

#### **APPLICATION ON NOTIFICATION – CROWN DEVELOPMENT**

<b>Applicant:</b> Department for Health and Wellbeing				
Development Number:	080/V041/20			
Nature of Development:	Redesign and refurbishment of two wards			
	at the Daw Park Repatriation Hospital for			
	transition care health facilities.			
Type of development:	State Agency Development			
Zone / Policy Area:	Mixed Use Zone			
Subject Land:	216 Daws Road, Daw Park			
Contact Officer:	Sarah Elding			
Phone Number:	08 7109 7006			
Start Date:	25 March 2020			
Close Date:	17 April 2020			

During the notification period, hard copies of the application documentation can be viewed at the Department of Planning, Transport and Infrastructure, Level 5, 50 Flinders Street, Adelaide during normal business hours. Application documentation may also be viewed during normal business hours at the local Council office (if identified on the public notice).

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered or emailed to the State Commission Assessment Panel (SCAP). A representation form is provided as part of this pdf document.

#### Any representations received after the close date will not be considered.

#### Postal Address:

The Secretary State Commission Assessment Panel GPO Box 1815 ADELAIDE SA 5001

### Street Address:

Planning and Land Use Services Department of Planning, Transport and Infrastructure Level 5, 50 Flinders Street ADELAIDE

Email Address: scapreps@sa.qov.au



Department of Planning. Transport and Infrastructure

#### **DEVELOPMENT ACT 1993**

#### NOTICE OF APPLICATION FOR CONSENT TO DEVELOPMENT

#### SECTION 49 - STATE AGENCY DEVELOPMENT

Notice is hereby given that an application has been made by the Minister for Health to re-design and refurbish two wards at the Daw Park Repatriation Hospital. Development Number 080/V041/20.

The subject land is situated within the existing Daw Park Repatriation Hospital at 216 Daws Road, Daw Park, (being a101, DP117209: CT 6201/131; and a100, DP 117209: CT 6201/130).

The development site is located within the Mixed Use Zone of the Mitcham Council Development Plan (Consolidated 20 February 2020).

The application may be examined during normal office hours at the office of the State Commission Assessment Panel, Level 5, 50 Flinders Street, Adelaide and at the office of the Mitcham Civic Centre, 131 Belair Road, Torrens Park. Application documentation may also be viewed on the State Commission Assessment Panel (SCAP) website: https://www.saplanningportal.sa.gov.au/

public\_notices

Any person or body who desires to do so may make representations concerning the application by notice in writing delivered to the Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide 5001 by NO LATER THAN 17 APRIL 2020. Submissions can also be emailed to: scapreps@sa.gov.au

Each person or body making a representation should state the reason for the representation and whether that person or body wishes to be given the opportunity to appear before the SCAP to further explain the representation.

Submissions may be made available for public inspection.

Should you wish to discuss the application and the public notification procedure please contact Sarah Elding on (08) 7109 7006.

Jessie Surace SECRETARY STATE COMMISSION ASSESSMENT PANEL

W1528 www.sa.gov.au

### DEVELOPMENT ACT, 1993 S49 – CROWN DEVELOPMENT REPRESENTATION ON APPLICATION

Department for Health and Wellbeing
070/V015/20
Redesign and refurbishment of two wards at the Daw Park Repatriation Hospital for transition care health facilities.
Mixed Use Zone
216 Daws Road, Daw Park, South Australia
Sarah Elding
08 7109 7006
17 April 2020

My name:		
	nber:	
	HOD(s) OF COM	
		Postal address:
		Postcode
You mav be	contacted via	your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to
-		nmission Assessment Panel in support of your submission.
My interests	are:	<ul> <li>owner of local property</li> <li>occupier of local property</li> <li>a representative of a company/other organisation affected by the proposal</li> <li>a private citizen</li> </ul>
The address	of the proper	y affected isPostcode
		application to which I make comment on are:
I	[]	wish to be heard in support of my submission do not wish to be heard in support of my submission (Please tick one)
by	[]	appearing personally being represented by the following person :
Date:		Signature:

Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 or <a href="mailto:scapadmin@sa.gov.au">scapadmin@sa.gov.au</a>

# SECTION 49 & 49A - CROWN DEVELOPMENT DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS			FOR OFFICE USE				
COUNCIL:	CITY OF MITCHAM	1	DE) (E) ODI (E)	<del>-</del>			
APPLICANT:	DPTI, CARE OF ST	Н					
ADDRESS:	LEVEL 3, SUITE 320	), 38 GAWLER PLACE,					
	ADELAIDE, 5000		DATE RECEI	VED:	/	/	
CROWN AGENCY	: <u>DP11</u>						
CONTACT PERSON FOR FURTHER INFORMATION           Name:         JEREMY KELLY           Telephone:         08 8223 1030         [work]         [Ah]           Fax:         [work]         [Ah]           Email:         JKELLY@STH.COM.AU			Complying  Merit Public Notification Referrals		Decision:  Type:  Finalised: / /		
NOTE TO APPLIC	CANTS:						
(1) All sections of this form must be completed. The site of the development must be accurately identified and the nature of the proposal adequately described. If the expected development cost of this Section 49 or Section 49A application exceeds \$100,000 (excl. fit-out) or the development involves the division of land (with the creation of additional allotments) it will be subject to those fees as outlined in Item 1 of Schedule 6 of the <i>Development Regulations 2008</i> . Proposals over \$4 million (excl. fit-out) will be subject to public notification and advertising fees.  (2) Three copies of the application should also be provided.			Planning: Land Division: Additional: Minister's Approval	Decision required	Fees	Receipt No	Date
DESCRIPTION OF	HEALTH FACILITY (OF PROPOSED DEVE	DEDESIC	N AND REFURBI				TION CARE
LOCATION OF BE	ODOSED DEVELO	DMENT.					
	ROPOSED DEVELOR Lot No: 216		\D -	Fown/Suburb:	DAW PARK		
	rt]	Hundred: ADELAIDE		Volume: CT620		Folio: 130	
	rt]	ADEL AIDE		Volume: CT620		Folio: 131	
LAND DIVISION:							
Site Area [m <sup>2</sup> ]	2180m2	Reserve Area [m <sup>2</sup> ]		No of existing a	llotments	1	
Number of addition	nal allotments [exclud	ling road and reserve]: _	0	Lease:	YES		
	COST [do not include	a, out ooo.oj.	12m				
will be forwarded t	to the Office of the Te	Schedule 5 (2a)(1) of the echnical Regulator for co tances from existing pov	mment unless th	e applicant provi	ides a decla	ration to confir	m that the

I acknowledge that copies of this application and supporting documentation may be provided to interested persons in accordance with the *Development Act 1993*.

SIGNATURE: \_\_\_\_\_ Dated: 18 / 12 / 2019

infrastructure and clearance distances can be downloaded from the DPLG website (www.dac.sa.gov.au).

# SCAP REPORT REACTIVATING THE REPAT - PHASE 2



18 December 2019 Revision 01









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# 1.0 INTRODUCTION

The Department of Transport, Planning and Infrastructure (DPTI), in association with the Department of Health and Wellbeing (DHW) and Southern Adelaide Local Health Network (SALHN) seek to undertake alterations and additions at the Daw Park Repatriation Precinct site. The proposed alterations are to existing assets on the site, buildings 71 and 72 with frontage on Daws Road.

In accordance with Section 49 (2) of the Development Act 1993, as the development is to be undertaken by the Department of Health and Wellbeing, the State Commission Assessment Panel (SCAP) must assess the development.

To assist the SCAP in its assessment, we provide a description of the development and its site with in the greater area and precinct. We have also taken an assessment of the relevant aspects of the development against the relevant version of the Mitcham (City) Development Plan (14th Nov 2019) as a guide to determine its suitability in context.



# 2.0 BACKGROUND

The Repat Health Precinct Master Plan identified opportunities for the provision of "Transition Care" beds within the Repat Health Precinct, and will be delivered through the refurbishment of existing buildings on the site. The proposed location on the site will be buildings 71 and 72, requiring alterations to the internal fit out and minor additions to the external envelope to accommodate patients.

Currently this group of patients are temporarily occupying a portion of building 12, to the north of the Repatriation site. This patient group are required to be relocated, to enable other works to be undertaken as part of the overall masterplan and reactivation of the site and precinct.

Buildings 71 and 72 are existing buildings on the site and have been previously used for inpatient hospital care services. Since the facility has ceased to operate as a hospital and closed all inpatient facilities, the space has been unoccupied. During this time the buildings have fallen into significant disrepair.

The proposed unit will support 26 patients, in a mixture of shared two person rooms and single rooms. The overall arrangement of the unit uses the existing building fabric and utilizes the main elements of the internal configurations to achieve a compliant space for inpatient spaces. of "Transition Care" beds were specifically intended to improve patient flow across the system and where appropriate to provide longer stay care in a non-acute hospital setting.



# 3.0 SITE & LOCALITY

The subject site, the Repatriation Precinct, is located on the southern side of the greater Adelaide area. (refer to 4.4)



Wards 1-2 highlighted yellow within the subject site boundary (blue).

The subject site is located on the south-eastern corner of the Repatriation Precinct, with frontage to Daws Road. The area of the proposed development (Wards 1-2) on the precinct site is approximately 2180m2.

Buildings are existing on the subject site and were associated with the previous activity of the Repatriation General Hospital and its clinical operation. The site ceased to operate as hospital and provide clinical since from 2017. Subsequently the precinct has undertaken decommissioning works and closed for providing inpatient care to the community.

Repat Radiology has remained operational on the Repatriation site during this period.

The former Repatriation General Hospital will be reactivated as a health and wellbeing precinct and undertake a number of projects to achieve this outcome.

Development to building 71 and 72 will be one of these projects.



# 3.0 SITE & LOCALITY

There are a number of mixed directional and information signs throughout the site. These will need to be amended with new site operation and function.

There are a number of mature trees of varying species across the site. Adelaide Tree Surgery have undertaken a survey of these trees and found that none of the trees adjacent to the development are regulated.

Currently there are no immediate car parking or bicycle parking spaces in the direct vicinity of Building 71 and 72. The site currently provides parking to the west, connected with the original main entrance off Daws Road, and to the north east, where a large number of car parks are available. Pathway connections to the building are poor and require use of the internal roadway. Directly in front of Building 71 and 72, Daws Road provides on street parking connected by a short path to the front door entrance. Current connections to the main entrance for building 71 and 72 are not in close proximity and do not provide compliant paths of access for patient drop off or visitors.

Access to the site is gained via two existing crossovers from Daws Road, and one from the connection via internal roadways that link with adjacent access to the development zone.

These crossovers to Daws Road, are single widths, and provide direct access to the site. No impact to these cross overs has been identified by the planned development and changes to the connection of Daws Road and Springbank Road. Access will be required for Ambulance entry and drop off to the front door of the site.

Parking along Daws Road is currently available, aside from a "no stopping zone" which extends for approximately 5 metres either side of the pedestrian crossing. When children are present, vehicle speeds on Daws Road are restricted to 25km/h, but at all other times a 60km/h speed limit applies.

A 1.8m high perimeter chain wire fence surrounds the site on the Daws Road boundary. This is not a secure fence. A variety of fences adjoin the residential neighbours along the east boundaries. The site perimeter will be reviewed as part of the overall precinct masterplan.

The subject site is serviced by public transport, with a bus stop located directly to the south west on Daws Road and the bus stops on the adjacent Goodwood Road approximately 340 metres to the north-east.

The subject site is well connected to the existing stormwater system that connects to major infrastructure on Daws Road. The proposed development will not change the current stormwater flow or impact the current management of stormwater.



### 4.0 PROPOSAL

Department of Transport, Planning and Infrastructure (DPTI), Department for Health and Wellbeing (DHW) and Southern Adelaide Local Health Network (SALHN) seeks to undertake alterations and additions at the Repatriation Precinct, to reactivate the site for a new purpose of life.

The Repatriation Precinct is currently operating with limited services and activity. Currently the services operating on the site are

- Repat Radiology
- Hydrotherapy
- Outpatient Services Brain Injury Services and connected community support
- Temporary Inpatient Accommodation for SALHN Transition Care Patients

The Repatriation Precinct will be undergoing a number of reactivation projects to transform the site from the once hospital site, to a health care support zone and community engagement destination.

### **BUILDINGS 71-72**

Buildings 71 and 72 are existing buildings on the site and have been previously used for inpatient hospital care services. Since the facility has ceased to operate as a hospital and closed all inpatient facilities, the space has been unoccupied. During this time the buildings have fallen into significant disrepair. The proposed reactivation of the spaces will see the building activated and fully utilised, which is the best outcome for the currently vacant buildings.

Buildings 71 and 72 are listed by South Australian Heritage Register, refer to Section 5: Heritage Impact Statement. Externally, minimal changes are proposed, and where new works occur, for example the entry canopy, the design is clearly contemporary and complimentary to the original fabric. The internal modifications respect the historically symmetrical planning and retain loadbearing walls. Conservation works will be undertaken to the roof, rainwater goods, and external fabric as required to preserve the existing use and significance of place.

The development is proposed to utilise the existing buildings on the site and minimize the external impact to site scape to the current street frontage.

With an essentially symmetrical floor plan, the planning layout has the building bisected by a central corridor that will provide the main entrance to the south, and link via covered walkway to the similar shaped existing building (Building 73 & 74) to the North, connecting the Town Square to the Transition Care Unit.

Planning of this heavily refurbished shell typically has Staff and Support rooms centrally located with bedrooms along the building perimeter to offer external views and natural light. The characteristic curved end-forms of the building envelope are designated as Meeting and Lounge areas.

Landscaping works include upgrading of gardens and courtyards immediate to this building. Gym & Lounge/Dining areas face gardens to the north side incorporating external facilities for activities and social engagement.



## 4.0 PROPOSAL

### **BRIEF**

The proposed development and clinical unit will support 26 patients, in a mixture of shared two person rooms and single rooms. The overall arrangement of the clinical unit uses the existing building fabric and utilizes the main elements of the internal configurations to achieve a compliant space for inpatient spaces.

"Transition Care" beds were specifically intended to improve patient flow across the system and where appropriate to provide longer stay care in a non-acute hospital setting.

The nature of the "Transition Care" patient will be encouraged to socialise and use the communal spaces, such as the gym space for rehabilitation activities and external spaces to improve health outcomes.

### **ACCESS**

The proposed "Transition Care" beds will be connected to the existing site by the network of sitewide covered walkway system, connecting building 71 and 72 with the greater site.

The existing internal roadway network on the Repatriation site will provide access for vehicle movement to the proposed site.

### **CAR PARKING**

Alterations to the existing internal roadway on the southern side of the of facility will provide 19 additional carpark spaces. This includes:

- Three spaces for disabled parking
- Bike parking
- Parking and covered patient drop off for Ambulance SA
- Parking and patient / visitor drop off for access cab

### **PRECINCT**

Repatriation precinct, as a site wide initiative will be activated in parts as a staged masterplan strategy in response to a community consultation

### **EMERGENCY RESPONSE**

Site-wide medical responses to support clinical care is currently being worked through by the health networks operating on the site.

Ambulance services will be supported with allocated space for specialist vehicles out the front of the facility. Ambulance SA have been consulted and supportive of the location proposed.

South Australian Metropolitan Fire Service will be able to access the site and provide the required emergency services to the proposed site.



### 4.0 PROPOSAL

### LANDSCAPING

Refer to Appendix D.

Landscaping to the proposed site, and across the precinct is intended to be consistent and coordinated by the improving the overall site legibility. Oxigen have been engaged and will be providing the overall site with a coordinated and consistent landscaping message.

For the proposed development landscape services will be provided to outdoor spaces immediately surrounding building 71 and 72.

This will include but not limited to the following

- Improvement of pathways
- Connection with outdoor spaces
- Therapy walking loops for patients
- Non slip surfaces
- Mixture of textured surfaces
- Multi use spaces
- Interactive spaces

### **Amenities**

- Redevelopment of courtyard spaces, on northern side of buildings and include walking paths, mobility gardens, seating, raised garden beds, shaded spaces and new planting
- Redevelopment of courtyard spaces on southern side of building to provide shaded spaces for patient interaction and rehabilitation
- Seating opportunities in the landscaped spaces
- Covered areas in the landscaped spaces
- Use of textures and opportunity to stimulate senses

### TREE REMOVAL

The project team has identified a significant risk to public and patient safety due to the existing trees along the Daws Road boundary that will be required to be removed. The reason for this is due to the type of tree and the small nut dropped, creating a slip hazard on pathways and open spaces.

Staged tree removal of the impacting species has been identified, with replacement tree planting.

No significant trees have been identified in the proposed site of works.

### **STORMWATER**

No significant changes to existing hard surfaces or existing stormwater management, as proposed planning does not impact current conditions.

The project has engaged Wallbridge Gilbert Aztec for civil services and combined with Aurecon hydraulic services team, to undertake a storm water management plan for the site.

Refer to Appendix E for the locations of the existing stormwater infrastructure system connecting to the site and proposed development.



# 4.1 PROPOSAL - RECTIFICATION WORKS

### **EXISTING BUILDINGS 71-72 – WARD 1 & 2**

Wards 1&2 are in poor condition. Original 1940's building fabric is structurally sound, with a later addition also in reasonable structural condition. Currently vacant, there are several significant issues requiring rectification prior to upgrade works. Damp is evident in the western sun-room, likely to be caused by failure of the waterproofing to the concrete roof above, further investigation of the structural adequacy of this roof and the corresponding eastern roof is required. Roof leaks are evident down the length of the building. Signs of possum habitation are also apparent.

The flooring throughout is a mix of slab-on-ground, suspended slab and suspended timber flooring. The timber flooring may cause issues with the proposed future use with regard to acoustics and adequacy for use in a clinical space.

Services to the building, electrical, hydraulic and mechanical, require replacement.



Interior Ward 1



Internal Ceiling



Western Sun-Room



N/E Courtvard



## 4.2 PROPOSAL - FACILITY MANAGEMENT

### **ACTIVITY**

The Transition Care Unit will provide 24-hour accommodation for patients that have completed their inpatient rehabilitation and are awaiting placement in appropriate accommodation.

Patient stay is generally for longer periods, in some cases over 24 months.

### **STAFFING**

A mix of staff will operate in the space, including Medical & Pharmacy staff, Nursing staff and associated Nurse Unit Managers, Physio and Case Managers. Nursing levels will vary between nine and four staff members on the ward at one time.

### **PHARMACY**

Site wide Pharmacy provision and delivery is being worked through to avoid replication and ensure efficiency. Planning provides a central and secure medication room, adjacent to the staff base. The room will be electronically secure, monitored and include CCTV coverage in line with SA Health guidelines.

### ADMISSION/PATIENT FLOW/DISCHARGE

The Transition Care Unit will provide accommodation for patients that have completed their inpatient rehabilitation and are awaiting placement in an appropriate care facility or their own homes. Patient transfer to and from the facility is by access cab, ambulance, or occasionally by private vehicles.

### **MATERIALS/FM SERVICES**

Final models for the support services are yet to be resolved. Provision has been made within the design to develop the associated spaces as required once decisions have been resolved.

### KITCHEN/FOOD PREP

Meal delivery methodology is currently being worked through to provide a site wide service, to avoid replication and ensure efficiency. Currently it is envisaged that meals will be prepared and transported to the unit by an external provider. Clean pathways are provided for meal delivery.

Serving of meals to inpatients will be either plated hostess or server model (TBC) and kitchen preparation has been provided in planning to accommodate either model.

The on-ward kitchen will have the ability to:

- Re-therm and plate meals
- Undertake food modification as required
- Allow a small selection food such as sandwiches to be prepared on site
- · Store meal trolleys



## 4.2 PROPOSAL - FACILITY MANAGEMENT

### **LINEN SERVICES**

Linen will be provided through an offsite service provider. Provision for on-site laundry facilities has been made for patient items.

Linen supply will be provided to the facility via the western end and the delivery path to the facility. Distributed linen stores will be provided within the planning.

Dirty linen path will be via dirty utility spaces and disposal pathways.

### **STORES & SUPPLIES**

Stores and supply models are yet to be resolved. Allocation for appropriate storage space has been made on ward for day to day consumables.

All supplies will be delivered to western side, for stores and other consumables. Couriers and small items will be delivered to the front entrance and reception point.

### **WASTE**

Disposal rooms are located on eastern and western ends of the planning, with direct access to external spaces for collection.

Site-wide management services will be providing waste removal services.

Dirty utility spaces have been allocated to each end of the planning and will assist with waste management activity connected to patient care.

### **KEY RELATIONSHIPS**

As an independently functioning unit, there are few critical clinical dependencies for this building. A clear and safe path to the town square and café is desirable to provide a level of amenity for the patients. The ability for patients to move around the site and access non-clinical spaces is also beneficial.

# 4.3 PROPOSAL - INTERIOR DESIGN **CONCEPTS**



### **BASE PALETTE**

Timbers, warm greys, warm whites and ochre
This palette is to be used across the site and is inspired by the colours common to the existing site and to local landscapes. The base palette is used together with a palette of accent colours that are used to give identity to individual spaces. Subtle variations in colour mimic colour in nature.

### **FLOOR FINISHES**



Carpets Vinyls

### **WALL, CEILING & JOINERY FINISHES**



Timber wall & ceiling panels Joinery laminates



Wall protection

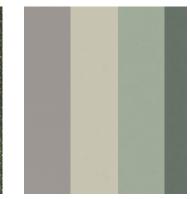


### **GREEN ACCENTS - ADELAIDE HILLS**

Restorative



Vinyls



Joinery laminates



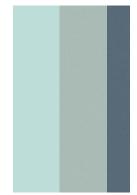
**BLUE ACCENTS - COAST Uplifting** 

Vinyls



Carpets

Carpets





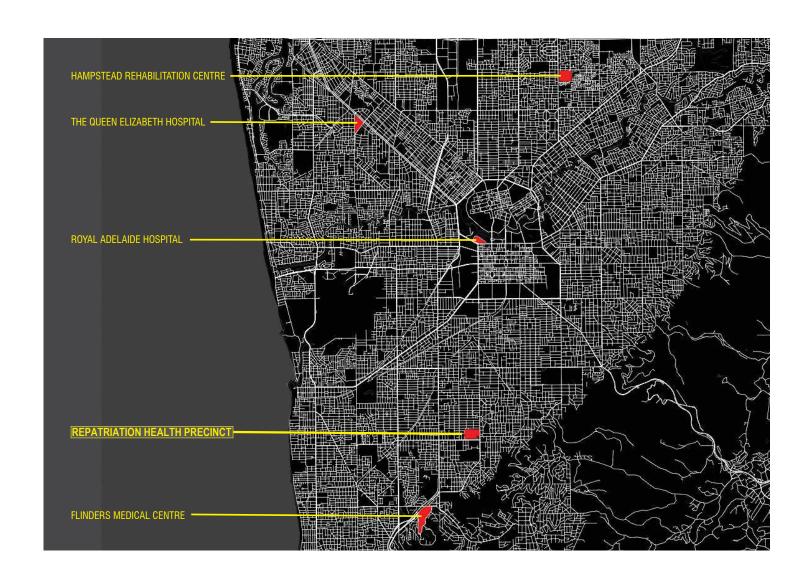


Joinery laminates



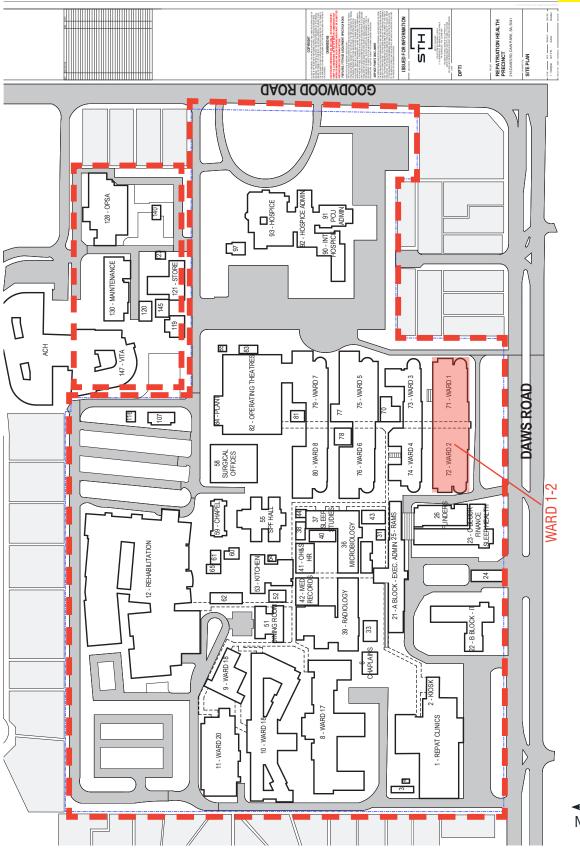
# 4.4 LOCAL HEALTH NETWORK SITES

Southern Adelaide Local Health Network (SALHN), Central Adelaide Local Health Network (CALHN) and Northern Adelaide Local Health Network (NALHN) sites.





# 4.5 LOCATION PLAN





# 4.6 PROPOSED PLAN



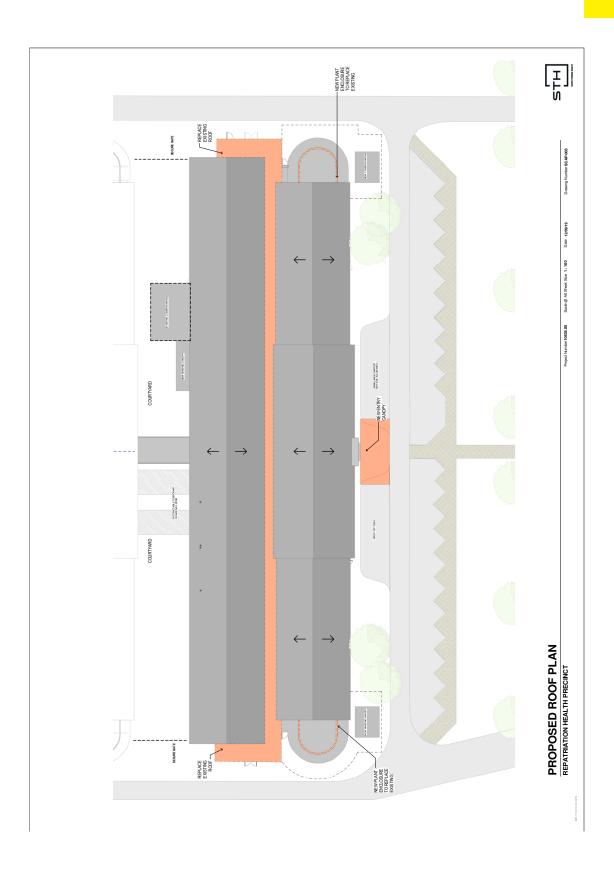


# 4.7 EXISTING CONDITIONS PLAN



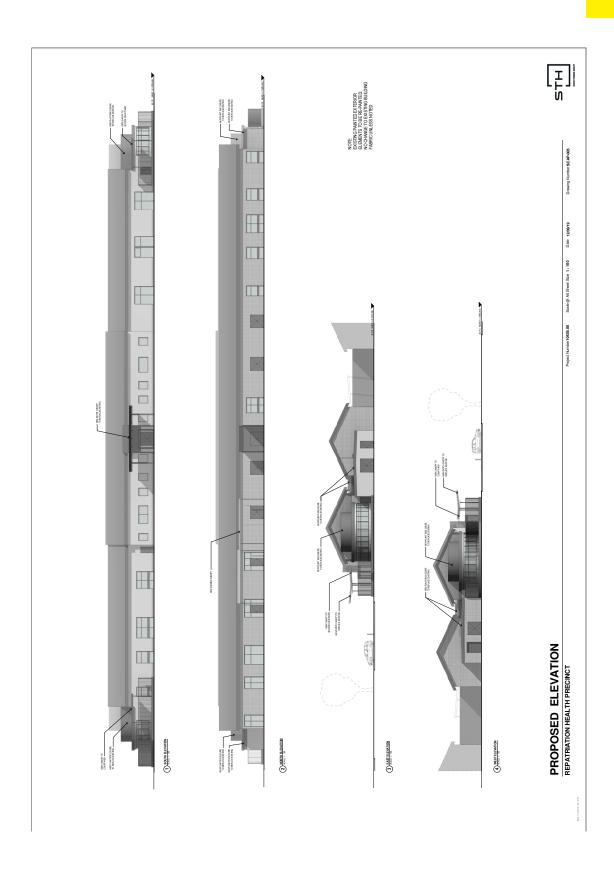


# 4.8 PROPOSED ROOF PLAN



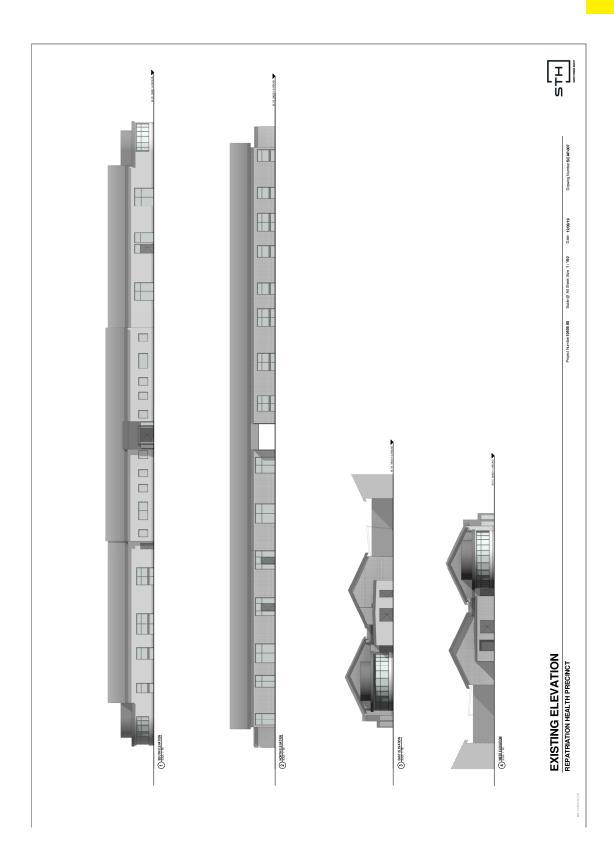


# 4.9 PROPOSED ELEVATION





# 4.10 EXISTING ELEVATION





# **5.0 HERITAGE IMPACT STATEMENT**

### **HERITAGE IMPACT**

Refer to Appendix L.

Grieve Gillett Andersen have been engaged by Silver Thomas Hanley to prepare a Heritage Impact Statement for proposed works at the Repatriation Precinct, Daw Park.

A Government commitment to reactivate the Repatriation Precinct has resulted in a number of projects to refurbish and reoccupy currently vacant buildings at the site.

The primary objective of the Heritage Impact Statement (HIS) is to assess any impact of the proposed upgrade works on the identified heritage values of the place, which is entered in the South Australian Heritage Register.

The following tasks have been undertaken in the preparation of the HIS document:

- A physical inspection of Wards 1 and 2 and their context in the Repatriation Hospital site;
- A review of the history and development of the buildings and site generally;
- Review of the documentation of proposed works, and discussions with Silver Thomas Hanley informing their preparation;
- A review of the heritage values of the place, to determine what impacts may occur as a result of the development.



## **6.0 PROCEDURAL MATTERS**

### **6.1 THE RELEVANT AUTHORITY**

In accordance with Section 49, Clause 2 of the Development Act 1993, as the development is to be undertaken by the Department of Planning, Transport and Infrastructure with the Department of Health and Wellbeing, the State Commission Assessment Panel (SCAP) must assess the development.

### **6.2 RELATED DEVELOPMENT PLAN**

This proposal has considered the Mitcham (City) Development Plan, consolidated version 14 November 2019.

### 6.3 KIND OF DEVELOPMENT

STH consider it important to use the Development Plan as a guide to determine the suitability of the development in this context, though the proposed development is to be assessed under Section 49.

As per Mitcham (City) Development Plan, the site is within a Mixed Use zone and an area not covered by Policy (p366), however the development retains and aligns with the desired character of the Mixed Use Zone "with a focus primarily on health and related purposes designed to support the site as a health precinct" (p191).

### 6.4 EXCLUDED DEVELOPMENT

Section 49, Clause 3 of the Development Act, 1993 states that some types of development are excluded from requiring any application for approval.

Clause 1 (1)(p)(v) excludes the construction of signage.

STH note that "landscaping" does not constitute "development".

Notwithstanding the above, these aspects of the proposal have been included in this application to show the holistic vision for the re-development of the health precinct.



# 7.0 CONCLUSION

The proposal addresses the following:

- Retains the existing façade as per Heritage SA
- Contributes positively to the streetscape, and integrates the existing trees on the subject site
- Redevelops the existing buildings in a coordinated and efficient manner to suit the new purpose
- Incorporates new carparks directly outside the main entry
- Incorporates a covered canopy to provide sheltered drop off for visitors and access vehicles
- Incorporates a covered canopy to provide a sheltered drop, to achieve the requirements for Ambulance SA requirements
- Incorporates landscaping and improvement of the Daws Road frontage
- Will not adversely impact the precincts internal road network or the connected public road network, including the proposed changes to Daws Road connections.
- Accommodates delivery and waste movements
- Appropriately manages stormwater

Accordingly, we trust that all the above will be supported and provide enough information for SCAP to support the proposal.





# SECTION 49 & 49A - CROWN DEVELOPMENT DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS			FOR OFFICE USE				
COUNCIL:	CITY OF MITCHAM	1	DE) (E) ODI (E)	<del>-</del>			
APPLICANT:	DPTI, CARE OF ST	Н					
ADDRESS:	LEVEL 3, SUITE 320	), 38 GAWLER PLACE,					
	ADELAIDE, 5000		DATE RECEI	VED:	/	/	
CROWN AGENCY	: <u>DP11</u>						
CONTACT PERSON FOR FURTHER INFORMATION           Name:         JEREMY KELLY           Telephone:         08 8223 1030         [work]         [Ah]           Fax:         [work]         [Ah]           Email:         JKELLY@STH.COM.AU			Complying  Merit Public Notification Referrals		Decision:  Type:  Finalised: / /		
NOTE TO APPLIC	CANTS:						
(1) All sections of this form must be completed. The site of the development must be accurately identified and the nature of the proposal adequately described. If the expected development cost of this Section 49 or Section 49A application exceeds \$100,000 (excl. fit-out) or the development involves the division of land (with the creation of additional allotments) it will be subject to those fees as outlined in Item 1 of Schedule 6 of the <i>Development Regulations 2008</i> . Proposals over \$4 million (excl. fit-out) will be subject to public notification and advertising fees.  (2) Three copies of the application should also be provided.			Planning: Land Division: Additional: Minister's Approval	Decision required	Fees	Receipt No	Date
DESCRIPTION OF	HEALTH FACILITY (OF PROPOSED DEVE	DEDESIC	N AND REFURBI				TION CARE
LOCATION OF BE	ODOSED DEVELO	DMENT.					
	ROPOSED DEVELOR Lot No: 216		\D -	Fown/Suburb:	DAW PARK		
	rt]	Hundred: ADELAIDE		Volume: CT620		Folio: 130	
	rt]	ADEL AIDE		Volume: CT620		Folio: 131	
LAND DIVISION:							
Site Area [m <sup>2</sup> ]	2180m2	Reserve Area [m <sup>2</sup> ]		No of existing a	llotments	1	
Number of addition	nal allotments [exclud	ling road and reserve]: _	0	Lease:	YES		
	COST [do not include	a, out ooo.oj.	12m				
will be forwarded t	to the Office of the Te	Schedule 5 (2a)(1) of the echnical Regulator for co tances from existing pov	mment unless th	e applicant provi	ides a decla	ration to confir	m that the

I acknowledge that copies of this application and supporting documentation may be provided to interested persons in accordance with the *Development Act 1993*.

SIGNATURE: \_\_\_\_\_ Dated: 18 / 12 / 2019

infrastructure and clearance distances can be downloaded from the DPLG website (www.dac.sa.gov.au).



# APPENDIX B - ELECRTICITY ACT DECLARATION

### **DEVELOPMENT REGULATIONS 1993**

# Form of Declaration (Schedule 5 clause 2A)

To: STATE COMMISSION ASSESSMENT PANEL

From: DEPARTMENT OF PLANNING, TRANSPORT AND INFRASTRUCTURE C/- SILVER THOMAS HANLEY

**Date of Application**: 18 / 12 / 2019

Location of Proposed Development: REPATRIATION HEALTH PRECINCT

House No: 71-72 Lot No: 216 Street: DAWS ROAD Town/Suburb. DAW PARK

Section No (full/part): ......Hundred: ADELAIDE

Volume: .6201 Folio: ...130-131 ....

Nature of Proposed Development: HEALTH PRECINCT - TRANSITION CARE INPATIENT UNIT

I .... JEREMY KELLY OF SILVER THOMAS HANLEY (STH) .... being the applicant/a person acting on behalf of the applicant (delete the inapplicable statement) for the development described above declare that the proposed development will involve the construction of a building which would, if constructed in accordance with the plans submitted, not be contrary to the regulations prescribed for the purposes of section 86 of the *Electricity Act 1996*. I make this declaration under clause 2A(1) of Schedule 5 of the *Development Regulations 1993*.

**Date:** 18/ 12 / 2019

Signed:

#### Note 1

This declaration is only relevant to those development applications seeking authorisation for a form of development that involves the construction of a building (there is a definition of 'building' contained in section 4(1) of the *Development Act* 1993), other than where the development is limited to –

- a) an internal alteration of a building; or
- b) an alteration to the walls of a building but not so as to alter the shape of the building.

#### Note 2

The requirements of section 86 of the *Electricity Act 1996* do not apply in relation to:

- a) a fence that is less than 2.0 m in height; or
- b) a service line installed specifically to supply electricity to the building or structure by the operator of the transmission or distribution network from which the electricity is being supplied.

### Note 3

Section 86 of the *Electricity Act 1996* refers to the erection of buildings in proximity to powerlines. The regulations under this Act prescribe minimum safe clearance distances that must be complied with.

#### Note 4

The majority of applications will not have any powerline issues, as normal residential setbacks often cause the building to comply with the prescribed powerline clearance distances. Buildings/renovations located far away from powerlines, for example towards the back of properties, will usually also comply.

Particular care needs to be taken where high voltage powerlines exist; where the development:

- is on a major road;
- commercial/industrial in nature; or
- built to the property boundary.

### Note 5

Information brochures 'Powerline Clearance Declaration Guide' and 'Building Safely Near Powerlines' have been prepared by the Technical Regulator to assist applicants and other interested persons. Copies of these brochures are available from council and the Office of the Technical Regulator. The brochures and other relevant information can also be found at <a href="https://www.technicalregulator.sa.gov.au">www.technicalregulator.sa.gov.au</a>

#### Note 6

In cases where applicants have obtained a written approval from the Technical Regulator to build the development specified above in its current form within the prescribed clearance distances, the applicant is able to sign the form.

PLN/06/0024



# APPENDIX C - CERTIFICATE OF TITLE



REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



### Certificate of Title - Volume 6201 Folio 130

Parent Title(s) CT 6155/740

Creating Dealing(s) RTC 12836730

Title Issued 11/12/2017 Edition 1 Edition Issued 11/12/2017

### **Estate Type**

**FEE SIMPLE** 

### **Registered Proprietor**

MINISTER FOR HEALTH OF ADELAIDE SA 5000

### **Description of Land**

ALLOTMENT 100 DEPOSITED PLAN 117209 IN THE AREA NAMED DAW PARK HUNDRED OF ADELAIDE

### **Easements**

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D ON D117209 (TG 12257525)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED F ON D117209 (TG 12257525)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED H ON D117209 (TG 12257525)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED C ON D117209 (TG 12257524)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED E ON D117209 (TG 12257524)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED G ON D117209 (TG 12257524)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED J ON D117209 FOR DRAINAGE PURPOSES (RTC 12836730)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED A ON D117209 (RTC 11881829)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED B ON D117209 (RTC 12836730)

### **Schedule of Dealings**

NIL

### **Notations**

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

**Registrar-General's Notes** 

PLAN FOR LEASE PURPOSES VIDE G221/1997

Land Services Page 1 of 2

### PLAN FOR LEASE PURPOSES VIDE G300/1997 PLAN FOR LEASE PURPOSES VIDE G764/2000

### **Administrative Interests**

CONFIRMED IN SA HERITAGE REGISTER 13/12/2013

Land Services Page 2 of 2



REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



### Certificate of Title - Volume 6201 Folio 131

Parent Title(s) CT 6155/740

Creating Dealing(s) RTC 12836730

Title Issued 11/12/2017 Edition 1 Edition Issued 11/12/2017

### **Estate Type**

**FEE SIMPLE** 

### Registered Proprietor

MINISTER FOR HEALTH OF ADELAIDE SA 5000

### **Description of Land**

ALLOTMENT 101 DEPOSITED PLAN 117209 IN THE AREA NAMED DAW PARK HUNDRED OF ADELAIDE

### **Easements**

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED J ON D117209 FOR DRAINAGE PURPOSES (RTC 12836730)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED B ON D117209 (RTC 12836730)

SUBJECT TO RIGHT(S) OF WAY OVER THE LAND MARKED B ON D117209 (TG 12257525)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED C ON D117209 (TG 12257524)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED E ON D117209 (TG 12257524)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED G ON D117209 (TG 12257524)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED A ON D117209 (RTC 11881829)

### **Schedule of Dealings**

Dealing Number Description

12125398 LEASE TO THE FLINDERS UNIVERSITY OF SOUTH AUSTRALIA COMMENCING ON

30/5/2011 AND EXPIRING ON 29/5/2030 OF PORTION (OFFICE 1 AND OFFICE 2 IN F55711)

### **Notations**

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

**Registrar-General's Notes** 

APPROVED FILED PLAN FOR LEASE PURPOSES FX55711

Land Services Page 1 of 2

#### **Administrative Interests**

CONFIRMED IN SA HERITAGE REGISTER 13/12/2013

Land Services Page 2 of 2

Orig. TG 12257524 1 of 2 Fees: \$0.00

Prefix TG Series No.

#### BELOW THIS LINE FOR AGENT USE ONLY

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F E E	R.G.O.		POST	NEW C.T.

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	ITEM(S)		AGENT CODE

LANDS TITLES REGISTRATION OFFICE SOUTH AUSTRALIA

#### **GRANT OF EASEMENT**

FORM APPROVED BY THE REGISTRAR-GENERAL

**BELOW THIS LINE FOR OFFICE &** STAMP DUTY PURPOSES ONLY

RevenueSA - Stamp Duty - ABN 19 040 349 865 ©
RevNetID/PRA Bundle No.: 131625497
Orig/Copy of/with copies
Consideration/Value/Security: \$100 -80
SA Proportion (if applicable): \$
SD: \$ 1-50 LTO Fees: \$
Int: \$Pen/Add Tax: \$
Signature: Date: 2 1/11/14
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The second secon
Z NEW CT/CR TO ISSUE
1 FROM CT 6106-369
TOGETHER WITH THE
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1 FROM CT 6106 - 370
SUBJECT TO EASTENBLY
C. E AND G

2	NEW CERTIFICATE(S) OF TITLE TO ISSUE AS PER
4-	INSTRUCTIONS
	1 111011100110110

CORRECTION	PASSED
REGISTERED 8-4-201	5
PREGISTRA	R-GENERAL

R-G 010709 CSO133451 RDA

DATED	21/11/14
1	EXECUTION (GRANTOR)
THE COMMON SEAL of AGED CARE AND HOUSING GROUP INCORPORATED ABN 99 437 071 895 was hereunto affixed in the presence of:  Signature of Director CEO  Print Full Names: JOHN MICHAEL  Signature of Director/Secretary GENERAL MARKET	
	ACCEPTANCE (GRANTEE) The within grant is hereby accepted
THE COMMON SEAL of MINISTER FOR HEALTH  was affixed hereto by authority of the Minister in the presence of  Signature of Witness  David Swan  Print Full Name of Witness (BLOCK/LETTERS)  Chief Executive  Position Held  Level 5. II Hindmarsh Squ Address of Authority  8226	COMMON SEAL OF AUSTRALIA

8-4-2015

## Form TG

Guidance Notes

#### **GRANT OF EASEMENT**

(Pursuant to Section 96 of the Real Property Act 1886)

available (Fursuant to Section 30 of the Near Figure 1997)
CERTIFICATE(S) OF TITLES OVER WHICH RIGHTS AND LIBERTIES ARE BEING GRANTED
The whole of the land comprised in Certificate of Title Volume 6106 Folio 370
ESTATE AND INTEREST
In fee simple
ENCUMBRANCES
Nil
GRANTOR(S) (Full name and address)
···
AGED CARE AND HOUSING GROUP INCORPORATED ABN 99 437 071 895 of PO Box 646 Torrensville Plaza Torrensville SA 5031 formerly of 22 Henley Beach Road Mile End SA 5031
/ 1224 / 1244 / 1
·
CONSIDERATION
By mutual agreement and no monetary consideration (Value of easement does not exceed \$100.00)
GRANTEE(S) (Full name, address and Certificate of Title affected)
<b>MINISTER FOR HEALTH</b> of Adelaide SA 5000 the registered proprietor of the whole of the land comprised in Certificate of Title Volume 6106 Folio 369
\-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
·

Page \_ 2 of \_ 5

## THE GRANTOR ACKNOWLEDGES RECEIPT OF THE CONSIDERATION HEREIN EXPRESSED AND HEREBY GRANTS TO THE GRANTEE

HERE SET FORTH THE RIGHTS AND LIBERTIES BEING CREATED. DEFINE PRECISELY

An Easement for the right to use the common footing piers over portions of Allotment 2 in Deposited Plan No. 89637 marked C, E and G in Filed Plan No.58922 being portion of the land in the above described Certificate of Title for the purpose of providing support of the walls, floors, ceilings, roofs or other parts of any building built or placed on the subject land, consistent with the design and load bearing capacity of the common footing piers as at the date of this instrument, and the Grantor covenants not to disturb or undermine the common footing piers.

#### TO BE HELD APPURTENANT TO:-

HERE SET FORTH APPURTENANCE. DEFINE PRECISELY

The whole of Allotment 1 in Deposited Plan No. 89637 being whole of land comprised in Certificate of Title Volume 6106 Folio 369

#### CONSENT TO THE GRANT OF AN EASEMENT

**CONSENTING PARTY** (Full Name and Address)

NATIONAL AUSTRALIA BANK LTD. A C N 004 044 937 of 22 King William Street Adelaide SA 5000

#### NATURE OF ESTATE OR INTEREST HELD

Estate as Mortgagee pursuant to registered Mortgage no.11907217 over CT Volume 6106 Folio 370

I/We the consenting party consent to the

(1)\* discharge of \*Encumbrance / \*Mortgage ...11907217 Section 144 of the Real Property Act 1886. over the easement being granted pursuant to

(2)\* granting of the easement subject to \*Encumbrance / \*Mortgage ... pursuant to Section 90F of the Real Property Act 1886.

\* Delete the inapplicable

DATED 13/10/14

**EXECUTION BY CONSENTING PARTY** 

National Australia Bank Limited ACN 004 044 937 By its Attorney

of 22-28 King William St ADELAIDE

Level 3 Attorney in the State of South Australia

P.A. NO. 10684492

in the Presence of:

DALL MARK WILLAM BENZ.

48 Greenhill Road WAYVILLE SA 5034

<sup>9</sup>H: **(08) 8291 3420** 

#### CONSENT TO THE GRANT OF AN EASEMENT

**CONSENTING PARTY** (Full Name and Address)

MINISTER FOR HEALTH of Adelaide SA 5000 as successor to the Minister for Health and Ageing pursuant to s7 of the Administrative Arrangements Act 1994 (SA) and proclamation dated 26/03/2014 in Government Gazette on page 1315

#### NATURE OF ESTATE OR INTEREST HELD

Estate as Encumbrancee pursuant to registered Encumbrance no.11881830 on CT Vol.6106 Fol.370

I/We the consenting party consent to the

- (1)\* discharge of \*Encumbrance / \*Mortgage ...no.11881830 over the easement being granted pursuant to Section 144 of the Real Property Act 1886.
- (2)\* granting of the easement subject to \*Encumbrance / \*Mortgage ...... pursuant to Section 90F of the Real Property Act 1886.
- \* Delete the inapplicable

#### **EXECUTION BY CONSENTING PARTY**

THE COMMON SEAL of the MINISTER FOR HEALTH was affixed hereto by authority of the Minister and in the presence of:

Signature of WITNESS

David Swan

Print Full name of Witness (BLOCK LETTERS)

Position Held: Chief Executive

Level 5, 11 Hindmarsh Square

Address of Witness

Business Hours Telephone No 226 073 C



Orig. TG 12257525

11:55 5-Jan-2015

Prefix TG Series No CERTIFIED CORRECT FOR THE PURPOSES OF THE REAL PROPERTY ACT 1886 Solicitor/Registered Conveyancer/Appl < GARNER F R.G.O. NEW C.T. Ε E AGENT CODE CROWN SOLICITOR Lodged by: Correction to: CSOL 22 TITLES, CROWN LEASES, DECLARATIONS ETC. LODGED WITH INSTRUMENT (TO BE FILLED IN BY PERSON LODGING) PLEASE ISSUE NEW CERTIFICATE(S) OF TITLE AS FOLLOWS 1. REPLACEMENT CT FOR ALLOT 1 IN D89637..... 2. REPLACEMENT CT FOR ALLOT 2 in 89637 .....

**DELIVERY INSTRUCTIONS** (Agent to complete) PLEASE DELIVER THE FOLLOWING ITEM(S) TO THE UNDERMENTIONED AGENT(S)

ITEM(S)	AGENT CODE
REPLACEMENT CT - ALLOT 1	CSOL 22
REPLACEMENT CT - ALLOT 2	NATE 58

R-G 010709 CSO133451 RDA

## LANDS TITLES REGISTRATION OFFICE SOUTH AUSTRALIA

#### **GRANT OF EASEMENT**

FORM APPROVED BY THE REGISTRAR-GÉNERAL

## BELOW THIS LINE FOR OFFICE & STAMP DUTY PURPOSES ONLY

RevenueSA - Stamp Duty - ABN 19 040 349 865 ©
RevNetID/PRA Bundle No.: 131625560
Orig/Copy of/with copies
Consideration/Value/Security: \$ . 60 - 60
SA Proportion (if applicable): \$
SD: \$ 1-60 LTO Fees: \$
Int: \$
Signature: Date: 21/11/14
\ <b>\</b>

2 NEW GT/GH TO ISSUE

1 FROM CT 6/06 - 369

SUBJECT TO A-RIGHT OF

WAY OVER B AND

ERSENEUT OVER D. F. AND H.

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NEW CERTIFICATE(S) OF TITLE TO ISSUE AS PER INSTRUCTIONS

CORRECTION DV 45	DACCED
	PASSED
23.2.2015	
REGISTERED 8. 4. 20/5	
man by by the second	TORO.

DATED	21/11/14
	EXECUTION (GRANTOR)
THE COMMON SEAL of MINISTER FOR HEALTH was affixed hereto by authority of the Minister in the presence of	STER FOR THE
Signature of Witness  David Swan  Print Full Name of Witness (BLOCK LETTERS)  Chief Executive  Position Held:	SEAL OF
Level 5, 11 Hindmarsh Squar Address of Witness	
Business Hours Telephone No	260730
THE COMMON SEAL of AGED CARE AND HOUSING GROUI INCORPORATED ABN 99 437 071.8 was hereunto affixed in the presence of the prese	AGED CARE AND HOUSING GROUP INCORPORATED
Signature of Director GENERAL MAMAGE	MER COMPODATE SERVICES
Print Full Names of Director (BLOCK LETTER:	/ S)
6. 4. 6012	



#### **GRANT OF EASEMENT**

(Pursuant to Section 96 of the Real Property Act 1886)

CERTIFICATE(S) OF TITLES OVER WHICH RIGHTS AND LIBERTIES ARE BEING GRANTED The whole of the land comprised in Certificate of Title Volume 6106 Folio 369 after registration of Grant of Easement between the within named Grantor (as Grantee) and Grantee (as Grantor) dated 21/11 /14 lodged contemporaneously herewith **ESTATE AND INTEREST** In fee simple **ENCUMBRANCES GRANTOR(S)** (Full name and address) MINISTER FOR HEALTH of Adelaide SA 5000 **CONSIDERATION** By mutual consent and no monetary consideration (value does not exceed \$1,00.00) **GRANTEE(S)** (Full name, address and Certificate of Title affected) AGED CARE AND HOUSING GROUP INCORPORATED ABN 99 437 071 895 of PO Box 646 Torrensville Plaza Torrensville SA 5031 the registered proprietor of the whole of the land comprised in Certificate of Title Volume 6106 Folio 370

#### THE GRANTOR ACKNOWLEDGES RECEIPT OF THE CONSIDERATION HEREIN EXPRESSED AND HEREBY GRANTS TO THE GRANTEE

HERE SET FORTH THE RIGHTS AND LIBERTIES BEING CREATED. DEFINE PRECISELY

#### **FIRST**

an Easement for access Purposes over that portion of Allotment 1 in Deposited Plan No. 89637 in the area named Daw Park Hundred of Adelaide marked "B" in Filed Plan No.58922 being portion of the land in the above described Certificate of Title subject to the following conditions:

1. In this document:

- The 'servient tenement' means the land comprised in Certificate of Title Volume 6106 Folio 369
- b. The 'dominant tenement' means the land comprised in Certificate of Title Volume 6106 Folio 370
- c. The 'access road' means the portion of the servient tenement marked "B" in Filed Plan No 58922
- d. The term GRANTOR includes the successors in title of the GRANTOR, and the term GRANTEE includes the successors in title of the GRANTEE.
- 2. The GRANTEE, its officers, employees and invitees, will have full free and unrestricted right of way including vehicular access over the access road for the purposes of access to the dominant tenement.
- 3. If at any time the GRANTOR requires it, the GRANTEE must, at the GRANTOR's cost in all things, surrender this easement and accept an easement (alternative easement) providing for a right of way over another portion of the servient tenement determined by the GRANTOR in its discretion.
- 4. If at any time the access road is temporarily unavailable, or if the GRANTOR requires that an alternative access route be used pending the surrender of this easement and the grant of the alternative easement pursuant to the preceding clause 3 of this instrument, the GRANTOR must provide and the GRANTEE must accept alternative access to the dominant tenement over the servient tenement via a route designated by the GRANTOR. Such alternative access will be full free and unrestricted.

#### **SECONDLY**

THE GRANTOR ACKNOWLEDGES RECEIPT OF THE CONSIDERATION HEREIN EXPRESSED AND HEREBY GRANTS TO THE GRANTEE:

The right to use the common footing piers marked D, F, and H in Filed Plan No. 58922 being portion of the land in the above described Certificate of Title for the purpose of support of the walls, floors, ceilings, roofs or other parts of any building built or placed on the subject land, consistent with the design and load bearing capacity of the common footing piers as at the date of this instrument, and the Grantor covenants not to disturb or undermine the common footing piers.

#### TO BE HELD APPURTENANT TO:-

HERE SET FORTH APPURTENANCE. DEFINE PRECISELY

FIRST AND SECONDLY DESCRIBED ABOVE:

The whole of Allotment 2 in Deposited Plan No. 89637 as comprised in Certificate of Title Volume 6106 Folio 370

9) X

#### CONSENT TO THE GRANT OF AN EASEMENT

**CONSENTING PARTY** (Full Name and Address)

NATIONAL AUSTRALIA BANK LTD. A C N 004 044 937 of 22 King William Street Adelaide SA 5000

#### NATURE OF ESTATE OR INTEREST HELD

Estate as Mortgagee pursuant to registered Mortgage no.11907217 over CT Volume 6106 Folio 370

I/We the consenting party consent to the

- (1)\* discharge of \*Encumbrance / \*Mortgage ....... over the easement being granted pursuant to Section 144 of the Real Property Act 1886.
- granting of the easement subject to \*Encumbrance / \*Mortgage ...11907217 pursuant to Section 90F of the Real Property Act 1886.
- \* Delete the inapplicable

DATED 13/10/14

**EXECUTION BY CONSENTING PARTY** 

National Australia Bank Limited ACN 004 044 937 By its Attorney

of 22-28 King William St ADELAIDE

Level State of South

in the State of South Australia P.A. NO. 10084492

in the Presence of:

PALL MARKUKIAM BENZ

48 Greenhill Road WAYVILLE SA 5034

PH: (06) 8291 3420

#### CONSENT TO THE GRANT OF AN EASEMENT

**CONSENTING PARTY** (Full Name and Address)

MINISTER FOR HEALTH of Adelaide SA 5000 as successor to the Minister for Health and Ageing pursuant to s7 of the Administrative Arrangements Act 1994 (SA) and proclamation dated 26/03/2014 in Government Gazette on page 1315

#### NATURE OF ESTATE OR INTEREST HELD

Estate as Encumbrancee pursuant to registered Encumbrance no.11881830 over CT 6106/370

I/We the consenting party consent to the

- (1)\* discharge of \*Encumbrance / \*Mortgage ...... over the easement being granted pursuant to Section 144 of the Real Property Act 1886.
- (2)\* granting of the easement subject to \*Encumbrance /<del>\*Mortgage</del> ......11881830...... pursuant to Section 90F of the Real Property Act 1886.
- \* Delete the inapplicable

DATED 31.03.2015

#### **EXECUTION BY CONSENTING PARTY**

The COMMON SEAL of the MINISTER FOR HEALTH was affixed hereto by authority of the Minister in the presence of:

Signature of WITNESS

MEUSSA COCKING

Print Full Names (BLOCK LETTERS)

Ministerial Advisor

PADELAIDE SA 5000

Address of Witness







Form M2 Guidance Notes available

#### MEMORANDUM OF ENCUMBRANCE

#### CERTIFICATE(S) OF TITLE BEING ENCUMBERED

The whole of the land identified as allotment 2 in the proposed plan of Division 89637 being an area of approximately 5636m² and being portion of the land in Certificate of Title Volume 5275 Folio 332 and the whole of the land in Certificate of Title Volume 5901 Folio 507, and being the whole of the land comprised in the new title to issue following registration of the RTC document lodged contemporaneously herewith dated 15th TANVARY 2013

#### **ESTATE AND INTEREST**

In fee simple

#### **ENCUMBRANCES**

Nil

" "CUMBRANCER (Full name and address)

AGED CARE AND HOUSING GROUP INCORPORATED (ABN 99 437 071 895) an incorporated association established under the Associations Incorporation Act 1985 (SA) of 22 Henley Beach Road, Mile End. SA 5031.

ENCUMBRANCEE (Full name, address and mode of holding)

MINISTER FOR HEALTH AND AGEING a body corporate pursuant to the Administrative Arrangements Act 1994 (SA) of Level 9, Citi Centre Building, 11 Hindmarsh Square, Adelaide SA 5000 as successor to Minister for Health.

#### **OPERATIVE CLAUSE**

THE ENCUMBRANCER ENCUMBERS THE ESTATE AND INTEREST IN THE LAND ABOVE DESCRIBED FOR THE BENEFIT OF THE ENCUMBRANCES SUBJECT TO THE ENCUMBRANCES AND OTHER INTERESTS AS SHOWN HEREON WITH AN ANNUITY OR RENT CHARGE OF

- (a) Insert the amount of the annuity or rent charge
- (a) TEN CENTS (10c) (HEREINAFTER REFERRED TO AS "THE RENT CHARGE")
- (b) State the term of the annuity or rent charge. If for life use the words "during his or her lifetime"
- (b) TO BE PAID TO THE ENCUMBRANCEE
  if demanded during a term of twenty (20) years from the date of this
  Encumbrance
- (c) State the times appointed for payment of the annuity or rent charge. Any special covenants may be inserted on page 2.
- c) AT THE TIMES AND IN THE MANNER FOLLOWING on the 30th day of June in each and every year commencing on the 30th day of June next hereafter for the term of this Encumbrance and with the performance and observance of the covenants by the Encumbrancer hereinafter contained.

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Refer page 3

IT IS COVENANTED BETWEEN THE ENCUMBRANCER AND ENCUMBRANCEE in accordance with the terms and conditions expressed \*herein / in-Memorandum No. \_\_\_\_\_\_ subject to such exclusions and amendments specified herein.

\*Delete the inapplicable

#### 1. DEFINITIONS AND INTERPRETATION

#### 1.1 Definitions

In this Encumbrance:

- "ACH's New Facility" has the meaning as set out in the Project Deed;
- "Approvals" means all or any approvals, contracts, licences, concurrences, authorities or permissions required under the *Development Act* 1993 (SA) and any other legislation to the carrying out of the Development;
- "Building Coordination Deed" has the meaning as set out in the Project Deed;
- "Construction Contract" has the meaning as set out in the Building Coordination Deed;
- "Design" has the meaning as set out in the Project Deed;
- "Development" has the meaning as set out in the Project Deed;
- "Dispose" means assign, transfer, otherwise dispose of or grant or permit or suffer the grant of any legal or equitable interest (either in whole or in part) whether by sale, lease, declaration or creation of a trust or otherwise;
- **"Encumbrancee"** means the Minister for Health and Ageing and includes his successors and permitted assigns;
- "Encumbrancer" means the party described as such on page 1 of this Encumbrance and includes its successors in title, permitted assigns and the registered proprietor for the time being of the Land;

#### "Insolvency Administration" means:

- 1.1.1 an administrator is appointed to the Encumbrancer or action is taken to make such an appointment;
- 1.1.2 the Encumbrancer resolves to be wound up;
- 1.1.3 the Encumbrancer is wound up by the Supreme Court, voluntarily or under the Associations Incorporation Act 1985 (SA) or the Corporations Act 2001 (Cth);
- 1.1.4 the Encumbrancer ceases to carry on business;
- 1.1.5 a receiver or a receiver and manager of property of the Encumbrancer is appointed whether by a court or otherwise;
- 1.1.6 an application is made to a court for an order appointing a liquidator or provisional liquidator in respect of the Encumbrancer or one of them is appointed, whether or not under an order;
- 1.1.7 the Encumbrancer enters into a compromise or arrangement with its creditors or a class of them; or
- 1.1.8 the Encumbrancer is or states that it is unable to pay its debts when they fall due;
- "Land" means the land described on page 1 of this Encumbrance;
- "Permitted Purpose" means the construction of ACH's New Facility in accordance with the Design, and the provision of residential aged care services, student training and associated support services;
- "Project Deed" means the deed of that name entered into between the Minister for Transport and Infrastructure and the Minister for Health and Ageing each on behalf of the Crown in right of the State of South Australia, and the Encumbrancer, for and in respect of the Development on the Land; and
- "Rent Charge" means the rent charge described on page 1 of this Encumbrance.

#### 1.2 Interpretation

In this Encumbrance, unless it is stated to the contrary:

- 1.2.1 the singular includes the plural and conversely;
- 1.2.2 a gender includes all genders;
- 1.2.3 if a word or phrase is defined, its other grammatical forms have a corresponding meaning;
- 1.2.4 a reference to a person, corporation, trust, partnership, unincorporated body or other entity includes any of them;
- 1.2.5 a reference to a clause is a reference to a clause of this Encumbrance:
- 1.2.6 a reference to an agreement or document (including this Encumbrance) is to the agreement or document as amended, varied, supplemented, novated or replaced, except to the extent prohibited by this Encumbrance or that other agreement or document;
- 1.2.7 a reference to *writing* includes any method of representing or reproducing words, figures, drawings, or symbols in a visible form but excludes any communication using electronic mail;
- 1.2.8 a reference to legislation or to a provision of legislation includes a modification or re-enactment of it, a legislative provision substituted for it and a regulation or statutory instrument issued under it;
- 1.2.9 a reference to conduct includes, an omission, statement or undertaking, whether or not in writing;
- 1.2.10 a reference to an *agreement* includes any undertaking, deed, agreement and legally enforceable arrangement, whether or not in writing;
- 1.2.11 a reference to a document includes an agreement (as so defined) in writing and any certificate, notice, instrument and document of any kind;
- 1.2.12 a reference to dollars and \$ is to Australian currency;
- 1.2.13 a reference to a right or obligation of any two or more persons confers that right, or imposes that obligation, as the case may be, jointly and severally;
- 1.2.14 the meaning of general words is not limited by specific examples introduced by *including, or for example,* or similar expressions;
- 1.2.15 references to agree, approve or consent are references to agreement, approval or consent (as the case may be) in writing; and
- 1.2.16 nothing in this Encumbrance is to be interpreted against a party solely on the ground that the party put forward this Encumbrance or any part of it.

#### 1.3 Headings

Headings do not affect the interpretation of this Encumbrance.

#### 1.4 Schedules and Annexures

Schedules and Annexures form part of this Encumbrance.

#### 2. RENT CHARGE

#### 2.1 Payment of Rent Charge

Subject to clause 2.2, the Encumbrancer must pay the Rent Charge to the Encumbrancee:

2.1.1 during the term of this Encumbrance; and

2.1.2 on 30 June immediately succeeding the grant of this Encumbrance and on each succeeding 30 June during the term.

#### 2.2 Rent Charge not payable unless demanded

- 2.2.1 The Encumbrancer must only pay the Rent Charge to the Encumbrancee if payment is demanded by it.
- 2.2.2 The Encumbrancee may not demand payment of the Rent Charge so long as the Encumbrancer duly observes all the covenants in this Encumbrance.

#### 2.3 Encumbrancee's right to injunctive relief and damages

The provisions of this clause 2 do not in any way affect or prejudice the rights of the Encumbrancee to:

- 2.3.1 an injunction preventing or restraining any breach of the covenants in this Encumbrance; or
- 2.3.2 damages for any such breach.

#### 3. SUCCESSORS BOUND BY ENCUMBRANCE

Without detracting in any way from this Encumbrance being binding on the successors of the Encumbrancer, the Encumbrancer must not Dispose of the Land to any person unless the Encumbrancer has first procured the grant by that person of an encumbrance:

#### 3.1 **Form**

in the same form as this Encumbrance;

#### 3.2 Effect

to the same effect as this Encumbrance;

#### 3.3 Binds

which binds that person;

#### 3.4 Benefit

is for the benefit of the Encumbrancee; and

#### 3.5 Registration

which is registered on the Certificate of Title of the Land immediately after the discharge of this Encumbrance.

#### 4. PERMITTED USE

#### 4.1 General

The Encumbrancer must not use or permit the Land to be used for any purpose other than the Permitted Purpose, unless the Encumbrancee has given approval in writing to the Encumbrancer to use the Land for another purpose.

#### 4.2 Development

The Encumbrancer must not do or permit anything to be done on the Land or erect, install, make, carry out or construct any building or structure on the Land other than the Development, without the written consent of the Encumbrancee.

#### 4.3 Approvals

The Encumbrancer must not use or permit the Land to be used for a purpose otherwise than in accordance with the Approvals obtained for the Land.

#### 5. WORK TO BE EXPEDITIOUSLY EFFECTED

The Encumbrancer and the Encumbrancee must:

#### 5.1 Commencement

commence the work on the Development as soon as reasonably practicable and in any event within one year of the date of the execution of this Memorandum of Encumbrance unless the parties agree some longer period for commencement of such works;

#### 5.2 Continuation

continuously proceed with the work with all due diligence until completion;

#### 5.3 Compliance with Approval

not carry out the work other than in accordance with the terms of the Approvals;

#### 5.4 Variations

not allow any variation to such work other than in accordance with the terms of any subsequent written approval of the other party given before such variation is commenced; and

#### 5.5 Completion

complete the works within the Permitted Completion Period. The Permitted Completion Period is:

- (a) the period of two years from the award of the relevant Construction Contract:
- (b) Some longer period agreed by the Parties in writing; or
- (c) an extended period to the extent that delay is caused by any variation under the relevant Construction Contract agreed to by the Parties under the Building Coordination Deed or by any cause which is outside the reasonable control of the relevant Party.

#### 6. CONSEQUENCES OF BREACH

#### 6.1 Transfer of the Land to the Encumbrancee in Certain Circumstances

If any of the following events occur:

- 6.1.1 the Encumbrancer uses the Land for a purpose other than the Permitted Purpose without the prior written approval of the Encumbrancee;
- 6.1.2 work on the Development:
  - is not commenced within the period set out in clause 5.1 or such further time as the Encumbrancee may agree in writing with the Encumbrancer; or
  - (b) has not reached practical completion within the period specified in clause 5.5; or
- 6.1.3 the Encumbrancer materially changes the Design prior to completion of construction of the Development without the prior written approval of the Encumbrancee; or
- 6.1.4 the Encumbrancer breaches the a term or condition of an Approval prior to completion of construction of the Development,

AND the Encumbrancee gives written notice to the Encumbrancer of such breach pursuant to this clause 6.1 and the Encumbrancer fails to remedy such breach within a reasonable time (having regard to the nature and extent of such breach) of receipt by the

Encumbrancer of such written notice then the Encumbrancee shall at any time whilst such default continues have the option of purchasing from the Encumbrancer the Land (and any building or structure on that land), and the Encumbrancer must within thirty days of the service of a written request from the Encumbrancee exercising its option transfer an estate in fee simple in the Land to the Encumbrancee or its nominee subject only to this Memorandum of Encumbrance.

6.2 Transfer of Land to the Encumbrancee in event of Insolvency Administration

If the Encumbrancer enters into any form of Insolvency Administration, then the Encumbrancee shall at any time have the option of purchasing from the Encumbrancer the Land (and any building or structure on that land), and the Encumbrancer must within thirty days of the service of a written request from the Encumbrancee exercising its option transfer an estate in fee simple in the Land to the Encumbrancee or its nominee subject only to the Memorandum of Encumbrance.

6.3 Step in by the Encumbrancer's Bank

If the Encumbrancee, the Encumbrancer and the Encumbrancer's Bank enter into or have entered into a deed (Security Tripartite Deed) placing conditions on exercise of the Encumbrancee's rights under clause 6.1 and 6.2, the Encumbrancee can only exercise those rights subject to the conditions of the Security Tripartite Deed.

6.4 Manner of Transfer

The following provisions apply to any transfer of the Land pursuant to clause 6.1 or 6.2:

- 6.4.1 the transfer shall be subject only to this Memorandum of Encumbrance;
- the transfer shall be for a price equal to the value of the Land (and the improvements thereon) determined by a licensed valuer appointed by the Encumbrancee in accordance with clause 8;
- 6.4.3 settlement of the transfer of the Land will be effected within one calendar month from the date of service on the Encumbrancer of the relevant request by the Encumbrancee and will be effected by the exchange of a proper registrable transfer of the Land (subject only to this Memorandum of Encumbrance), executed by the Encumbrancer and delivery by the Encumbrancer of the duplicate Certificate of Title to the Encumbrancee;
- 6.4.4 the purchase price must be paid on settlement of the transfer of the Land;
- 6.4.5 rates and taxes and all other outgoings in respect of the Land will be adjusted to the date of settlement;
- 6.4.6 all costs associated with the transfer will be borne by the Encumbrancer; and
- 6.4.7 otherwise on the terms and conditions of the standard Law Society of South Australia Contract for the Sale and Purchase of Land.

#### 6.5 Power of Attorney

The Encumbrancer irrevocably:

- 6.5.1 appoints the Encumbrancee, and the Encumbrancee's nominees from time to time, jointly and severally as the Encumbrancer's attorney with full power and authority to exercise the Encumbrancee's rights under this clause 6; and
- 6.5.2 agrees to ratify and confirm whatever action is taken by its appointed attorney.

#### 7. FIRST RIGHT OF REFUSAL

7.1 The Encumbrances's right

If the Encumbrancer wishes at any time during the period of twenty years from the execution of the Memorandum of Transfer, to transfer the estate in fee simple of the Land

or any part of it the Encumbrancee will have the first right of refusal to purchase the Land (or that part of it) on the terms of this clause 7:

#### 7.2 Notice of Offer

The Encumbrancer shall give not less than three calendar months' prior notice in writing to the Encumbrancee of the Encumbrancer's intention to dispose of a whole or part of the Land (the "Relevant Land"). Such notice shall specify:

- 7.2.1 whether the Encumbrancer wishes to dispose of the whole or a part of the Land;
- 7.2.2 if the Encumbrancer wishes to dispose of only a part of the Land, a description of that part including a plan showing the dimensions and positions of the relevant part relative to the boundaries of the whole of the Land;
- 7.2.3 the amount nominated by the Encumbrancer as the proposed purchase price of the Relevant Land.

Any notice given by the Encumbrancer pursuant to this clause shall constitute an irrevocable offer by the Encumbrancer to sell (hereinafter called the **Offer to Sell**) the Relevant Land described in the notice to the Encumbrancee or its nominee for the amount (**Purchase Price**) specified in the Offer to Sell.

#### 7.3 Acceptance

If the Encumbrancee wishes to accept the Offer to Sell, it must give the Encumbrancer notice of acceptance within three calendar months from receipt of the Offer to Sell.

#### 7.4 Deemed Rejection

If the Encumbrancee does not give the Encumbrancer notice in writing of its acceptance within three calendar months from receipt of the Offer to Sell then the Encumbrancee shall be deemed to have rejected the Offer to Sell.

#### 7.5 Sale to third party

If the Encumbrancee rejects or is deemed to reject the Offer to Sell, the Encumbrancer shall be at liberty at any time within a period of six calendar months thereafter to sell the Relevant Land to any third party at a price not less than the Purchase Price and on terms and conditions not otherwise more favourable to the third party than the terms and conditions which would have applied if the Encumbrancee had accepted the Offer to Sell (Third Party Terms).

#### 7.6 Other land not affected

The right of the Encumbrancer to sell to a third party pursuant to clause 7.5 shall apply only as regards the Relevant Land and shall not apply to any other part of the Land.

#### 7.7 Expiry of Encumbrancer's right

If the Encumbrancer becomes entitled at any stage to sell the Relevant Land pursuant to clause 7.5 to a person other than the Encumbrancee and the Encumbrancer fails to enter into a legally binding contract with a third party at a price not less than the Purchase Price and on the Third Party Terms within the period of six calendar months specified in clause 7.5 or if such a contract is entered into within such period but settlement of such contract is not effected for any reason, then the entitlement and right of the Encumbrancer to sell the Relevant Land to any third party shall lapse and the Encumbrancer shall not be entitled to sell or offer for sale the Relevant Land without giving a further Offer to Sell and complying with this clause 7.

#### 7.8 Settlement

Settlement on the transfer of the Relevant Land will be effected within one calendar month from the date of acceptance by the Encumbrancee of the Offer to Sell and will be effected by the exchange of a proper registrable transfer of the Relevant Land (subject only to the Memorandum of Encumbrance) executed by the Encumbrancer and delivery by Encumbrancer of the duplicate Certificate of Title to the Encumbrancee.

The Purchase Price must be paid on settlement of the transfer of the Relevant Land.

Rates and taxes and all other outgoings in respect of the Relevant Land will be adjusted to the date of settlement.

All costs associated with the transfer will be borne by the Encumbrancee.

Otherwise the transfer will be on the terms and conditions of standard Law Society of South Australia Contract for the Sale and Purchase of Land.

#### 7.9 Service

Any Offer to Sell and any acceptance of an Offer to Sell must be served on the recipient by being left at the recipient's principal office with some responsible person employed there or sent by prepaid registered post under cover addressed to the recipient's principal office.

#### 7.10 Exclusions

- 7.10.1 This clause 7 does not apply to a transfer of the Land arising from a corporate reconstruction or amalgamation of the Encumbrancer, where the Encumbrancer is a corporation as defined by the *Corporation Act 2001* (Cth).
- 7.10.2 If the Encumbrancee, the Encumbrancer and the Encumbrancer's Bank enter into or have entered into a deed (Security Tripartite Deed) then subject to compliance with its obligations under the Security Tripartite Deed, the Encumbrancer's Bank is not obliged to offer the State first right of refusal of the Land in circumstances contemplated in the Security Tripartite Deed where the Encumbrancer's Bank sells the Land pursuant to its security and novates agreements entered into between the Encumbrancer and Encumbrancee such that the purchaser of the Land assumes the rights and obligations of the Encumbrancer.

#### 8. VALUATION

#### 8.1 General

A valuation of the Land pursuant to clause 6.4.2 shall be carried out as follows:

- 8.1.1 The value of the Land will be determined by a valuer who:
  - (a) is registered to practice in the City of Adelaide; and
  - (b) has no less than 5 years relevant experience immediately prior to the appointment,
  - (c) appointed at the request of the Encumbrancee by the then President of the South Australian Branch of the Australian Property Institute.
- 8.1.2 The following provisions apply to the determination of the value of the Land by the appointed valuer:
  - (a) the appointed valuer is an expert and not an arbitrator and the provisions of the *Commercial Arbitration and Industrial Referral Agreements Act* 1986 (SA) do not apply to the appointed valuer's determination;
  - (b) the appointed valuer must seek, accept and give due consideration to written submissions from or on behalf of the Encumbrancee and the Encumbrancer;
  - the appointed valuer must determine the fair market value of the Land as at the date on which the Encumbrancee requested the transfer of the Land pursuant to clause 6.1 taking into account the cost of removing any structure or fixture on the Land;
  - (d) each party will bear its own costs and expenses in relation to the appointed valuer's determination;
  - the parties must pay in equal shares the appointed valuer's fees and expenses and costs of determination;

- (f) the appointed valuer must provide the determination to the parties in writing, with reasons for the determination, within 30 days of appointment; and
- (g) the determination of the appointed valuer is final and binding on the parties.

#### 9. VACANCY

The Encumbrancer must use its reasonable endeavours (regard being had to market conditions at the relevant time) to ensure that the whole or a substantial portion of any building or structure on the Land is not vacant for a continuous period of more than 3 months.

#### 10. WAIVER AND RELEASE

#### 10.1 General

- 10.1.1 The Encumbrancee may waive any covenant relating to the Land.
- 10.1.2 The Encumbrancee may from time to time in its absolute discretion lessen waive or release any of the covenants and other stipulations contained or implied in this Memorandum of Encumbrance.

#### 11. RELEASE ON TRANSFER

The Encumbrancer and its successors in title shall be successively released and discharged from the payment of the Rent Charge and from the observance of the covenants and other stipulations contained and implied in this Encumbrance upon ceasing to be registered as the proprietor of the Land to the intent that the Rent Charge and covenants and other stipulations will be binding only upon the registered proprietor for the time being of the Land.

#### 12. NOTICE

#### 12.1 Form and execution

Any notice, request or demand under this Encumbrance must be:

- 12.1.1 in writing; and
- 12.1.2 signed by the Encumbrancee or by any employee or officer or contractor of the Encumbrancee or by the Solicitors for the Encumbrancee.

#### 12.2 Service

Any notice, request or demand may be served upon the Encumbrancer either:

- 12.2.1 personally;
- 12.2.2 by being left for the Encumbrancer on the Land;
- 12.2.3 by being affixed to some part or parts of the Land; or
- 12.2.4 by being sent by prepaid post under cover addressed to the Encumbrancer at the last known place of business or abode in South Australia of the Encumbrancer.

#### 12.3 When effective

Any notice, request or demand takes effect and is in force from the next day after the day on which it is served, left or posted whether or not the notice, request or demand comes to the hands or knowledge of the Encumbrancer.

#### 12.4 Content

- 12.4.1 It is not necessary in any demand or notice on the Encumbrancer to specify any amount but the demand or notice will be sufficient if it requires payment of the monies secured by this Encumbrance without specifying the amount.
- 12.4.2 Any notice as to default under this Encumbrance may be a general notice that default has been made without specifying the nature of the default.

#### 12.5 Other ways

The provisions of this clause 12 are in addition to any other ways in which the Encumbrancee may be entitled to give the Encumbrancer any notice, request or demand in relation to this Encumbrance.

#### 13. REMEDIES

The Encumbrancee is entitled to all the powers rights and remedies given to encumbrancees by the Real Property Act 1886 (SA).

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THE COMMON SEAL of AGED	) / COMMON S.
CARE AND HOUSING GROUP INCORPORATED	) AGED CAR
(ABN 99 437 071 895) was	) // AND HOUSE
hereunto affixed in the presence of:	) { GEORB
Director [Print Name: BREST BLANKS I Director  int Name: LERBLY HOLD 1 C	]



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## LANDS TITLES REGISTRATION OFFICE SOUTH AUSTRALIA

## MEMORANDUM OF ENCUMBRANCE

FORM APPROVED BY THE REGISTRAR-GENERAL

BELOW THIS LINE FOR OFFICE & STAMP DUTY PURPOSES ONLY

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#### BELOW THIS LINE FOR AGENT USE ONLY

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## APPENDIX D- LANDSCAPE & URBAN DESIGN CONCEPT DESIGN REPORT

# Daw Park Repat Hospital Ward 1 & 2

LANDSCAPE CONCEPT REPORT



## **CONTENTS**

Issue —	Revision —	Approved —	
Preliminary	Α	DS,JH	

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**Site Context** 

**Key issues** 

**Key moves** 

**Key objectives** 

Landscape Concept Plan

Front Area + Carpark

Outdoor Space 1 & 2

Outdoor Space 3

Outdoor Space 4

Planting

**Landscape Details** 

Materials & Elements

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4

5

6

7

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9

10

11

12

12

13

## **CONTEXT**



## **KEY ISSUES**

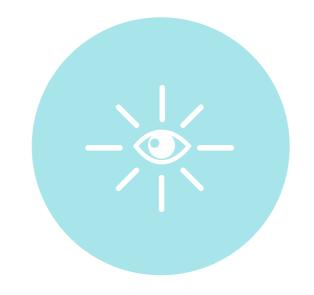
- 1 Uninviting courtyard spaces
- 2 Poor outlook from consumer bedrooms
- 3 Material harshness paving, architectural facade etc

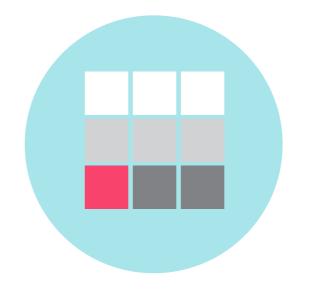


4 Daw Park Repat Hospital - Ward 1 & 2 Preliminary oxigen.net.au

### **KEY OBJECTIVES**









# CIRCULATION OF SPACES

- Legibility of pathways
- Ease of movement between indoor + outdoor spaces
- Multiple walking loops

## **SAFETY + SECURITY**

- Observed / non observed
- Monitored privacy
- Controlled freedom
- Flexible + safe outdoor spaces

# MATERIALS + TEXTURES

- Non-slip spaces
- Non-contrasting surfaces
- Visually soft surfaces, less harsh spaces
- Mixture of texture to stimulate senses

## **NATURE + OUTLOOK**

- Non-institutional outdoor spaces
- Home garden environments
- Attractive outlook from internal spaces
- Multi-use spaces

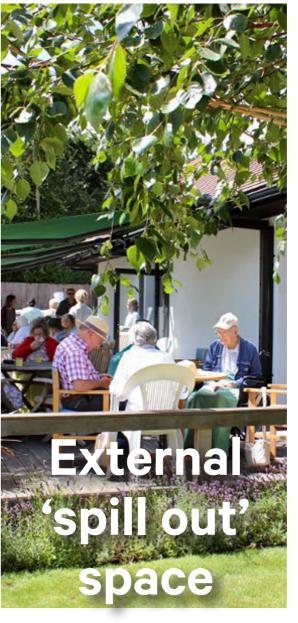
Daw Park Repat Hospital - Ward 1 & 2 Preliminary

## **KEY MOVES**



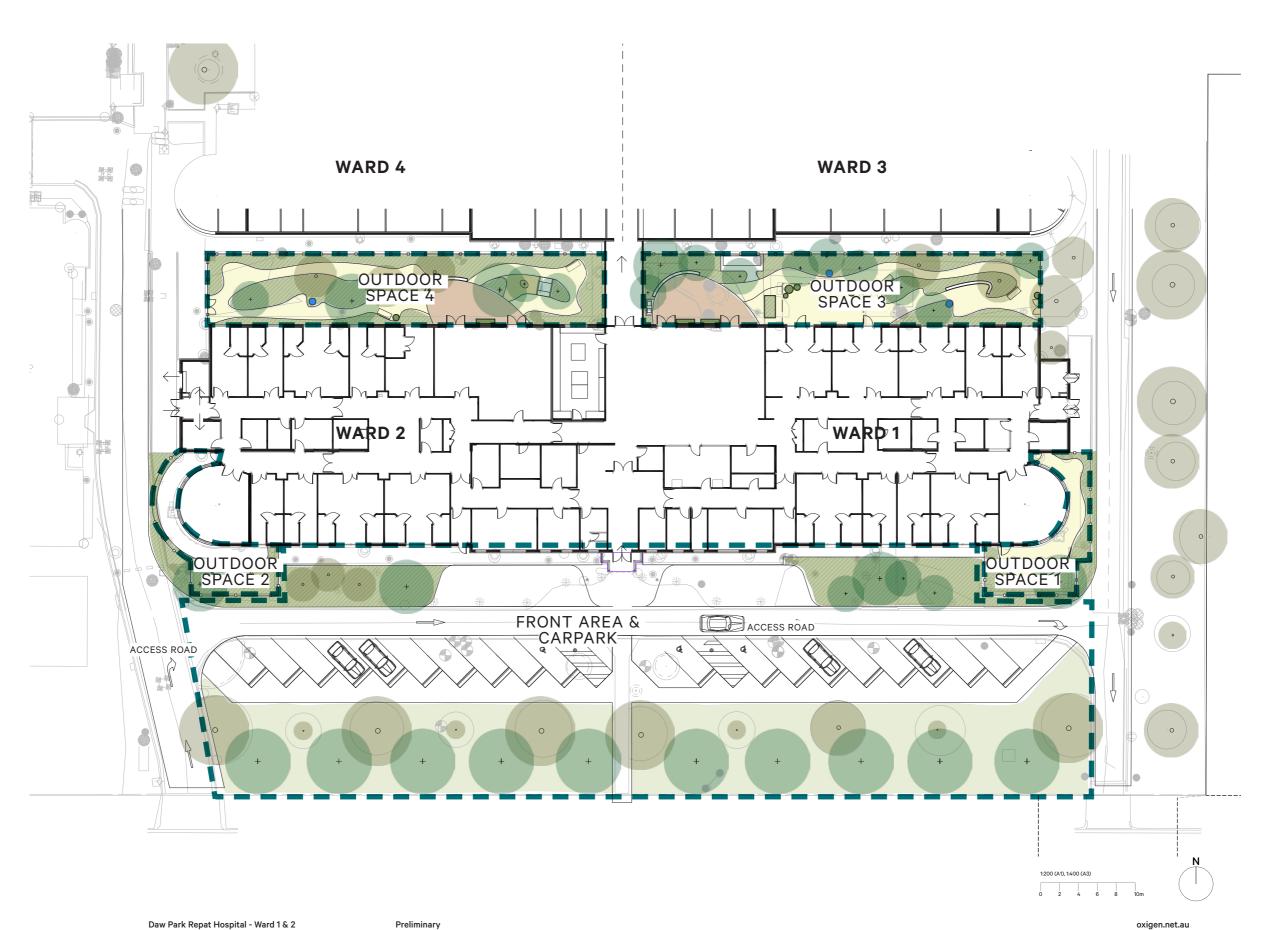




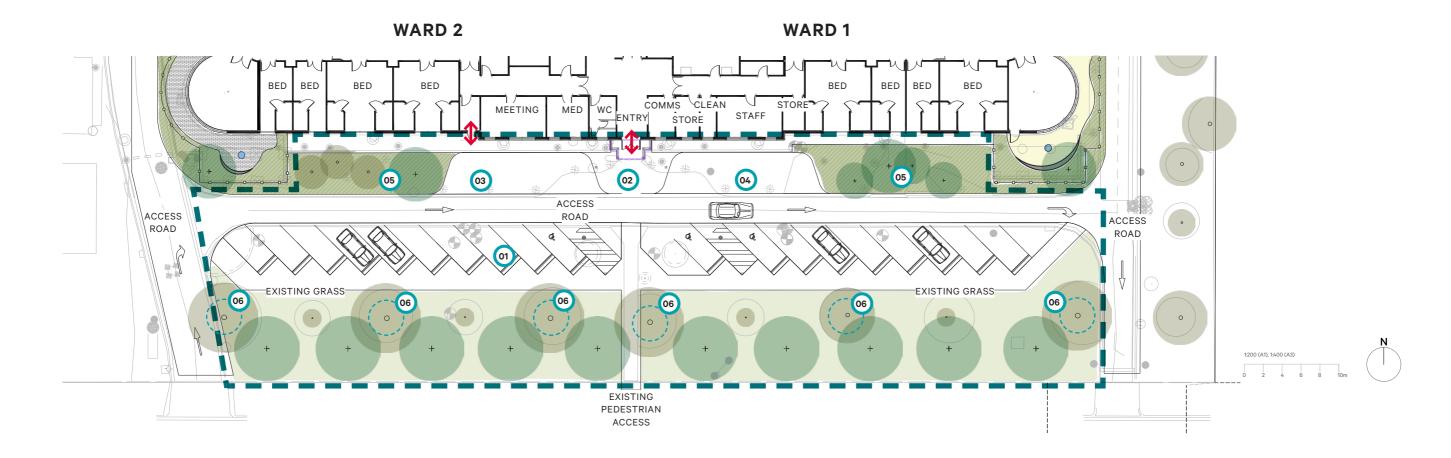




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### FRONT AREA & CARPARK



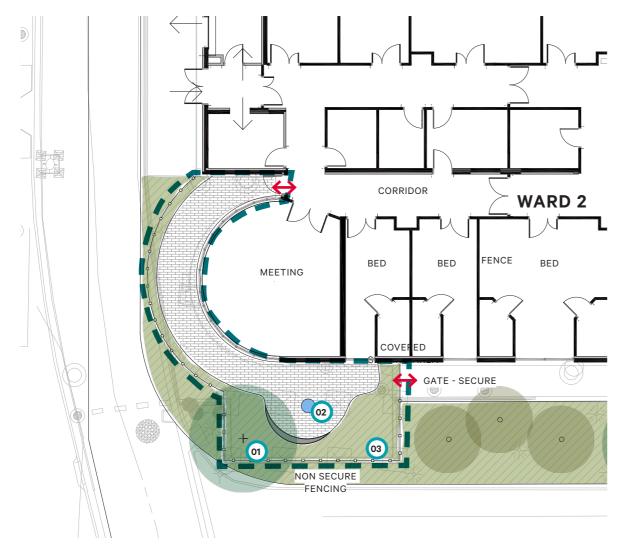
#### **KEY**

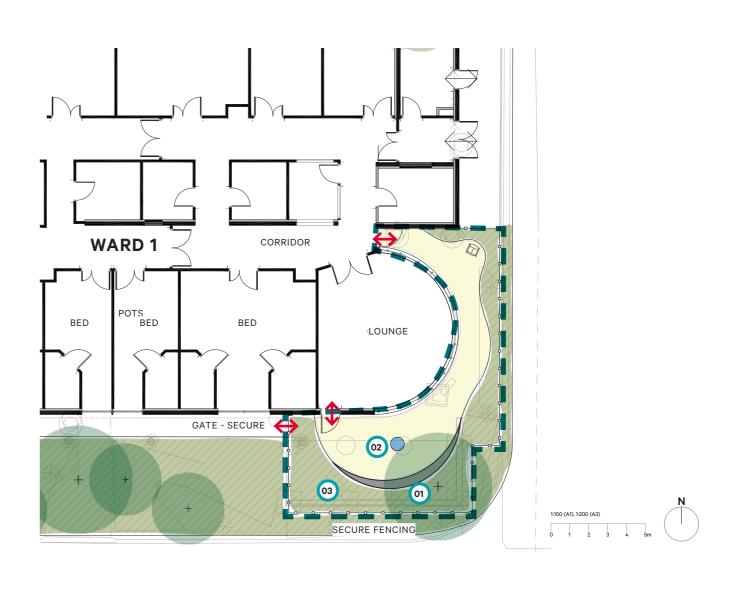
- 1 CARPARK
- 2 CANOPY
- 3 DROP-OFF/PICK UP AREA
- 4 AMBULANCE BAY
- 5 BUFFER PLANTING
- 6 STAGE REMOVAL OF EXISTING
  QUEENSLAND BOX TREES &
  INTERPLANTING WITH NEW SUITABLE
  SPECIES

#### **LEGEND**



## **OUTDOOR SPACE 1 & 2**





#### **KEY**

- 1 FEATURE TREE
- 2 SITTING AREA WITH SENSORY/ART FEATURE
- 3 RAISED PANTER

#### **LEGEND**



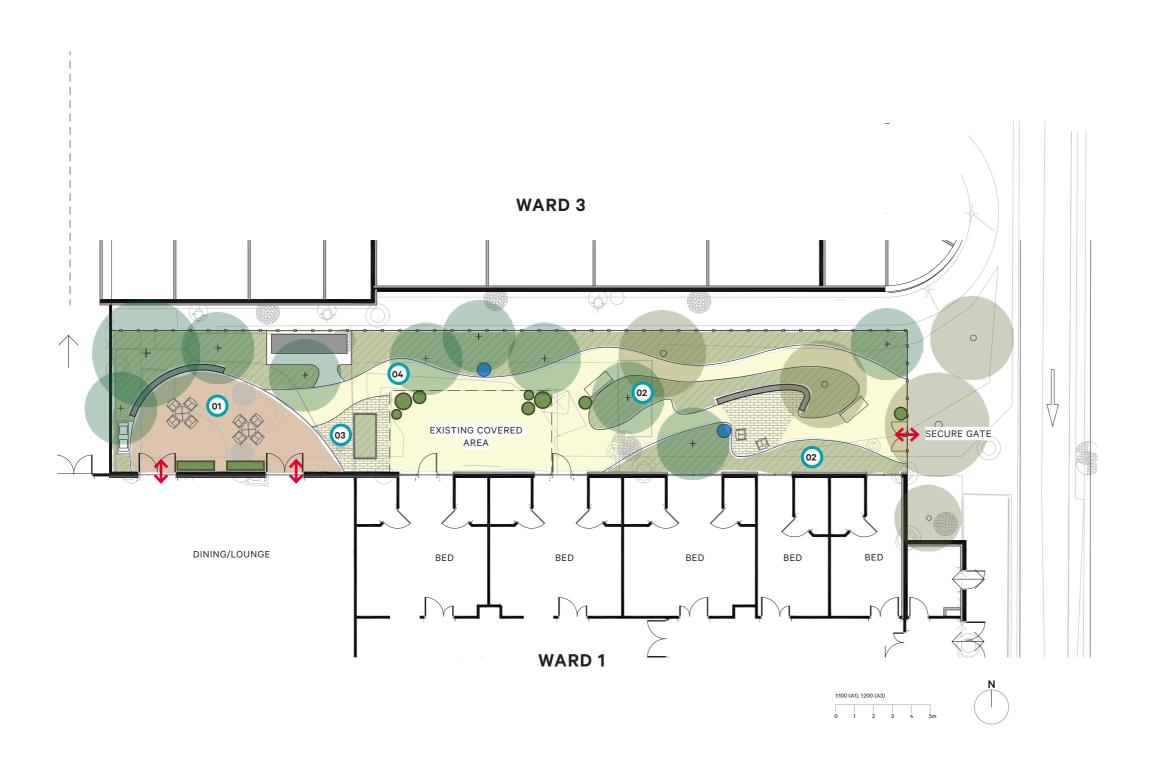
Stone sitting wall

Sensory/Art feature

Fencing

Consumer access

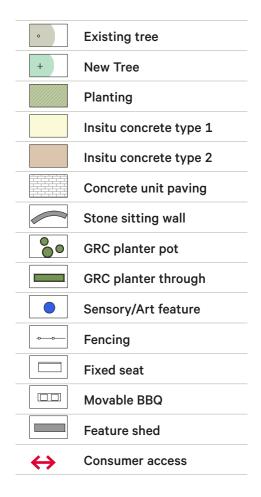
## **OUTDOOR SPACE 3**



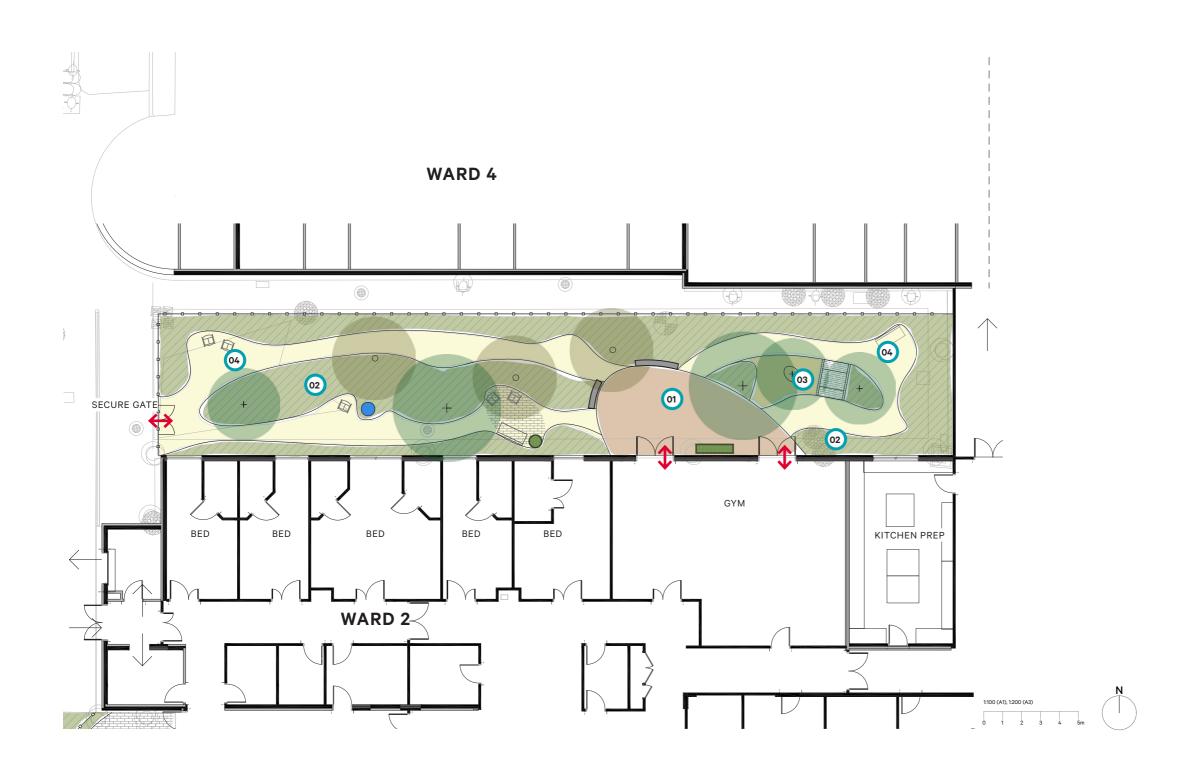
#### **KEY**

- 1 OUTDOOR SITTING AREA
- 2 MOUNDED PLANTED BEDS WITH SMALL ORNAMENTAL TREES
- 3 VEGGIE PLANTER
- 4 ACCESSIBLE CONCRETE PATH WITH RESTING POCKETS

#### **LEGEND**



## **OUTDOOR SPACE 4**



#### **KEY**

- 1 OUTDOOR ACTIVITY AREA
- 2 MOUNDED PLANTED BEDS WITH SMALL ORNAMENTAL TREES
- 3 CHALLENGING PATH IE. TIMBER BRIDGE
- 4 ACCESSIBLE CONCRETE PATH WITH RESTING POCKETS

#### **LEGEND**



## **MATERIALS & ELEMENTS**

#### PAVING + SURFACES





**Insitu Concrete** 

Small format concrete pavers

#### **FURNITURE**





Mixed planter pots



Stone garden walls



Raised vegetable gardens

**Fixed Seats** 

## **PLANTING**

#### TREES (INDICATIVE SPECIES)



Pistacia chinensis



Cercis canadensis
Forest Pansy



*Lagerstroemia indica 'Sioux'*Crepe Myrtle

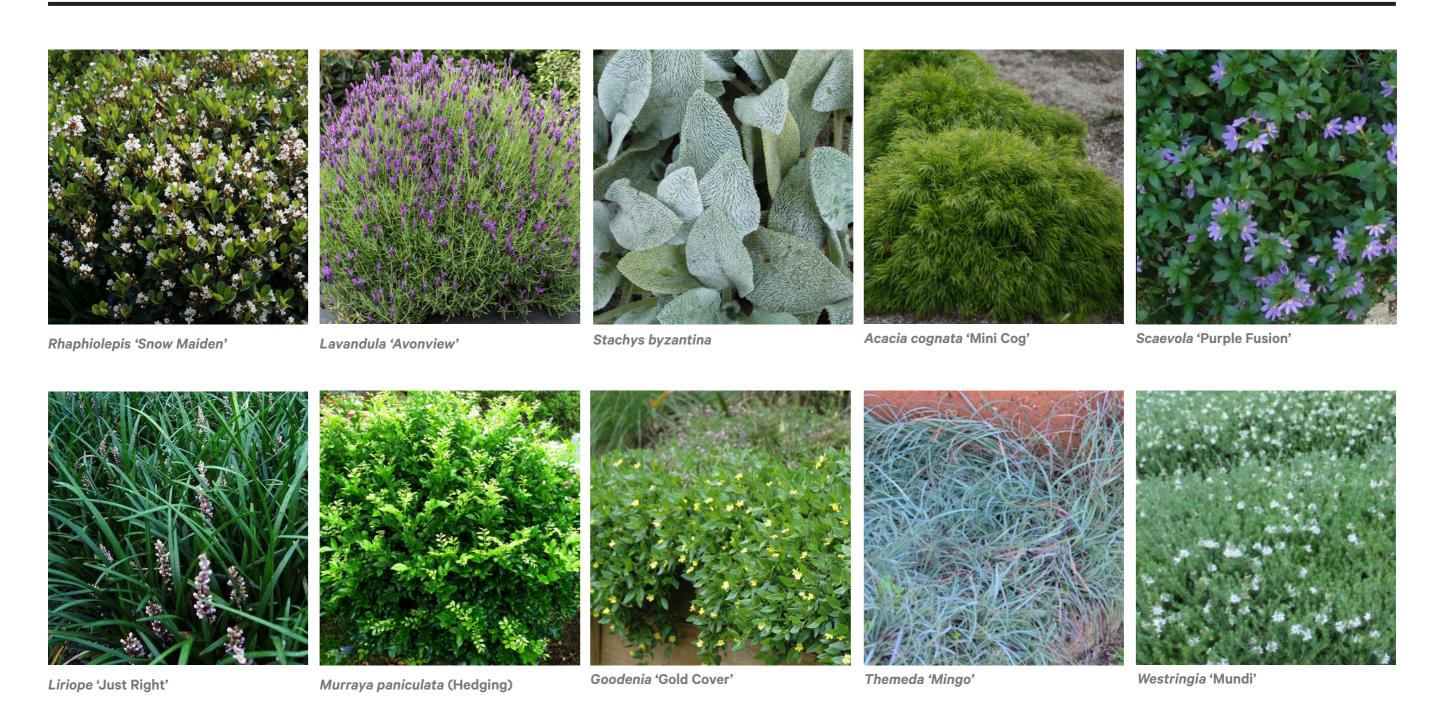


Mandarin Orange, Tahitian Lime etc.



## **PLANTING**

#### **GROUND LAYER PLANTS (INDICATIVE SPECIES)**



# oxigen

People, nature and space.

Oxigen Pty Ltd 98-100 Halifax Street Adelaide SA 5000

T +61 (08) 7324 9600 design@oxigen.net.au oxigen.net.au



## APPENDIX E - STRUCTURAL & CIVIL CONCEPT DESIGN REPORT



Department of Planning, Transport and Infrastructure

Repat Health
Precinct
Reactivation –
Phase 2

#### **CONCEPT DESIGN REPORT**

Project No. WGA191258 Doc No. WGA191258-RP-AA-0001 Rev. B

08 November 2019



#### **Revision History**

Rev	Date	Issue	Originator	Checker	Approver
Α	08/11/2019	Draft for Review	MSG	MSG	MSG
В	08/11/2019	For Client Review	MSG	MSG	MSG

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#### **Appendices**

Appendix A Geotechnical Report

Appendix B Council / Department Stormwater Infrastructure

Appendix C Internal Stormwater Main Infrastructure



INTRODUCTION

This Concept Design Report has been prepared for the proposed Repat Health Precinct Reactivation – Phase 2 project.

#### 1.1 PROJECT BACKGROUND

The purpose of this Concept Design Report is to provide the Department of Planning, Transport and Infrastructure (**DPTI**) and the Cost Consultants with a broad overview of the conceptual design for disciplines that WGA are responsible for, including background history or references to support the basis for this design.

The document will also be used to form the basis of our internal Design Basis Report (**DBR**) which will provide direction and consistency of design outputs to WGA project personnel to assist them in meeting our obligations to DPTI. The DBR will be a controlled document that will be updated as the project progresses in order to better assist with the project quality management.

Design criteria are largely defined by WGA's learnings of the project requirements through the Concept Design phase and user group meeting process in conjunction with other consultant interaction.

# 2 GENERAL PROJECT INFORMATION

#### 2.1 PROJECT TEAM

WGA has been engaged by Silver Thomas Hanley Pty Ltd to provide structural, civil, and geotechnical consultancy services.

WGA has engaged independent Survey and Contamination consultants as subcontractors.

Team Member	Role
Client	Department of Planning, Transport and Infrastructure (DPTI)
Cost Consultants	RLB
Architect (Primary Consultant)	Silver Thomas Hanley
Structural	WGA
Civil Engineering	WGA
Building Services Engineering	Aurecon
Landscape Architect	Oxigen
Geotechnical	WGA
Contamination	LBW co
Survey	Sawley Lock

## 3 STRUCTURAL DESIGN

#### 3.1 DESIGN LIFE

The structure will be designed in accordance with the standard requirements of AS3600-2009 (Concrete Structures) and AS4100 (Steel Structures) which provide structures and members with a design life of 50 years +/- 20%.

#### 3.2 BUILDING IMPORTANCE LEVEL

We understand that the building will be designed to the 2019 version of the NCC.

The 2019 National Construction Code (NCC) defines Health Buildings as Importance Level 3 if they have a capacity of 50 or more residents but not having surgery or emergency treatment facilities.

The individual buildings as part of this project are not expected to fall into the category. We understand they hold less than 50 residents each and they are care facilities rather than surgical spaces.

The sports hall facility will be a space where more than 300 people can congregate in one area. On this basis the NCC would classify the building as Importance Level 3.

Based on the above we believe it would be appropriate to design for the following:

#### Sports Hall: Importance Level 3

· Wind: 1:1000 year return period

Earthquake: 1:1000 yr

Other Facilities: Importance Level 2

· Wind: 1:500 yr

• Earthquake: 1:500 yr

The final classification of the Importance Levels **must be confirmed** by both the client and Building Certifiers who may elect to increase these levels.

#### 3.3 DURABILITY

Minimum concrete cover for durability is expected to be as follows:

#### **Exposure classification:**

Surface location	Class	Min f'c	Min cover (mm)
Interior	A2	32 MPa*	25mm
Exterior	B1	32 MPa*	40mm
In ground	A2	40 MPa	40mm

#### 3.4 FIRE RATING

Fire Resistance Levels (FRLs) are defined by the National Construction Code (NCC).

FRLs apply to the entire fire compartment which are bounded by fire walls or other defined boundaries. There are no new suspended slabs nominated at this point, however should they be included then they would need to be fire rated and the columns supporting them also fire rated.

We understand that the roof and roof structure would not need to be fire rated, except that fire walls would need to be laterally restrained appropriately such that they do not collapse if the structure on one side of the wall is affected by fire.

Fire rating of steel is typically achieved through intumescent paint, vermiculite spray, or Fyrchek linings. These are specified by the architect if required.

The Building Certifier would need to confirm the fire rating requirements for the project. Certain rooms and plant spaces may require higher than standard fire rating. These are expected to be achieved by supplementary linings or treatment as required.

#### 3.5 VERTICAL LOADS

The loads presented below are typical of similar projects based on our previous experience.

#### **Dead Loads**

Dead loads will be calculated on the basis of the following material densities:

Element	Load Allowance
Reinforced concrete & Precast Elements	2,500 kg/m <sup>3</sup>
Structural steel	7,850 kg/m <sup>3</sup>
Concrete Block Walls (190 thick)	Hollow: 2.10 kN/m <sup>2</sup> Core filled: 4.50 kN/m <sup>2</sup>
Soil Loads	18kN/m³
Screeds	24kN/m <sup>3</sup> Typically 100mm average: 2.4kN/m <sup>3</sup>

Assumed dead loads from other building elements:

Element	Load Allowance
Metal deck sheeting	0.055 kPa
Purlins/battens	0.055 kPa
Glazing System	0.6 kPa

#### Superimposed Dead and Live Loads

All design loads will be in accordance with AS1170.1 unless higher loads are defined during the design development period, or as required for specific pieces of equipment (or as required for access/loading of the equipment).

There have been no specific load requirements conveyed during the Concept Design phase by the usergroups that we are aware of, except for:

- Bariatric rooms
- Patient lifters

Increased floor loading might also be considered for the following conditions during detailed design:

- Reading rooms with book storage: 4.0 kPa
- General storage spaces: 2.4kN per metre height (4.0kPa allows for 1.6m high storage)
- · File rooms, compactus areas: 5.0 kPa
- · Public assembly areas (courts, auditoria, etc): 4.0 kPa

WGA should be notified if any of these apply.

The following design loads have been assumed for this project.

Description	Super-imposed Dead Load (kPa)	Uniformly Distributed Live Load (kPa)	Concentrated Live Load (kN)
General areas, bedrooms, wards, toilet areas	1.0	2.0	1.8
Offices	1.0	3.0	2.7
Corridors	1.0	4.0	4.5
Sports Hall Floor	0.5	5.0	3.6
Ceilings	0.5	-	-
Plant Rooms	-	Floor: 5.0 * Ceiling: 1.5 * May require higher loads for certain equipment	-
Non trafficable roof	-	0.5	1.4
Specific items of equipment such as compactuses, tanks, equipment	-	Actual Loads	Actual Loads

#### 3.6 WIND LOADS

Based on the concept of a 2 storey maximum building the following parameters would apply to the building:

Regional wind speed = 45 m/s

- Terrain Category = 3
- Structure height Z = 5m
- Variation of wind speed with height  $M_{(z,cat)}$  = Varies
- Topographical multiplier M<sub>t</sub> = 1.0
- Shielding multiplier M<sub>s</sub> = 0.9

Use of these parameters gives:

•  $V_u = 35.5 \text{ m/sec}$   $q_u = 0.76 \text{ kPa}$ •  $V_s = 27.6 \text{ m/sec}$   $q_s = 0.51 \text{ kPa}$ 

#### 3.7 SEISMIC LOADS

Earthquake design shall be conducted in accordance with AS1170.4 (2007).

Based on a Building Importance Category of 2:

· Return Period: 1:500yr

Probability Factor, kp = 1.0

Hazard Factor: 0.1 (Adelaide)

- Site Sub-soil Class: De (Refer Geotechnical Report)
- · Structural Ductility Factor, u: Dependent upon final construction type
- · Structural Performance Factor, Sp: Dependent upon final construction type

In general, the new buildings and extensions will be designed as independent structures that are fully compliant with the current standards. However, the existing buildings may not currently comply with these standards.

The proposed scope of works to date do not appear to affect the structural integrity of the existing buildings sufficiently to trigger a full earthquake assessment. This avoids the need to consider additional bracing or major structural strengthening. However, DPTI may desire to assess and strength any building that is refurbished to current standards anyway. This is likely to have cost implications.

WGA recommend that a seismic workshop be held to fully understand DPTI's requirements in relation to the existing buildings. The original concepts involved 'light touches' to the refurbished areas which did not warrant a seismic review of the buildings, however more recent concepts for Wards 1 and 2 are becoming more significant which may influence DPTI's seismic approach.

#### 3.8 BARRIERS, HANDRAILS, GRAB RAILS AND BALUSTRADES

Handrails, grab rails and balustrades will be designed in accordance with AS1170.1. Structurally we will provide typical details with extents shown on architectural drawings.

#### 3.9 IMPOSED MOVEMENTS

Allowance will be made for the effects of restrained shrinkage of concrete elements and for thermal effects on the structure (both concrete and steel structures).

Design concrete shrinkage 650 microstrain @ 56 days

Thermal movement To be considered

#### 3.10 ROBUSTNESS

All structures are to be designed in accordance with the minimum robustness requirements of AS1170.0 where no other governing criteria exceed these requirements.

#### 3.11 TEMPORARY WORKS

At this early stage, no consideration has been made during concept design for temporary construction requirements.

Detailed design considerations should include:

- · Site access including deliveries;
- Crane accessibility;

Perhaps one of the more significant challenges from a temporary works perspective will be site access. The Stage 2 works are in the far corner of the site, away from the main roads. The design should consider that larger components may be difficult to get into the site.

#### 3.12 FUTURE FLEXIBILITY

Options for future flexibility have been discussed during concept design but not fully explored.

#### **Regular Column Grids**

A significant contributing factor to future flexibility is the provision of a regular column grid arrangement. This allows for greater flexibility in future planning than being confined by odd arrangements that were created for unique planning considerations. Steel framed buildings with lightweight partitions allow for more flexibility in re-planning spaces in the future (as opposed to load-bearing walls). However, the requirement for wet areas will limit future flexibility of some spaces. Sacrificial toppings could be considered to provide flexibility for future setdowns, however this is not expected to be within current budget allowances.

#### 3.13 CEILINGS AND SERVICES – SEISMIC RESTRAINT

The ceilings and services across all areas of the project shall be designed with seismic restraint.

For refurbished areas, many partitions, services and ceilings may be retained. At this stage it is assumed that all existing conditions would remain as-is where this occurs, and that they would not be upgraded to be seismically rated.

This assumption must be validated by DPTI and the Building Certifier. The scope of replacement with seismically rated versions may depend on the level of disruption to the existing building. For example, where a ceiling or service is completely removed, or a new partition is added it will be seismically rated, but in areas of 'light touch' they will remain as-is.

WGA recommend that a workshop be conducted to explore the exact extend of seismic restraint desired once the concept is agreed at high-level, however some budget allowance should be included as part of the concept.

#### 3.14 NEW SERVICES WITHIN EXISTING BUILDINGS

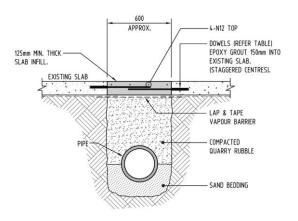
It is expected that the proposed refurbishments will require new in-ground services that will need to be cut into existing footings, particularly due to modifications around existing and new wet areas.

In general, the existing footing systems are raft footings which cannot accommodate trenching through the footing beams. In these instances, the services must penetrate horizontally through the beams. The footing beams would need to be located on site through x-ray scanning prior to trenching.

In some instances, there are suspended raft slabs which may require detailed coordination of trench locations.

Refer to the Aurecon services report for extent of in-ground services. Footing beams are expected at approximately 4m centres, or as shown on existing drawings.

The following details provide indicative scope of structural works required to achieve this.



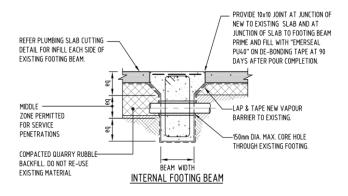
#### PLUMBING SLAB CUTTING DETAIL (BETWEEN BEAMS)

1. REFER PLUMBING DRAWINGS FOR EXTENT OF SLAB CUTTING

APPLICATION DOWELS CENTRES DOWEL LENGTH

HEAVY DUTY N16 350 550

Figure 3a - Slab Trenching Detail



#### PIPE PENETRATION THROUGH EXISTING FOOTING BEAM

Figure 3b - Beam Penetration Detail

Generally, old services are expected to be removed and new services are assumed to be of similar weight such that the existing structure does not need to be reassessed or strengthened.

Some new penetrations through existing walls should be expected and allowed for.

# 4 SPINAL REHAB REFURBISHMENT

Spinal Rehabilitation is an existing building which is designated for refurbishment as part of this project. This section describes the building based on a desktop study of the original drawings. It also describes some of the proposed refurbishment works relevant to the structure.

#### 4.1 DESKTOP STUDY

The original drawings of the existing rehab building are available and were used for this desk top study. The building was built in three stages described as buildings 12, 12A and 12B, refer to Figure 4a.

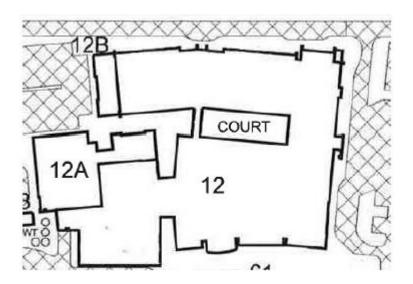


Figure 4a - Key Plan of Spinal Rehab Existing Buildings

#### 4.1.1 **Building 12**

The building was documented in 1999. The building is typically single storey, however there are small areas of mezzanine plant platforms.

The construction is steel frame superstructure. The roof is typically purlins spanning between rafters. Rafters are typically spanning directly onto steel columns. Column sizes are typically 89 sits and 100 sits. Refer to Figure 4b.

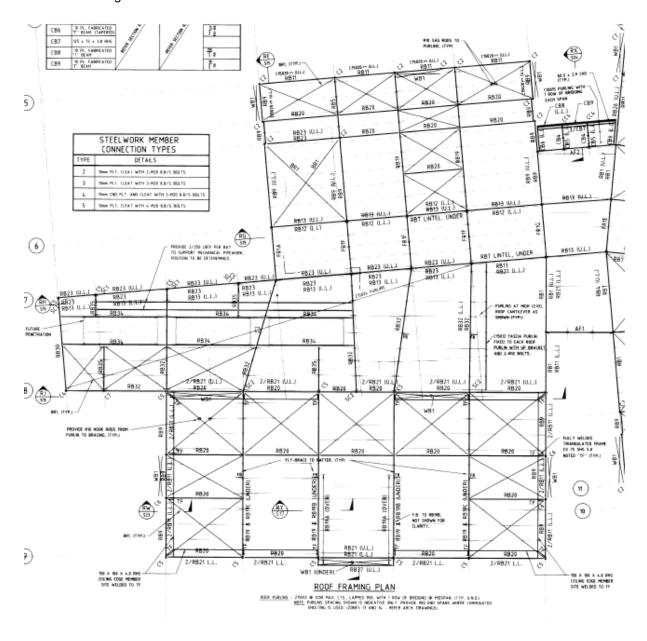


Figure 4b - Building 12 Roof

The footings system is a raft with integrated pad footings supporting the columns. The slab is typically 110mm thick with 50 mm setdowns that maintain the 110mm thickness. Refer to Figure 4c.

Footing beams are typically 300 w X 550 deep internally and 400 wide X 650 deep on the perimeter.

Internal walls are typically non load bearing and are assumed to be steel studs.

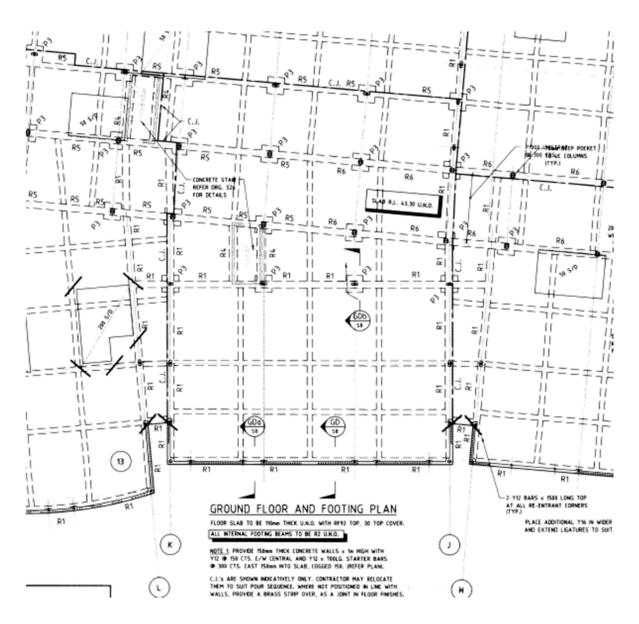


Figure 4c

The plant platforms are typically 150mm thick slabs on Bondek spanning onto steel framing. Refer to Figure 4d.

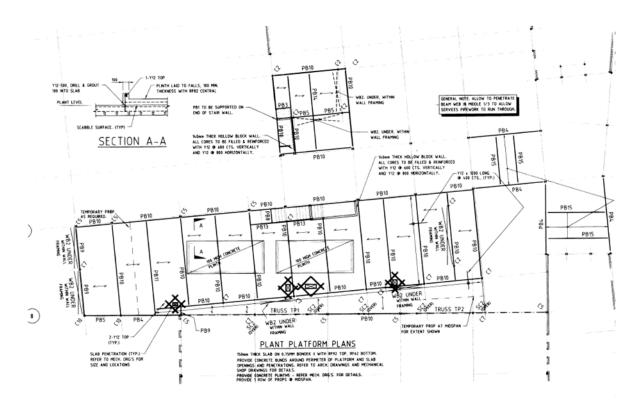


Figure 4d

#### 4.1.2 Building 12A

Building 12A was documented in 2011. The east side of the building is single storey and the west side is two-storey.

The footing is a raft with integrated pad footings. There are trench piers at all raft beam intersections. The raft slab is 150mm thick with mesh top and bottom, this indicates it has been designed as suspended. The internal footing beams are 400 wide X approximately 800 deep the external beams are 300 wide X 800 deep. The raft is dowelled to Building 12. Refer to Figure 4e.

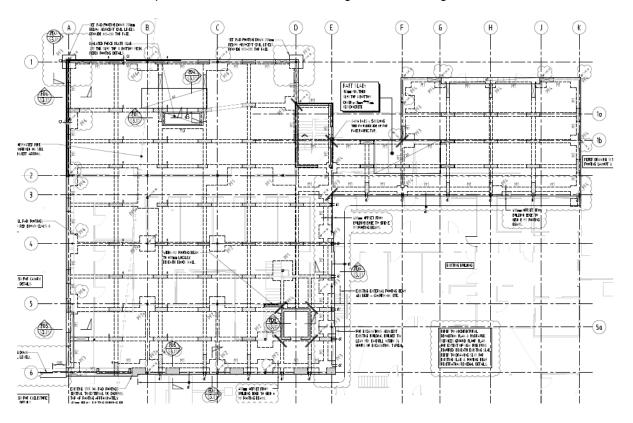


Figure 4e

The first floor is a 140mm slab on RF55 metal decking. The slab is supported on I beam secondary and primary beams. Refer to Figure 4g.

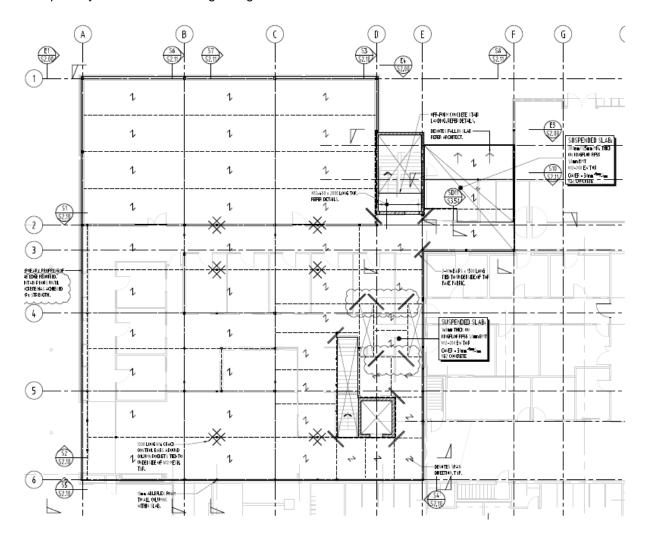


Figure 4g

The roof has steel purlins spanning onto steel rafters. The rafters are supported on steel columns which are typically 89 SHS. A western section of the first floor has a roof built directly on the slab. This area was built for future expansion. Refer to Figure 4f.

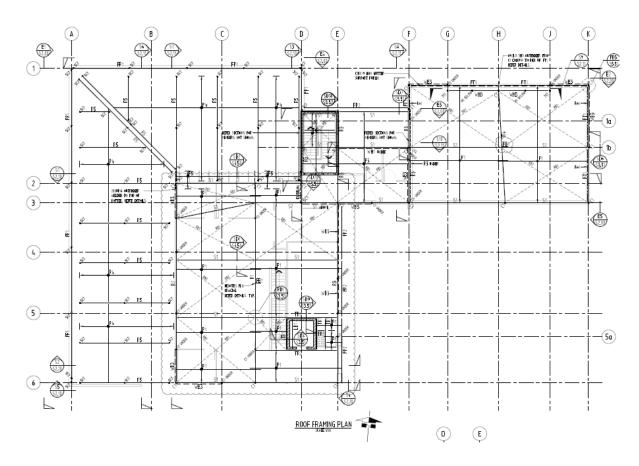


Figure 4f

#### 4.1.3 **Building 12B**

Building 12B was documented in 2013. It is a small single storey extension to the west side of Building 12. The footing is a raft with a 130mm thick slab with SL92 mesh reinforcement top and bottom. The slab has 50mm setdowns for wet areas. Refer to Figure 4h. The roof is steel framed with purlins spanning onto rafters, refer to Figure 4i.

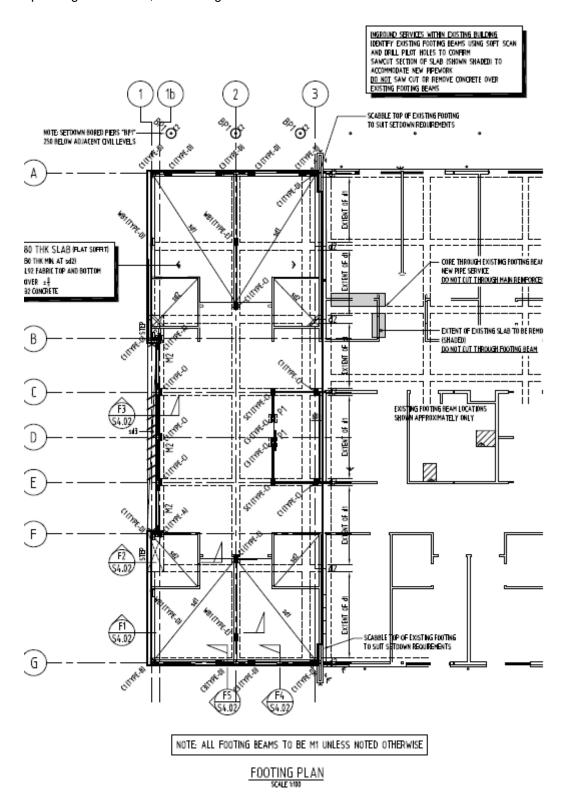


Figure 4h

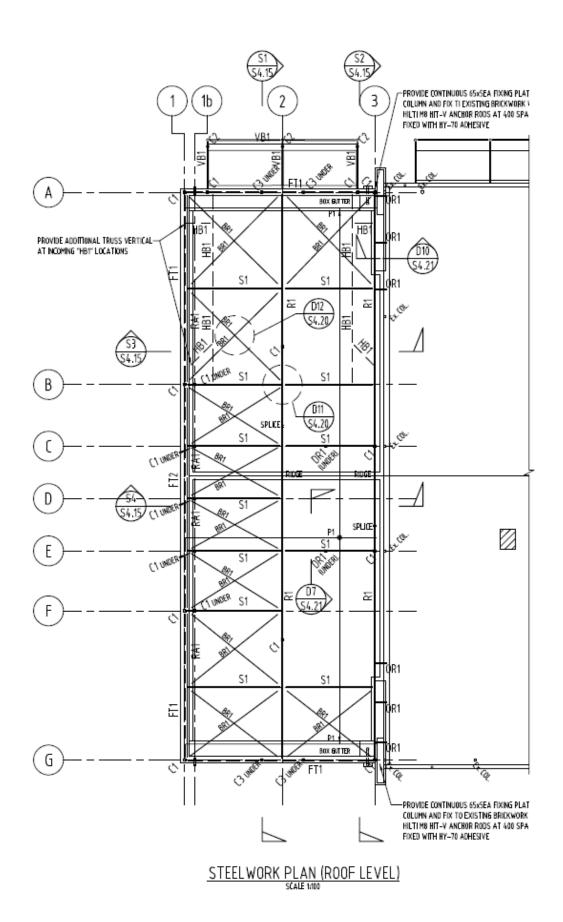


Figure 4i

#### 4.2 REFURBISHMENT WORKS

#### 4.2.1 Wall Relocation

The refurbishment works involve the relocation of internal walls. The walls are non-load bearing stud walls and typically have no effect structurally, however steel columns supporting the roof are hidden in the walls. Column locations should be co-ordinated wherever walls are being moved.

#### 4.2.2 Ensuite Changes

The ensuite walls have been designated to change by approximately 500mm. This will necessitate an extension of the setdown for tiles. It has been envisaged that this wall be achieved by scabbling down the corner and direct sticking the tile.

Aurecon have advised that the inground services connections will still be adequate. Therefore, minimal slab removal is envisaged for the ensuite changes.

#### 4.2.3 Inground Services

There will be new services that require trenching the raft slab. Refer to Aurecon drawings for extent.

The footing beams cannot be cut so will need to be cored through. Refer to typical details in the previous sections.

#### 4.2.4 Gym Ceiling Mounted Track (Patient Lifter)

STH have indicated that a new ceiling mounted lifting track will be required in the gym. Depending on the load requirements for the track and the selected system (single track or multi-position gantry style), this may be able to be supported directly from the existing structure or a supplementary steelwork frame may be required.

Refer to STH for further advice and selection of equipment.

#### 4.2.5 New Plant

Aurecon have indicated that a new chiller of approximately 5 tonnes will need to be housed. Options are:

- a) Use plant slab area which is currently unused in building 12A. Floor has been designed for 5kPa and will need to be assessed. Extension of roof to enclose chiller is required.
- b) New raft slab and roof at the south-west corner of building 12.

# 5 BRAIN REHABILITATION (NEW BUILDING)

The new Brain Rehabilitation building is typically a single storey building. It is envisaged that the structure will be similar to building 12A described in the previous section.

In this section we describe the indicative structural solution for costing purposes. The basis is building 12A which was designed by WGA in 2011.

#### 5.1 FOOTINGS

It is envisaged that a raft slab footing system will be adopted.

The whole building footprint will need to be built up with compacted rubble in the order of 1200-1500mm (to be confirmed with survey).

Allow for 150mm slab with 2 layers of mesh and 300 wide x 800 deep. Trench piers at all intersections integrated pads to support all columns. Refer to figure 4e in the previous section for indicative footing arrangement.

Slab will be stepped to accommodate setdowns at wet areas which are envisaged to be 50 mm deep typically.

#### 5.2 PLANT MEZZANINE

Aurecon have indicated that mezzanine plant area will be required similar to building 12.

The area of plant mezzanine required will need to be confirmed by Aurecon. Access to plant floors should also be costed.

The structural solution envisaged is typically a 150mm thick slab on metal decking supporting on steel framing. Refer to Figure 4g in the previous section for an indictive footing arrangement.

#### **5.3 ROOF**

The roof structure will typically be steel frame with purlins at 1.2m centres spanning between rafters. Allow for support columns at 8m x 8m grid over entire floor area. Refer to Figure 4f in the previous sections for indicative arrangement.

#### 5.4 FAÇADE

Refer to architect for façade type. Allow for additional structure such as steel SHS mullions and header beams at windows and doors.

## 6 GYMNASIUM (NEW BUILDING)

The new Gymnasium building contains a single basketball court with changerooms and store facilities around its perimeter. In this section the indicative structural solution is outlined for costing purposes.

#### 6.1 SUBSTRUCTURE

It is anticipated the footings will comprise of a stiffened raft system with beams spaced on a typical 4m x 4m grid. Allow for a 150 slab with 350 wide x 600 beams. Trench piers will be required at all beam intersections 350 wide x 900 deep to ensure the footing system is founded through the fill present on site. Localised spread footings will be utilised beneath concentrated column loads.

The raft slab will be stepped at wet areas, entry mats other similar areas, and set down generally to accommodate a sprung timber floor.

#### 6.2 SUPERSTRUCTURE

STH have envisaged a structural timber frame (CLT), however this is expected to be very expensive and not within current budget allowances. For the purposes of this report, WGA have nominated a notional steel frame which could be timber clad as a base-line design. If there is sufficient budget and client desire, WGA can look at timber options during the next phase of design.

A steel frame would include regular single span rafters supporting purlins continuous over. Allow for 610UB rafters spliced to achieve the required clear span and Z15019 light-gauge steel purlins at 1200 centres. The 'V' shaped perimeter columns will directly support the rafters over. Allow for 150 SHS columns. A mid height window header will be used to restrain the glazing system to the external walls.

If a ceiling is adopted, an allowance for additional ceiling support struts spanning between rafters should be made. The spacing of these struts will be dependent on the ceiling system selected.

It is envisaged the surrounding store and change rooms will also comprise of a steel frame with steel columns supporting regular rafters. Steel wall studs shall be used for framing of external and internal non-load bearing walls.

#### 6.3 MISCELLANEOUS ITEMS

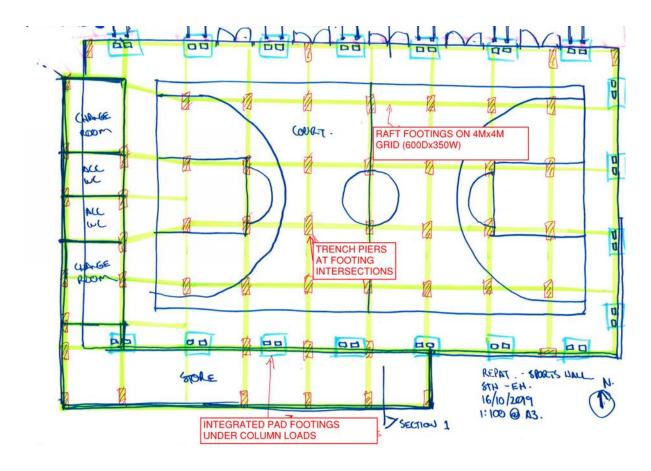
An allowance for additional structure should be made for top hung basketball rings, nets, scoring systems etc. if they are including within the building scope.

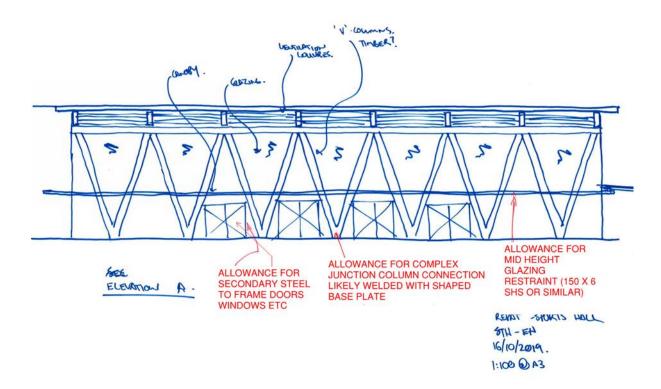
#### 6.4 CONCEPT SKETCHES

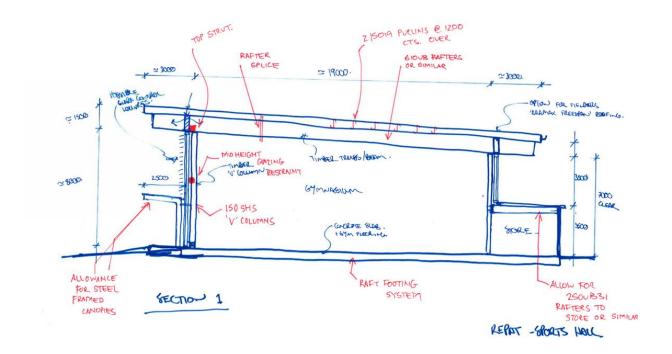
The following sketches depict the expected structural solution described above.

It should be noted that the structural concepts are very conceptual and indicative in nature. They will be subject to ongoing change during design development. They are intended to highlight general form and planning considerations.

#### **Footing System**







# CARE TRANSFORMATION REFURBISHMENT

The Care Transition wards are proposed to be located in refurbished Wards 1 and 2. This section describes the building based on a desktop study of the existing building.

## 7.1 DESKTOP STUDY

WGA were able to locate some existing structural drawings relating to Wards 1 and 2 in the plan room on site. These drawings provide a good indication of the expected structural challenges, and we were able to validate some of the information provided during the limited inspection opportunities we've had during the Concept phase.

Wards 1 and 2 appear to have been constructed in a staged approach. A central original building has been extended with wings to the East and West (call this Stage 2), before the latest extension to the North (Stage 3). The drawings available relate to Stage 3, but they provide a good indication of the expected construction in the first stages.

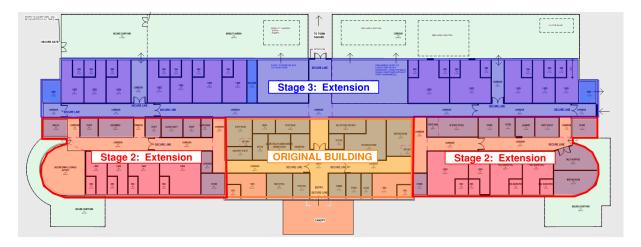


Figure 7a - Varies Stages of Wards 1 & 2 Construction

## 7.1.1 The Original Building

The original building is constructed of load-bearing masonry perimeter walls on all four sides, with steel roof trusses supported on these. The roof is tiled.

Timber framed partition walls are constructed within the masonry perimeter, and the ceilings are generally supported by these walls rather than the roof structure above.

There is a significant ceiling space that is readily accessible. The ceiling space has a significant amount of services within it which would need to be removed and replaced.

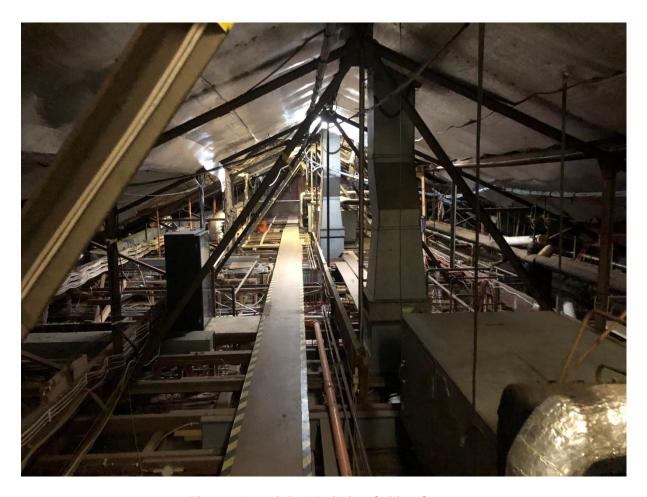


Figure 7b - Original Building Ceiling Space

As part of a previous refurbishment, the floor within the original building was replaced with a new 110mm suspended slab on lost formwork supported by regular dwarf walls. This creates a void below the existing slab which extends the full area of the original building.

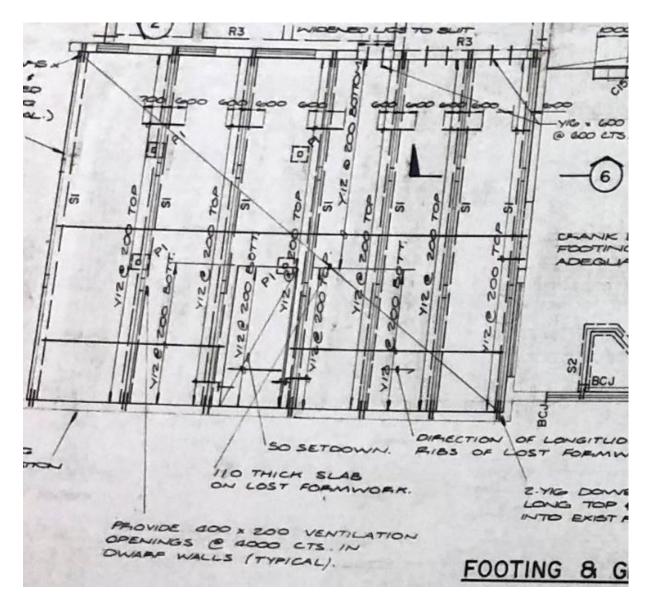


Figure 7c - Part Footing Plan of the East End of the Original Building

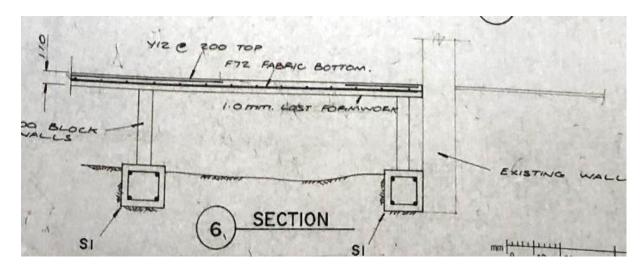


Figure 7d - Suspended Slab in Original Building Area (Section 6 on the plan above)

## 7.1.2 Stage 2 East and West Wings

The East and West Wings were added to the original building at a later stage. They were constructed similarly to the original stage with masonry load-bearing walls around the perimeter and steel roof trusses to match the original.

The floors in these areas are still the original suspended timber floors. As part of the Stage 3 works, local modifications were made to create suspended concrete slabs for the ensuites and support for new brick walls.

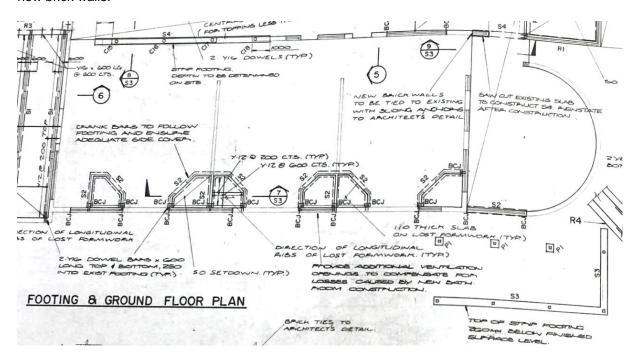


Figure 7e - The Eastern Wing Footing Details

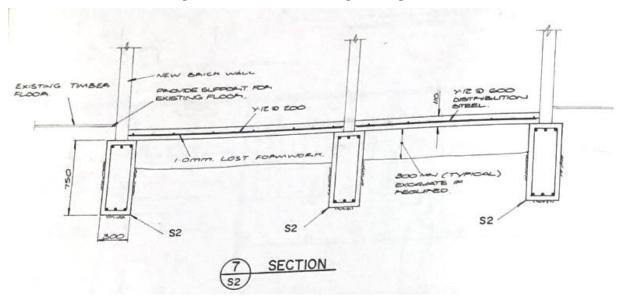


Figure 7f - A Section Through the Existing Ensuites in the East and West Wings

### 7.1.3 Stage 3 Northern Addition

The northern half of the building was added most recently. The construction of this area is significantly different to the original sections.

Based on the drawings, the roof trusses in these zones are timber trusses at close 1200mm spaces similar to residential construction techniques.

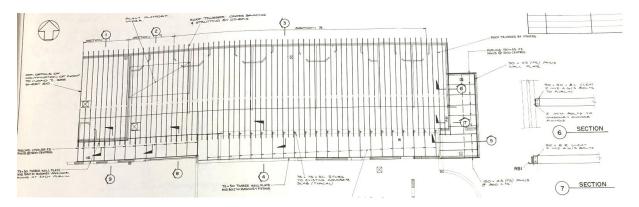


Figure 7g - A Part Roof Plan of the Eastern End of Stage 3 Showing Timber Roof Trusses

The roof trusses are supported on the perimeter masonry walls, and steel beams on steel columns (south side).

There is a flatter link roof between the original stages and the newer Stage 3 pitched roof. This is the roof that is expected to be the source of multiple leaks in the existing roof.

The footing system is a conventional raft slab system.

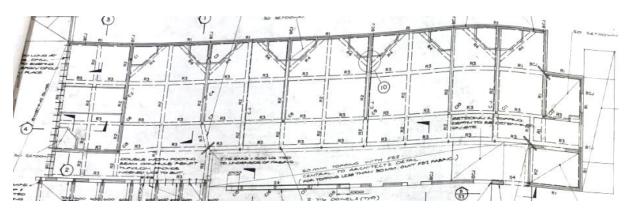


Figure 7h - A Part Footing Plan of the Eastern End of Stage 3 showing the raft slab arrangement

The following image shows the differences between the construction methods. It shows the Stage 3 construction on the left with the raft slab on ground, and the original construction on the right with the suspended timber/concrete slab.

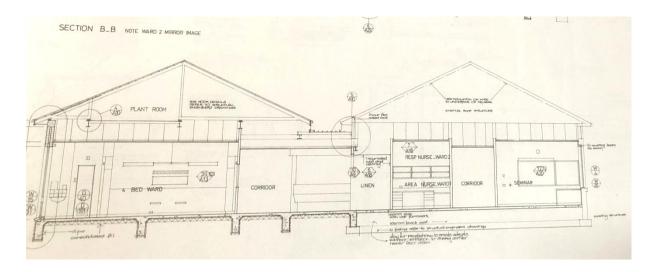


Figure 7i - A Section Through the Building - Stage 3 on the left, the Original on the right.

## 7.1.4 Existing Condition

Generally, the existing structure appears to be in sound condition, however at this stage WGA have not been able to undertake a very extensive review due to access restrictions. There are known roof leaks which appear to stem from the link roof in between the two pitched roofs, however these are unlikely to stem from structural issues (possible replacement of sheeting and flashing).

There are suspended concrete slabs at each end of the Stage 2 wings that support some plant equipment. These slabs are exposed and are the most likely areas in need of structural repair. These areas could be more invasively inspected to further assess their condition and identify any concrete cancer or durability issues.



Figure 7j - The Suspended Concrete Roofs at Each End of the Stage 2 Wings

## 7.2 REFURBISHMENT WORKS

## 7.2.1 Wall Relocation

The refurbishment works involve the relocation of internal walls. Generally, the internal walls are non-load bearing stud walls and typically have no structural impact, however steel columns supporting the roof are hidden in some walls. Some internal walls are still the original external masonry walls. These may require new steel lintels if new openings are created. Ideally we try to avoid these though. Column locations should be co-ordinated wherever walls are being moved where possible to avoid the need for transfer beams to be installed.

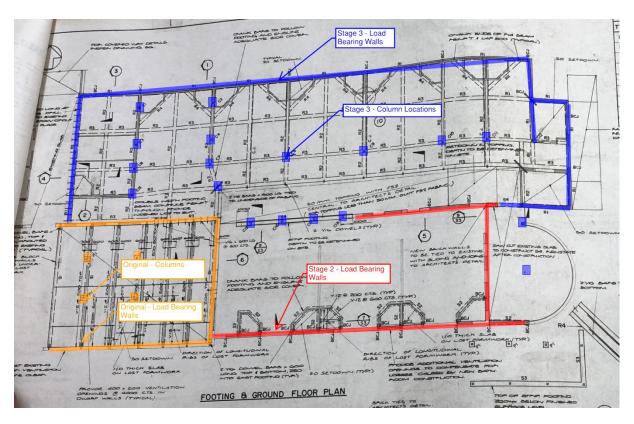


Figure 7k - Load Bearing Walls and Columns

The currently proposed concept appears generally sympathetic to the existing structural walls and columns.

## 7.2.2 Ensuite Changes

The ensuite walls have been designated to change by approximately 500mm. This will necessitate an extension of the setdowns for tiles.

There are two different ensuite conditions: those on a raft roofing, and those on the suspended slab.

In the raft footing area it is envisaged that the setdowns will be achieved by scabbling down the corner of the room and direct sticking the tile. All plumbing works are expected to be contained to within the original ensuite shape which allows for the slab to be cut locally and to use existing footing penetrations for reticulation.

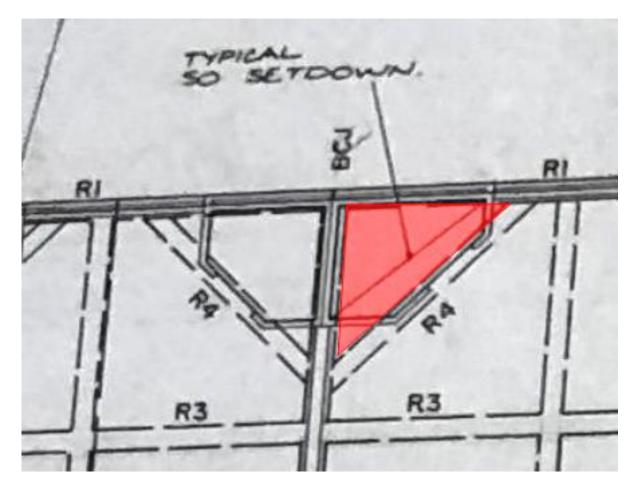


Figure 7I - Raft slab Ensuites - Red Zone Shows Possible Slab Areas That Can Be Readily Cut and Replaced if Required

The suspended ensuites are more difficult to modify. The existing walls are masonry and supported on footings to match their location. Extending the size of these ensuites means that part of the floor is timber and part is concrete. In addition, the new walls would need to be lightweight.

The preferred option at this stage is to remove the existing slabs and walls and reframe the timber floors in these areas with a setdown to suit the new arrangement. They exact framing arrangement is yet to be coordinated.

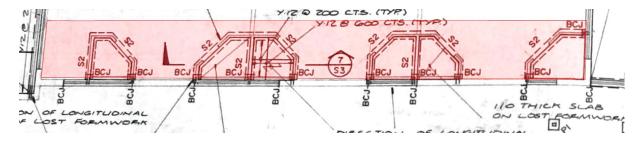


Figure 7m - Suspended Ensuites - Showing Possible Extent of New Timber Floor Framing

## 7.2.3 Inground Services

There will be new services that require trenching the raft slab. Refer to Aurecon drawings for extent.

The footing beams cannot be cut so will need to be cored through. Refer to typical details in previous sections.

There are also new services that will need to pass through the suspended slab and timber framed zones. Access holes may need to be created and patched to achieve this.

## 7.2.4 New Plant

New ceilings and plant equipment are expected to be required in the ceiling space. If the existing ceilings and plant equipment are removed it should be structurally acceptable to replace with newer modern services of equivalent weight. We note that ceiling should be supported by the existing or new walls rather than hung from the roof trusses to simulate current conditions.

## 7.2.5 New Entrance Canopy

A new front entrance canopy is envisaged as part of the refurbishment. This is expected to be construct in either timber or a light steel frame depending on final architectural intent.

### 7.2.6 New Car Park

STH have indicated that new car parks may be required to the South of the building to accommodate visitors. Refer to STH for scope of works in this area.

### 7.2.7 Ambulance Access

STH indicated that the existing road to the East of the building may need to be widened to accommodate Ambulance access. The road is bound by a small retaining wall. WGA recommend avoiding widening this if possible because modifying the retaining walls and re-working this area is likely to be an expensive exercise.



Figure 7n - Possible Road Widening is Likely to be Expensive Due to the Existing Retaining Wall (East End of Building)

## GEOTECHNICAL DESIGN

A desktop geotechnical assessment has been undertaken by Wallbridge Gilbert Aztec (WGA) for the proposed Stage 2 project. A copy of this report is provided in Appendix A.

The report outlines the available geotechnical data and summarises the subsurface conditions previously reported under other projects related to the greater Repat site.

The previous reports referenced during this desktop assessment comprised:

- "Repatriation General Hospital Development Daw Park Geotechnical Investigation" Coffey Geotechnics report 06747AA-AB, dated 21 June 2011.
- "Proposed Extension. Rehabilitation Unit Building Geotechnical Investigation" Wallbridge & Gilbert report WAD100311, dated 10 September 2013.
- "Preliminary Site Investigation (Site History and Limited Soil Investigation) SA Health Repatriation General Hospital, Daw Park" Greencap report J143789/01, dated May 2016.
- Borehole logs, groundwater well logs and site plan (dated 6, 7 and 8 December 2016) LBW Environmental job number 160884. A report on the LBW investigations was not available at the time of reporting.

It is noted that the first two reports listed above are geotechnical investigation reports, whilst the last two reports above were environmental site investigations. The environmental investigations comprise limited data relevant to this desktop geotechnical assessment. Reference to the data presented in the environmental reports has been mainly limited to the depth of fill across the site.

## 8.1 FILL

Fill was encountered in the majority of boreholes from the previous investigations. The composition of the fill varied from re-worked natural clay with some gravel, to sandy topsoil material, imported quarry product, and included some brick fragments, concrete fragments, ash, cinders and slag in places.

The fill depth was typically about 0.3 m, but varied considerably. The maximum thickness of the fill encountered during the previous investigations is summarised in Table 1.

Investigation	Maximum Depth of Fill Reported (m)
Coffey (2011)	0.4
W&G (2013)	0.9
Greencap (2016)	1.7



Note: \* the base of the fill was not penetrated in six boreholes from the LBW investigation, including the boreholes where the fill was deepest. The maximum depth of fill is therefore unknown.

Table 1: Maximum fill depths reported in the previous investigations

Strips, pads and stiffened raft sub-beams must not be founded in the existing fill, topsoil, softened or disturbed natural soils. Where such materials are encountered at the design founding level, footings would need to be founded deeper. Spread footings must be founded in undisturbed natural clay of at least very stiff consistency.

All existing non-engineered fill and organic topsoil should be stripped from beneath pavement and building areas. Based on the previous borehole logs, stripping to depths of typically about 0.3 m to 0.5 m is anticipated across the new building footprints, but stripping to depths of 1.7 m or more may be required locally. Deeper pockets of fill may also require excavation where existing underground services, footings or basements require demolition. Following stripping, the exposed natural surface should be proof rolled and be observed by a suitably experienced engineer. Site won pavement materials from excavations could be stockpiled on site for re-use as engineered fill.

## 8.2 FOOTING DESIGN

Based on the previous geotechnical investigations, and the classification system presented in AS2870-2011 "*Residential slabs and footings*", a characteristic surface movement (y<sub>s</sub>) of up to about 55 mm has been predicted for the site at the current ground surface level.

Based on reactive soil movements a site classification of Class H1-D (Highly reactive with deep moisture changes) is considered appropriate based AS2870. No allowance for the effects of trees is provided in the y<sub>s</sub> value presented above.

The site classification assumes that any non-engineered fill more than 0.4 m thick is removed or treated in situ, otherwise a classification of Class P (filled site) would apply.

A minimum embedment of 0.6 m below the finished surface level and at least 0.3 m into the natural clay founding layer is recommended. Trenched piers should be expected at all footing beam intersections to achieve this.

In general, the new buildings are single storey only and would be founded on a raft footing system. Footing beams are expected to be similar to recent projects on the site with suspended slabs (2 layers of mesh) and trenched piers at beam intersections. Refer to the previous sections for more specific footing design recommendations.

## 9 SITE SURVEY

## 9.1 SITE SURVEY

Sawley Lock O'Callaghan has been engaged to undertake a survey of the existing site with the following information:

- · Extents and outlines of any buildings and structures, including downpipes
- Floor Levels of buildings and structures at each doorway (or minimum of one FFL reading if doorway is out of scope area)
- · Extents and levels of roadways, kerbs, paths, tracks and any other surface features
- · Levels at all changes of grade, including top of crown, top of kerb and gutter invert levels
- An identification of each of the pavement and surface types
- Existing surface levels including survey strings along changes of grade and top and bottom of banks
- Surface channels and flow drainage paths
- All existing infrastructure including the tops of all service lids, lighting, poles, street furniture and the like
- All in and below ground stormwater infrastructure, types of pits, cover and invert levels of pits, pipe sizes and relevant pipe inverts
- Survey all on-ground evidence of other underground services, and survey any 'marked' service lines (as / if provided and located by others)
- Trees including type, diameter of trunk measured at base, and the extent of the tree canopy plus tree heights)
- Survey models and contour plans produced with 100mm contour intervals or other interval as practical
- · Any other site features that are visible on the surface
- Survey shall be to AHD and coordinate system GDA94 MGA ZONE 54
- · Plan produced to show boundaries, contours and features etc.
- AutoCAD plan (dwg) 3D files / CAD file and coordination system to be formatted to suit use in Revit software.
- True north must be exactly in the up direction in the AutoCAD model space.
- A single polyline should be used for the project site boundary on a clearly identifiable layer
- Hard copies and electronic copies shall be provided the survey has been provided in CAD format and includes a 3D triangulation file.

The survey is yet to be completed and is expected within a few weeks of this concept report.

## 10 contamination

LBWco have been engaged to undertake a contamination assessment of the existing site. LBWco have already conducted extensive investigations on this site for ACH Group who were considering purchasing the site prior to the reactivation projects.

DPTI have elected to purchase this previous report from ACH Group and this process is currently underway with the report expected to be released just after this Concept Report is completed.

LBWco have also conducted some additional localised testing to strengthen the results in the areas associated with the Phase 2 scope of works. This testing has been completed, but the results are yet to be received at the time of this report.

Verbally we have been advised that there are no major contamination issues that have been encountered in any of the testing done to date. We understand that there is minor contamination associated with termite sprays locally below the buildings. On this basis, we are not expecting any major surprises.

LBWco will provide a consolidated report in the coming weeks.

## 11 CIVIL DESIGN CRITERIA

Civil design will be undertaken accordance with the following design standards and guidelines.

## 11.1 DESIGN STANDARDS AND SOURCES OF REFERENCES

Civil design of roadways, carparks, pedestrian pathways, trafficable and non-trafficable pavements, hardstands and stormwater drainage shall comply with the following standards, guidelines and design methods:

- Austroads Road Design Guidelines for geometric considerations, DPTI supplement to the Austroads Guide to the Structural design of Road Pavements
- · Light duty pavements: "A structural design guide for flexible residential street pavements"
- · Heavy duty pavements: "Austroads guidelines" and Circly mechanistic pavement design program.
- AS 2890 Parking Facilities
- AS 1428 Design for Access and Mobility
- AS3500 Plumbing and Drainage –Stormwater Drainage Part 3,
- ARRD Special Report 34 " Stormwater Drainage design in small Urban Catchments"
- · DRAINS stormwater analysis and design program;

### 11.2 DESIGN DATUM

Survey grid and set out shall be to a minimum Geocentric Datum Australia 1994 (GDA 94) and levels to Australian Height Datum (AHD).

## 11.3 EXISTING STORMWATER INFRASTRUCTURE

The overall and linked 'branch' stormwater design(s) to be undertaken for this staged project will take into account a number of key objectives and considerations as below, relating to the existing infrastructure both internally and externally:

- Proximity of the existing Council stormwater system. Currently, 2 x 1500mm diameter stormwater pipes exist running in a westerly direction along Daws Road, to the south of the project site(s)
- Existing Council system capacity. The City of Mitcham advises that their Daws Road stormwater pipe mains (Drain 4) are 'close to capacity for a 5 year ARI catchment event'.
- Overland flow path. The subsequent surcharge and/or overflow of stormwater run-off from the site (and/or upstream within the Repat site) is known to travel generally in a westerly direction towards the boundary driveway. Subsequently, this major storm flow balance must be controlled to exit to Daws Road, largely within the southwest corner of the overall site. Interrogation of future site survey results will determine how effective this stormwater overflow path has been.



Refer to Appendix B for a layout indication of surrounding Council / Department stormwater infrastructure

Refer to Appendix C for an approximated plan of Internal Stormwater Main Infrastructure, as gleaned, to date, from review of past drawings obtained on site. Layouts will require confirmation by way of an in-ground service / stormwater location and re-survey program.

## 11.4 OVERARCHING STORMWATER DESIGN STRATEGY

The aim of a Water Sensitive Urban Design (WSUD) approach would be to integrate landscape function with stormwater management within various landscaped area to lessen or 'soften' stormwater run-off impact. The ability to achieve outcomes in this space will depend broadly upon available land area and proximity to structures

## 11.5 GENERAL SITE STORMWATER MANAGEMENT

Key design criteria to be met by this project include;

- Achieve the stormwater management criteria associated with any relevant Green Star requirements
- Site stormwater management practices in accordance with AS 3500, and standard Australian practice

Discussions have been held with Council's Stormwater Engineering Representatives to discuss the existing Council infrastructure capacity and limitations, our design approach and to confirm the design standards and intent of the stormwater management plan discussed in this report.

In essence, most of the project site is ultimately serviced by a major stormwater pipe main running parallel to the western boundary, within the western driveway itself. The pipe main is understood to be 600mm in diameter, with direct connection to the large external stormwater pipework passing in Daws Road.

The 600mm diameter stormwater pipe main grading southwards along the western driveway continues to the site's northwest corner, and accommodates a number of main pipe branches which extend back up through the site to the east.

A major 525mm diameter pipe branch extends along the main roadway passing between Ward 18 and 20 and the Rehabilitation Unit. (ie between Buildings 11 or 9, and Building 12). This appears to also

collect much of the northeast of the 'Repat', outside this scoped site. Another pipe branch is believed to snake its way east to the north of current Building 8 (Ward 16,17 and PDST Unit)

These existing pipework mains, if found to be suitable, will be accessed for use within a detailed civil and stormwater design

Specific City of Mitcham requirements with respect to stormwater management for the Repatriation General Hospital site as a whole, is for post development stormwater flows not to exceed the site's current, predevelopment outflows. With the impermeability of the site unlikely to increase beyond its current state, it is expected that no increase in stormwater run-off will be generated. However, the limited capacities of separate pipe branches or outlet points will drive the need for potential detention (temporary storage) in some situations. Shallow pipe runs mean that any major in-ground concrete tanks used for stormwater detention purposes would require pumped outflows to an extent, as gravity runs will be limited by depth. In-ground, oversized pipes or box culverts (as used currently on site) may provide some capacity at a shallower, gravity drained level.

Council also require that stormwater runoff from car parking areas is to be treated by a suitable oil / grease arrestor or similar prior to being discharged into the Council stormwater system. It is not clear if any such arrestors exist within the current layout framework

There is a benefit to overall stormwater outflows if stormwater (generally roof run-off) is captured and reused on-site as much as possible, be it for wet areas or general landscaping purposes. This

WGA will work with the design team and the Council's Technical Services team to review the survey and known stormwater layouts to the point necessary to confirm individual floor levels for the building or stages as required. We will design the site drainage system to connect into the existing system, and to not increase the risk of flooding to any adjacent land holdings

As part of the design concept phase it is expected the project team will:

- Undertake a full (internal) site stormwater location program, to build upon initial surveying with pipe invert depths and sizes
- Undertake CCTV review of main stormwater pipe branches existing, to ascertain if the current, internal infrastructure is of a condition and size that may be capable of use into the future
- Coordinate future easements to access stormwater outflow opportunities and provide adequate separation where required. The future Dementia Village in the site's southwestern corner is one such area. Future stormwater outlet points and detention / retention contributions will need to be planned and managed, whilst ensuring the section does not hinder other minor or major (flood) outflows of stormwater from beyond that portion.

## 11.6 ROOF STORMWATER RUNOFF

Subject to the final architectural roof design shape and collection system, all roof flow is to broadly be captured and discharged in a south-westerly direction. Roof run-off may potentially be separated according to its inherent "cleanliness" and placed into 'harvesting' Retention Tanks for irrigation re-use or similar on-site.

Stormwater runoff from the building could be concentrated for use and conveyed by using either a conventional drainage system or syphonic system. These details or opportunities would need to be confirmed by the Service Engineers and Architect during the design phase.

Green Star targets, where relevant, may require that the roof runoff be directed to a rainwater harvesting tank for reuse. Overflows from the tank would be then be directed onwards to the below

ground stormwater system and be discharged off site to the Council drainage infrastructure downstream.

## 11.7 BUILDING ACCESS

One of the key design initiatives and considerations will be the compliant and comfortable passage of the greater community around this Health Facility. The overall design is to avoid steps and minimise ramping, with smooth, gradual and consistent pavement grades to be targeted where at all possible.

DDA access, appropriate pavement selection and carefully considered floor levels will be a significant part of the design development process.

Roadways, drop-off points and carparking links will need to be carefully managed, and may require internal architectural consideration in some building envelopes. Interfaces and access links between sections and stages will be critical to a successful final product.

Centrally on site, there currently exists a complicated labyrinth of split-grade ramps, steps and building floor levels. It is expected that there may be need for similar external solutions and cost input in future walkways and links, although a coordinated design consideration and approach will allow this to be minimised.

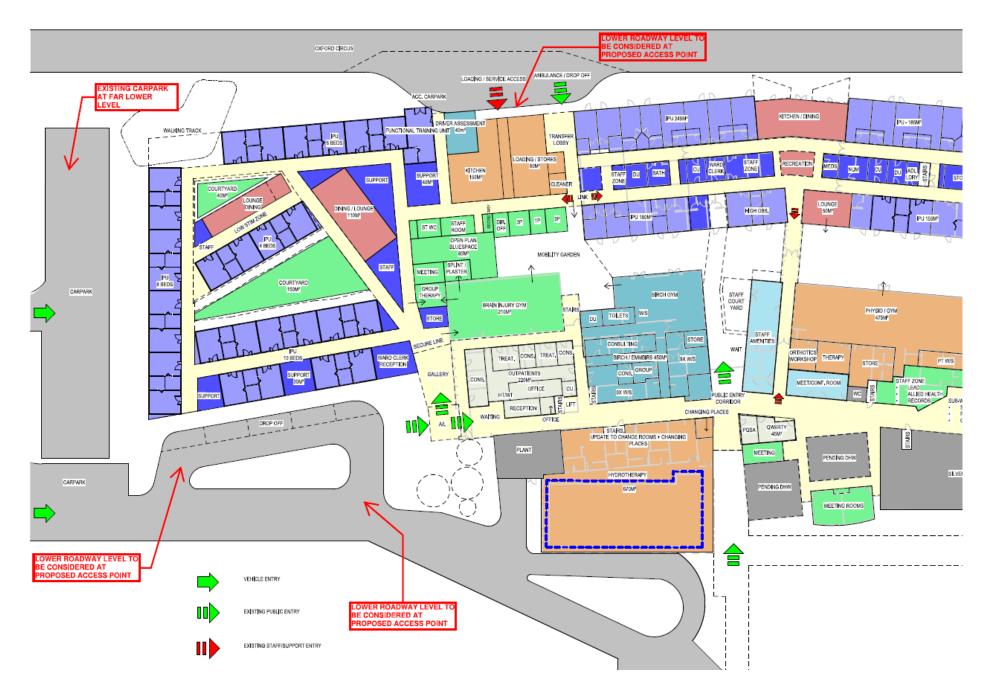
Initial Design Masterplan overviews have indicated some likely link points and potential access risks, although receipt of the Engineering Survey will provide a more complete better picture naturally. One area that will surely require close review is the proposed car and patient accessibility to the future 'Rehabilitation' extension to the north of the site.

The Rehabilitation Unit and its surrounding western carpark and entrance appear to sit more than 1000mm higher than the main carpark to its west, with plans to extend the 'Rehab' building floor plate out over this significantly lower land in the future. As such, the western end of the proposed building (if at the same Floor Level) will be far higher than the nearby driveway and carpark, with challenges to be met in terms of compliant access. There appears to be little new driveway length which could allow the carriageway to rise up towards proposed door entrance points.

These, and similar compliance risks, will need to be assessed and resolved early within the design development phase following surveying results and settlement on architectural form.







## 11.8 ROADS, PAVEMENTS AND PATHS

Paths and hardstands will conform to AS1428, whilst also providing minimum grades required for drainage purposes. DDA criteria for longitudinal and crossfall grades will be met, with or without handrails as applicable.

Where ramping is not required to compliantly link design areas, the maximum path or pavement crossfall shall be 2.5% maximum.

Differing pavements surfaces will require varying civil solutions.

## 11.9 LANDSCAPING

The landscaping design could include a combination of WSUD systems on a stage by stage basis. These include:

- Rain gardens and vegetated landscaping
- Landscape strips where localised runoff can be managed and treated (these are considered to be small scale rain gardens)

Project based opportunities in WSUD that aim to meet Green Star requirements can be achieved when opportunities are explored through an integrated design process. We believe the proposed Town Square, northwestern Carpark and future Dementia Village designs may present the best opportunities and outcomes for this. Opportunities can be confirmed through the design and development phase and consideration of the project budgets and aspirations.

## 11.10 REFERENCE DOCUMENTS AND STANDARDS

The stormwater management approach has been developed to encompass design practices in accordance with the following recognised references:

- Australian Rainfall and Runoff (1999)
- Storm drainage Design in Small Urban Catchments: A handbook for Australian Practice, Report 34 (1985),
- Australian Runoff Quality, A Guide to Water Sensitive Urban Design, Engineers Australia (2006).
- WSUD Engineering Procedures Stormwater, Melbourne Water (2005)
- WSUD: Basic procedures for source control of stormwater, A handbook for Australian Practice, University of SA (2004)

These handbooks and guidelines are considered as Australian and South Australian standards and cover all aspects of stormwater management and Water Sensitive Urban Design (WSUD). The stormwater management approach will adopt the design standards, principles and practices covered by the handbooks.

## **APPENDIX A**

## GEOTECHNICAL REPORT



**DPTI** 

## Repatriation General Hospital

DESK TOP GEOTECHNICAL ASSESSMENT

Project No. WGA191258 Doc No. WGA191258-RP-GE-0001 Rev. A

26 August 2019



## **Revision History**

Rev	Date	Issue	Originator	Checker	Approver
Α	26/08/2019	Draft	ВЈН	BJH	RWG

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Appendix A Figures

INTRODUCTION

A desktop geotechnical assessment has been undertaken by Wallbridge Gilbert Aztec (WGA) for the proposed reactivation of the Repatriation General Hospital (RGH) in Daw Park.

Whilst the concept plan for the hospital reactivation is yet to be developed, the reactivation is expected to include construction of new pavements, new buildings and refurbishment of existing buildings.

This report outlines the available geotechnical data and summarises the subsurface conditions previously reported. Preliminary recommendations relating to the design of pavements, footings, basement retaining walls and earthworks are presented in Section 4.

The previous reports referenced during this desktop assessment comprised:

- "Repatriation General Hospital Development Daw Park Geotechnical Investigation" Coffey Geotechnics report 06747AA-AB, dated 21 June 2011.
- "Proposed Extension. Rehabilitation Unit Building Geotechnical Investigation" Wallbridge & Gilbert report WAD100311, dated 10 September 2013.
- "Preliminary Site Investigation (Site History and Limited Soil Investigation) SA Health Repatriation General Hospital, Daw Park" Greencap report J143789/01, dated May 2016.
- Borehole logs, groundwater well logs and site plan (dated 6, 7 and 8 December 2016) LBW Environmental job number 160884. A report on the LBW investigations was not available at the time of reporting.

It is noted that the first two reports listed above are geotechnical investigation reports, whilst the last two reports above were environmental site investigations. The environmental investigations comprise limited data relevant to this desktop geotechnical assessment. Reference to the data presented in the environmental reports has been mainly limited to the depth of fill across the site.

## 2 PREVIOUS INVESTIGATIONS

## 2.1 FIELD INVESTIGATIONS

The field work completed during the previous geotechnical and environmental investigations referenced in Section 1 is summarised in Table 1.

Investigation	Scope of Field Investigations	
Coffey (2011)	17 x Boreholes to about 1 m to 1.5 m 9 x Boreholes to 3 m to 4 m 4 x Boreholes to 6 m to 8 m	
W&G (2013)	2 x Boreholes to 3 m	
9 x Borehole to <1 m Greencap (2016) 17 x Boreholes to 1 m to 2 n 4 x Boreholes to 4 m		
LBW (2016)  18 x Borehole to <1 m 13 x Boreholes to 1 m to 2 m 3 x Groundwater wells to 12.5 m to 15.5 ii		

Table 1: Summary of previous field investigations

The approximate locations of the previous boreholes are illustrated in Figure 1 in Appendix A.

## 2.2 LABORATORY TESTING

Geotechnical laboratory testing was only performed during the 2011 Coffey investigation. Testing comprised:

- Atterberg limits and particle size distribution testing on 8 subgrade soil samples. The estimated CBR of each sample was calculated based on the laboratory test results using a procedure adopted by the Department of Planning, Transport and Infrastructure;
- · Shrink-swell tests on 2 undisturbed soil samples.

## 3 SITE CONDITION

## 3.1 GENERAL

The site is located on the northern side of Daws Road and western side of Goodwood Road at Daw Park.

The site is currently developed with numerous hospital buildings (predominantly 1 or 2 storey), access roads and car parking areas. A number of garden and grassed areas are present, including many mature trees.

Based on regional topography, the site has a slight fall to the west or north west, with an average gradient of about 1V:100H, resulting in an overall elevation difference of about 5 m over the 500 m (approximate) length of the site from east to west.

## 3.2 REGIONAL GEOLOGY

The site is located near the down-thrust side of the Eden Burnside Fault. A nearby stratigraphic bore (on Springbank Road) encountered 80 m thickness of Quaternary aged soil, underlain by at least 151 m thickness of Tertiary aged materials. Bedrock was not encountered in the upper 231 m at the location of the stratigraphic bore.

The upper Quaternary aged soils are alluvial in origin and are associated with the Brownhill Creek fan of the upper outwash plain.

The Soil Association Map of the Adelaide Area suggests that the upper soils (Pooraka Formation) are likely to resemble a Red Brown Earth soil profile type RB3, which typically comprise reddish brown clay and sandy clay of high or medium plasticity. Some calcareous pockets and more sandy or gravelly zones may be present within the predominantly clayey soil profile. At depth, mottled clay (Hindmarsh Clay) is expected.

## 3.3 SUBSURFACE CONDITIONS

Fill was encountered in the majority of boreholes from the previous investigations. The composition of the fill varied from re-worked natural clay with some gravel, to sandy topsoil material, imported quarry product, and included some brick fragments, concrete fragments, ash, cinders and slag in places.

The fill depth was typically about 0.3 m, but varied considerably. The maximum thickness of the fill encountered during the previous investigations is summarised in Table 2.

Investigation	Investigation Maximum Depth of Fill Reported (m)	
Coffey (2011)	0.4	
W&G (2013)	0.9	
Greencap (2016)	1.7	
LBW (2016)	1.0*	

Note: \* the base of the fill was not penetrated in six boreholes from the LBW investigation, including the boreholes where the fill was deepest. The maximum depth of fill is therefore unknown.

Table 2: Maximum fill depths reported in the previous investigations

The natural subsurface profile reported in the previous investigations was broadly consistent with the expected regional geology. The profile broadly comprised

- Brown, low plasticity sandy clay topsoil. Where encountered, the thickness generally varied from about 100 mm to 300 mm;
- Red-brown high plasticity clay approximately 0.5 m thick, with some calcareous pockets present at increasing depth;
- Orange-brown and brown clay and sandy clay, typically extending to the limit of the investigations, but interbedded with silty sand or clayey layers and lenses in some deeper boreholes.
- Some sandy and occasionally gravelly layers or lenses, typically below about 5 m, but as shallow as about 2.5 m in some boreholes. More extensive layers of alluvial gravel were encountered from about 7.5 m to 10 m depth in one of the groundwater wells and from about 11.5 m to 12.5 m in another groundwater well installed during the LBW (2016) investigation.

The clay soils typically had a very stiff to hard consistency and have the potential to undergo high volume changes with changes in soil moisture content. The laboratory shrink-swell index testing from the Coffey (2011) investigation indicated shrink-swell indices of 2.2% and 2.7% for two different samples of the high plasticity red-brown clay.

## 3.4 GROUNDWATER

Groundwater was only intercepted in the three groundwater wells installed during the LBW (2016) investigation. Standing groundwater was reported at depths varying between about 11.5 m and 13.2 m. Seasonal variations in groundwater may occur.

Perched groundwater may develop following extended wet periods, particularly in the relatively permeable sandy or gravelly lenses within the less permeable clayey profile.

# PRELIMINARY GEOTECHNICAL ASSESSMENT

## 4.1 GENERAL

The natural subsurface conditions appear typical of many sites adjacent to the base of the foothills, south and east of Adelaide

The main geotechnical issues likely to affect the design and performance of footings and pavements at the site are:

- The presence of existing fill of varying thickness. The existing fill must be considered to be non-engineered (uncontrolled) unless suitable documentary evidence exists to the contrary. Non-engineered fill is generally considered unsuitable to support footings and pavements. Removal and/or treatment of the fill is therefore expected to be required;
- The potential shrink-swell movements of the natural clays in response to changes in soil moisture
  content. Such movements would be exacerbated by changes to the existing equilibrium soil
  moisture conditions (e.g.by removal of mature trees, planting of new trees, leaking pipes, ponding
  of surface storm water, or construction of concrete floor slabs over previously unsealed surfaces).

Lightly loaded buildings of 1 or 2 storeys could be supported by conventional stiffened raft footings.

Buildings up to about 4 storeys could be supported on either a thick raft or pad and strip footings.

Pad and strip footings are unlikely to be practical for buildings taller than 4 storeys. Such buildings could be supported either by a thick raft footing or piles. Bored piles or continuous flight auger (CFA) piles could be considered depending on the required pile length and the soil profile at a particular location (bored piles may be unstable in sandy and gravelly alluvium).

## 4.2 SITE CLASSIFICATION

## 4.2.1 Shrink-Swell Potential

WGA Repatriation General Hospital

Based on the previous geotechnical investigations, and the classification system presented in AS2870-2011 "*Residential slabs and footings*", a characteristic surface movement (y<sub>s</sub>) of up to about 55 mm has been predicted for the site at the current ground surface level.

Based on reactive soil movements a site classification of Class H1-D (Highly reactive with deep moisture changes) is considered appropriate based AS2870.

Should future moisture content changes in the soil exceed the design moisture change reported in AS2870, a larger  $y_s$  value may occur. Such changes could occur adjacent to leaking water services or where the soils are desiccated by timber floors in existing buildings or trees. No allowance for the effects of trees is provided in the  $y_s$  value presented above.

The site classification assumes that any non-engineered fill more than 0.4 m thick is removed or treated in situ, otherwise a classification of Class P (filled site) would apply.

A further assessment of shrink-swell movements beneath undercroft areas will be required as part of the final design and will depend on the depth of the proposed undercroft excavation. For the preliminary design of undercroft footings founded at about 2 m depth, an allowance of around 25 mm for future shrink-swell movements should be made, provided that significant moisture content changes are not permitted in the reactive clays during construction or in the future.

## 4.2.2 Earthquake Design

Based on the regional geology described in Section 3, bedrock is expected to occur at a depth of more than 100 m below the ground surface at the site.

Based on the expected subsurface profile described above, a site sub-soil class of De (Deep soil) is recommended in accordance with AS1170.4-2007 "Structural design actions Part 4: Earthquake actions in Australia".

## 4.2.3 Durability

No specific chemical laboratory durability testing has been performed on the soils in the previous investigations. Limited pH testing undertaken in the Greencap (2016) investigation indicates that the near-surface soils are alkaline (pH results of 8.0 and 8.5 for two samples tested).

The concentrations of sulphates and chlorides is not known. Further testing will be required if durability design is likely to be an issue.

For the purposes of preliminary design and based on previous experience in the area, the following exposure classifications are suggested:

- "mild" for buried concrete in accordance with the guidelines of Table 6.4.2(C) in AS2159-2009 "Piling Design and Installation"; and
- 'A2' based on the guidelines of Table 4.8.1 and Table 4.8.2 in in AS3600-2009 "Concrete Structures".

## 4.3 SPREAD FOOTINGS

Strips, pads and stiffened raft sub-beams must not be founded in the existing fill, topsoil, softened or disturbed natural soils. Where such materials are encountered at the design founding level, footings would need to be founded deeper. Spread footings must be founded in undisturbed natural clay of at least very stiff consistency.

A minimum embedment of 0.6 m below the finished surface level and at least 0.3 m into the natural clay founding layer is recommended.

Spread footings founded in natural clay of very stiff or hard consistency (with an undrained shear strength of at least 125 kPa) may be proportioned on the basis of the following maximum allowable bearing pressures:

- square or rectangular pad footings with a length to breadth ratio of 2 or less: 250 kPa;
- strip footings (length to breadth ratio greater than 2): 200 kPa.

In assessing the allowable bearing pressure a factor of safety of around 3 has been adopted. The design ultimate geotechnical capacity ( $R_{d,ug}$ ) may be estimated as 3 times the recommended maximum allowable bearing pressure.

Under short term transient loads (such as earthquake or wind loading) the maximum allowable bearing pressure may be increased by 25%.

The elastic (immediate) settlement of square or rectangular spread footings (length to breadth ratio of 2 or less) up to about 3 m wide is unlikely to exceed about 20 mm, when uniformly loaded to the maximum recommended allowable bearing pressure.

Differential settlement resulting from soil variability beneath footings of similar size and bearing pressure is likely to be of the order of 10 mm.

The long-term total settlement of a spread footing is not expected to exceed the immediate settlement by more than about 40%. It would be expected that the majority of the settlement would occur during the construction period with only relatively small total and differential settlement expected after construction.

It is recommended that the base of all spread footing excavations be observed by a suitably experienced Engineer to check that the natural foundation conditions exposed are consistent with the design assumptions.

## 4.4 BORED PILE DESIGN

Based on the available geotechnical information it is recommended that bored piles be founded in natural clay of hard consistency at a depth of about 6 m or more. The ratio of the pile founding depth to pile base diameter should be at least 4.

It is recommended that bored piles be proportioned on the basis of the following preliminary geotechnical parameters:

Ultimate End Bearing Pressure: 1,800 kPa (1).

Average Ultimate Shaft Resistance (2, 3):

Formation	Depth Range (m)	Ultimate Shaft Resistance (kPa)
Ground surface to underside of pile cap	0 to at least 1	Neglect
Natural Clay	1 to 6	80

Table 3: Ultimate shaft resistance for bored piles

### Notes:

- 1. assumes piles are founded in hard ( $c_u \ge 200 \text{ kPa}$ ) clay or sandy clay at a depth of 6 m below existing ground level and with a founding depth to base diameter ratio of at least 4. A lower bearing pressure would apply for piles with a lower ratio of founding depth to base diameter.
- shaft resistance must be neglected over any undercroft excavation and depth of any pile cap.

Where piles are arranged in closely spaced groups, a reduction in the above parameters may be necessary. Pile groups would need to be assessed individually based on the size of the group and the pile spacing.

Based on the guidelines of AS2159-2009 "Piling - Design and Installation" a geotechnical strength reduction factor,  $\phi_g$ , must be applied to the ultimate geotechnical parameters presented above to determine the design geotechnical strength,  $R_{d,g}$ , which must then be equal to or exceed the design action effect,  $E_d$ .

Using the guidelines of Table 4.3.2 (A) in AS2159-2009, and based on limited geotechnical data available below the proposed pile founding depth, an average risk rating (ARR) of between 2.5 and 3 is assessed, corresponding to an overall risk category of 'low to moderate'. Based on clause 8.2.4(C), at least 1% of piles should be subjected to testing to determine pile serviceability. Providing the pile load testing is performed and in accordance with Table 4.3.2(C) a basic geotechnical strength reduction factor,  $\phi_{gb}$  of 0.52 may be adopted for a low redundancy system or 0.6 for a high redundancy system.

Alternatively, in the absence of any pile load testing, a geotechnical strength reduction factor of 0.4 may be used.

A higher geotechnical reduction factor may be used if pile load testing to verify pile serviceability is conducted during construction. Further advice should be sought on this issue if required.

The elastic settlement of a single bored pile at the design serviceability load (nominally  $0.74~R_{d,g}$ ) is unlikely to exceed 10 mm, provided the pile is designed in accordance with the above recommendations. Settlement of a group of piles would be expected to be larger than for a single pile and would need to be assessed as part of the detailed design.

In order to assess the short term lateral capacity of a bored pile and pile cap it is recommended that an average undrained shear strength of 150 kPa be adopted in the natural clay below 1 m depth.

The adoption of the recommended end bearing pressure assumes that adequate cleaning of the bored pile bases is carried out prior to concreting. In this regard, it is essential that the base of each pile is free of loose or softened soil or other debris over at least 80% of the base area. In most instances this will require specialist cleaning methods to be adopted.

The pile shaft must also be essentially free of loose spoil or smeared/remoulded soil.

It is recommended that the base of all bored piles be carefully observed by a suitably experienced Engineer to confirm that the foundation materials have geotechnical properties consistent with the design assumptions and to check base and shaft cleanliness. Where materials are encountered which are weaker than assumed in the design analyses the pile would need to be founded deeper or the allowable bearing pressure reduced.

Pile boring may be adversely affected by the presence of a perched water table which could occur, for example, in fill or within sandy or gravelly lenses. Under-reaming of piles in the presence of perched water could lead to collapse of fissured clay exposed in the pile under-ream.

Where relatively thick layers of sandy or gravelly soils are encountered, bored piles are likely to be problematic due to collapse of the pile shaft and any under-ream. Under such conditions, CFA piles would need to be used.

## 4.5 FLOOR SLABS

For floor slabs at-grade (near existing ground level), provision should be made for differential movement to occur due to shrink-swell effects. The floor slab should not be constructed on non-engineered fill.

For the purposes of preliminary design, an average long-term Young's modulus of 20 MPa is considered appropriate for the natural foundation soils.

## 4.6 RETAINING WALLS AND BATTER SLOPES

It is assumed that retaining walls up to about 3 m high may be required for potential undercrofts. Over this depth range, the retaining walls are expected to mainly retain fill, high and medium plasticity clay.

The following geotechnical parameters are suggested for preliminary design of conventional cantilevered retaining walls up to 3 m high:

- Coefficient of active earth pressure, K<sub>a</sub> = 0.4;
- Coefficient of earth pressure at rest, K₀ = 1.0;
- Coefficient of passive earth pressure, K<sub>p</sub> = 2.5;
- Soil bulk unit weight = 19.5 kN/m<sup>3</sup>.

For temporary, flexible walls where lateral movement of the wall is permitted to occur, the wall may be designed based on an active earth pressure coefficient. For relatively rigid walls or where movement of the retaining wall is to be reduced, the at-rest  $(k_0)$  earth pressure distribution should be used.

Further advice must be sought if piled retaining walls are to be used.

The effects of ground movements on adjacent buildings, pavements and services would need to be considered.

In addition to the design earth pressures, retaining walls must cater for (as appropriate):

- an unbalanced hydrostatic pressure;
- traffic loadings;
- surcharge loadings (e.g. construction materials or footings of adjacent buildings).

Adequate surface drainage must be provided to prevent infiltration of surface water behind the wall. Measures to reduce saturation of the soils behind the retaining wall include sealing of the surface behind the wall (with a concrete or asphalt), and locating water bearing services well away from the

wall. The retention of water behind the retaining wall could lead to the development of relatively high lateral soil swelling pressures in the red-brown clays. Such pressures could be markedly higher than the at-rest earth pressure.

Retaining walls should be designed in accordance with the recommendations of AS 4678-2002 "Earth Retaining Structures".

For retaining walls which have significant backfill placed after construction, it is expected that the compaction induced pressures will be much greater than the earth pressure coefficients above.

The compaction equipment used to compact backfill behind the wall must be carefully selected and preferably light-weight compaction equipment should be used.

The load on the retaining wall due to compaction equipment may be estimated from Figure J5 in AS4678-2002. For select compacted granular backfill, an active coefficient,  $k_a$  of 0.3 and an at rest coefficient,  $k_0$  of 0.65 are recommended together with a bulk density of 21 kN/m³.

Preliminary batter slopes recommendations are presented in Table 4.

Soil Type	Short term excavations	Long term excavations
Existing Fill	1V:1H	1V:3H
Natural Clay	2V:1H	1V:3H

Table 4: Maximum recommended batter slopes

Temporary batter faces must be protected against moisture content changes and scour and erosion by the use of a shotcrete facing or PVC membrane.

Flatter batter slopes would be required where lenses of alluvial sand/gravel are encountered, or if groundwater seepage is encountered.

Flatter long-term slopes may also be required for access and maintenance purposes.

## 4.7 FLEXIBLE PAVEMENT DESIGN

Previous laboratory Estimated CBR testing (Coffey 2011) indicated CBR values ranging from 2% to 15%. A design CBR value of 2.5% for flexible pavements founded on natural high plasticity clay was previously recommended by Coffey. Higher design CBR values would apply for pavements founded on reworked engineered fill, or if the high plasticity clay subgrade is treated with hydrated lime.

## 4.8 EARTHWORKS

## 4.8.1 Site Preparation

All existing non-engineered fill and organic topsoil should be stripped from beneath pavement and building areas. Based on the previous borehole logs, stripping to depths of typically about 0.3 m to 0.5 m is anticipated across large areas of the site, but stripping to depths of 1.7 m or more may be required locally. Deeper pockets of fill may also require excavation where existing underground services, footings or basements require demolition.

Following stripping, the exposed natural surface should be proof rolled with a vibrating pad foot roller of at least 10 tonnes static weight to identity any soft, wet or weak areas. Any soft, wet, weak or organic materials encountered during proof rolling must be removed and replaced with compacted select fill. The proof rolling should be observed by a suitably experienced engineer.

Site won pavement materials from excavations could be stockpiled on site for re-use as engineered fill. Site won clayey fill materials are less desirable for re-use as engineered fill as they will be more difficult to moisture condition and compact, will have a lower CBR value and greater shrink-swell movements in response to future moisture changes. However, the site won clayey fill materials may still be re-used as engineered fill, providing these issues are considered in the design and construction of the redevelopment. Any oversized particles (larger than 100 mm), organic material and deleterious materials must not be re-used as engineered fill and should only be considered for re-use under open space landscaping areas, or preferably be removed from site.

All engineered fill materials must be moisture conditioned to within ±2% of the optimum moisture content and be compacted in layers not exceeding 200 mm loose thickness to achieve a dry density ratio of at least 98% based on Standard compaction (AS1289.5.1.1). Level 1 earthworks overview (in accordance with AS3798-2007) of site preparation works and fill placement is recommended.

## 4.8.2 Excavatability and Dewatering

The natural soil profile described by the previous investigations is expected to be generally excavatable using conventional earthmoving equipment and pile boring rigs. Slower production rates might be experienced if the clay soils are desiccated and hard, or in layers of coarse gravelly alluvium.

The regional groundwater table appears to be deeper than 10 m below existing surface levels. Extensive dewatering of excavations is therefore unlikely to be required.

Where perched groundwater is locally encountered in excavations, dewatering is expected to be undertaken using pumps and sumps.

## 4.8.3 Moisture control in Footing Excavations

The high plasticity red-brown clay is highly reactive with the potential to undergo large shrink-swell movements with changes in soil moisture content. As a result, care must be undertaken during construction to prevent desiccation or moisture ingress to the clay soils exposed in any excavation.

The soils exposed in the base of footing or pile cap excavations should be covered with a blinding layer of lean mix concrete to assist in reducing moisture content variations during construction.

Any undercroft excavations should be blinded with a layer of quarry rubble at least 0.2 m thick to reduce desiccation effects during construction. The quarry rubble must be kept moist during construction.

### 4.8.4 Other Issues

The effects on nearby buildings of construction activities such as vibrations during compaction, excavation works and changes in the soil moisture regime must be considered. A dilapidation survey and regular monitoring of the existing structures near to the site during construction are strongly recommended.

Excavation work must not undermine existing footings of any adjacent buildings.

1 1 WGA Repatriation General Hospital

Further advice on mitigating potentially damaging construction activities on the adjacent building can be provided if required.

#### 4.9 SAFETY IN DESIGN

This report presents factual information about the subsurface conditions at the site and an assessment of how these conditions might impact on the design and construction of the proposed development from a geotechnical perspective. Specific input on geotechnical issues for the Safety in Design report can be provided during the design phase, if required.

# 5 LIMITATIONS AND ADDITIONAL INVESTIGATIONS

It is essential that additional geotechnical investigations be undertaken to verify the recommendations contained in this report. The scope of such additional investigations would need to be assessed once the redevelopment plans are finalised and based on access around existing buildings.

The recommendations contained within this report have been based largely on historical investigations performed by others and the judgement and opinion of Wallbridge Gilbert Aztec. To the best of our knowledge, the subsurface conditions described in this report provide a reasonable interpretation of the typical subsurface conditions likely to be encountered at the site.

It must be accepted that variations in subsurface conditions are likely to occur between the locations investigated and such variations may impact on the design recommendations provided. Under no circumstances can it be assumed that this report represents the actual subsurface conditions at all locations over the site.

Roger Grounds

For

WALLBRIDGE GILBERT AZTEC

# **APPENDIX A**

# **FIGURES**



Denotes approximate Greencap borehole locations, 2016



Denotes approximate LBW borehole locations, 2016

Drawn	BJH
Approved	
Date	26/08/2019
Size	А3

REPATRIATION GENERAL HOSPITAL **DESK TOP GEOTECHNICAL ASSESSMENT** PREVIOUS BOREHOLE LOCATIONS

Job Number:

WGA191258



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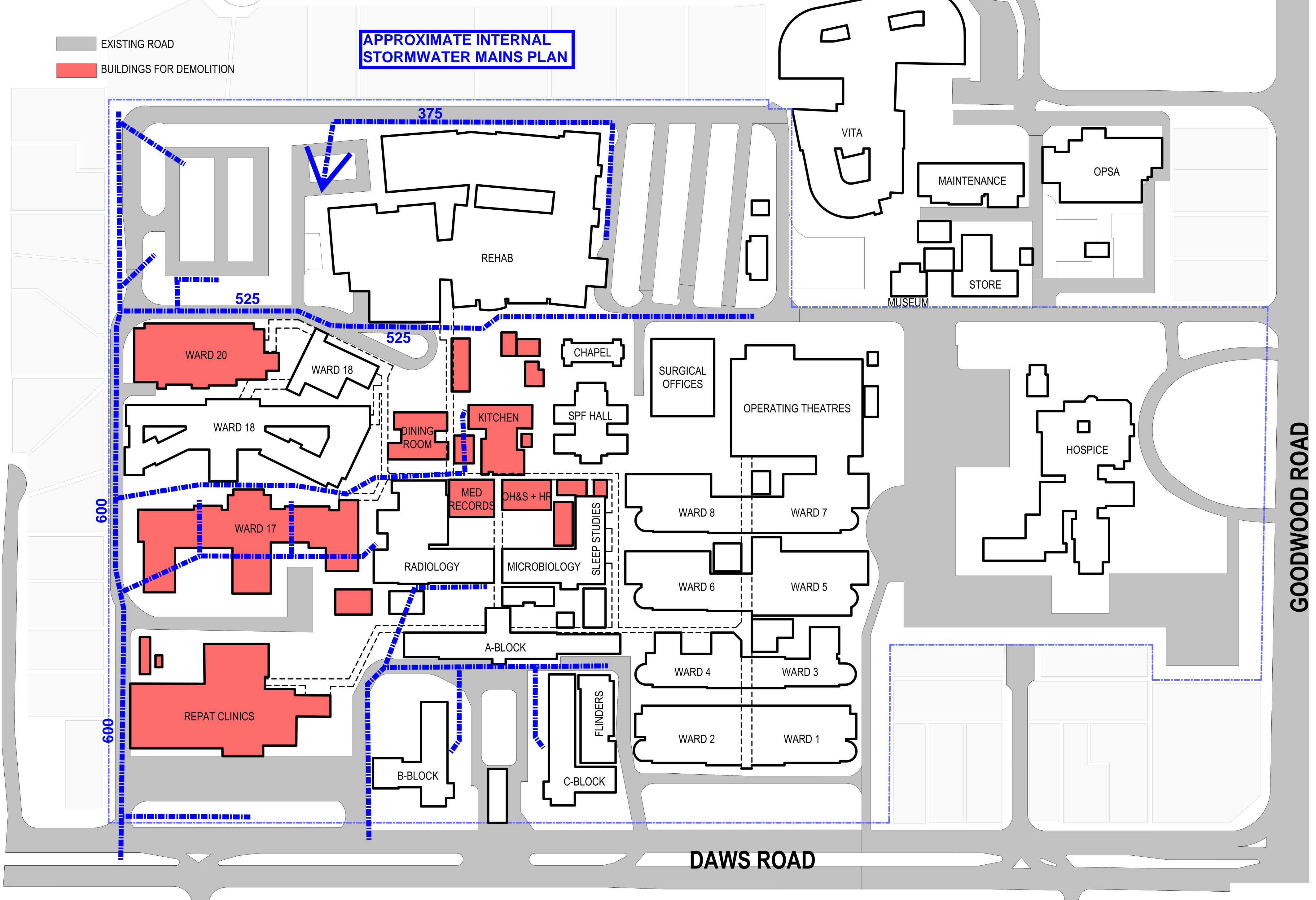
# **APPENDIX B**

COUNCIL /
DEPARTMENT
STORMWATER
INFRASTRUCTURE



# **APPENDIX C**

# INTERNAL STORMWATER MAIN INFRASTRUCTURE



SITE PLAN - DEMOLITION

REPATRIATION GENERAL HOSPITAL

DATE: 9/10/2019 3:36:25 PM





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# APPENDIX F - SERVICES CONCEPT DESIGN REPORT

# **Repat Health Precinct**

Concept Design Report - Services

#### STH

Reference: 507498

Revision: A

7 November 2019



### 6 4 Care Transition

#### 6.1 Description

The Care Transition is proposed to be located in the old hospital wards 1 and 2 (building 70 & 71).

This existing building dates back to the original site establishment in the mid 1940's (following use of tent and temporary huts as wards!). This building was subject to a major extension (effectively duplicating the building size) in 1986. The northern part of the building is the new extension. The southern face of the building is original and has state heritage value.

The existing building is proposed to be subject to medium to heavy refurbishment to achieve the new architectural and functional floor plate.



Figure 17. Care Transition Site plan



Figure 18. Care Transition (Ward 1+2) Floor Zoning Plan.

#### 6.1.1 Scope

#### General

- Internal modifications to areas of Building 71 (Ward 1) and Building 72 (Ward 2) to accommodate 20 bed Transition Care Inpatient Unit
- Demolition and enlargement of en-suites to meet AusHFG guidelines, while maximising reuse of existing hydraulic drainage
- Refurbishment of patient bedrooms and bed bays, including conversion of four bed bays into three bed bays
- Refurbishment of existing and creation of new utility, staff, therapy, consulting and patient living areas in line with AusHFG guidelines

#### **State Heritage**

- Building 71 (former Ward 1) within briefed scope
- Building 72 (former Ward 2) within briefed scope
- Building 73 (former ICU/CCU) -adjacent briefed scope
- Building 74 (former Sleep Studies) -adjacent briefed scope

#### Other External Requirements

 Modification of landscaping and pathways around existing building to allow for patient access into and around the building.

#### **Internal or Fitout Requirements**

- Sensitive and efficient reuse of existing Ward 1 & 2, in consideration of State Heritage listing, where
  possible maximising reuse of existing ward layout and services.
- Compliance with Australasian Health Facility Guidelines for inpatient accommodation.

#### 6.2 Electrical Services

#### 6.2.1 Electrical

#### **Existing**

The existing building is supplied by 500kVA Transformer 3 and the existing generator at Transformer 1. Main switchboard is located external near building 37 and appear to be very old.



Figure 19. Main Switchboard 3

Identified though site visits there are a mixture of LED and fluorescent luminaires existing on site. Lighting control appears to be manually switched.

Existing exit and emergency lighting are assumed to be connected to a stanalite monitoring system.

#### **Design Philosophy**

The existing transformer and generator capacity will be calculated to check whether the refurbishment and other existing buildings can be fed from the existing infrastructure. New Generator for Ward 1 and 2 to be located next to the transformer 3. Existing main switchboard is very outdated. New main switchboard will be located next to the transformer 3 to provide supply to ward 1 and 2 with future extensions such that in the future all area 3 buildings will be supplied by this main switchboard and the old MSB 3 can be demolished.

Main Switchboard and Distribution Board sizes will be detailed during the design phase of the project. All new distribution boards will be designed with 30% physical spare space and 20% load spare capacity for future additions.

Mechanical services switchboard and hydraulics power supplies will be supplied from this main switchboard.

It is assumed that critical power is only required for new communication racks. Any new or refurb areas having any specific critical power requirements for essential backup through generators will have to be specifically identified and designed for. Critical power backup times will also have to be analysed based on the operation and use of the equipment. This will be reviewed in user group sessions.

All areas to have LED luminaires with low glare and high CRI. An Automatic Lighting Control system will be provided with connection to BMS system for master time schedule adjustment and lamp failure alarms as well as field devices including PE cells to detect ambient light, occupancy sensors to prevent lights turning off in occupied areas and lighting switches and control panels allowing manual control of lighting such as

ON/OFF, dimming and pre-set lighting scene selection. Where appropriate and viable daylight harvesting will be provided to areas with daylight ingress to dim the artificial lighting. This will not be utilised in critical medical areas.

An exit and emergency lighting system will be provided in accordance with the BCA and the AS/NSZ 2293 and connect to existing nexus stanalite system. Emergency lights to be recessed where ceiling voids are provided, exit signs to be the edge illuminated semi recessed/suspended type where ceiling voids are provided.

Metering to suit NCC, ESD and revenue metering requirements shall be provided for any loads greater than 25kVA. All power meters shall have but not be limited to Line Currents, Line Voltages, Phase-phase voltages, kVA, kW, kW hours, kVar, Power Factor, Maximum demand in kVA and Harmonic distortion.

#### **Proposed Design**

- Provide new main switchboard near transformer 3.
- Provide new distribution boards to comply with AS 3000.2018.
- Provide general essential and non-essential power to match room layouts and user requirements.
- Provide interior LED lighting and LED exterior lighting for car parks. Connect to a new automatic lighting control system.
- Provide emergency and exit lighting and connect to existing stanalite system. Upgrade if required to be part of a sitewide system.

#### 6.2.2 Communications

#### **Existing**

The main communication building distributor TC-17 is in the mid-section.



Figure 20. Building 71 & 72 (Ward 1 + 2) main communication building distributor (TC-17)

There is also assumed to be a coax cabling TV distribution system in the existing building.

#### **Design Philosophy**

The proposed communications system for the new build is a structured cabling system with common horizontal cabling infrastructure for telephone, data, security, CCTV, BMS and nurse call systems. This system is to be a Category 6A unshielded foiled twisted pair wall mounted connect solutions in accordance with the latest Department of Health ICT Standards. In addition, fully populated consolidation points will be utilised throughout the ceiling space to enable maximum future flexibility.

Allowances are to be made for installation of wireless access points (WAPs) throughout, connected to the communications network. The exact location of the WAP transceivers will be selected to minimise any interference from the building fabric however will generally be located within the corridor areas.

#### **Proposed Design**

- Provide new building distributor in accordance with SA Health ICT guidelines. New Fibre connection.
- All new data outlets in the refurbishment areas are to be connected to the new floor distributor.
- Provide data outlets and WAP points as required.
- The new television outlets and associated cabling to be connected to the existing system. All cabling to be coaxial shielded 75-ohm RG6.

#### 6.2.3 Security

#### **Existing**

TECOM challenger 4 system security panels are currently located in site. There are CCTV cameras located inside and external to the site.

#### **Design Philosophy**

To comply with latest SA Health security services guidelines the existing system will require to be upgraded to TECOM challenger 10. This Security System comprising of Access Control, Intruder Detection and CCTV shall be supplied and installed throughout the new-build and refurbishment areas connected to a new sitewide headend.

The upgraded access control system shall be an IP based system and comprise of proximity readers, keypads, door locking mechanisms, egress push buttons where no free handle exit is provided and Break glass units (where applicable). All access control doors shall be interfaced with the fire detection system to allow de-activation and free egress under alarm activations (fail-safe). All needs to be HID 37 bit proximity card and smart card enabled.

All existing and new perimeter doors of the scoped areas and selected interior doors shall be supplied and installed with monitored reed switches. Movement sensors to be supplied and installed near the main and rear entrances of the building. All access-controlled doors to be monitored for door left open indication.

Intruder alarm to have automatic dial out facilities to contact a 24/7 manned security agency as well as the site security office.

All new CCTV cameras shall be IP ONVIF complaint. These cameras are also required to have analytic capabilities. NVR should have hard drive capability sufficient to provide 60 days continuous recording at high resolution full frame rate.

#### **Proposed Design**

- Upgrade the existing Tecom challenger 4 to Tecom challenger 10 and connect to the existing sitewide system.
- Provide new CCTV cameras internally and externally and connect to the new site wide system.

- Provide NVR with appropriate capacity.
- Provide real time location service and connect to the site wide system.

#### 6.2.4 Nurse Call

#### **Existing**

Current nurse call system is assumed to be an Austco system.

#### **Design Philosophy**

The new site wide nurse call system will be a PC server-based technology and shall integrate with the existing site-wide nurse call system via a High-Level Interface (HLI).

Digitally Enhanced Cordless Telecommunications System (DECT) telephones shall be utilised throughout the premises to operate in conjunction with the Nurse Call system. Disabled WC Alarm systems shall be installed to be integrated with the nurse call systems.

#### **Proposed Design**

Provide new nurse call system and connect to the site wide system.

#### 6.3 Mechanical Services

#### 6.3.1 Heating Ventilation and Air Conditioning

#### **Existing**

- CHW and HHW FCUs located in the ceiling and AHUs located on two external rooftop areas
- CHW and HHW provisions from old chiller and boiler plant that have been shut down for an extended duration of 3 plus years.
- Control from old BMS systems.
- Independent exhaust systems.

#### **Design Philosophy**

- Refurbishment of patient bedrooms and bed bays, including conversion of four bed bays into three bed bays
- Sensitive and efficient reuse of existing Ward 1 & 2, in consideration of State Heritage listing, where
  possible maximising reuse of existing ward layout and services.
- Compliance with Australasian Health Facility Guidelines for inpatient accommodation.

#### **Options Analysis**

Type of A/C considered	Pros	Cons	Cost (estimated)
New Local Chiller and Boiler. FCU/AHU in ceiling, VAV diffusers in bed rooms.	Possible for expansion to service Ward 3+4, 5+6 in future Ability to night purge and use economy cycle etc. Keeps maintenance activities away from clinical services. May be able to repurpose some of the existing CHW and HHW plant, pipework and infrastructure depending on condition.	Need to find home for new chiller and boiler. If located on existing walkway structure may cause shadows, noise, and, in any case, will disturb outdoor spaces.  New FCUs, pipework, controls, ductwork required in ceiling space. Complexity of controls required.  Ductwork Intensive.  Additional builders work to provide safe in-ceiling access to plant.  Limitations to room to room temperature control.	\$\$\$
VRV Systems With ducted OA provisions via 6x VRV fresh air units. Independent exhaust systems.	Limited ductwork required.  Possible reuse / repurpose of existing exhaust air ductwork and fans.  Smaller outdoor units for structure / floorplate.  Better room to room temperature control.	Disruptions to clinical services (maintenance of VRV heads).	\$

VRV Systems With ducted OA provisions from 2x Air Change packaged unit handling exhaust and pre-conditioning outside air.	Additional energy efficiencies through exchanging conditions from exhaust air to the incoming outdoor air. Reduces load on the internal FCU coils.  Smaller outdoor units for structure / floorplate.  Better room to room temperature control.	Disruptions to clinical services (maintenance of VRV heads)  New exhaust ductwork and hence greater capital cost compared to alternative VRV System which can repurpose existing independent exhaust systems.	<b>\$\$</b>
Split Packaged Units	Keeps maintenance activities away from clinical services.	New packaged unit (or can be split packaged unit type) and ductwork required in ceiling space.  Ductwork intensive.  Need to find home for packaged units. If located on existing walkway structure may cause shadows, noise, and, in any case, will disturb outdoor spaces.  Additional builders work to provide safe in-ceiling access to plant.  Limitations to room to room temperature control.	<b>\$\$</b>

#### **Proposed Design**

VRV Systems - With ducted OA provisions from 2x Air Change packaged unit handling exhaust and preconditioning outside air (subject to life cycle cost analysis).

Note that this proposed solution is based off current scope being only ward 1 + 2 refurbishment, should ward 3 + 4, or 5+6 be proposed for inclusion into the scope or perhaps planned for future development – refurbishment of existing CHW and HHW plant may be more suitable.

- Severance and capping of old central CHW and HHW outside the building above the walkway to allow the refurbished ward to operate as a standalone building.
- New VRV condensers located on existing outdoor rooftop platforms.
- Approximately fifty new bulkhead fan coil units within each room. Each with local thermostats provided for independent temperature control.
- New Air Change packaged unit to handle exhaust air and pre-condition outside air provided to the indoor fan coil units. Complete with proprietary controls. Located on a new plant platform as indicated within the drawings.
- New outside air ductwork and air balancing mechanisms.
- New/extension to existing exhaust ductwork back to the Air change packaged unit.
- New central control system within the reception room or similar.

Note: location of outdoor plant subject to Structural Engineer's reviews.

#### 6.3.2 Medical Gases

#### **Existing**

Reticulated medical gas provisions from existing centralised medical gas sources.

#### **Design Philosophy**

- Refurbishment of patient bedrooms and bed bays, including conversion of four bed bays into three bed bays
- Compliance with Australasian Health Facility Guidelines (AusHFG) for inpatient accommodation.

#### **Proposed Design**

- New reticulated medical gas provisions from new medical gas sources to terminals in the rooms.
- New terminals as per AusHFG for inpatient accommodation
- New Medical Gas Alarm Panels (MGAP) located within clear line of site from staff station.
- New Medical Gas Valve Boxes located underneath respective MGAP.
- New cylinder manifold for Oxygen.
- New medical air compressor system.
- New Suction Vacuum plant system.



#### 6.4 Hydraulic Services

#### **Existing Systems**

The existing wards incorporate the following Hydraulic Services systems:

- Cold water is supplied from a central water treatment plant located in the operating theatre plant area (Building 84), which reticulates via a treated cold water flow and return system throughout all eight ward buildings.
- Natural gas is supplied to plant in the operating theatre plant area (Building 84). There is no existing natural gas pipe within Ward 1 and Ward 2.
- Sewer drainage is supplied via connection to external infrastructure.
- Hot water is supplied via centralised gas fired hot water plant located in the operating theatre plant area (Building 84).

#### **Design Philosophy**

The design philosophy for Ward 1 and Ward 2 will be to remove all existing hydraulic services fixtures, pipework and equipment. All existing piped supplies into Ward 1 and 2 will be capped

New sub-metered water and gas supplies will be provided to allow Ward 1 and Ward 2 to operate independently of all other ward buildings. A water treatment plant will be provided to minimise water quality risks.

A central hot water plant with forced flow and return will be provided for each ward. Point of use thermostatic mixing tapware will be used to minimise warm water dead legs.

Existing below slab sewer drainage will be reused as much as is practicable to minimise floor cutting and reinstatement. New sewer drainage will connect to existing internal and external sewer pipework.

#### **Proposed Design**

The proposed design for Ward 1 and Ward 2 will incorporate the following:

- Demolition of existing sanitaryware, tapware, pipework and equipment
- Extension of sub-metered cold water supply from existing external infrastructure
- Extension of sub-metered natural gas supply from existing external infrastructure
- New cold water treatment plant incorporating filtration, softening and chlorine monitoring/dosing
- New sewer drainage and modification of existing as required to suit new architectural layout
- Localised concrete floor cutting to facilitate installation of new drainage
- New grease arrestor and grease waste drainage to provide trade waste pre-treatment for kitchen drainage
- New central gas fired hot water system incorporating forced flow and return pipework system for each ward.
- WELS rated, commercial grade sanitaryware and tapware
- Point of use thermostatic mixing tapware to minimise warm water dead legs
- Refer Appendix 1.3 for hydraulic services concept design sketches.

#### 6.5 Fire Protection Services

#### **Existing Systems**

Wards 1 and 2 incorporate the following existing fire protection services:

- Fire extinguishers
- Fire hose reels
- Fire Hydrants (external)
- Fire sprinkler system with the sprinkler control valves located adjacent to the main entry
- Fire detection and alarm system
- Emergency warning and intercommunication system
- Fire data gathering panels located in the ceiling space and monitored at the fire control centre in B12

#### **Design Philosophy**

The design philosophy will be to upgrade the existing systems as required and generally modify to suit the new Architectural refurbishments.

It is proposed to upgrade and replace the existing fire detection system with a new system to current standards. The existing Data gathering panels are proposed to be relocated from the ceiling space to the main entry and replaced with a typical Fire indicator panel and Emergency Warning system Panel set-up. The new detection system panel is proposed to be reconnected to the site fire control centre for monitoring and connection to the SAMFS.

The existing fire sprinkler system is believed to utilise plastic "Blaze Master" PVC pipework which is not recommended to be retained. It is recommended to remove the existing PVC pipework and provide new medium weight steel pipe as per standard industry practice.

#### **Proposed Design**

Wards 1 and 2 will incorporate the following fire protection services:

- New fire extinguishers
- New fire hose reels
- Existing fire hydrants (external) to service the new building extension
- Replace the fire sprinkler system throughout the building to suit the Architectural refurbishments
- Replace the fire detection system throughout the building to suit the Architectural refurbishments
- Replace the Emergency warning system throughout the building to suit the Architectural refurbishments
- Connection of the fire detection system to the site fire control centre located in B12 for monitoring and connection to the SAMFS

#### Document prepared by

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Gringing ideas

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# **APPENDIX G - PROJECT BRIEF**

# **Project Brief – Repat Reactivation: Rehabilitation and Site Works Package**

### **Project Information**

Project Name	Repat Reactivation – Rehabilitation and Site Works Package
Site Address	216 Daws Road, Daw Park, SA, 6061
SAMIS Asset Number	03481
Lead Agency Project Manager	Tim Packer / Mark Nangle

### **Brief Prepared by**

	1
Name	Jack Reynolds
Position	Health Facility Planner
Contact	
Date	08/02/2019
Signature	Tackkeynolds

#### **Approving Officer**

	1
Name	
Position	
Contact	
Date	
Signature	

#### **Project Objectives**

# Program Background and Objective

Ahead of the 2018 State Election the then South Australian Opposition committed to the reactivation of the former Repat General Hospital as a health and wellbeing precinct. This electoral commitment included ensuring community consultation in developing the future of the Repat site.

Through a thorough community consultation process that occurred in the second half of 2018 the public identified dementia and mental health, rehabilitation, care transition and surgical procedural activity as the key priorities for the site.

Commencing in late 2018 the Department for Health & Wellbeing, working with a team of consultants, commenced preparation of a site master plan and implementation strategy. This master planning process was informed by the outcomes of the community consultation, an EOI process and best use of existing assets.

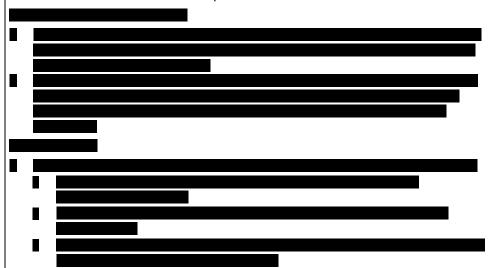
From this master planning exercise;

- The Repat Health & Wellbeing precinct, and specifically Building 12, was identified as the preferred location for State-wide Specialist Rehabilitation Services currently located at Hampstead Rehabilitation Centre.
- The South-western corner of the site, fronting Daws Road, was identified as the preferred location for the private Dementia Care development.
- The central zone between SPF Hall and Repat Radiology was identified as the preferred location for a central "town square" zone and wheel chair sports facility.

## Project Drivers and Purpose

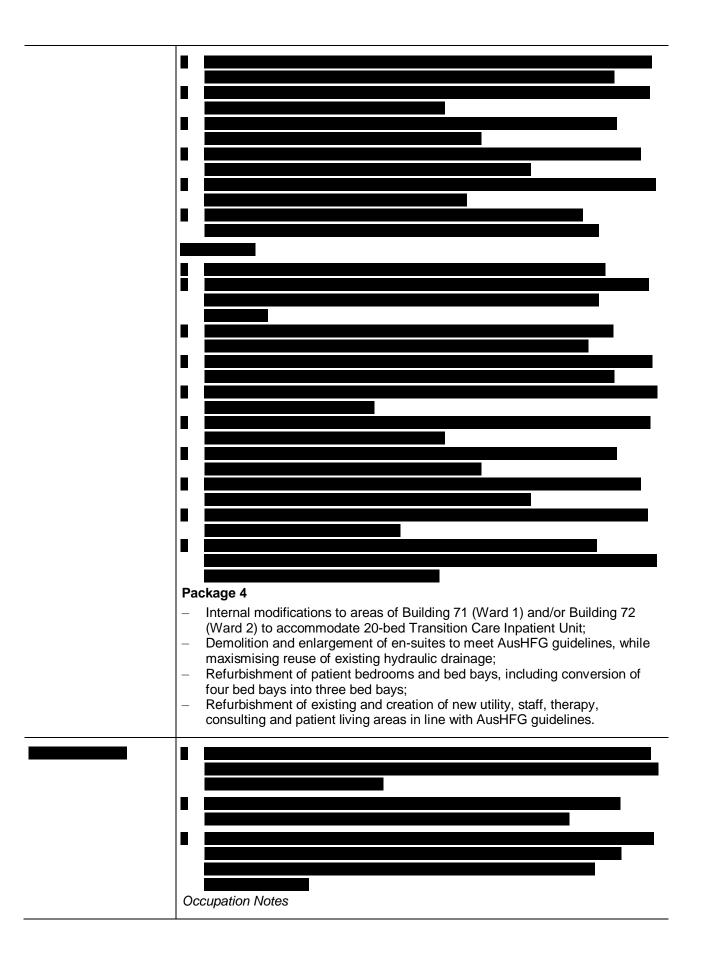
#### **Project Wide**

 Reactivation of the Repat Site, in line with community consultation and the needs of the South Australian public.



#### **Care Transition**

- Provision of additional Care Transition beds to reduce bed blockage within SA Health's acute care hospitals.
- Specifically relocation of 20 SALHN Transition Care beds from Building 12 to allow development of Specialist Rehab.



Approvals (DPTI ref – AS4122 Schedule 1.13 and 3.10)	<ul> <li>Statutory approvals</li> <li>Public Works Committee - Design team contribution to the submission will be required, including ESD acquittal from the Department of Environment and Water, Climate Change Group will be required.</li> <li>Stakeholder approvals</li> <li>Development Approval, comprising Building Rules consent and Planning Rules consent.</li> </ul>
Development Approval Status/Planning (DPTI ref – AS4122 Schedule 1.13 and 3.10)	Development Approval - Application to be lodged with the SCAP. (Guide for Applicants: <a href="https://www.sa.gov.au/">https://www.sa.gov.au/</a> data/assets/pdf_file/0012/12036/Guide-for-Applicants-for-Crown-Development-Applications.pdf)

### **Background Information**

General Background	As outlined in Project Objectives
Government Targets/ESD Performance	Ecological Sustainable Development (ESD) initiatives are to be considered in the design of the facilities. Refer to AS4122 Contract Schedule 4 for DPTI and SA Government policies, guide notes and standards.
Lead Agency Standards and Guidelines	<ul> <li>Australasian Health Facility Guidelines</li> <li>Australasian Faculty of Rehabilitation Medicine facility standards</li> <li>NSW Health Engineering Services Guidelines</li> <li>SA Health – Security Service</li> <li>SA Health – Protective Security Plan</li> <li>SA Health – Signage Standards</li> <li>SA Health –Installation of a Structured Cabling System Specification – ICT Services Version 6.0</li> <li>SA Health – Bedside Monitor Mounting Installation Guide for New SA Health Hospital Sites</li> <li>DPTI Building Technical Guidelines, including seismic design and restraint technical notes.</li> <li>SA Health Data Requirements</li> <li>SA Health Project Completion Requirements</li> <li>Refer also to AS4122 Contract Schedules 1-4 for DPTI and SA Government policies, guidenotes and standards.</li> <li>International Wheelchair Basketball Federation Rules and Equipment</li> </ul>
Hazardous Materials	<ul> <li>Asbestos Hazards Related to the Project</li> <li>Building 1 (Repat Clinics) – SAMIS No 18.01.01: Asbestos identified, refer report</li> <li>Building 8 (Ward 17) – SAMIS No 18.01.08: Asbestos identified, refer report</li> <li>Building 11 (Ward 20) – SAMIS No 18.01.11: Asbestos identified, refer report</li> <li>Building 41 (OHS / HR) – SAMIS No 18.01.41: Asbestos identified, refer report</li> <li>Building 42 (Medical Records) – SAMIS No 18.01.42: Asbestos identified, refer report</li> <li>Building 51 (Dining Room) – SAMIS No 18.01.51: Asbestos identified, refer report</li> <li>Building 53 (Kitchen) – SAMIS No 18.01.53: Asbestos identified, refer report</li> <li>Building 55-57 (SPF Hall) – SAMIS No 18.01.55 – 18.01.57: Asbestos identified, refer report</li> <li>Building 60 (Generator) – SAMIS No 18.01.60: Asbestos identified, refer report</li> <li>Building 61 (Medical Records) – SAMIS No 18.01.61: Asbestos identified, refer report</li> <li>Building 62 (Pharmacy Store) – SAMIS No 18.01.62: Asbestos identified, refer report</li> <li>Existing overhead services: Asbestos identified, refer report</li> <li>Other potential hazardous materials</li> <li>Potential hazards and contamination linked to the application of termiticides beneath buildings</li> <li>Potential historic soil contamination</li> </ul>

- Potential lead based paints within existing buildings;
- There may be limited presence of lead sheeting within Building 1 linked to historic radiation shielding.

Soil contamination testing is to be carried out.

#### Heritage

#### **State Heritage**

- 26974 Repat Site, specifically including
  - Building 21 (Bldg A) outside of briefed scope;
  - o Building 22 (Bldg B) outside of briefed scope;
  - o Building 23 (Bldg C) outside of briefed scope;
  - Building 24 (former Library); outside of briefed scope;
  - Building 55 (SPF Hall) within briefed scope;
  - o Building 59 (Chapel) within briefed scope;
  - o Building 71 (former Ward 1) within briefed scope;
  - o Building 72 (former Ward 2) within briefed scope;
  - Building 73 (former ICU/CCU) –adjacent briefed scope;
  - Building 74 (former Sleep Studies) –adjacent briefed scope;
  - o Building 119 (former Post Office); outside of briefed scope; and
  - o External Remembrance Gardens- within briefed scope

#### **Local Heritage**

- 3498 Daws House Hospice, Exterior of building (including windows, roof form and materials, tower, chimneys, verandah), but excluding later extension. Note this heritage place is outside of the development scope of this brief.
- 3499 Building A, B, C and D Exterior of gatehouse, two storey portion
  of the building to the north of the entrance courtyard, and the two storey
  portions of the buildings to the east and west of the entrance courtyard.
  Note this heritage place is outside of the development scope of this
  brief.

Aboriginal Heritage not yet investigated – refer to fact sheet 'Project Planning and Aboriginal Heritage'

www.dpc.sa.gov.au/ data/assets/pdf file/0015/34602/FactSheet ProjectPlanning.pdf

### Existing Buildings and Site Information

Key buildings listed only

#### **Building 1 - SAMIS No 18.01.01**

- Former Repat Outpatient Clinic;
- Built in the 1960's and subsequently extended;
- Single storey, flat roofed, composite framed (concrete columns, steel roof frame), concrete slab on ground building;
- Exterior walls are cavity cream brick with natural anodised aluminium framed windows and doors;
- Interior walls are plastered solid brick with steel framed doors. Floor coverings are vinyl in clinical areas, carpet in administration areas, and tiles in bathrooms and toilets. Ceilings are predominantly suspended tiles in exposed T-bar, with flush plasterboard and acrylic skylights in waiting areas:
- Total area of 2,165m<sup>2</sup>.

#### **Building 8 - SAMIS No 18.01.08**

- Former Veterans Mental Health / PTSD inpatient unit;
- Built in the 1960's, added to several times and last refurbished in 2001;

- Single storey, tiled roofed, load bearing walls, suspended timber floored building. Exterior walls are cavity cream brick with timber framed windows and doors;
- Interior walls are a mixture of plastered solid brick with steel and timber framed doors and plasterboard lined stud. Floor coverings are vinyl in wet areas and carpet in ward, consulting, and administration areas.
   Ceilings are predominantly flush plasterboard and lathe & plaster;
- Total area of 1,892m<sup>2</sup>.

#### **Building 12 - SAMIS No 18.01.12**

- Completed circa 2000. Steel framed, masonry building comprising patient accommodation, therapy and administration space.
- Predominantly single storey, with all patient facing areas on the ground floor, area of 7,024m<sup>2</sup>
- A small first floor admin and plant level accessed by stairs and a staff lift, area of 1,202m<sup>2</sup>.
- The building has been progressively extended since initial construction including construction of the hydrotherapy pool, 4<sup>th</sup> Gen Rehab Clinic and additional patient bedroom extension.
- Total floor area of 8,228m<sup>2</sup>.

#### **Building 11 - SAMIS No 18.01.11**

- Former Ward 20
- 1970's era single storey brick veneer building, formally used for patient accommodation;
- Total area of 1343m<sup>2</sup>.

#### Building 55 - SAMIS No 18.01.55 - 18.01.57

- School Patriotic Fund Hall (SPF Hall)
- 1940's WW2 era single storey masonry theatre hall including stage and orchestra pit;
- State Heritage place;
- Total area of 694m<sup>2</sup>.

#### Building 71 and 72 - SAMIS No 18.01.71 - 18.01.72

- Former Ward 1 and Ward 2
- 1940's WW2 era single storey masonry ward building with timber truss roof structure:
- 1980's era brick veneer extension to building on northern side
- State Heritage place;
- Total area of 1,118m<sup>2</sup>.

# Other Relevant Information and Advice

- Repat Reactivation Master Plan
- Repat Reactivation Implementation Plan

#### Design Criteria

#### **ODASA Principles of Good Design**

Context

Good design is contextual because it responds to the surrounding built and natural environment and contributes to the quality and character of a place.

Inclusivity

Good design is inclusive because it creates places for everyone to use and enjoy, by optimising social opportunity and equitable access.

Durability

Good design is durable because it creates buildings and places that are fit for purpose, adaptable and long-lasting.

Value

Good design adds value by creating desirable places that promote community and local investment, as well as enhancing social and cultural value.

Performance

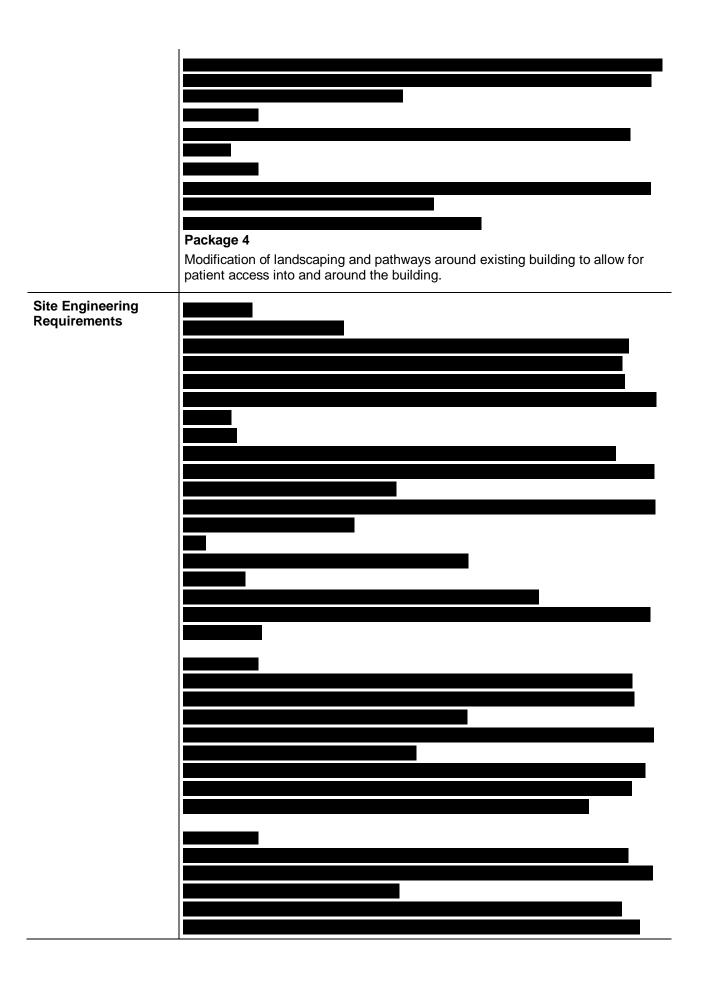
Good design performs well because it realises the project potential for the benefit of all users and the broader community.

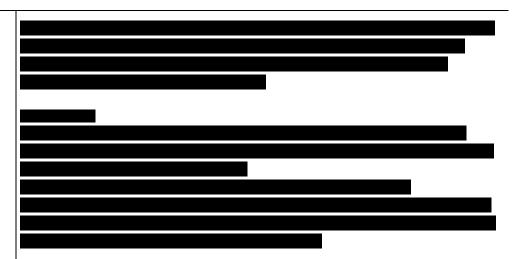
Sustainability

Good design is sustainable because it is environmentally responsible and supports long-term economic productivity, health and wellbeing.

### **Site and External Requirements**

Site Information	<ul> <li>Certificate of Title: Volume 6155, Folio 740</li> <li>City of Mitcham Development Plan – Mixed Use Zone</li> <li>Refer to attachments</li> </ul>
Operational Hours	Inpatient Areas  - Standard hours: Continuous 24hour operation  Outpatient Areas  - Standard hours: Business hours  - After hours use: As required  Town Square Hours  - Standard hours: Flexible; evening use is to be anticipated
Site Access and Security	<ul> <li>Safe drop off and pick up areas: as identified on the plans and site master plan, including new turning circle entry at western entrance.</li> <li>Safe pedestrian access: as identified on the plans and site master plan.</li> <li>Ambulance access to all patient areas.</li> <li>Disability access – required to all areas, specific bedrooms to be identified as accessible / bariatric.</li> <li>Fencing – parts of SABIRS inpatient unit will include secure fencing to prevent patients absconding, to patient resident privacy and to minimise external disturbance. However it is noted that the service is generally open.</li> </ul>
Service Access	Site perimeter road as identified on the Master Plan.  Specific consideration to be given to food and equipment deliveries associated with new activities.
Car Parking	<ul> <li>Reduction and modification of existing western car park to suit extension works.</li> <li>Creation of new car park and associated civil works following demolition of Ward 20.</li> <li>Creation of a new car park and loading zone around the Town Square.</li> <li>Assessment of total car park numbers on the site against projected activity and specific assessment of appropriate accessible car space numbers to reflect the unique needs of Rehabilitation activities present.</li> <li>Assessment and adjustment of existing car parking and drop off zones to suit works.</li> </ul>
Other external Requirements	





#### Package 4

Severance of former central mechanical system to allow the building to operate as a standalone facility;

New standalone medical gas stores / manifolds to allow the building to operate as a standalone facility;

Upgrade of existing sewer and water supplies and new hot water plant to allow the building to operate as a standalone facility.

#### **Future Requirements**

- Staging and planning of construction activities around wider site master plan and other reactivation activities.
- Site suitability for private dementia care development and secure boundary fence and private transitional accommodation development as identified in the Master Plan and Implementation Plan.
- Site suitability for expansion of Care Transition bed numbers and support spaces as identified in the Master Plan and Implementation Plan.
- Site suitability for Surgical Procedural activity as identified in the Master Plan and Implementation Plan.
- Site suitability for unconfirmed development in the Partnership Zone as identified in the Master Plan and Implementation Plan.

# **Accommodation Requirements**

Accommodation Schedule

Demolition	SAMIS No.	Area
		I
Refurbishment	SAMIS No.	Area

	Building 71 - 72 (Ward 1 / Ward 2)	18.01.71 - 18.01.72	2,118m <sup>2</sup>
End User Groups	User Groups will be established to provi include sub user groups linked to specif user group for overarching consideration A Consumer Reference Group will be escurrent patients from the two rehabilitation. VHAC (Veteran's Health Advisory Counliaison on the Remembrance Garden, S related considerations.	ic operational areas ns. stablished, which w on services and car cil) will be the key r	and a consolidate ill include past a ers. ers. eference group f
Internal or Fitout Requirements			
	Package 4 - Sensitive and efficient reuse of exist Heritage listing, where possible material and services; and - Compliance with Australasian Heal accommodation.	iximising reuse of e	xisting ward layo



### Mechanical

- Severance of old central mechanical system to allow the refurbished ward to operate as a standalone building;
- New mechanical condensers and air handling plant to suit independent operation of ward.

### Electrical

- New and upgrade of existing electrical system within building, including potentially rewiring and switchboards.
- Power and lighting grid to suit revised internal ward layout and current standards, including;
  - Body Protected power within patient areas any required to meet AS3003 compliance.
  - Essential power as required to meet AS3009.
  - Data, nurse call and duress systems.
  - · Revised bed head locations.
- ICT and security to SA Health standards and briefed requirements.

#### Hydraulic

- New and upgrade of existing hydraulic system to suit revised internal ward layout and current standards;
- Replacement of existing hydraulic fixtures throughout, including creation of new bariatric bathrooms.

### Fire Protection

- Detector upgrades to existing building.
- New passive and active fire systems to building extension, including extension of existing sprinkler system.

### Medical Gas

 Reconfiguration / replacement of existing medical gas system on an as needed basis to achieve current compliance including provision of new gas outlets to bedheads and some patient bathrooms to suit revised layouts.

### Services Mounting

- All new service installations and ceilings will be restrained to IL3 requirements.

### **Attachments**

1	A	C44:-	DI	/D +

- □ Lead Agency Strategic Plan (Repat Reactivation Master Plan / Implementation Plan)

□ Certificate of Title

- ☐ Work Health Safety Incident Register / Risk Register
- □ BIM Brief
- ☐ BIM Requirements (G168)
- □ Organisation Chart



# **APPENDIX H - SITE SURVEY**

PURPOSE:	DIVISION		AREA	NAME:	DAW PARK		APPROVED: PETER LAWSON 24/11/2017	
MAP REF:	6628/50/N		COUN	CIL:	CITY OF MITCHAM			D447000
							DEPOSITED:	D117209
AST PLAN:			DEVEL	OPMENT NO	:		SANDY BEAGLEHOLE	SHEET 1 OF 5
							07/12/2017	SHEET 1 OF 5 53961_text_01_v05_Version_5
AGENT DETAILS:	SAWLEY LOCK O'CAL 176 PROSPECT ROAL PROSPECT SA 5082 PH: (08) 83441522 FAX: N/A			EYORS FICATION:	personal supervision and	EN , a licensed surveyor do hereby certify - n accordance with the Survey Act 1992. 2) 7 Damian John Brogden Licensed Surveyo	That the field work was complete	from surveys carried out by me or under my d on the 5th day of August 2016
AGENT CODE: REFERENCE:	SLAA 1627802 NPA							
SUBJECT TITLE D PREFIX VOLUM CT 6155	DETAILS: IE FOLIO OTHER 740	PARCEL ALLOTMEN	T(S)	NUN 1	MBER PLAN	NUMBER HUNDRED / IA / DIV 89637 ADELAIDE	ISION TOWN	REFERENCE NUMBER
OTHER TITLES A	FFEGIED:							
EASEMENT DETA STATUS	ILS: LAND BURDENED	FORM	CATEGORY	IDENTIFIE	ER PURPOSE	IN FAVOL	ID OE	CREATION
EXISTING	LAND BONDLINED	SHORT	FREE AND UNRESTRICTED RIGHT OF WAY		LIV FUITFUSE	100.101	JIV OI	RTC 11881829
EXISTING	101	LONG	RIGHT(S) OF WAY	В				TG 12257525
EXISTING		LONG	EASEMENT(S)	С		100.101		TG 12257524
EXISTING	100	LONG	EASEMENT(S)	D				TG 12257525
EXISTING		LONG	EASEMENT(S)	Е		100.101		TG 12257524
EXISTING	100	LONG	EASEMENT(S)	F				TG 12257525
EXISTING		LONG	EASEMENT(S)	G		100.101		TG 12257524
EXISTING	100	LONG	EASEMENT(S)	Н				TG 12257525
NEW	101	SHORT	EASEMENT(S)	J	FOR DRAINAG	E PURPOSES 100		



SHEET 2 OF 5

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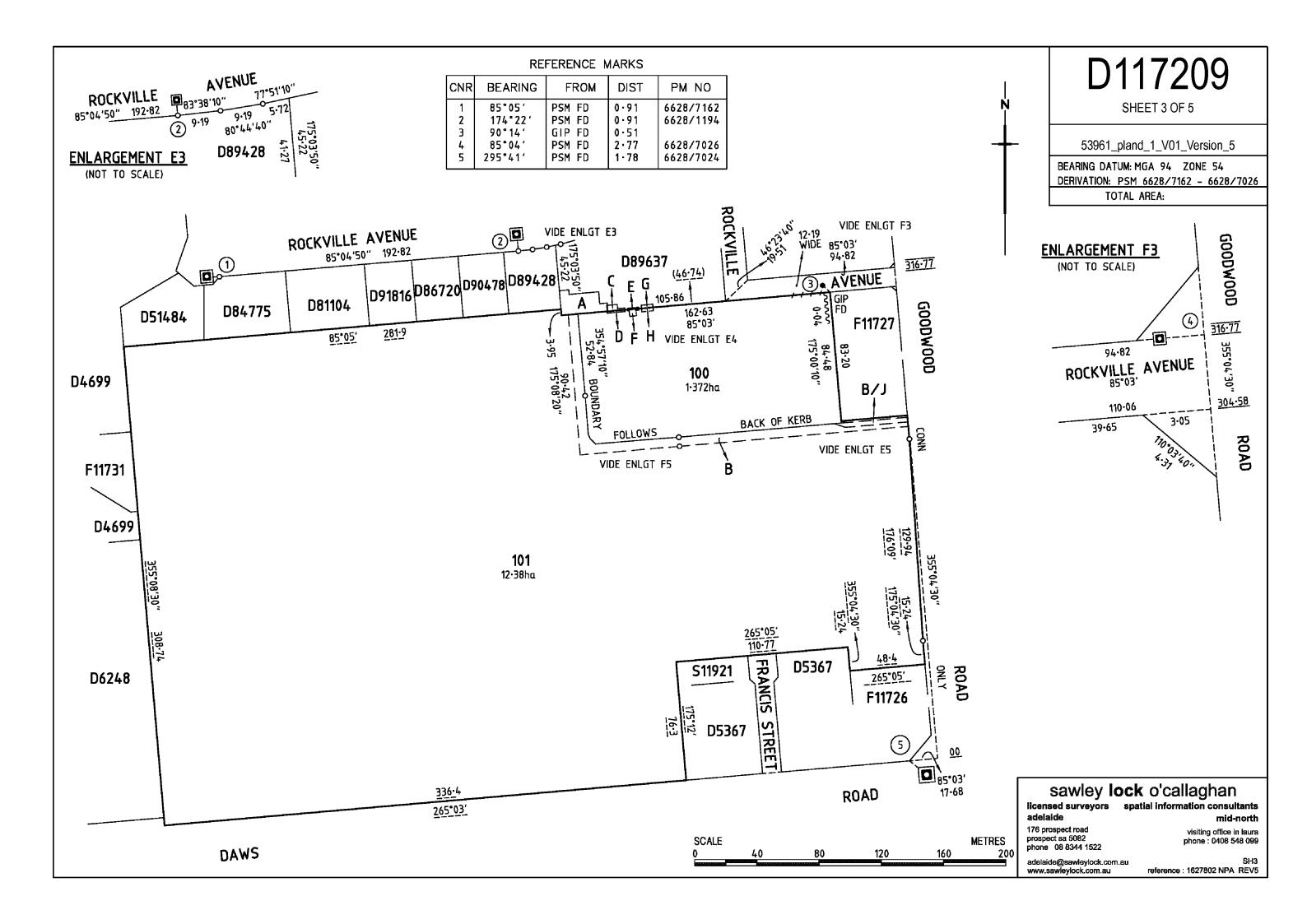
EASEMENT DETAILS:

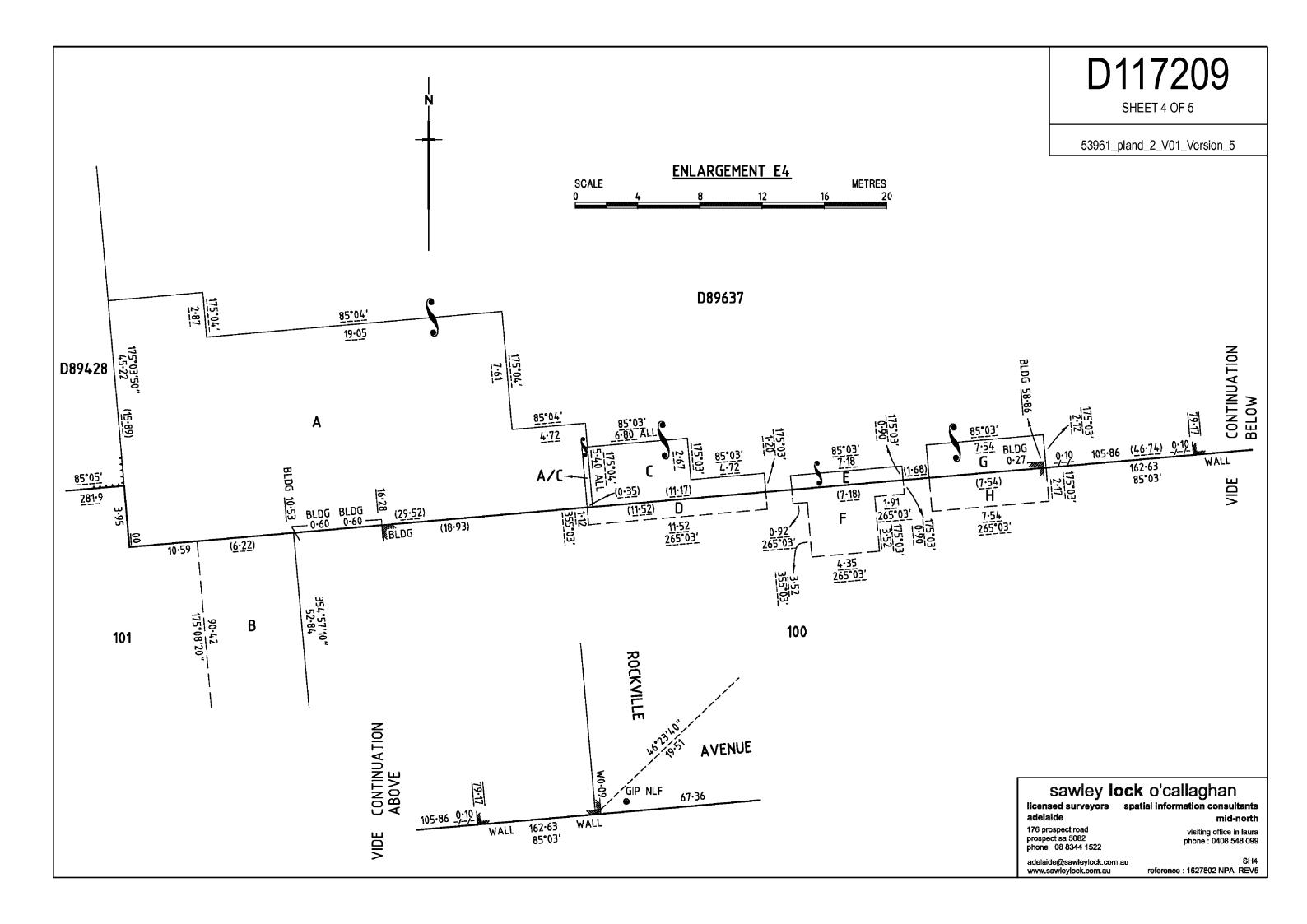
STATUS LAND BURDENED FORM CATEGORY IDENTIFIER PURPOSE IN FAVOUR OF CREATION

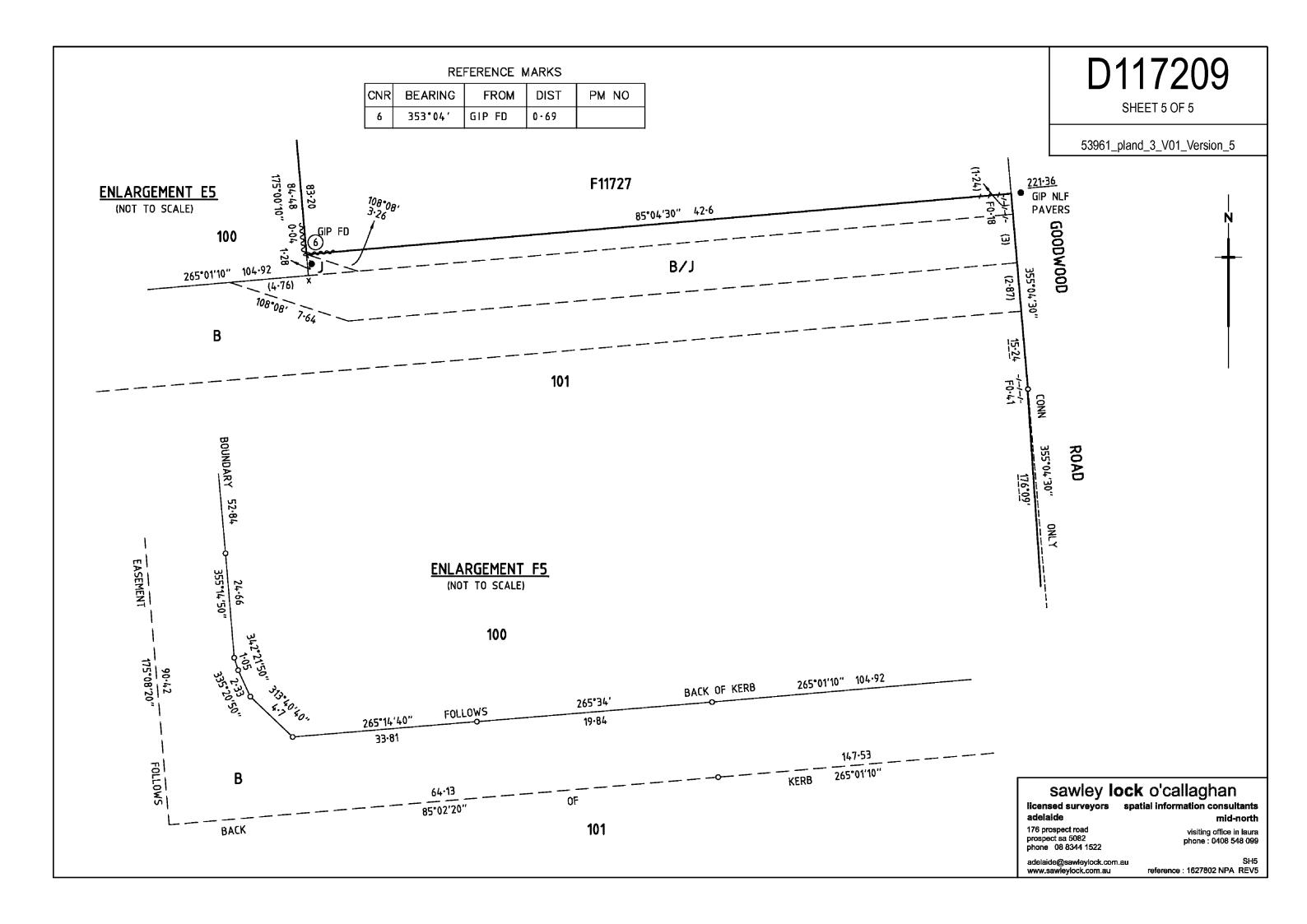
NEW 101 SHORT FREE AND UNRESTRICTED RIGHT(S) B 100

OF WAY

ANNOTATIONS:

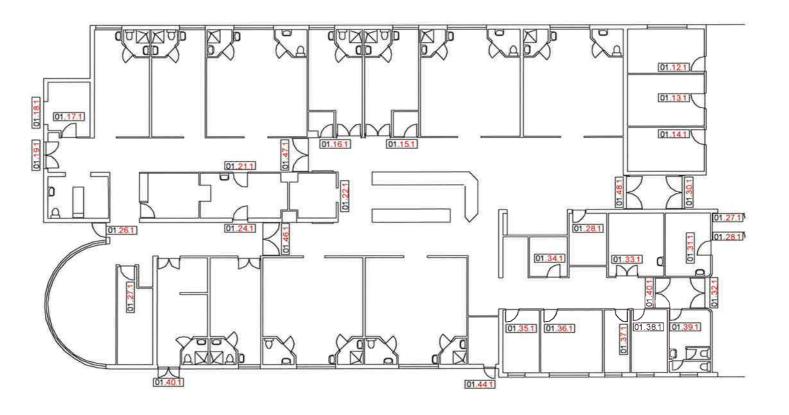








# **BUILDING 072** WARD 2



### DOOR SCHEDULE

072.01.12.1	Discharge Nurse Concultari
072.01.13.1	Unit Head Cardiology
072.01.14.1	Pharmacy Research
072.01.16.1	Store room
072.01.17.1	Disposal room
072.01, 19.1	South Entry / Exit
072.01.20.1	Assisted Bathroom
072 01 21 1	Clean Utilty room
072.01.22.1	Medication room
072.01.23.1	Switchboard
072 01 24 1	South Clean Utility room
072.01.25.1	Pan Room
072.01.27.1	Medical store
072.01.28.1	Unit Nume Managers Office
072.01.29.1	Staff Tolets
072.01.30.1	Main Entry
072.01.33.1	Treatment room
072.01.34.1	Bed Managers Office
072.01.35.1	Doctors Office
072 01 36 1	Seminar Room
072.01.37.1	Cleaners room
072.01.38.1	Staff T / Room
072.01.40.1	Exit from Isolation room
072.01.44.1	External store room
072,01.45.1	Fire door 5th East
072.01.46.1	Smoke door 5th West
072.01.47.1	Smoke door Nth West
072,01.48.1	Fire door nth East
072 11.15.1	Store room

LEGEND



2 4 6 8 10

Disclaimer: This plan has been prepared for marketing purposes only. Interested parties should undertake their own enquiries as to the accuracy of the information. Areas are approximate and dimension rounding may result in area discrepancies.

### Plan Prepared For:





Repatriation General Hospital

DOOR SCHEDULE Building 072, Daws Road DAW PARK, S.A

Date: 19/12/2008 30630LM Rev: A Ref: Scale: 1: 250 at A3

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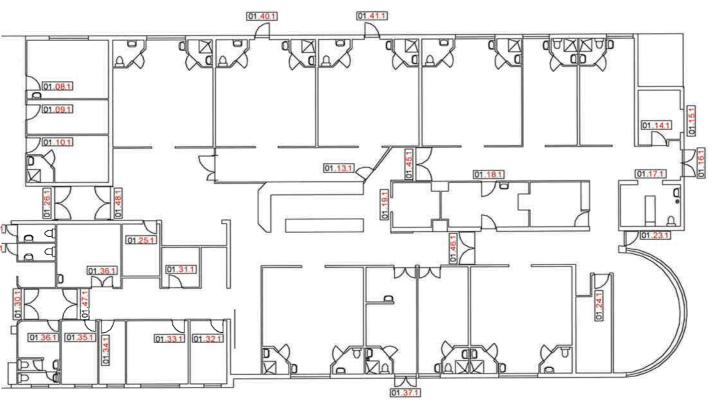
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### DOOR SCHEDULE

071.01.05.1	Entry to 1>8 Confideor
071.01.08.1	Respiratory Registered Nurse Office
071.01.09.1	Respiratory Outreach
071,01,10,1	CPAP Nume
071.01.11.1	West Dementia Unit door
071.01.15.1	Waste Disposal room
071.01.16.1	Emergency Exit
071.01.17.1	Assisted Bathroom
071.01.18.1	Clean Utility rm
071.01.19.1	Medication Room
071.01.20.1	Switchboard closet
071.01.21.1	Clean Utility rm
071.01.22.1	Utility room
071_01_23_1	South East Entry / Exit
071.01.24.1	Store room
071.01.25.1	Unit Nurse Managers Office
071.01.26.1	Main Entry
071.01.27.1	Exit from mm 2
071.01.27.1	Female Toilet corridoor
071.01.28.1	Male toilet conidoor
071.01.30.1	Treatment Room
071.01.31.1	Discharge Clerical
071.01.32.1	Doctors Office
071.01.33.1	Seminar Room
071.01.34.1	Cleaners room
071.01.35.1	Staff T/Room
071.01.36.1	Toilets
071.01.37.1	Sth door exit bed 5
071.01:40.1	West Dementia Unit door
071.01.41.1	East Dementia door
071.01.45.1	Smoke door Nth East corridoor
071.01.46.1	Smoke door 5th East corridoor
071.01.47.1	Fire door 5th West corridoor
071.01.48.1	Fire door Nth West main entry

## **BUILDING 071** WARD 1



LEGEND

Building No. → O01 | OO O00 → Door

2 4 6 8 10

Disclaimer: This plan has been prepared for marketing purposes only, interested parties should undertake their own enquiries as to the accuracy of the information. Areas are approximate and dimension rounding may result in area discrepancies.

### Plan Prepared For:





Repatriation General Hospital

DOOR SCHEDULE Building 071, Daws Road DAW PARK, S.A

Date: 19/12/2008 30630LM Rev: A Ref:

Scale: 1: 250 at A3

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# **APPENDIX I - SITE CONTEXT PHOTOS**

WARD 1



Scale @A3

REPATRIATION PRECINCT



# **APPENDIX I - SITE CONTEXT PHOTOS**

WARD 2











Scale @A3







## SITE CONTEXT PHOTOGRAPHS

Project Number 10439.00

Date 12/09/19 Drawing Number SCAP-004

STH SILVER THOMAS HARLEY

REPATRIATION PRECINCT

DATE: 9/12/2019 11:56:50 AM

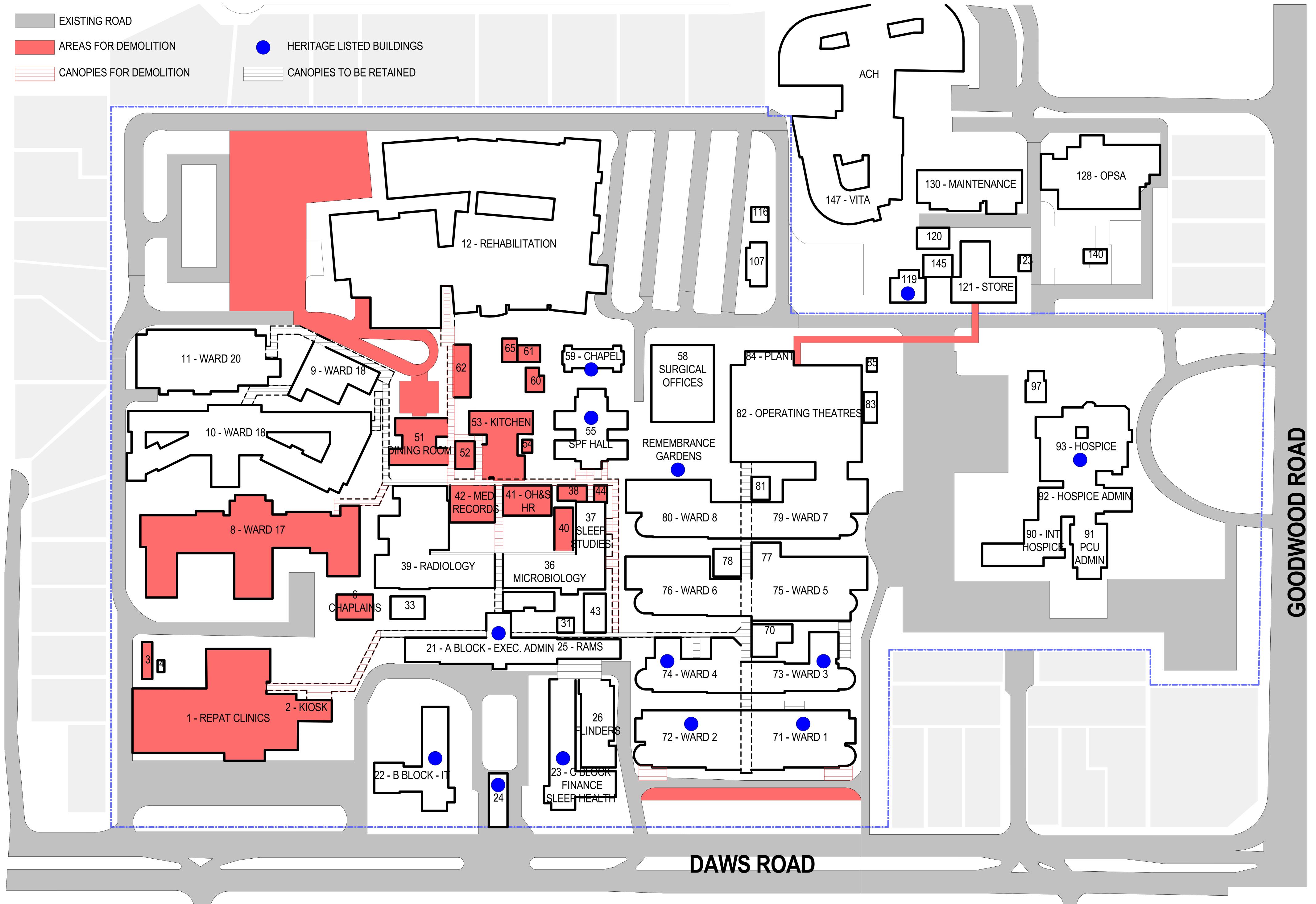


# APPENDIX J - SITE-WIDE DEMOLITION WORKS

Site-wide demolition works will occur as per the following plans within the 'Reactivate the Repat - Phase 2' project.

SCAP Reports will be issued for each area for new works as required. As the demolition works will likely form part of an early contract, the project considerers the inclusion of site-wide demolition plans prudent in the assessment of this and subsequent SCAP reports for this project.

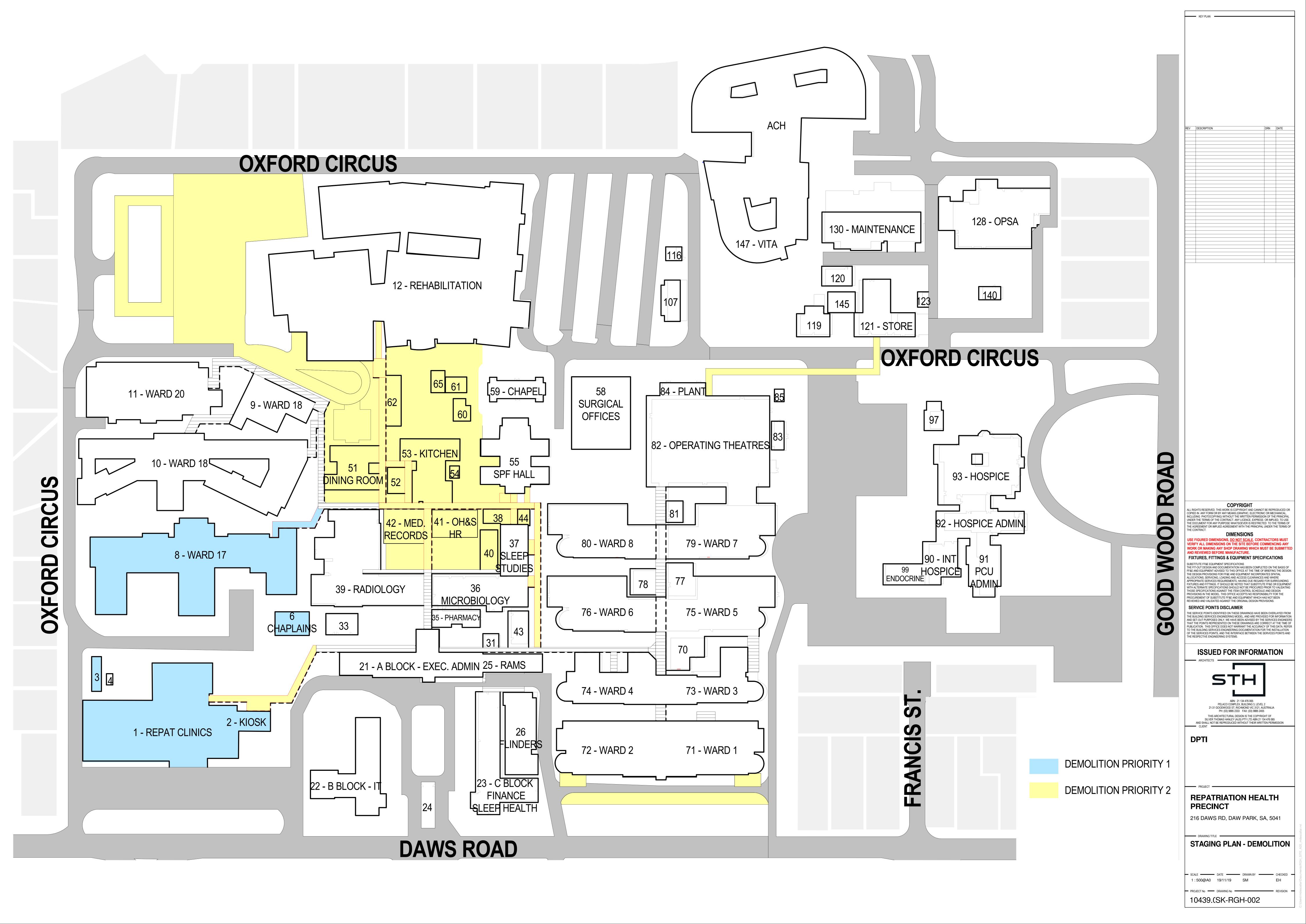
Heritage-listed buildings within the site can be found in Appendix G (Project Brief) and building numbers can be cross-referenced with the plans to follow.

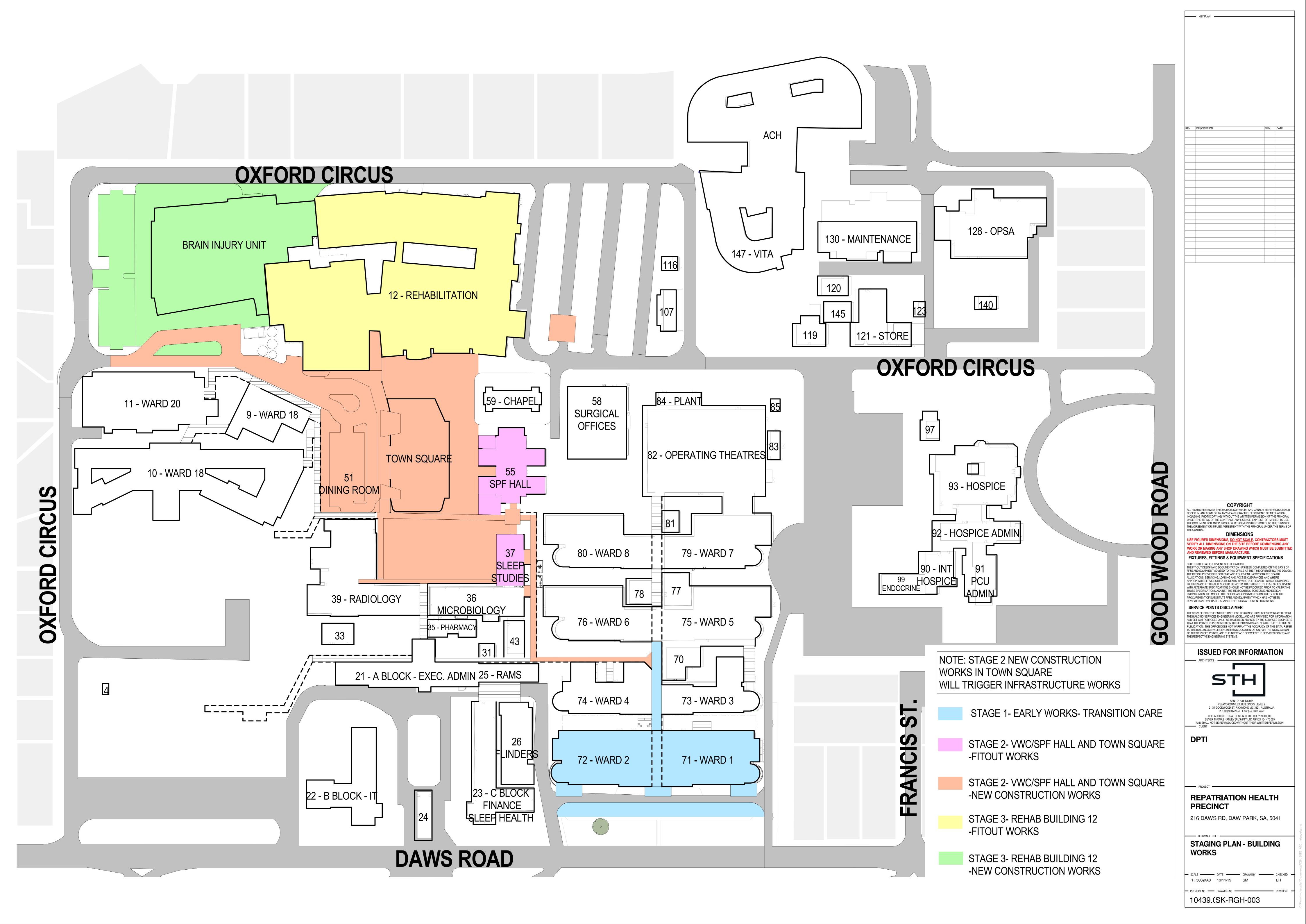


SITE PLAN - DEMOLITION

REPATRIATION HEALTH PRECINCT









# APPENDIX K - ARBORICULTURAL TREE SURVEY/AUDIT



3 Ellemsea Circuit LONSDALE SA 5160 ABN: 33 099 478 994

Phone: 8371 5955 Mobile: 0408 086 774 Fax: 8297 6885 Email: mark@adelaidetreesurgery.com

# **Arboricultural Tree Survey/Audit**

Prepared for
Prepared for
Repatriation Hospital
Mr Stuart Shaw
216 Daws Road
Daw Park SA 5041

Site located at 216 Daws Road, Daw Park South Australia, 5041

> In Regard to Tree Survey/Audit



Prepared By:
Mark Elliott Consulting Arborist/Diploma Arboriculture



### 3 Ellemsea Circuit LONSDALE SA 5160 ABN: 33 099 478 994

**Phone**: 8371 5955 **Mobile**: 0408 086 774 **Fax**: 8297 6885 **Email**: mark@adelaidetreesurgery.com

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1.0 Introduction

2.0 Limitations and Retraints

3.0 The Site

4.0 Legislation

5.0 Audit/Survey Tables

Appendix A: Disclaimer and Limitations

7

### 1.0 INTRODUCTION

- 1.1 This Tree Audit/Survey for the Repatriation Hospital has commissioned by Mr Stuart Shaw.
- 1.2 It was requested to update previous survey/audit and advise significant tree approximate location, condition and trees that require attention.
- 1.3 There are a number of trees on the site, which are classed as "Significant" or "Regulated" trees and are protected by State Legislation (Development Act 2008). Approval must be obtained prior to the removal of these trees.

### 2.0 LIMITATIONS AND CONSTRAINTS

- 2.1 This is a stage 1 'Ground report'. The trees were inspected from the ground only. A climbing inspection was not recommended or performed at this stage.
- 2.2 The report reflects the trees as found on the day of inspection. Any changes to site conditions or surroundings, such as construction works or landscape works, may alter the findings of the report.
- 2.3 The report is based on the inspection and the material available at the time of inspection. No past architect's drawings, planning applications, planning consents and conditions, or drainage plans were made available. It is possible that the contents of such documents may directly affect the findings and recommendations of this report.
- 2.4 No soil samples were taken for laboratory analysis.
- 2.5 The inspection period to which this report applies is two months from the date of the report.
- 2.6 The roots were not inspected below ground.

### 3.0 THE SITE

- 3.1 Refer to the site plan (Appendix A).
- 3.2 The trees are located in various locations throughout the property with high concentrations along roadsides, car parks, footpaths and large recreational garden areas.
- 3.3 A Majority of the larger protected (Significant and Regulated Tree) are located in the south eastern corner, Goodwood Road frontage, along Daws Road and the north western corner of the site.
- 3.4 The growing environments for the trees vary greatly from open soil and lawn areas to impervious and compacted bitumen.
- 3.5 It was observed that a number of trees (mainly smaller) were located very close to buildings, with some in very confined spaces between buildings.
- 3.6 The Repatriation General Hospital is located within the Council boundaries of the City of Mitcham.

#### 4.0 LEGISLATIVE REQUIREMENTS

- 4.1 The inspection of the trees identifies a stem circumference measurement when measured at 1 metre above natural ground level, where this is indicated as greater than 2.0 metres and less than 3.0 meters as "Regulated" and a tree with stem circumference greater than 3 metres as a "Significant" as per the Development Regulations 2008. Multi stemmed specimens are classed as significant trees when the sum of all stems when measured at 1.0 metre above natural ground level is greater than 2.0 metres and the average circumference of each stem is greater than 625mm.
- 4.2 All significant trees are included in Table 2 (Appendix B) and are highlighted in red.
- 4.3 Note: Council permission through the City of Mitcham must be given prior to the removal of any "Regulated" or "Significant".

### 5.0 SURVEY TABLES

- 5.1 Table 1, in Appendix B summarises the observations made at the time of inspection and provides recommendations to rectify any potential issues.
- 5.2 The trees are categorised as being in poor (P), fair (F), good (G) or excellent (E) condition. Condition of the trees has been considered a combination of their structure and their health (foliage density and quality). The presence of structurally compromised co-dominant stems or root plates would for example be considered as poor condition despite healthy foliage. Trees with poor condition are recommended for removal as they are considered dangerous or in irreversible decline. Trees in fair condition are considered worthy of retention provided structural defects are abated through pruning and/or growing conditions are improved. Trees in good condition will require the removal of little or no live material and may simply require the removal of deadwood to remove risks to an acceptable level. Trees in excellent condition will require no work. The appearance of a healthy and structurally sound crown in trees of good and excellent condition should not suggest that improvements in growing conditions are not required. It is in the best interest of all trees to provide an optimal growing environment.
- 5.3 The size of the trees is approximated in terms of whether they are small, medium, large or very large. Small trees being approximately 3-4 metres, medium trees approximately 5-7 metres, large trees approximately 8-10 metres and very large trees being taller than 10 metres.
- 5.4 All entries that have the trunk circumference highlighted in red are deemed to be regulated or significant trees as define within the SA Development Regulation 2008.
- 5.5 Some trees have been classed in groups. These groups generally consist of large numbers of similar species and similar size and form in close proximity to one another. Trees considered part of a group and those less than 3.0 metres in height are not included in the survey tables.
- 5.6 The approximate location of the numbered trees can be seen in Appendix A.

### APPENDIX A: SITE PLAN SHOWING APPROXIMATE LOCATION OF SOME TREES



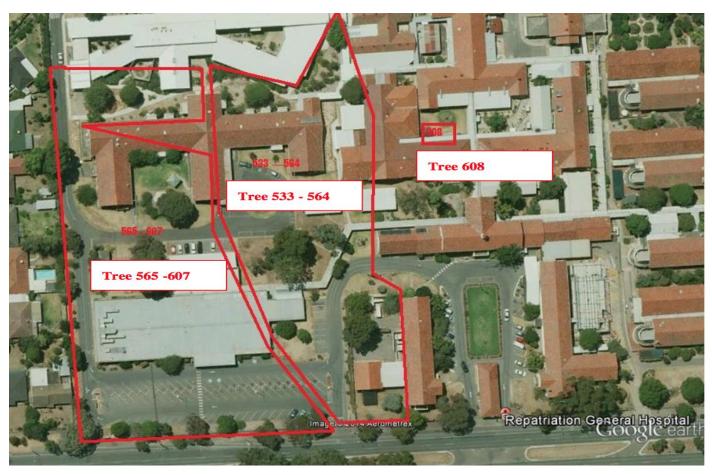












### **APPENDIX B: Tables**

1	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
2	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
3	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
4	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
5	Prunus cerasifera	Purple Leaved Plum	S	F	N	Tree has been removed - COMPLETED	
6	Grevillea robusta	Silky Oak	S	G	N	Tree has been removed - COMPLETED	
7	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
8	Grevillea robusta	Silky Oak	S	F	N	Remove (Not suitable for area)	2
9	Prunus cerasifera	Purple Leaved Plum	S	F	N	Formative prune	3
10	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
11	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
12	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
13	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
14	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
15	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
16	Cinnamomun camphora	Camphor Laurel	S	Р	N	Remove	1
17	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
18	Cinnamomun camphora	Camphor Laurel	S	Р	N	Remove	1
19	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
20	Cinnamomun camphora	Camphor Laurel	S	F	N	Formative prune	3
21	Eucalyptus camaldulensis	River Red Gum	М	F	N	Remove (not suitable for area)	1

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22	Eucalyptus camaldulensis	River Red Gum	L	G	N	Prune clear from services/roofline and crown clean	1
23	Eucalyptus camaldulensis	River Red Gum	VL	G	5.1	Remove major deadwood. Thin epicormics in lower crown and reduce crown overhanging the building –COMPLETED 2018	1
24	Eucalyptus camaldulensis	River Red Gum	VL	G	3.8	Inspect union at 6m, reduce weight of large lateral towards new building by 1m. Prune away from froofline and deadwood	1
25 – ACH tree	Eucalyptus camaldulensis	River Red Gum	VL	G	5.2	Arborist report required. Fungall fruit in north-west leader union. Immediate works: remove major deadwood and prune clear from roof line.	1
26	Prunus dulcis	Almond	S	G	N	Formative prune	3
27	Hymenosporun flavum	Native Frangipani	S	F	N	Formative prune	3
28	Cinnamomun camphora	Camphor Laurel	S	G	N	Formative prune and lift	3
29	Callistemon viminalis	Bottle Brush	S	G	N	Prune away from footpath	3
30	Callistemon viminalis	Bottle Brush	S	G	N	Prune away from footpath	3
31	Callistemon viminalis	Bottle Brush	S	G	N	Prune away from footpath	3
32	Melaleuca sp.	Paperbark Melaleuca	S	G	N	Prune away from footpath	3
33	Callistemon viminalis	Bottle Brush	S	G	N	Formative prune and crown lift	3
34	Brachychiton populneus	Kurrajong	S	G	N	Formative prune and crown lift	3
35	Brachychiton populneus	Kurrajong	S	G	N	Formative prune	3
36	Brachychiton populneus	Kurrajong	S	G	N	Formative prune	3
37	Brachychiton populneus	Kurrajong	S	G	N	Formative prune	3
38	Brachychiton populneus	Kurrajong	S	G	N	Formative prune	3
39	Brachychiton populneus	Kurrajong	S	G	N	Formative prune	3
40	Ficus sp	Fig sp.	S	G	N	Formative prune	3
41	Ficus sp	Fig sp.	S	G	N	Formative prune	3
42	Ficus sp	Fig sp.	S	G	N	Formative prune	3
	1						

43 – ACH TREE	Ficus sp	Fig	VL	G	1.2 + 1.3 +1.	Inspect tree once building works have complete. Light crown lift and deadwood.	1
43 – ACH TREE	Ficus sp	Fig	VL	G	1.6	Inspect tree once building works have complete. Light crown lift and deadwood.	1
45	Eucalyptus sideroxylon	Red Ironbark	M	G	N	Remove co-dominant leader with bark damage	3
46	Eucalyptus sideroxylon	Red Ironbark	M	Р	N	Formative prune	3
47	Callistemon viminalis	Bottle Brush	S	D	N	Remove	3
48	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Formative prune	3
49	Shinus areira	Peppercorn	М	F	N	Crown clean and light crown lift	2
50	Eucalyptus sideroxylon	Red Ironbark	VL	G	N	Removal of tree and stump	2
51	Lophostemon confertus	Brush Box	М	G	N	Crown clean and remove major deadwood	3
52	Corymbia ficifolia	Flowering Gum	M	Р	N	Removal of tree and stump	1
53	Corymbia maculata	Spotted Gum	L	G	N	Prune clear from light, remove major deadwood and reduce lateral limb	2
54	Eucalyptus sideroxylon	Red Ironbark	M	Р	N	facing private property.  Remove major deadwood	2
55	Eucalyptus sideroxylon	Red Ironbark	M	G	N	Formative prune by removing co-dominant leader	2
56	Shinus areira	Peppercorn	M	G	N	Crown clean and light crown lift over road	2
57	Callistemon viminalis	Bottle Brush	S	G	N	No work required	
58	Eucalyptus sideroxylon	Red Ironbark	L	F	2.4	Reduce laterals over road and garden by 1M. Crown clean and deadwood.	2
59	Eucalyptus torquata	Coral Gum	S	Р	N	Removal of tree and stump	1
60	Corymbia Maculata	Spotted Gum	VL	G	1.6 5	Remove major deadwood, stubs and reduce laterals over road/garden by 1M	2

61	Eucalyptus torquata	Coral Gum	S	G	N	Crown clean and remove major deadwood.	2
61	Eucalyptus torquata	Coral Gum	S	G	N	Remove co-dominant stem and crown clean	2
63	Eucalyptus sideroxylon	Red Ironbark	VL	G	Y	Reduce crown to the West by 1M to crown balance and also crown clean.	2
64	Eucalyptus petiolaris	Eyre Peninsula Blue Gum	S	Р	N	Crown clean and remove major deadwood	3
65	Eucalyptus torquata	Coral Gum	М	F	N	Crown clean and reduce weight on lateral towards house by 1M	2
66	Eucalyptus sp.	Gum	М	Р	N	Remove major deadwood	2
67	Eucalyptus sp.	Gum	М	Р	N	Crown clean and major deadwood	3
68	Eucalyptus sp.	Gum	L	G	3.7	Remove – poor condition, declining	1
69	Eucalyptus sp.	Gum	L	G	N	Crown clean and major deadwood	3
70	Eucalyptus grandis	Rose Gum	L	G	N	Remove major deadwood and reduce 2 lateral branches over road by 1M	2
71	Eucalyptus grandis	Rose Gum	L	G	N	Remove major deadwood and reduce 2 lateral branches over road by 1M	3
72	Lophostemon confertus	Brush Box	М	G	N	No work required	
73	Eucalyptus botryoides	Southern Mahogany	S	F	N	Removal of tree and stump COMPLETED 2017	
74	Corymbia citriodoa	Lemon Scented Gum	VL	F	2.35	Remove major deadwood COMPLETED 2017	2
75	Corymbia citriodoa	Lemon Scented Gum	VL	F	2.46	Reduce lateral towards private property (NW), reduce over extended lateral limb by 1M COMPLETED 2017	2
76	Corymbia citriodoa	Lemon Scented Gum	VL	F	2.14	Remove major deadwood COMPLETED 2017	2
77	Corymbia citriodoa	Lemon Scented Gum	VL	F	2.43	Remove major deadwood and reduce laterals over road COMPLETED 2017	2
78	Corymbia citriodoa	Lemon Scented Gum	VL	F	1.98	Prune away from light and remove major deadwood COMPLETED 2017	2
79	Melaleuca armillaris	Melaleuca	М	F	N	Remove stubs and failed hanging branch	2
80	Callistemon viminalis	Bottlebrush	L	G	N	Prune away from other tree	2
81	Angophora costata	Smooth-Barked Apple	VL	Р	2.70	Deadwood and prune away from building COMPLETED 2018	1
82	Angophora costata	Smooth-Barked Apple	VL	F	2.56	Remove major deadwood, crossing limbs and prune away from roofling COMPLETED 2018	e 1

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83	Angophora costata	Smooth-Barked Apple	VL	F	2.82	Prune away from roofline COMPLETED 2018	1
84	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
85	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
86	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
87	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
88	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
89	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
90	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
91	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
92	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
93	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
94	Hymenosporum flavum	Native frangipani	S	F	N	Formative prune	2
95	Hymenosporum flavum	Native frangipani	S	F	N	Formative prune	2
96	Hymenosporum flavum	Native frangipani	S	F	N	Formative prune	2
97	Hymenosporum flavum	Native frangipani	S	F	N	Formative prune	2
98	Hymenosporum flavum	Native frangipani	S	Р	N	Removal of tree and stump	1
99	Corymbia flavum	Lemon Scented Gum	L	G	N	Removal of major deadwood and rubbing branches	1
100	Corymbia flavum	Lemon Scented Gum	L	G	N	Removal of major deadwood and rubbing branches	1

101	Pyrus ussuriensis	Manchurian Pear	F	N		Formative prune and crown lift lower branches	2
102	Pyrus ussuriensis	Manchurian Pear	F	N		Formative prune and crown lift lower branches	2
103	Pyrus ussuriensis	Manchurian Pear	F	N		Formative prune and crown lift lower branches	2
104	Pyrus ussuriensis	Manchurian Pear	F	N		Formative prune and crown lift lower branches	2
105	Eucalyptus sideroxylon	Red Ironbark	М	G	N	NO work required	
106	Eucalyptus sideroxylon	Red Ironbark	М	Р	N	Removal of tree and stump	1
107	Eucalyptus sp.	Gum	М	G	N	Remove major deadwood, crown clean and lift	2
108	Corymbia maculata	Spotted Gum	М	F	N	Crown lift	3
109	Corymbia maculata	Spotted Gum	М	F	N	Crown clean	2
110	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
111	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
112	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
113	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
114	Corymbia flavum	Lemon Scented Gum	L	G	N	Crown clean, remove major deadwood and lift crown over parking bays	3
115	Corymbia maculata	Spotted Gum	M	G	N	Removal of tree and stump	1
116	Corymbia maculata	Spotted Gum	М	G	N	Remove major deadwood and crown clean	2
117	Corymbia maculata	Spotted Gum	М	F	N	Remove major deadwood and crown clean	2
118	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
119	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
120	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
	_1	_1				_1	L
121	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2

122	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
	-						
123	Pyrus ussuriensis	Manchurian Pear	S	F	Ν	Formative prune and crown lift	2
124	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Crown clean tree and remove stubs	3
125	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Remove limb growing to the north-east with included union	2
126	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Remove northern co-dominant stem and crown lift	2
127	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Remove southern co-dominant stem and crwon lift	2
128	Corymbia maculata	Spotted Gum	М	G	N	Reduce south west limb from light	2
129	Corymbia maculata	Spotted Gum	М	G	N	Remove major deadwood and crown clean	2
130	Corymbia flavum	Lemon Scented Gum	М	F	N	Formative prune and crown lift	2
131	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
132	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and crown lift	2
133	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and crown lift	2
134	Corymbia maculata	Spotted Gum	М	G	N	Remove major deadwood and prune away from light/sign	2
135	Corymbia flavum	Lemon Scented Gum	L	G	N	Remove major deadwood, remove severely cankered limbs and continue to monitor	2
136	Corymbia flavum	Lemon Scented Gum	S	G	N	Formative prune	3
137	Corymbia maculata	Spotted Gum	М	F	N	Remove major deadwood and crown clean	2
138	Corymbia maculata	Spotted Gum	М	F	N	Remove major deadwood and prune away from light	2
139	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
140	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
	1	-1	l	l	I		
141	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
142	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
143	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2

144	Pyrus ussuriensis	Manchurian Pear	S	F	Ν	Formative prune and crown lift	2
145	Eucalyptus sideroxylon	Red Ironbark	М	F	N	Formative prune and crown lift	2
146	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Remove northern co-dominant leader	2
147	Eucalyptus sideroxylon	Red Ironbark	M	G	N	Remove tree and stump	1
148	Eucalyptus sideroxylon	Red Ironbark	М	F	N	Reduce co-dominant stem by 1M and crown lift	2
149	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
150	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
151	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and crown lift	2
152	Corymbia flavum	Lemon Scented Gum	S	F	N	Crown lift	2
153	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
154	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
155	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
156	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
157	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
158	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
159	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Reduce both co-dominant stems by 1M	2
160	Eucalyptus sideroxylon	Red Ironbark	М	F	N	Reduce both co-dominant stems by 1M	2
161	Eucalyptus	Red Ironbark	M	G	N	Remove major deadwood, stubs and crown lift	2

161	Eucalyptus sideroxylon	Red Ironbark	М	G	N	Remove major deadwood, stubs and crown lift	2
162	Corymbia maculata	Spotted Gum	S	G	N	Crown clean and prune away from roofline	2
163	Corymbia flavum	Lemon Scented Gum	S	F	N	Crown clean and prune away from roofline	2
164	Acacia iteaphylls	Flinders Range Wattle	S	G	N	Formative prune	3
165	Prunus dulcis	Apricot	S	G	N	Formative prune	3

166	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
167	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
168	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
169	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
170	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
171	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift	2
172	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
173	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
174	Callistemon viminalis	Bottlebrush	S	G	N	Formative prune	2
175	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
176	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
177	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
178	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
179	Callistemon viminalis	Bottlebrush	S	F	N	Formative prune	2
180	Corymbia ficifolia	Flowering Gum	S	G	N	Formative prune	2
			I	_ [			I
181	Callistemon viminalis	Bottlebrush	S	G	N	Formative prune	2
182	Callistemon viminalis	Bottlebrush	S	G	N	Formative prune	2
183	Corymbia ficifolia	Flowering Gum	S	G	N	Formative prune	2

F

G

G

G

S

М

М

М

Ν

Ν

N

Ν

Formative prune

Formative Prune and Crown Lift

Formative Prune and Crown Lift

Formative Prune and Crown Lift

Bottlebrush

Ash Tree

Ash Tree

Ash Tree

184

185

186

187

Callistemon viminalis

Franxinus sp

Franxinus sp

Franxinus sp

3

3

3

188	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift and prune away from light	3
189	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
190	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
191	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
192	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
193	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
194	Franxinus sp	Ash Tree	М	G	N	Formative Prune and Crown Lift	3
195	Robinia pseudicacia frisia	Golden Robinia	S	G	N	Formative prune and adjust ties	2
196	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and adjust ties	2
197	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and adjust ties	2
198	Robinia pseudicacia frisia	Golden Robinia	S	G	N	Formative prune and adjust ties	2
199	Eucalyptus camaldulensis	River Red Gum	L	Р	N	Remove major deadwood. (Monitor recent excavations)	1
200	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
		I				1	
201	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
202	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3

201	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
202	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
203	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
204	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
205	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
206	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
207	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
208	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
209	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3

210	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
211	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
212	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
213	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
214	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from road	3
215	Eucalyptus torquate	Coral Gum	S	G	N	Formative prune, crown lift and prune away from light	1
216	Eucalyptus scoparia	Wallangara White	L	G	N	Crown ocean tree and reduce laterals over parking bay COMPLETED - Tree Removed	
217	Corymbia maculata	Spotted Gum	M	G	N	Formative prune	3
218	Eucalyptus scoparia	Wallangara White	L	G	N	Crown ocean tree and reduce laterals over parking bay	1
219	Eucalyptus torquate	Coral Gum	S	G	N	Formative prune and crown lift	2
220	Eucalyptus torquate	Coral Gum	S	G	N	Formative prune and crown lift	2
221	Eucalyptus camaldulensis	River Red Gum	М	G	N	Crown lift, crown clean and major deadwood	2
222	Corymbia maculata	Spotted Gum	М	G	N	Crown clean and lift	2
223	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	2
224	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	2

221	Eucalyptus camaldulensis	River Red Gum	M	G	N	Crown lift, crown clean and major deadwood	2
222	Corymbia maculata	Spotted Gum	M	G	N	Crown clean and lift	2
223	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	2
224	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	2
225	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	2
226	Cinnamomum camphora	Camphor Laurel	L	G	N	Remove major deadwood, prune away from building and crown clean	1
227	Eucalyptus sp.	Gum tree	L	G	N	Remove major deadwood	1
228	Eucalyptus sp.	Gum tree	S	F	N	Formative prune and crown lift	3
229	Eucalyptus sp.	Gum tree	S	F	N	Formative prune and crown lift	3
230	Eucalyptus sp.	Coral Gum	S	G	N	Formative prune and crown lift	3
231	Corymbia maculata	Spotted Gum	М	F	N	Formative prune	3

232	Ulmus procera	English Elm	S	F	N	Formative prune and crown lift	3
233	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
234	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
235	Ulmus procera	English Elm	S	F	N	Formative prune and clear from light	2
236	Ulmus procera	English Elm	S	F	N	Formative prune and clear from light	2
237	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
238	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
239	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
240	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune	3

241	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune	3
242	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune	3
243	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune and crown lift over path	3
244	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift over path	3
245	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift over path	3
246	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift over path	3
247	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift over path	3
248	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune and crown lift over path	3
249	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune	3
250	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
251	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
252	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
253	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3

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254	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
255	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
256	Hymenosporum flavum	Native Frangipani	S	Р	N	Remove tree and stump	1
257	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
258	Ulmus procera	English Elm	S	F	N	Formative prune	3
259	Ulmus procera	English Elm	S	F	N	Formative prune and clear from light	3
260	Ulmus procera	English Elm	S	F	N	Formative prune	2

261	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and remove stakes	3
262	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and remove stake	3
263	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune and remove stake	3
264	Gleditsia triacanthos	Honey Locust	S	F	N	Formative prune	3
265	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and prune from sign	3
266	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and prune from sign	3
267	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	3
268	Jacaranda Mimosifolia	Jacaranda	М	G	N	Formative prune	3
269	Jacaranda Mimosifolia	Jacaranda	М	G	N	Formative prune	3
270	Jacaranda Mimosifolia	Jacaranda	М	G	N	Formative prune	3
271	Jacaranda Mimosifolia	Jacaranda	М	G	N	Formative prune	3
272	Jacaranda Mimosifolia	Jacaranda	М	G	N	Formative prune	3
273	Fraxinus angustifolia subsp.oxycarpa	Desert Ash	L	G	2.81	Crown clean, remove major deadwood and reduce over extended laterals toward building	1
274	Brachychiton popuineus	Kurrajong	L	G	N	Crown clean and prune away from building	2
275	Callistemon citrinus	Lemon Bottlebrush	М	F	N	Crown clean and prune away from building	2

276	Gleditsia triacanthos	Honey Locust	S	G	N	Formative prune	2
277	Calistemon viminalis	Bottle Brush	S	G	N	Prune away from roofline	2
278	Liquidambar styracflua	Sweet Gum	L	G	N	Remove major deadwood and monitor unions	3
279	Calistemon viminalis	Bottle Brush	S	F	N	No work required	
280	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune and remove stubs	3
			<b>.</b>	1			1
281	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	3
282	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	3
283	Calistemon viminalis	Bottle Brush	S	G	N	Formative prune	3
284	Robinia pseudocacia	Robinia (Mophead)	S	G	N	No work required	
285	Eucalyptus grandis	Rose Gum	L	G	2.07	Reduce laterals over building and remove major deadwood. Full arboriculture report is needed.	1
286	Ulmus procera	English Elm	L	G	N	Crown clean and reduce lateral over path and roofline. Create a large mulch bed around base	1
287	Acer negundo	Box Elder	М	Р	N	Remove major deadwood	1
288	Acacia sp.	Wattle	S	G	N	Crown lift and prune away from building	2
289	Eucalyptus sp.	Gum	S	F	N	Prune off building	2
290	Eucalyptus sp.	Gum	S	F	N	Prune off building	2
291	Lophostemon confertus	Brush Box	S	G	N	Crown clean and remove major deadwood	2
292	Lophostemon confertus	Brush Box	S	G	N	Crown clean and remove major deadwood	2
293	Hymenosporum flavum	Native Frangipani	S	G	N	Prune away from building	2
294	Hymenosporum flavum	Native Frangipani	S	F	N	No work required	
295	Jacaranda Mimosifolia x 2	Jacaranda	S	G	N	Crown clean	3
296	Hymenosporum flavum	Native Frangipani	S	G	N	No work required	
297	Acacia sp.	Wattle	S	G	N	Formative prune	2
	1	1					

298	Acacia baileyana	Cootamundra	S	G	N	Crown Ifit	3
299	Corymbia citriodora	Lemon Scented Gum	V/L	G	N	Reduce crown form building, reduce lowest lateral over path	1
300	Corymbia citriodora	Lemon Scented Gum	L	G	N	Reduce apical leader (Cavity), reduce from building and reduce lateral over p ath	1

301	Calistemon viminalis	Bottle Brush	S	G	N	Crown lift	2
302	Grevillea robusta	Silky Oak	S	G	N	Formative prune	3
303	Fraxinus oxycapa var.raywoodii	Claret Ash	S	F	N	Crown clean and crown lift over bay	2
304	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
305	Fraxinus oxycapa var.raywoodii	Claret Ash	S	Р	N	Formative prune and clear from light and sign	2
306	Calistemon viminalis	Bottle Brush	S	F	N	Formative	3
307	Fraxinus oxycapa var.raywoodii	Claret Ash	S	F	N	Crown clean and crown lift over bay	2
308	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
309	Fraxinus oxycapa var.raywoodii	Claret Ash	S	Р	N	Crown clean and crown lift	2
310	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
311	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
312	Paulownia tomentose	Foxglove tree	S	F	N	Remove tree and stump	1
313	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
314	Paulownia tomentose	Foxglove tree	S	G	N	Formative prune and crown lift over bay	2
315	Paulownia tomentose	Foxglove tree	S	Р	N	Formative prune	2
316	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune	3
317	Calistemon viminalis	Bottle Brush	S	F	N	Formative prune and lift over path	2
318	Calistemon viminalis	Bottle Brush	S	F	N	Lift over path	2
319	Pittosporum sp.	Pittosporum	S	G	N	Prune away from building	3

320	Hymenosporum flavum	Native Frangipani	S	G	N	Crown clean, crown lift and prune away from building	2
	•		1	<b>-</b>			,
321	Hymenosporum flavum	Native Frangipani	S	G	N	Crown clean, crown lift and prune away from building	2
322	Hymenosporum flavum	Native Frangipani	S	F	N	Crown clean, crown lift and prune away from building	2
323	Malus sp.	Crab Apple	S	F	N	Formative prune	3
324	Malus sp.	Crab Apple	S	F	N	Formative prune	3
325	Pyrus ussuriensis	Manchurian Pear	S	F	N	Formative prune	3
326	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune	3
327	Eucalyptus sp.	Gum	M	Р	N	Removal of tree and stump	1
328	Hymenosporum flavum	Native Frangipani	S	F	N	No work required	
329	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
331	Hymenosporum flavum	Native Frangipani	S	F	N	No work required	
332	Eucalyptus sp.	Gum	S	Р	N	Remove major deadwood	2
333	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
334	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
335	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	3
336	Melaleuca sp.	Paper bark Melaleuca	S	F	N	Prune away from roofline	2
337	Melaleuca sp.	Paper bark Melaleuca	S	F	N	Prune away from roofline	2
338	Eucalyptus sp.	Melalleuca	S	F	N	Prune away from roofline	2
339	Calistemon viminalis	Bottle Brush	M	F	N	Remove co-dominant leader towards roofline	2
340	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and crown lift	2
341	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and crown lift	2
342	Jacaranda Mimosifolia	Jacaranda	S	F	N	Formative prune and crown lift	2

343	Jacaranda Mimosifolia	Jacaranda	S	G	N	Formative prune and crown lift	2
344	Jacaranda Mimosifolia	Jacaranda	S	G	N	Formative prune and crown lift	2
345	Jacaranda Mimosifolia	Jacaranda	S	G	N	Formative prune and crown lift	2
346	Jacaranda Mimosifolia	Jacaranda	S	G	N	Formative prune and crown lift	2
347	Jacaranda Mimosifolia	Jacaranda	S	F	N	Formative prune and crown lift	2
348	Koelreuteria paniculata	Golden Rain Tree	S	F	N	Crown lift and clean	2
349	Koelreuteria paniculata	Golden Rain Tree	S	F	N	Crown lift and clean	2
350	Corymbia citriodora	Lemon Scented Gum	V/L	G	2.23	Remove major deadwood, reduce lateral north facing at 6M and east facing at 5M	1
351	Eucalyptus botryoides	Southern Mahogany	М	F	N	Crown clean and crown balance COMPLETED	3
352	Morus alba	White Mulberry	M	F	N	Create a mulch border to divert pedestrians. Cown clean and prune from light.	1
353	Pittosporum undulatum	Sweet Pittosporum	L	F	N	Remove epicormic growth from base and crown lift	2
354	Melia azedarach	White Cedar	L	G	4.7	Crown clean and crown lift over bay COMPLETED	3
355	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and crown lift	2
356	Pyrus ussuriensis	Manchurian Pear	S	G	N	Formative prune and crown lift	2
357	Robinia pseudocacia frisia	Golden Robinia	S	F	N	Removal of tree and stump	1
358	Robinia pseudocacia frisia	Golden Robinia	S	F	N	Formative prune	3
359	Robinia pseudocacia frisia	Golden Robinia	S	F	N	Formative prune and monitor union at crown break	3
360	Eucalyptus stricklandii	Strickland's Gum	M	F	N	Crown lift and supress Western lateral	1

361	Eucalyptus camaldulensis	River Red Gum	V/L	G	2.55	Urgent works: Removal of suspended hangers and major deadwood. Requires a full Arborist report.	1
362	Hymenosporum flavum	Native Frangipani	S	G	N	No work required	
363	Eucalyptus camaldulensis	River Red Gum	V/L	F	3.58	Requires a full arboricultural assessment and report	1
364	Pittosporum sp	Pittosporum	M	F	N	No work required	

365	Pittosporum sp	Pittosporum	S	F	N	No work required	
366	Pittosporum sp	Pittosporum	S	F	N	No work required	
367	Pittosporum sp	Pittosporum	S	F	N	Monitor split at base	2
368	Pittosporum sp	Pittosporum	S	F	N	No work required	
369	Pittosporum sp	Pittosporum	S	F	N	No work required	1
370	Eucalyptus microcarpa	Grey Box	V/L	F	N	Requires a full arboricultural assessment and report	1
371	Grevillea robusta	Silky Oak	S	F	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly) COMPLETED	1
372	Grevillea robusta	Silky Oak	L	Р	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly) <b>COMPLETED</b>	
373	Corymbia ficifolia	Flowering Gum	М	F	N	Crown lift and remove major deadwood	2
374	Grevillea robusta	Silky Oak	L	F	N	Crown clean and remove major deadwood	2
375	Brachychiton populneus	Kurrajong	М	G	N	No work required	
376	Grevillea robusta	Silky Oak	L	G	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly) <b>COMPLETED</b>	
377	Grevillea robusta	Silky Oak	L	G	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly)	1
378	Brachychiton populneus	Kurrajong	L	F	N	No work required	
379	Grevillea robusta	Silky Oak	L	G	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly) <b>COMPLETED</b>	
380	Grevillea robusta	Silky Oak	L	G	N	Crown clean, remove failed limb, root injections and mulch base (Ensure trees receive water regularly) <b>COMPLETED</b>	

381	Brachychiton populneus	Kurrajong	М	G	N	No work required	
382	Cupressus sp.	Pencil Pine	М	F	N	No work required	
383	Liquidambar styraciflua	Sweet Gum	М	G	N	No work required	
384	Jacaranda Mimosifolia	Jacaranda	М	G	N	Crown clean	2
385	Liquidambar styraciflua	Sweet Gum	М	G	N	No work required	
386	Ulmus procera "vanhoutti"	Golden Elm	M	Р	N	Removal of tree and stump COMPLETED	1

387	Cupressus sp.	Pencil Pine	M	F	N	No work required	
388	Cupressus sp.	Pencil Pine	М	F	N	No work required	
389	Erythrina caffra	Coral tree	L	F	N	Crown clean, remove failed branches and reduce over extended laterals	1
390	Erythrina caffra	Coral tree	L	G	3.98	Crown clean, remove laterals and remove stubs	1
391	Erythrina caffra	Coral tree	L	G	2.72	Crown cleanand reduce lateral over table area	1
392	Erythrina caffra	Coral tree	L	G	3.85	Crown clean and reduce over extended laterals	1
393	Cupressus sp.	Pencil Pine	М	G	N	No work required	
394	Platanus x acerifolia	London Plane	L	Е	N	Crown clean and prune away from roofline	1
395	Platanus x acerifolia	London Plane	L	G	N	Crown clean and prune away from roofline and lift over bays	1
396	Platanus x acerifolia	London Plane	L	G	N	Crown clean and prune away from roofline and lift over bays	1
397	Platanus x acerifolia	London Plane	L	G	N	Crown clean and prune away from roofline and lift over bays	1
398	Coymbia citriodora	Lemon Scented Gum	V/L	G	2.35	Crown clean, remove major deadwood, inspect union at crown break and mulch around base of tree.	1
399	Coymbia citriodora	Lemon Scented Gum	L	G	N	Crown clean, remove major deadwood and mulch around base of tree	1
400	Cedrus atlantica	Blue Atlas Cedar	M	E	N	No work required	

401	Coymbia citriodora	Lemon Scented Gum	L	G	N	Crown clean, remove major deadwood and mulch base of tree	1
402	Phoenix canariensis	Date palm	L	G	N	Crown clean, remove major deadwood and mulch base of tree	1
403	Coymbia maculate	Spotted Gum	L	G	2.48	Crown clean, remove major deadwood and mulch base of tree	1
404	Coymbia citriodora	Lemon Scented Gum	L	Е	1.9	Crown clean, remove major deadwood and mulch base of tree	1
405	Coymbia maculate	Spotted Gum	L	G	1.82	Crown clean, remove major deadwood and mulch base of tree t	1
406	Coymbia maculate	Spotted Gum	L	G	1.78	Crown clean, remove major deadwood and mulch base of tree	1
407	Cedrus atlantica	Blue Atlas Cedar	М	Е	N	No work required	
408	Phoenix canariensis	Date Palm	S	G	2.1	Remove dead fronds	1

409	Phoenix canariensis	Date Palm	L	G	2.4	Remove dead fronds	1
410	Eucalyptus camaldulensis	River Red Gum	V/L	G	5.77	Crown clean, remove major deadwood, reduce laterals over road by 2M, aerial inspect cavities, mulch base of tree	1
411	Calistemon viminalis	Bottle Brush	S	G	N	No work required	
412	Phoenix canariensis	Date Palm	М	G	N	Remove dead fronds	2
413	Liquidambar styraciflua	Sweet Gum	S	G	N	Formative prune	3
414	Cercis siliquastrum	Judas tree	S	G	N	Formative prune	3
415	Eucalyptus sideroxylon	Red Ironbark	V/L	G	2.21	Crown clean, remove major deadwood and selective reduce laterals	1
416	Eucalyptus sideroxylon	Red Ironbark	L	G	N	Crown clean, remove major deadwood and thin epicormics growth	1
417	Eucalyptus grandis	Rose Gum	L	G	N	Crown clean, remove major deadwood and crown lift over bays COMPLETED 2017	2
418	Eucalyptus grandis	Rose Gum	V/L	F	5.2	Remove large failed limbs, remove major deadwood, veternize tree to height of large failures and crown shape. Mulch large area at base. Arboricultural report required. Dormant beehive on lowest lateral facing west. URGENT COMPLETED	
419	Robinia pseudocacia	Robinia (Mophead)	S	G	N	Light crown lift	2
420	Robinia pseudocacia	Robinia (Mophead)	S	G	N	Light crown lift	2

421	Pittosporum sp	Pittosporum	S	F	N	No work required	
422	Jacaranda Mimosifolia	Jacaranda	L	G	N	Crown clean	2
423	Jacaranda Mimosifolia	Jacaranda	М	Р	N	Crown clean and inspect union and monitor	2
424	Jacaranda Mimosifolia	Jacaranda	L	F	N	Crown clean	2
425	Jacaranda Mimosifolia	Jacaranda	L	Р	N	Crown clean	2
426	Jacaranda Mimosifolia	Jacaranda	L	Р	N	Crown clean and reduce co-dominant leader, facing North	2
427	Jacaranda Mimosifolia	Jacaranda	L	F	N	Crown clean	2
428	Jacaranda Mimosifolia	Jacaranda	L	F	N	Crown clean	2
429	Jacaranda Mimosifolia	Jacaranda	L	Р	N	Crown clean	2

						·	
430	Brachychiton populneus	Kurrajong	М	G	N	No work required	
431	Jacaranda Mimosifolia	Jacaranda	L	Р	N	Crown clean and remove major deadwood	2
432	Jacaranda Mimosifolia	Jacaranda	М	Р	N	Crown clean and remove major deadwood	2
433	Sysygium paniculatum	Lilly Pilly	L	G	N	Crown clean	2
434	Radarmachera sinica	China Doll	S	F	N	Formative prune and prune away from roof	2
435	Radarmachera sinica	China Doll	S	F	N	Formative prune and prune away from roof	2
436	Brachychiton acerfolius	Flame Tree	М	F	N	No work required	
437	Cotoneaster sp.	Cottoneaster	S	Р	N	Remove tree and stump COMPLETED	
438	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
439	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
440	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
441	Calistemon viminalis	Bottle Brush	S	F	N	Prune away from roofline	2
442	Radarmachera sinica	China Doll	S	F	N	Crown clean	2
443	Metrosideros excelsa	New Zealand Christmas	М	G	N	Crown clean	2
444	Callistemon viminalis	Bottle Brush	S	F	N	Crown clean	2
445	Plumeria sp.	Frangipani	М	G	N	Prune away from roof line	2
446	Sysygium paniculatum	Lilly Pilly	L	G	N	Crown clean	3
447	Malus sp.	Crab Apple	М	F	N	Crown clean and remove major deadwood	2
448	Lophostemon confertus	Brush Box	L	G	N	Crown clean	2
449	Jacaranda Mimosifolia	Jacaranda	S	G	N	No work required	
450	Prunus sp.	Prunus	S	G	N	No work required	
451	Prunus sp.	Prunus	S	G	N	No work required	
	- 1 2 300 Gp.	1 1 233	-				

452	Lophostemon confertus	Brush Box	L	G	N	Crown clean and reduce south-west facing leader	2
453	Lophostemon confertus	Brush Box	L	G	N	Crown clean	2
454	Malus sp.	Crab Apple	M	F	N	Crown clean and remove major deadwood	2
455	Lophostemon confertus	Brush Box	L	G	N	Crown clean	2
456	Jacaranda Mimosifolia	Jacaranda	М	F	N	No work required	
457	Sysygium paniculatum	Lilly Pilly	L	G	N	Crown clean and remove major deadwood	3
458	Lagerstroemia indica	Crepe Myrtle	S	F	N	No work required	
459	Photinia sp.	Photinia	M	F	N	Prune away from roofline	2
460	Callistemon viminalis	Bottle Brush	M	F	N	No work required	
461	Lagerstroemia indica	Crepe Myrtle	S	F	N	No work required	
462	Lagerstroemia indica	Crepe Myrtle	S	F	N	No work required	
463	Callistemon viminalis	Bottle Brush	S	F	N	Crown lift over footpath	2
464	Ligustrum lucidum "tricolour"		S	F	N	No work required	
465	Acacia baileyana	Cootamundra Wattle	S	Р	N	Remove tree and stump	1
466	Lophostemon confertus	Brush Box	M	Р	N	Remove tree and stump	1
467	Eucalyptus cladocalyx	Sugar Gum	V/L	F	5.21	Crown clean, remove major deadwood and carry out climbing inspection - URGENT	1
468	Hymenosporum flavum	Native Frangipani	М	G	N	No work required	
469	Syagus romanzaffianna	Cocos Palm	М	F	N	Prune away from roof. Remove deadfronds and seed pods	2

470	Syagus romanzaffianna	Cocos Palm	М	F	N	Prune away from roof. Remove deadfronds and seed pods	2

471	Gleditsia triacanthos	Honey Locust	S	F	N	Prune away from roofline	2
472	Callistemon viminalis	Bottle Brush	S	F	N	No work required	
473	Callistemon viminalis	Bottle Brush	S	F	N	No work required	
474	Phoenix canariensis	Date Palm	S	F	N	No work required	
475	Phoenix canariensis	Date Palm	S	F	N	No work required	
476	Phoenix canariensis	Date Palm	S	F	N	No work required	
477	Phoenix canariensis	Date Palm	S	F	N	No work required	
478	Acacia sp.	Acacia	M	Р	2.02	Remove major deadwood and crown clean – COMPLETED OCT 2018	
479	Agonis flexuosa	Willow Myrtle	S	G	N	No work required	
480	Hymenosporum flavum	Native Frangipani	S	F	N	No work required	
481	Unknown species		S	F	N	Remove tree and stump	1
482	Unknown species		S	F	N	Remove tree and stump	1
483	Lophostemon confertus	Brush Box	V/L	F	2.7	Prune away from roofline, install cobra bracing between co-dominant stems	2
484	Callistemon viminalis	Bottle Brush	М	Р	N	Formative prune	2
485	Plumeria sp.	Frangipani	S	F	N	Formative prune and prune clear from roofline	2
486	Unknow sp.	Palm	М	F	N	No work required	2
487	Lophostemon confertus	Brush Box	L	F	2.6	Crown clean and prune away from roofline	2
488	Lophostemon confertus	Brush Box	L	G	N	Crown clean and prune away from roofline	2
489	Acacia podalyrifolia	Queensland Silver Wattle	S	Р	N	Remove tree and stump	1
490	Melaleuca linariifolia	Snow in Summer	М	F	N	Prune away from roofline	2
491	Melaleuca sp.	Paper Bark Melaleuca	М	F	N	Prune away from roofline	2
492	Melaleuca linariifolia	Snow in Summer	M	F	N	Remove tree and stump	1

493	Callistemon viminalis x2	Bottle Brush	S	F	N	Crown clean and prune away from roofline	2
494	Eucalyptus botryoides	Southern Mahogany	М	F	N	Crown clean and prune away from roofline	2
495	Melaleuca sp.	Paper Bark Melaleuca	S	Р	N	Crown clean and prune away from roofline	2
496	Callistemon viminalis	Bottle Brush	S	F	N	Crown clean and prune away from roofline	2
497	Callistemon viminalis	Bottle Brush	S	F	N	Crown clean and prune away from roofline	2
498	Unknown sp.	Pine	S	F	N	Crown lift	2
499	Morus sp.	Mulberry	S	F	N	No work required	
500	Robinia pseudocacia	Robinia (Mophead)	S	F	N	Re-pollard	2
501	Robinia pseudocacia	Robinia (Mophead)	S	F	N	Re-pollard	2
502	Robinia pseudocacia	Robinia (Mophead)	S	F	N	Re-pollard	2
503	Cupressus sp.	Pencil Pine	S	P	N	Remove tree and stumps	1
504	Cupressus sp.	Pencil Pine	S	Р	N	Remove tree and stumps	1
505	Cupressus sp.	Pencil Pine	S	Р	N	Remove tree and stumps	1
506	Cupressus sp.	Pencil Pine	S	Р	N	Remove tree and stumps	1
507	Brachychiton populneus	Kurrajong	V/L	G	N	No work required	
508	Unknown sp.	Palm	S	G	N	Prune away from roofline	2
509	Schefflera actinophylla	Umbrella Tree	S	F	N	Prune away from roofline	1
							I
510	Syagus romanzaffianna	Cocos Palm	М	G	N	Remove seed pods and dead fronds	1
511	Syagus romanzaffianna	Cocos Palm	М	G	N	Remove seed pods and dead fronds	1
512	Syagus romanzaffianna	Cocos Palm	М	G	N	Remove seed pods and dead fronds	1

G

G

Ν

Ν

Remove seed pods and dead fronds

Remove seed pods and dead fronds

М

М

Cocos Palm

Cocos Palm

513

514

Syagus romanzaffianna

Syagus romanzaffianna

515	Syagus romanzaffianna	Cocos Palm	М	G	N	Remove seed pods and dead fronds	1
516	Gleditsia triacanthos	Honey Locust	S	F	N	Prune away from roofline	2
517	Schefflera actinophylla	Umbrella Tree	М	F	N	Prune away from roofline	2
518	Photinia sp.	Photinia	S	F	N	No work required	
519	Schefflera actinophylla	Umbrella Tree	S	F	N	Prune away from roofline	2
520	Melaleuca armillaris	Melaleuca	S	F	N	Prune away from roofline	2
521	Plumeria sp.	Frangipani	S	F	N	Prune away from roofline	2
522	Arbutus unedo	Irish Strawberry	S	F	N	Remove Tree - Dead	1
523	Schefflera actinophylla	Umbrella Tree	М	F	N	Prune away from roofline	2
524	Callistemon viminalis	Bottle Brush	S	Р	N	Crown clean	2
525	Melaleuca armillaris	Bracelet Honey Myrtle	М	F	N	Crown clean and crown lift	3
526	Photinia sp.	Photinia	S	F	N	Prune away from sign	2
527	Schefflera actinophylla	Umbrella Tree	М	F	N	Prune away from roofline	2
528	Callistemon viminalis	Bottle Brush	М	F	N	Reduce crown over carpark	2
529	Arbutus unedo	Irish Strawberry	М	Р	N	Remove Tre - Dead	1

530	Eucalyptus spathulata	Swamp Mallet	L	G	2.8	Crown clean, remove major deadwood and prune away from sign	1
531	Callistemon viminalis	Bottle Brush	М	G	N	No work required	
532	Lophostemon confertus	Brush Box	М	F	N	Crown clean	3
533	Acacia baileyana	Cootamundra Wattle	М	G	N	Crown clean	2
534	Privet sp.	Privet	S	G	N	No work required	
535	Coymbia maculate	Spotted Gum	L	G	N	Crown clean, remove major deadwood and crown lift laterals over road	1
536	Platanus x acerifolia	London Plane	М	G	N	Crown lift over road/services and thin canopy by 25%	2

537	Callistemon viminalis	Bottle Brush	S	G	N	Remove (not suitable for area) COMPLETED	
538	Ficus carica	Fruiting Fig	M	F	N	Full crown reduction by 1M, ensure tree is reduced over service	1
539	Callistemon viminalis	Bottle Brush	М	G	N	Reduce from road	2
540	Photinia sp.	Photinia	S	F	N	Reduce from road	2
541	Robinia pseudocacia	Robinia (Mophead)	S	F	N	Re-pollard	2
542	Cupressus sp.	Pencil Pine	М	F	N	NO work required	
543	Acer platanoides	Norway Maple	S	G	N	Formative prune	2
544	Fraxinus angustifolia subsp. Oxycarpa	Desert Ash	L	F	N	Crown clean and major deadwood	2
545	Lagunaria patersonia	Norfolk Island Hibiscus	М	G	N	Remove epicormics shoots	2
546	Syagus romanzaffianna	Cocos Palm	М	G	N	Remove seed pods, dead fronds and prune away from roofline	2
547	Syagus romanzaffianna	Cocos Palm	М	F	N	Remove seed pods, dead fronds and prune away from roofline	2
548	Syagus romanzaffianna	Cocos Palm	М	F	N	Remove seed pods, dead fronds and prune away from roofline	2
549- COUNCIL	Eucalyptus sp.	Gum	V/L	G	3.2	Crown clean, reduce to low eastern upright, crown balance and carry out aerial inspection COMPLETED – Tre Removed	

550	Toona Australis	Australian Red Cedar	S	F	N	Remove major deadwood	2
551-	Coymbia maculate	Spotted Gum	V/L	G	3.1	Remove major deadwood and reduce lower lateral toward parking bay COMPLETED	1
552	Coymbia citriodora	Lemon Scented Gum	L	G	N	Install cobra bracing and remove major deadwood	1
553	Eucalyptus torquate	Coral Gum	М	F	N	Crown clean	3
554	Cinnamomum camphora	Camphor Laurel	S	G	N	Crown clean	3
555	Photinia sp.	Photinia	S	F	N	Crown clean	3
556	Citharexlem spinosum	Fiddlewood	М	F	N	Crown clean and prune away from roofline	3
557	Citharexlem spinosum	Fiddlewood	М	F	N	Crown clean and prune away from roofline	3
558	Eucalyptus sp.	Gum Tree	S	G	N	Formative prune	3

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559	Eucalyptus sp.	Gum Tree	S	F	N	Formative prune	3
560	Eucalyptus sp.	Gum Tree	S	F	N	Formative prune	3
561	Lophostemon confertus	Brush Box	М	F	N	Crown clean	1
562	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and prune from roofline	2
563	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and prune from roofline	2
564	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and prune from roofline	2
565	Callistemon viminalis	Bottle Brush	S	G	N	Prune away from roofline	2
566	Lophostemon confertus	Brush Box	S	F	N	Crown clean	2
567	Sysygium paniculatum	Lilly Pilly	М	G	N	Prune away from roofline	2
568	Plumeria sp.	Frangipani	S	G	N	Prune away from roofline	2
569	Callistemon viminalis	Bottle Brush	S	G	N	Crown clean and crown lift	2

570	Callistemon viminalis	Bottle Brush	S	F	N	Crown clean and crown lift	2
571	Metrosideris excels	New Zealand Christmas Tree	S	F	N	Prune away from roofline	2
572	Sysygium paniculatum	Lilly Pilly	S	F	N	Prune away from roofline	2
573	Toona Australis	Australian Red Cedar	S	F	N	No work required	
574	Eucalyptus sp.	Gum Tree	М	F	N	Reduce over road and remove major deadwood	1
575	Coymbia maculate	Spotted Gum	V/L	G	14.1	Remove major deadwood and reduce lower lateral over building and parking bays COMPLETED Feb 2017	2
576	Angophora costata	Smooth-Barked Apple	L	G	2.92	Crown clean, reduce crown over shelter and remove major deadwood	1
577	Callistemon viminalis	Bottle Brush	S	G	N	Remove major deadwood and prune away from roofline	2
578	Callistemon viminalis	Bottle Brush	S	F	N	Remove epicormics growth	3
579	Pyrus ussuriensis	Manchurian Pear	S	F	N	Prune away from roofline	2
580	Pyrus ussuriensis	Manchurian Pear	S	F	N	Prune away from roofline	2

581	Pyrus ussuriensis	Manchurian Pear	S	F	N	Prune away from roofline	2
582	Pyrus ussuriensis	Manchurian Pear	S	F	N	Prune away from roofline	2
583	Callistemon viminalis	Bottle Brush	М	G	N	Remove major deadwood and prune away from roofline	2
584	Callistemon viminalis	Bottle Brush	М	F	N	Remove major deadwood and prune away from roofline	2
585	Privet sp.	Privet	S	F	N	No work required	
586	Eucalyptus torquate	Coral Gum	S	F	N	No work required	
587	Hymenosporum flavum	Native Frangipani	S	F	N	Crown clean and remove major deadwood	2
588	Callistemon viminalis	Bottle Brush	S	G	N	No work required	
589	Lagunaria paterson	Norfolk Island Hibiscus	S	F	N	No work required	

590	Callistemon viminalis	Bottle Brush	М	F	N	Remove epicormics growth	3
591	Callistemon viminalis	Bottle Brush	М	F	N	Remove epicormics growth	3
592	Hymenosporum flavum	Native Frangipani	S	F	N	Formative prune and remove major deadwood	3
593	Eucalyptus torquate	Coral Gum	М	F	N	Crown clean and remove major deadwood	2
594	Eucalyptus sp.		L	F	2.6+ 2.13+ 1.98	Crown clean and reduce crown by approximately 25% COMPLETED	2
595	Lophostemon confertus	Brush Box	М	F	N	Crown clean and crown lift	2
596	Lophostemon confertus	Brush Box	M	Р	N	Remove tree and stump	1
597	Lophostemon confertus	Brush Box	М	F	N	Crown clean and crown lfit	3
598	Corymbia ficifolia	Flowering Gum	М	F	N	Formative prune	2
599	Eucalyptus torquate	Coral Gum	М	F	N	Crown clean and crown lift	2
600	Lophostemon confertus	Brush Box	М	F	N	Crown clean and crown lfit	2
601	Eucalyptus sp.	Melalleuca	S	F	N	No work required	

602	Callistemon viminalis	Bottle Brush	S	F	N	No work required	
603	Corymbia ficifolia	Flowering Gum	М	F	N	Crown clean and crown lift	2
604	Eucalyptus torquate	Coral Gum	S	F	N	Crown clean and reduce laterals over footpath and parking bays	2
605	Sapium sebiferum	Chinese Tallow Wood	М	F	N	No work required	
606	Cinnamomum camphora	Camphor Laurel	М	F	N	Crown clean, crown lift and prune away from building	2
607	Photinia sp.	Photinia	М	F	N	Crown clean and prune away from building	2
608	Betula pendula	Silver Birch	S	F	N	Formative prune	3

## APPENDIX A: DISCLAIMER AND LIMITATIONS

This report only covers identifiable defects present at the time of inspection. The author accepts no responsibility or can be held liable for any structural defect or unforeseen event/situation that may occur after the time of inspection, unless clearly specified timescales are detailed within the report.

The author cannot guarantee trees contained within this report will be structurally sound under all circumstances, and cannot guarantee that the recommendations made will categorically result in the tree being made safe.

Unless specifically mentioned this report will only be concerned with above ground inspections, that will be undertaken visually from ground level. Trees are living organisms and as such cannot be classified as safe under any circumstances. The recommendations are made on the basis of what can be reasonably identified at the time of inspection therefore the author accepts no liability for any recommendations made.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the author can neither guarantee nor be responsible for the accuracy of information provided by others.

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# APPENDIX L - HERITAGE IMPACT STATEMENT



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# REPATRIATION PRECINCT REACTIVATION

WARDS 1 - 2 REFURBISHMENT



PREPARED FOR SILVER THOMAS HANLEY
13 DECEMBER 2019



243 Pirie Street Adelaide South Australia 5000 T +61 8 8232 3626 admin@ggand.com.au

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REPORT NAME:	Repatriation Precinct Wards 1 & 2 Heritage Impact Statement
FOR:	Silver Thomas Hanley
JOB NUMBER:	19134

# PREPARATION, REVIEW AND APPROVAL

REVISION #	DATE	PREPARED BY	REVIEWED BY	APPROVED BY
DRAFT 1	13.12.2019	EL	ND	ND
FINAL	16.12.2019	EL	ND	ND

# **ISSUE REGISTER**

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## 1. INTRODUCTION

Grieve Gillett Andersen was engaged by Silver Thomas Hanley to prepare a Heritage Impact Statement for proposed works at the Repatriation Precinct, Daw Park.

A Government commitment to reactivate the Repatriation Precinct has resulted in a number of projects to refurbish and reoccupy currently vacant buildings at the site.

This Heritage Impact Statement is specifically in relation to the proposed upgrades to Wards 1 and 2

This report has been prepared by Elizabeth Little, Senior Heritage Architect and reviewed by Nicole Dent, Associate Director of Grieve Gillett Andersen.

#### 1.1. OBJECTIVES OF THE HERITAGE IMPACT STATEMENT

The primary objective of this Heritage Impact Statement (HIS) is to assess any impact of the proposed upgrade works on the identified heritage values of the place, which is entered in the South Australian Heritage Register.

This HIS will accompany a Development Application for the proposed works, to be submitted to the State Commission Assessment Panel (SCAP).

The following tasks have been undertaken in the preparation of this document:

- A physical inspection of Wards 1 and 2 and their context in the Repatriation Hospital site;
- A review of the history and development of the buildings and site generally;
- Review of the documentation of proposed works, and discussions with Silver Thomas Hanley informing their preparation;
- A review of the heritage values of the place, to determine what impacts may occur as a result of the development.

#### 1.2. LOCATION OF THE DEVELOPMENT

The Repatriation Precinct is located at 216 Daws Road, Daw Park, in the City of Mitcham Council Area. Wards 1 and 2 are located at the eastern end of the Repatriation site, facing Daws Road.



Figure 1: Location Plan, Wards 1 and 2, Repatriation Precinct, Daw Park

#### 1.3. USE AND OWNERSHIP

The Repatriation site is owned by the South Australian Government. This HIS has been commissioned by Silver Thomas Hanley on behalf of DPTI.

Wards 1 & 2 are currently vacant, but are proposed to form part of the upgraded health services facility, to function as the Transition Care Inpatient Unit.

#### 1.4. SUMMARY OF PROPOSAL

This project seeks to upgrade Wards 1 and 2, to provide patient services for inpatients in transition to and from other facilities. Previous incremental upgrades to the building have been generally ad hoc, and have resulted in little original fabric being evident internally.

The works include demolition and stripping out of existing floor coverings, joinery, sanitary facilities, lightweight partitions, and services, and the construction of a new fitout including all required fixtures and fittings. The original footprint of the building is to be retained, and the general symmetry of the floor plan conserved. New internal partitions will be constructed to suit the new plan requirements, with existing loadbearing walls retained.

## 2. EXISTING HERITAGE LISTINGS

The Repatriation Precinct site contains items of both State and Local Heritage value, with some buildings being assigned both levels of heritage listing concurrently. The subject buildings are not included in the Local Heritage listing, so this is not discussed further in this report.

The extent of the Repatriation Precinct site entered in the South Australian Heritage Register is indicated in Figure 2.



Figure 2: Summary of Heritage Places (Grieve Gillett Andersen over SA Viewer Map, December 2019)
Red hatch denotes State Heritage Places
Blue dot / hatch denotes Local Heritage Places
Green outline denotes location of Wards 1 and 2

#### 2.1. ASSESSMENT OF SIGNIFICANCE

The place was entered in the Register on 13 December 2013 (Place ID: 26305). The Statement of Significance provided on the SA Heritage Places Database reads:

The Repatriation General Hospital has a significant association with an international event of profound historical importance to the South Australian community: World War II (criterion (g)). The outbreak of World War II created an immediate need for more hospital beds. In June 1940 the South Australian State Cabinet approved construction of a new 880 bed military hospital for injured soldiers and a site near the corner of Daws Road and Goodwood Road, was chosen and resumed under wartime emergency regulations: the 105 Australian Military Hospital (105 AMH) was formed on 10 June 1941. Despite changes over many years, the essence of the original layout of the site is still discernible in the symmetrical arrangement of the central buildings on the north-south axis, with the original wards to its east. The site is still characterised by comparatively low-scale development interspersed with well-maintained gardens. The surviving wartime buildings and structures, together with later items of a commemorative nature such as the Peace Garden, act as reference points for the unique history of the place. The Repatriation General Hospital has a strong and ongoing cultural association with veterans who served in World War II and subsequent conflicts: strong links with the Returned and Services League and other ex-service organisations (criterion (f)). This association is discernible in the physical fabric and the culture of the place, by reference to wartime experience (various memorials, naming of wards etc, and in the corporate identity promoted by the Hospital). For the generation of South Australians who experienced World War II as servicemen and women, and for their families, the 'Repat' played an important role. As part of their rehabilitation before resuming civilian life, a large number of veterans passed through the Hospital after returning from military service overseas. A considerable proportion of veterans and war widows returned to the 'Repat' for on-going treatment for decades following their military discharge, as indeed many still do to the present day. In its policies and internal culture the hospital has maintained a strong focus on providing specialised medical and social support services to veterans and war widows, and in this respect it represents a unique association with the veteran community in this state. This association is demonstrated in numerous tangible and intangible references to the connections with military history on the site including the naming of wards after battles, Peace Garden dedication, chapel windows, remembrance ceremonies, and the museum. The special association with the Repatriation General Hospital has continued for veterans of post-World War II conflicts and for currently serving members of the military forces.

The assessment of the place against the criteria set out in Section 16 of the *Heritage Places Act 1993* determined that it meets the following criteria:

- (a) It demonstrates important aspects of the evolution or pattern of the State's history;
- (d) it is an outstanding representative of a particular class of place of cultural significance;
- (f) it has strong cultural or spiritual associations for the community or a group within it;
- (g) it has a special association with the life or work of a person or organisation or an event of historical importance.

Further detail on how the place meets these criteria is set out in the Summary of State Heritage Place report, prepared by the South Australian Heritage Council, as follows:

(a) It demonstrates important aspects of the evolution or pattern of the State's history;

The Repatriation General Hospital is unique in South Australia as the only purposebuilt hospital for veterans and serving defence personnel. It is associated with international events that touched an entire generation and left a lasting impression on the lives of thousands of South Australians.

The history of the Hospital is intrinsically linked with World War II, one of the major social upheavals of the twentieth century, and its impact on South Australians. This link is demonstrated in numerous tangible and intangible references to military history on the site (naming of wards after battles, Peace Garden dedication, chapel windows, remembrance ceremonies, museum, etc.).

(d) it is an outstanding representative of a particular class of place of cultural significance;

The Repatriation General Hospital is a well-preserved and largely intact representative of a particular class of South Australian public buildings completed during and after World War II. There are few places in South Australia similar to Repatriation General Hospital with which direct comparisons may be made. Wartime restrictions on materials limited new construction to only essential buildings, and in many cases these were of a temporary nature (many of the original buildings on the hospital site were timber and iron construction - of which the former post office building is probably the sole survivor). Few institutional buildings of the scale of the 'Repat' were built in the 1940s, and it was not until the mid 1950s that larger projects such as the Nurses Home at Glenside Hospital were attempted. Given the circumstances, ii is notable that the main buildings of the Repatriation General Hospital were conceived and built as substantially as they were as part of planning for it to become a repatriation hospital after the end of the war.

Although there have been ongoing additions and alterations to the hospital over its history, the central administrative core, comprising A, B, and C Blocks and the former Guard House, are well-preserved and largely intact as built in 1942. Later additions and internal reconfigurations have been undertaken in sympathy with the original design and have not significantly impinged upon the integrity of the place. Alterations to the wards have been more intrusive, though the original form and scale is preserved.

(f) it has strong cultural or spiritual associations for the community or a group within it;

The South Australian veteran community has maintained a high regard for the Repatriation General Hospital over its 70 year history. A significant proportion of veterans who served in World War II and subsequent conflicts are likely to have had direct contact with the hospital, either as a result of injuries sustained during their service or for medical treatment in later life. The hospital has maintained strong links with the Returned and Services League and other ex-service organisations, which have been involved in decisions about hospital management through representation on the Hospital Board.

Many veterans and their families have maintained a close association with the Repatriation General Hospital since the war years. It has fostered this special relationship with its primary client group through development of medical and surgical specialties appropriate to their needs, along with targeted social services such as the Vietnam Veterans Counselling Service and the position of Veterans' Advisor. Though now accepting a higher proportion of 'civilian' patients, the hospital still guarantees priority access for veterans, and promotes itself as 'the Veterans' Choice in

South Australia! This sentiment is reflected in the slogan used on the hospital's website: 'RGH is proudly serving those who have served for us'. Evidence of the high value placed on the hospital by the contemporary veteran community is observable in its sustained resistance to proposals in recent years to remove high level services from the Hospital and redirect veterans to other public hospitals for certain treatments.

There are a number of specific sites within the Hospital of special significance. The Schools' Patriotic Fund {SPF} Hall has a special significance as it demonstrates the contribution of civilians to the war effort and the support of veterans. It was built using funds raised by the Schools Patriotic Fund and the Red Cross, for the benefit of patients of the hospital, and was opened in August 1943. During the war years the hall was a venue for theatrical performances, concerts and films for the entertainment of inpatients, and helped keep up morale and relieve the boredom which often accompanied lengthy hospital stays. Many popular entertainers volunteered their time to perform there and visit patients. The annexes once housed a library and reading rooms and recreation rooms for the use of ambulatory patients. Over the years it was used for ceremonies and special events, staff meetings and training sessions. The hall retains its proscenium arch stage and fixtures and is still used regularly for theatrical performances by a local amateur theatre group.

The chapel continues in regular use for commemorative services throughout the year, and for funeral services for deceased veterans. Its distinctive decorative elements, particularly the stained glass windows and wall plaques, express the special connection with the veteran community. The Peace Garden, located nearby, also has significance as a sanctuary and place for quiet reflection for hospital patients and their families.

The hospital represents a practical expression of the nation's obligation towards those who served their country in war, and to that extent it is also a memorial.

(g) it has a special association with the life or work of a person or organisation or an event of historical importance.

The Repatriation General Hospital has a special association with an international event of profound historical importance to a significant sector of the South Australian community. During World War II the hospital received thousands of South Australian casualties repatriated from overseas war zones, and it has continued to be associated with the broader veteran community over its entire 70 year history. It has direct personal associations for the patients, including many ex-prisoners of war, who were admitted for treatment and rehabilitation following the traumatic experiences of the war.

#### 2.2. EXTENT OF LISTING / EXTANT FABRIC / SUMMARY OF ALTERATIONS

The formal extent of listing is as defined in Figure 2 above, and includes a number of buildings outside the scope of this HIS. In specifically discussing the extent of listing as it applies to Wards 1 and 2, we refer to the assessment against criterion (d), which states:

Although there have been ongoing additions and alterations to the hospital over its history, the central administrative core, comprising A, B, and C Blocks and the former guard House, are well-preserved and largely intact as built in 1942. Later additions and internal reconfigurations have been undertaken in sympathy with the original design and have not significantly impinged upon the integrity of the place.

Alterations to the wards have been more intrusive, though the original form and scale is preserved. (bold emphasis by author)

The Ward Buildings are very austere in design, with little to no decoration or embellishment. They retain their simple, symmetrical plan form, with a simple terracotta tile gable roof over the primary form, and a circular plan, flat roofed space at the east and west ends of the southern section of the building. A simple portico denotes the central front entrance. External walls feature an unpainted brick plinth, with painted render above. Regular, vertically

proportioned windows are located along the primary (south) façade, with panels above that are variously filled in with solid boards, or contain louvres for ventilation or services exhaust purposes. The window frames have been replaced at some point with bronzed aluminium frames.

We therefore provide a summary of aspects of the buildings that contribute to their heritage value, based on an understanding of the original designs, and a physical inspection of extant fabric, as follows:

- External symmetrical form of the original building, including circular plan form rooms at east and west ends;
- East west axial layout, continued by wards to the north;
- Single storey scale and form;
- Terracotta roof tiles and concrete deck roofs to circular end pavilions;
- Vertical proportions of windows generally (although original frames have been replaced with bronzed aluminium);





Figures 3,4: External views of the Wards, showing overall form and curved end rooms (GGA, 2019)

Internally there is little visible evidence of original fabric or even a sense of the original planning intent. Remnant features include:

- Generally symmetrical planning about the primary north south axis, centred on the primary entrance;
- Floor finishes to the central north south axis corridor appear to be original;
- Curved corner detail at the primary north south corridor / east west corridor intersection.





Figures 5,6: Internal views of the Wards, showing floor finish to central corridor, later partitions (GGA, 2019)

#### 2.3. HISTORICAL BACKGROUND OF THE PLACE

The outbreak of the Second World War created an immediate need for more hospital beds, and in June 1940 the South Australian State Cabinet approved construction of a new 800 bed military hospital for injured soldiers. Initial sketch plans were prepared by Melbourne firm, Stephenson and Turner. Local architects Woods, Bagot, Laybourne-Smith and Irwin were commissioned to develop the plans and oversee the construction of the new hospital. The supervising architect was Louis Laybourne-Smith.

The first sections of the 105 Australian Military Hospital (AMH) (later the Repatriation General Hospital) were constructed and opened in 1942 in response to the need for the new military hospital for injured soldiers. The first buildings included three wards, the administrative block and nurses' quarters. Temporary huts and tents were also erected, and continued to be used for several years. Meanwhile building continued at the site, with the chapel, hall and additional wards being completed by 1944.

When built, 105 AMH at Daws Road was the most modern development of its kind in South Australia. The architectural concept of single-storey pavilion wards was standard for new hospital development at the time and it was only when space became a constraint that hospitals were built in large multi-storey blocks.

105 AMH provided occupational therapists who instructed patients in arts, crafts and practical activities such as carpentry. Sports such as lawn bowls, badminton, table- tennis and archery were encouraged, as well as gardening and animal husbandry. As well as giving patients something useful to do, and achieving significant savings for the hospital kitchens, it was considered that imparting the skills to enable patients to grow their own food at home, or perhaps undertake a new career in farming, would help them make the transition back into civilian life.

After the Japanese surrender brought the war to an end in September 1945, Australian military hospitals were gradually handed over to the Repatriation Commission. This meant the withdrawal of serving army personnel and replacement with civilian administrators, nursing and medical staff, and created some recruitment problems. In September 1946 120 long term patients were transferred from the Keswick Repatriation Hospital, and on 1st February 1947 a formal ceremony marked the official transfer of the 105 AMH from the Army to the Repatriation Commission, which became part of the Commonwealth Public Service in that year. Administration thenceforth came under the Repatriation Department, later the Department for Veterans' Affairs, until the hospital was transferred to become part of the South Australian Health Department in July 1995. At the time of the handover to the Repatriation Commission the newly named Repatriation General Hospital (Springbank) had 485 beds.

The architects' vision for the completed hospital was never fully realised, only four pairs out of the 12 brick and tile pavilion wards were built as originally conceived, with many 'temporary' timber framed buildings remaining on the site until the early 2000s. Compromise and changing needs dictated the nature of future development of the site over succeeding years. Two timber-framed 'Nightingale' wards were built north of Wards 7 and 8, but were demolished to make way for new operating theatres in 1985. Many of the early timber-framed buildings on Service Road disappeared when the new Rehabilitation Centre was constructed north of the Chapel in 2003, and new Psychiatric wards were completed in recent years. Most recently, the double-storey building to the immediate east of Building C was constructed for Flinders University as a physiotherapy building.

(Extracted from the State Heritage Statement of Heritage Significance and the South Australian Heritage Council Assessment Report).

The Repatriation Hospital was closed in 2017, but is now being progressively reactivated as a health and community precinct.

## 2.4. HISTORIC PHOTOS



Figure 7: Aerial view of newly completed complex from east. ('The Repat: a biography of the Repatriation General Hospital', published 1994)



Figure 8: Aerial view of newly completed complex from west. ('The Repat: a biography of the Repatriation General Hospital', published 1994)

## 3. HERITAGE IMPACT ASSESSMENT

#### 3.1. DESCRIPTION OF DEVELOPMENT PROPOSAL

This project involves an internal refurbishment and minor external upgrade to Wards 1 and 2, to provide patient services for inpatients in transition to and from other health facilities. Previous incremental upgrades to the building have been generally ad hoc, and have resulted in little original fabric being evident internally.

The original footprint of the building is to be retained, and the general symmetry of the floor plan conserved. New internal partitions will be constructed to suit the new plan requirements, with existing loadbearing walls retained.

The intent of the works is to provide patient and staff facilities to support the function of transitional inpatient care. A detailed schedule of works is provided below.

#### 3.1.1. EXTERNAL WORKS

External works proposed include:

- Repairs to leaking concrete roofs to circular end rooms;
- Repairs to terracotta tiled roof;
- Repair / replacement of downpipes and gutters;
- Construction of new entrance canopy to accommodate ambulance access;
- New automated entrance door;
- New handrails as required to comply with current building codes;
- External painting
- Construction of new courtyard fencing to east and west ends of building, and northern façade (refer plan at Figure 11);

No works are proposed to the following external elements at this stage:

- Existing non original window frames and glazing;
- Unpainted brick plinth.



Figure 9: External form and materials of the Ward Building, including central entrance canopy (GGA, 2019)

#### 3.1.2. INTERNAL WORKS

#### Internal works include:

- demolition and removal of existing internal fabric including floor coverings, joinery, sanitary facilities, lightweight partitions, suspended ceilings, fixtures and fittings, and services;
- construction of new lightweight walls to suit new layout (refer plan at Figure 11);
- Installation of new floor coverings;
- Installation of new ceilings and repair of some existing high level ceilings;
- Installation of new fixtures and fittings within patient care areas, support spaces, staff facilities and common areas;
- Provision of new sanitaryware to WCs throughout;
- Provision of new kitchen and kitchenette facilities;
- Painting of new and existing wall surfaces;
- Provision of new electrical, hydraulic, fire and mechanical services.



Figure 10: Interior of curved façade space, indicating later lowered ceilings, joinery, floor coverings (GGA, 2019)



Figure 11: Proposed Wards 1 & 2 floor plan (STH, 2019)



Figure 12: Proposed South Elevation (STH, 2019)

# 3.1.3. ASSESSMENT OF HERITAGE IMPACT

The following table responds directly to the Department for Environment & Water *Heritage Impact Statement Guidelines for State Heritage Places*.

Heritage Impact review	
Provide a brief summary of the advantages and disadvantages of preliminary development options explored and the reasons for the selection of the final proposal.	The proposed new function of the building has been assigned on the basis that the building has operated as a ward in the past, and will continue this appropriate use.
Provide a brief description of the development proposal, focussing on the effect upon all the elements of heritage significance including site elements and settings.	The proposed works maintain the external envelope of the building with little to no physical change to the exterior of the building.  The proposed new entry canopy is proposed to be a self-supporting steel structure with a glazed roof canopy, which will sit below the gutter line of the existing projecting entry structure.  New secure courtyard fencing is proposed to be constructed of vertical steel fins, allowing visual transparency to the building façade.  Internal planning has been designed to maintain the generally symmetrical planning of the building, and retain existing load bearing walls. Internal planning is also driven by spatial requirements for patient care spaces and health standards generally.
Describe/assess the impacts, positive and/or negative of the various aspects of the proposal on the cultural heritage significance of the State Heritage Place.	The proposed works will not impact negatively on the historical value of the place. The historical use of the building for patient care is continued. The proposed works will support the value of the ward buildings and Repatriation Hospital site more broadly as an outstanding representative of a particular class of place, continuing the use for patient care.  The proposed works will have a positive impact on the social and association significance of the place, maintaining the use of the place for patient care. The building having been vacant for some years has resulted in the deterioration of some building fabric, a situation that will be addressed with reuse of the wards.

Provide reasons why the proposed works are Ongoing and continuous use of the building is necessary for the conservation of the State the best way to ensure its ongoing maintenance Heritage Place. Why is this best and conservation. Unused and underutilised solution/outcome? buildings often suffer from neglect and lack of maintenance and repair work being undertaken. Detail how the proposal has been influenced by The proposal meets the objectives of the and/or addressed Local Council Development Mitcham Development Plan, specifically the Plan, Council wide objectives, design guidelines Mitcham (City) Mixed Use Zone Concept Plan or policies. (Fig MU/1), which anticipates mixed use for the Repatriation Hospital Site, and specifically for the area containing the ward buildings, Health and Rehabilitation uses. Refer Figure 13 for extract from the Development Plan. Detail measures that are to be taken to mitigate Design phase mitigation measures have included potential detrimental impacts on the cultural preliminary consultation with Heritage South heritage significance of the place (e.g. Australia, to discuss the extent and nature of conservation works, interpretation). works, and incorporation of their feedback into the design proposal, as well as consideration of significant fabric in proposing retention of existing loadbearing walls and the external form and footprint of the building. Mitigations measures will also be employed during the construction phase to ensure existing fabric is protected during the works, and required conservation works will be undertaken (for example repairs to the concrete roofs at either end of the building, and repair of salt damp affected masonry walls).

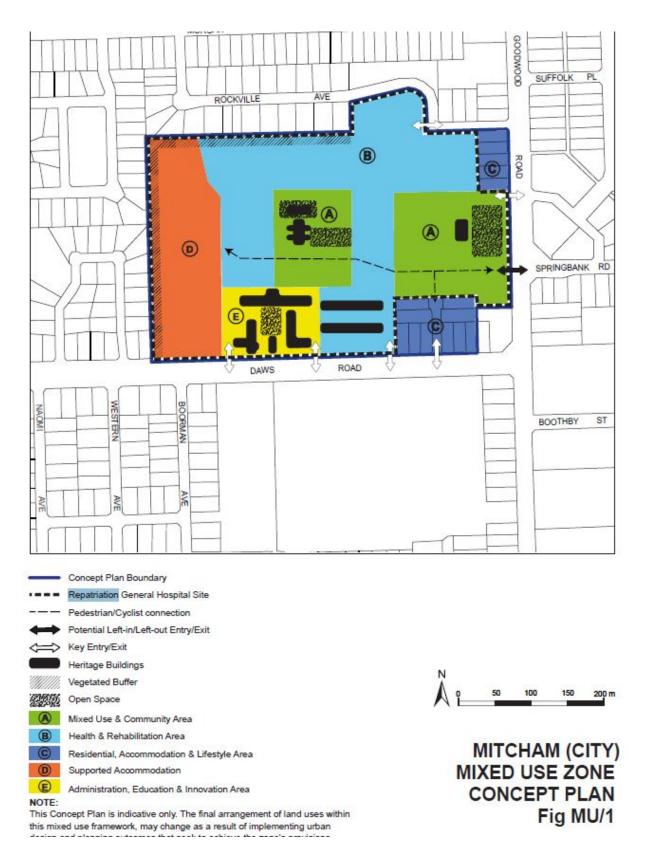


Figure 13: Figure MU/1 extracted from Mitcham Council Development Plan

# 4. CONCLUSION

The proposed alterations to Wards 1 and 2 at the Repatriation Precinct will see the building activated and fully utilised, which is the best outcome for a currently vacant building.

The proposed use for patient care is an appropriate use for the building, maintaining the historic use with updated and compliant facilities. The internal modifications respect the historically symmetrical planning and retain loadbearing walls. Externally, minimal changes are proposed, and where new works occur, for example the entry canopy, the design is clearly contemporary and complimentary to the original fabric.

Conservation works will be undertaken to the roof, rainwater goods, and external fabric as required.

The proposal will see an ongoing, appropriate use for the place, and has no negative impacts on the significance of the place.



# APPENDIX M - DISCLAIMER

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