall be as follows:

Stormwater connections to natural waterways

- Sydney Water's guidelines for stormwater connections to natural waterways outline the process and design requirements for such activities. As per the guidelines, the applicant is advised of the following:

Temporary or permanent diversion of stormwater assets

- If temporary or permanent diversion of Sydney Water's stormwater assets is required a diversion plan will be required to be approved by Sydney Water. The applicant must address the following requirements:
 - Hydraulic Capacity Feasibility Study
 - This study must demonstrate that the existing stormwater system's hydraulic capacity and performance will not be impacted. This ensures the existing capacity of the stormwater system is maintained.
 - Disconnection/connection methodology
 - Clearly describe and specify how disconnection/connection of Sydney Water's stormwater assets will take place.
 - Interim Operating Procedure
 - An Interim Operating Procedure (IOP) must be prepared by the proponent to own, operate and maintain temporary stormwater assets. The IOP will indicate that the proponent/applicant will own, operate and maintain the temporary stormwater assets and must address any impacts (including financial). Once Sydney Water's stormwater assets are disconnected, Sydney Water will have no responsibility on the operations and maintenance of the temporary stormwater asset.
 - Sydney Water may resume to own, operate and maintain the permanent stormwater drainage system if it is constructed to Sydney Water's requirements.
 - Risk management controls & emergency response plan
 - A risk workshop must be conducted with relevant design consultants, Water Servicing Coordinators and contractors to identify key risks, management controls and develop an emergency response plan to ensure safety of people and property in the event of asset and/or embankment failing or flooding. This plan is to be developed and approved by the relevant authorities.
 - Backfilling
 - Plans must provide for any redundant pipes that will be backfilled.

Other agency notification

The applicant is notified that other agencies must be notified of the proposed work including local council, Roads and Maritime Services, Office of Water, other respective agencies.

2. Flooding Impacts

- The applicant is required to submit a Flood Impact Assessment report based on a current flood model for the proposed development and identify flood hazards. The FIA must demonstrate that there are no potential adverse flood impacts offsite due to the development and evaluate the impacts of flooding on the proposed development.
- For State significant developments the applicant is also required to submit a Flood Hazard Management Plan as per Floodplain Development Manual. The flood models need to assess 5, 20, 100 and 100 year plus climate change year storm events.
- Sydney Water requires the models to be 1D/2D models. Models should be simple and easy to read illustrating in maps:
 - Flood levels
 - Velocities
 - Hazards

- Sydney Water needs to ensure that developments do not adversely impact on people, properties and infrastructure.

On-site Stormwater Detention

- Sydney Water's guidelines for on-site stormwater detention (OSD) outline the circumstances when a development is required or exempted from providing an OSD system and its design specifications. As per the guidelines, the applicant is advised of the following:
- The proposed development requires OSD system to offset stormwater run-off. To determine if OSD is applicable to your development and what Sydney Water's requirements are, the following site specific information is required to be submitted:
 - address in which the development will occur
 - total site area (m²)
 - existing pre-development impervious area (m²)
 - proposed post-development impervious area (m²)
 - The proposed development requires an OSD system to meet Permissible Site Discharge (PSD), Site Storage Requirements (SSR) m³

If a percentage of the site area does not drain into the OSD system, the rate of discharge from the OSD storage must be restricted so that the total flow from the site (from the OSD storage and free runoff) does not exceed the specified PSD.

- Sydney Water's guidelines for on-site stormwater detention (OSD) outline the circumstances when a development is required or exempted from providing an OSD system and its design specifications. As per the guidelines, the applicant is advised of the following:
 - As the proposed activity / development does not connect directly to a Sydney Water stormwater asset or is within the City of Sydney LGA, Sydney Water requires the applicant to comply with the local council's OSD policies and guidelines where available.
 - If local council does not have current OSD design specifications, Sydney Water requires the applicant to comply with the specifications detailed in our policy and guideline.

3. Stormwater Quality

Discharged Stormwater Quality Targets

- Stormwater run-off from the site should be of appropriate quality and quantity before discharged into a Sydney Water asset or system. Developments must demonstrate stormwater quality improvement measures that meet the following specified stormwater pollutant reductions:

Pollutant	Pollutant load reduction objective (%)
Gross Pollutants (>5mm)	90
Total Suspended Solids	85
Total Phosphorus	65
Total Nitrogen	45

4. Easements & Land Constraints

Easements

- The applicant's proposed activity / development will impact an existing Sydney Water easement. Sydney Water's guidelines for easements outline the restrictions and obligations set on works within stormwater easement boundaries. As per the guidelines, the applicant is advised of the following:
 - Our records indicate that your proposal will/may impact a heritage listed asset. Therefore, you are required to obtain Heritage Council approval for any work.

- *[Advise which easements are affected (inclusive of heritage - <http://www.sydneywater.com.au/SW/water-the-environment/what-we-re-doing/Heritage-search/index.htm>)]*
- *[Advise of any restrictions & obligations]*
- *[Advise of any requirements against their proposed activity / development]*

Water

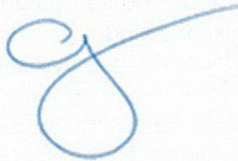
- For the proposed development, the drinking water main available for connection is the 250mm main on Bridge Street.
- Detailed requirements will be provided at the Section 73 application phase.

Wastewater

- The wastewater main available for connection is the 300mm main located on Bridge Street.
- Detailed requirements will be provided at the Section 73 application 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.

Building Plan Approval

You must have your building plans stamped and approved before any construction is commenced. Approval is needed because construction/building works may affect Sydney Water's assets (e.g. Water, sewer and stormwater mains).

For further assistance please telephone 13 20 92 or refer to the Building over or next to assets page on the Sydney Water website (see Plumbing, building and developing then Building over or next to assets).

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 15 meters 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