

# TRAFFIC IMPACT ASSESSMENT

**Maitland Private Hospital Redevelopment  
173-175 Chisholm Road, Ashtonfield**

**Prepared for:**

Health Care  
Level 13,  
Sussex Street,  
Sydney,  
NSW 3000

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## BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Health Care (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

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## DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
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# 1 Introduction

## 1.1 Context

Health Care (HeC) have engaged SLR Consulting Australia Pty Ltd (SLR) to undertake a Traffic Impact Assessment (TIA) for Stage 6C of the proposed redevelopment at Maitland Private Hospital located at located at 175 Chisholm Rd, Ashtonfield, NSW.

This report has been prepared to provide a traffic, transport, and parking assessment relevant to a number of concurrent applications relating to the Maitland Private Hospital site.

The first application is a modification to the still current 2015DA15-2853 application that was approved by Council with conditions by way of consent notice dated 17 November 2017. The modification primarily involves incorporating the approved at-grade car parking previously proposed and approved at 9 and 11 Molucca Close (Lots 4 DP245545 and Lot 5 DP245545) and relocating of these spaces internal to the main site as part of the new multi upper deck car park.

The second application is a new expansion of the existing (and approved) use that will include:

- Upward extension to include a new ward (approx. 675sqm) consisting of:
  - 3 Beds; and,
  - 17 Chemotherapy Chairs.
  - For the purposes of the TIA the 17 Chemotherapy Chairs will be considered as beds i.e., 20 beds in total.
- An additional 63 car parking spaces in total, 28 of which are additional to the previously approved spaces and 7 of which replace spaces lost to the introduction of an Icon Cancer Bunker. The remainder are relocated spaces from previous approvals. These are to be provided on a new upper deck car park in the south-eastern corner of the site; and,
- Internal change within the existing hospital.

The development plans are included within **Appendix A** for context.

## 1.2 Assessment Scope

This TIA report assesses the consistency of the development with Council and State planning, and the impacts of the proposed development on the surrounding transport networks. The TIA identifies the transport infrastructure required to support the development, and provides an assessment of the traffic and transport aspects of the development against the requirements of the following relevant authorities:

- Maitland City Council; and
- Transport for New South Wales (TfNSW).

The TIA addresses the following:

- The vehicle site access;
- A review of the history of the car parking arrangements on site;

- The proposed provision for car parking;
- The servicing requirements and swept path assessments for the site; and
- External road network operations and development impact.

### 1.3 Report Structure

The structure of this TIA report is shown in **Table 1**.

**Table 1 TIA Report Structure**

Section	Title	Description
1	Introduction	Identifies the context of the project.
2	Existing Road Appraisal	Describes the existing transport network including traffic volumes, crash history, and bus services.
3	Development Overview	Describes the development proposals.
4	Parking Assessment	This section of the report considers the existing car parking arrangement, requirements and assesses the proposals on the car parking demand.
5	Traffic Assessment	Outlines the technical analysis undertaken to confirm the appropriateness of the proposed development from traffic engineering perspective.
6	Conclusion	Summarises the findings of the assessment and recommends approval conditions.

## 2 Existing Situation

This section of the report sets out the existing conditions surrounding the site including the road network, crash data, and public transport access.

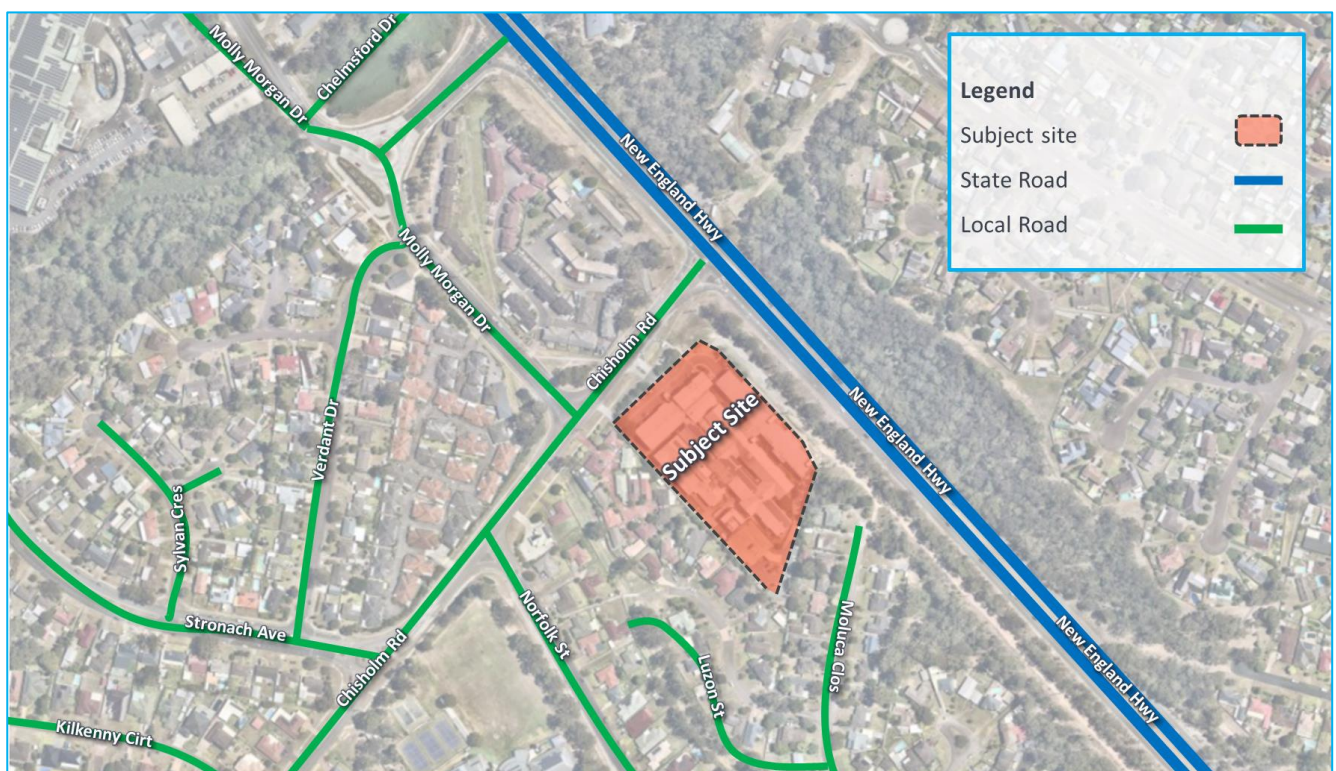
### 2.1 Subject Site

The sites location in a local and strategic context are shown at **Figure 1** and **Figure 2** for reference.

The site is located to the southwest of the New England Highway, which is a state road running between Hunter Valley and Newcastle in the proximity of the site. The hospital is located between the residential areas of East Maitland and Ashtonfield on Chisholm Road, a local road bisecting the local residential area and providing access to the New England Highway. The hospital is located approximately 25km northeast of Newcastle and 43km southeast of Singleton.

The subject site is located at 175 Chisholm Street, Ashtonfield and is legally defined as Lots 4 and 5 DP 245545. The site is located within the Local Government Area (LGA) of Maitland City Council.

**Figure 1 Subject Site Local Context**



**Figure 2 Subject Site Regional Context**



## 2.2 Surrounding Road Network

Details of the key roads surrounding the subject site are provided in **Table 2**.

**Table 2 Key Road Network**

Road Name	Classification	Authority	Existing Form	Posted Speed
New England Highway	State	TfNSW	Two trafficable two-way, divided urban cross-section with auxiliary turning lanes.	60km/h 80km/h
Chisholm Road	Local	Council	Two-way, divided (with line marking), urban cross-section and one trafficable lane in each direction with auxiliary turning lanes.	50 km/h



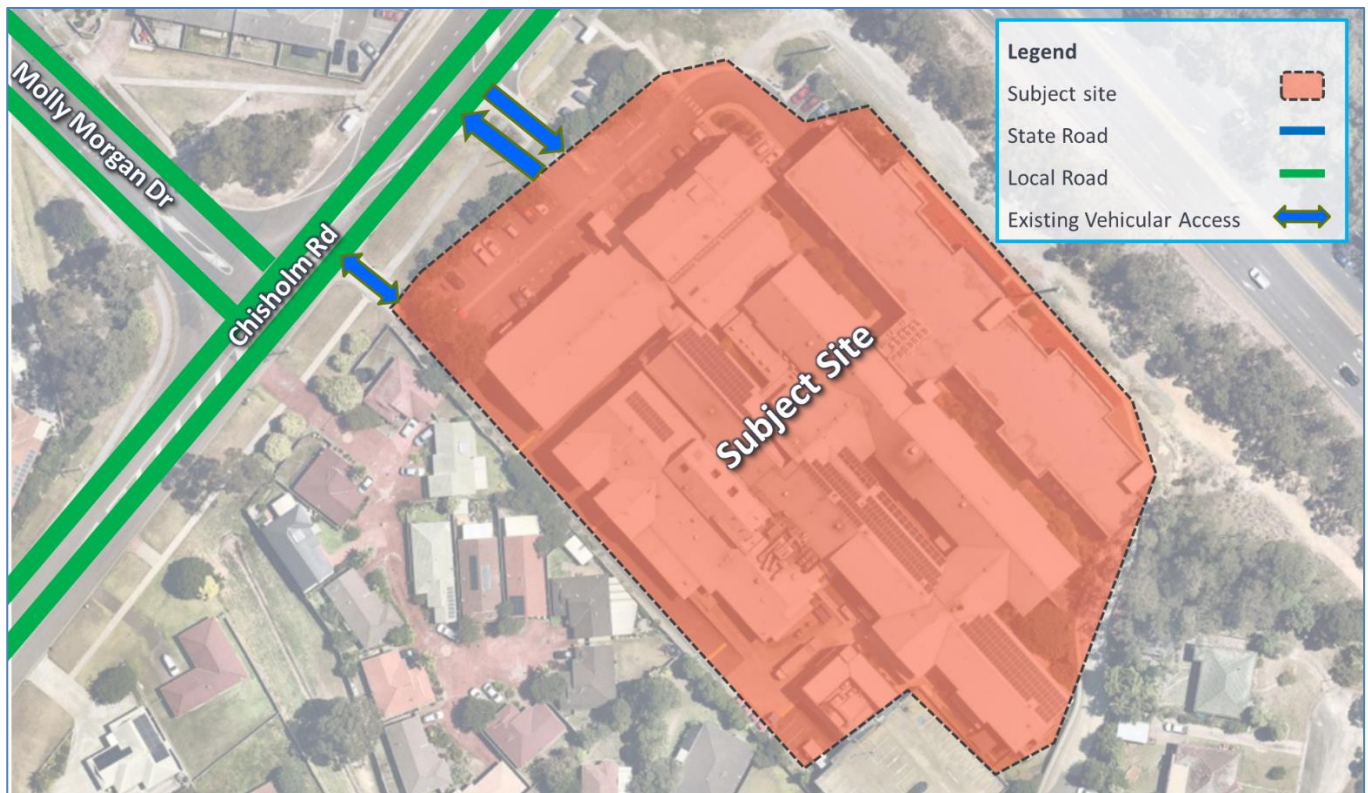
## 2.3 Site Access and Parking

### 2.3.1 Site Access

The site access is shown in **Figure 3**. The site is accessed from Chisholm Road which is designated as a local road. The site access junction has dedicated right and left turn lanes from Chisholm Road into the hospital. The driveway has a pedestrian refuge island segregating accessing and egressing traffic. The island also provides a safe place for pedestrians and cyclist to wait whilst vehicles enter and exit as there is a shared footway/cycleway running along the Chisholm Road.

There are no proposed amendments or changes to the site access as part of the development proposals.

**Figure 3** Site Access



### 2.3.2 Servicing Access

There is a second site access circa 50m south of the main site access junction. This access is restricted to servicing vehicles and does not provide access to the hospital car park. This access is a standard priority T junction with right turning movements banned.

There are no proposed amendments or changes to the servicing site access as part of the development proposals.

### 2.3.3 Car Parking

A review of the existing, approved, and proposed car parking has been undertaken as part of this application. The proposed car parking is discussed later in this report. The current car parking situation is set out in **Table 3**. It should be noted that the current situation includes those spaces approved as part of the 2015 DA 15-2853 i.e., that approved development is regarded herein as the baseline.

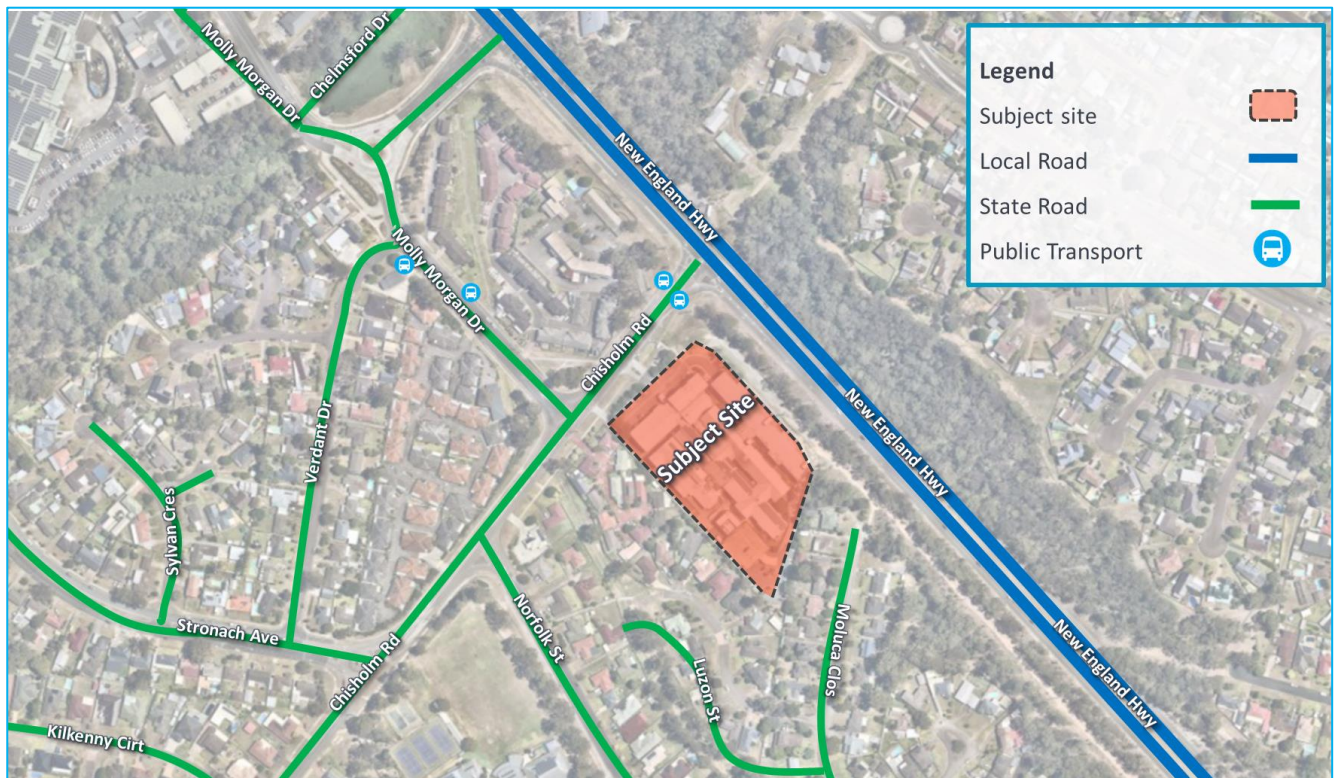
**Table 3 Summary of Existing Car Parking**

Scenario	Yield/Metric			Parking Spaces
	GFA	Beds	Staff	
Existing 2023 As Built Situation	12,145sqm	172	179	225

### 2.4 Public Transport

The subject site is located near several bus stops served by several routes. The nearest bus stops are located on Chisholm Road, Molly Morgan Drive/Chelmsford Drive. As detailed **Figure 4** the nearest stop is located approximately 90m northeast of the subject site on Chisholm Road.

**Figure 4 Public Transport Map**



**Table 4 Public Transport Services**

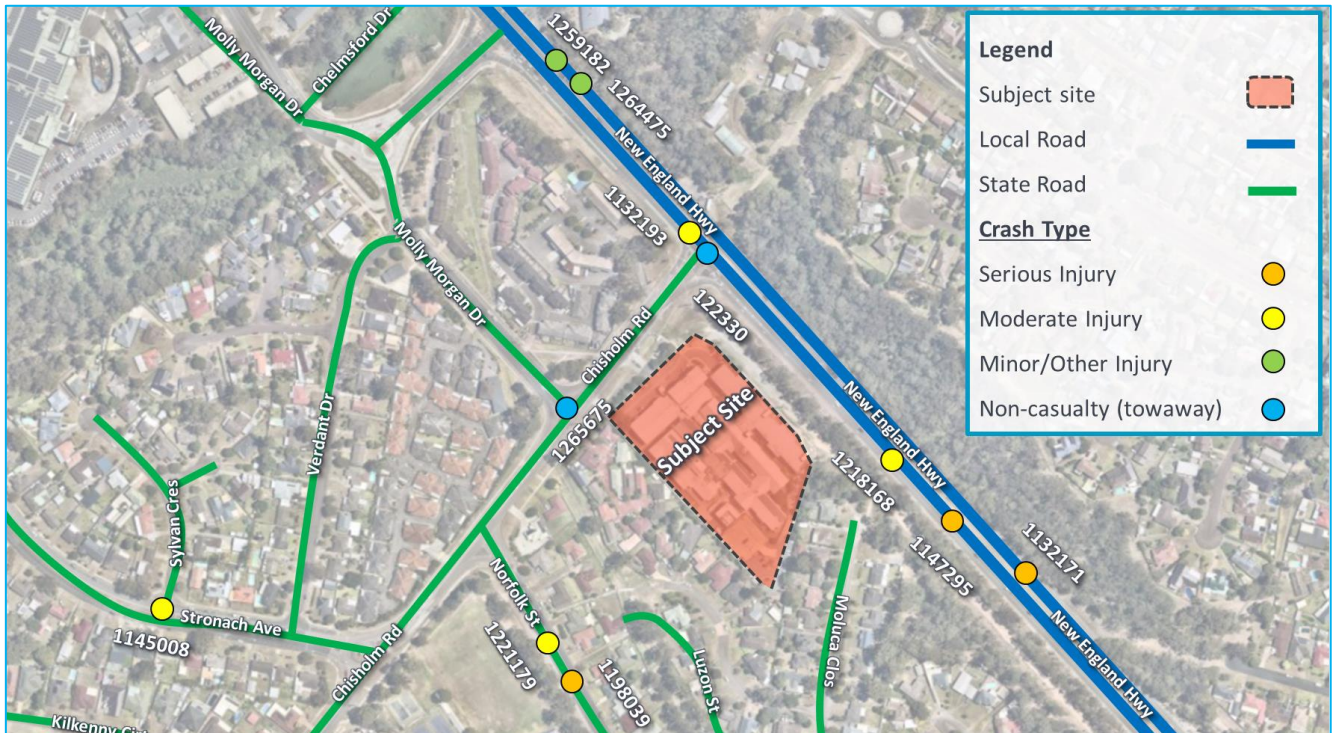
Route	Description	Location	Peak Service Frequency	Nearest Stop (ID)	First / Last Service
180	Stockland Green Hills to Singleton Heights Via Maitland	Chisholm Road	-	# 232343 & # 232338 (Inbound & Outbound)	9:10 am–6:34 am (School Service)
181	Woodberry To Rutherford Via Bresfield, Green Hills Shopping Centre & Maitland	Chisholm Road	1 hour	#232343 & #232338 (Inbound & Outbound)	6:30am –10:56 pm
188	Green Hills Shopping Centre to Woodlands Estate Via Maitland hospital	Chelmsford Drive / Molly Morgan Drive	21 mins	#232342 & #232373 (Inbound & Outbound)	5:27am – 11:05 pm
145	Newcastle Airport to Green Hills Shopping Centre via Raymond Terrance	Chelmsford Drive / Molly Morgan Drive	1 hour	#2323136 & #2323337 (Inbound & Outbound)	7:53am – 6:53pm

Source: <https://transportnsw.info/>

## 2.5 Recorded Crash History

Historic traffic crash data recorded in the vicinity of the site was source from the TfNSW website<sup>1</sup>. The locations of the crashes are included at **Figure 5** and the details of these crashes are described in **Table 5**. The data provided by the transport agency was for the latest five-year period for all crash types (1 January 2017 to 31 December 2021).

**Figure 5** Crash Data Locations



Source: <https://roadsafety.transport.nsw.gov.au/statistics/interactivecrashstats/index.html> (accessed 01/03/23)

<sup>1</sup> <https://roadsafety.transport.nsw.gov.au/statistics/interactivecrashstats/index.html>

**Table 5 Crash Data**

Crash Ref.	Year	Location	Crash Severity	RUM Code	RUM description
1259182	2021	New England Hwy	Minor/ Other Injury	30	Rear end
1264475	2021	New England Hwy	Minor/ Other injury	30	Rear end
1132193	2017	New England Hwy/ Chisholm Rd	Moderate Injury	21	Right through
1223330	2020	New England Hwy/ Chisholm Rd	Non – casualty (towaway)	32	Right rear
1218168	2019	New England Hwy	Moderate injury	74	On road-out of cont.
1147295	2017	New England Hwy	Serious Injury	35	Lane change left
1132171	2017	New England Hwy	Serious Injury	30	Rear end
1265675	2021	Chisholm Rd / Molly Morgan Dr	Non-Casualty (towaway)	19	Other adjacent
1145008	2017	Stronach Ave/ Verdant Dr	Moderate Injury	13	Right near
1221179	2019	Norfolk St	Moderate Injury	71	Off rd left => obj
1198039	2019	Norfolk St	Serious injury	71	Off rd left => obj

An interrogation of the data shows that there are not accidents in the proximity of the site access junctions and the accidents which have occurred at the two nearest junctions are recorded as “*non-casualty*” and “*moderate injury*”. It is therefore considered there are no safety issues with the surrounding road network.

It is, therefore, considered the proposed development would not significantly exacerbate the risk of crashes occurring on the road network.

## 2.6 Road Network Planning

To determine the location and nature of any planned upgrades of the surrounding road network, SLR carried out a review of publicly available material online. The review indicated that there are no major transport infrastructure upgrades planned by TfNSW<sup>2</sup> and Council in the surrounds of the study area.

## 2.7 Existing Development Approvals

As described in **Section 1** of the report an application was submitted in 2015 (15-2853) and was consented in November 2017.

The approved plans indicated:

- 1,400 sqm of additional floor area;
- The loss of 15 bed and an additional 34 beds proposed; and,
- The deletion of 2 car parking spaces and an additional new 35 car parking spaces, of which 28 spaces would be located at 9 and 11 Molucca Close.

<sup>2</sup> <https://www.transport.nsw.gov.au/projects/current-projects>

In terms of traffic there were no proposed changes to the site access junction or the servicing arrangements at the subject site. The TIA which accompanied the application (prepared by Intersect Traffic) demonstrated the additional floor space, beds and car parking spaces would have a minimal impact on surrounding highway network. It concluded the proposed extensions would result in an additional 23 vph and 25 vph across the AM and PM peak respectively, which is less than 10% of the existing traffic flow on the surrounding network and therefore unlikely to cause a material impact.

As described the council consented this application in November 2017 with the following traffic conditions at the following paragraphs within the notice of determination:

- Paragraph 20 – a car parking management plan to be submitted prior to the occupation certificate.
- Paragraph 21 – car parking is to be provided in line with the approved plans providing a minimum of 225 spaces, allowing for a maximum number of 179 staff on site at any one time.
- Paragraph 22 – all car parking spaces shall be designed and constructed in accordance Australian Standards AS1428.1-2009.
- Paragraph 23 – all driveways, parking areas and vehicles turning areas shall be constructed with a bitumen sealed granular pavement, segmental paver surface.
- Paragraph 24 – all parking bays to be delineated with line marking and signposting.
- Paragraph 25 – a pedestrian path shall be permanently marked out within the car park and link to the existing pedestrian network.
- Paragraph 27 – a traffic management plan is to be produced prior to construction.

The next section of the report sets out the development proposals in the context of the previously consented scheme.

## 3 Development Overview

This section addresses both the proposed 2015 DA 15-2853 modification and the new 2023 development expansion.

### 3.1 Proposed Development

#### 3.1.1 2015 DA 15-2853 Modification

It is proposed to modify the previous consent granted in November 2017. Amongst other non-traffic matters, the modification seeks to relocate the at-grade car parking that was originally proposed and approved to be located at 9 and 11 Molucca Close. It should be noted this development consent has not yet been enacted and the associated expansion and car parking not yet constructed as of March 2023.

Due to current business arrangements, the construction of the at-grade parking in Molucca Close is not proposed in the foreseeable future but may still occur at some other time as part of another application. Accordingly, the reliance on the Molucca Close car parking spaces is not proposed as part of Stage 1, but rather these spaces will be accommodated in the new multi-deck car park proposed within the existing hospital site.

This equates to the relocation of 28 car parking spaces from 9 and 11 Molucca Close to within the proposed multi-deck car park which is being applied for under this new DA submitted April 2023.

#### 3.1.2 Icon Cancer Bunker

Since the 2015 DA 15-2853 development consent, an Icon Cancer Bunker has been constructed on the site as shown on the development plans at **Appendix A**. This resulted in the loss of seven car parking spaces. These spaces will be re-provided as part of the multi-deck car park proposed as part of this new DA submitted April 2023 such that the 225 spaces referenced by the 2015 DA15-2853 consent are provided.

#### 3.1.3 New Development Expansion

The proposed new development expansion will include the following elements:

- Upward extension to include a new ward (approx. 675sqm) consisting of:
  - 3 Beds; and,
  - 17 Chemotherapy Chairs.
  - For the purposes of the TIA the 17 Chemotherapy Chairs will be considered as beds i.e., 20 beds in total.
- An additional 28 car parking spaces to be provided on a new upper deck car park in the south-eastern corner of the site; and,
- Internal change within the existing hospital.

The development plans are included at **Appendix A** for reference.

It should be noted that a total 63 car parking spaces will be provided, comprised of:

- 28 new car parking spaces, provided for the new ward;

- Seven car parking spaces replacing those deleted as part of the Icon Cancer Bunker construction; and,
- Relocating 28 car parking spaces from the previously approved Molucca Close at-grade car park to the multi-deck car park.

### 3.2 Site Access

The existing site access and servicing access from Chisholm Road will be retained and no changes are proposed as part of the 2015 DA 15-2853 modification or new development application.

### 3.3 Car Parking

As described above, the plans show a car parking provision of 63 new spaces.

Under the 2015 DA 15-2853 approval the site is consented to provide 225 car parking spaces. This previously included 28 car parking spaces located at-grade on the Molucca Close lots, and seven car parking spaces lost due to the construction of the Icon Cancer Bunker. Therefore, to ensure these spaces are provided in line with the planning consent under this DA application it is proposed to relocate the 28 car parking spaces from Molucca Close and re provide the 7 car parking spaces lost due to the Icon Cancer Bunker within the new multi-deck car park.

Further, as this DA proposes a new ward it is proposed to also provide an additional 28 car parking spaces to meet this demand. The new multi-deck car park is indicated on the development plans included in **Appendix A**.

As part of this development application, we have reviewed the car parking history of the site which we have set out in **Table 6**.

**Table 6 Car Parking History**

Scenario	Yield/Metric			Parking Spaces
	GFA (sqm)	Beds	Staff	
Approved 2015 DA 15-2853	12,145	172	179	225
2023 Proposed Expansion	12,820	192 <sup>1</sup>	191	258

All numbers are presented as totals.

1: 20 Beds, which consists of 3 Beds and 17 Chemotherapy Chairs

While it is acknowledged that the proposed development includes additional beds, they are oncology beds and typically would only be occupied in business hours. In this regard, typically patients would be dropped off and picked up from the site and would not have an additional visitor demand for parking like that occurring at other types of wards (i.e., maternity and rehabilitation wards). In this regard, the likely car parking demand for this additional space would be less.

The car parking provision is assessed against the car parking requirements as set out in the Maitland DCP are set out in **Section 4** of this report.



## 3.4 Servicing

The existing loading/unloading arrangements for the service vehicles will be retained and no changes are proposed under this development application. It is not expected the additional hospital beds will generate a significant increase in the number of servicing movements to the site.

Swept path analysis has been included at **Appendix B** demonstrating that the existing servicing arrangements are sufficient for a HRV (12.5m) and SRV (6.40m) vehicles which are expected to travel to the site.

## 4 Parking Assessment

This section of the report considers the existing car parking arrangement, requirements and assesses the proposals on the car parking demand.

### 4.1 Statutory Requirements

The car parking requirements for specific land uses are set out in Maitland Development Control Plan (DCP) (2011), where for a hospital the parking requirement is:

- 1 space per 10 beds (visitors);
- 1 space per 2 employees (staff parking); and,
- 1 space per ambulance.

Where employee or staff includes the number of staff on the site at any time during peak operating period.

The key parameters to derive the number of car parking spaces are summarised in **Table 7**. The following definitions are noted:

- Approved – As consented under the 2015 DA 15-2853; and,
- Proposed – The current development proposal submitted under this application (April 2023).

**Table 7 Development Parameters for Car Parking**

Yield (Staff/Beds)	Approved 2015 DA 15-2853 (additional)	2023 Proposed Expansion (additional)	Total
Staff	179	12	191
Patient Beds	172	21 <sup>1</sup>	193

Source: SLR, Intersect

1: 21 Beds which consists of 3 Beds and 17 Chemotherapy Chairs

**Table 8** sets out the car parking requirements for the development based on the Maitland DCP and the existing car parking arrangement on site as well as the proposals.

**Table 8 Maitland DCP Car Parking Requirement**

Parking (Required and Proposed)	Approved 2015 DA 15-2853	2023 Proposed Expansion	
		Proposed Incremental	Approved + Proposed
2011 DCP Parking Requirement	(106.7) 107	(8.1) 9	(114.8) 115

Source: Maitland Development Control Plan 2011

Based on the Maitland DCP, the current resultant number of beds and staff would require 115 car parking spaces.

It is our understanding there has been prior comment made by Council regarding the actual car parking demands being higher than those by the Maitland DCP and perhaps other DCP's being more applicable. Whilst the Maitland DCP is the primary specification, SLR has considered the requirement derived using other DCP's including Penrith and Newcastle. These car parking rates are set out below in **Table 9**.

**Table 9 Penrith and Newcastle Car Parking Requirements**

Council DCP	Land Use	DCP Car Parking Requirement		
Penrith	Hospitals	1 space per 3 beds plus 1 space per 2 employees	65 Visitor Parking	160.5 (161)
			95.5 (96) Staff Parking	
Newcastle	Hospitals	1 space per 3 beds for visitors 1 space per 2 staff	65 Visitor Parking	160.5 (161)
			95.5 (96) Staff Parking	

Source: Penrith DCP, 2014 and Newcastle DCP, 2012

Based on the **Table 10** calculations, the proposed car parking supply is more than the various DCP requirements.

**Table 10 Maitland DCP Car Parking Requirement and Proposed Supply**

Parking (Required and Proposed)	Approved 2015 DA 15-2853	2023 Proposed Expansion	
		Proposed Incremental	Approved + Proposed
2011 DCP Parking Requirement	(106.7) 107	(8.1) 9	(114.8) 115
Parking Supply	Approved	225	258
	Proposed	-	

\*The 33 spaces include 26 new proposed spaces and the replacement of the 7 spaces loss as part of the Icon Cancer Bunker

## 4.2 Parking for People with Disabilities

The parking requirements and standards for off-street parking for People with Disabilities (PWD) is set out in AS2890.6 as well as the Building Code of Australia (BCA). The hospital provides a mixture of services for inpatient and outpatient-based programs. The accessible car parking space provision for hospital (Building Class 9a) is set out in Table D3.5 of Volume 1 of the BCA, as shown in **Table 11**.

**Table 11 PWD Car Parking Space Requirements**

Component	PWD Space Requirement		Existing Provision
(a) Hospital (inpatient)	1 space for every 100 car parking spaces or part thereof	3	11
(b) Hospital (outpatient area)	1 space for every 50 carparking spaces or part thereof 1 space	6	
(i) Up to 1000 carparking spaces			
(ii) For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces			

To be conservative it has been assumed that the PWD parking space provision is in line with the greater requirement i.e., all patient rooms are assumed to provide outpatient type services, and therefore 1 PWD spaces is required for every 50 car parking spaces. Given the hospitals total parking space provision will increase to 258 car parking spaces, there is a requirement of 6 PWD spaces, therefore the existing provisions of 11 PWD spaces meets the requirements set out in BCA.

### 4.3 Car Park Layout

The development plans have been reviewed against the requirements of the Australian Standard for Off Street Car Parking (AS2890.1 and AS2890.6:2009). Swept path analysis is included at **Appendix C** for reference.

A review considered the following:

- Parking bay widths and lengths;
- Parking aisle widths;
- Proximity of adjacent structures, other parking spaces, and footway;
- Blind aisles;
- Circulation roadways and any ramps/grades; and,
- Parking for people with disabilities.

The dimensional requirements of the additional off-street car parking facilities are line with AS2890.1, where the parking is classified in accordance with User Class 2 (long-term city and town centre parking, sport facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)). It is noted these spaces are proposed to be for staff members and therefore the vehicles will be parked for a significant part of the day and so User Class 1A and 3 are not appropriate.

The dimensional requirements of the PWD space are also in line with AS2090.6.

## 5 Traffic Assessment

This section considers the impact of the development proposals on the surrounding highway network.

### 5.1 Traffic Impact

The Guide to Traffic Generating Developments (RMS, 2002) documents extensive traffic generation rates for a variety of land uses. For private hospitals, the Guide recommends the following trip generation rates based on the number of beds and the average number of staff per weekday shift:

- Peak Vehicle Trips (PVT) =  $14.69 + 0.69B + 0.31 \text{ ASDS}$ .
- Morning Vehicle Trips (MVT) =  $10.21 + 0.47B + 0.06 \text{ ASDS}$ .
- Evening Vehicle Trips (EVT) =  $2.84 + 0.25B + 0.40 \text{ ASDS}$ .

Where:

- B is the number of beds; and
- ASDS is the Average Staff per Day Shift.

The hospital expansion will result in changes to the number of patients rooms (beds) and daily staff levels as detailed in **Table 7**. Application of the RMS trip generation rates based on these details for the existing site and post-development scenarios are given in **Table 12**.

**Table 12 Trip Generation Comparison**

Trip Generation	2015 DA 15-2853	2023 Proposed Expansion	Approved 2015 DA 15-2853+ 2023 Proposed Expansion	Change (%)
Peak Vehicle Trips (PVT)	180	33	213	+15%
Morning Vehicle Trips (MVT)	107	21	128	+16%
Evening Vehicle Trips (EVT)	89	13	102	+13%

The development trips generated by the proposed expansion is likely to generate a maximum of 33 additional vehicle trips per hour during the hospital peak vehicle movements (PVT). Importantly, the development will result in minor increases to vehicle trips during the weekday AM and PM peak hours, equating to 21 and 13 vehicle trips, respectively. This equates to 1 additional vehicle movement every 2 to 3 minutes during the AM peak. Considering the PM peak this equates to 1 additional vehicle every 4 to 5 minutes.

Existing traffic surveys, contained within the 2015 application, shows a circa 50:50 split at the site access junction for vehicle movements once this is taken into consideration and the existing flow of traffic on Chisholm Road and New England Highways the proposed development is expected to have a minimal impact on the highway. The percentage traffic flows on Chisholm Road are shown in **Table 13**.

**Table 13 Percentage Impact Assessment**

Road	AM Peak Traffic Flow		PM Peak Traffic Flow		Percentage Increase	
	Existing	Development	Existing	Development	AM Peak	PM Peak
Chisholm Road West	604	11	888	9	1.82%	1.01%
Chisholm Road East	607	11	908	9	1.82%	0.99%
Site Access	123	21	152	17	17%	11.18%

It can be seen from **Table 13** that the proposed development will have a minimal impact on the surrounding highway network. Based on the above, the incremental traffic generated by the expansion is not anticipated to be significant enough to impact on the function, operation, and safety of the surrounding road network and therefore junction modelling has not been undertaken.

Furthermore, we have reviewed the junction modelling undertaken during the 2015 application which considers a 10-year design horizon (2025). The modelling results for this design horizon show there is an average delay of 7 seconds during the AM peak and 9 seconds during the PM peak with a 2m metre queue for both peak periods. These clearly demonstrates there is significant capacity to at the site access to accommodate the proposed development.

## 5.2 Servicing Vehicles

It is understood that the existing servicing arrangements will accommodate the minor additional demand resulting from the expansion and redevelopment of the upper-level ward, i.e., no new or more frequent servicing activities are necessary. The existing servicing access will remain unchanged. Swept path analysis has been included at **Appendix B** demonstrating the existing loading area is sufficient.

## 5.3 Emergency Vehicles

There are 4 existing ambulance bays at the site. The development proposals do not propose to increase the number of ambulance bays at the site.

Access to the site and the location of ambulance bays will remain unchanged.

## 6 Conclusion

Health Care (HeC) have engaged SLR Consulting Australia Pty Ltd (SLR) to undertake a Traffic Impact Assessment (TIA) for Stage 6C of the proposed redevelopment at Maitland Private Hospital located at Chisholm Road, Ashtonfield.

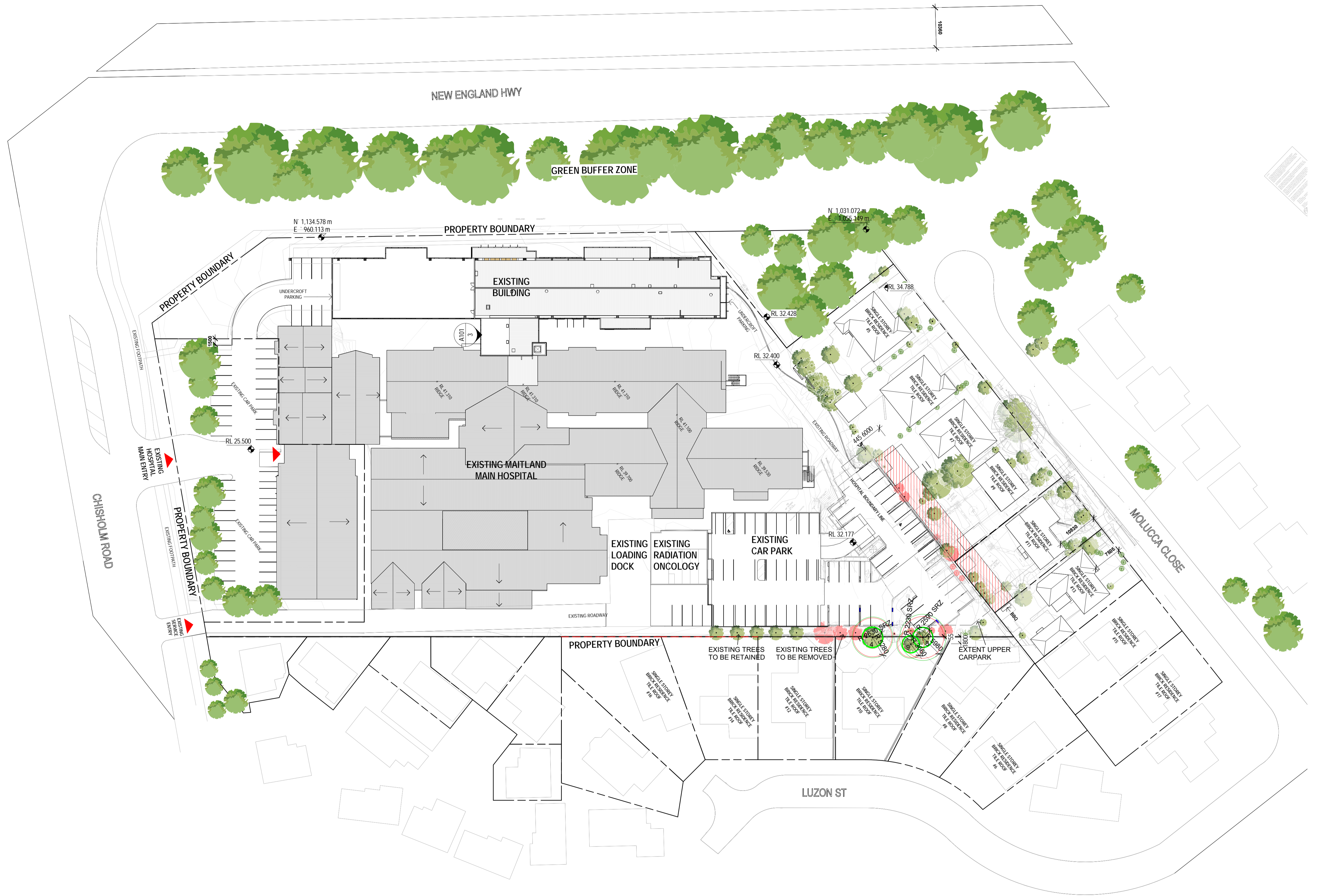
Plans for the development have been prepared by HSPC and are included at Appendix A. Based on the findings of the analysis detailed herein, the following conclusions have been made:

- The site is accessible by selected bus services with links to Green Hills, Woodberry and Newcastle, however the majority of staff and visitors are likely to travel by car.
- Under the 2015 DA 15-2853 approval 225 car parking spaces are consented. This includes the 28 car parking spaces proposed at the ground level car park on Molucca Close and the 7 car parking spaces lost to the construction of the Icon Cancer Bunker.
- The development proposal under this DA (April 2023) propose the relocation of the 28 car parking spaces and the replace of the 7 car parking spaces lost to the Icon Cancer Bunker as well as 28 additional spaces to accommodate the demand from the new ward proposals.
- Car parking provision is in excess of the Maitland DCP; however, it has been identified under previous applications that demand for car parking at the existing hospital is in higher demand than the Maitland DCP allows. Therefore, a review of surrounding built up areas car parking standards for hospitals including both Penrith and Newcastle have been undertaken and car parking is proposed in line with these requirements.
- The proposed additional car parking spaces are compliant with the relevant Australian Standards.
- The development is expected to result in a marginal increase in traffic generation, with between 21 and 13 vehicle trips during the AM and PM peak respectively. When these vehicle trips are considered in the context of the existing traffic flows on Chisholm Road the development percentage impact is circa 1% to 2%.
- There are no proposed changes to the site access, servicing arrangements, the existing car parking spaces and emergency vehicle bays.

# Appendix A:

## Development Plans





1 EXISTING SITE PLAN  
Scale 1:500

ISSUE	REVISION	DRN	CHK / APP	DATE
ISSUE FOR DA		TC	SS	14.12.2022

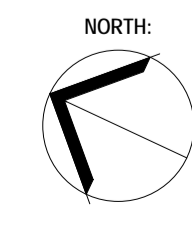
CONSULTANTS:

**HS PC** HEALTH ARCHITECTS  
 Melbourne Level 1, 525 Flinders Street Melbourne Victoria 3000  
 Sydney Level 6, 61 Market Street Sydney NSW 2000  
 Melbourne Victoria 3000 T + 61 2 8289 5777 W www.hs-pc.com.au

REASON FOR ISSUE

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK OR MARKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALED DIMENSIONS. ALL SCALED DIMENSIONS MUST BE VERIFIED ON SITE. THIS DRAWING'S COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

PROJECT No.: 9-19-0020



PROJECT: MAITLAND STAGE 8  
 PROJECT ADDRESS: 173-175 Chisholm Rd Ashtonfield NSW 2323  
 CLIENT: HealthCare Australia

DRAWING TITLE: EXISTING SITE PLAN

SCALE: 1:500 @ A1

PROJECT DATE: 18/01/2023

DRAWING No.: DA002

REVISION: -

12/04/2023 2:05:05 PM

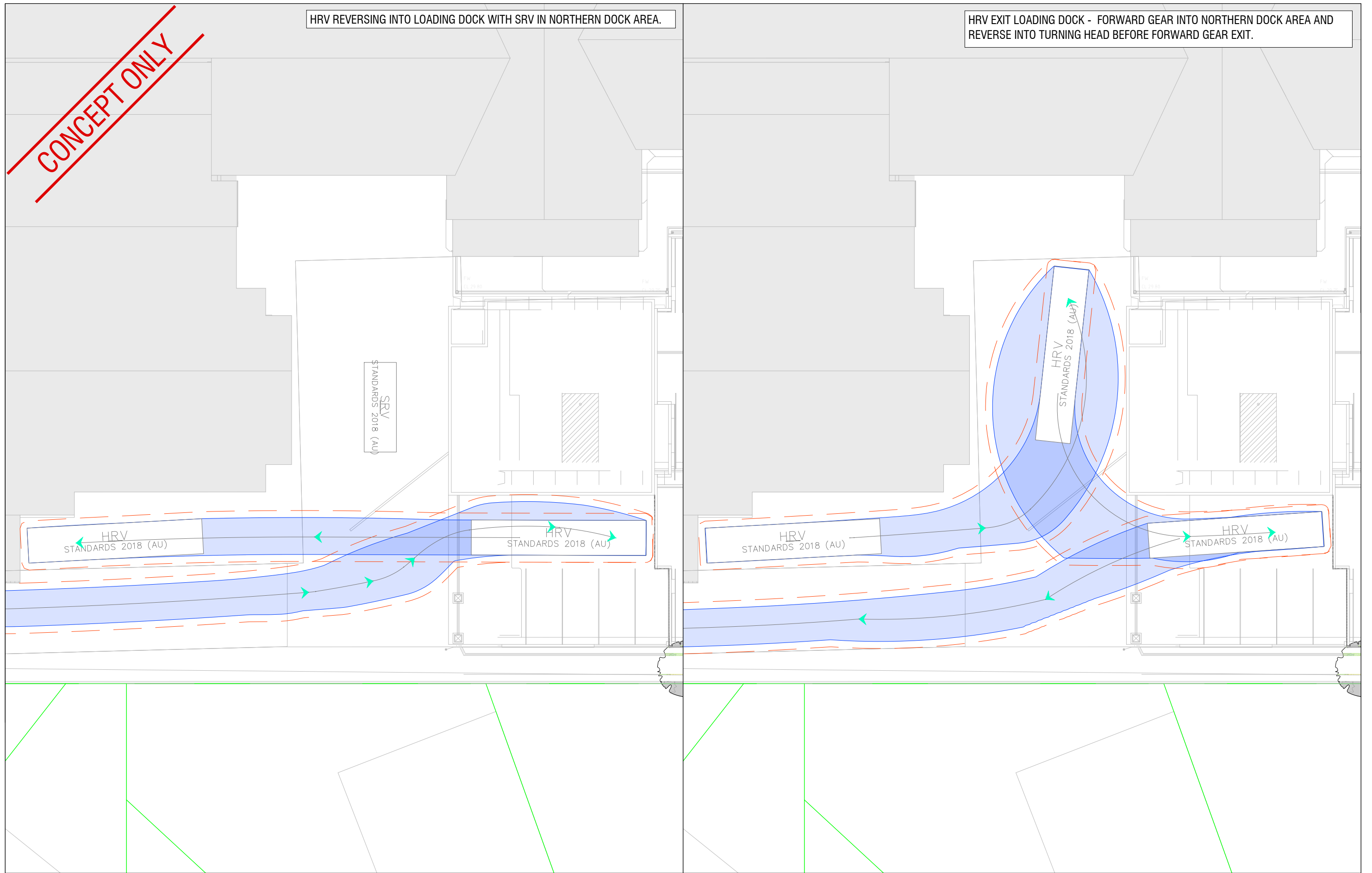
# Appendix B:

## Servicing Swept Path Analysis

**CONCEPT ONLY**

HRV REVERSING INTO LOADING DOCK WITH SRV IN NORTHERN DOCK AREA.

HRV EXIT LOADING DOCK - FORWARD GEAR INTO NORTHERN DOCK AREA AND REVERSE INTO TURNING HEAD BEFORE FORWARD GEAR EXIT.

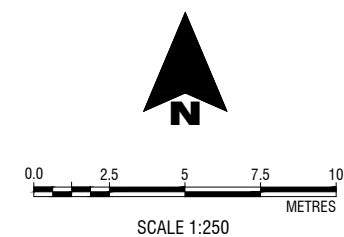
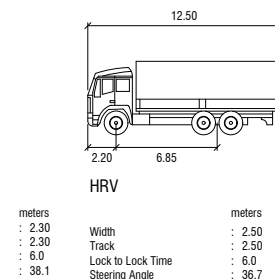
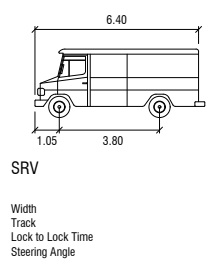


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Date:	28/03/2023
Drawn by:	AM
Scale:	AS SHOWN
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Projection:	-

**SWEPT PATH LEGEND**  
 - - - - - Vehicle Path  
 ———— Vehicle Body  
 - - - - - Body Clearance

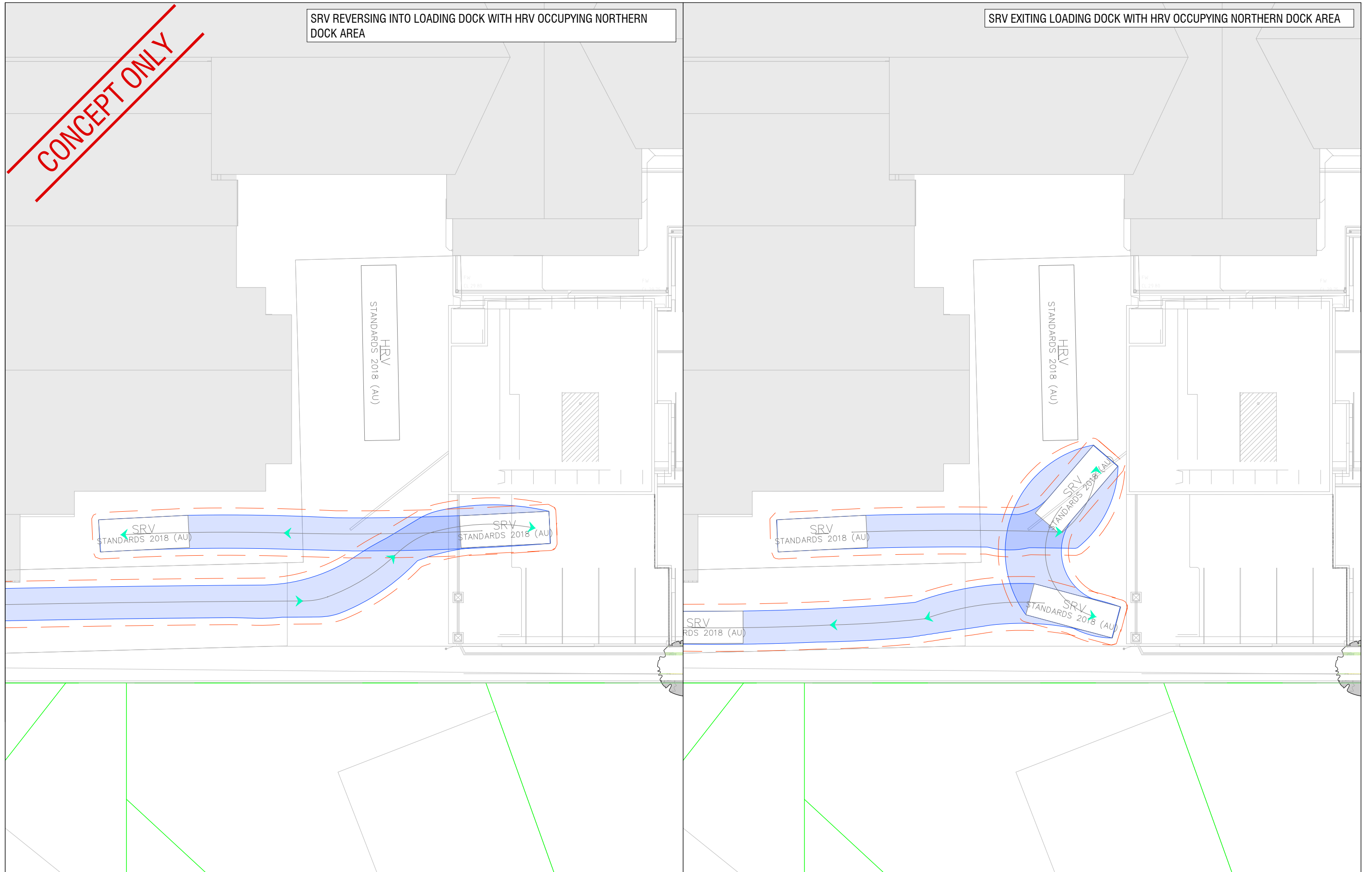


Health Care Surgical Party Limited  
 Maitland Private Hospital  
**Loading Dock Review -  
 HRV entry and exit**  
 FIGURE 01

**CONCEPT ONLY**

SRV REVERSING INTO LOADING DOCK WITH HRV OCCUPYING NORTHERN DOCK AREA

SRV EXITING LOADING DOCK WITH HRV OCCUPYING NORTHERN DOCK AREA



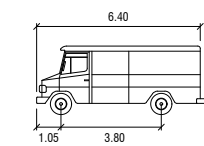
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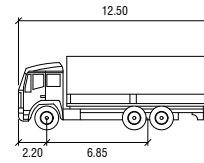
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**SWEPT PATH LEGEND**

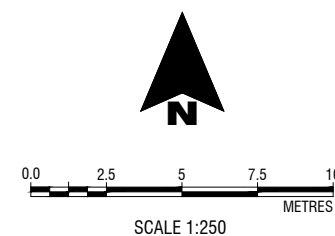
- Vehicle Path
- Vehicle Body
- Body Clearance



SRV  
Width : 2.30  
Track : 2.30  
Lock to Lock Time : 6.0  
Steering Angle : 38.1



HRV  
Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7



Health Care Surgical Party Limited  
Maitland Private Hospital  
**Loading Dock Review - SRV entry and exit**  
FIGURE 02

**CONCEPT ONLY**

SRV REVERSING INTO LOADING DOCK WITH HRV WAITING IN PARKING AREA

SRV EXITING LOADING DOCK WITH HRV WAITING IN PARKING AREA

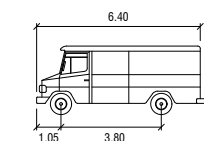


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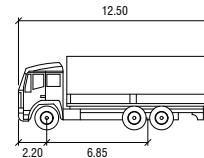
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**SWEPT PATH LEGEND**

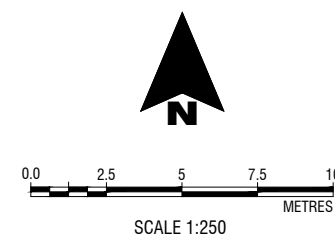
- Vehicle Path
- Vehicle Body
- Body Clearance



SRV  
Width : 2.30  
Track : 2.30  
Lock to Lock Time : 6.0  
Steering Angle : 38.1



HRV  
Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7



Health Care Surgical Party Limited

Maitland Private Hospital

**Loading Dock Review - SRV entry and exit**

FIGURE 03

**CONCEPT ONLY**

HRV ENTERING NORTHERN DOCK AREA IN FORWARD GEAR, AND REVERSE EXIT WITH SRV IN LOADING DOCK.

SRV ENTERING NORTHERN DOCK AREA IN FORWARD GEAR, WITH HRV IN LOADING DOCK



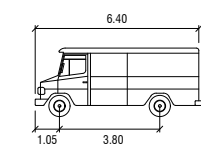
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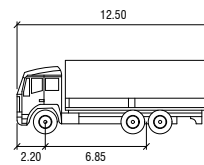
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**SWEPT PATH LEGEND**

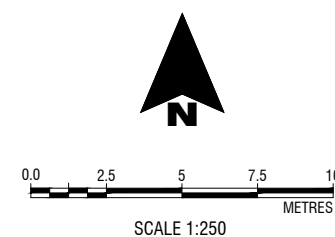
- Vehicle Path
- Vehicle Body
- Body Clearance



**SRV**  
Width : 6.40  
Track : 2.30  
Lock to Lock Time : 6.0  
Steering Angle : 38.1



**HRV**  
Width : 12.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

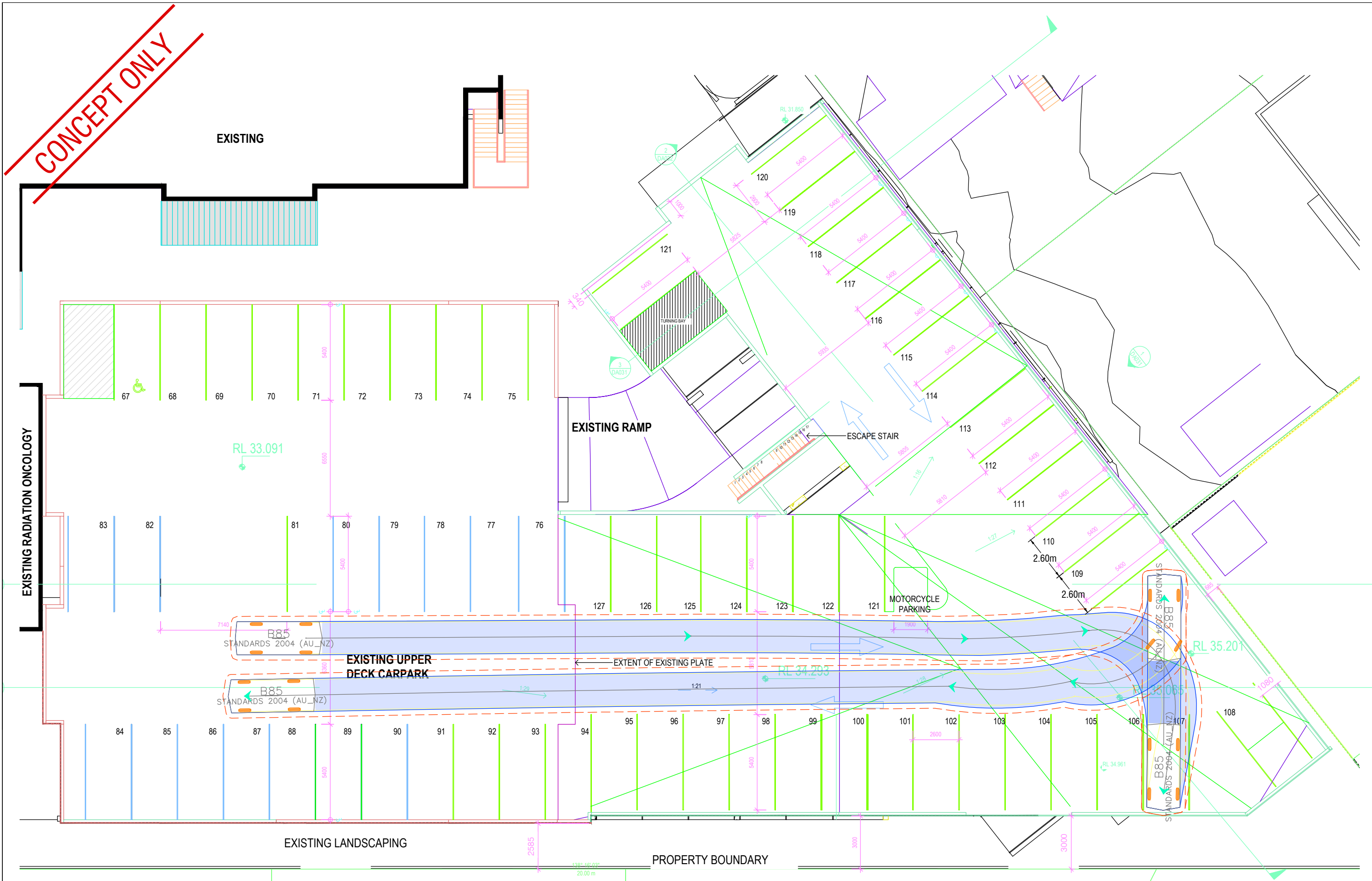


Health Care Surgical Party Limited  
Maitland Private Hospital  
**Loading Dock Review - Northern dock area access**  
FIGURE 04

# Appendix C:

## Car Park Swept Path Analysis

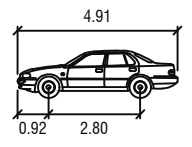
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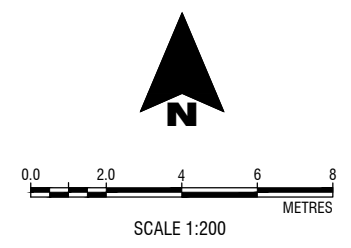
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**B85**

Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1



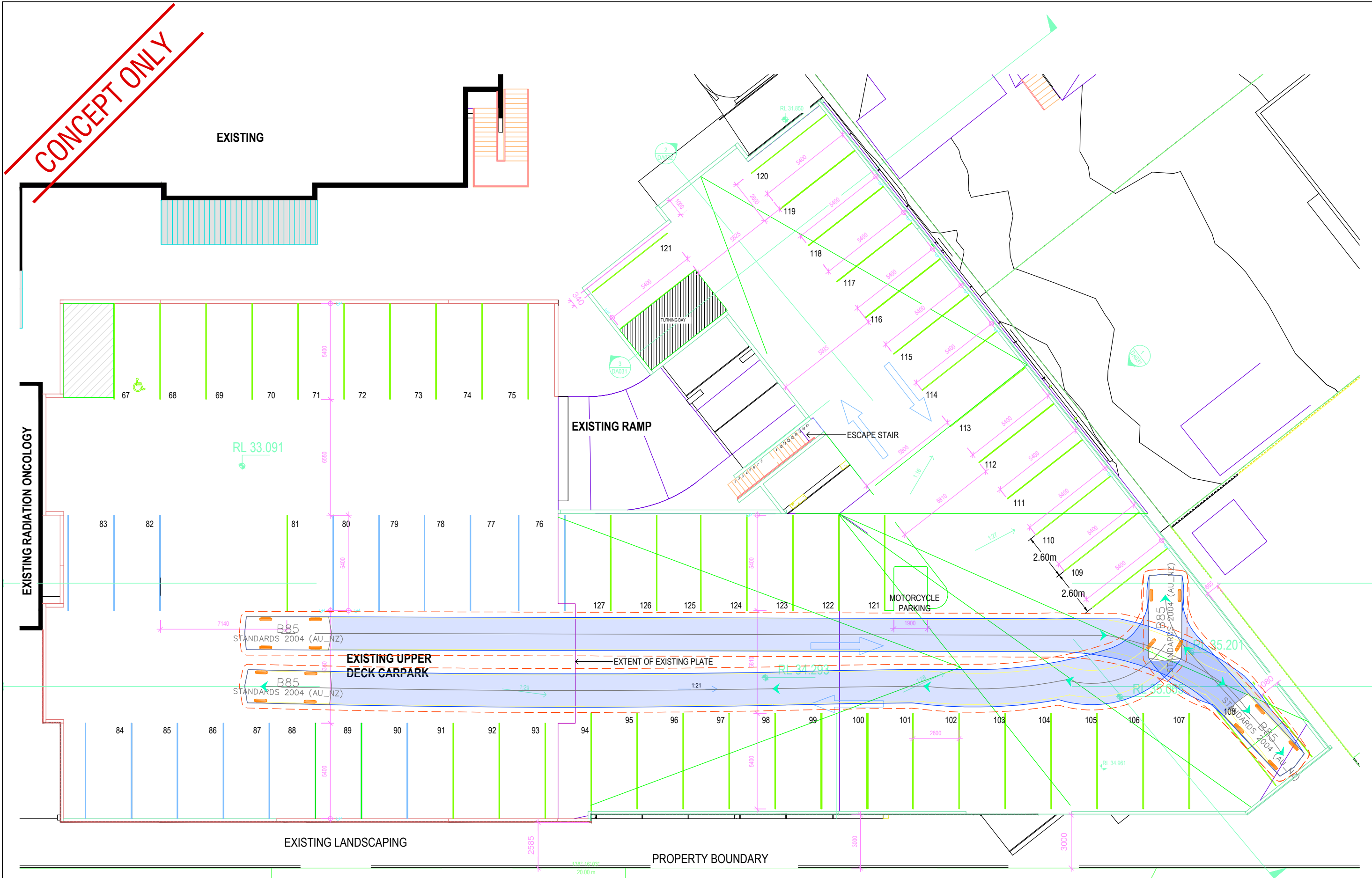
HSPC Health Architects  
Maitland Private Hospital

**Upper Deck Car Park  
Manoeuvre Movement 1**

FIGURE SK01



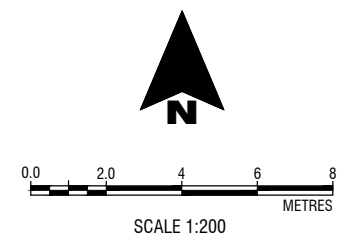
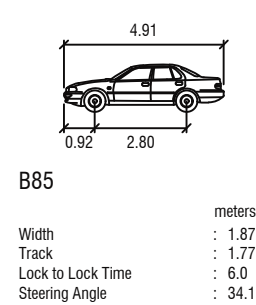
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**Upper Deck Car Park  
Manoeuvre Movement 2**

FIGURE SK02

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