

## Memorandum

To	<b>David Glasgow</b> <b>Department of Planning, Industry &amp; Environment</b>	From	<b>Maeve Molins</b>
Copy	<b>Eliza Scobie (Urbis)</b> <b>Nik Wheeler (Urbis)</b>	Aurecon Reference	<b>505355</b>
Date	<b>2019-12-19</b>	Application Number	<b>SSD-9726</b>
Subject	<b>Response to RFI – ESD for SSHQCC</b>		

### **Ecologically Sustainable Design for Sydney Swans HQ and Community Centre**

The purpose of this memorandum is to provide a response to the Request for Additional Information submitted in relation to the Response to Submissions (RtS) for a State Significant Development Application for the adaptive reuse of the Royal Hall of Industries to accommodate the Sydney Swans Headquarters and Community Centre (SSHQCC) project at Moore Park.

Aurecon, on behalf of Sydney Swans Ltd have considered the comments raised by the City of Sydney and responses to the matters raised are summarised below.

#### **City of Sydney Comment (a)**

The revised Ecologically Sustainable Design (ESD) Report submitted with the RTS generally addressed the concerns raised in the City's objection letter. The Report has identified that the development will achieve a 5 Star Green Star Design and As Built rating under version 1.2 of the tool. The City recommends that the development should apply the version 1.3, given it is the most recent version

#### **Aurecon Response**

The GBCA has an online registration system that only allows projects to register under current tools. The project has completed the registration process with the GBCA and would not have been able to select a tool that was not considered current.

The below extract from the GBCA's website confirms this.

*Both rating tools are currently open for registration. Buildings that are subject to development approval under the Section J NCC 2019 must register or upgrade fully to Green Star - Design & As Built v1.3. Where buildings are subject to development approval under the Section J NCC 2016, registration is still eligible for Green Star - Design & As Built v1.2.*

Given the SSHQCC Green Star - Design & As Built v1.3 was released to cater specifically for NCC Section J 2019. Changes to the tool relate purely to updated Section J benchmarks, however other than that the outcomes are the same. As stated below in response (b), NCC Section J 2016 has applied to this project, therefore Green Star v1.2 is the correct tool to use.

#### **City of Sydney Comment (b)**

With respect to the National Construction Code (NCC), the City suggests that the development comply with Section J of NCC 2019. This would align with the 5.5 Star NABERS rating requirement under Sydney DCP 2012. Energy and water points under the Green Star rating should be employed. The use of gas fired hot water systems is discouraged.

## **Aurecon Response**

Aurecon notes that applying Section J 2016 is still an appropriate method to comply with the National Construction Code until May 2020. This has been confirmed by the Building Certifier (Mackenzie Group).

While NABERS benchmarks can be used as a guiding benchmark, subjecting the project to a 5.5 Star NABERS target, or equivalent, would not be a meaningful comparison given that NABERS only relates to offices, hotels, apartments, data centres and shopping centres.

## **City of Sydney Comment (c)**

The ESD Report should address façade shading to allow solar gain in winter and prevent direct solar gain in hot summer months. The City recommends that a separate meter is to be installed for the make-up lines for the cooling towers and swimming pool and spa.

Further, whilst the ESD Report identifies that reuse of the existing structure will reduce waste, the development is to reuse or recycle at least 80% of construction and demolition waste, either on site or diverted for reuse and recycling. Car parking areas should also be designed and constructed so that electric vehicle charging points can be and are installed. These matters have not been clearly identified in the amended ESD report

## **Aurecon Response**

### **Façade**

In relation to the Royal Hall of Industries, no changes to the external façade (with the exception of glazing replacement) can be implemented due to the heritage nature of the building.

In relation to the Swifts Annex, energy modelling has been used to assess the impact of the proposed façade against standard practice (NCC Section J). Façade performance of the proposed building is improved by -

- Danpatherm façade to the court area. This is a high performance double glazed cassette panel system which has excellent thermal performance and includes translucent insulating material in the cavity. With a Solar Heat Gain Coefficient of .25, this material is very capable of blocking solar radiation, which is an outcome equivalent to external shading.
- Significant amount of glazing is South facing and not subject to direct summer sun.
- Vertical Shading screens are provided to the Swifts office areas on the North East.

### **Construction & Demolition Waste**

The project intends to meet Green Star credit 22 Construction and Demolition Waste.

The Green Star waste diversion target is 90% by weight or less than 10 kg/m<sup>2</sup>

The Contractor is aware of these requirements and has committed to meeting this target.

### **Metering**

While the design no longer comprises of cooling towers, water for pool and spa make up shall be separately metered.

The project is targeting all points for Green Star credit 6. Metering and Monitoring.

## Electric Vehicle Charging

The Swans have reviewed the possibility of adding Electric vehicle charging spaces however the addition of these facilities does not align with the intention for car parks to be used short term.

Typically, these types of spaces are installed in a commercial car park setting where there are dedicated staff to operate the system for EV charging and maintain equipment. It is currently not considered feasible to operate these facilities at the SSHQCC.

The Green Star rating tool reflects the reality that there are a ways of pathways to achieve best practice sustainability, the project is already expected to be rewarded for other sustainable transport characteristics of the site.