SydneyOlympicPark

6 June 2016

Mr Brendon Roberts
A/ Team Leader – Key Sites Assessment
NSW Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Matthew Rosel

Dear Mr Roberts,

RESPONSE TO NOTICE OF EXHIBITION – SSD 7445 Site 9 SYDNEY OLYMPIC PARK

I refer to your letter dated 21 April 2016 regarding the exhibition of the above application.

The Sydney Olympic Park Authority (SOPA / the Authority) supports the proposed development and believes that the proposal generally complies and contributes to the vision of a vibrant township as outlined in in the Sydney Olympic Park Master Plan 2030.

The Authority has reviewed the submitted application and wishes to raise the following in relation to the proposed development.

1. Ground level plant / services

The ground level of the building is heavily encumbered with plant and services which occupy more than 50% of the ground level frontages. These impact on the size of ground level retail tenancies and the residential lobby and create long stretches of bland and inactive frontages in areas where high pedestrian use is expected.

Recommendations:

1. *Consider increase activation of ground level floor space, particularly along the through site link.*

2. Quality of Materials and finishes

While the design of the façade is generally well considered, there are concerns with:

- Mitigating the impact of above-ground carparking. The design proposal should screen the utilitarian carpark function from the Boulevard and Sarah Durack as well as noise and fumes emanating from the carpark.
- The quality of some materials: off-form concrete finishes and expanded aluminium mesh require careful consideration for a development fronting the Boulevard
- The lack of certainty in relation to materials proposed. For example, slab edges are either off-form concrete or aluminium clad. There is a significant difference in quality between the 2 options offered.
- Terracotta will add warmth and texture to the facade and is essential to a quality finish on the podium levels. Its continued use is strongly recommended and consideration could be given to using a greater colour range.

Recommendations:

1. *Provide details of an alternative material to expanded mesh for consideration (to all street frontages of the podium).*

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2. *Consider alternative stack or rear laneway facing ventilation solutions for the carpark that don't rely on the Olympic Boulevard, Sarah Durack or street 22 frontages for cross ventilation.*
3. *a condition of consent requiring provision of* ***Materials and Finishes Schedule*** *(or a finishes board) confirming all materials and finishes and clearly indicating their application throughout the development, especially the use of the terracotta panelling, is to be submitted for approval of SOPA's Executive Director – Operations (EDO).*
4. *Provide specific detail on the quality of finish on the slab edges including specifications on the thickness of slab edges to retain the quality of finish proposed for approval.*

3. Tower Floor plans and Apartment layouts

The 'boomerang' shape of the buildings floor plate provides for a quality narrow footprint. The majority of apartments have a long frontage and many meet the 8m depth requirement in the ADG. Key concerns are:

- that the narrow footprint design has not been better utilised to provide greater cross ventilation, as only two of the eight apartments per floor have dual frontage to provide for cross ventilation.
- Most of the apartments on each floor have AC condenser units on the balconies. This is no longer considered to be good practice as it reduces the usability of the balconies.
- Given the fire stair has a large external wall surface and is generously proportioned, it has the potential to be better utilised on a daily basis by residents, especially if there were windows or viewing panels in the outer wall.

Recommendations:

1. *Where possible seek to maximise the number of dual frontage apartments.*
2. *Incorporate a 'natural stack' ventilation system with registers to the rear of apartments i.e. near the kitchen, entry hall and bathroom areas for single orientation apartments.*
3. *AC condensers to be located away from balconies – consider enlarging the AC condenser rooms on every floor to accommodate the needs of the entire floor.*

4. Utilisation of Communal Open Space

As currently planned, The Level 7 South Podium roof space cannot be accessed. Whilst it is understood that the space is likely to be subject to downdrafts and wind turbulence, this area is a significant exterior asset to the building and has potential to be better utilised.

Recommendations:

1. *Part of the level 7 roof space could be utilised as external private space for each of the two dwellings facing onto the space to create garden apartments.*
2. *Provide a connection from the lobby so that the remainder of the space is accessible to residents as an alternative green landscaped passive communal recreation area, when weather conditions permit.*

5. Public domain

The colonnade zone is not well integrated into the public domain, and is less likely to be active and usable as a result. Key concerns are:

- very few connections from the colonnade to the Boulevard's public footpath
- Barriers created by continuously landscaped planting beds and seating benches
- Residential lobby entry columns partially obstruct the path of travel along the colonnade
- No information on paving treatments and how it will be integrated with the existing Trihex, Eco- Trihex and asphalt paving at this corner

Recommendations:

1. *Consider repositioning the 2 columns impeding the colonnade zone at the residential lobby entry, so that they are out of the path of travel.*
2. *Provide more frequent crossing points between the Hoop pines to connect the colonnade and the footpath. These should be in permeable paving i.e. Eco Trihex and could incorporate steps to resolve the substantial level changes in some areas.*
3. *Relocate seating benches, to clear the crossing points recommended in point 1 above.*
4. *Prepare an **Integrated Public Domain Plan** that coordinates the colonnade area, paving finishes and other public domain elements, to the satisfaction of the SOPA's EDO.*

6. Bicycle parking provisions

The proposed bicycle parking provision of 201 on-site spaces is below the minimum requirement of 387 spaces, on the basis that the required minimum residential provision is excessive. This assertion is not supported by any research into current or long term bicycle usage.

The Authority is committed to promoting bicycle use for environmental benefits, health and recreational purposes and as an alternative transport option. As such, proposals which underprovide bicycle parking and associated amenities are not supported.

Recommendations:

1. *Provide for 387 secure, conveniently located bicycle parking spaces as required by MP2030; either on-site or alternative locations that deliver the same outcome.*

7. Pedestrian Access & Safety

Pedestrian flows from P3 to/from Sports Centre/Netball Central/ Hockey/Tennis generated by major event and routine sports competition and training will be impacted by the proposed building and 'through site link'.

This may create potential road crossing safety issues particularly on evenings when there are strong flows of spectators and players moving around and through Site 9.

Pedestrians using the 'through site link' may short cut/jay-walk across Olympic Boulevard instead of using the pedestrian crossing at the intersection at Olympic Boulevard/Sarah Durack Avenue and be exposed to potential conflicts with vehicles.

Recommendations:
The traffic report is to address potential safety aspects of pedestrian movements around and through the building particularly in major event modes for Tennis, Hockey, Sports Centre and Netball Central and suitability of the median strip as a pedestrian refuge.

8. Tree Protection / Preservation

An agreement was reached at a meeting on March 17 2016 between SOPA Officers, developer representatives (including the consulting Arborist) to retain and protect 12 of the 14 Hoop Pines (*Araucaria cunninghamii*) proposed for removal (5.2 TURF Tree Removal drawing).

All trees assessed by the Arborist were deemed to be in healthy condition and based on the successful management of Tree Protection Zone (TPZ) fencing during demolition and construction works on other town centre development projects e.g. Pullman Hotel, Netball Central, Site 4B, the risk of damage to tree is regarded as low to warrant the protection and retention of these trees.

Two trees were identified for developer funded transplanting to other sites on the Olympic Boulevard where specimens are in poor condition (see below):

- specimen closest to the Sarah Durack Ave corner (TURF: identified as tree 1)
- specimen located where the proposed through-site link joins the Olympic Boulevard northern footway (TURF: identified as tree 7)

Recommendations:

- *Construction works to be in accordance with SOPA's Tree Protection on Construction Sites Guidelines*
- *Tree Protection Zone fencing (height 1.8m) is required during demolition and building construction phases*
- *Any service connections within the TPZ must be supervised by a consulting Arborist and be aligned to minimise loss of root plate using manual trenching and/or boring*
- *Paved pedestrian crossings are allowed (maximum 2m) wide equidistant between Hoop Pine trees using Eco-Trihex permeable pavers (as per UEDM 2009)*
- *Minor 'crown lift' pruning of lower branch 'whirls' to be agreed and supervised by SOPA Authority's Manager Site Presentation.*

9. Stormwater Management

The SSD is to address SOPA's Stormwater Policy, which requires the following minimum information to be submitted with a development application:

- *An integrated water cycle management plan including a description of how all stormwater generated on the site will be managed and a water balance report*
- *Justification for why each element of the water sensitive urban design strategy has been selected over alternate approaches*
- *Design assumptions including design rainfall events used to size rainwater tanks and water sensitive urban design elements*
- *A site layout plan showing the location of each element of the proposed stormwater treatment train; design details of each element*
- *Monitoring and maintenance plan*

10. Contamination and Remediation Action Plan

SOPA considers that the Remediation Action Plan (RAP) – Project DL3620, prepared by DLA Environmental Service, is generally well considered. However, as the holder of the Contaminated Lands Management Act Notice issued in relation to the site, SOPA will need to carefully review the relevant management plans to ensure they contain a sufficient level of detail, address the relevant ongoing environmental risks in relation to the remediated landfill and do not impede the Authority's ability to comply with its ongoing statutory responsibilities.

Recommendations:

- *The SSD is to address detailed comments in relation to the RAP, which are provided at* ***Attachment 1****.*

11. Accessibility & Building Code of Australia

Any construction plans are to demonstrate compliance of the provisions for persons with a disability with the requirements of AS 1428.1 *SOPA's Access Guidelines 2015* and the recommendations contained in the Access Report by Access Solutions dated the 31st March 2016.

Should you require any further information on the above please contact me on 9714 7934 or Dat Tran – Planner on 9714 7139

Darlene van der Breggen
Executive Manager, Development Planning

ATTACHMENT 1
Detailed Comments regarding Contamination & Remediation Action Plan

SOPA provides the following comments and suggested amendments in relation to the Remediation Action Plan prepared by DLA Environmental Service (Project DL3620):

- Section 1.5 - The RAP must given consideration to the requirements under the Contaminated Lands Management Act Notice – 28040 and Remediated Lands Management plan to which Site 9 is subject.
- Section 2.10 Site History – should read "*It is understood that an inward hydraulic gradient is used to prevent the migration of contaminants off-site. Landfill leachate is collected via a gravity drain which drains into a leachate rising main. However, there is no leachate collection and transfer infrastructure located on the development site and the proposed design for the Site is not expected to compromise the Golf Driving Range leachate management system……".*
- Section 3.4: PAHs were observed in soil samples. It is not stated in what depth. Depth is important considering assessment is undertaken for a proposed Residential B site which is a Residential site with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise building and apartments. The assessment has to refer to proposed development as well as the proposed remediation action.
- Site 9 is located adjacent to P3 car park. This area is known to have significant concentrations of landfill gas – the location of the site to P3 car park should be acknowledged upfront.
- Section 4.1: In addition to methane and carbon dioxide carbon monoxide and hydrogen sulphide which is toxic are contaminants of concern.
- Section 4.2 – The RAP should be recognised that the potential for offsite migration of contaminates through infiltration and groundwater movement only remains low if the landfill containment system is managed in accordance with its intended design – maintain inward hydraulic gradient through collection and extraction of landfill leachate.
- Section 4.3: Exposure pathways are identified based on contaminants of concern and future potential development activities. They should distinguish between potential exposure pathways construction/remediation activities and potential exposure pathways after completion of construction/remediation. Different exposure pathways and different mitigation measures.
- Section 4.4: The RAP should discuss the different sensitive receptors during construction/remediation and after works are completed. The RAP considers only landfill gas. Soil/dust, waste, asbestos and contaminated groundwater during construction/remediation have not been considered
- Section 4.4 – Potential sensitive receptor – does not include residents. Given risk is associated with exposure time; residents (particularity the very young and old) would be the most sensitive receptors spending the most time on the site once occupied. The RAP should consider and provide information on residents as sensitive receptors.
- Section 5: Fact that the proposed site development is located on a landfill with a cap and containment system and leachate collection system is not acknowledged. The RAP should be amended to include this information.
- Section 6.1: The remediation strategy should also achieve: maintain the integrity of the landfill and related landfill/leachate infrastructure. The remediation strategy has to incorporate this as a requirement of the Remediation Notice for the site issued under the CLM Act and RLMP.

- Page 27 - Section 6.5.1: states that the preferred strategy for managing leachate is for it to remain onsite within the landfill. It will not be permissible to dispose of leachate back into the landfill collection systems this may compromise function. SOPA will require any leachate that needs to be disposed of to (including any surface waters that come into contact with waste) to be tankered offsite to a facility that can lawfully receive that waste. – The RAP should be amended accordingly.
- Page 25: The RAP should provide information on what is meant by "water bars".
- On-site capping and containment – suggests capping for management of contaminants including Landfill gas. Gas will not be contained by capping alone. Service trenches and pylons that will be required for the basic construction will provide a conduit for landfill gas migration into building cavities. The RAP should be amended to acknowledge that the installation of capping plus appropriate protection measures for LFG will be required to minimise the risk of LFG.
- The RAP should specifically state that the proponent will engage a NSW EPA accredited Site Auditor with specialist knowledge in remediated lands and landfill gas systems to oversee the implementation of the RAP and associated infrastructure and ultimately signoff that the construction is fit for purpose.
- Table 8A – Important requirement should include any soil importation requirements as specified by SOPA.
- The RAP should state that remediation contingencies, if required, may need to be implemented prior to occupation. Remediation contingencies must be overseen and approved by a NSWEPA accredited Site Auditor with specialist knowledge in remediated lands and landfill gas systems to certify that they are fit for purpose. This should be made clear in the updated document.
- Sediment and erosion controls –The RAP must acknowledge that any water that comes into contact with the excavation into the landfill waste is leachate and must be managed as such. This wastewater cannot be discharged; it must be tankered to a facility that can lawfully receive that waste or be managed by allowing it to infiltrate back into the landfill, provided SOPA has been consulted and provided approval to ensure that infiltration can be managed without compromising the integrity of the remediated lands. Section 6.5.1: it is unclear what is meant by circulating leachate under gravity within the landfill. All leachate (including any surface waters that come into contact with waste, must be removed and lawfully disposed. The RAP should be amended accordingly.
- In relation to dust control measures, work may need to cease on windy days when dust cannot be effectively managed on-site. Stockpiles may need to be covered or sealed. These methods should be included in the RAP as appropriate action or responses.
- Section 7 Validation Plan: It is noted that all soils are in compliance with proposed land use criteria. This has not been demonstrated in the RAP. Either provide summary of soil data and assessment or include in data and assessment in appendix. At least a reference to the DSI (Detailed site investigation) has to be included. A Site Auditor is unlikely to be able to accept this without the supporting information.
- Section 7.3: Unclear what is implied with the first sentence *Asbestos will not be visible at the surface or within the surface 100mm soils. Clarification is required.*
- Given the site is a remediated landfill, the Unexpected finds protocol must not be limited to asbestos, but applied to all unexpected finds. This should be amended.
- A validation sampling and analysis or plan is required. It should include landfill gas monitoring. This should be reviewed by the Site Auditor to ensure it is appropriate. The plan should be included as part of the RAP.
- Section 10 should repeat requirement of asbestos management plan. If there is likelihood of encountering contaminated groundwater a groundwater management plan should be provided.

- Groundwater Management Plan - If there is likelihood of encountering contaminated groundwater, a groundwater management plan Will be required. Diversion of leachate (contaminated groundwater) back into the landfill is generally on an accepted management practice. The RAP should be amended to remove this statement in place of a commitment to prepare a groundwater management plan as part of the CMP for the site. The groundwater management plan to be provided to the Site Auditor and to SOPA for consideration and approval. SOPA has the legal liability for management of the landfill and leachate extraction system and needs to be confident that leachate (contaminated Groundwater) will be managed appropriately.
- Section 10.9 should provide all emergency contacts including nearest hospital, first aid, doctors etc.
- A Map showing extend of the Golf Driving Range Landfill and the location of Site 9 should be included to provide context.