

Gold Coast Health & Knowledge Precinct Parklands PDA Southport

Traffic Impact Assessment

GCHKP Pty Ltd

22 March 2023

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1305

Date: 30-May-2023



AMENDED IN BLUE

By: Essen Joseph

Date: 25-May-2023



VEHICLE ACCESS SUBJECT TO COMPLIANCE ASSESSMENT

Cross over splay beyond the curtilage of the site not approved.
Compliance assessment required – see conditions of approval.



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Document Issue History

Report File Name	Prepared	Reviewed	Issued	Date	Issued to
P5363.001R GCHKP Southport TIA	M. Fard / A. Packer	L. Darragh	A. Packer	28/06/2022	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.002R GCHKP Southport TIA	M. Fard / A. Packer	L. Darragh	A. Packer	29/06/2022	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.003R GCHKP Southport TIA	M. Fard / A. Packer	M.Bitizios	A. Packer	31/08/2022	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.004R GCHKP Southport TIA	M. Fard / A. Packer	M.Bitizios	A. Packer	19/09/2022	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.005R GCHKP Southport TIA	M. Bitzios / S. Tafa	M.Bitizios	M. Bitzios	21/02/2023	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.006R GCHKP Southport TIA	M. Bitzios / S. Tafa	M.Bitizios	M. Bitzios	20/03/2023	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.007R GCHKP Southport TIA	M. Bitzios / S. Tafa	M.Bitizios	M. Bitzios	21/03/2023	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com
P5363.008R GCHKP Southport TIA	M. Bitzios / S. Tafa	M.Bitizios	M. Bitzios	22/03/2023	William Nikiforides, GCHKP Pty Ltd Pty Ltd, sent via: wcn@niecon.com

CONTENTS

	Page
1. INTRODUCTION	1
1.1 Background	1
1.2 Proposed Development	1
1.3 Scope	2
2. EXISTING CONDITIONS	3
2.1 Existing Site	3
2.2 Surrounding Road Network	3
2.3 Public Transport	3
2.4 Active Transport	4
2.4.1 Pedestrian Facilities	4
2.4.2 Cycling Facilities	5
3. TRAFFIC ASSESSMENT	6
3.1 Development Traffic Generation	6
3.2 Traffic Distribution	7
3.3 Traffic Impacts	7
4. PARKING ASSESSMENT	9
4.1 Car Parking Requirements and Provision	9
4.1.1 Wayfinding	10
4.2 Bicycle Parking Requirements and Provision	12
4.3 Geometric Layout	13
4.4 Queuing	15
5. ACCESS	16
5.1 Vehicular Access	16
5.2 Sight Distance	17
5.3 Pedestrian Connectivity	17
6. SERVICING ASSESSMENT	18
6.1 Servicing	18
6.2 Refuse Collection	18
7. SUMMARY AND CONCLUSION	19

Tables

Table 2.1:	Surrounding Road Network Hierarchy
Table 2.2:	Key Intersections
Table 2.3:	Bus Services in Proximity to the Subject Site
Table 3.1:	Medical Centre Trip Generation Rates – Weekday
Table 3.2:	First Principles Peak Hour Development Trip Generation
Table 3.3:	Development Traffic Splits
Table 4.1:	Car Parking Requirements and Provisions
Table 4.2:	Bicycle Parking Requirements (Austroads)
Table 4.3:	Parking Geometric Layout Assessment
Table 4.4:	Compliance Against MP4.1-A12 of QDC
Table 5.1:	Vehicular Access
Table 5.2:	Access Sight Distance Assessment
Table 6.1:	Minimum Service Vehicle

Figures

Figure 1.1:	Site Location
Figure 2.1:	Public Transport in Proximity to the Site
Figure 2.2:	Surrounding Pedestrian Pathway Network
Figure 2.3:	Surrounding Cycling Network
Figure 3.1:	Development Trip Distribution
Figure 3.2:	Development Trip Assignment
Figure 4.1:	Basement Parking Access
Figure 4.2:	Wayfinding Signage Examples: Staff and Visitor Parking
Figure 4.3:	Indicative Wayfinding Signage Strategy: Basement Level 1
Figure 4.4:	Indicative Wayfinding Signage Strategy: Basement Level 2
Figure 4.5:	Indicative Wayfinding Signage Strategy: Basement Level 3
Figure 5.1:	Proposed Crossover Impacts
Figure 6.1:	Proposed On-street Loading Zone for Refuse Collection
Figure 6.2:	Proposed On-street Loading Zone for Refuse Collection

Appendices

Appendix A:	Development Plans
Appendix B:	Swept Path Diagrams

1. INTRODUCTION

1.1 Background

This traffic impact assessment (TIA) was prepared on behalf of GCHKP Pty Ltd (applicant) for a medical centre development proposed within the Queensland State Government's Parklands Priority Development Area (PDA). The site's location is on the corner of Hill Street and Frazer Street, Southport (formally described as Lot 62 on SP338437).

The subject site is shown in Figure 1.1 below.



Source: Nearmap

Figure 1.1: Site Location

As the site is located within the Parklands PDA, the proposal is subject to the requirements of the Parklands PDA Development Scheme and will be assessed by Economic Development Queensland (EDQ), as well as the City of Gold Coast (Council).

1.2 Proposed Development

The site is to consist largely of medical and health related tenancies, including a short-stay hospital, and an ancillary café. The proposed land uses are well positioned and will service the surrounding medical precinct which includes the existing private hospital, the Gold Coast University Hospital (GCUH), and other surrounding similar health uses.

Key details of the proposal are summarised as follows:

- The development is proposed across 11 levels: 4 podium levels (Level 0 – Level 3) and 7 tower levels (Level 4 - Level 10)
- Access to the development is via a single crossover to Frazer Street
- Parking is provided across three (3) basement levels: Basement 1, 2 & 3

A copy of the development plans has been provided in **Appendix A**.

1.3 Scope

The scope of works for this traffic impact assessment included:

- Reviewing the key surrounding road network, public transport and active transport
- Estimating the development's traffic generation and providing a qualitative assessment of the impacts on the surrounding road network
- Assessing the car and bicycle parking provision against the requirements of the Parklands Priority Area Development Scheme
- Assessing the car and bicycle parking geometric layouts against Australian Standards AS2890
- Assessing the proposed access location and form against Council's *Transport Code* (Ver. 8) and Australian Standards AS2890
- Assessing the servicing and refuse collection arrangements.

2. EXISTING CONDITIONS

2.1 Existing Site

The subject site is currently a vacant lot and hence currently does not generate any traffic or parking demands. It is within a 2P parking restriction area, where all on-street parking spaces are limited to a maximum stay of 2 hours during typical work hours (Monday to Friday, 9AM – 5PM). There are approximately seven (7) on-street car parking spaces on Frazer Street fronting the subject site.

2.2 Surrounding Road Network

Details of the road network surrounding the subject site are shown in Table 2.1.

Table 2.1: Surrounding Road Network Hierarchy

Road Name	Jurisdiction	No. of Lanes (two Way)	Hierarchy	Divided	Posted Speed	Details
Frazer Street	Council	2	Local	No	50 km/h	Frontage and access road for the subject site
Hill Street	Council	2	Local	No	50 km/h	Frontage road for the subject site
Nexus Way	Council	2	Local	No	50 km/h	Provides access from Frazer Street to Parklands Drive
Parklands Drive	Council	2-4	Distributor	Yes	60 km/h	Provides access from the hospital precinct to the Smith Street Motorway
Innovation Drive	Council	2	Local	Yes	50 km/h	Provides access from Frazer Street to Parklands Drive
Smith Street Motorway	TMR	6	Arterial	Yes	70-80 km/h	Arterial road connecting the Pacific Motorway and Southport

The surrounding key intersections are shown in Table 2.2.

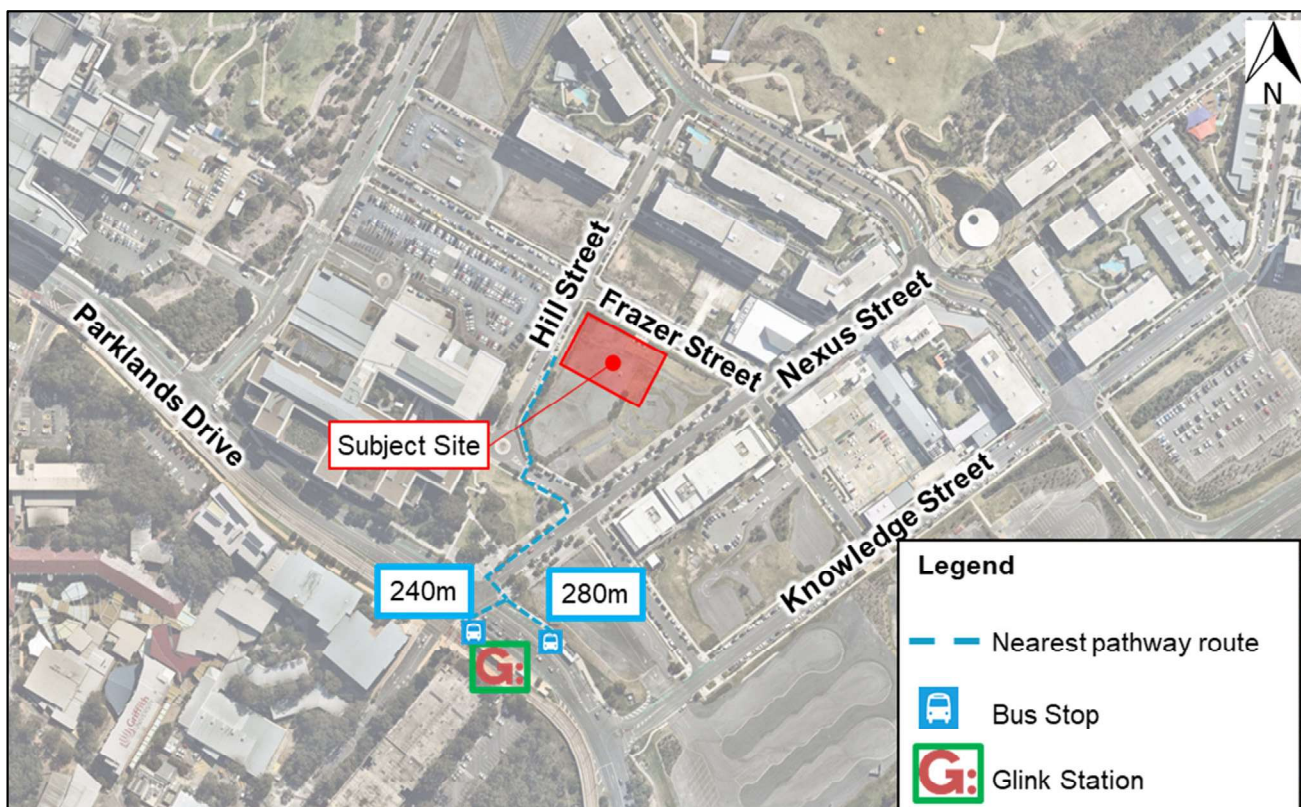
Table 2.2: Key Intersections

Major Road	Minor Road	Jurisdiction	Type
Smith Street Motorway	Village Boulevard	TMR	Signalised
Village Boulevard	Hill Street	Council	Priority controlled
Village Boulevard	Innovation Drive	Council	Priority controlled
Innovation Drive	Frazer Street	Council	Priority controlled
Parklands Drive	Nexus Way	Council	Signalised
Frazer Street	Hill Street	Council	Priority controlled

2.3 Public Transport

The subject site is located less than 300m walking distance from bus stops and the Griffith University tram station as shown in Figure 2.1 below.

Details of the bus routes servicing the bus stops are summarised in Table 2.3.



Source: Nearmap

Figure 2.1: Public Transport in Proximity to the Site

Table 2.3: Bus Services in Proximity to the Subject Site

Bus Service	Bus Route Description	Peak Frequency (mins)
700	Tweed Heads to Broadbeach and Griffith University station via Burleigh Heads	7-8
710	Griffith University station to Helensvale station via GCUH station	30
714	Griffith University to Helensvale via GCUH and Pacific Pines	60
719	Paradise Point to Southport via Harbour Town	15
738	Broadbeach South station to Southport via Ashmore	30
739	Griffith University station to Nerang station via Ashmore	60

2.4 Active Transport

2.4.1 Pedestrian Facilities

The proposed development site is surrounded by high quality pedestrian infrastructure, as shown in Figure 2.2 below.



Source: Nearmap

Figure 2.2: Surrounding Pedestrian Pathway Network

2.4.2 Cycling Facilities

The subject site is located in proximity to numerous on-road and off-road cycle paths. Figure 2.3 demonstrates the formalised cycling infrastructure in proximity to the subject site.



Source: Nearmap

Figure 2.3: Surrounding Cycling Network

3. TRAFFIC ASSESSMENT

3.1 Development Traffic Generation

The Roads and Maritime Services' (RMS) *Guide to Traffic Generating Developments* (2002) and the *Technical Direction* (2013) were used to source trip generation rates for the proposed land uses. Due to the unique, combined nature of the similar land uses, the traffic generation rates were reviewed to determine appropriateness as follows:

- The 'medical centre' rate (see below) was reviewed for the GP / allied health / pharmacy tenancies, as it was the most conservative traffic generation rate
- The 'medical centre' rate was also reviewed for radiology and pathology land uses. A 50% linked trips discount was applied for these in the review, as it is anticipated that at least half of the visits to these tenancies would originate within the site
- The 'medical centre' rate was reviewed for the medical / day hospital land uses and the medical suites as a conservative assumption
- The café and educational suites were considered to be an 'ancillary' land uses, and thereby are not considered to be generating additional trips to the site.

The *Guide to Traffic Generating Developments* does not provide a trip generation rate for the medical centre or medical suites land uses. Therefore, the review was undertaken of recorded peak hour traffic generation surveys conducted at 17 medical centres across SEQ by TMR in their database.

Table 3.1 summarises the survey results.

Table 3.1: Medical Centre Trip Generation Rates – Weekday

Suburb	Year	Yield (GFA)	Peak Hour	Peak Hour Trips	Trip Gen. Rate (trips/100m ² GFA)
Taringa	2006	2,188 m ²	15:00 - 16:00	63	2.9
Indooroopilly	2006	1,695 m ²	15:30 - 16:30	86	5.1
Camp Hill	2006	469 m ²	15:00 - 16:00	21	4.5
Newmarket	2006	1,147 m ²	16:15 - 17:15	52	4.5
Aspley	2006	910 m ²	17:30 - 18:30	57	6.3
Kedron	2006	936 m ²	16:00 - 17:00	50	5.3
Robina	2007	640	15:15 - 16:15	53	8.3
Beenleigh	2007	840	16:15 - 17:15	41	4.9
Taringa	2009	2,188 m ²	15:00 - 16:00	88	4.0
Indooroopilly	2009	1,695 m ²	08:45 - 09:45	88	5.2
Newmarket	2009	1,147 m ²	14:00 - 15:00	61	5.3
Kedron	2009	937 m ²	11:15 - 12:15	100	10.7
Burleigh Heads	2011	298 m ²	07:45 - 08:45	18	6.0
Average		1,160 m²	-	59.8	5.6
85th Percentile			-	88	6.7

Given the range of yields, the 85th percentile weekday rate of 6.7 trips per 100m² GFA was assumed to determine the level of trip generation that would result from this rate.

At this rate it was determined that 666 peak hour trips would result. This level of trip generation is considered excessive and unrealistic for a range of land uses that are supported by the surrounding precinct of similar uses, where linked and multi-purpose trips take place, and where further supported by an integrated public transport system and high-quality, connected active transport network.

In addition, the site proposes a parking supply of only 270 spaces, of which only 60 spaces are allocated as short-term visitor parking. This parking is provided generally in accordance with the rates outlined in the Development Scheme, hence further limits the level of traffic that can be generated to/from the site in a typical peak hour.

Therefore, a first principles approach based on the car parking supply and expected turnover was used to calculate a more realistic level of traffic generation, as shown in Table 3.2 below.

Table 3.2: First Principles Peak Hour Development Trip Generation

Land Use	Quantity	Traffic Generation Rate		Traffic (veh/h)	
		AM	PM	AM	PM
Proposed					
Visitor Parking (short term)	60 spaces	3 trips per space ¹	3 trips per space ¹	180	180
Staff Parking (long term)	210 spaces	0.75 trips per space ²	0.75 trips per space ²	158	158
Total (veh/h)				338	338

¹Based on each car parking space turning over 1.5 times in the peak hours

²Based on 75% of available staff parking being filled or vacated during the peak hours

As indicated in Table 3.2 above, the development is likely to generate approximately 338 trips in the AM and PM peak hours.

3.2 Traffic Distribution

A nominal 50:50 'IN:OUT' split was adopted, as summarised in Table 3.3.

Table 3.3: Development Traffic Splits

Land Use	AM Peak Split		PM Peak Split		AM Trips (veh/h)		PM Trips (veh/h)	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Medical Centre	50%	50%	50%	50%	169	169	169	169

The development traffic has been assigned to the road network based on nearby catchments and typical routes travelled using directions from Google Maps and our knowledge of the precinct. The resultant traffic distribution and assignment are shown in Figure 3.1 and Figure 3.2 below.

3.3 Traffic Impacts

As shown below, the additional traffic generation in the AM and PM peak is the equivalent of 1 vehicle per 42 seconds (assuming uniform flow) at the Parklands Drive / Nexus Way intersection.

The additional traffic generated by the proposed development is not expected to have an adverse impact on the surrounding road network, nor does it warrant mitigation measures to be imposed. Further, the land uses proposed are entirely consistent with those contemplated for the precinct, and multiple route choices are available for access to/from the site.

In addition, the high-quality, highly connected public transport system combined with the surrounding complimentary uses are expected to result in a reduced reliance on the private vehicle as contemplated throughout the overall planning of the precinct.

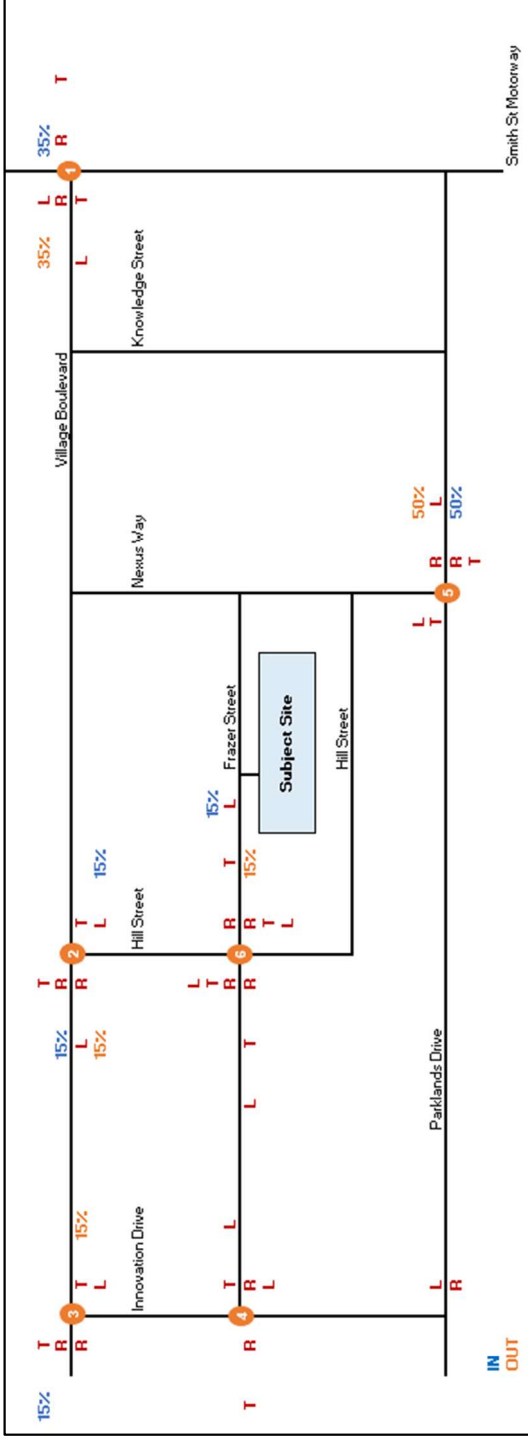


Figure 3.1: Development Trip Distribution

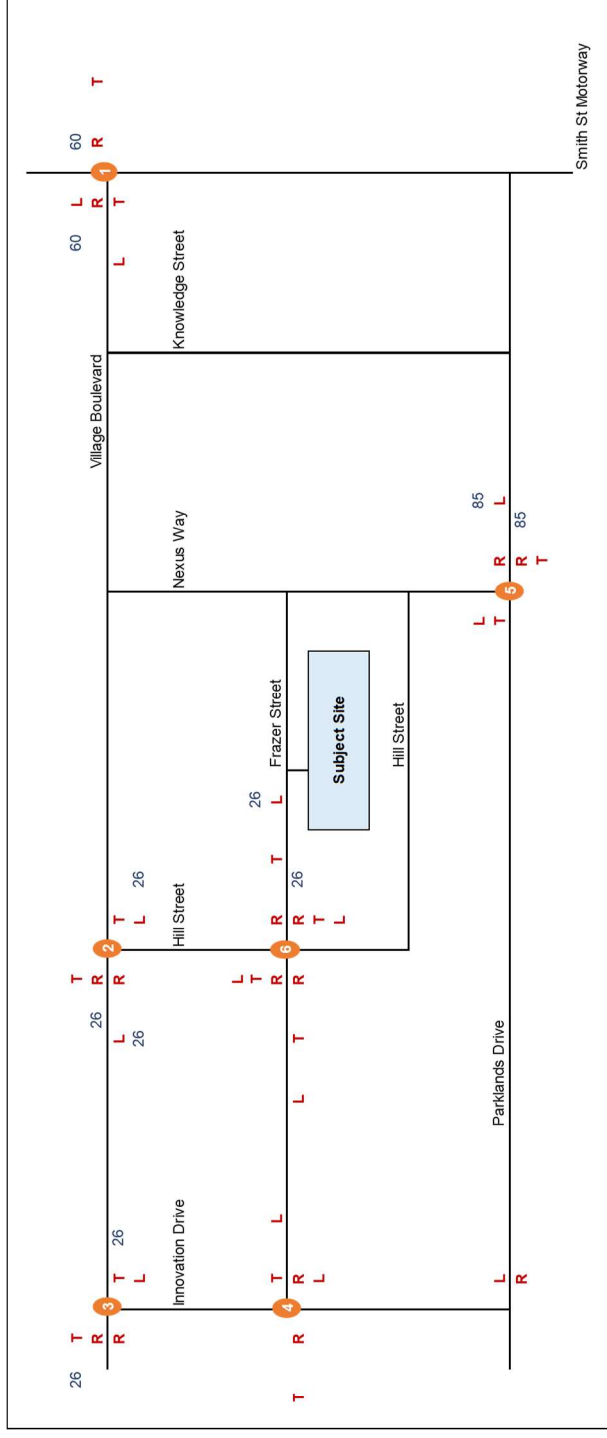


Figure 3.2: Development Trip Assignment

4.1.1 Wayfinding

As the access between the basement levels is not clearly visible, wayfinding signage is recommended to direct both staff and visitors within the parking areas. Examples of wayfinding signage are provided below which can be implemented within the basement are shown below. Ceiling mounted signage directing visitors at circulation points / parking aisle intersections can also be implemented to direct drivers.



Figure 4.2: Wayfinding Signage Examples: Staff and Visitor Parking

Importantly, visitor parking (i.e. unfamiliar drivers) are located throughout Basement 1, so signage directing visitors to additional parking bays is advisable.

In addition, visitor car parks will include pavement marking to indicate “VISITOR”.

An indicative wayfinding strategy (example only) has been included below and overleaf to demonstrate how such signage may be implemented. In addition, considerations shall be given to providing signage to indicate the location of pay stations for ticketed / paid parking (refer also to Section 4.4 for the proposed parking control system).

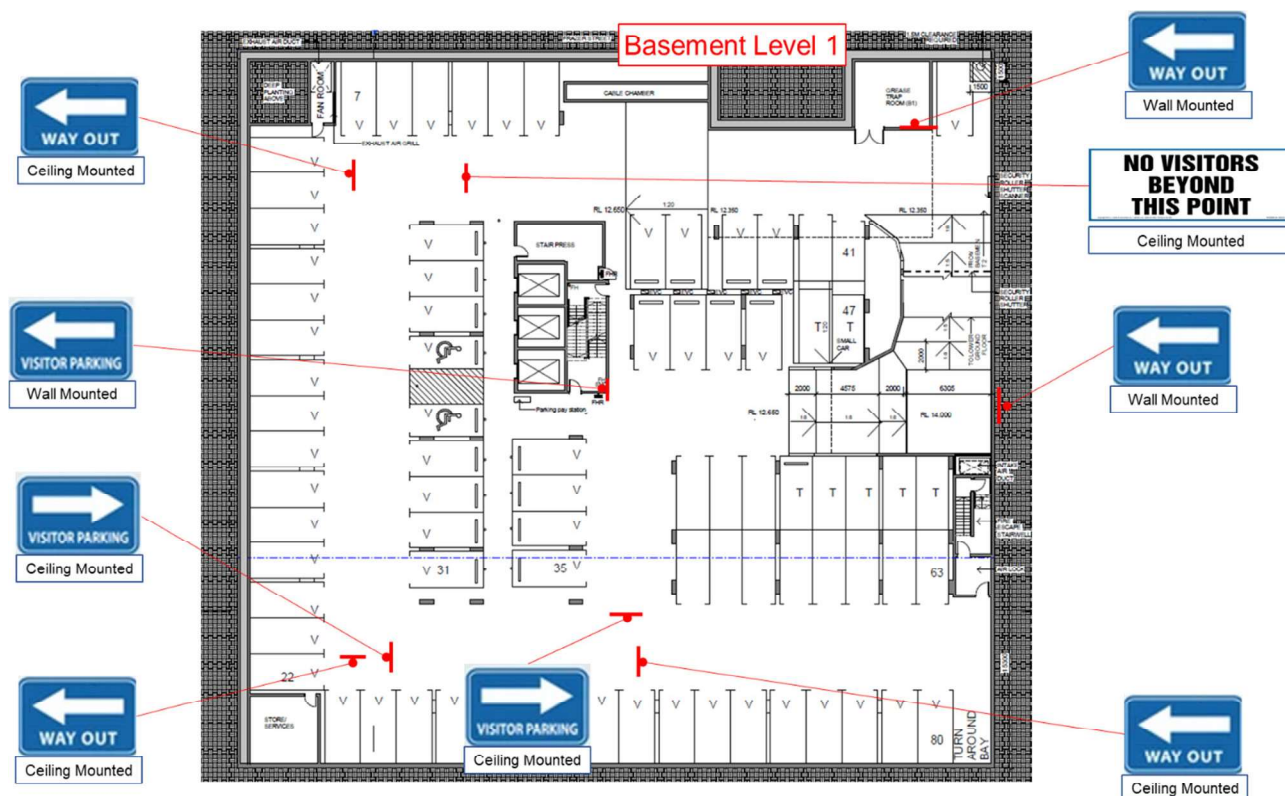


Figure 4.3: Indicative Wayfinding Signage Strategy: Basement Level 1

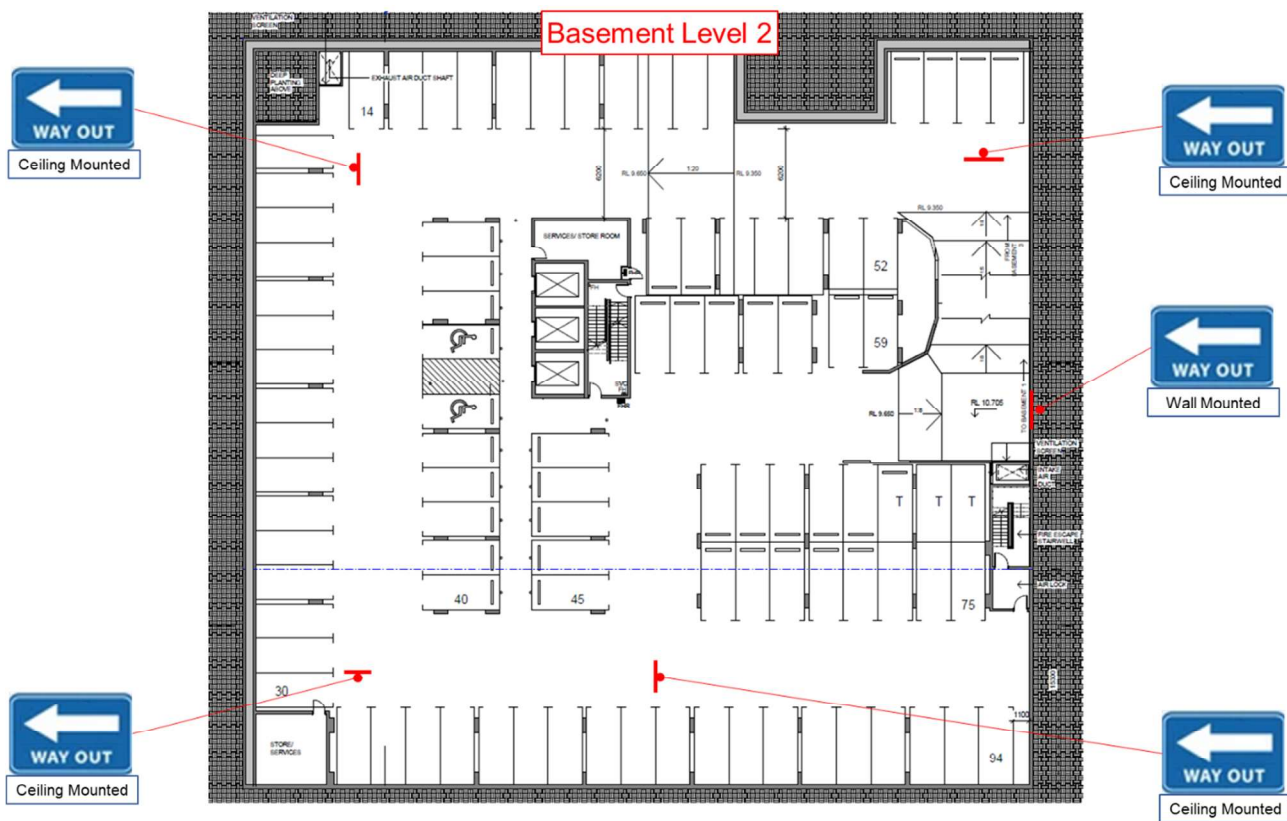


Figure 4.4: Indicative Wayfinding Signage Strategy: Basement Level 2

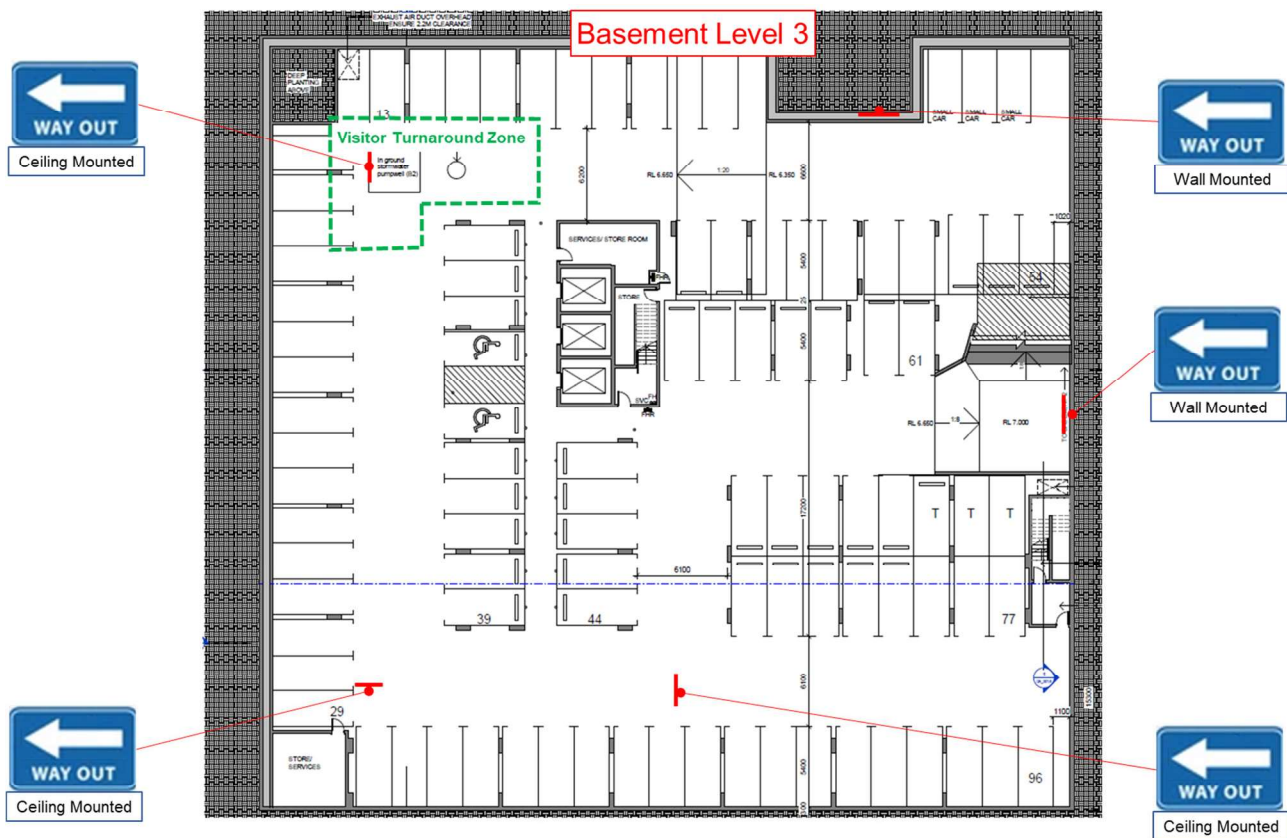


Figure 4.5: Indicative Wayfinding Signage Strategy: Basement Level 3

4.2 Bicycle Parking Requirements and Provision

The Parklands PDA Development Scheme specifies that bicycle parking should be provided in accordance with the *Queensland Development Code 4.1 – Sustainable Buildings* (2011), which specifies the following in Schedule 3:

- Hospital: One (1) bicycle space per 100 occupants.

The occupants of the development are unknown and as such cannot be determined accurately with this rate. As such, Council's Transport Code was referenced for bicycle parking rates for Health Care Services which state:

- Staff parking: 1 per 8 consultation rooms
- Visitor parking: 1 per 4 consultation rooms.

As the number of consultation rooms has not been specified for the development at this time, reference is made to the bicycle parking rates outlined in the *Austroads Guide to Traffic Management, Part 11: Parking* (2020) as shown in Table 4.2 below.

Table 4.2: Bicycle Parking Requirements (Austroads)

Land Use	Type	Quantity (GFA)	Parking Rate	Required
Health Centre	Staff parking (Class B)	14,620m ²	1 per 400m ² of GFA	37
	Visitor parking (Class C)		1 per 200m ² of GFA	74

The primary bicycle parking provision shall be dedicated for staff use, as the types of land uses proposed within the development (medical appointments and short stays in nature) do not typically generate large visitor bicycle demands.

In addition, the development's provision has been designed to achieve 5-star Greenstar Accreditation (high standard in building sustainability) which again, is based on Class 5 occupancy density (unknown), with visitor parking based on 5% of peak visitor numbers.

As such, the proposed bicycle parking provisions for this site include the following:

- 64 secure staff (Class B) bicycle spaces accessed via Lower Ground (from Frazer Street)
- End-of-trip facilities, including, 97 lockers, 6 toilets, 1 PWD shower / toilet, 10 showers
- 8 visitor (Class C) bicycle parking spaces: 4 spaces near the building entry on Frazer Street, and 4 on Upper Ground, accessible via a path from Hill Street.

It is noted that the provided staff bicycle parking (64 spaces) exceeds the bicycle parking rates prescribed in the *Austroads Guides* (2014) and is therefore considered appropriate to meet the demand. In lieu of knowing visitor numbers, the eight (8) visitor spaces is equivalent to 160 peak visitors to the development (based on 5% rate specified).

Given the anticipated mode share and the observed utilisation of visitor bicycle parking facilities in similar developments, the visitor parking rate in the *Austroads Guides* is considered onerous. Survey data in the *RMS Trip Generation Surveys* for medical centres shows that the average mode share across 20 sites in for 'other' modes (including tram, cycle and motorbike) is less than 1%.

As the development provides eight visitor bicycle parking spaces, the bicycle parking is considered appropriate to meet the needs and volumes of predicted cyclist users achieving compliance with PO10 of Council's *Transport Code* (Ver. 8).

4.3 Geometric Layout

The on-site parking geometric layout has been assessed against Council's *Transport Code* (2019) and the relevant sections of Australian Standards *AS2890.1:2004 Off-Street Car Parking*, with key features outlined in Table 4.3.

Table 4.3: Parking Geometric Layout Assessment

Design Element	Required	Provided	Compliant
Staff Parking Bays (User Class 1)	2.4m x 5.4m	2.4m x 5.4m (min.)	YES
Visitor Parking Bays (User Class 3)	2.6m x 5.4m	2.6m x 5.4m	YES
Tandem Parking Bays	2.4m x 10.8m	2.4m x 10.8m	YES See Note 1
Parking Aisle Width	5.8m + 0.3m for single sided aisle	5.8m (min.)	YES
Blind Aisle Extension	1.0m	1.1m (min.)	
Clearance to Vertical Obstructions	0.3m	0.3m (min.)	YES
Column Intrusions	As per Figure 5.2 in AS2890.1	As per Figure 5.2 in AS2890.1	YES
Grades (Entry)	Max. 1:20 for first 6m into site	1:33	YES
Grades (Parking Module)	Max. 1:20 measured parallel to the angle of parking. Max. 1:16 measured in any other direction	As per AS2890.1	YES
Ramp Width (Straight Ramp)	6.1m	6.1m (min.)	YES
Ramp Width Two Way (Curved Ramp)	Outside Radius 11.8m min Inside Radius 4.0m min	Based on swept path analysis	See Note 2
Ramp Grade	Max. 1:5 with transitions	Max. 1:5 with transitions	YES
Change in Grade	1:8 (12.5%) summit and 1:6.7 (15%) sag	1:8 (max) via 2m transitions	YES
Height Clearance (Basement and Podium Parking)	Min. 2.2m to overhead structure and obstructions	Min. 2.2m to overhead structure and obstructions	YES
Height Clearance (Lower Ground Loading Zone)	Min. 3.5m to overhead structures and obstructions	Not Annotated, RL's indicate in excess of 3.5m	Shall Comply
Horizontal Bicycle Parking	1.8m x 0.5m + 1.5m aisle	Not Annotated	Shall Comply
Vertical Bicycle Parking	1.2m x 0.5m + 1.5m aisle	Not Annotated	Shall Comply

Notes:

1. The tandem parking bays will be allocated to tenancies and will be accessible to staff only.
2. While the basement level ramps are essentially straight ramps with 90-degree bends, the manoeuvring essentially requires them to operate similar to a curved ramp. As such, the ramp design has been based on swept path analysis, achieving the required 600mm outside clearance and 300mm inside clearance. Swept path diagrams are provided in **Appendix B**.

A summary of compliance against MP4.1-A12 of the Queensland Development Code is provided in Table 4.4.

Table 4.4: Compliance Against MP4.1-A12 of QDC

Element	Comment	Compliance Achieved?
1(a) Bicycle spaces are easily accessible and provided in a building or within 100m of entrance to building	Bicycle spaces within building	YES
1(a)(i) Staff bicycle spaces provided at 5% of total number of employees	Ultimate number of occupants / staff currently unknown. Provision of staff / visitor bicycle spaces allows for up to 1,320 staff and 800 occupants. This is considered to be significantly more than what will be required	YES
1(a)(ii) Provides staff bicycle spaces at a rate of 1 per 100 occupants (hospital)		YES
1(b) Design and constructed pursuant to AS2890.3	Design is pursuant to AS2890.3.	YES
2(a) Lockers are easily accessible and provided in a building or within 100m of entrance to building	Lockers within building	YES
2(b) Co-located or provided within 50m of change rooms	Lockers adjacent to change rooms	YES
2(c) Provided with minimum dimensions of 900mm x 300mm x 450mm	Provided at >900mm x 300mm x 450mm	YES
3(a) Change rooms are easily accessible and provided in a building or within 100m of entrance to building	Change rooms within building	YES
3(a)(i) Change rooms are fitted with a lockable door or screened from public view	Change rooms fitted with lockable door	YES
3(a)(ii) Change rooms are located within 100m of bicycle parking / storage facilities	Change rooms adjacent to bicycle parking / lockers	YES
4(a)(i) Change rooms provide four male showers and four female showers, based on 72 bicycle spaces	Five male showers, five female showers provided	YES
4(a)(ii) Change rooms provide showers that have a minimum 3-star WELS rating shower head	Detailed design of this element not completed	Shall Comply
4(a)(iii) Change rooms provide showers that dispense both hot and cold water	Detailed design of this element not completed	Shall Comply
4(b)(i) Change rooms provides two female sanitary compartments and two male sanitary compartments, based on 72 bicycle spaces	Three male sanitary compartments, three female sanitary compartments provided	YES
4(b)(ii) Change rooms provide sanitary compartments that are constructed in compliance with the BCA	Detailed design of this element not completed	Shall Comply
4(c) Change rooms provide one male wash basin and one female wash basin, based on 72 bicycle spaces	Two male wash basins, two female wash basins provided	YES
4(d) Change rooms provide a mirror located above wash basins	Detailed design of this element not completed	Shall Comply
4(e) Change rooms provide a hook and beach seating located within each shower compartment	Detailed design of this element not completed	Shall Comply
4(f) Change rooms provide a socket-outlet adjacent to each wash basin	Detailed design of this element not completed	Shall Comply
5 Change rooms located in a car park may not count towards requirements of the BCA	Changerooms on lower ground floor connected to pedestrian access / lift lobby	YES

Element	Comment	Compliance Achieved?
6 Local planning schemes may require additional bicycle parking and associated facilities	City of Gold Coast accepts use of Austroads rates as a performance outcome which the proposed development complies with.	YES

The proposed development is considered to comply with A12 of the Queensland Development Code MP4.1.

4.4 Queuing

The proposed development provides a roller shutter for the after-hours security of the car parking levels. As the roller shutter will remain open during staffed hours, no queueing is expected to result from its provision during peak staff entry times.

As discussed in the TIA report submitted with the development application, the development's parking shall be controlled via a number plate scanner. This removes the need for vehicles to stop when entering the site to collect a ticket. The presence of the boom-gate on entry is to force vehicles to slow as to increase the accuracy of the numberplate scanner. The system is expected to operate similarly to the parking controls implemented at the nearby Woolworths Smith Collective development at the corner of Von Itzstein Street and Knowledge Street. Similar to this example, the numberplate scanner results in a two second delay for vehicles entering the site.

As discussed in the TIA report submitted with the development application, the proposed development is anticipated to generate 169 ingressing trips in the AM peak hour. An assessment of vehicle queuing pursuant to the Austroads Guide to Traffic Management Part 2: Traffic Theory Concepts shows that the 98th percentile queue is one vehicle.

Sufficient distance between the entry boom gate and the property boundary (i.e. 6.5m) has been provided for the largest vehicle entering the site (i.e. an SRV or ambulance) to queue at the entry gate without overhanging the pedestrian path along Frazer Street as shown in the development plans attached in **Appendix A**.

5.2 Sight Distance

A review of sight distance was undertaken for the vehicular access to the site as shown in Table 5.2.

Table 5.2: Access Sight Distance Assessment

Sight Distance	Minimum SSD Requirement (50km/h)	Available
Looking west	45m	55m
Looking east		60m

SSD = Stopping Sight Distance

As shown above, the site accessway has approximately 55m of sight distance to the Hill Street / Frazer Street intersection and 60m to the Frazer Street / Nexus Way intersection, which exceeds the minimum stopping sight distance of 45m for a 50km/hr frontage road as per Figure 3.2 of AS2890.1 (2004).

5.3 Pedestrian Connectivity

Pedestrian footpaths are provided between building lobby and the surrounding pedestrian footpaths on Frazer Street and Hill Street in accordance with PO11 of Council's *Transport Code* (Ver. 8).

Direct pedestrian and cyclist access is afforded into internal active transport facilities and connects with the broader, high-quality and highly connected pathway network.

6. SERVICING ASSESSMENT

6.1 Servicing

Council's *Transport Code* prescribes minimum service vehicle sizes for the various land uses within the development as outlined in Table 6.1 below.

Table 6.1: Minimum Service Vehicle

Land Use	Minimum class of service vehicle
Health care services	SRV
Food and drink outlet	SRV

The proposed development provides an on-site standing area for both an SRV (equivalent to an ambulance) and a van (equivalent to a B99) within the lower ground level as shown in **Appendix A**.

A swept path assessment, provided in **Appendix B**, shows that a 6.4m SRV is able to enter and exit the site in a forward gear in accordance with the requirements of the *Transport Code* (Ver. 8).

6.2 Refuse Collection

On-site refuse collection could not be achieved given the design constraints within the lower ground level, including the retention of the existing transformers and separate registered land title, proposed circulation ramps, and ambulance bay. The proposed servicing location is shown in Figure 6.1.

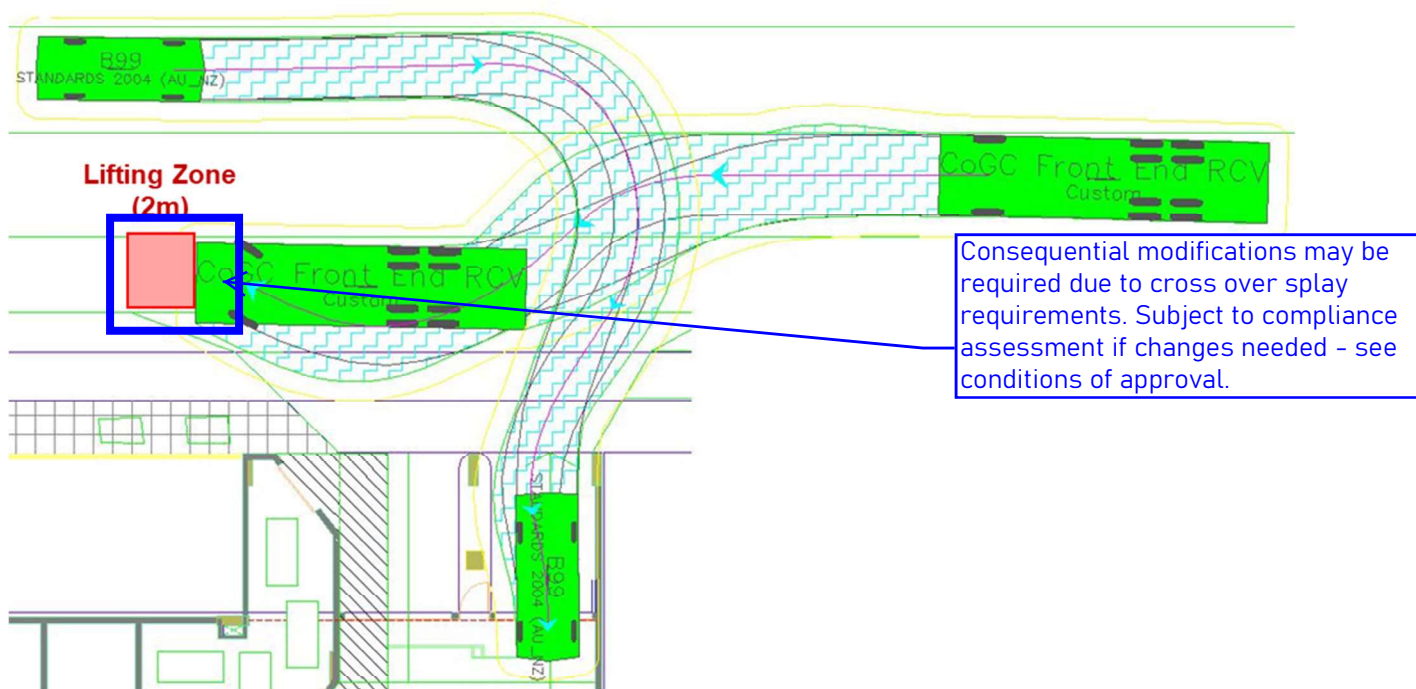


Figure 6.1: Refuse Collection Location

Refuse collection is understood to occur between 6am – 9am. It is unlikely that there will be egressing traffic at this time. Ingressing vehicles are able to manoeuvre around the Refuse Collection Vehicle (RCV) and enter the site. It is noted that the width of the crossover / lifting zone does not result in the loss of any on-street parking spaces. An additional 5.8m is required to allow for the provision of another parking space between the proposed crossover and Hill Street.

It is noted that the RCV is stationary within the road reserve for servicing, but remains clear of pedestrians and through traffic. Cyclists will ride within the through lane or on the footpath, meaning that cyclists will also remain clear of the RCV during periods of servicing.

7. SUMMARY AND CONCLUSION

The key findings of the Traffic Impact Assessment for the proposed health services development to be located at the corner of Hill Street and Frazer Street are as follows:

- The proposed development is comprised of a total GFA of 14,620m² of facilities, excluding common areas
- The development is likely to generate approximately 338 trips in the AM and PM peak hours
- The development provides 270 car parking spaces
- The development provides 72 bicycle spaces including 8 visitor bicycle parking spaces and 64 staff parking spaces which is expected to meet the demands of cyclists travelling to the development
- The on-site parking geometric layout is generally in accordance with the relevant requirements of AS2890.1 and Council's *Transport Code* (Ver. 8)
- The driveway crossover is provided generally in accordance with the relevant requirements of AS2890.1 and IPWEAQ Drawing No. RS-051 in terms of form, location and sight distances
- The proposed development provides on-site servicing for both an SRV (equivalent to an ambulance) and a van, so that service vehicles can enter and exit the site in a forward gear
- Refuse collection (and servicing by larger vehicles should they be required) is proposed to occur on-street due to site constraints through a kerbside management solution consistent with other existing operations within the City.

Based on the above assessment it is concluded that there are no significant traffic or transport impacts associated with the proposed development to preclude its approval and relevant conditioning on transport planning grounds.

Appendix A: Development Plans



NIECON
CREATING LIFESPACES

REV	DATE	BY	REMARK
C	03.02.2022	NS	GENERAL AMENDMENTS
D	03.02.2022	NS	GENERAL AMENDMENTS
E	17.02.2022	NS	TEMP AMENDMENTS
F	21.02.2022	CL	TEMP AMENDMENTS
G	02.03.2022	CL	TEMP AMENDMENTS
H	02.03.2022	CL	TEMP AMENDMENTS
I	02.03.2022	CL	TEMP AMENDMENTS
J	03.03.2022	NS	GENERAL AMENDMENTS
K	03.03.2022	NS	GENERAL AMENDMENTS
L	03.03.2022	NS	GENERAL AMENDMENTS
M	28.03.2022	NS	GENERAL AMENDMENTS
N	30.03.2022	MC	GENERAL AMENDMENTS
O	07.04.2022	MC	GENERAL AMENDMENTS
P	17.04.2022	MC	GENERAL AMENDMENTS
Q	30.04.2022	MC	GENERAL AMENDMENTS
R	28.04.2022	JC	IN COORDINATION
S	30.04.2022	JC	DEVELOPMENT APPROVAL
T	03.05.2022	JC	DEVELOPMENT APPROVAL
U	16.05.2022	JC	GPA SUMMARY REV
V	19.05.2022	JC	PRELIMINARY DEVELOPMENT
W	31.05.2022	JC	DEVELOPMENT APPROVAL
X	13.06.2022	JC	DEVELOPMENT APPROVAL
Y	20.06.2022	NS	GENERAL AMENDMENTS
Z	20.02.2023	NS	GPA UPDATE
AA	14.02.2023	NS	GPA UPDATE

PROJECT:
CENTRE OF EXCELLENCE
FOR CLINICAL CARE,
RESEARCH, INNOVATION AND
INDUSTRY

AT: LUMINA SITE 6B
CORNER OF HILL STREET &
FRAZER STREET
SOUTHPORT

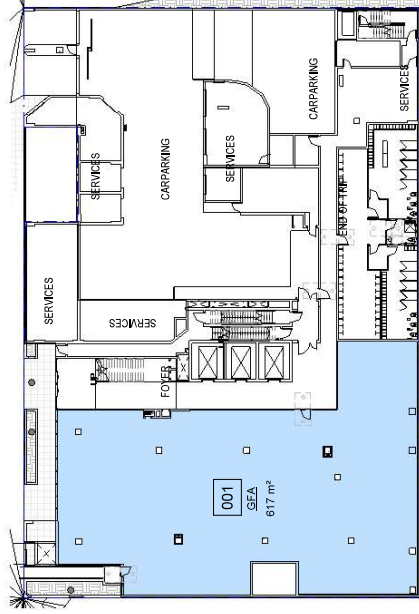
DRAWING TITLE:
GFA SUMMARY

SCALE: 1:500 @A3

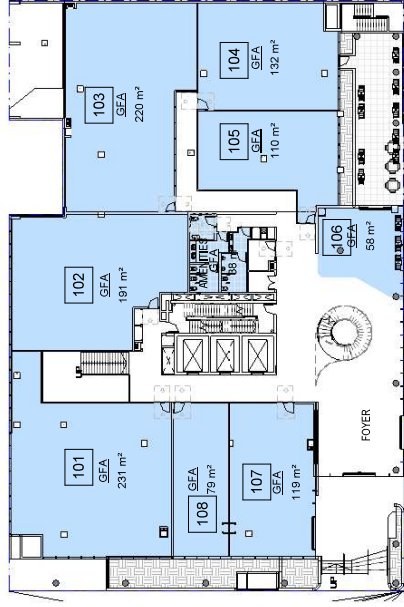
DATE: 13.09.2022

NORTH 

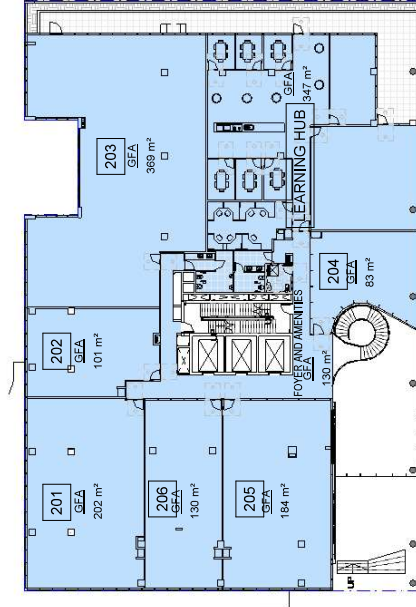
JOB No.	Dwg. No.	REV.
1793	DA 0 141	AB



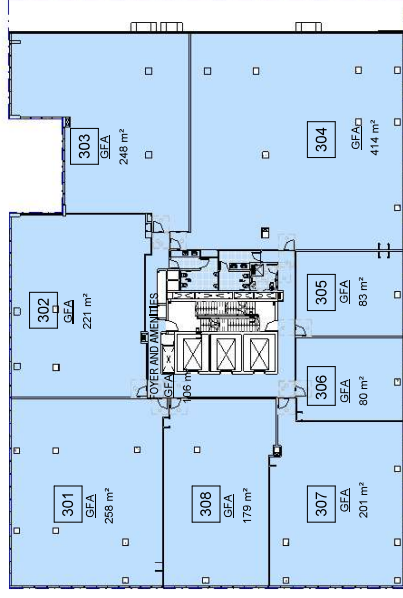
LEVEL: LOWER GROUND - 617m²



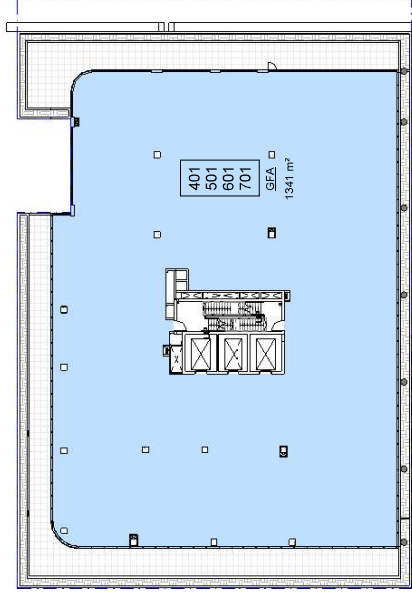
LEVEL: 1 (UPPER GROUND) - 1,178m²



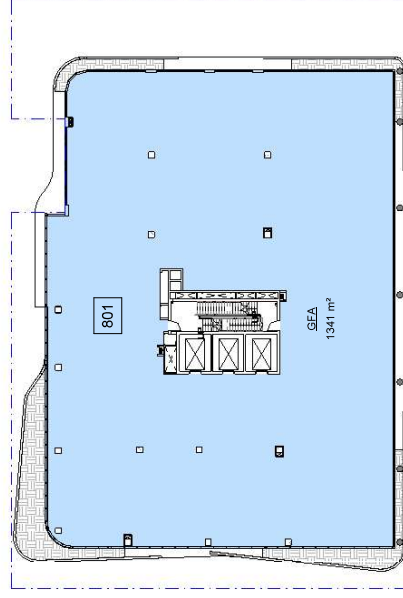
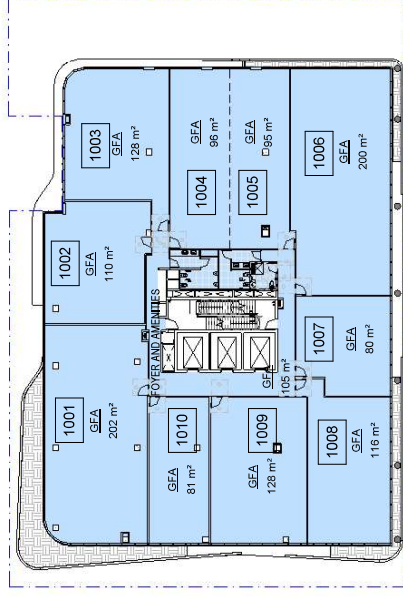
LEVEL: 2 - 1,546m²



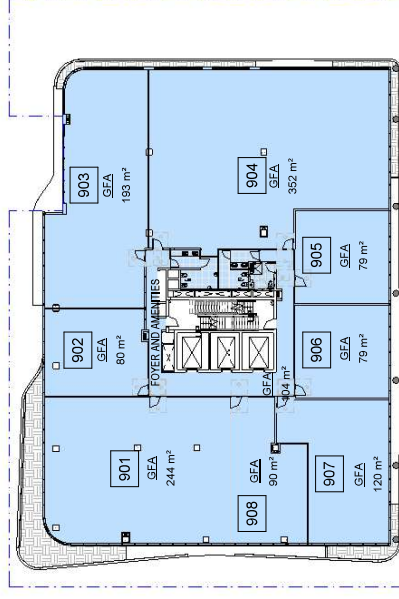
LEVEL: 3 - 1,790m²



LEVEL: 4 to 7 - 5,364m²

LEVEL: 8 - 1,341m²

LEVEL: 10 - 1,341m²



LEVEL: 9 - 1,341m²

[illegible]

NIECON
CREATING LIFESPACES

PROJECT:
CENTRE OF EXCELLENCE
FOR CLINICAL CARE,
RESEARCH, INNOVATION AND
INDUSTRY

DRAWING TITLE:
GENERAL ARRANGMENT -
BASEMENT 3

SCALE: 1:200 @A3

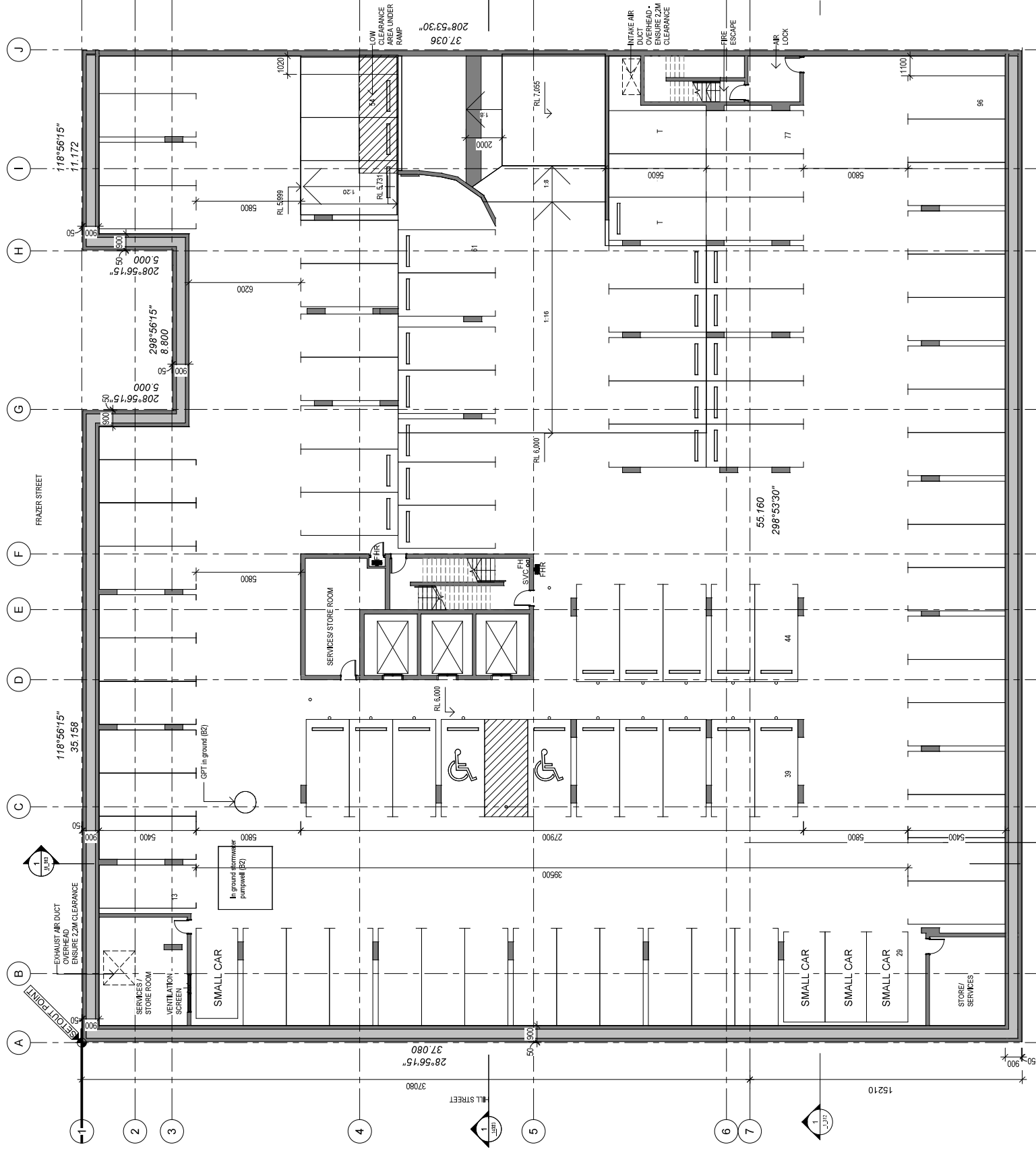
DATE: 13.09.2022

NORTH



JOB No. 1793 Dwg. No. DA 1 097 REV

TOTAL: 270
INC. 60 VISITOR CAR PARKS)



NIECON
CREATING LIFESPACES

REV	DATE	BY	REVISION
A	12-28-2022	JC	BASEMENT LAUNDRY DEVELOPMENT APPROVAL
B	10-03-2022	JC	PRELIMINARY DEVELOPMENT APPROVAL
C	11-08-2022	JC	DEVELOPMENT APPROVAL
D	12-08-2022	JC	DEVELOPMENT APPROVAL
E	10-05-2022	JC	DEVELOPMENT APPROVAL
F	11-01-2022	JC	DEVELOPMENT APPROVAL
G	11-11-2022	JC	STRUCTURAL COORDINATION
H	10-20-2022	JC	BASEMENT DOOR SWINGS
I	11-01-2022	JC	BASEMENT DOOR SWINGS
J	11-01-2022	JC	CHANGED BASEMENT RAMP
K	14-02-2023	JC	CHANGED BASEMENT RAMP
L	14-03-2023	K2	SERVICE ROOM RAMP

PROJECT:
CENTRE OF EXCELLENCE
FOR CLINICAL CARE,
RESEARCH, INNOVATION AND
INDUSTRY

AT:
LUMINA SITE 6B
CORNER OF HILL STREET &
FRAZER STREET
SOUTHPORT

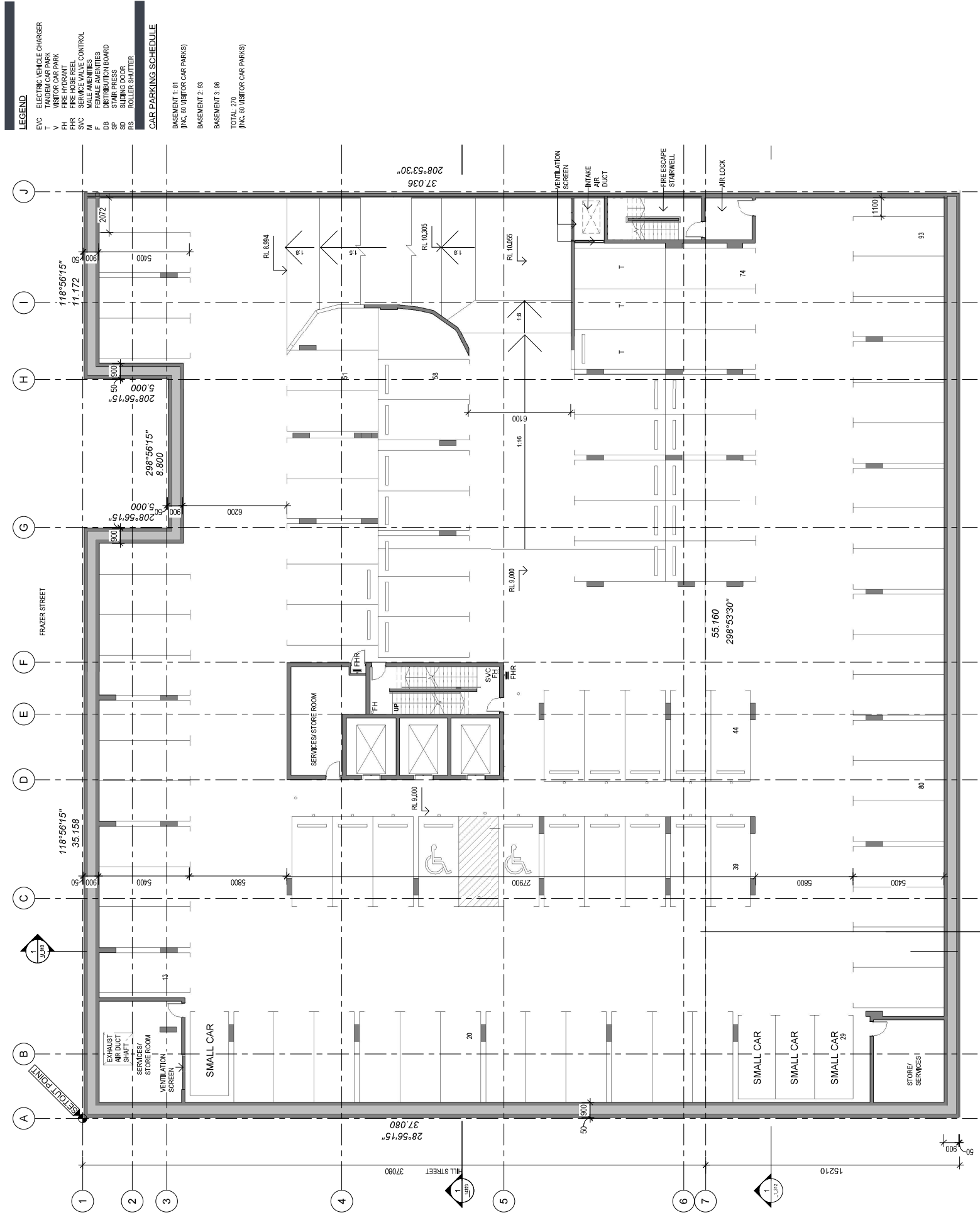
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GENERAL ARRANGEMENT
BASEMENT 2

SCALE: 1:200 @A3

DATE: 13.09.2022

NORTH 

JOB No. Dwg. No. REV.
1793 DA_1_098 L



REVIEW	DATE	BY	AMENDMENT
A	08.05.2022	AC	PRELIMINARY DESIGN MEMORANDUM
B	17.08.2022	AC	PRELIMINARY LAYOUT
C	18.08.2022	AC	PRELIMINARY DEVELOPMENT
D	19.08.2022	AC	DEVELOPMENT APPROVAL
E	12.08.2022	AC	DEVELOPMENT APPROVAL
F	31.08.2022	AC	COORDINATION
G	03.11.2022	AC	COORDINATION
H	25.11.2022	AC	STRUCTURAL COORDINATION
I	01.01.2023	AC	MECHANICAL COORDINATION
J	13.01.2023	AC	MECHANICAL COORDINATION
K	14.02.2023	AC	MECHANICAL COORDINATION
L	14.03.2023	AC	CHARMED ELEVATION RAMPS
M	14.03.2023	NS	SERVICE ROOM REMOVED

PROJECT:
CENTRE OF EXCELLENCE
FOR CLINICAL CARE,
RESEARCH, INNOVATION AND
INDUSTRY

UT: UMINA SITE 6B
CORNER OF HILL STREET &
FRAZER STREET
SOUTHPORT

DRAWING TITLE:
GENERAL ARRANGEMENT
BASEMENT 1

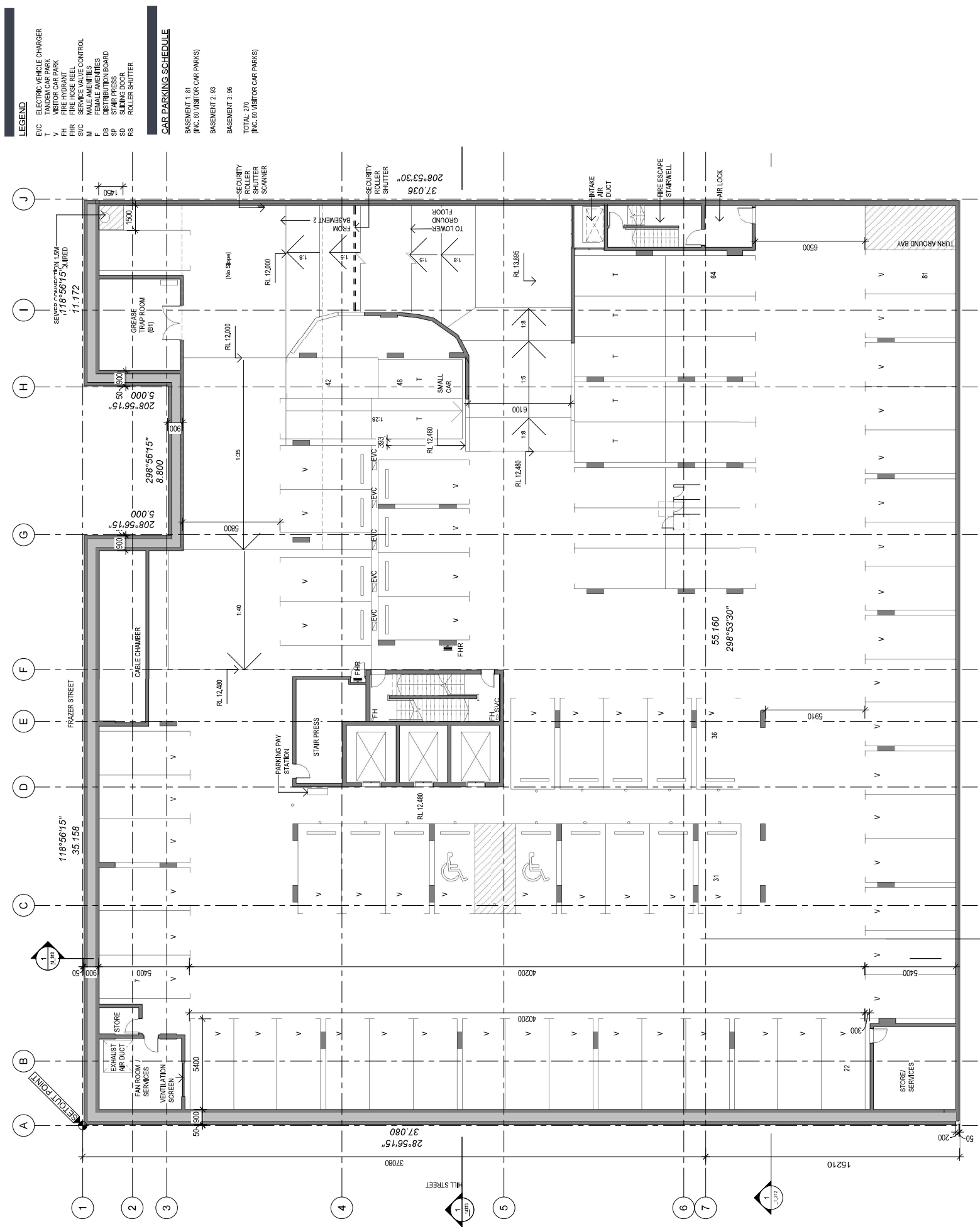
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DATE: 13.09.2022

NORTH

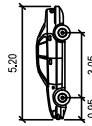


OB No.	Dwg. No.	REV
1793	DA_1_099	M

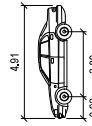


Appendix B: Swept Path Diagrams





B99
Width : 5.20
Track : 3.05
Lock to Lock Time : 6.0
Steering Angle : 38.0



B85
Width : 4.91
Track : 2.80
Lock to Lock Time : 6.0
Steering Angle : 38.5

DESIGN VEHICLE



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Unit 303, 3 Gladstone Street, Newtown NSW 2042
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REVISIONS

Issue	Revised By	Revised Date
001	Basement Ramp Sweep Path - B85 Passing B99	

Drawn: M.B. 21.02.23

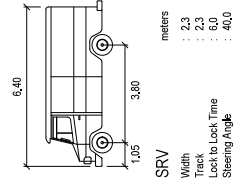
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Project: GCHKP Southport TIA

Design: M.B.

Project Number	Sheet Number	Date
P5363	1	21.02.23
CONCEPT ONLY		Issue
		005

Title: Basement Ramp Sweep Path - B85 Passing B99



DESIGN VEHICLE



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REVISIONS		
Issue	Revised By	Date
001	Lower Ground - SRV Ingress & Egress	21.02.23

Scale @ A3	0 2 4 6 8 10	1:200
Project	GCHKP Southport TIA	Design
Project	M.B	Project Number
Project	CONCEPT ONLY	Sheet Number
Project	21.02.23	Issue

Project	Lower Ground - SRV Ingress & Egress	Project Number
Project	P5363	Sheet Number
Project	2	Issue
Project	005	Issue

