

7 June 2017

Director of Key Site Assessments
NSW Planning & Environment
GPO Box 39, Sydney 2001

Attention: Andrew Hartcher

Dear Andrew,

**Submission of Environmental Impact Statement for State Significant Development (SSD 7942):
URBNSURF Sydney, Pod B P5 Carpark, Hill Road, Sydney Olympic Park**

URBN SURF (Sydney) Pty Ltd is pleased to submit the attached Environmental Impact Statement (**EIS**) for URBNSURF Sydney – a world class sport, recreation, leisure, tourism and event facility, centred around a “Wavegarden” ® surfing lagoon.

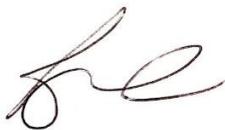
The EIS has been prepared in accordance with Part 4 of the *Environmental Planning & Assessment Act 1979 (EP&A)*, Schedule 2 of the EP&A Regulations and the Secretarial Environmental Assessment Requirements (**SEARs**) issued by the Department of Planning & Environment on 30 September 2016. The EIS is supported by a range of technical studies confirming the proposed development is consistent with the assessment framework established by the SEARs.

To support the submission of the EIS, unconditional landowner’s consent was provided Sydney Olympic Park Authority (**SOPA**) on 15 May 2017 (Attachment 1). The suggested amendments proposed by SOPA have been addressed by URBN SURF (Sydney) Pty Ltd in the Table of Responses (Attachment 2) and respective reports in the EIS.

Accordingly, based on the assessment undertaken in the EIS, approval of the proposed development is sought.

Please do not hesitate to contact me on 040 330 8099 should you wish to discuss any aspect of the proposed development.

Yours sincerely,
URBN SURF (SYDNEY) PTY LTD



Ben McCarthy
SENIOR PROJECT MANAGER

ATTACHMENT 1 – Letter of Landowner's Consent, Sydney Olympic Park Authority, 15 May 2017

[ATTACHED SEPERATELY]

ATTACHMENT 2 – Table of Responses to Sydney Olympic Park comments

SOPA Comment	Response	Action
Traffic Impact Assessment		
<p>1. The signalised intersection of Hill Rd and Holker Street/Busway does not allow right turn and/or left turn from Hill Rd into Holker Busway, nor from Holker Street into Holker Busway. The proposal to permit service (heavy or any other service vehicles) via Holker Street cannot be achieved under the current intersection arrangements. Urbn Surf will need to enter into satisfactory arrangements with SOPA to provide for access to the Premises from within the Holker Busway, and this should be limited where possible. These arrangements will need to be discussed and approved with SOPA and after consultation with SOPA Operations team.</p>	<p>Upon further consultation, SOPA’s Acting Director of Major Events and Precinct advised on 26 May 2017 that access onto Holker Busway (and the connecting service yard) can be managed through the issuing of permits to staff and contractors (i.e. specified waste management trucks).</p>	<p>Section 3.2 of Traffic Impact Assessment report has been amended accordingly.</p>
<p>2. The Traffic Consultants (The Transport Planning Partnership) report (page 26) refers to provision of parking spaces based on the estimated attendance. The report refers to the use of 1.6 people per car (parking rate) and an estimate of 150 people on site. It also refers to a 66% mode share arriving by car. Table 5.1 does not reflect these numbers. Therefore, clarification is required on how the Traffic Consultants reached that number and the report should be amended accordingly.</p>	<p>The person per car ratio of 1.6 is based on data available on aquatic facilities. The 66% mode share is based on Journey to Work data and industry benchmarks.</p>	<p>Section 5.1.2 and table 5.1 have been updated accordingly.</p>
<p>3. The report refers to the P5 car park as “the least desirable for events...” due to its isolation from the main Sydney Olympic Park areas. This is not accurate as for the majority of major events parking arriving from North and West (Holker Street) is mainly directed to P5 and shuttle buses from P5 to the larger venues require a short trip to the Olympic Blvd. Therefore, this statement made in the Traffic Report is not supported and should be amended.</p>	<p>Noted.</p>	<p>Section 5.1.5 of the Traffic Impact Assessment report has been amended accordingly.</p>
<p>4. The Traffic modelling assessment for the Hill and Holker signalised intersection is not relevant as currently only buses are permitted through the intersection. Any proposed provision of service vehicles will require RMS consideration and relevant intersection analysis. Vehicles travelling from Hill Rd into Holker Busway will not be supported under current traffic conditions. Our Operations team should be able to provide a solution as to how we can make this work.</p>	<p>The “Buses only” signage on Hill Road is Sydney Olympic Park Authority managed signage and in agreement with SOPA Operations Team (further to email provided 26 May 2017), will be amended to permit infrequent service and staff vehicles requiring access to the service yard accessed from Holker Busway. The intersection has been designed to standard RMS requirements and will accommodate</p>	<p>Section 3.2 of the Traffic Impact Assessment report has been updated accordingly.</p>

staff and service vehicles (as it already does for buses).

5. The Traffic report refers to “other arrangements are required by SOPA in order for the proposed facility not to be inconvenienced by SOPA Event operations”. This statement needs to be clarified as the operation of many events requires Holker Busway to close. This will have an impact on, and inconvenience, the proposed facility. The expectation should be set in relation to the impact from future events as Holker Busway and the P5 car Park is important for the smooth operation of Events. Urbn Surf needs to amend this statement as Sydney Olympic Park is an events precinct and the operation of many events in the precinct will have an impact on, and possibly inconvenience, the proposed facility.

Upon further consultation, SOPA’s Acting Director of Major Events and Precinct advised on 26 May 2017 that the closing of Holker Busway is generally associated with “fun run” events, potentially restricting access (to the connecting service yard) for short times during short periods (up to 10 times a year on weekends).

This level of impact is acceptable to the Proponent. URBN SURF (Sydney) Pty Ltd, who will continue to work with SOPA on programming of events as required by SOPA’s Major Events Impact Assessment Guidelines.

Section 5.1.5 of the Traffic Impact Assessment report has been amended accordingly.

Integrated Water Management Plan

1. Climate - Provide clear reference and demonstrate that data sources, duration and periods for which summary statistics have been applied including extreme conditions, are applicable to proposed development and site conditions

A range of data sources have been used specific to each modelling task reported within the document.

A summary of climate data used for each model has been provided in section 2.1 including all BoM reference numbers.

Additional references have been provided in the calculation sheets.

2. Lagoon Water Discharge - Provide details of the subsoil drainage system beneath the lagoon, control and management, including water quality any water treatment if required

The lagoon does not intersect groundwater and there is no need to control groundwater levels. The subsoil drainage system is provided as a precautionary measure only to ensure lateral infiltration of surface water is adequately drained.

Because this, there are negligible, to minimal, flows. Any flows that are generated will be treated by the stormwater management system prior to any discharge to the downstream environment.

The final design of the subsoil drainage system and water treatment are subject to detailed design and is not detail that is normally provided with a Development Application.

Clarification of the requirement for subsoil drainage has been added to section 2.4.1.

<p>3. Topography and Geology - Reference provided is inadequate and site specific hydro-geological verification and assessment is required with respect to:</p> <ul style="list-style-type: none"> - Saline soils - Acid sulphate soils - Ground water hydrology and hydrodynamics 	<p>The site is built upon 5m to 6m of semi-engineered material and does not intercept the naturally occurring potential acid sulfate or saline soils.</p> <p>Separate geotechnical investigations and field results show a soil pH of 6.0-8.4, suggesting low to no risk of acid sulfate material.</p> <p>Geotechnical investigations undertaken during winter months have also logged the interception of groundwater beneath the surface. Due to the site's topography, groundwater ranges between 4m to 7m below ground level (RL0m to RL2.0m), with a northward hydraulic gradient.</p>	<p>Additional geotechnical and groundwater information has been provided in sections 2.2 and 2.4.1 on the basis of geotechnical investigations.</p> <p>Includes table of geotechnical laboratory testing and figure of groundwater levels.</p>
<p>4. Water discharge - Include typical characteristics of quality, chemicals and residual generated on site (volumes, concentration, i.e. backwash water from pool filters and details of onsite treatment or disposal method. Provide details of trade waste, liquid, grease etc. that would be generated on site and how these wastes would be managed</p>	<p>This detail is subject to Detailed Design and operational requirements and is not normally presented in a Development Application. Accordingly, the report is "outcomes based" - Lagoon water quality will be maintained to exceed the standards specified in <i>Guidelines for managing risks in recreational water</i> (NHMRC, 2008). Any potential discharge of the lagoon to stormwater will meet the standards specified in <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZECC, 2000) for freshwater ecosystems.</p> <p>Further, there is no known requirement for storage of quantities of hazardous chemicals that would require licensing. Clarification of backwash from the lagoon filtration system reduces water volumes discharged to sewer. Any residual solids would be spadeable and removed by a licensed waste contractor.</p> <p>Food grease traps will be incorporated in subsequent phases of design to meet relevant State and Local regulatory requirements (and is not normally described in a Development Application).</p>	<p>Section 3.2 already describes the water quality outcomes that will be sought.</p> <p>Section 5.3 has been amended to provide additional detail about the water treatment system's proposed backwash to sewer. Table 9 provides a forecast backwash disposal to sewer volume.</p>

<p>5. Stormwater runoff – Verify and demonstrate need for stormwater balancing tank and / or lagoon water overflow storage provisions. Provide details of water quality leaving development site including ongoing measurement and verification</p>	<p>No stormwater balancing tank or overflow storage is proposed.</p> <p>Treatment of stormwater consistent with the requirements set out in Sydney Olympic Park policies is proposed and has been designed using MUSIC modelling.</p>	<p>The lagoon is sufficiently large to accommodate a large volume of stormwater with no overflow, and this is a critical part of the water balance for the site, helping to offset evaporation.</p> <p>A summary of modelling results has been added to section 4.3</p>
<p>6. Hydrology – Provide reference to data sources used in calculation and methodology i.e. ARR</p> <p>Flood risk – Include information and evidence that flood levels estimates include:</p> <ul style="list-style-type: none"> - concurrently extreme conditions such as tidal behaviour - climate change and sea level rise - reference to actual events 	<p>ARR87 has been applied because work commenced on this study prior to confirmation of the revised ARR methodologies.</p> <p>Limited historic data are available, but were considered in referenced flood studies.</p> <p>Sea level rise predictions and potential increases in rainfall intensity due to climate change have been considered.</p>	<p>References to ARR and rainfall data sources have been clarified.</p> <p>Discussion of available historic flood data has been included in section 2.5</p> <p>Discussion of sea level rise has been included in section 2.6</p> <p>Discussion of sensitivity testing for stormwater modelling has been added to appendix 1</p>
<p>7. Water balance – must demonstrate higher than above minimum performance standards including specific water and energy conservation methods and techniques</p>	<p>ESD consultant, Kinesis, was engaged to provide a review of the potential opportunities specifically relating to power and water demands of the facility. Their findings were provided as attachments in the Draft DA submission and reported on in the EIS report.</p> <p>Note that there are no existing examples to compare minimum performance standards to, however, the best in class water treatment filtration equipment is proposed as is the wave generator, creating nine surfable waves per pass, one pass every 4.5 seconds.</p>	<p>Please refer to the ESD Reports by Kinesis included in the DA submission.</p>
<p>8. Monitoring and maintenance plan - This section requires additional information. The full scope of onsite monitoring and reporting should be developed once more details including specification and design are completed and available for review. Monitoring and maintenance plans should also incorporate risk analysis</p>	<p>The final monitoring and maintenance plan will be developed in consultation with SOPA prior to opening and commencement of operations. Outcomes for the monitoring and management of the surf lagoon is provided in the Summary Water Treatment Monitoring Plan in Appendix 6 (and is more detailed than what would typically be provided at Development Application).</p>	<p>An expanded monitoring and maintenance plan has been provided in section 8.</p>