SSD_6603: Site 68, Sydney Olympic Park

Response to Submissions

March 2015

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1 Introduction

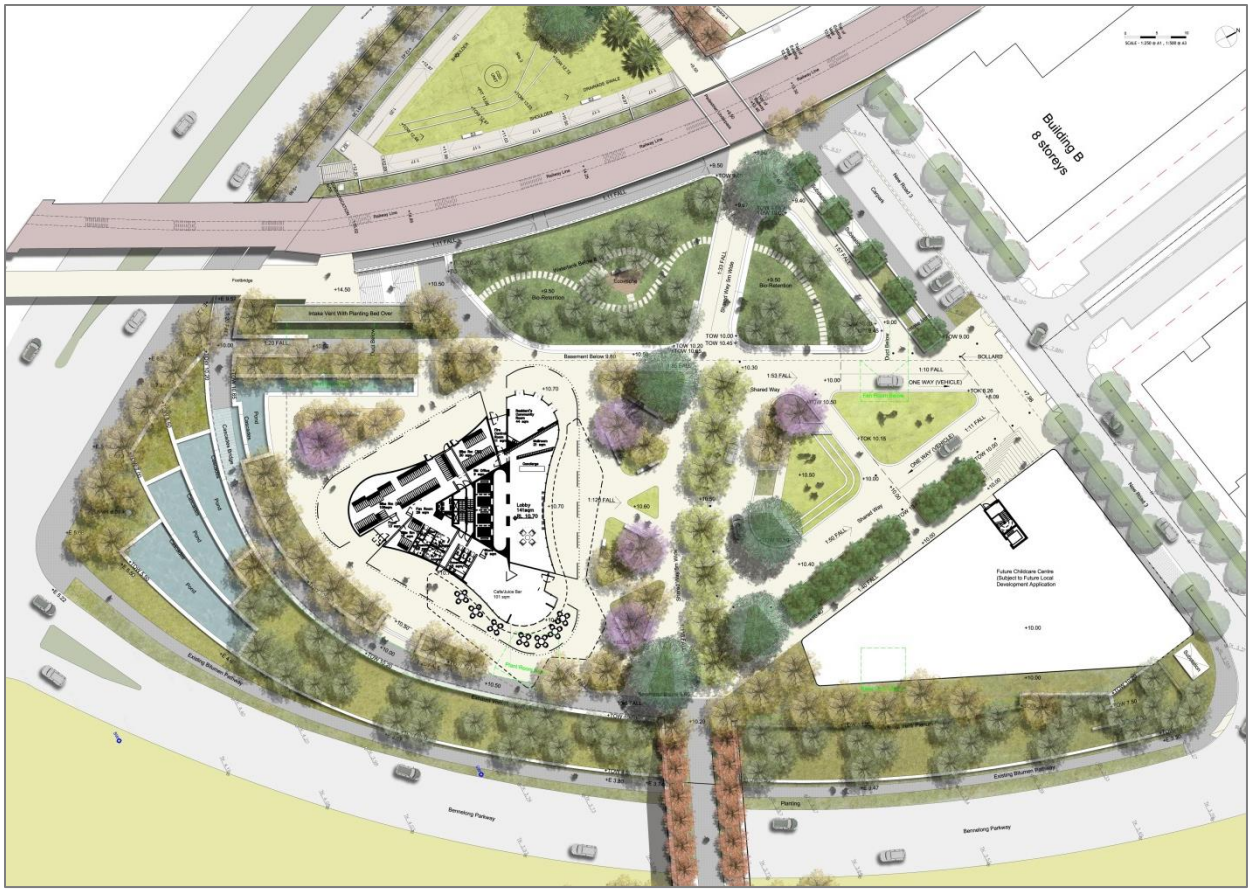
1.1 OVERVIEW

This Response to Submissions Report has been prepared on behalf of *Ecove Group Pty Ltd*, the proponent for the Staged Development Application for State Significant Development SSD_6603. The application was lodged in November 2014 and seeks approval for:

- A mixed use tower building comprising 33 residential floors, with 369 apartments, and 120m² of ground floor retail / commercial uses;
- A stormwater detention tank;
- Three levels of basement car park, comprising 408 resident spaces, 42 visitor spaces, 2 retail spaces, and 20 child care centre spaces; and
- Associated landscaping works, comprising mature plantings, bio-retention wetlands, and a cascading waterfall.

The indicative footprint for a childcare centre is illustrated on the architectural drawings in the northern portion of the site. Consent for the construction of a child care centre with an approximate gross floor area of 700m² is to be sought under a separate local development application.

FIGURE 1 – SITE 68 SOP – PROPOSED GROUND PLANE



The application was placed on public exhibition in November 2014 and following its conclusion, the *Department of Planning and Environment* (DPE) issued correspondence dated 19 December 2014 requesting that the applicant respond to the issues raised in the submissions received during the public exhibition period.

This report provides a comprehensive response to each of the issues raised both by DPE and in the submissions received during the public exhibition, with the provision of additional justification and technical information where relevant.

Amendments to the proposal to respond to key issues and amended mitigation measures have also been provided and are documented in this report.

1.2 EXHIBITION AND SUBMISSIONS

The correspondence from DPE, confirms that the public exhibition of the application concluded on 18 December 2014 with submissions made publically available on the DPE website.

A total of five submissions were received from various government agencies, roads and utility providers, and other stakeholders. No public submissions were received.

The stakeholder submissions were provided to the proponent for review following the conclusion of the public exhibition period. The issues raised in the submissions have been assessed with a response provided in Section 3 of this report.

1.3 PURPOSE OF THIS REPORT

This Submissions Report is structured as follows:

- **Section 2:** A response to key issues raised following the Preliminary Assessment undertaken by DPE, as outlined in the correspondence dated 19 December 2014.
- **Section 3:** A summary of issues raised in the submissions and a response to each of these, including provision of additional or amended technical information as appropriate.
- **Section 4:** A description of the amended proposal.
- **Section 5:** Revised mitigation measures and recommendations.

1.4 REFERENCE DRAWINGS & SUPPORTING DOCUMENTATION

This report is supported by the following technical studies provided in the appendices of this report. This information is intended to supersede that originally lodged in November 2014 while all other consultant reports remain unchanged from the EIA lodgement in November 2014 and can be found on the DPE website.

TABLE 1 – SUPPORTING DOCUMENTATION

REPORT	PREPARED BY	REFERENCE
Architectural Drawings	Bates Smart	Appendix A
Landscape Drawings	Turf Design	Appendix B
Compliance Assessment	Urbis	Appendix C
Traffic and Transport Report	Cardno	Appendix D
Biodiversity Offset Report	EcoLogical Australia	Appendix E
Phase 2: Environmental Site Assessment	Douglas Partners	Appendix F
Stormwater and Flooding Report	Alluvium	Appendix G
Submissions	Various	Appendix H

2 DPE Preliminary Assessment

2.1 OVERVIEW

Correspondence received from DPE dated 19 December 2014 requires that the applicant further consider and respond to matters raised during the Preliminary Assessment. A review of these matters has been undertaken and a detailed response to the issues is provided in Table 2.

TABLE 2 – RESPONSE TO DPE PRELIMINARY ASSESSMENT

ISSUE	RESPONSE
Provide an assessment of the Section 4.0 General Controls and Guidelines of Sydney Olympic Park Mater Plan 2030, including justification of any proposed variations.	An assessment of the proposal against the relevant provisions of the *Sydney Olympic Park Master Plan 2030*, including justification of proposed variations, is provided at **Appendix C**.
Architectural and landscape plans shall be fully dimensioned, including details of storage, access and path widths, etc.	The Architectural and Landscape Plans have been updated to include dimensions. A detailed storage plan and access diagram has also been provided. Refer **Appendix A** and **Appendix B**.
Proposed variations to *State Environmental Planning Policy No.65- Design Quality of Residential Flat Buildings* shall be documented and adequately justified, including a review of the proposal against the draft Apartment Design Guideline.	An assessment of the proposal against the provisions of *State Environmental Planning Policy No.65- Design Quality of Residential Flat Buildings,* the Residential Flat Design Code, and the draft Apartment Design Guideline, including justification of proposed variations, is provided at **Appendix C**.
Landscape plan details shall be provided of the proposed winter gardens.	Turf Design has undertaken a detailed assessment of the environmental conditions of each of the proposed winter gardens and has selected plant species accordingly. Detailed plans are provided at **Appendix B**.
Mitigation measures to minimise potential conflicts between service vehicles and other vehicles entering the basement, due to the location of the basement loading dock immediately adjacent to the basement car park entrance.	Proposed mitigation measures are detailed in the Traffic and Transport Report at **Appendix D**. In summary, a convex mirror can be placed on the wall opposite the loading bays to provide trucks with a clear view of outbound motorists and inbound motorists approaching from the west. Trucks and Inbound motorists approaching from the east already have a clear view of one another. Typical loading dock signage and truck warning signs can be installed within the car park.
Details shall be provided demonstrating that vehicles entering the new road would be able to safely turn around and exit back onto Bennelong Parkway, particularly when all proposed 10 road side car parking spaces are occupied.	Sweep path diagrams have been provided which demonstrate that vehicles are able to safely make a 3-point turn when all 10-road side car parking spaces are occupied. Refer **Appendix D**.

ISSUE	RESPONSE
All recommended environmental site investigations shall be undertaken and the site certified suitable for its intended residential land use in accordance with the requirements of *State Environmental Planning Policy No.55- Remediation of Land* and *Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land.*	Additional environmental investigations have been undertaken on the site, including an assessment of groundwater quality in two existing monitoring wells located in the footpath area of Bennelong Parkway, and permeability testing of the wells to estimate the permeability of the rock adjacent to the proposed basement excavation. Refer **Appendix F**. It is noted that access to the remainder of the site for the recommended contamination assessment and waste classification is not currently available due to SOPA environmental restrictions and this work should be undertaken at a later stage following DA approval.

3 Response to Submissions

A total of five submissions were received from various government agencies, roads and utility providers, and other stakeholders, during the public exhibition of SSD_6603, including:

- *NSW Environment Protection Authority;*
- *NSW Office of Water;*
- *NSW Office of Environment and Heritage;*
- *Roads and Maritime Services;*
- *Transport for NSW;* and
- *Sydney Olympic Park Authority.*

No public submissions were received.

3.1 NSW OFFICE OF ENVIRONMENT AND HERITAGE

An amended Biodiversity Offset Strategy has been prepared in response to the *NSW Office of Environment and Heritage* (OEH) submission and is included at **Appendix E**. The Biodiversity Offset Strategy provides an assessment of the site, determines the offset requirements, and outlines the proposed offset package and statement of commitments.

In summary, the total species credits required for the project is 21, resulting in a required offset area of 2.95ha. The offset will be achieved by the purchase and retirement, prior to the commencement of construction, of 21 Green and Golden Bell Frog (GGBF) credits from a registered BioBank site. Two options for the purchase of these credits have been identified, including:

- **Option 1** – Purchase and retirement of 21 GGBF credits from a BioBank site near Crescent Head that is currently being assessed by OEH; or
- **Option 2** – Purchase and retirement of 21 GGBF credits from a BioBank site registered on land administered by SOPA.

If Option 2 is to be pursued, *Ecove Group Pty Ltd* and SOPA will enter into a Planning Agreement under Section 93F of the *EP&A Act* committing to submitting an application, prepared by an accredited assessor, to register a BioBank site capable of generating 21 GGBF credits (approximately 3 ha in area) within 6 months of project approval.

3.2 NSW ENVIRONMENT PROTECTION AUTHORITY

A review of the *NSW Environmental Protection Authority* (EPA) submission has been undertaken. The EPA submission outlined recommended Conditions of Consent and associated comments regarding licensing, construction and operational noise and vibration, groundwater and surface water management, contamination, dust, and waste management.

The recommended Conditions of Consent have been incorporated into the proposed mitigation measures at Section 5. Specific comments relating to groundwater and surface water management are addressed in the *'Report on Additional Testing'* submitted at **Appendix F** and are summarised at Section 3.3.1 below.

3.3 NSW OFFICE OF WATER

A review of the *NSW Office of Water* submission has been undertaken. The Office of Water submission related directly to groundwater assessment and management. Douglas Partners have since undertaken additional testing including groundwater quality and permeability testing on site. The *'Report on Additional Testing'* is submitted at **Appendix F** and the results are summarised at Section 3.3.1 below.

3.3.1 GROUNDWATER AND SURFACE WATER MANAGEMENT

The following geotechnical and contamination investigations were submitted with the Environmental Impact Statement in November 2014:

- *Report on Supplementary Geotechnical Investigation* dated 19 September 2014; and
- *Report on Preliminary Site Investigation (Contamination)* dated 19 September 2014.

These reports recommended some additional investigations following development approval and before the commencement of construction. The recommended additional investigations included:

- Further assessment of contaminant levels in any existing filling and soil that will remain on site;
- Assessment of groundwater quality on the site to determine appropriate groundwater control and disposal options that will need to be incorporated into the building; and
- Waste classification of all materials requiring removal from the site to allow them to be disposed of in an appropriate manner.

The additional testing recently undertaken on the site included an assessment of groundwater quality in two existing monitoring wells located in the footpath area of Bennelong Parkway, and permeability testing of the wells to estimate the permeability of the rock adjacent to the proposed basement excavation.

GROUNDWATER QUALITY

The laboratory test results for the current range of testing indicate low levels of contaminants that are below the NEPM/ANZECC criteria for marine waters. This suggests that groundwater is likely to flow from the north-west towards Bicentennial Park, rather than flow from the landfill cells within Bicentennial Park back towards the development site. The water quality would be poor if leachate was present within the groundwater.

Provided that the two samples tested are representative of the groundwater quality on and adjacent to the site, water seepage into the basement should be able to be disposed of to stormwater. It is noted that additional monitoring wells could not be tested at this stage as access to the site is unavailable.

ROCK PERMEABILITY

The permeability results are relatively consistent between the two wells and within one order of magnitude. The testing indicates that the rock is relatively impermeable and seepage inflows should be able to be handled using an appropriately designed drainage system.

It is noted that rock mass permeability is dependent on the jointing within the rock mass and some areas of the excavation may experience higher seepage inflows than others. This is often dealt with during construction by grouting open joints if inflows are significant. It is noted that in Douglas Partners' experience, groundwater inflows into basements within the Ashfield Shale in Sydney Olympic Park are usually minor.

CONCLUSIONS

The additional testing was aimed at providing information on groundwater quality and rock permeability. The quality of the groundwater was within the adopted guideline levels and the rock permeability measured was very low.

The other additional testing previously recommended (i.e. contamination testing and waste classification of the soils in the areas that could not previously be tested) cannot be undertaken until access to the full site area (i.e. inside the stormwater dam) is available. Environmental restrictions in this area remain in place and it therefore follows that testing would be best undertaken at a later stage rather than at the current pre-DA approval stage. The results of the additional soil testing will not affect the proposed use of the land; any soils that are not suitable for the proposed land use can be disposed of or remediated as appropriate.

3.4 ROADS AND MARITIME SERVICES

A review of the *Roads and Maritime Services* (RMS) submission has been undertaken and a detailed response to the issues is provided in Table 3.

TABLE 3 – RESPONSE TO SUBMISSIONS: ROADS AND MARITIME SERVICES

ISSUE	RESPONSE
The layout of the proposed car parking areas, loading docks and access driveway associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1-2004 and AS 2890.2-2002 for heavy vehicle usage.	All parking bay dimensions are compliant with the design criteria at AS2890.1. The location of some columns at the south of the site impede on the parking aisle width, however convenient vehicular access to these spaces has been demonstrated through swept path diagrams. All the design issues raised are addressed in the Traffic Impact Assessment and typically accords with the design criteria outlined at AS2890.1 or have been demonstrated to function appropriately (refer **Appendix D**). The Basement Level 002 plan has been modified to provide a sight triangle on the internal western side of the site access to address the issue of sight distance. Heavy vehicles need only access the loading area on the site, which is at-grade and has been demonstrated to function appropriately.
A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Department prior to the issue of a construction certificate.	A Construction Traffic Management Plan will be prepared prior to the issue of a construction certificate.

3.5 TRANSPORT FOR NSW

A review of the *Transport for NSW* (TfNSW) submission has been undertaken and a detailed response to the issues is provided in Table 4.

TABLE 4 – RESPONSE TO SUBMISSIONS: TRANSPORT FOR NSW

ISSUE	RESPONSE
The development is to provide for bicycle access and servicing as provided in the Sydney Olympic Park Master Plan 2030, Section 4.0: General Controls and Guidelines for Bicycle Access and Servicing.	Refer Traffic and Transport Assessment prepared by Cardno and included at **Appendix D**.
The development is to provide an approved sight triangle device on the western side of the drive to alert pedestrians to the presence of cars.	The Basement Level 002 plan has been modified to provide a sight triangle device on the internal western side of the site access (refer **Appendix A**).
Prepare a Construction Traffic Management Plan (CTMP), which details construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control. The plan should also specify any potential impacts to bus services operating on roads within the vicinity of the proposal site from construction vehicles during construction. Any potential impacts to pedestrian access or public transport infrastructure including train and bus stops are to be specified. Should any impacts be identified, the duration of the impacts and the measures proposed to mitigate these, including any temporary relocation of services, are to be clearly explained and committed to being enforced. The CTMP should be submitted to the Department of Planning & Environment for review prior to the issue of a Construction Certificate.	A Construction Traffic Management Plan will be prepared prior to the issue of a construction certificate.
Detail existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely future demand for increased public transport and pedestrian and cycle access."	The Traffic and Transport Assessment at **Appendix D** details the existing on-road and off-road bicycle facilities in the vicinity of the site. The Landscape Design Report at **Appendix B** also includes a 'Shared Ways' diagram which highlights the pedestrian and cycle desire lines between the development and existing public transport services.
Identify measures to promote travel choices that support the achievement of State Plan targets, such as implementing a location-specific sustainable travel plan.	The Traffic and Transport Assessment at **Appendix D** details measures that may assist in achieve a higher mode share of sustainable transport usage, including maps of public transport services and timetables in residential foyers and providing new residents with information on bicycle user groups.

ISSUE	RESPONSE
Provide details of the total daily and peak hour trips generated by the proposed development, including accurate details of the current and future daily vehicle movements and assess the impacts of the traffic generated on the local road network, including intersection capacity and any potential need for upgrading or road works (if required). Section 7: Traffic Considerations in the Traffic and Transport Assessment describes the impact the proposed development will have on Bennelong Parkway. However, it does not provide any analysis of where the project traffic not utilising Benne long Parkway and New Road disperses. It assumes this traffic will use the new north/south road west of the proposed project entrance and be distributed on Australia Avenue. Intersection analysis needs to be performed, and results provided for review by TfNSW and Roads and Maritime Services on all intersections impacted by project traffic. Additionally, without an electronic copy of the SIDRA files for Bennelong Parkway and New Road, TfNSW is not able to verify the intersection will perform as presented.	Additional SIDRA analysis has been prepared for the intersection of Bennelong Parkway and Australia Avenue to the south of the site. The analysis is detailed within the Traffic and Transport Assessment at **Appendix D**. The SIDRA files are also submitted with this Assessment.
Section 4 of the Sydney Olympic Park Master Plan 2030, details general controls and guidelines for bicycle access and servicing. Table 4.12 details the minimum bicycle parking rates that need to be provided, by land use type. Section 6 of the Traffic and Transport Assessment provides rationales as to why the proposed development should not have to conform to the controls and guidelines for bicycle access and servicing presented in the Sydney Olympic Park Master Plan 2030. TfNSW does not support the reduction of bicycle spaces from that specified in the Sydney Olympic Park Master Plan 2030.	Refer Traffic and Transport Assessment prepared by Cardno and included at **Appendix D**.
The Traffic and Transport Assessment does not address connections to existing and future walking and cycling routes, or end of trip facilities for the commercial element of the proposed development.	Refer Traffic and Transport Assessment prepared by Cardno and included at **Appendix D**.
Detail the proposed service vehicle movements (including vehicle type and the likely arrival and departure times).	The Traffic and Transport Assessment at **Appendix D** details the proposed service vehicle movements and provides swept path diagrams which demonstrate vehicle access and egress from the loading bays.

ISSUE	RESPONSE
Detail access and car parking arrangements at all stages of construction and measures to mitigate any associated pedestrian, cycleway, public transport or traffic impacts.	A Construction Traffic Management Plan will be prepared prior to the issue of a construction certificate.
Adequately address the impact of major events in the precinct as it relates to the proposed development within the Town Centre (SOP Major Event Impact Assessment Guidelines). Demonstrate that the proposed development and future operation can work in major event mode. Sydney Olympic Park Master Plan 2030; Section 5.6 of the Precinct Controls and Guidelines for Parkview Precinct states in 5.6.7 Events Controls (1) The Parkview Precinct will be affected by major ANZ Stadium events, the Royal Easter Show and events requiring full use of P6, and (2) Ensure all development can accommodate the changes to access required as described in Section 4.4, Event Access and Closures of Sydney Olympic Park Master Plan 2030.	The Traffic and Transport Assessment at **Appendix D** details the impact of major events on the proposed development. It is noted that the subject site is located at the south-eastern boundary of Sydney Olympic Park and will not be affected by potential road closures.

3.6 SYDNEY OLYMPIC PARK AUTHORITY

A review of the *Sydney Olympic Park Authority* (SOPA) submission has been undertaken and a detailed response to the issues is provided in Table 5.

TABLE 5 – RESPONSE TO SUBMISSIONS: SYDNEY OLYMPIC PARK AUTHORITY

ISSUE	RESPONSE
Apartment Mix: The Sydney Olympic Park Master Plan 2030 (SOP MP 2030) requires a unit mix comprising a minimum 15% of units to be studio or 1 bedroom units and a minimum 15% of units to be 3+ bedrooms. The proposal only provides for 10% of the total units being 3+ bedrooms. The proposal provides no justification for this departure. It is recommended that more 3 and 4 bedroom apartments be considered, which in this area could be attractive to the market, and would contribute to greater diversity in the SOP community.	The proposed apartment mix was established through the Design Competition Process for Site 68. The Sydney Olympic Park Design Review Panel and Competition Jury endorsed the Design Excellence Strategy and Competition Brief which required 10% 3 and 4 bedroom units. The proposed apartment mix is a direct reflection of market expectations in Sydney Olympic Park and will contribute to greater diversity in the area.
Built Form & Scale: The indicative form and location of the future childcare centre is strongly supported due to the high visibility of the site. Although specific details of the centre will be assessed as a separate Local Development DA, the current proposal provides for future lift and service access, drop off and car parking in the basement levels below the future building. There should also be adequate access to utilities and height clearances for structural support of the future building.	Following the submission of the Environmental Impact Statement in November 2014, the Proponent has worked with SOPA to develop the detailed design of the future Childcare Centre. Through the design process, the size of the proposed Childcare Centre has increased marginally as a direct result of the Provider's minimum size and layout requirements. The indicative form and location of the future childcare centre has not altered. Further detail is provided at Section 4 below.

ISSUE	RESPONSE
Solar Access: The proposed development provides an assessment of solar access between 9am and 4pm. The proposed development should provide an assessment between 9am and 3pm (as per MP 2030) and provide justification if the 70% target is not achieved.	68% of residential apartments achieve 3 hours of solar access between 9am and 4pm on 22nd June. 78% of residential apartments achieve 2 hours of solar access between 9am and 4pm on 22nd June. 42% of residential apartments achieve 3 hours of solar access between 9am and 3pm on 22nd June. 60% of residential apartments achieve 2 hours of solar access between 9am and 3pm on 22nd June. Consistent with the principles set out the RFDC, the design seeks to maximise the number of apartments receiving direct sunlight in midwinter to living rooms and balconies. These spaces are given priority and are located at the building's façade to ensure solar access to both spaces. The plan geometry is such that the north and west oriented apartments receive 3 hours of solar access between 9am and 4pm, while the remaining apartments receive the highest quality views. It is argued that Site 68 is situated within a dense urban area and as such the two hour provision, as described in the RFDC is acceptable. This is emphasised by the proposed future use of the Parkview Precinct as described within the Sydney Olympic Park Master Plan 2030, which states: "*Its existing industrial and commercial uses will progressively give way to a higher density, mixed use precinct incorporating community, educational, commercial and residential uses to create a compact urban neighbourhood with a vibrant and leafy street character.*" Furthermore, as indicated on the shadow diagrams provided at **Appendix A**, the adjacent residential tower on Site 3 overshadows the proposed development for one hour between 2pm and 3pm on 22 June. This further emphasises that the site is located in a precinct with a developing character of high density urban form and as such it is considered that the area constitutes a dense urban form and the lower standard of solar access should be applied.

ISSUE	RESPONSE
Storage: The SOP MP and the RFDC both identify specific and identical storage requirements for residential units. Note: There is an anomaly in the MP, which refers to the storage requirement as m2 as when it should be m3. It appears that some of the proposed storage for certain types of Units falls significantly short of the required storage space and no specific details are given in relation to the amount of basement storage to be provided for each unit type (pg. 62 Appendix C).	Storage is provided for all units in accordance with the minimum requirements outlined in the RFDC, through the provision of internal storage rooms and basement storage cages. The Design Report, provided at **Appendix A**, includes a detailed storage schedule, outlining the proposed storage arrangement per apartment type.
Bicycle Parking: The SOP MP requires 1-2 bicycle space per unit depending on Unit type (in addition to visitor). The EIS indicates that 580 spaces are provided, but the plans appear to provide 156 spaces only. Bicycle parking should be at Basement level 2 as this is the only level on-grade with the street entry.	The development plans indicate the subject proposal will provide an on-site bicycle parking provision of 246 spaces. This will comprise 156 spaces on basement level 1 for resident use and 90 spaces on the ground level for the use of staff and resident visitors. Further space for an additional 42 bicycles is provided at ground level to enable the cafe to offer bicycle rental facilities to the general public if desired. Refer Traffic and Transport Assessment at **Appendix D** for further discussion.
Pedestrian / Cycling Access: Cycling through the rail tunnel underpass is not supported due to potential conflict with pedestrians. In this regard paving materials, directional signage and ground stencilling should be used to direct cyclists to the existing asphalt concrete share way on the Australia Avenue pathway. Secondary cycle route from Bicentennial Park to the Town Centre to link with Parkview new street (Road 4). Primary pedestrian route shown as '5m shareway': paving material to be clearly differentiated from primary cycle route (AC1 0). Paving for the upgraded connection with new pedestrian/cycle bridge is to maintain AC1 0 surfacing (paving type 1) with appropriate directional signage as required in the Sydney Olympic Park Urban Elements Design Manual. Management of vehicle traffic for Childcare Centre and Residential Lobby drop-off needs delineation of paving and bollard elements to reduce vehicle/pedestrian conflicts.	A 'Pavement Type Diagram' has been prepared by Turf Design and is submitted at **Appendix B**. The diagram identifies four alternative paving types used to delineate primary and secondary pedestrian, bicycle, and vehicle access routes.

ISSUE	RESPONSE
Landscape / Public Domain Plan: The following issues should also be addressed: 1. The proposed 'Phoenix Palms', are at risk from 'Fusarium' infection (root pathogen), and provide roosting sites for the Australian White Ibis which are considered a pest avi-fauna species. Only healthy trees should be relocated to the childcare frontage. Alternatively, a more suitable tree /palm species could be nominated. 2. Larger scale alternative species of shade trees should be considered in place of Chinese tallow tree (Sapium sebiferum), which is out of scale with residential tower. 3. Legend does not show 'Existing trees for protection' or Existing trees for removal 4. Street trees shown in Parkview New Street (Road 3) should be noted as 'future proposed trees by others'. 4. Legend is to include existing and proposed public area lighting. New lighting is to meet relevant Australian Standards and UEDM lighting category (PN) standards. 5. The following are to be confirmed for the Water Feature I Cascade Pond: ▪ Species for all bio-retention areas and irrigation systems. ▪ Compatibility of stepping stones pedestrian access and seating niche with wetland plantings. ▪ Linings and materials of cascade ponds and bridge. ▪ Location of pumps, filters and control room/chamber.	Refer to Landscape Design Report and Drawings provided at **Appendix B**. 1. Where appropriate healthy 'Phoenix Palm' trees will be relocated to the Childcare frontage. Alternatively, 'Phoenix Palms' will be replaced by Kauri. 2. The General Arrangements Plan has been updated to include alternative large scale shade trees. *Sapium sebiferum* has been replaced by *Plantatus digitata* as required. 3. Existing trees to be removed shown on Page 17 of the Landscape Design Report. 4. New lighting will follow SOPA standard. Details to be provided at Construction Certificate stage. 5. Water Feature / Cascade Pond details are provided in the Landscape Design Report.
Crime Prevention through Environmental Design: There is little passive surveillance to the ground level of the proposed development and this is considered an issue. It is not clear from the documentation provided whether the proposed planting consists of low ground covers with tree planting. The location of tree planting should ensure that clear and unobstructed sight lines are retained for passive surveillance of the ground floors of the new building, as well as ensuring any new planting discourages antisocial behaviour.	Details of the proposed ground level landscape treatment are provided within the Landscape Design Report at **Appendix B**. In summary, the proposed planting consists of low ground covers and trees with trunks that extend at least 3m above the ground. Trees have been positioned to ensure clear sightlines are retained.

ISSUE	RESPONSE
Substations: Proposed substation on corner of Bennelong Parkway and new street (Road 3) is in conflict with the corner gabion wall in SOPA civil package- Parkview New Streets.	The proponent will liaise directly with SOPA to resolve this conflict. In summary, it is proposed to revise the SOPA civil package for Parkview New Street to enable to substation to be positioned at this location.
Mechanical Ventilation: Provide elevation details of the Exhaust Vents / Plenum / Intake Vents and confirm vent materials.	Detailed sections and elevations of the proposed mechanical ventilation are provided with the Landscape Design Report and Drawings at **Appendix B.**
Ecology: 1. The Flora & Fauna assessments (FFA) shall consider off-site impacts of the development to flora and fauna, including shadowing of the tower over the habitats of Lake Belvedere and surrounding public parkland areas, and impacts of changes in stormwater flows to flora and fauna in Bennelong Pond. 2. The FFA only provides recommendations for further ecological surveys and habitat improvement works (on land outside the development site which have not been discussed or agreed with SOPA). The FFA shall be amended to include specific management measures, that are discuss and agreed with by SOPA. 3. The Biodiversity Offset Strategy (BOS) does not state which of the 4 options proposed is to be implemented to offset impacts of the development. Two of the options state that they require agreement with SOPA. The proponent is to consult these options with SOPA. 4. The BOS states that the offset required can be reduced because new bio-retention ponds will be Green and Golden Bell Frog habitat. The suitability of these sites as frog habitat should be considered as the development site will become a highly urbanised site. Should the development site be used to reduce the offset required, an appropriate management plan should be developed and implemented by the Proponent.	Refer to the Biodiversity Offset Report prepared by Eco Logical Australia and provided at **Appendix E**.

ISSUE	RESPONSE
Stormwater Management: 1. The stormwater system is to be designed so that the discharge flow rates into Bennelong Pond meets SOPA requirements. 2. The Applicant is to revise the Stormwater & Flooding Assessment Report including the Integrated Water Management Plan (Appendix Q) to address all aspects of SOPAs Stormwater Management and Water Sensitive Urban Design (SMWSUD) Policy. 3. The Applicant be required to revise the Stormwater & Flooding Assessment Report (Appendix Q) to address the longer term ecological impacts on Bennelong Pond arising from the increased water quantity outflows from Site 68 during larger storm events (refer Table 5) and ways to manage or mitigate these impacts e.g. the high flow bypass. 4. The Applicant provides a maintenance and performance testing regime for the new treatment system prior to approval of the DA (consistent with the SOPA SMWSUD Policy).	Refer to the Stormwater Report prepared by Alluvium and provided at **Appendix G.**
Contamination and Geotechnical Reports: The following conditions are recommended for any consent granted: 1. Prior to commencement of construction, the proponent must undertake the additional assessment and classification works outlined in the report prepared by Douglas Partners titled "Report on Preliminary Site Investigation (Contamination)- Project No. 73942"; and 2. Prepare a detailed Waste Management Plan for construction works including but not limited to segregation and management of contaminated materials and spoil stockpiles for the approval of SOPA's General Manager- Operations & Sustainability. During construction, the proponent must undertake waste classification of all material to be transported off site for disposal in accordance with the Department of Environment, Climate Change and Water (2009) Waste Classification Guidelines.	Additional testing was undertaken by Douglas Partners and is detailed in the 'Additional Testing Letter' at **Appendix F**. The additional testing included an assessment of groundwater quality in two existing monitoring wells located in the footpath area of Bennelong Parkway, and permeability testing of the wells to estimate the permeability of the rock adjacent to the proposed basement excavation. It is noted that access to the remainder of the site for the recommended contamination assessment and waste classification is not currently available due to SOPA environmental restrictions and this work should be undertaken at a later stage following DA approval and prior to the commencement of any works on site. A detailed Construction Waste Management Plan will be prepared at Construction Certificate stage.

ISSUE	RESPONSE
Accessibility & Building Code of Australia: 1. 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 2011 and the recommendations contained in the Access Review by Morris Goding dated the 19th September 2014. An Access Impact Statement is to be prepared by an appropriately qualified person to demonstrate how the proposed development will integrate into the town centre with compliant paths of travel and services. 2. All non-deemed to satisfy compliance issues as identified in the BCA Assessment Report prepared by McKenzie Group dated the 19th September 2014 are to be captured into the Construction Certificate process as alternative solutions to the current Building Code of Australia (BCA) provisions.	Construction plans will demonstrate compliance with the relevant Australian Standards and SOPA's Access Guidelines. An Access Impact Statement will be prepared at Construction Certificate stage. All non-deemed to satisfy compliance issues will be captured at the Construction Certificate stage.

4 The Proposal

4.1 SUMMARY OF PROPOSED DEVELOPMENT

In summary, development consent is sought to construct a mixed-use development, comprising:

- A mixed use tower building comprising 33 residential floors, with 369 apartments, and 120m² of ground floor retail / commercial uses;
- A stormwater detention tank;
- Three levels of basement car park, comprising 408 resident spaces, 42 visitor spaces, 2 retail spaces, and 20 child care centre spaces; and
- Associated landscaping works, comprising mature plantings, bio-retention wetlands, and a cascading waterfall.

The indicative footprint for a childcare centre is illustrated on the architectural drawings in the northern portion of the site. Consent for the construction of a child care centre with an approximate gross floor area of 700m² is to be sought under a separate local development application.

Note – the Environmental Impact Statement submitted in November 2014 indicated consent would be sought under a separate local development application for a childcare centre with an approximate gross floor area of 500m². Following the submission of the Environmental Impact Statement, the Proponent worked closely with SOPA to develop the detailed design of the future childcare centre. Through the design process the size of the proposed childcare centre has increased marginally to respond to the Provider's minimum size and layout requirements.

As a result of this minor increase in gross floor area, the total gross floor area for the proposed development is 33,166m². As such, the proposal has a floor space ratio of 2.4:1, resulting in a non-compliance of 0.2:1. While this represents a non-compliance of 0.2:1, the floor space ratio has not altered from the original submission, and as such the justifications presented in support of the 'exception to development standard' in the Environmental Impact Statement remain relevant.

It is noted that the future childcare centre (and associated gross floor area) is to be constructed by Ecove Group and dedicated to SOPA.

4.2 SUMMARY OF PROPOSED CHANGES

The response to the issues raised both by DPE and in the submissions has resulted in amendments to the submitted documentation and technical studies. The amendments are summarised as follows:

- **Architectural Plans:** have been amended to include key dimensions and additional plans have been provided which include details of apartment storage provisions.

- **Basement Plans:** have been updated to include further detail regarding allocation of car and bicycle parking spaces, as well as location of storage areas and facilities. Details regarding sight triangle devices, sweep path diagrams, and servicing areas have also been included.

- **Landscape Plans** have been amended to include key dimensions. Additional plans have been provided which include details of storage, access arrangements, and path widths and materials. Plant selection has been amended to take into account comments from SOPA. Landscape plans have also been provided for the proposed gardens within the 'slots' of the residential tower.

- **Childcare Centre:** the building envelope and gross floor area allocation for the proposed childcare centre has been amended as a result of detailed design and negotiations with SOPA. As such, the Ground Floor Plan has been updated to reflect the amended childcare centre proposal.

- **Biodiversity Offset Strategy:** has been amended to include two offset options to be pursued by the Proponent. The Strategy also includes a statement of commitments and a series of mitigation measures to be incorporate prior, during and post construction.

5 Revised Mitigation Measures & Recommendations

Section 10 of the Environmental Impact Statement provided a range of mitigation measures proposed to reduce any potential environmental and social impact of the proposal. With consideration of the submissions received and the additional information prepared, amendments and additions to these mitigation measures are now proposed (refer Table 6).

TABLE 6 – REVISED ENVIRONMENTAL MANAGEMENT MEASURES

ITEM	ENVIRONMENTAL MANAGEMENT MEASURE
CONSTRUCTION CERTIFICATE	
Construction management plan	A Construction Management Plan (CMP) is to be prepared in respect of the proposed works to identify detailed mitigation and management measures to be implemented during construction. The CMP will involve the following components: ▪ Construction Traffic Management Plan; ▪ Construction Waste Management Plan; ▪ Construction Noise Management Plan; ▪ Air Quality/Dust Management Plan; ▪ Water Quality Management Plan; and ▪ Erosion and Sediment Control Management Plan.
Contamination and groundwater	The following additional works, as described within the Preliminary Site Investigation, will be required once access to the site is available (i.e. post-DA approval): ▪ Further assessment of contaminant levels in any existing filling and soil that will remain on the site (i.e. areas outside the proposed basement excavation) if applicable; ▪ Assessment of estimated groundwater volumes to determine appropriate control and disposal options that will need to be incorporated; and ▪ Waste classification of all materials requiring removal from the site to ensure they are disposed of in an appropriate manner.
Access	Construction plans are to demonstrate compliance with the requirements of AS 1428.1, SOPA's Access Guidelines 2011 and the recommendations contained in the Access Review by Morris Goding (dated the 19 September 2014). An Access Impact Statement is to be prepared to demonstrate how the proposed development will integrate into the town centre with compliant paths of travel and services.
Building Code of Australia	All non-deemed to satisfy compliance issues as identified in the BCA Assessment Report prepared by McKenzie Group (dated the 19 September 2014) are to be captured into the Construction Certificate process as alternative solutions to the current Building Code of Australia (BCA) provisions.

ITEM	ENVIRONMENTAL MANAGEMENT MEASURE
Green & Golden Bell Frog	Prior to commencement of any works onsite, contractors must be inducted into the following procedures and ensure they are implemented onsite: *Standard Procedures – Biodiversity Management, January 2014*: ▪ 1. Access to habitat areas ▪ 4. Frog clearance ▪ 6. Frog habitat – minor and major works.
Biodiversity offset strategy	In line with the contents of the Biodiversity Offset Strategy at **Appendix E**, *Ecove Group Pty Ltd* commits to select one of the two options specified below, subject to development consent being granted. **Option 1** - Purchase and retire 21 GGBF credits from a proposed BioBank site near Crescent Head NSW prior to impacting any GGBF habitat and provide evidence of the transaction (a credit retirement certificate) to DPE / OEH upon completion. **Option 2** - Purchase and retirement of 21 GGBF credits from a BioBank site registered on land administered by SOPA. Ecove Pty Ltd and SOPA will enter into a Planning Agreement under s 93F of the EP&A Act committing to submitting an application, prepared by an accredited assessor, to register a BioBank site capable of generating 21 GGBF credits (approximately 3 ha in area) within 6 months of project approval. These credits will be purchased and retired by *Ecove Group Pty Ltd* prior to any impacts to areas of potential GGBF habitat (or when available noting that once an application to register a BioBank site has been submitted to OEH the time required to actually register the site is beyond Ecove/SOPAs control).
OCCUPATION CERTIFICATE	
Stormwater management	In accordance with SOPA's *Stormwater Management and Water Sensitive Urban Design (SMWSUD) Policy* an establishment, handover and operation and maintenance plan is to be developed and implemented for all water sensitive urban design assets on site, at Occupation Certificate stage.
Ecologically sustainable development	ESD measures to be included as per the recommendations of the ESD Report (submitted with the Environmental Impact Statement).
Utilities	The provision of and connection to electrical services, gas, telecommunications, water, sewer and stormwater to be provided in accordance with the Utilities and Services Strategy Documentation.
Mechanical services	Design, sizing, installation and materials for Mechanical Services to be provided in accordance with the Concept Design Report (submitted with the Environmental Impact Statement).

6 Conclusion

This Submissions Report has been prepared on behalf of *Ecove Group Pty Ltd*, the proponent for the Staged Development Application for State Significant Development SSD_6603. The application was lodged in November 2014 and seeks approval for:

- A mixed use tower building comprising 33 residential floors, with 369 apartments, and 120m² of ground floor retail / commercial uses;
- A stormwater detention tank;
- Three levels of basement car park, comprising 408 resident spaces, 42 visitor spaces, 2 retail spaces, and 20 child care centre spaces; and
- Associated landscaping works, comprising mature plantings, bio-retention wetlands, and a cascading waterfall.

The indicative footprint for a childcare centre is illustrated on the architectural drawings in the northern portion of the site. Consent for the construction of a child care centre with an approximate gross floor area of 700m² is to be sought under a separate local development application.

The proposed development has been designed generally in accordance with the parameters of the relevant Environmental Planning Instruments and Policies, and has been endorsed by the Design Competition Jury and SOPA Design Review Panel.

There are compelling reasons why a positive assessment and determination of the project should prevail, as outlined below:

- The proposal demonstrates consistency with the relevant environmental planning instruments including strategic planning policy, State and local planning legislation, regulation and policies.
- The proposal fully addresses the issues identified in the SEARs and proposes appropriate mitigation measures for implementation during the pre and post construction stages.
- The proposal will result in minimal environmental impacts, all of which can be mitigated through the recommendations outlined in Section 5 of this report.
- The proposal is consistent with the principles of ESD as defined by Schedule 2, clause 7(4) of Schedule 2 of the EP&A Regulation.
- The proposed works will enable residential, retail / commercial, and community development at the site and will result in positive economic impacts through the provision of direct and indirect employment (during both construction and operation).
- The proposed works will enable construction of publically accessible through-site links, a neighbourhood park, childcare centre, and community room and will result in positive social impacts and improved access networks.
- The proposal fully addresses the direct and indirect impacts on the Green and Golden Bell Frog and provides viable options for Biodiversity Offsets in accordance with the *BioBanking Assessment Methodology* and the *Framework for Biodiversity Assessment – NSW Biodiversity Offset Policy for Major Projects.*

- The site is considered to be suitable for the proposed works given its location within Sydney Olympic Park and will result in public benefit through the provision of the following:

  - Recreation and pedestrian or bicycle connectivity throughout the site which links with key transport and access nodes. These will provide significant pedestrian and cycleway upgrades and new links to improve connectivity to Olympic Park Station, Bicentennial Parklands and the wider Sydney Olympic Park Precinct.

  - Development of a large publically accessible landscape ground-plane, providing for both active and passive recreation opportunities for residents and visitors.

  - A future childcare centre is accommodated which will respond to the needs of the area and the demographic profile of the current and future population.

  - Best practice sustainability measures including the use of vertical slots with automated louvers allowing for cross ventilation, double-glazing, efficient appliances and fixtures, use of low volatile organic compound materials, rainwater reuse tanks, bio-retention wetlands, and other WSUD measures.

Changes have been made to the State Significant Development Application in response to the issues raised in submissions. Having regard to the relevant Environmental Planning Instruments and Policies, and considering the site and its location and potential impacts of the non-compliances proposed, strict application of Floor Space Ratio and Building Height standards under the Major Development SEPP are unreasonable and unnecessary.

Given the merits of the proposal, it is requested that the Minister approve the proposal subject to the mitigation measures outlined in this report.

Disclaimer

This report is dated March 2015 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Ecove Group Pty Ltd (**Instructing Party**) for the purpose of SSD_6603 (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

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