RENYI AUSTRALIAN ENGINEERING CONSULTANTS FOR SUSTAINABLE BUILDINGS

ABN: 81 603 204 299
L23, 520 Oxford Street Bondi Junction, NSW 2022

3 DECEMBER 2024

To: Marie Trarieux

Project Engineer

Besix Watpac

Level 15, 210 George St Sydney NSW 2000

Dear Marie

RE: St George Hospital – Refurbishment project (REF)

1.0 INTRODUCTION

This statement has been prepared by RENYI Pty Ltd on behalf of the Health Infrastructure NSW (the Applicant) to assess the potential environmental impacts that could arise from the refurbishment works at St George Hospital at 16 Kensington Street, Kogarah (the site).

This report has been prepared to highlight the proposed sustainability initiatives that will be considered for the project.

This report accompanies a Review of Environment Factors that seeks approval for the refurbishment of the existing St George Hospital, which involves the following works:

- Internal refurbishment works within existing hospital buildings.
    - Burt Nielson Wing Level 1 – Fluoroscopy
    - Burt Nielson Wing Level 2 – Paediatrics and CYF
    - Clinical Services Building & Services Block Ground Floor – Back of House
    - Ward Block Level 2 – Multi-faith, Patient Transit and AAU
    - Tower Ward Block Level 4 – Renal
    - Tower Ward Block Level 6 – Surgical
    - Prichard Wing Various Levels – Sexual Health, Antenatal and Gynaecology
    - Acute Services Building Level 7 – Palliative Care
- Minor extension for a new Clinical Waste building within the hospital campus and new covered walkways
- Services upgrade/ modification works & new services installations including but not limited to lighting, hydraulics, mechanical, fire, stormwater, and drainage.
- Demolition of existing buildings within the hospital campus and wider precinct
- Civil & Landscaping works adjacent to Belgrave Street for continuation of the Ambulatory Care main entry forecourt area.

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1.1 Site Description

The St George Hospital is located on Kensington Street, Kogarah, within the Georges River Council Local Government Area (LGA) on Bidjigal Country. The hospital site is approximately 12 kilometres south of the Sydney CBD and has an area of approximately 5.16 hectares.

The hospital is located in a cluster of health and education uses within the Kogarah town centre. It comprises a number of buildings associated with the hospital campus situated around an internal road network.

St George Hospital is within proximity of transport services and key road links, including Kogarah Railway Station approximately 350 metres to the north of the site and Princes Highway to the east of the site. An aerial image of the site is shown in Figure 1.

Figure 1: Site Area (Source: Nearmap, edits by RENYI)

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2.0 DGN058 Sustainability framework Approach

The DGN058 sustainability framework has been adopted for the Main St George hospital Stage 3 project and will be used as a guide for the refurbishment works as well. The refurbishment work would form part of the larger Stage 3 project. The table below highlights the points summary currently adopted for the Stage 3 project.

Table 1: DGN058 Summary scorecard for the main building works

DGN058 (GREEN STAR) SCORE CARD summary (rev01)	
Date	**29/04/2024**
Project	**ST GEORGE HOSPITAL**
Green Star Registration Number	**TBA**
Targeted Rating	**5-Star (60 points min)**

Environmental Category	Points Available	Low Risk Points Targeted	High Risk Points Targeted	POINTS CONFIRMED To date
Management	14	13.0	1	0
Indoor Environment Quality	16	12.0	0	0
Energy	22	4.7	1	0
Transport	10	3.5	1	0
Water	12	3.0	0	0
Materials	14	9.0	0	0
Land Use & Ecology	6	3.0	1	0
Emissions	5	4.0	0	0
BASE TOTAL/ Points to Confirm	**99**	**52.2**	**4**	**0**
Innovation Points	10	5	3	0
GRAND TOTAL		***57.20***	**7**	0

3.0 Sustainability Initiatives for the Refurbishment project

RENYI and Besix Watpac have conducted multiple consultation sessions with NSW Health Infrastructure to derive the sustainability initiatives for the REF project. The process involved identifying the relevant credits to be targeted and setting the required scope of works to achieve the credit requirements in-line with the DGN058 guidelines.

In general, the approach would be as follows:

Please refer to Appendix A for more information regarding the relevant Sustainability initiatives.

Please feel free to contact me if you have any queries.

Thank you.

Yours sincerely

Allan Ang | Director
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4.0 Appendix A

	Agreed sustainability measures included in design and/ or construction between HI and BW
1) Project is to engage an ESD consultant	ESD consultant was engaged for the Stage 3 project and it was during this engagement that project sustainability planning occurred. It is acceptable for some items in this checklist to be marked "not applicable" (N/A) given the nature of the project. The approach should remain as "using a common sense approach to achieve the best we reasonably can".
2) Demonstrate how the development addresses the following sustainable design considerations	
i) Waste minimisation including by the choice and reuse of building/construction materials	N/A during design During construction, a letter will be obtained from the demolition contractor stating the percentage of materials that can be recycled. Depending on the demolition scope of works, the reuse may be significantly low or even 0%.
ii) Electricity Peak Demand Management	N/A
iii) Energy efficient technology	During Design: Design to nominate that all new lighting fixtures are LED lights. During Construction: ESD Consultant will ensure all new lighting fixtures are LED lights, appropriate for the space. LED lighting product datasheets will be presented as evidence.
iv) Passive design measures to reduce reliance on artificial lighting and mechanical heating and cooling	N/A - No change to building envelope, orientation or shading.
v) Generation and storage of renewable energy (including compliance with NCC2022 J9D5 where new roof area>55m2)	N/A
vi) Provide metering and monitoring of energy consumption (including compliance with NCC2022 J9D3 where relevant)	N/A
vii) Potable water minimisation	During Design: Design to nominate that all new sanitary fixtures are WELS rated. During Construction: ESD Consultant will ensure all new sanitary fixtures are WELS rated. WELS certificate and sanitary fixtures schedule will be presented as evidence.
3) Provide an Operational Waste Management Plan (if one is not already in place for the facility/LHD)	N/A - Existing plan
4) Provide an EV charging infrastructure plan which aligns with DGN 046 and NCC J9D4 (if project scope involves carparking areas)	N/A
5) Project is to be 100% electric (no new fossil fuel equipment for areas within project scope)	NA - No new equipment
6) Demonstrate project will achieve a 10% improvement on NCC Reference Building J1 V3	Works to meet requirements of NCC Section J if triggered.
7) Demonstrate the project will achieve a 10% Improvement over NCC2022 Max Illumination Power Density Table J7D3a	Works to meet requirements of NCC Section J if triggered.
8) Demonstrate how the project is addressing Climate Risk Assessment and Adaptation by:	N/A
i. where there is an existing LHD climate risk assessment, identify and assess relevant risks within project scope and identify and implement relevant adaptation measures for all risks rated medium or above OR	N/A
ii. Where there is no existing LHD climate risk assessment, identify relevant climate risks within scope and implement HI standard adaptation measures for any risks rated medium or above (using Climate Risk Assessment Tool to be provided by HI Sustainability team)	N/A
9) Comply with the following requirements outlined in GREP as relevant to project scope: ***E3 Minimum standards for new electrical appliances and equipment** ***W3 Minimum standards for new water-using appliances** ***A1 Air emission standards for mobile non-road diesel plant and equipment** ***A2 Low-VOC materials (project is to use low VOC paints/coatings under APAS standards AP-D181)**	During design: Design to nominate low VOC paints and high energy-efficiency rating loose appliances. During Construction: -Letter statement from Project Manager to confirm loose appliances have high energy-efficiency rating. -Letter statement from paints contractor to confirm low VOC paints are used.
10) Provide a Sustainability Initiatives list (including whole of life costing, evidence of how initiatives to be implemented via design/construction and roles and responsibilities). This list is to be updated throughout project as required. Provide evidence that 4% of budget spent on Sustainability Initiatives. Suggested Initiatives to consider (as appropriate to scope) include, but are not limited, to:	Note 4% spend on sustainability is intended for entire project, not milestone within projects such as REF works.
i. Solar if roof area >55m2 or carpark/airfield area >1000m2 (NB: may also be included in Net Zero Plan Statement if relevant)	N/A
ii. Concrete with high % SCM	N/A
iii. Low embodied emission building materials	N/A
iv. Recycled building materials (consider recycled asphalt pavement, recycled glass sand, recycled aggregates etc)	N/A
v. Energy efficient design elements (which exceed NCC Section J deemed to satisfy requirements where relevant to scope)	N/A
vi. Water Sensitive Urban Design measures (if outdoor landscaping or paved areas >100m2 to project)	N/A
11) Provide evidence that tender schedules/specifications to consider sustainability	Sustainability initiatives listed in this table will be implemented during Design and Construction.

12) Provide project reporting data at completion stage on:	
i. Embodied/Upfront carbon emissions (currently using NABERS Embodied Emissions Materials Form to be replaced with NABERS Embodied Emissions Tool once developed in 2024)	During Design: Quantities of materials are to be extracted from architectural and services documentation and filled into the form/tool to undertake Upfront Carbon Emissions calculation. During Construction: Co-ordination with suppliers to update calculations. Note no percentage target will need to be considered.
ii. Potable/Non-Potable water usage (KL)	N/A
iii. Construction and Demolition waste to landfill (tonnes)	During Design: N/A During construction: Waste Contractor to be provide reporting on waste generated.
iv % construction and demolition waste diverted form landfill	During Design: N/A During construction: Waste Contractor to be provide reporting on waste generated.
v. % recycled content in construction materials (to include at least concrete/asphalt/aggregate/steel/aluminium/plasterboard/glass/mulches/timber)	During Design: N/A During construction: Waste Contractor to be provide reporting on waste generated.
vi. Construction Waste Management Plan which considers: i. Reuse ii. Recycling opportunities iii. Identifies relevant waste streams	During Design: N/A During construction: Waste Contractor to be provide reporting on waste generated.