

12<sup>th</sup> March 2024

## Health Infrastructure

c/o TSA Management

1 Reserve Road, St Leonards NSW 2065

**Attention:** Health Infrastructure – Marcus Haines

**Project Reference:** HI23123

## Introduction

Health Infrastructure is proposing temporary works at Ryde Hospital at 1 Denistone Road, Denistone.

The purpose of the development is to carry out a series of temporary works to ensure that the ongoing operation of the hospital is not impacted during construction of the Ryde Hospital Redevelopment. Specifically, the proposed temporary works will comprise:

- Construction of temporary intensive and critical care building.
- Alterations to the Graythwaite Building and basement to facilitate new office space, kitchens and storage areas.
- Establishment of two construction zones to accommodate office space, workshops, storage and waste compactors.
- Construction of a pedestrian ramp that connects between Trigg House and the Graythwaite Building.
- Connection and augmentation of in-ground services and utilities, as required.

## Sustainability Review

This review of the temporary works documentation [see Appendix for documentation references] has been carried out in order to assess compliance against the following;

- DGN58/Hi Sustainability Framework
- Section 2.5.6 of HI Services Guidelines (6/08/21), Describe any climate resilient design measures in response to climatic risks
- Consideration of the pre-fab/temporary nature of facilities and any in-built measures or alternative pathways if non-compliant.

## Assumptions

In carrying out this review it should be noted that the works are *temporary* and will be removed prior to the Main Works being completed. As such, a set of assumptions have been made in order to fairly assess the works against the main project sustainability criteria, as follows:

1. DGN-058 HI ESD Evaluation Tool [REV G dated 18/12/22] various elements relating to operational initiatives, ecology & landscape, commissioning, and tuning have not been

applied to the temporary works. This review has centred generally on impacts relating to materials lifecycle, energy & water efficiency, and occupant comfort. Due to the temporary nature of the works it is considered not necessary to achieve at least 60 points under the DGN-058. All efforts to comply with the relevant requirements have been undertaken otherwise.

2. Climate risk & adaptation: given the short-term nature of the works, potential direct climate risks are generally limited to user safety during heat events, and localised flood risk to the extent that it might already apply to the site. These risks are considered to be captured by present-day OH&S approaches;
3. Main works ESD Specification provides detailed sustainability criteria for the Main Works. It is assumed that the temporary works will adhere to this Specification where relevant.

## Findings

In general the proposed temporary works are considered to comply with the sustainability requirements on the provision that the following conditions outlined in *DGN-058 ESD Evaluation Tool Specification, Rev01* dated 18/12/22 (issued for Main Works), are met:

1. All demolition and construction work meets the criteria in clause 5.43 *Construction & Demolition Waste: Percentage Benchmark* (where at least 90% of all construction and demolition waste is diverted from landfill);
2. Clauses 5.37 through to 5.41, all relating to the sourcing of materials and associated environmental impacts. These are considered relevant and applicable regardless of the temporary nature of the works;
3. Clauses relating to occupant indoor comfort are still met, being the following:
  - a. Clause 5.17 Ventilation system attributes
  - b. Clause 5.17.2 Design for ease of maintenance and cleaning
  - c. Clause 5.17.3 Cleaning prior to use and occupation
  - d. Clause 5.18 Provision of outdoor air
  - e. Clause 5.19 Exhaust or elimination of pollutants
  - f. Clause 5.20 Internal noise levels [on-site testing by the contractor would be sufficient]
  - g. Clause 5.22/1 flicker-free lighting
  - h. Clause 5.23.1 General illuminance (relates to user comfort and energy efficiency)
  - i. Clause 5.23.2 Glare reduction (lighting)
  - j. Clause 5.26 Glare reduction (sunlight)
  - k. Clauses 5.28, 5.28.2, (low VOC) paints, adhesives and sealants, and carpets (applicable to site-applied materials only)
  - l. Clause 5.29 Engineered wood products (low formaldehyde) – apply to interior joinery only, loose furniture may be excluded for temporary works
4. Clause 5.33 Sanitary Fixture efficiency, applicable to all items listed under Performance Requirements
5. Also consider adopting Clauses 4.10 and 4.11 from the ESD Specification relating to local procurement of products, materials, services and skilled labour

## Recommendations

The following initiatives relating to climate risk are also recommended for consideration:

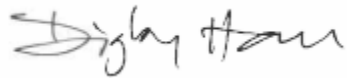
1. Wherever existing guttering and downpipes are to be removed, consider upsizing their replacement (whether it be temporary or permanent) to cater for potential increases in downpour & storm events. Also consider including increased overflow capacity should gutters block.
2. Wherever site staff are required to walk on-grade between temporary buildings, also provide fixed shelter along primary external circulation routes, to protect from weather & direct sun

### 3. Adoption of ESD Specification Clause 5.45 Heat Island Effect Reduction

Given the temporary nature of the works, every effort should be made to enable re-use of materials and FF&E following removal. This may require specific installation methods to be used during site establishment.

Based on the above assumptions, it is my professional view that the temporary works are able to comply with the relevant aspects of the project's sustainability requirements.

Yours sincerely,



**Digby Hall**

Founder & Director, Climatewise Design

(Exec) MBA, B.Arch.

Nominated Architect, NSW 7141, TAS 1279

## Documentation References

|                         |   |            |  |            |
|-------------------------|---|------------|--|------------|
| RHR-AR-DWG-10-TS-00-001 | 2 | 08/03/2024 | TEMPORARY STRUCTURES - PROPOSED SITE PLAN  | For Tender |
| RHR-AR-DWG-50-TS-EL-002 | 2 | 08/03/2024 | TEMPORARY STRUCTURES - ELEVATIONS - BINS / ENGINEERING / EXECUTIVE OFFICES / IPO | For Tender |
| RHR-AR-DWG-50-TS-EL-003 | 3 | 08/03/2024 | TEMPORARY STRUCTURES - ELEVATIONS - ICU / CCU                                    | For Tender |
| RHR-AR-DWG-50-TS-EL-004 | 3 | 08/03/2024 | TEMPORARY STRUCTURES - ELEVATIONS - FOOD SERVICES                                | For Tender |
| RHR-AR-DWG-51-TS-SE-001 | 2 | 08/03/2024 | TEMPORARY STRUCTURES - SECTIONS - BINS / ENGINEERING / EXECUTIVE OFFICES / IPO   | For Tender |
| RHR-AR-DWG-51-TS-SE-002 | 3 | 08/03/2024 | TEMPORARY STRUCTURES - SECTIONS - ICU / CCU                                      | For Tender |
| RHR-AR-DWG-61-TS-TB-001 | 2 | 08/03/2024 | FIT OUT PLAN - BINS / ENGINEERING / EXECUTIVE OFFICES / IPO                      | For Tender |
| RHR-AR-DWG-61-TS-TC-001 | 2 | 08/03/2024 | FIT OUT PLAN - ICU / CCU - GROUND LEVEL - A                                      | For Tender |
| RHR-AR-DWG-61-TS-TC-002 | 2 | 08/03/2024 | FIT OUT PLAN - ICU / CCU - GROUND LEVEL - B                                      | For Tender |
| RHR-AR-DWG-61-TS-TC-010 | 3 | 08/03/2024 | FIT OUT PLAN - ICU / CCU - LEVEL 1 - A   | For Tender |
| RHR-AR-DWG-61-TS-TC-011 | 3 | 08/03/2024 | FIT OUT PLAN - ICU / CCU - LEVEL 1 - B   | For Tender |
| RHR-AR-DWG-61-TS-TC-012 | 2 | 08/03/2024 | FIT OUT PLAN - ICU / CCU - LEVEL 1 - C   | For Tender |
| RHR-AR-DWG-61-TS-TD-001 | 2 | 08/03/2024 | FIT OUT PLAN - LINKWAY / RAMP  | For Tender |
| RHR-AR-DWG-61-TS-TF-001 | 2 | 08/03/2024 | FIT OUT PLAN - STORES AND LINEN  | For Tender |
| RHR-AR-DWG-61-TS-TF-002 | 3 | 08/03/2024 | FIT OUT PLAN - FOOD SERVICES   | For Tender |