

# ACCESS REPORT

## SENIORS HOUSING

**12-14 GLADYS AVE,  
FRENCHS FOREST**



Prepared by Mark Relf

17<sup>th</sup> September 2024

# Accessibility Report for Development Application for a DEVELOPMENT APPLICATION SENIORS HOUSING DEVELOPMENT 12-14 GLADYS AVE, FRENCHS FOREST

## Introduction

The following report has been prepared to review the “accessibility” of a development application to develop a site at 12-14 Gladys Avenue, Frenchs Forest for the purposes of a new seniors housing consisting of nineteen (19) independent living units (ILUs).

The development proposes the following building elements.

- **Dwelling Mix** - The development proposes 2 X 2 bedroom apartments and 17 X 3 bedroom single level designs in multi storey development with basement parking.
- **Parking** – The plans indicate; twenty-eight (28) resident parking spaces.

## Assessment Criteria

The following report has been prepared to review the “accessibility” of proposed development pursuant to the requirements of State Environment Planning Policy: Housing 2021 : Part 5 Housing for Seniors and People with a Disability (hereinafter *SEPP HS*) and related Schedules 4 and 8 clause 6 - *Accessibility* of the SEPP Housing 2021.

Inherently, the assessment has had regard to

- AS1428.1 (2021) Design for Access and Mobility
- AS1428.4.1 (2009) Tactile Ground Surface Indicators
- AS2890.6 (2009) Off-street parking for people with a disability
- AS1735.12 (1999) Lifts : Facilities for people with a disability
- Building Code of Australia 2022 – Sections D4 and E3D7/E3D8
- DDA Disability Standard for Accessible Public Transport (2002)
- Accessible bus stop guidelines (2010) Australian Human Rights Commission
- Northern Beaches Council – Warringah DCP 2011 – *Part D18 Accessibility and Adaptability*

DA Documentation - The appraised documents and plans relied upon for this report include: Issue DA architectural plans prepared by Smith and Tzannes architects are listed at Appendix C.

# Access Assessment

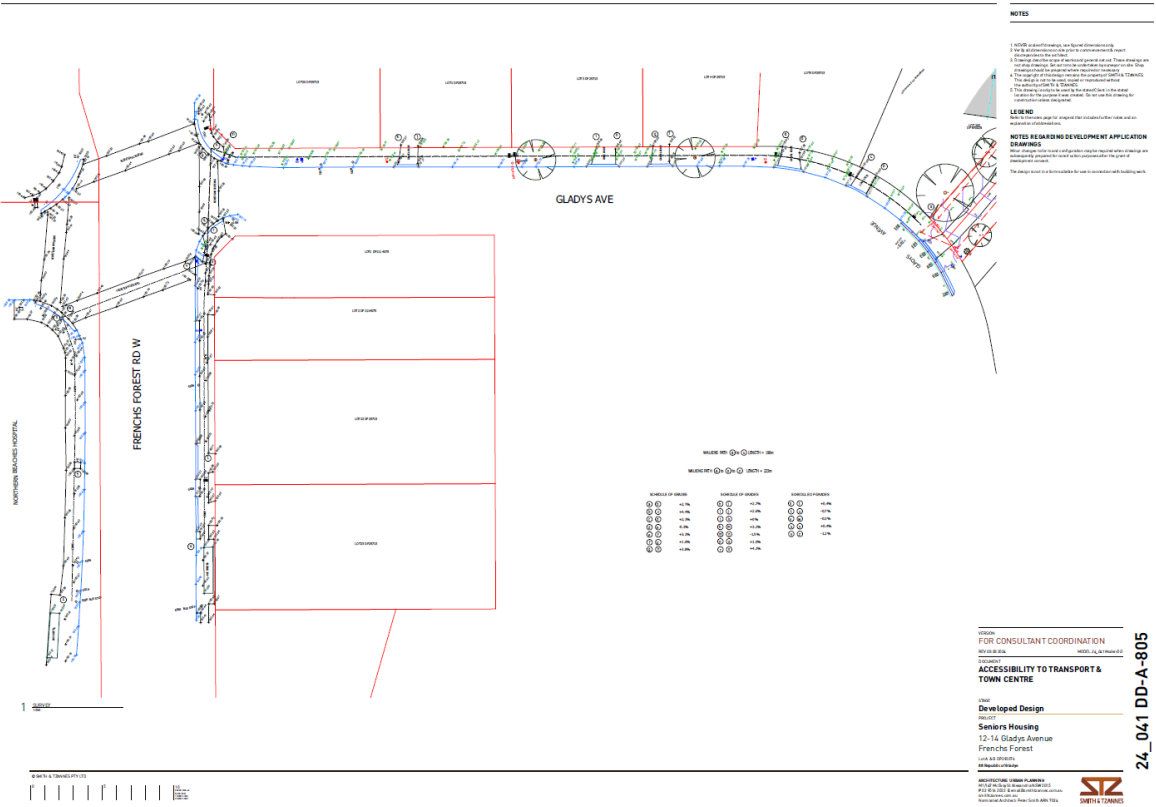
**Section 1: Access to Public Transport and Services  
[Clause 26 & Schedule 8 Clause 6(a)]**

**Accessible facilities and services**

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**Distance to shops and services**

1.1 While the site is located approximately 1 to 2 km to the local Forest Way, Frenchs Forest and Belrose the distances to a wider range of services are 6 km to 12 km to Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood shopping centres which provide the required variety of shops and services to fully satisfy the expectations of clauses 93(1) and (5) of the SEPP HS.

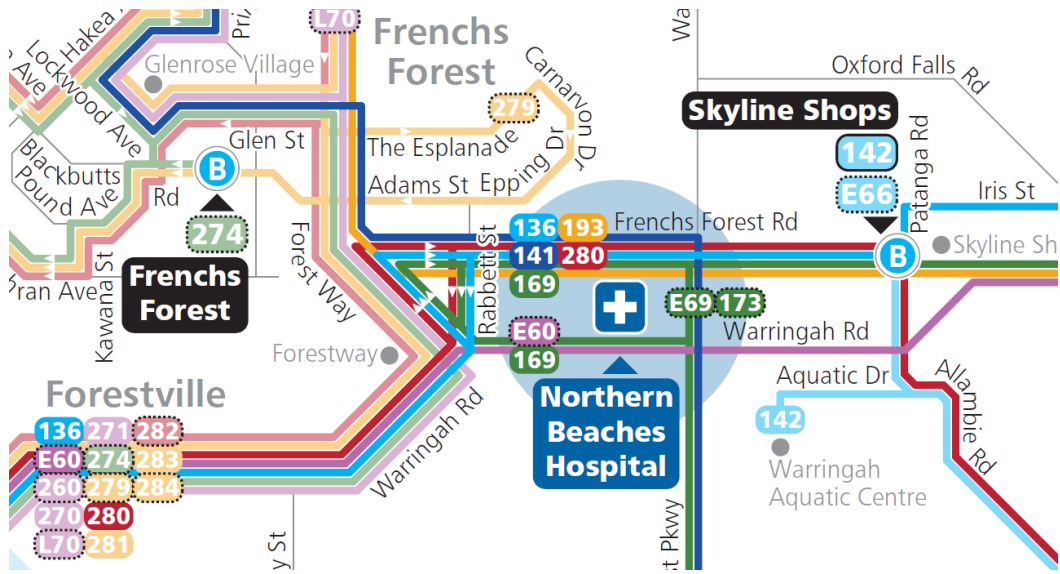


**Pedestrian access map to bus stops**

1.2 Therefore, this assessment considers the proposed pedestrian access along Gladys Avenue and Frenchs Forest Road to access two bus stops which are serviced by bus routes 136, 141, 169, 193 and 280 that travel to and from the abovementioned retail and commercial centres.

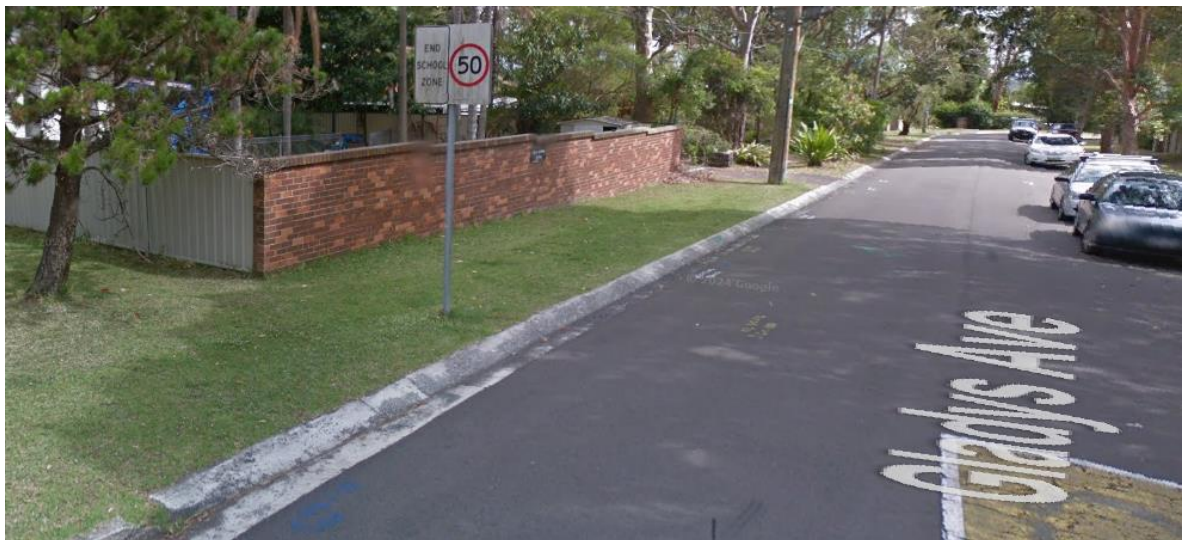
A review the proposed works confirms the distance to the easterly outbound bus stop is 196 metres and 223 metres to the westerly bus stop which complies with clause 93(2b) of the SEPP HS.

**Accessible facilities and services**



At destination centres of the local Forest Way, Frenchs Forest and Belrose shops, Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood retail and commercial precincts there are inbound and outbound bus stops adjoining these retail and commercial precincts that are less than 400mm to shops and services to comply with clause 93(2b) of the SEPP HS.

**Quality of footpath access to the bus stop**



- 1.3 The topography of the pedestrian verge along Gladys Avenue provides a very moderate slope of less than 1:20 to comply with clause 93 of the SEPP HS in terms of gradient. However, the absence of a concrete footpath does not comply with clause 93 of the SEPP HS and would require a footpath to be installed from the development site to Frenchs Forest Road where appropriate footpaths and associated infrastructure is provided to fully satisfy clause 93 of the SEPP HS.



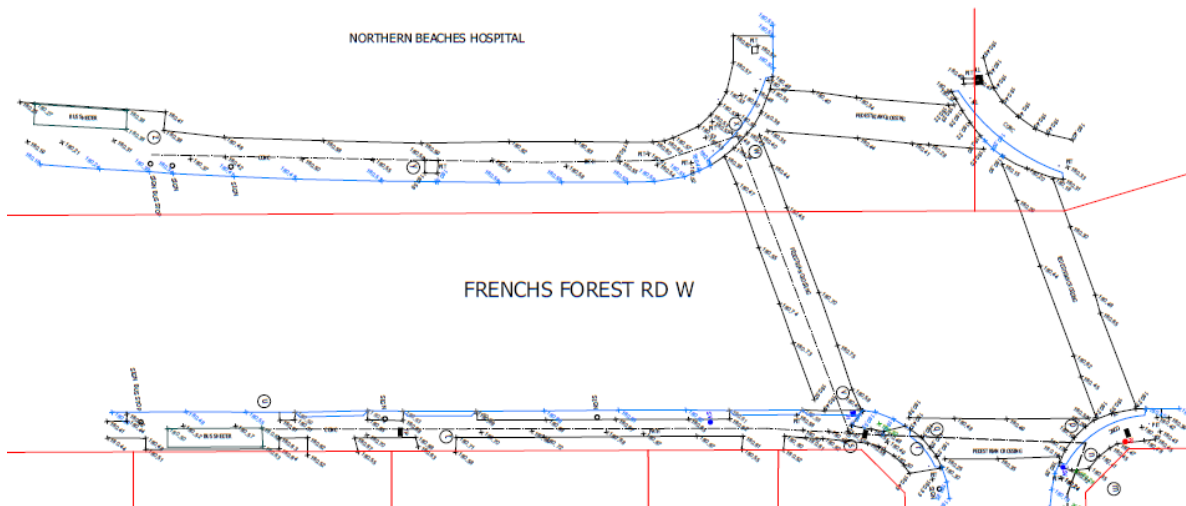
**Accessible facilities and services**

**Frenchs Forest Road / Gladys Avenue Crossing**



1.4 The signalised crossing of Frenchs Forest Road provides kerb ramps and footpaths that enable wheelchair access that complies with clause 93 of the SEPP HS.

**Frenchs Forest Road footpaths to bus stops**



1.5 The Frenchs Forest Road footpaths to the bus stops provide a very moderate 1:20 maximum longitudinal gradient and 1200-1500mm width to the southbound bus stop in accordance with ASI 428.1 and clauses 93(3) and (4) of the SEPP HS.



### Accessible facilities and services

- 1.6 The bus stops incorporate a shelter with a boarding point providing an area to facilitate a 1540mm X 2070mm turning area and 150mm minimum height kerb to board a bus in accordance with AS 1428.1 and the AHRC Bus Stop Guidelines to satisfy the DSAPT and clause 93(4) of the SEPP HS.
- 1.7 **Destination Accessibility** - With respect to the accessibility of destination bus stops at the local Forest Way, Frenchs Forest and Belrose shops, Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood retail and commercial precincts this assessment confirms appropriate access in accordance with Clauses 93(2)(3)(4) and clause 6 of schedule 8 of the SEPP HS.
- 1.8 **Shopping Centres** – The 141, 160/166 169, 193 and 280 bus routes that travel from the abovementioned bus stops to the local Forest Way, Frenchs Forest and Belrose shops, Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood retail and commercial precincts enable access to a wide range of shops and services in accordance with Clauses 93(1)(3)(5) and clause 6 of schedule 8 of the SEPP HS.
- 1.9 **Bus Route Frequency** - With respect to requirements of clause 93(2) of the SEPP HS the timetables for the 141, 160/166 169, 193 and 280 routes confirm 150 services daily, Monday to Friday that travel to the Forest Way, Frenchs Forest, Belrose shops, Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood shopping precincts with;
- a) Route 141 provides 17 services depart from the designated stops on Frenchs Forest Road daily with 7 services between 8.00am and noon Mon–Fri travelling to Manly and Belrose; and
  - b) Routes 160/166 provide 76 services depart from the designated stops on Frenchs Forest Road daily with 16 services between 8.00am and noon Mon–Fri travelling to Chatswood and Dee Why and Manly; and
  - c) Route 193 provides 31 services depart from the designated stops on Frenchs Forest Road daily with 8 services between 8.00am and noon Mon–Fri travelling to Warringah Mall and Belrose; and
  - d) Route 280 provides 31 services depart from the designated stops on Frenchs Forest Road daily with 8 services between 8.00am and noon Mon–Fri travelling to Warringah Mall and Chatswood.
- There are a similar number of return services to the designated bus stops between noon and 6.00pm.
- 1.10 The timetables also confirm that the abovementioned bus routes provide more than 100 services on Saturday and Sunday to ensure a comprehensive array of public transport. A sample of the 166 timetable is attached at Appendix A of this report to illustrate the above frequencies.
- Overall, the abovementioned services provide an appropriate range of services and choice of destinations to access a wide range of shops and services to satisfy clause to satisfy clause 93 (2) and (5) of the SEPP HS.

## Section 2 - Development Standards – Independent Living Units

This section provides an accessibility review of the independent living units and common amenities in accordance with the requirements of;

- Sections D4, E3D7, E3D8 of the Building Code of Australia 2022 (BCA) regarding accessibility of common areas.
- Housing for Seniors Policy 2021, Schedule 4 concerning the independent living units and common amenities on the ground floor and clauses 108(h) and (k) for parking and private open spaces.
- Relevant aspects Australian Standard AS1428.1 – Design for Access and Mobility, AS1735.12 – Lifts and AS2890.6 – Off Street Parking for People with Disabilities as referenced by Schedules 4 and 8 of the Housing for Seniors Policy.

Clause	Item Assessment	Complies
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Clauses  
D4D2, D4D3  
of the BCA

### Site Entry Access

The development occupies a sloping site with a battle-axe accessway which proposes three [3] buildings A, B, C with basement carparking and three [3] lifts enabling equitable access to all apartments and common areas.

YES



The principal site entrance will provide a grade separated pedestrian accessway that is 1:14 to 1:20 slope that incorporates an accessible entry gate, rest landings, passing areas that leads to the principal entrance of the building A foyer entrance @ RL 153.20 in accordance with AS1428.1 to satisfy clauses D4D2 and D4D3 of the BCA and clause 2 of the SEPP HS.

YES

Clause	Item Assessment	Complies
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<p>Clauses D4D2, D4D3, D4D4 of the BCA</p>	<p><b>Ground Floor Access (Level 4 RL 153.20)</b></p> <p>Lift 1 provides direct access to all levels within Building A @RL 153.20 including the basement carpark on level 2 @RL146.80 which facilitates level access to the Buildings B and C at the same level which complies with D4D2, D4D3 of the BCA and clause 2 of the SEPP HS.</p>	<p><b>YES</b></p>
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Clause	Item Assessment	Complies
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Level 3 @150.00 showing upper carpark and access to Building C



Level 2 @146.800 showing lower carpark and interconnected access to all buildings

Clause	Item Assessment	Complies
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Clauses  
D4D2, D4D3,  
D4D4 of the  
BCA

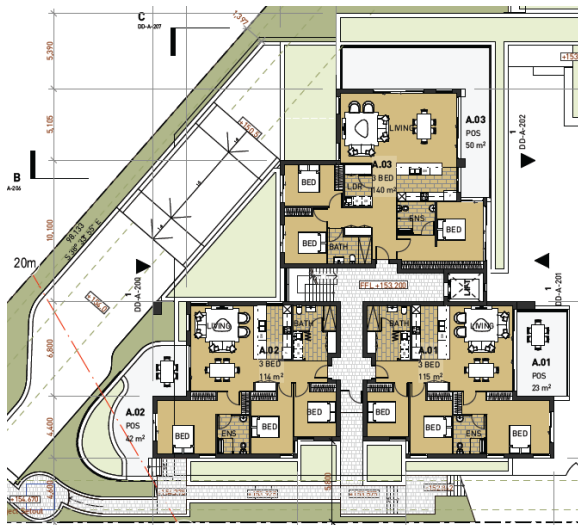
**Building A access**

The ground floor (level 4) plan proposes a foyer entrance of 1600-2400 width with a lift and stairway to the upper apartments 5.01, 5.02, 5.03 and lower parking levels. The 2400 X 7400 lift landing provides ample turning, passing areas and doorway circulation spaces to comply with ASI 428.1 to satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES

Level 5 of Building A provides the same circulation spaces with the foyer area to access apartments 5.01, 5.02 and 5.03 to comply with ASI 428.1 and satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES



Level 4



Level 5

Clauses  
D4D2, D4D3,  
D4D4 of the  
BCA

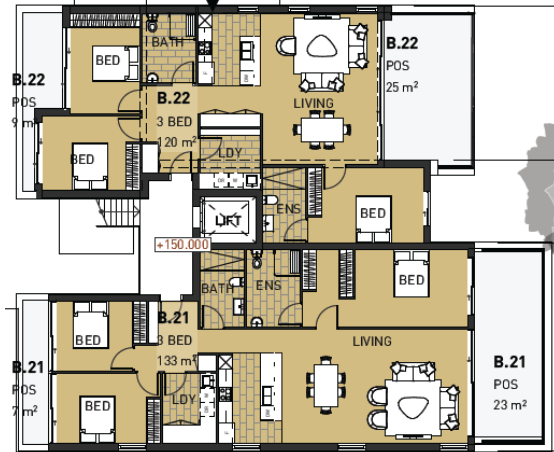
**Building B access**

The level 2 and 3 plans propose a foyer entrance of 1600-2000 width with a lift and stairway to the upper and lower level apartments. The 2000 X 4900 lift landing provides ample turning, passing areas and entrance doorway circulation spaces to comply with ASI 428.1 and satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES

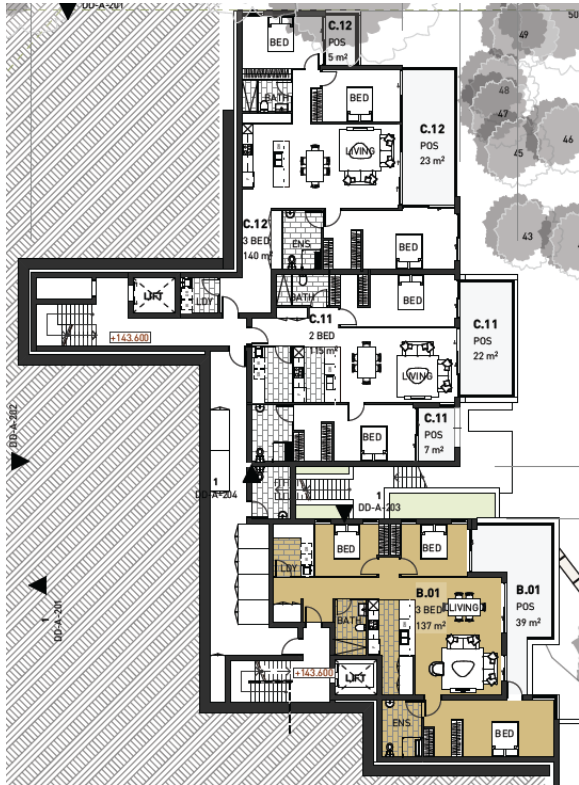


Building B Level 2



Building B Level 3

Clause	Item Assessment	Complies
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Level I of Building B provide similar circulation spaces within the foyer areas to access apartment B1.01.

YES

Level I of the development proposes a common corridor link to Building C and apartments C11 and C12 to comply with ASI428.1 and satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES

The common corridor provides a variable width from 1000 to 2000 with doorway circulation spaces complying with ASI428.1 and satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES

Level I also provides A cleaners toilet and resident storage.

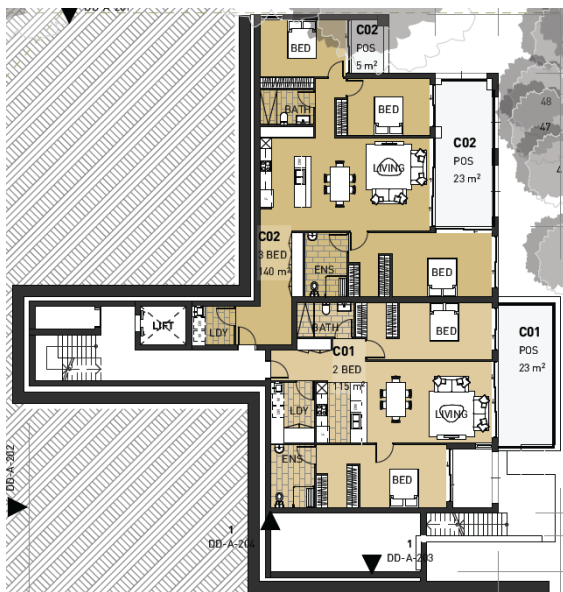
**Buildings B and C Level 1 – RL143.600**

Clauses **Building C access**

D4D2, D4D3, D4D4 of the BCA

The level 0 plan proposes a lift lobby of 1800-2000 width with level access along a 1600 width corridor to apartments C01, C020 which complies with ASI428.1 and satisfy clauses D4D2, D4D3, D4D4 of the BCA and the SEPP HS.

YES

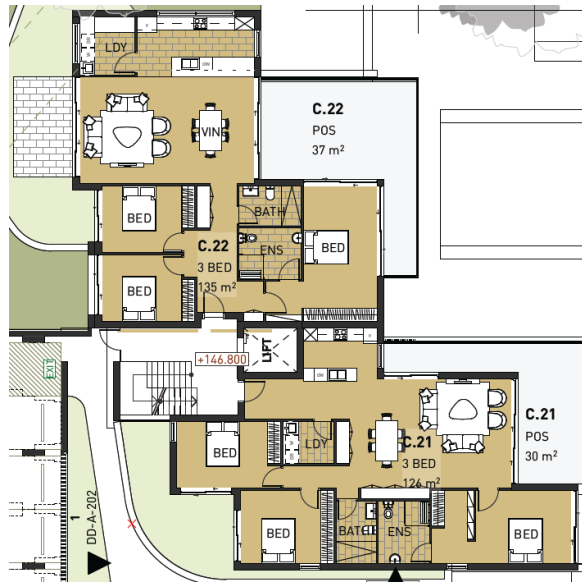


**Building C Level 0**

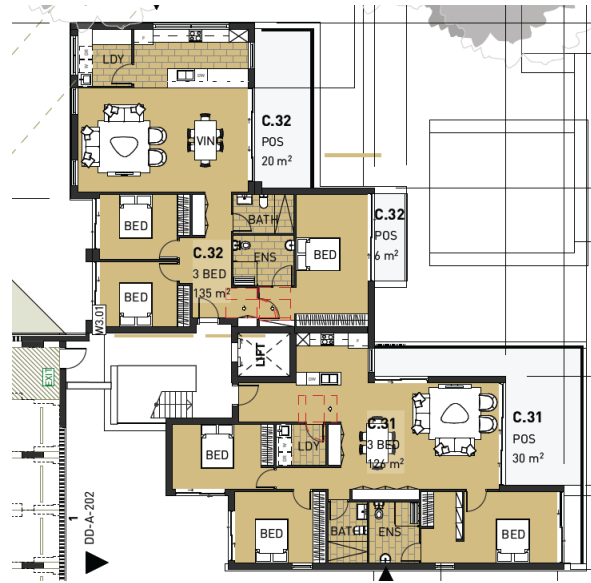


**Building C Level 1**

Clause	Item Assessment	Complies
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**Building C Level 2**

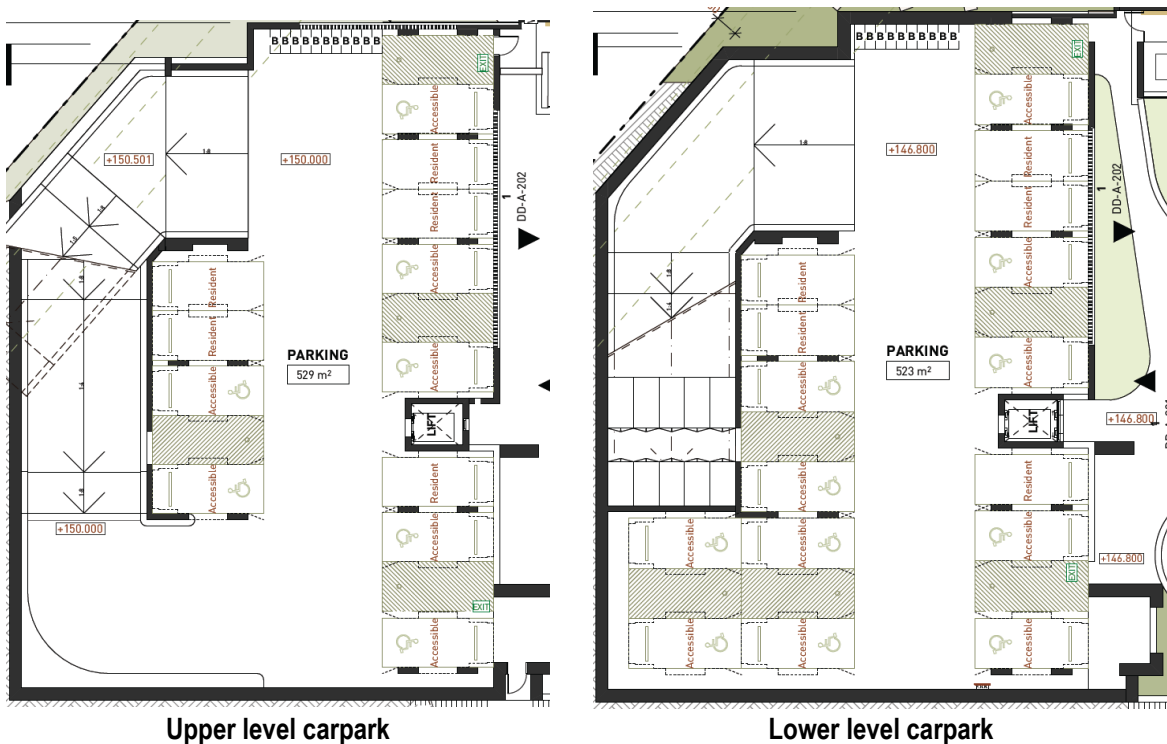


**Building C Level 3**

<p>Clauses D4D2, D4D3, D4D4, E3D7, E3D8 of the BCA Schedule 4, Clause 2(1)(2)</p>	<p><b>Site Access – Wheelchair Access</b> The combination of outdoor accessways and the three [3] lifts facilitate equitable access to all apartments and parking while doorway landings propose appropriate circulation spaces and accessible thresholds that comply with ASI428.1 to enter the dwellings and satisfy clauses D4D2, D4D3, D4D4 of the BCA and schedule 4 of the SEPP HS.</p>	<p><b>YES</b></p>
<p>Clauses D4D4, D4D9 D3D15 of the BCA</p>	<p><b>Lifts</b> The three [3] lifts will be detailed in accordance with ASI735.12 to satisfy clauses E3D7, E3D8 of the BCA and clause 21 of the SEPP HS.</p>	<p><b>YES at CC stage</b></p>
<p>Clauses D4D4, D4D9 D3D15 of the BCA</p>	<p><b>Common Stairways</b> The plans show two common lobby stairways and basement exit stair that will provide handrails on both sides and with extensions at landings for safer access and luminance contrasting stair nosings in accordance with ASI428.1 to satisfy of the BCA.  Details concerning step nosings, tactiles, slip resistance and luminance contrast shall be confirmed during construction documentation phase in accordance with ASI428.1, ASI428.4.1 as required by clauses D3D15, D4D3 and D4D9 of the BCA.</p>	<p><b>YES at CC stage</b></p> <p><b>YES at CC stage</b></p>
<p>Schedule 4 Clause 3</p>	<p><b>Letterboxes</b> – The plans indicate that letterboxes will be installed adjacent to the front site entrance, which will include a generally level 1550 X 1550 area adjacent to the letterboxes to comply with this requirement.</p>	<p><b>YES</b></p>

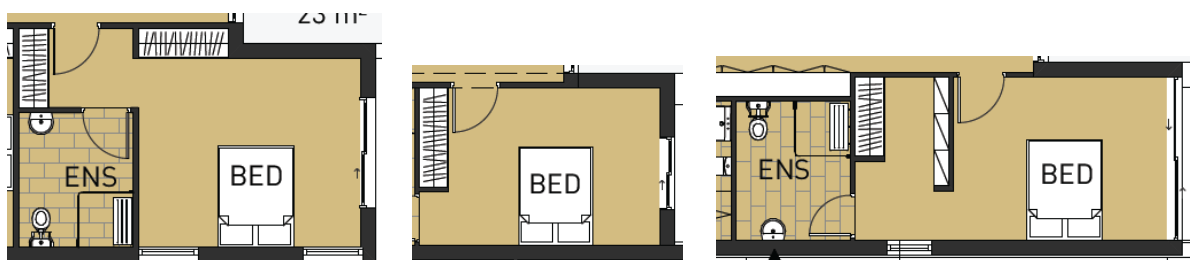


Clause	Item Assessment	Complies
Schedule 4 Clause 4	<p><b>Car parking</b> – The development proposes a total of twenty-eight (28) resident parking spaces within a basement car park of a class 2 building. Consequently, the requirements of subclause (2)(c) shall apply:</p> <p>i) 15% of the 28 parking spaces must comply with AS 2890.6 = 4.2 rounded to 4 spaces.</p> <p>ii) 50% of the 28 parking spaces must comply with AS 2890.6 or be 3200mm minimum width = 14 spaces.</p> <p>Subclause (3) mandates the provision of spaces in item (2)(c)(i) cannot be counted in the 50% requirement of item (2)(c)(ii).</p>	



Schedule 4 Clause 4	In accordance with the SEPP HS the development proposes:	
	<ul style="list-style-type: none"> <li>4 accessible resident parking spaces to comply with AS2890.6 and clause 4(2)(c)(i) of the SEPP HS,</li> </ul>	YES
	<ul style="list-style-type: none"> <li>14 accessible resident parking spaces to comply with AS2890.6 and clause 4(2)(c)(ii) of the SEPP HS, and</li> </ul>	YES
	There are an additional 10 parking spaces of 2400mm for an overall total of 28.	
	The carpark is designed to provide 2200mm minimum entry height and 2500mm within the car spaces to satisfy the accessibility requirements of AS2890.6 and schedule 4, clause 4(2) of the Housing for Seniors Policy.	YES
	The carpark will provide power operated doors as specified by schedule 4 clause 4(6) of the Housing for Seniors Policy.	YES

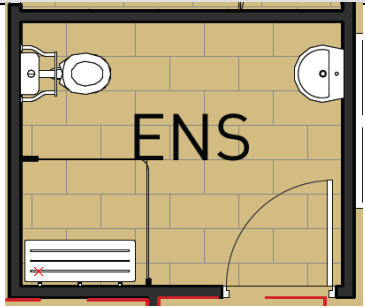
Clause	Item Assessment	Complies
Schedule 8 Clause 6(b)	<b>Parking Accessibility</b> With respect to the requirements of clause 6(b) of schedule 8 to provide safe, environments for pedestrians and motorists with convenient access and parking for residents and visitor it is my opinion that the undercover sure carpark with two [2] lifts achieves the required objectives.	YES
Schedule 4 Clause 5	<b>Accessible entry</b> – The plans confirm that the entry doorway landings for each dwelling provide 1550mm X 1550mm minimum circulation space with 530mm minimum latch side clearance in accordance with AS4299.  The internal unit foyer areas also provide at least 1650mm X 1550mm circulation space with the required 530mm latch side clearance in accordance with ASI428.1 and the SEPP HS.  Details of 920mm entry doors and lever door handles can be confirmed at construction documentation stage.	YES  YES  Can Comply
Schedule 4 Clause 6	<b>Interior: general</b> – The plans show that all internal corridors on the accessible ground floor areas shall be 1240mm minimum width to facilitate side-on doorway circulation spaces in accordance with Figure 31(a)(b) of ASI428.1 to satisfy clause 6 of schedule 4.  Where front-on approaches to doorways is provided then the doorway circulation space shall provide at least 1450mm length X 1550mm width with 530mm minimum latch side clearance in accordance with Figure 31(d)(h) of ASI428.1 to satisfy clause 6 of schedule 4.	YES  YES
Schedule 4 Clause 7	<b>Main bedroom</b> – The plans show a main bedroom on the accessible entry level that provides an area large enough to accommodate a queen sized bed with the required circulation spaces to enter/exit the room or access the ensuite in accordance with ASI428.1.  The main bedrooms provide 1200mm minimum clearance at the foot of a queen bed and 1000mm minimum on each side and robe areas with doorway circulation spaces to enter and exit the room that comply with ASI428.1. See examples below.	YES  YES



Unit A101


Unit B22

Unit C 31

Clause	Item Assessment	Complies
Schedule 4 Clause 8	<p><b>Bathroom</b> – The plans show a bathroom on the accessible entry level for the apartments that will provide at least 2800-3000mm X 2100-2300mm with a layout that complies with AS4299/1428.1 and the provisions of the SEPP HS in the following manner:</p>	<p>YES</p>
	<div style="text-align: center;">  <p>2800 X 2300</p> </div> <ul style="list-style-type: none"> <li>▪ Toilet in a recessed corner to enable retrofitting of grabrails and provide 1200mm clearance in front of the pan,</li> <li>▪ Vanity washbasin that will have plumbing that can be adapted to comply with A1428.1.</li> <li>▪ 1160mm X 1100mm minimum shower area with 1250mm X 1600mm minimum circulation area and a removable screen that can accommodate a grabrail, folding seat and portable shower head to comply with ASI428.1.</li> <li>▪ Wall cabinet and mirror with an adjoining power outlet 1100mm maximum height above the floor in accordance with ASI428.1</li> </ul>	<p>YES at CC stage</p> <p>YES at CC stage</p> <p>YES at CC stage</p> <p>YES at CC stage</p>
Schedule 4 Clause 9	<p><b>Toilet</b> – The plans show a toilet on the accessible entry level of every apartment, as above, that provides a toilet pan in the corner of a room to enable future grabrails and facilitates internal access to provide at least 1200mm X 900mm clearance in front of the pan with that complies with ASI428.1 with a removable shower screen to satisfy the SEPP HS.</p>	<p>YES</p>
Schedule 4 Clause 10	<p><b>Surface finishes</b> – Details regarding paving finishes in accordance with the SEPP HS, can be provided at construction certificate stage to comply with this requirement.</p>	<p>Can Comply</p>
Schedule 4 Clause 11	<p><b>Doors</b> – Details regarding doors and door handles complying with ASI428.1 can be provided at construction certificate stage to comply with this requirement.</p>	<p>Can Comply</p>
Schedule 4 Clause 12	<p><b>Switches and power points</b> – Details regarding installation of switches, power points complying with the ASI428.1 or capable of complying with ASI428.1 can be provided at construction certificate stage.</p>	<p>Can Comply</p>
Schedule 4 Clause 13	<p><b>Private passenger lifts</b> There are no private internal lifts within units of this development. See clause 21 regarding common lifts.</p>	<p>N/a</p>

Clause	Item Assessment	Complies
Schedule 4 Clause 15	<b>Bedroom access</b> All apartments are single level and provide bedrooms on the accessible entry level to comply with the SEPP HS.	YES
Schedule 4 Clause 16	<b>Living room</b> – The combined living and dining areas are located on the accessible entry level and confirm 2250mm diameter circulation spaces to comply with this clause and can provide a telecommunications data outlet adjoining a power point.	YES
Schedule 4 Clause 17 & Clause 108(h)	<b>Private Open Space</b> - The plans indicate that there are terraces/courtyards for all independent living units on the same level as the interior spaces and provide private open space to meet the requirements of at least 15M <sup>2</sup> with one area adjoining the living room that is at least 3.0 X 3.0 metres to readily comply with clause 108(h) the SEPP HS.  Details the doors and doorway thresholds can be confirmed at a later date in accordance with ASI428.1 to satisfy of the SEPP HS.	YES  YES at CC stage
Schedule 4 Clause 18	<b>Kitchen</b> – The plans indicate the floor area and general kitchen layout will comply with this clause by providing 1200mm minimum width circulation space between kitchen cupboards. The plans also show an area to accommodate a wall oven, hotplate, sink and fridge in accessible positions as required by the SEPP HS.  Details regarding other aspects of adjustable cupboards and fitments as per the requirements of sub-paragraphs (4) to (9) which will be provided at construction certificate stage to satisfy the SEPP HS.	YES  At CC stage
Schedule 4 Clause 19	<b>Laundry</b> – The laundry facilities are provided within rooms or closets which have appropriate 1550mm diameter circulation spaces that comply with the SEPP HS including an area for a washing machine, basin and drier.  Details regarding slip resistant floors, level thresholds to the clotheslines and door sizes and handles can be provided at construction certificate stage to comply with this clause.	YES  Can Comply
Schedule 4 Clause 20	<b>Linen storage</b> – The plans indicate that all units shall have a storage / linen cupboard adjoining the hallway.	YES
Schedule 4 Clause 21	<b>Lifts in Multi-Storey Buildings</b> – This development proposes three [3] lifts that will access all levels within the buildings and will be detailed at construction certificate phase to confirm compliance with clause E3 of the BCA and satisfy the SEPP HS.	YES



Clause	Item Assessment	Complies
Schedule 4 Clause 22	<p><b>Garbage</b> – With respect to waste management the development proposes the outdoor bin store area in an accessible area with 1550 X 1550 circulation space adjacent to all bins to enable wheelchair access to satisfy the SEPP HS.</p> 	YES

## **Conclusion**

Following a review of the plans and documentation it is my opinion that the proposed pedestrian infrastructure works comply with the accessibility requirements of the State Environment Planning Policy - Housing 2021 : Housing for Seniors and People with a Disability pursuant to clause 93 of the SEPP HS regarding the provision of access to public transport to access an appropriate range of shops and services, schedule 4 and related accessibility requirements.

In particular:

- Subject to the installation of a footpath on Gladys Avenue as noted in this report the existing footpath infrastructure on Frenchs Forest Road will provide a distance of less than 400 metres and have appropriate gradients that are suitable for pedestrians and motorised wheelchairs to access public bus transport in accordance with clauses 93(2)(3)(4) and clause 6 of schedule 8 of the SEPP HS.
- The available bus services provided Routes 141, 160/166, 169, 193, 280 facilitate appropriate access to services in a manner consistent with clause 93(2)(b) of the SEPP HS.
- The destination shopping centres at the local Forest Way, Frenchs Forest and Belrose shops, Dee Why, Brookvale/Warringah Mall, Balgowlah, Manly and Chatswood retail and commercial precincts provide a comprehensive range of services to readily satisfy Clause 93(1) and 93(5) of the SEPP HS.
- The internal site access proposes an appropriate design to comply with sections D4 and E3 of the Building Code of Australia and the SEPP HS.
- The interior design of the independent living units will comply with the spatial requirements of schedule 4 of the SEPP HS while detailing of doors, door hardware, kitchen cabinetry, slip resistance outdoor flooring and the like will be confirmed at construction documentation phase as required by schedule 4 and related Australian Standards.



Mark Relf  
Access Consultant (ACAA)

## Appendix A – Statement of Expertise

### CONSULTANCY PROFILE & STATEMENT OF EXPERTISE

Accessibility Solutions consultancy offers a range of services to provide advice for clients to develop new and modify existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations relevant to people with disabilities.

Relevant legislation and regulations that underpins advice includes the Disability Discrimination Act (DDA) Building Code of Australia, Australian Standards 1428, DDA Premises Standards, DDA Transport Standard, State Environment Planning Policy (Housing) 2021, SEPP 65 – Apartment Design Guide, Livable Housing Guidelines and various local government DCP's.

The scope of services provided by Accessibility Solutions includes:

- Plan Appraisals and design advice
- Access Reports for development applications and construction certificates
- Expert Reports for Court evidence
- Access Auditing of existing buildings, facilities, transport conveyances and infrastructure
- Policy and document reviews and development of Disability Action Plans
- Staff training in access auditing

The services consider issues concerning people with all types of disability including; physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with a disability consistent with the Disability Discrimination Act.

As principal consultant Mark Relf has considerable experience and expertise in a wide range of access related projects and is an accredited member of the Association of Consultants in Access Australia for the purposes of providing advice concerning access to the built environment and services for people with disabilities.

His expertise has been gained over 20 years working in management and advocacy roles within the disability sector and since 1994 providing advice to clients on access issues. Mark also participates on various key committees concerning access for people with disabilities. His qualifications and affiliations are:

- Accredited Member of the Association of Consultants in Access Australia.
- Member, Standards Australia committees responsible for the AS1428 suite, AS4299 – Adaptable Housing, AS2890 – Parking and AS1735 - Lifts.
- Registered Assessor of Livable Housing.



**Appendix B – Bus route 166 and timetable**

**Outbound services before noon highlighted**

166

## Manly to Frenchs Forest via Dee Why Beach

B

Valid from: 04 Aug 2024

Creation date: 08 Sept 2024  
 NOTE: Information is correct on date of download.

Monday to Friday									
Manly Wharf, West Esplanade, Manly	-	05:20	05:40	06:00	06:20	06:40	06:50	07:00	07:10
North Steyne opp Queenscliff SLSC, Manly	-	05:25	05:45	06:05	06:25	06:45	06:55	07:05	07:15
Harbord Rd at Wyuna Ave, Freshwater	-	05:27	05:48	06:08	06:28	06:48	06:58	07:08	07:19
Wyuna Av near Oliver St, Freshwater	-	05:28	05:50	06:10	06:30	06:50	07:00	07:10	07:21
Griffin Rd at Abbott Rd, North Curl Curl	-	05:31	05:53	06:13	06:33	06:53	07:03	07:13	07:24
Howard Ave after The Strand, Dee Why	-	05:35	05:57	06:17	06:37	06:57	07:07	07:17	07:28
Howard Ave near Pittwater Rd, Dee Why	05:18	05:38	06:00	06:20	06:40	07:00	07:10	07:20	07:31
McIntosh Rd near Alfred St, Narrabeena	05:22	05:42	06:04	06:24	06:44	07:04	07:14	07:25	07:36
Tristram Rd near Willandra Rd, Beacon Hill	05:25	05:45	06:08	06:28	06:48	07:08	07:19	07:30	07:41
Frenchs Forest Rd opp Inverness Ave, Frenchs Forest	05:29	05:50	06:12	06:32	06:52	07:12	07:24	07:35	07:46
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	05:31	05:52	06:15	06:36	06:56	07:16	07:27	07:38	07:49
Rabbett St at Forest Way, Frenchs Forest	05:35	05:57	06:20	06:41	07:01	07:24	07:35	07:46	07:58
Monday to Friday									
Manly Wharf, West Esplanade, Manly	07:20	07:30	07:40	07:50	08:00	08:10	08:20	08:30	08:40
North Steyne opp Queenscliff SLSC, Manly	07:25	07:35	07:45	07:55	08:05	08:15	08:25	08:35	08:45
Harbord Rd at Wyuna Ave, Freshwater	07:29	07:39	07:50	08:00	08:10	08:20	08:30	08:40	08:50
Wyuna Av near Oliver St, Freshwater	07:31	07:41	07:52	08:02	08:12	08:22	08:32	08:42	08:52
Griffin Rd at Abbott Rd, North Curl Curl	07:34	07:44	07:56	08:06	08:16	08:26	08:36	08:46	08:56
Howard Ave after The Strand, Dee Why	07:38	07:48	08:00	08:10	08:20	08:30	08:40	08:50	09:00
Howard Ave near Pittwater Rd, Dee Why	07:41	07:51	08:03	08:13	08:23	08:33	08:43	08:53	09:03
McIntosh Rd near Alfred St, Narrabeena	07:46	07:56	08:08	08:18	08:28	08:38	08:48	08:58	09:07
Tristram Rd near Willandra Rd, Beacon Hill	07:51	08:01	08:13	08:23	08:33	08:43	08:53	09:02	09:11
Frenchs Forest Rd opp Inverness Ave, Frenchs Forest	07:56	08:06	08:18	08:28	08:38	08:48	08:58	09:07	09:16
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	07:59	08:09	08:21	08:31	08:41	08:51	09:01	09:10	09:19
Rabbett St at Forest Way, Frenchs Forest	08:08	08:18	08:30	08:40	08:50	09:00	09:09	09:18	09:27
Monday to Friday									
Manly Wharf, West Esplanade, Manly	09:00	09:20	09:40	10:00	10:20	10:40	11:00	11:20	11:40
North Steyne opp Queenscliff SLSC, Manly	09:05	09:25	09:45	10:05	10:25	10:45	11:05	11:25	11:45
Harbord Rd at Wyuna Ave, Freshwater	09:09	09:29	09:49	10:09	10:29	10:49	11:09	11:29	11:49
Wyuna Av near Oliver St, Freshwater	09:11	09:31	09:51	10:11	10:31	10:51	11:11	11:31	11:51
Griffin Rd at Abbott Rd, North Curl Curl	09:15	09:34	09:54	10:14	10:34	10:54	11:14	11:34	11:54
Howard Ave after The Strand, Dee Why	09:19	09:38	09:58	10:18	10:38	10:58	11:18	11:38	11:58
Howard Ave near Pittwater Rd, Dee Why	09:22	09:41	10:01	10:21	10:41	11:01	11:21	11:41	12:01
McIntosh Rd near Alfred St, Narrabeena	09:26	09:45	10:05	10:25	10:45	11:05	11:25	11:45	12:05
Tristram Rd near Willandra Rd, Beacon Hill	09:30	09:49	10:09	10:29	10:49	11:09	11:29	11:49	12:09
Frenchs Forest Rd opp Inverness Ave, Frenchs Forest	09:35	09:54	10:14	10:34	10:53	11:13	11:33	11:53	12:13
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	09:38	09:57	10:17	10:37	10:56	11:16	11:35	11:55	12:15
Rabbett St at Forest Way, Frenchs Forest	09:44	10:03	10:23	10:43	11:02	11:22	11:41	12:01	12:21



**Inbound return services after noon highlighted**

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## Frenchs Forest to Manly via Dee Why Beach

B

Monday to Friday	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ
Forestway Shopping Centre, Forest Way, Frenchs Forest	11:07	11:27	11:47	12:07	12:27	12:47	13:07	13:26	13:46
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	11:08	11:28	11:48	12:08	12:28	12:48	13:08	13:27	13:47
Patanga Park, Patanga Rd, Frenchs Forest	11:10	11:30	11:50	12:10	12:30	12:50	13:10	13:29	13:49
Tristram Rd near Willandra Rd, Beacon Hill	11:14	11:34	11:54	12:14	12:34	12:54	13:14	13:33	13:53
McIntosh Rd near Alfred St, Narraweena	11:19	11:39	11:59	12:19	12:39	12:59	13:19	13:38	13:58
Howard Ave near Pittwater Rd, Dee Why	11:22	11:42	12:02	12:22	12:42	13:02	13:22	13:41	14:01
Oaks Ave before The Strand, Dee Why	11:26	11:46	12:06	12:26	12:46	13:06	13:26	13:45	14:05
Griffin Rd at Abbott Rd, North Curl Curl	11:30	11:50	12:10	12:30	12:50	13:10	13:30	13:49	14:09
Wyuna Av near Oliver St, Freshwater	11:34	11:54	12:14	12:34	12:54	13:14	13:34	13:54	14:14
Wyuna Av near Harbord Rd, Freshwater	11:35	11:55	12:15	12:35	12:55	13:15	13:35	13:55	14:15
Queenscliff SLSC, North Steyne, Manly	11:41	12:01	12:21	12:41	13:01	13:21	13:41	14:01	14:21
Manly Wharf, West Esplanade, Manly	11:52	12:12	12:32	12:52	13:12	13:32	13:52	14:12	14:32

Monday to Friday	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ
Forestway Shopping Centre, Forest Way, Frenchs Forest	14:05	14:23	14:41	15:00	15:08	15:17	15:27	15:38	15:49
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	14:06	14:24	14:42	15:01	15:09	15:18	15:28	15:39	15:50
Patanga Park, Patanga Rd, Frenchs Forest	14:08	14:26	14:44	15:03	15:11	15:21	15:31	15:42	15:53
Tristram Rd near Willandra Rd, Beacon Hill	14:12	14:30	14:49	15:08	15:16	15:26	15:36	15:47	15:58
McIntosh Rd near Alfred St, Narraweena	14:17	14:35	14:54	15:13	15:21	15:31	15:41	15:52	16:03
Howard Ave near Pittwater Rd, Dee Why	14:20	14:38	14:57	15:16	15:26	15:36	15:46	15:57	16:07
Oaks Ave before The Strand, Dee Why	14:24	14:42	15:01	15:20	15:30	15:40	15:50	16:01	16:11
Griffin Rd at Abbott Rd, North Curl Curl	14:28	14:46	15:06	15:25	15:35	15:45	15:55	16:05	16:15
Wyuna Av near Oliver St, Freshwater	14:33	14:51	15:11	15:31	15:41	15:51	16:01	16:11	16:21
Wyuna Av near Harbord Rd, Freshwater	14:34	14:52	15:12	15:32	15:42	15:52	16:02	16:12	16:22
Queenscliff SLSC, North Steyne, Manly	14:40	15:00	15:20	15:40	15:50	16:00	16:10	16:20	16:30
Manly Wharf, West Esplanade, Manly	14:52	15:12	15:32	15:52	16:02	16:12	16:22	16:32	16:42

Monday to Friday	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ
Forestway Shopping Centre, Forest Way, Frenchs Forest	16:01	16:11	16:21	16:33	16:43	16:53	17:03	17:13	17:23
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	16:02	16:12	16:22	16:34	16:44	16:54	17:04	17:14	17:24
Patanga Park, Patanga Rd, Frenchs Forest	16:05	16:15	16:25	16:37	16:47	16:57	17:07	17:17	17:27
Tristram Rd near Willandra Rd, Beacon Hill	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30
McIntosh Rd near Alfred St, Narraweena	16:15	16:25	16:35	16:45	16:55	17:05	17:15	17:25	17:35
Howard Ave near Pittwater Rd, Dee Why	16:19	16:29	16:39	16:49	16:59	17:09	17:19	17:29	17:39
Oaks Ave before The Strand, Dee Why	16:23	16:33	16:43	16:53	17:03	17:13	17:23	17:33	17:43
Griffin Rd at Abbott Rd, North Curl Curl	16:27	16:37	16:47	16:57	17:07	17:17	17:27	17:37	17:47
Wyuna Av near Oliver St, Freshwater	16:33	16:43	16:53	17:03	17:13	17:23	17:33	17:43	17:53
Wyuna Av near Harbord Rd, Freshwater	16:34	16:44	16:54	17:04	17:14	17:24	17:34	17:44	17:54
Queenscliff SLSC, North Steyne, Manly	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00
Manly Wharf, West Esplanade, Manly	16:52	17:02	17:12	17:22	17:32	17:42	17:52	18:02	18:12

Monday to Friday	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ
Forestway Shopping Centre, Forest Way, Frenchs Forest	17:33	17:43	17:53	18:04	18:14	18:26	18:47	19:11	19:33
Nth Beaches Hospital, Frenchs Forest Rd, Frenchs Forest	17:34	17:44	17:54	18:05	18:15	18:27	18:48	19:12	19:34
Patanga Park, Patanga Rd, Frenchs Forest	17:37	17:47	17:57	18:08	18:18	18:30	18:50	19:14	19:36
Tristram Rd near Willandra Rd, Beacon Hill	17:40	17:50	18:00	18:11	18:21	18:33	18:53	19:17	19:39
McIntosh Rd near Alfred St, Narraweena	17:45	17:55	18:05	18:16	18:26	18:37	18:57	19:21	19:42
Howard Ave near Pittwater Rd, Dee Why	17:49	17:59	18:09	18:20	18:30	18:40	19:00	19:24	19:45
Oaks Ave before The Strand, Dee Why	17:53	18:03	18:13	18:24	18:34	18:44	19:04	19:28	19:48
Griffin Rd at Abbott Rd, North Curl Curl	17:57	18:07	18:17	18:28	18:38	18:48	19:08	19:32	19:52
Wyuna Av near Oliver St, Freshwater	18:03	18:13	18:23	18:34	18:44	18:54	19:14	19:36	19:56
Wyuna Av near Harbord Rd, Freshwater	18:04	18:14	18:24	18:35	18:45	18:55	19:15	19:37	19:57
Queenscliff SLSC, North Steyne, Manly	18:10	18:20	18:30	18:40	18:50	19:00	19:20	19:42	20:02
Manly Wharf, West Esplanade, Manly	18:22	18:32	18:42	18:52	19:02	19:12	19:32	19:52	20:12

**Appendix C Drawing List – Revision A**

<b>DRAWING No.</b>	<b>DESCRIPTION</b>
DD-A-000	TITLE
DD-A-001	NOTES
DD-A-010	SURVEY PLAN
DD-A-011	SITE DETAILS
DD-A-012	SITE PLAN
DD-A-013	DEMOLITION PLAN
DD-A-014	EXCAVATION & FILL PLAN
DD-A-020	CONSTRUCTION MANAGEMENT
DD-A-021	SITE WORKS
DD-A-100	ROOF
DD-A-101	LEVEL 5
DD-A-102	LEVEL 4
DD-A-103	LEVEL 3
DD-A-104	LEVEL 2
DD-A-105	LEVEL 1
DD-A-106	LEVEL 0
DD-A-200	ELEVATIONS - EAST AND SOUTH
DD-A-201	PAVILLION A - WEST
DD-A-202	LOWER PAVILLION B & C ELEVATIONS
DD-A-203	LOWER PAVILLION B & C ELEVATIONS
DD-A-204	LOWER PAVILLION B & C ELEVATIONS
DD-A-205	ENTRY DETAIL ELEVATION
DD-A-206	SECTIONS
DD-A-207	SECTIONS
DD-A-800	AREA CALCULATIONS
DD-A-801	GROSS FLOOR AREA
DD-A-802	SOLAR ACCESS
DD-A-803	CROSS VENTILATION
DD-A-804	STORAGE
DD-A-805	ACCESSIBILITY TO TRANSPORT & TOWN CENT...
DD-A-806	ACCESSIBILITY COMMON OPEN SPACES
DD-A-807	ACCESSIBILITY TYPICAL FLOOR PLATES
DD-A-808	ACCESSIBILITY TYPICAL FLOOR PLATES
DD-A-809	MAX HEIGHT STUDY
DD-A-810	TWO STORIES STUDY
DD-A-850	SHADOWS - WINTER SOLSTICE
DD-A-851	SHADOWS - WINTER SOLSTICE
DD-A-852	SHADOWS - WINTER SOLSTICE