

# BCA - DDA/ACCESS COMPLIANCE REVIEW

Manly Corso Apartments Refurbishment

**Hilrok Properties**

**ISSUE B**

DATE 1<sup>ST</sup> MAY 2019

PROJECT 17349

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ISSUED	REVIEW	ISSUED BY
Date 1 <sup>st</sup> May 2019	Issue B- Revised drawings included	Trevor Eveleigh
Date 15 <sup>th</sup> April 2019	Issue A	Trevor Eveleigh
Date. 5 <sup>th</sup> April 2019	Draft Issue for Review	Trevor Eveleigh

## 1.0 INTRODUCTION

### 1.1 GENERAL

NBRS Architecture have been engaged by Hilrok Properties Pty Ltd to develop a design for the refurbishment and additions to the existing mixed use building at 19-23 The Corso, Manly. As part of the design process a review has been undertaken of the proposed design against current building regulations and to ensure that the design meets the appropriate building regulations for the provision of equitable access for occupants.

This report has been prepared to accompany the Development Application and sets out the outcome of the BCA /DDA Access review.

The review compares the proposed design, against the requirements set out in the following documents:

- The Building Code of Australia 2019 version (BCA2019) and
- The associated relevant standards
- Disability Access to Premises – Buildings Standards 2010 (The Premises Standard)

It is noted that BCA 2019 takes effect on the 1<sup>st</sup> May and therefore the proposed works will be compared to the planned requirements of BCA2019.

The proposed design for the development is represented in the following plans prepared by NBRS Architecture which have been used as part of this review.

Table 1

Drawing number	Issue	Drawing name	Date
17349-A-01	D	Site Context	4/18/2019
17349-A-02	D	Site Analysis and Roof Plan	4/18/2019
17349-A-03	D	Existing Floor Plans	4/18/2019
17349-A-04	D	Existing Floor Plans	4/18/2019
17349-A-05	D	Ground and First Floor Plan	4/18/2019
17349-A-06	D	Second and Third Floor Plan	4/18/2019
17349-A-07	D	Elevations	4/18/2019
17349-A-08	C	Elevations	4/18/2019
17349-A-09	C	Sections	4/18/2019

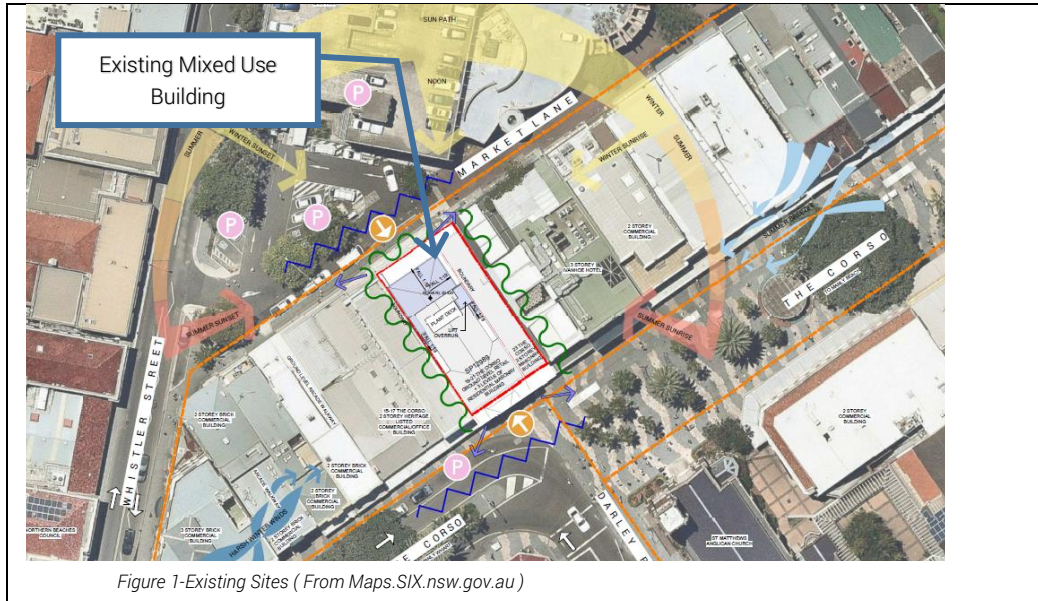
### 1.2 SITE DETAILS

The site for the existing mixed use building is 19 to 21 The Corso, Manly, NSW 2095.

The existing site includes multiple strata lots within the Strata Plan SP 12989

The site is within the Northern Beaches council area, which is Climate Zone 5.

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**1.3 THE EXISTING**

The existing building includes 3 levels of apartments above a retail tenancy on the ground floor level. The existing building has three stairs connecting the upper levels, which are not of sufficient width and do not comply with current regulations.



**1.4 THE PROPOSAL**

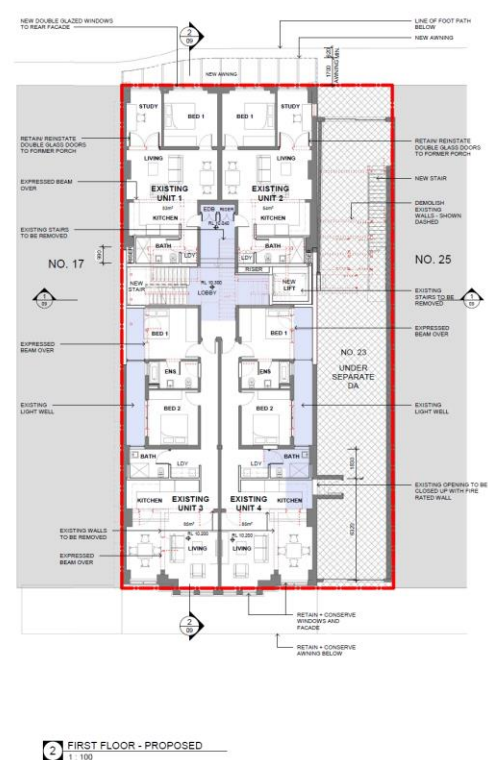
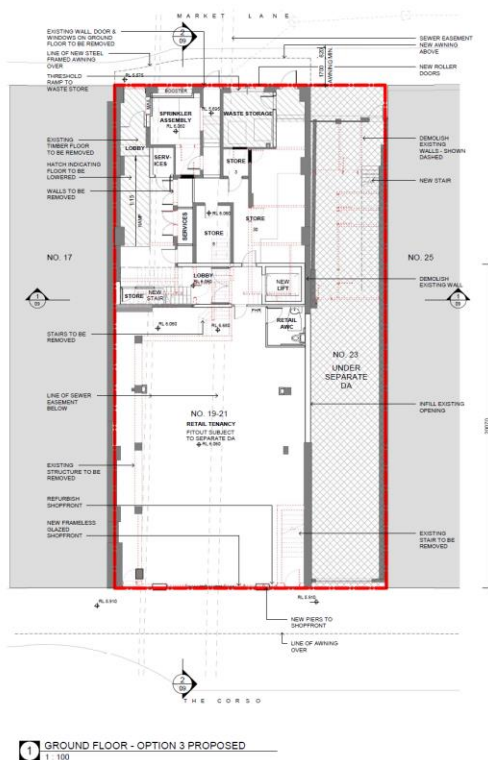
- The proposal is to upgrade the existing building to:
- refurbish and update the existing apartments,
  - include a new lift to access the upper levels

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- construct a new compliant stair to serve the upper apartment levels, which is fire separated from the ground floor retail tenancy.
  - constructing an additional apartment to the upper level existing terrace.
  - Alter the layout of the existing ground floor level to provide
    - o a new foyer and lift lobby space
    - o include fire separated egress from the new central stair .
    - o Include waste and storage areas.
  - Updating the fire services within the building, to include fire hydrants and Sprinkler protection.
- The proposed usage of the various levels of the building on completion of the works will be as follows;

Table 2- Building Usage

Level	Use	Use Type
Ground Level	Retail tenancy Back of house areas & Lift lobby for apartments	Class 6 associated with Class 2 & 6
Level 1	Four existing apartment (SOU's)	Class 2
Level 2	Four existing apartment (SOU's)	Class 2
Level 3	Two existing apartment (SOU's) One additional Apartment (SOU)	Class 2



**1.5 ACCESSABILITY UPGRADE STRATEGY**

Currently the existing apartments are not accessible as they are on the upper floors and there is not a lift in the building. Additionally the configuration of the existing entry doors to the apartments on each level and the width of the doors, does not enable sufficient circulation space for the main entry doors to the Apartments to be considered to be accessible.

The proposed works includes a new shopfront façade to the Corso on the ground floor level, this will include a new entry door to the tenancy that is to be accessible, without a step at the threshold.

The proposed works are to upgrade the existing facilities within the apartments as well as improving access and egress to the apartments by the inclusion of the lift and new fire isolated stair.

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On completion of the proposed works, access will be provided to the central corridor on each level, but will not enable access to and through the main entry to each of the existing apartments due to the restrictions of the existing building walls and doorways. The exception to this are existing units 5 & 6, where as part of the works the doors to the units will be relocated and therefore could be made to meet the accessibility requirements. Access will also be provided to the entry door of the new Apartment on the third floor level (Unit 11).

As the proposed works are refurbishment of existing apartments, it is considered to be appropriate for access to be provided to only the new apartment and potentially other existing apartments where feasible in the design.

**1.6 BCA REQUIREMENTS**

The Building Code of Australia (BCA) sets out number of Performance Requirements that a building solution must meet to achieve a reasonable level of safety, access to buildings, and functional performance.

Where due to the configuration within individual building or site applications, the detailed design does not meet the Deemed to Satisfy Provisions of the BCA, there is an opportunity for the design to be assessed as an Alternative Solution, against the Performance Requirements of the BCA.

Any alternative Performance Solutions will be subject to the approval of the Principal Certifying Authority.

The requirements for the building are based on the scale of the building, the number of occupants and the usage of the building.

**1.7 BUILDING HEIGHT, RISE IN STOREYS & EFFECTIVE HEIGHT**

The existing building has a rise in storeys of 4.

The existing effective height is 10.97m from ground floor level RL 6.06 to third floor level RL 17.03.

As part of the proposed works to the ground floor level a new entry lobby will be created at approximately RL 5.6 which will change the effective height to approximately 11.43m.

**2.0 BCA DEEMED TO SATISFY PROVISIONS**

**2.1 PART A – BUILDING CONSTRUCTION TYPE**

With a rise in storeys of 4 the building is considered to be required to be of Type A construction.

Manly Corso Apartments		19-21 The Corso Manly		17349	BCA 2019
Hilrock					
Building Details / BCA Requirements					
Use Class	2 - Units				Key
Rise in Storeys	4	or more			Fill in the details BCA Requirements
Effective Height	less than 25m				
Building Floor Area	2000	M2			
Containing Atrium	No				
Place of Public Entertainment	No			Stage & Backstage Area	1- No Stage
Basement Car park	No				
	0				
Class 9B Building Specific use				Zone Maps	
	Zone	Sydney CBD Central Coast NSW		NSW	<a href="#">[Size/Admin/Reference Documents/BC]</a>
Building Location Zone	Zone 5			VIC	<a href="#">[Reference Documents/BCA/315 Ctr]</a>

**2.1.1 PART D3.1 – GENERAL ACCESS REQUIREMENTS**

Under the BCA requirements in Part D3.1, an access pathway is required to areas depending upon the usage of the area as indicated in the table below, except as permitted by Clause D3.4.

Applying this requirement to the proposed works, access is required to all areas as indicated in the following table.

Table 3 Access Requirements

USAGE TYPE	BCA REQUIREMENTS(D3.1)	APPLICATION TO DESIGN	COMPLIANCE
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**DDA / ACCESS COMPLIANCE REVIEW – MANLY CORSO APARTMENTS**

<b>Class 2</b>	From a pedestrian entrance <i>required</i> to be <i>accessible</i> to at least 1 floor containing <i>sole-occupancy units</i> and to the entrance doorway of each <i>sole-occupancy unit</i> located on that level.	Access to be provided to the ground floor lift lobby. Lift required to provide access to at least 1 level of apartments	Yes Yes
<b>Class 2</b>	To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, <i>swimming pool</i> , common laundry, games room, individual shop, eating area, or the like.	Access to be provided to common area of general Storage and Waste storage.	Access to be provided
<b>Class 2</b>	Where a ramp complying with <a href="#">AS 1428.1</a> or a passenger lift is installed— a) To the entrance doorway of each <i>sole-occupancy unit</i> ; and b) To and within rooms or spaces for use in common by the residents	Access to be provided to entrance doorway of SOU's	Yes To new SOU only
<b>Class 6</b>	To and within all areas normally used by the occupants.	Accessible pathway to be provided from street to and into the retail tenancy.	

**2.1.2 PART D3.2 GENERAL BUILDING ACCESS REQUIREMENTS**

Part D3.2 of the BCA requires an accessible pathway to be provided from the main street frontage, at least 50% of all entries and the accessible parking space to the building.

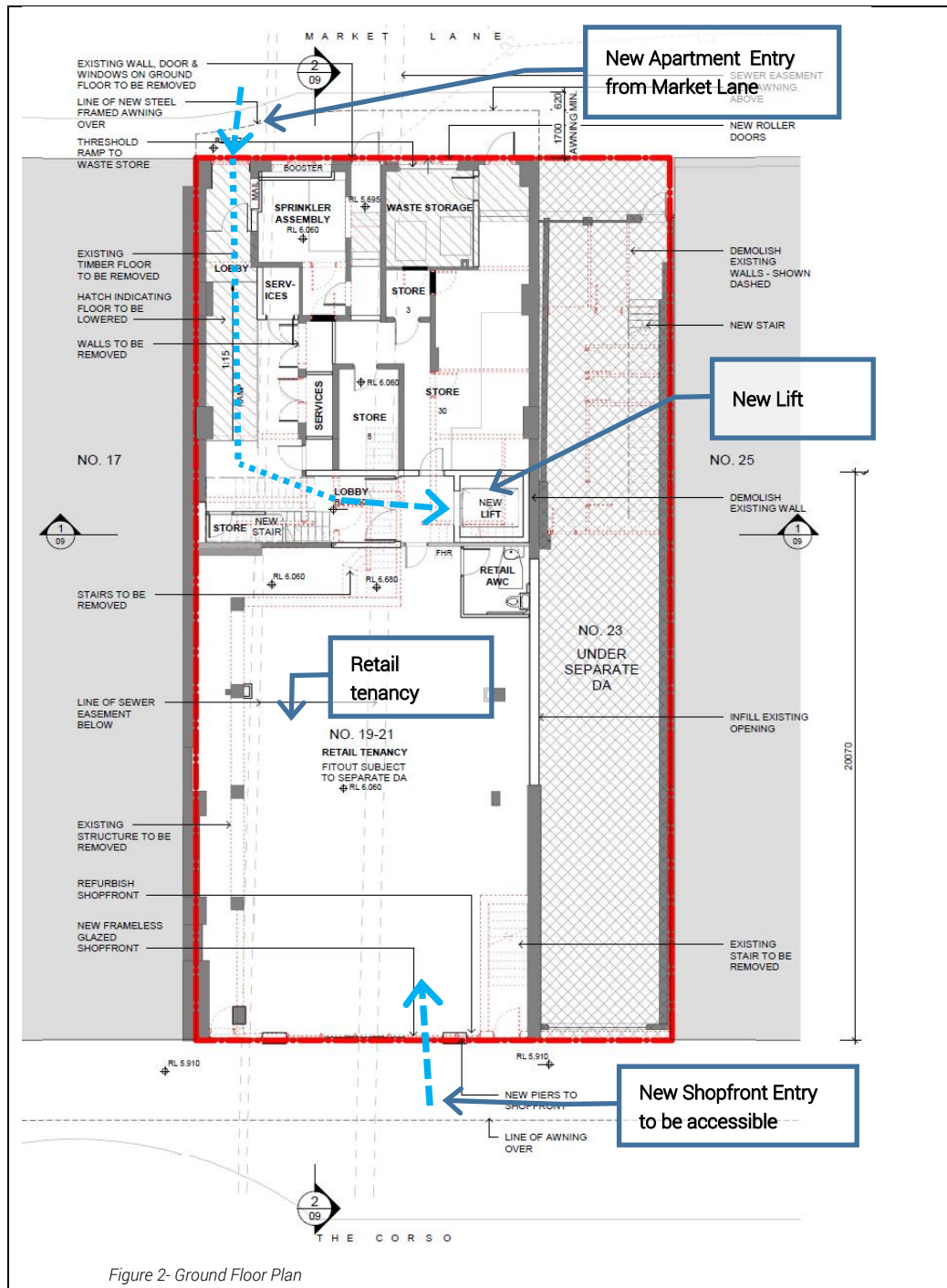
Within the current design there are two entries to the building, being;

- the entry to the retail tenancy from The Corso street frontage
- The entry to the apartment lift lobby from the Market Lane street frontage.

Both entries are at grade and could be provided with an accessible entry, subject to the detailed design, therefore 100% of entries could be accessible and therefore the design could meet the requirements of Clause D3.2

The following figure show the existing site entries and proposed building entries.

DDA / ACCESS COMPLIANCE REVIEW – MANLY CORSO APARTMENTS



2.1.3 PART D3.3 PARTS OF BUILDING TO BE ACCESSIBLE.

Under part D3.3 of the BCA, access is required to all areas normally used by the occupants and includes areas such as toilet facilities, meeting rooms and kitchens etc.

This applies to areas that are required to be accessible, which for this project is:

- Within the retail tenancy
- Within the shared communal space on the ground floor being the General Storage area and the Waste storage area.
- The main entry doors to Apartments on levels served by the lift.

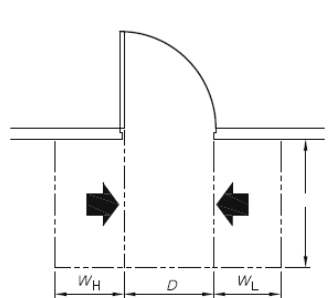


**DDA / ACCESS COMPLIANCE REVIEW – MANLY CORSO APARTMENTS**

Access paths, door widths and door clearances are to comply with AS1428.1 - 2009

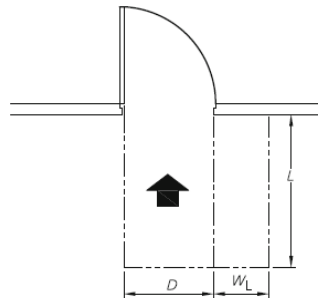
The following criteria from AS1428.1 sets out the requirements for providing access, that should be included within the detailed design:

- All new doorways should be minimum 850mm clear (requires min. 920mm leaf doors)
- Provide side clearances to doors as per Figure 31 of AS1428.1 ( refer below.)
- Provide lobbies with min 1450mm clear lengths to enable usability. (refer below)



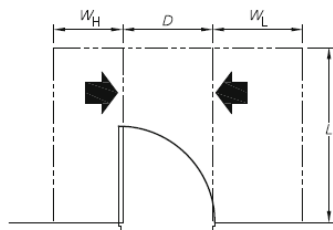
Dimension $D$	Dimension $L$	Dimension $W_H$	Dimension $W_L$
850	1240	560	660
900	1210	510	660
950	1175	460	660
1000	1155	410	660

(c) Either side approach, door opens away from user



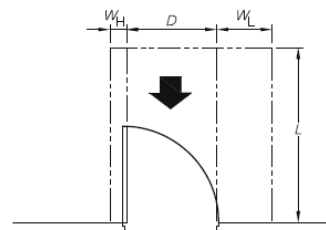
Dimension $D$	Dimension $L$	Dimension $W_H$	Dimension $W_L$
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

(d) Front approach, door opens away from user



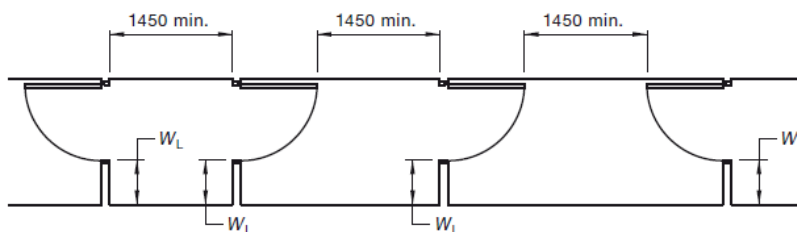
Dimension $D$	Dimension $L$	Dimension $W_H$	Dimension $W_L$
850	1670	660	900
900	1670	610	900
950	1670	560	900
1000	1670	510	900

(g) Either side approach, door opens towards user



Dimension $D$	Dimension $L$	Dimension $W_H$	Dimension $W_L$
850	1450	110	530
900	1450	110	530
950	1450	110	530
1000	1450	110	530

(h) Front approach, door opens towards user



(a) Continuous accessible path of travel

**2.1.4 ACCESS PATHWAYS PROVIDED WITHIN THE DESIGN.**

**2.1.4.1 GENERAL**

Within the design access is provided to all areas used by the occupants with the exception of the following:

**DDA / ACCESS COMPLIANCE REVIEW – MANLY CORSO APARTMENTS**

**2.1.4.1 RETAIL TENANCY AREA**

The proposed works includes adjustments to the ground floor retail tenancy and the installation of a new glass shopfront to the street frontage. Subject to the detailed design of the shopfront an accessible path would be provided within the retail tenancy.

**2.1.4.2 APARTMENT COMMON AREAS**

The proposed common areas to the ground floor are to be provided with an accessible path to the lift and from the lift to the storage areas and to the waste area. The existing design includes a waste chute which is within an accessible area of the storage area. New doors within this area are to have a minimum 850mm clear doorway opening width.

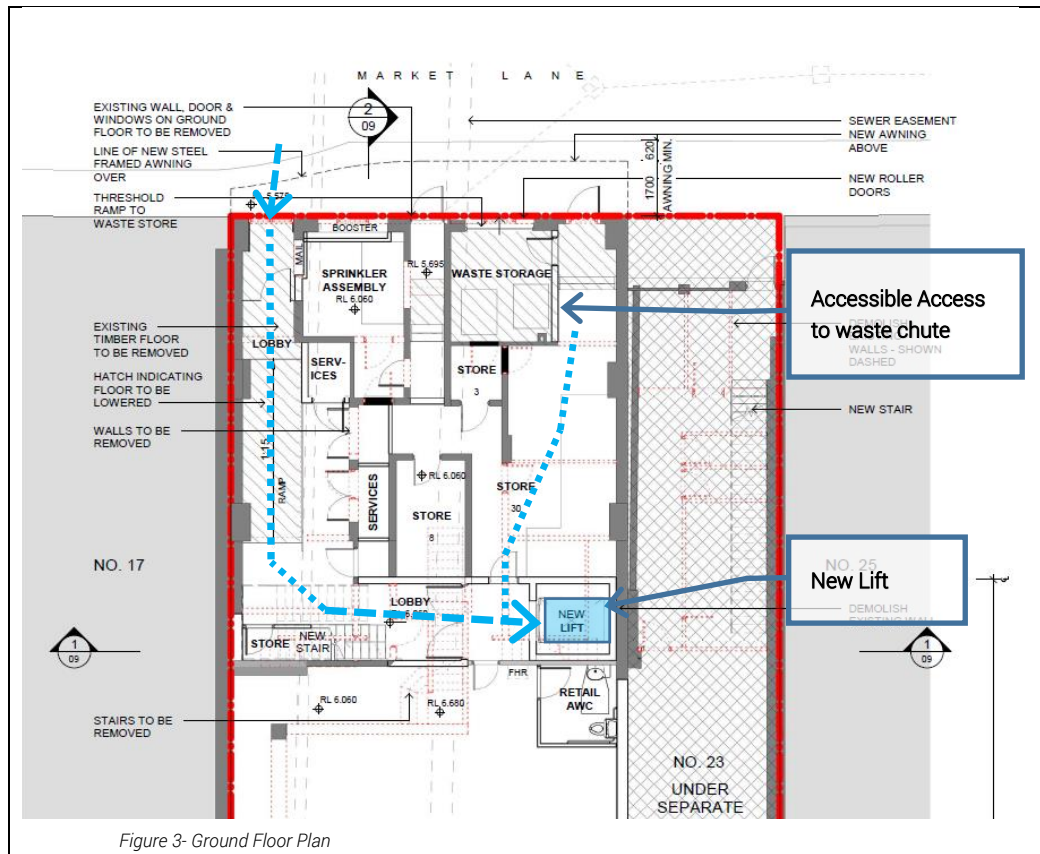


Figure 3- Ground Floor Plan

**2.1.4.3 APARTMENTS**

As identified within the Access strategy, as the proposed works are a refurbishment of the existing building, not all of the existing apartments will be provided with access to the main door of the apartment as set out within AS1428.1 and required by Clause D3.2, only the new apartment and the existing apartment Unit 5 & 6 will be provided with access to the entry door of the apartment.

**2.1.5 LIFT**

A lift is included within the design, to provide access between the various levels and floors of the Building, to meet the DTS requirements for an accessible pathway through the building. The lift will travel less than 12m, therefore the lift car floor dimensions will need to be as set out in the following table.

Lift Requirements						
Lift Travel distance	Less than 12m		Depth	Width	Emergency Lift	Not Required
	Lift Required	Lift Car dimensions	1400mm	1100mm	Stretcher Facilities	Required if effective height > 12m

**DDA / ACCESS COMPLIANCE REVIEW – MANLY CORSO APPARTMENTS****2.1.6 ACCESSIBLE TOILET FACILITIES**

The design includes new accessible facility to the ground floor retail tenancy as the only facility in the area, therefore meeting the requirements for the provision of accessible facilities.  
The detailed design of the toilet facility is to be in line with the details of AS1428.1;2009.

**2.1.7 PART D3.5 CAR PARKING**

Carparking is not provided on the existing site and no additional parking is proposed as part of the works, therefore no accessible parking is required.

**2.1.8 PART D3.6 IDENTIFICATION OF ACCESSIBLE FACILITIES, SERVICE AND FEATURES**

Part D3.6 requires signage complying with Specification D3.6 to be included within the building in, a number of locations to identify the following:

- All sanitary facilities
- Identification of exit ( where exit signage is included.)
- Path of travel to the Lift if not evident from the main entry.

Signage is to be included as part of the detailed design to identify the path to the lift from the Market Lane frontage and the accessible wc facilities.

**2.1.9 PART D3.7 HEARING AUGMENTATION**

Part D3.7 requires that where an amplification system within a meeting room of more than 100m<sup>2</sup> a hearing augmentation system is to be installed.

This does not apply to the proposed design.

**2.1.10 PART D 3.8 TACTILE GROUND SURFACE INDICATORS**

Part D3.8 of the BCA requires that tactile ground surface indicators (TGSIs) be installed at the top and bottom of open stairs and ramps to warn occupants of the associated hazard, where the area is to be accessible.

The detailed documented design is to include tactile indicators to the top and bottom of all stairs and ramps to meet the DTS requirements.

**2.1.11 PART D3.9 WHEELCHAIR SEATING SPACES IN CLASS 9B ASSEMBLY BUILDINGS**

Part D3.9 and table D3.9 sets out the requirements for the provision of seating spaces for wheel chairs where fixed seating is provided and requires that where there is up to 150 fixed seats at least 3 spaces for wheel chairs is provided.

This does not apply to the proposed works as the building is not a Class 9b building.

### 3.0 UNIVERSABLE /LIVABLE HOUSING DESIGN

#### 3.1 INTRODUCTION

The NSW Department of Planning and Environment, Apartment Design guide sets out recommended design criteria for universal design within Objective 4Q-1 as set out below:

<p><b>Objective 4Q-1</b> Universal design features are included in apartment design to promote flexible housing for all community members Design guidance</p>	<p>Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features.</p>
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#### 3.2 LIVABLE HOUSING DETAIL REQUIREMENTS

Applying this guide to the proposed project with 11 Units over the three floors, at least 2 units should be design to achieve the Silver Level Liveable Housing Design Guidelines.

The elements of the design to achieve this would be as follows:

Element	Performance Statement	Provided in the design
1 Dwelling Access	Provide a safe, continuous step free pathway from the front boundary of the property to an entry door to the dwelling	Yes
2. Dwelling Entrance	There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.	Yes to new unit 11 and existing unit 5 & 6
3. Internal Doors & Corridors	Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.	Yes to new Unit 11 only.
4. Toilet	The ground (or entry) level has a toilet to support easy access for home occupants and visitors.	Yes to new Unit 11 only
5. Shower	The bathroom and shower is designed for easy and independent access for all home occupants.	Yes to new Unit 11 only
6. Reinforcement of bathroom & toilet walls	The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.	Yes to new Unit 11 only
7. Internal stairways	Where installed, stairways are designed to reduce the likelihood of injury and also enable safety pathway.	To apply to all proposed stairs
8. Kitchen Space	The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.	Recommended to all new kitchens
9. Laundry Space	The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.	Yes to new Unit 11 only
10. Ground (or entry level) bedroom space	There is a space on the ground (or entry) level that can be used as a bedroom.	Yes to new Unit 11 only
11. Light switches and power points	Light switches and power points are located at heights that are easy to reach for all home occupants.	Recommended for all new points
12. Door and Tap Hardware	Home occupants are able to easily and independently open and close doors and safely use tap hardware.	Recommended for all new hardware and taps
13. Family/living room space	The family/living room features clear space to enable the home occupant to move in and around the room with ease.	Yes to new Unit 11 only
14. Window Sills	Windows sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position.	Yes to new Unit 11 only
15. Flooring	Floor coverings are slip resistant to reduce the likelihood of slips, trips and falls in the home.	Recommended for all new finishes

#### **4.0 CONCLUSION & RECOMENDATIONS**

Based on the review of the proposed design, as outlined in the assessment above, it is considered that the proposed design as indicated on the drawings generally will be able to meet the relevant Deemed to Satisfy Provisions of the Building Code of Australia 2019, subject to the detailed design.



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