INNER WEST

File Ref: SSD-10468

3 November 2021

Department of Planning, Industry & Environment
Locked Bag 5022
Parramatta
NSW 2124

Dear Mr Copas

New Request for Advice – Warehouse and Customer Fulfilment Centre, Marrickville

Property: 74 Edinburgh Road, Marrickville

Council has reviewed the submitted additional information forming the formal Response to Submissions and makes the following comments:

Flooding

The subject site is identified as being located within flood prone land. The application has been reviewed by Council and the following comments with regards to flooding are made:

i. The amended proposal has reduced the 1 in 100 year flood level applicable to the site from 4.81m to 4.61m AHD (200mm) with no explanation on how this was achieved given that no additional flood storage was proposed. Further clarification on how this was achieved will need to be provided. Given the extent of flooding on the site and the impacts that may occur off site it recommended the flood model be peer reviewed by an independent consultant such as GRC Hydro who has done a lot of work for the Sydney Metro project in the area and has good knowledge of the drainage system.

ii. The proposed floor levels have not been raised to provide the minimum 300mm freeboard as previously advised to comply with Council's Flood Management DCP. The minimum floor levels of the proposed development must be at 4.91m AHD (based on the current flood level that still needs to be verified). The proposal to provide threshold ramps is unsatisfactory and is not supported;

iii As previously advised the improvement post development in flood depths is achieved by collecting the flood waters by pit inlets and diverting them to an underground flood detention of 1200m3 volume equal to the existing site's above ground 1% AEP flood storage. The current stormwater plans detail very little inlet capacity to adequately capture these overland flows arriving on the site. It appears the inlet capacity is only provided by a single 2.4m kerb inlet pit (Pit 4A) and a single 900x900 grated pit (Pit 4B) which is unsatisfactory.

iv Additional information will be required on the volume of flows entering the site and the inlet capacity provided on site to capture these flows. HEC-22 Inlet capacity calculations shall be provided, tabulated on a spreadsheet (preferably excel) so the inlet capacity can be verified.

v. To model the blockage the outlet from the flood storage chamber (which also drains the site) was modelled as 100% blocked for the 100yr ARI, however no blockage of the inlet structures has been modelled as previously requested. Using blockage of the outlet as a proxy for inlet blockage is not acceptable when your flood protection measures are based on the performance of your inlet capacity to adequate capture overland flows. It is recommended that the suggested Design Blockage Factors as per Table 9.5.1 of Book 9 of AR&R be used to model blockage of the inlet pits as shown below;

Type of structure		Blockage conditions	
		Design blockage	Severe blockage
Sag kerb inlets	Kerb inlet only	0-20%	100% (all cases)
	Grated inlet only	0-50%	
	Combined inlets	Capacity of kerb opening with 100% blockage of grate	
On grade kerb inlets	Kerb inlet only	0-20%	100% (all cases)
	Grated inlet only (longitudinal bars)	0-40%	
	Grated inlet only (transverse bars)	0-50%	
	Combined inlets	10% blockage of combined inlet capacity on continuous grade	

vi The blockage factor used for each pit shall be tabulated in any future submission

Stormwater

i. The proposed relocation of the Sydney Water Stormwater channel to Council's Road Reserve (new footpath alignment) is not supported. Removing the Stormwater channel from within the property to encumber Council property is unsatisfactory. Any relocation shall be undertaken within the final lot boundaries of the site.

ii. The channel will be 3000m wide (assumed internal) and close the surface. No details on cover available over the channel have been provided. The width of the channel will take up the full width of the footpath leaving little room for existing and proposed services in the footpath. In addition due to the width and minimal cover over the channel no meaningful landscaping and trees can be planted. In addition, there will be no room for the relocation of services within the footpath. The existing footpath has Ausgrid power

cables and poles, Council stormwater pits and pipes, 150mm water main, Telstra and NBN cables etc. The proposed relocation of these services needs to be detailed on future submission.

iii It is doubtful that the proposed diversion of the channel will have the same hydraulic capacity as the existing channel given that the size is the same, the hydraulic losses produced by the double 90 degree bends and the fact that the grade of the channel has been reduced. This will need to be adequately modelled with a Hydraulic Grade Line Analysis provided to ensure that there are no impacts upstream of the channel bends. I note that the calculation shown on the stormwater plans have shown no loss in capacity by changing the value of Manning's "n" with no justification.

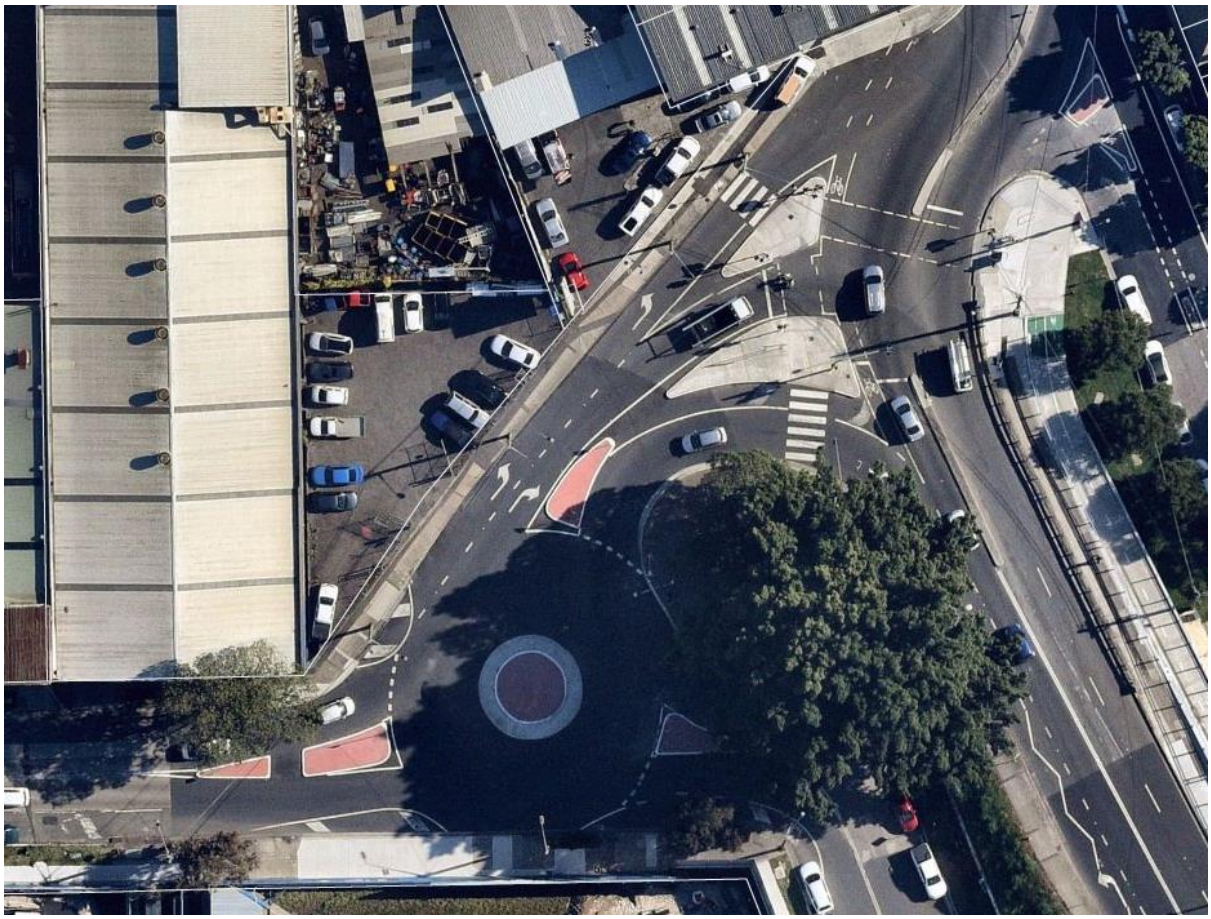
Traffic

i. The Traffic Signals design shall be amended to include bicycle lanterns;

iii. Although an off-road shared pedestrian/cycle path has been shown on the plans it has not been designed to be a minimum width of 3 metres for its full length as previously advised. This must be shown on the plans;

iii. Road widening in Sydney Steel Road must be provided and be detailed on the plans to allow for a shared pedestrian/cycle path to be fully within the road reserve. The current plans show part of the path on private property (within the site).

iv. The intersection of Bedwin Road and Edingburgh Road has undergone significant changes recently. The Traffic and Access report shall clarify what is the largest proposed vehicle to use this intersection to gain access to the site and provide swept vehicle templates to ensure that they can manoeuvre through the intersection. Any changes to the medium islands or roundabout shall be at the applicants cost.



Arboricultural Impact Assessment

i. Whilst the site and adjacent trees have been assessed by an Arborist the significance and retention values have not been used to inform the design to allow for retention of High value trees. Note – Seventy-eight (78) high value trees are proposed for removal. It is recommended that many more of the high value trees are retained and protected as a component of the design.

ii. An Arboricultural Impact Appraisal (AIA) and Method Statement has been prepared by Naturally Trees (dated 21 May 2020). This report notes that seventy-eight (78) high category trees will need to be removed for the proposal. It is also noted that fifty-five (55) of these were approved for removal under DA201500168. The report recommends that in order to compensate for loss of amenity, consideration should be given to replacement planting within the site. The trees proposed for within the site are small trees such as Tuckeroo, Crepe Myrtle, Dwarf Magnolia and Watergum. It is recommended that more variety in canopy size and tree height is incorporated into the internal planting. Whilst all of the street trees that are currently adjacent the site will be removed, it is noted that the street tree planting will (in the long term) eventually replace the lost canopy in this regard.

iii. The proposed canopy cover on site is not sufficient. The Landscape SSDA Report prepared by Site Image notes that only 4% of the site will have canopy cover. The

canopy cover targets for land zoned IN1 is 25% in both the Inner West Tree Management DCP and the Greater Sydney Commission District Plan.

iv. Tree on adjacent site - In the AIA report prepared by Naturally Trees (dated May 2020) it is noted that Tree 74 (*Eucalyptus tereticornis*) 'is an important tree on the adjoining property with an existing kerb and hard surfacing near it. The proposal is to demolish the kerb and hardstand and construct a new entry ramp and driveways within its TPZ. These changes are likely to cause harm however all efforts should be made to retain this tree'. The report also recommends tree sensitive construction methods must be implemented.

v. There is not sufficient detail on the plans to determine if Tree 74 can be viably retained (even with Arborist supervision and tree sensitive methods as recommended). Any proposal that will impact the structural stability or health of a tree on an adjacent site, will require the neighbouring owners consent for removal. It is recommended that the viability of Tree 74 be investigated in detail before any further design development so that adjustment can be made if required. Proposed trees - Where new trees are proposed within or adjacent to large areas of pavement it is recommended that Strata Vault or similar are installed to provide sufficient non compacted below pavement soil volumes for viable and long term tree growth. It is recommended that Final Landscape Plans include soil volume calculations for each tree.

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vii. Relocation of stormwater culvert – The proposed location of the culvert is not supported because of the direct impact this will have on soil volumes available for the replacement streets on Edinburgh Road and internal landscape trees along this street frontage. The culvert location must be amended so that required deep soil volumes for trees are not constrained. The removal of the existing trees cannot be supported unless the trees are to be replaced in a viable growing environment.

viii. Soil volumes for trees – The Landscape Plans/Landscape Report must include soil volume calculations demonstrating that street trees and site trees have sufficient soil volumes to allow for the development of healthy root systems. Note – Medium trees ideally require approx. 27-38 m3 and large trees approx. 27-39 m3 (each) depending on soil conditions. Where trees are planted in shared contiguous planting zones and irrigated the soil volumes may be able to be reduced.

<u>Other</u>

i. It is recommended that any existing overhead power cables along frontages of the site be relocated underground (including any proposed power cables) with appropriate

street lighting and new steel standard poles. The street lighting must be designed in accordance with Australian Standard AS1158-Road Lighting and the Network Standards of Ausgrid and must meet the lighting category required by Council.

If you need any further assistance in relation to the above matters please contact Conor Wilson – Senior Planner on 9392 5997 or email conor.wilson@innerwest.nsw.gov.au.

Yours faithfully

Martin Amy
Acting Manager Development Assessment