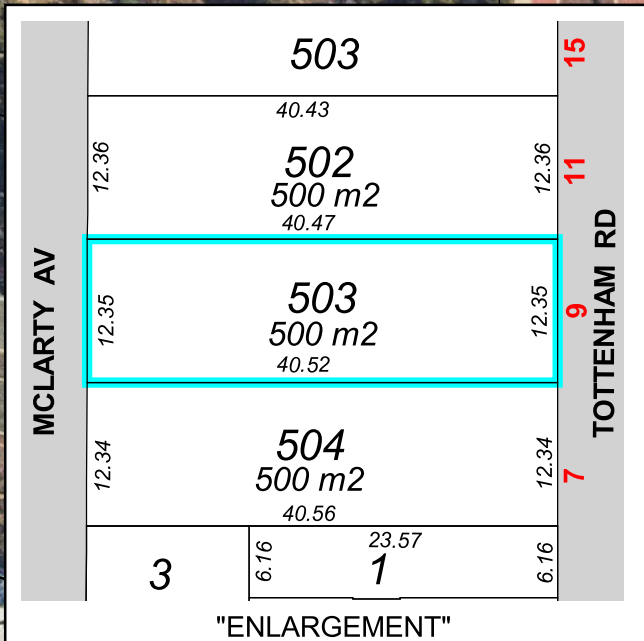
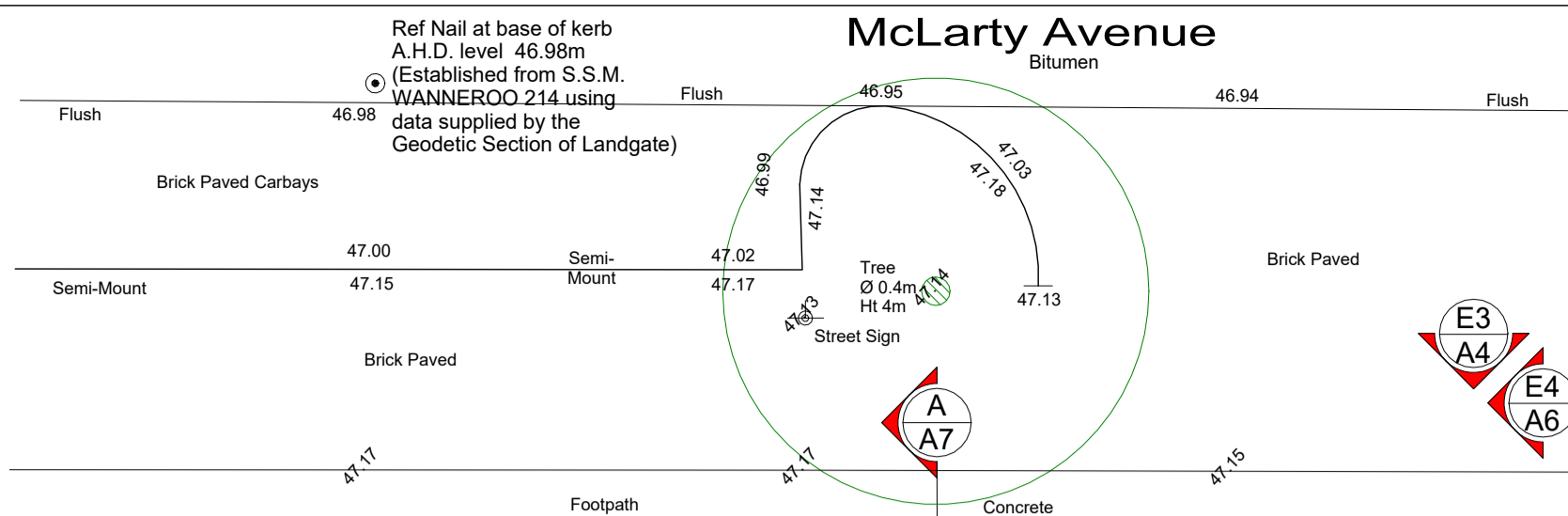




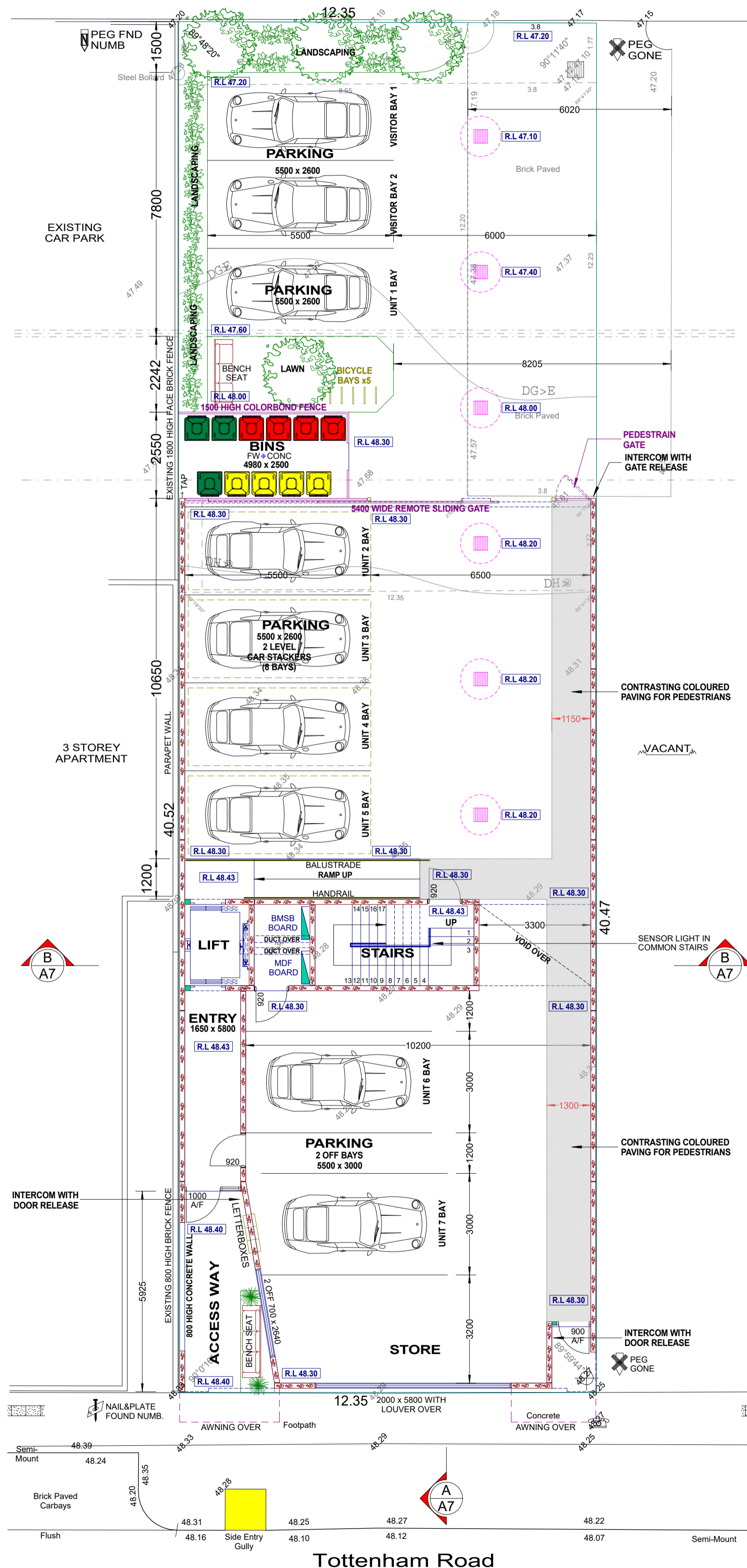
Subject Site
 Lot 503 Deposited Plan 40003
 9 Tottenham Road, Joondalup





AREAS							
LEVEL	A'MENT	# OF BEDS	MAIN AREA	BALCONY	STORE	COMMON AREA	CARBAYS
1	-	-	-	-	-	22 m ²	-
2	1	2	127 m ²	16 m ²	4 m ²	16 m ²	2
2	2	2	127 m ²	16 m ²	4 m ²	16 m ²	2
3	3	2	127 m ²	16 m ²	4 m ²	16 m ²	2
3	4	2	127 m ²	16 m ²	4 m ²	16 m ²	2
4	5	2	127 m ²	16 m ²	4 m ²	16 m ²	2
4	6	2	127 m ²	16 m ²	4 m ²	16 m ²	2
5	7	4	246 m ²	62 m ²	4.76 m ²	16 m ²	2

SITE AREA	500 m ²
PLOT RATIO	2.016
SITE COVER	64.4 %



AMENDED PLANS
Received: 31 March 2022

DRAWING No: DA 01
REV 07

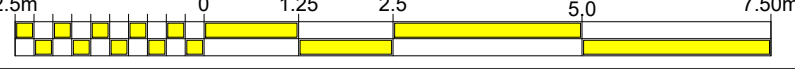
DATE: 29.03.22
SHEET 4 OF 12



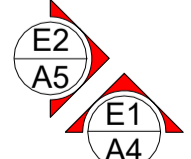
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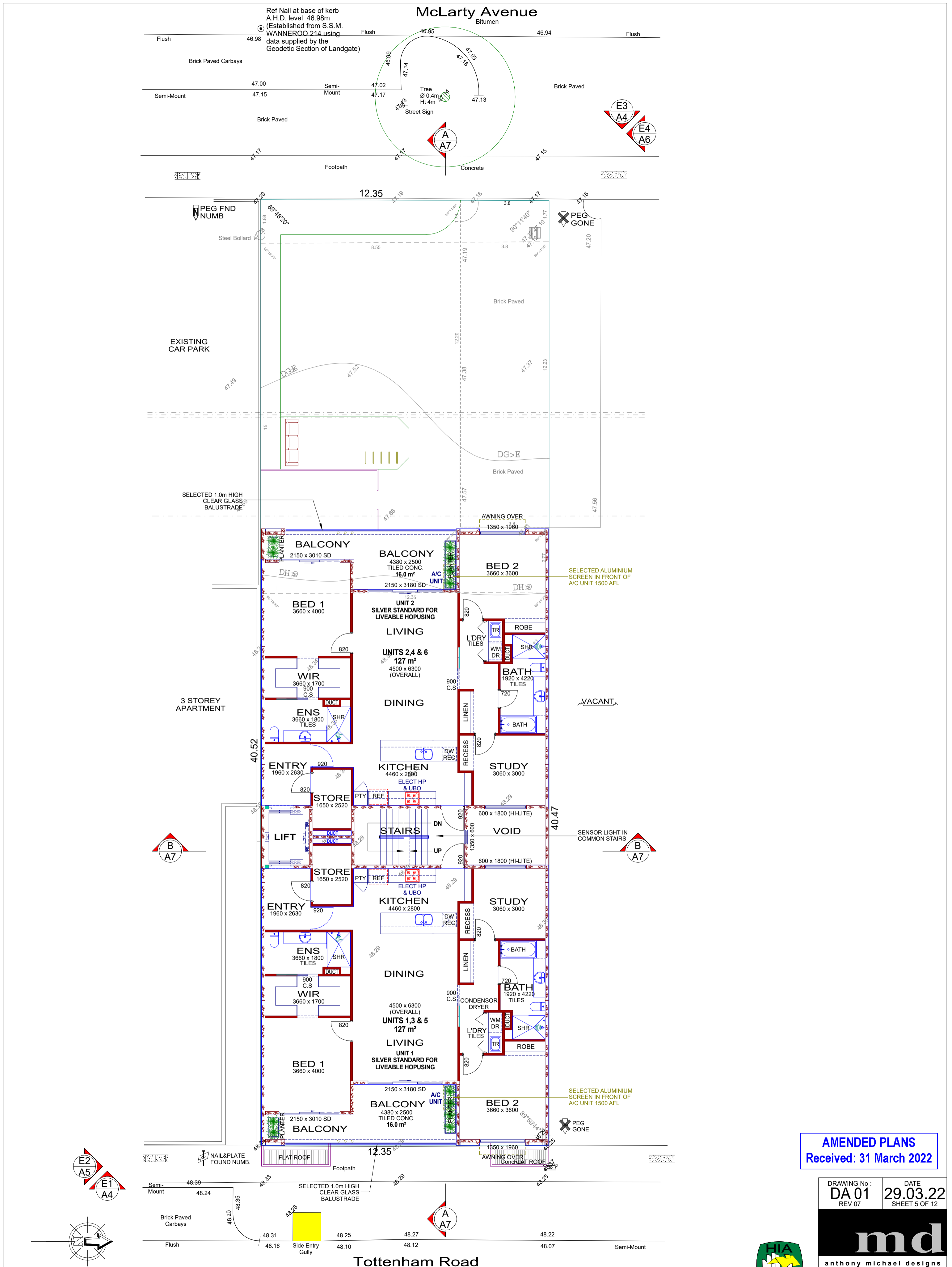
BASEMENT PLAN

JOB No 20-2079
SCALE 1: 100 ON A2 SHEET



PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP





TYPICAL FLOOR PLANS TO LEVELS 2, 3 & 4

JOB No 20-2079
SCALE 1:100 ON A2 SHEET



**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

AMENDED PLANS
Received: 31 March 2022

DRAWING No: DA 01
REV 07

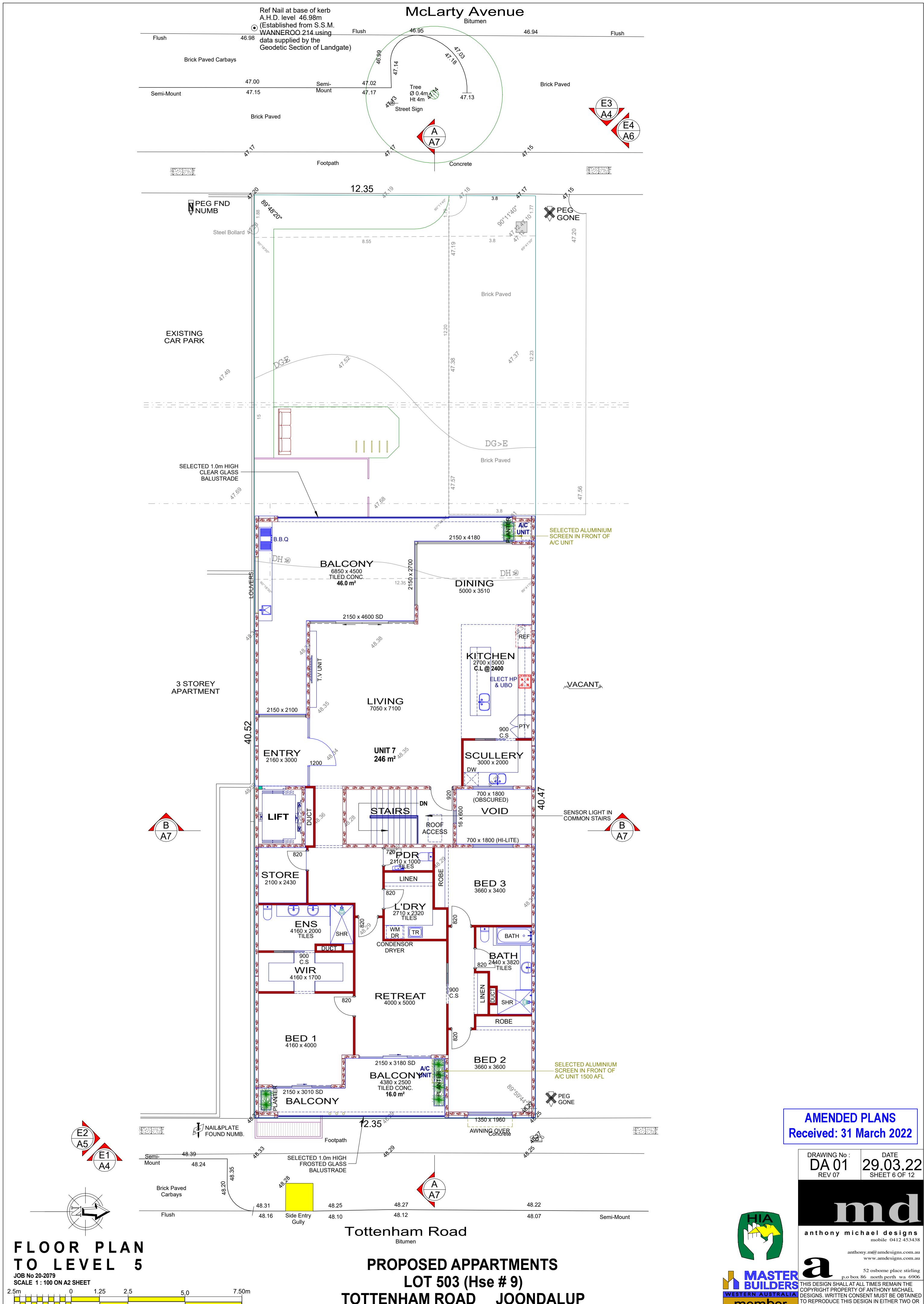
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FLOOR PLAN TO LEVEL 5

JOB No 20-2079
SCALE 1: 100 ON A2 SHEET



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LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

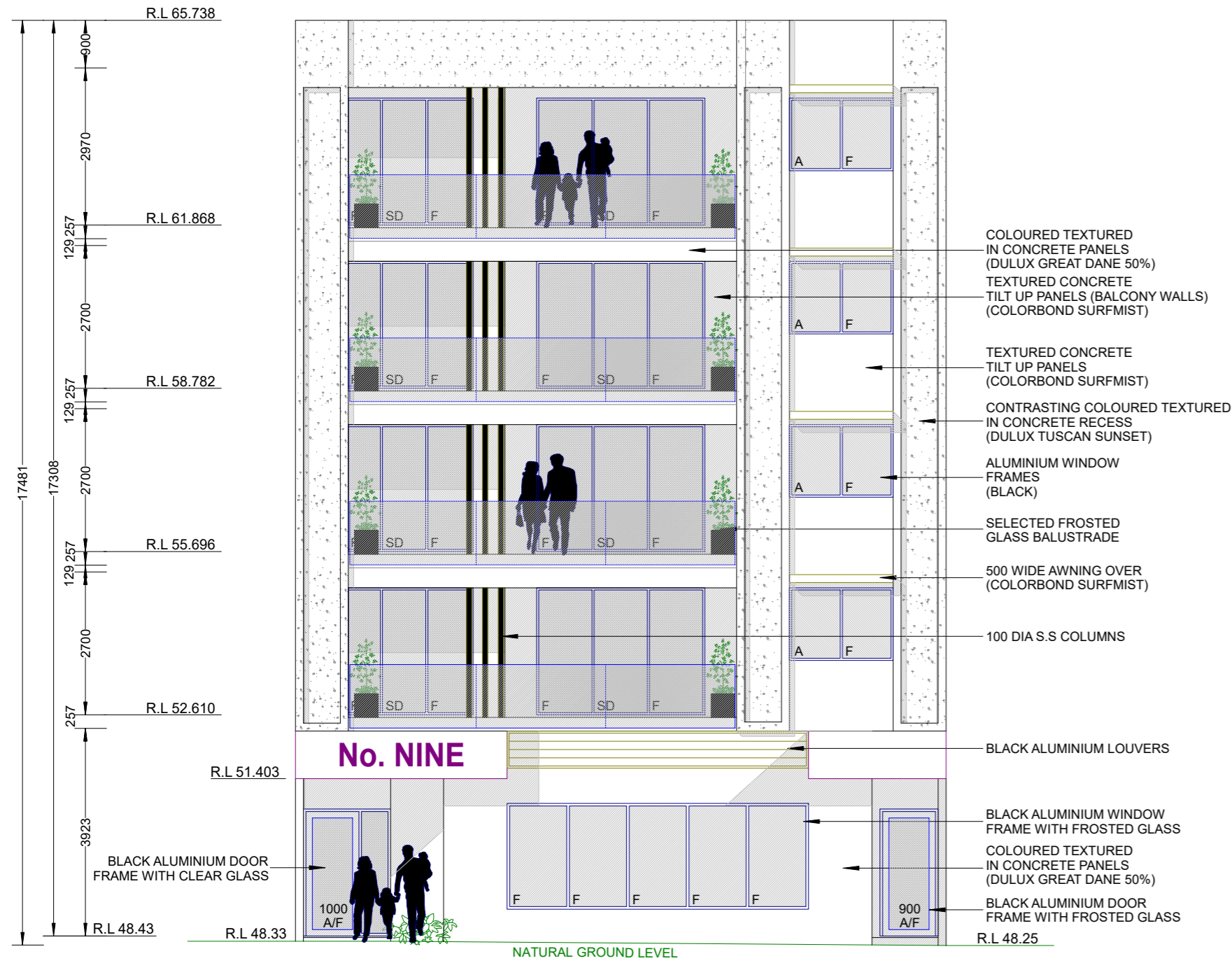
AMENDED PLANS
Received: 31 March 2022

DRAWING No: DA 01
REV 07
DATE: 29.03.22
SHEET 6 OF 12

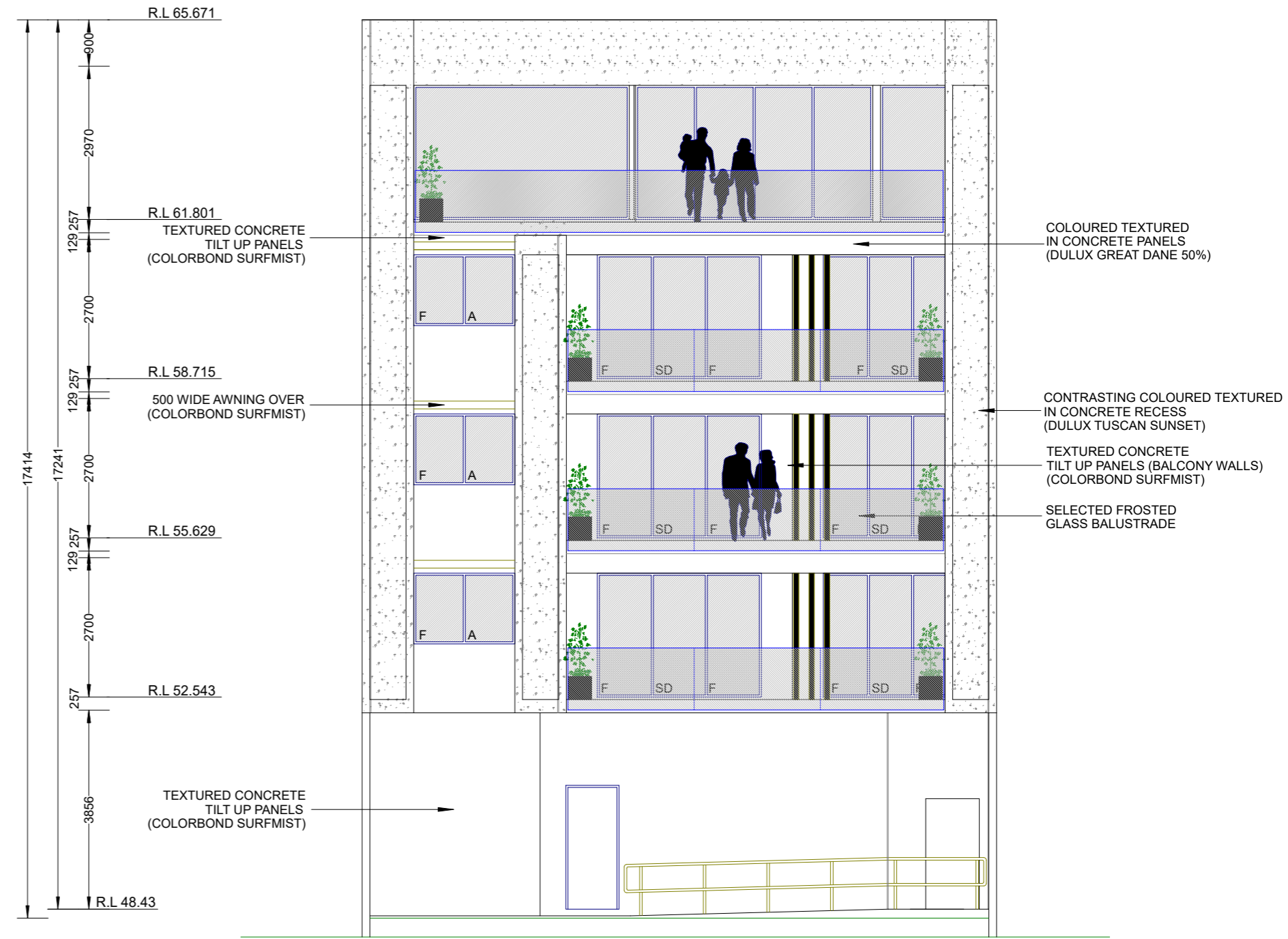
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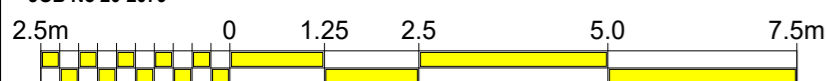
ELEVATION 01 (TOTTENHAM ROAD)



ELEVATION 03 (Mc LARTY AVENUE)
(BIN STORE & FENCE NOT SHOWN FOR CLARITY)

ELEVATIONS 01

SCALE 1 : 100 ON A2 SHEET
JOB No 20-2079

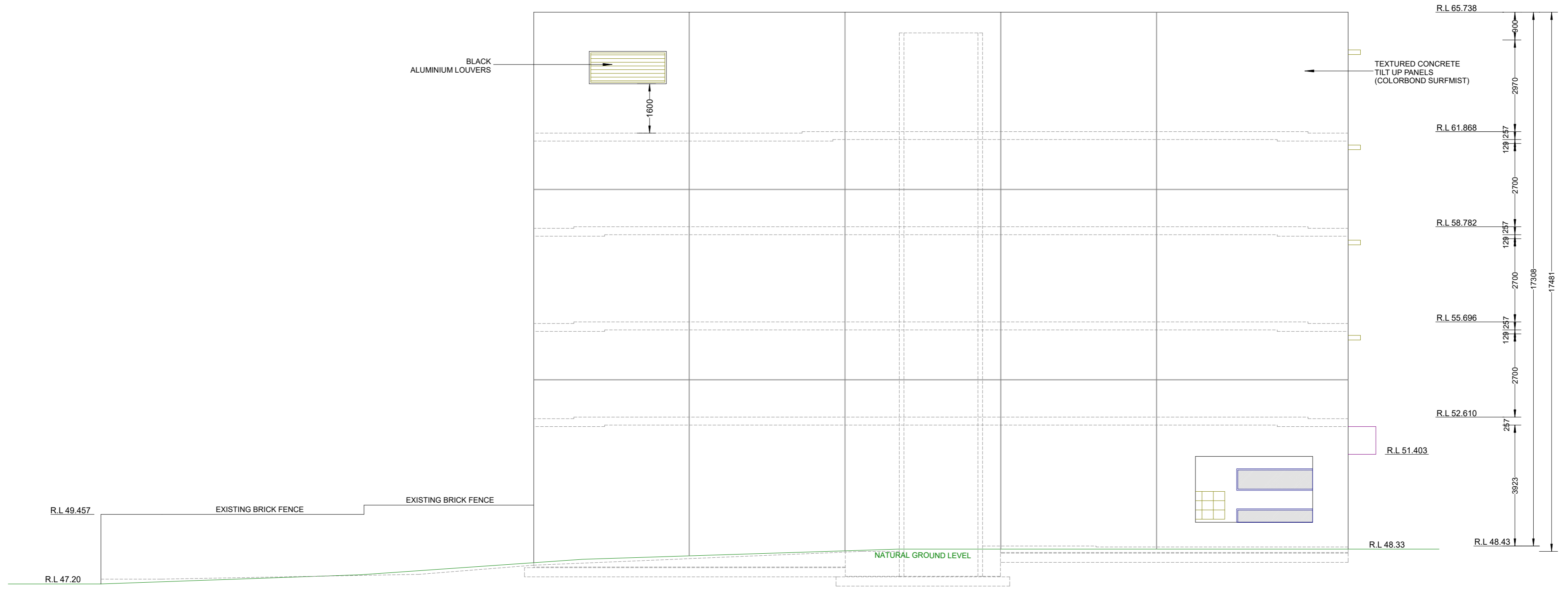


**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

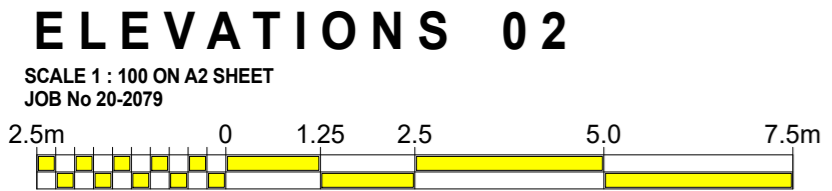
AMENDED PLANS
Received: 31 March 2022

DRAWING No : DA 01
REV 07
DATE 29.03.22
SHEET 7 OF 12

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ELEVATION 02



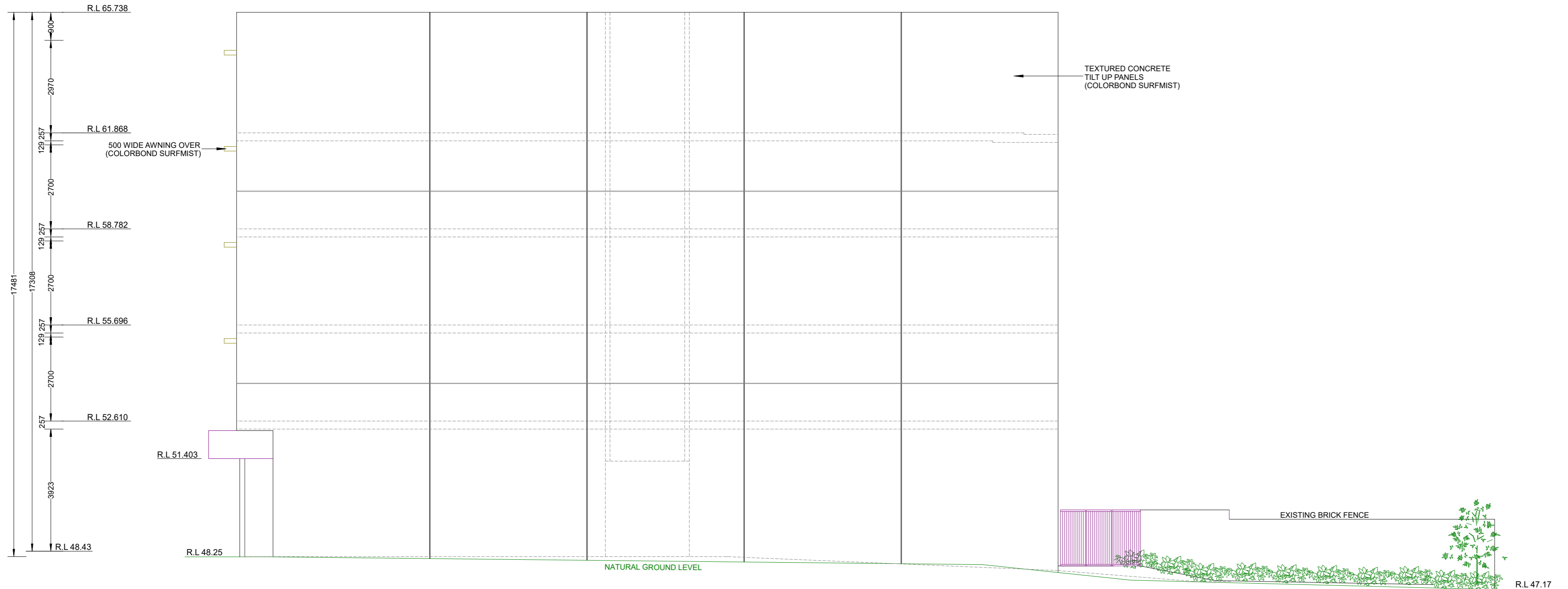
**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

AMENDED PLANS
Received: 31 March 2022

DRAWING No : **DA 01** DATE **29.03.22**
REV 07 SHEET 8 OF 12



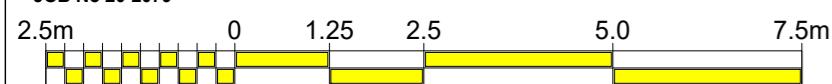
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ELEVATION 04

ELEVATIONS 03

SCALE 1 : 100 ON A2 SHEET
JOB No 20-2079



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TOTTENHAM ROAD JOONDALUP**

AMENDED PLANS
Received: 31 March 2022

DRAWING No : DA 01
REV 07
DATE 29.03.22
SHEET 9 OF 12

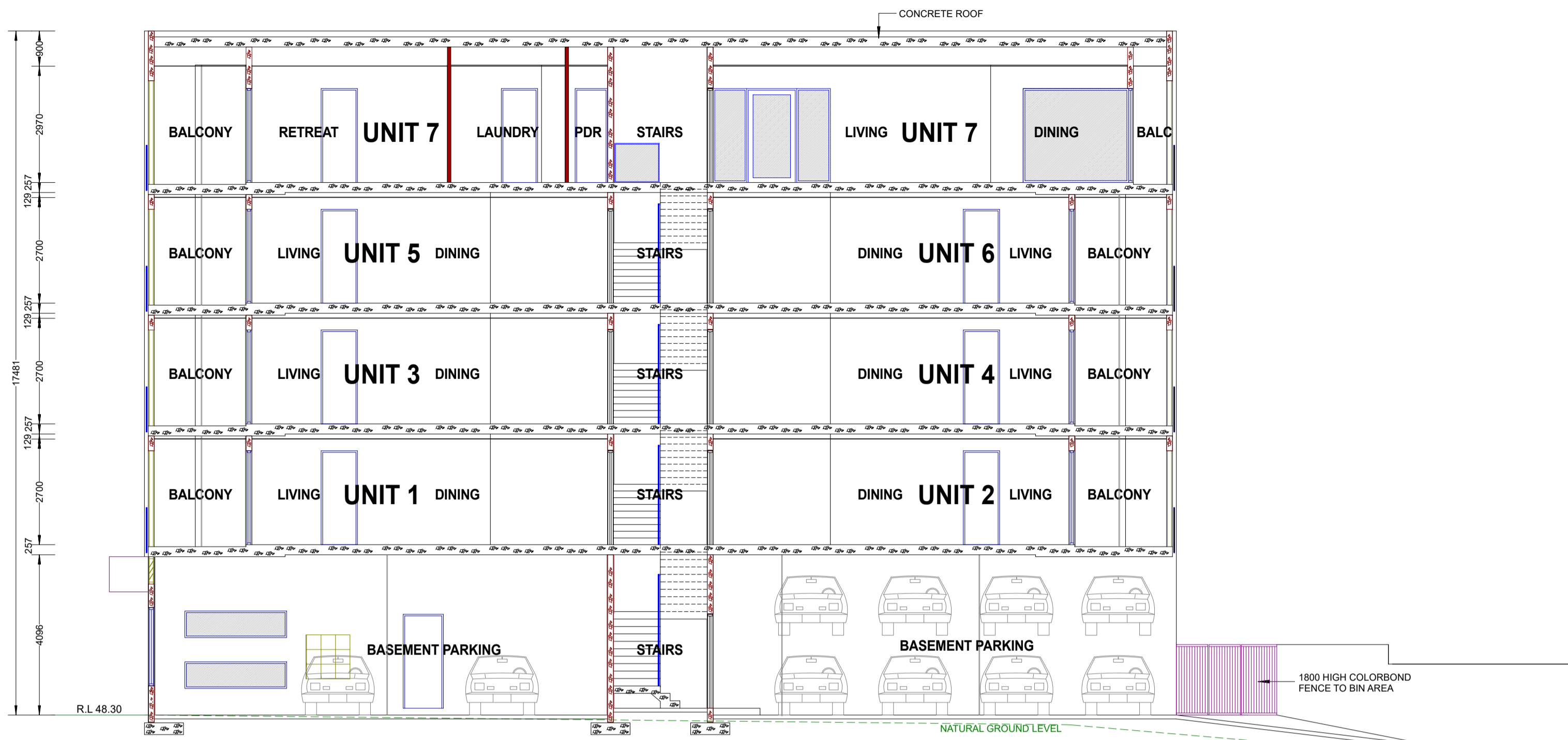
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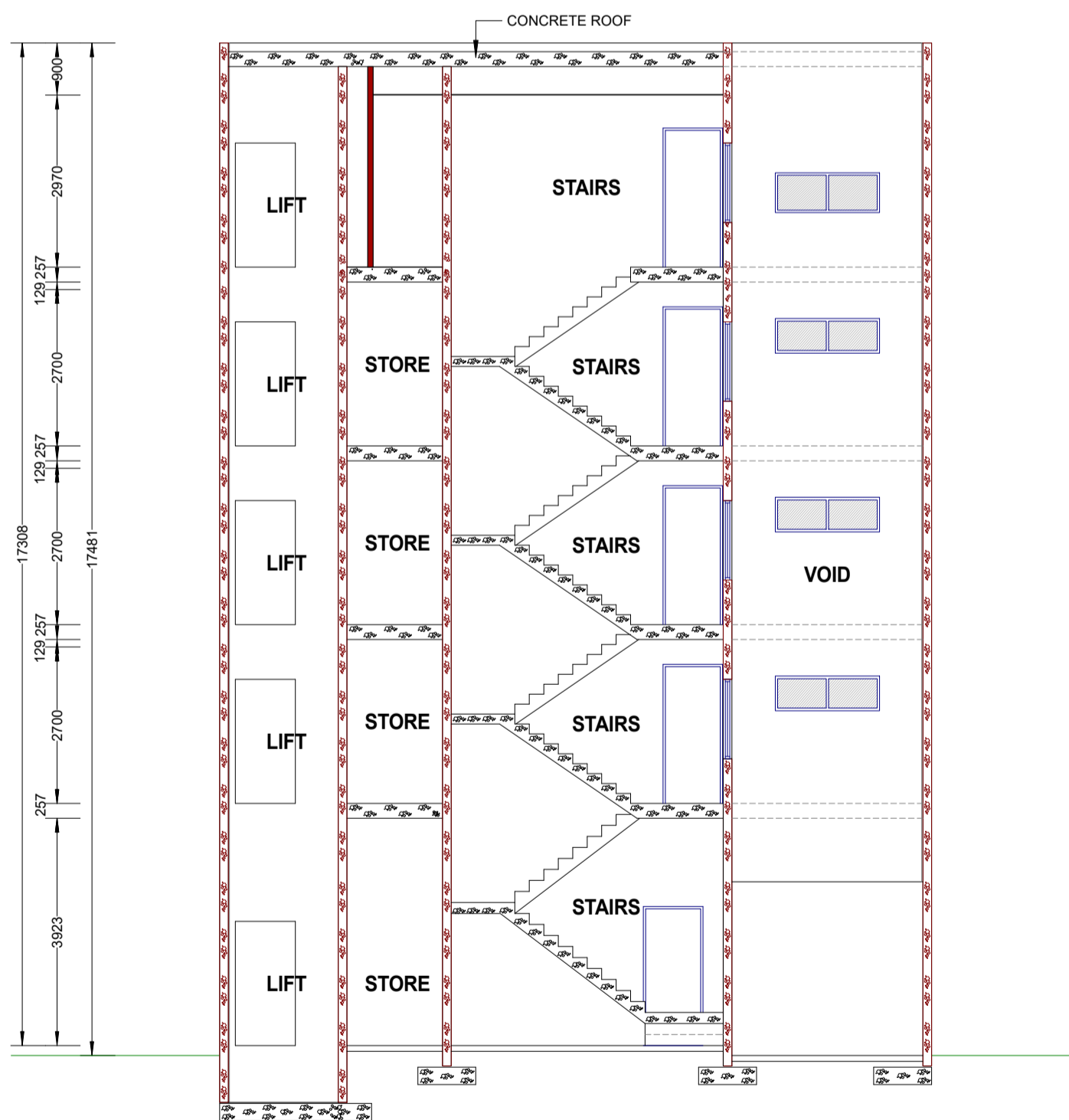
anthony.m@amdesigns.com.au
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SECTION A - A



SECTION B - B

AMENDED PLANS
Received: 31 March 2022

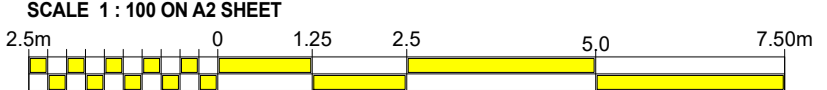
DRAWING No : DA 01
REV 07
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SHEET 10 OF 12

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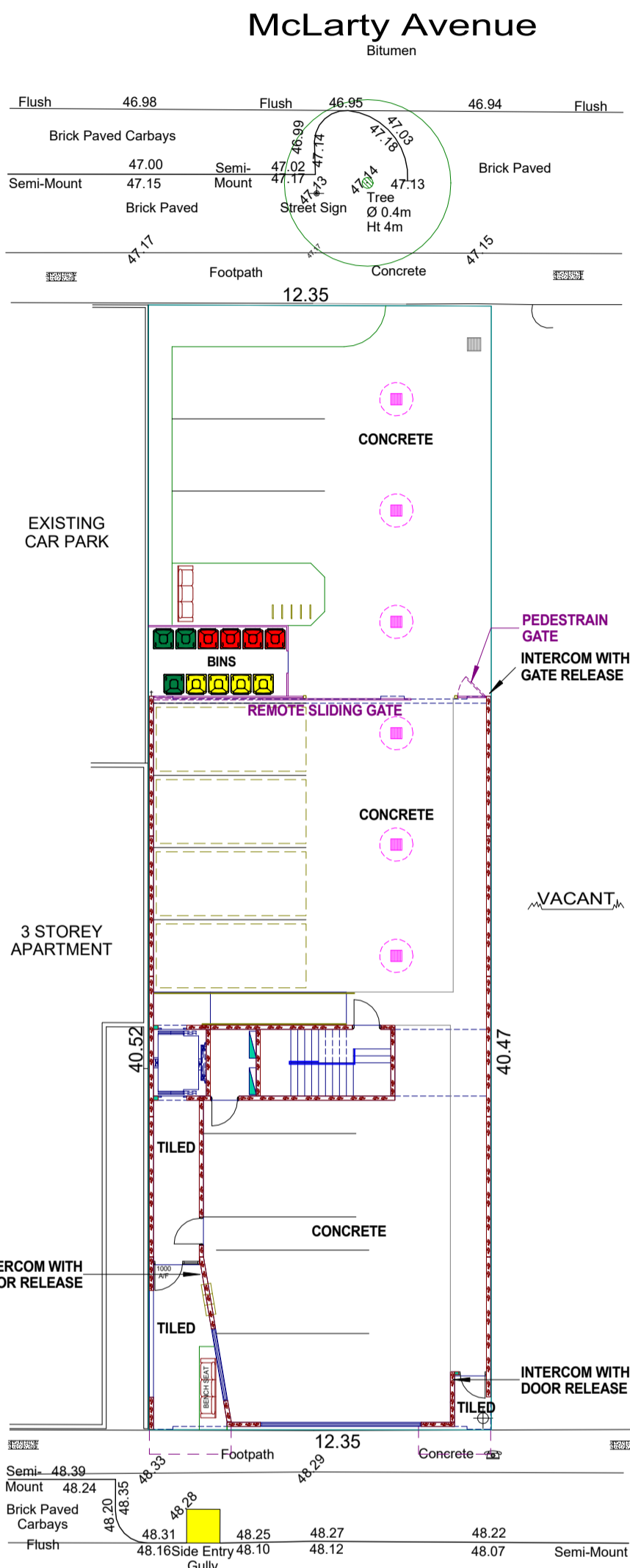
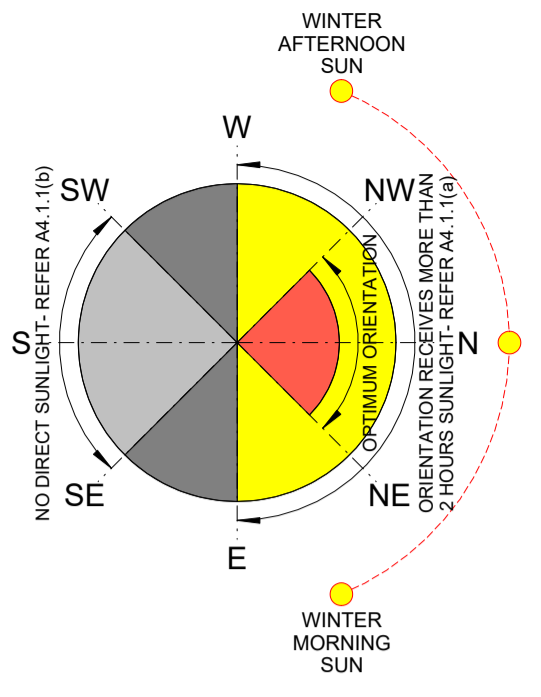
TYPICAL SECTIONS

JOB No 20-2079
SCALE 1:100 ON A2 SHEET

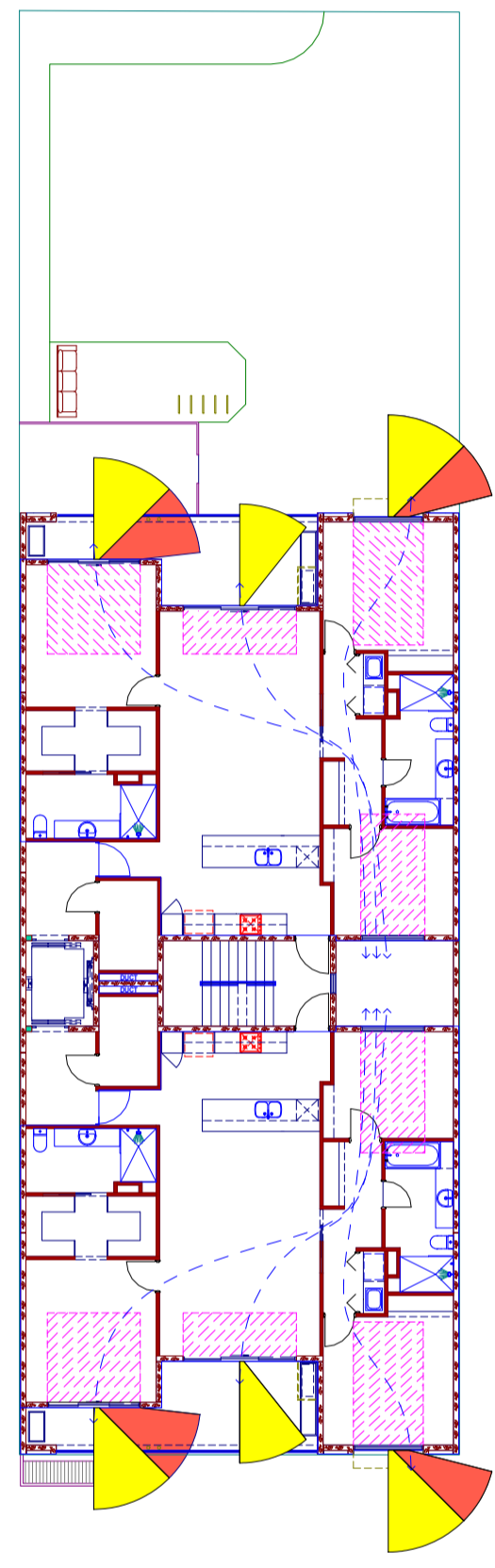


PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP

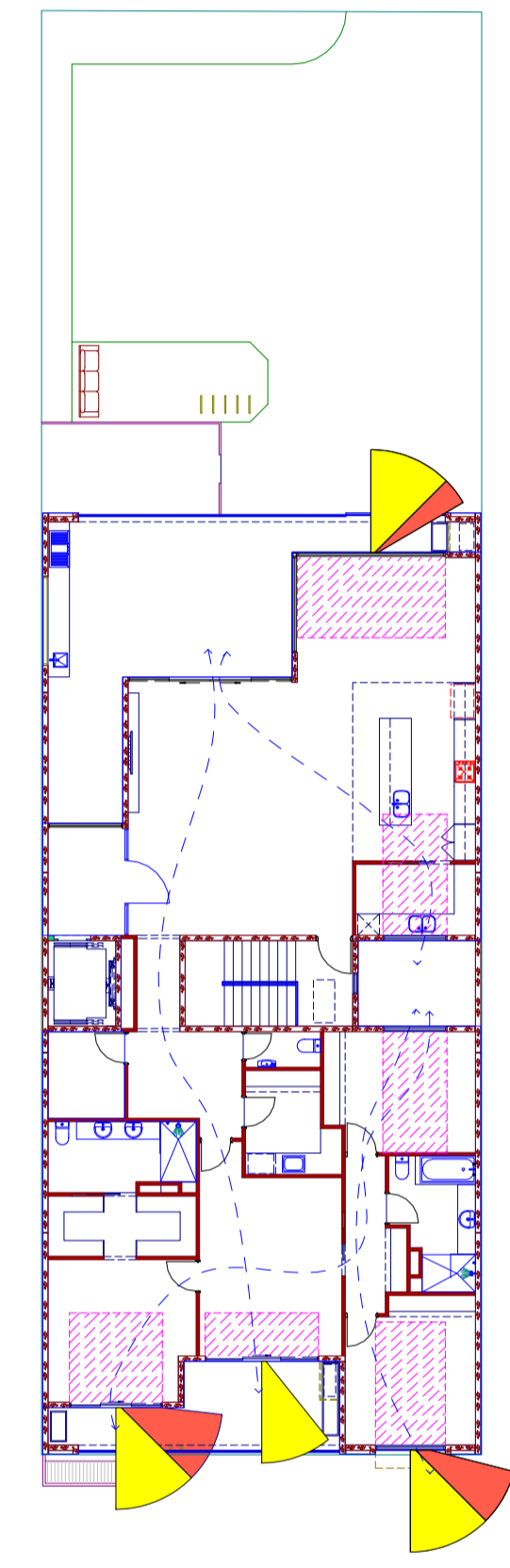
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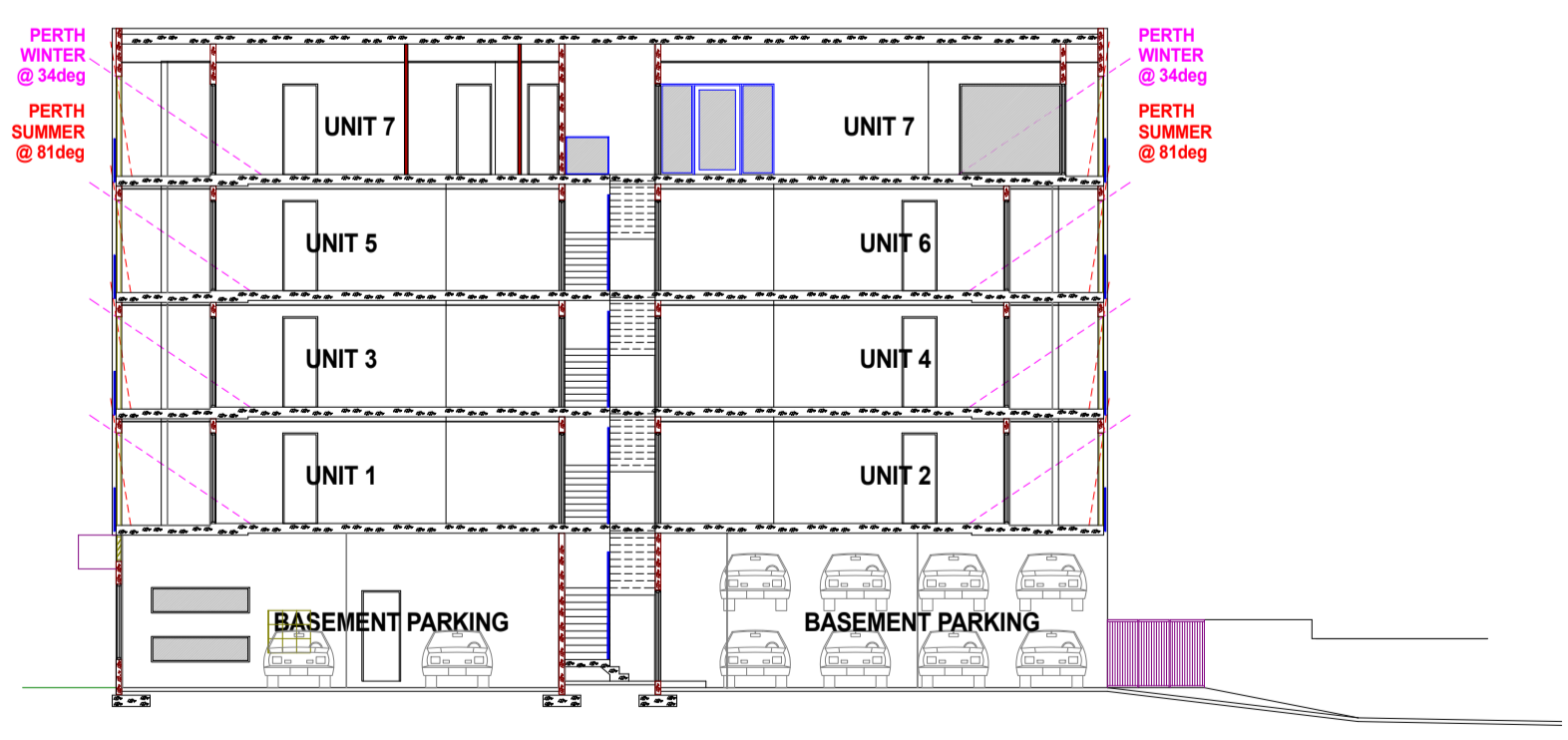
GROUND PLAN



LEVELS 2, 3, & 4 PLANS



LEVEL 5 PLAN

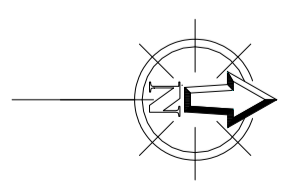


SECTION A - A

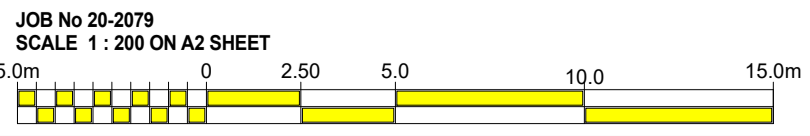
SOLAR ACCESS			NATURAL CROSS VENTILATION	
FLOOR	UNIT	ACCESS TO DIRECT LIGHT BETWEEN 9am AND 3pm	ACCESS TO DIRECT LIGHT BETWEEN 9am AND 3pm	
1	-	N/A	N/A	
2	1	2.75 Hours	YES	
2	2	2.75 Hours	YES	
3	3	2.75 Hours	YES	
3	4	2.75 Hours	YES	
4	5	2.75 Hours	YES	
4	6	2.75 Hours	YES	
5	7	5.50 Hours	YES	
TOTAL OF 7 UNITS (100%) ACHIEVED 2 HOURS OF DIRECT SUN LIGHT			TOTAL OF 7 UNITS (100%) ACHIEVED NATURAL CROSS VENTILATION	

AMENDED PLANS
Received: 31 March 2022

DRAWING No: DA 01 REV 07
DATE: 29.03.22 SHEET 11 OF 12



LIGHT & VENTILATION PLANS



**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**



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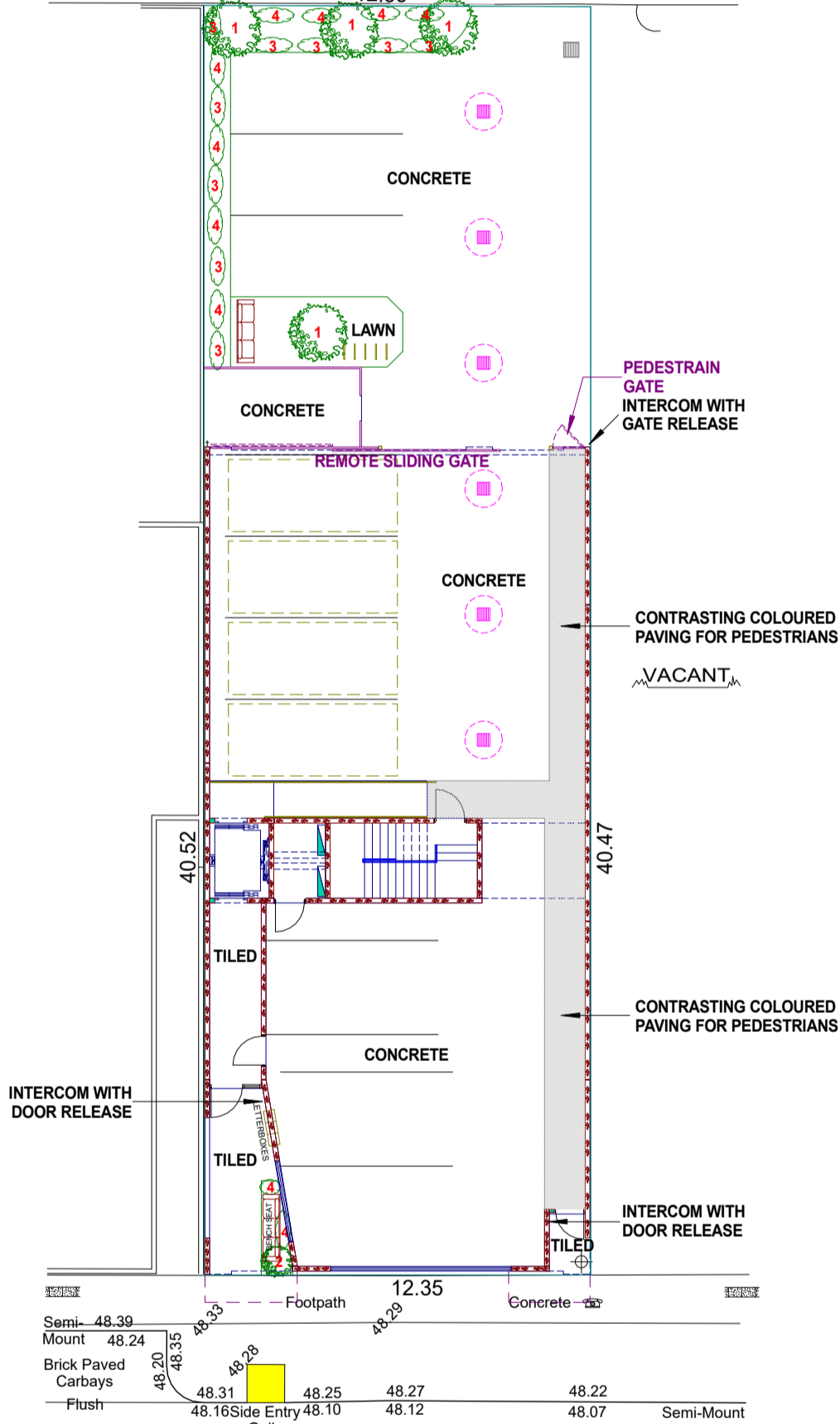
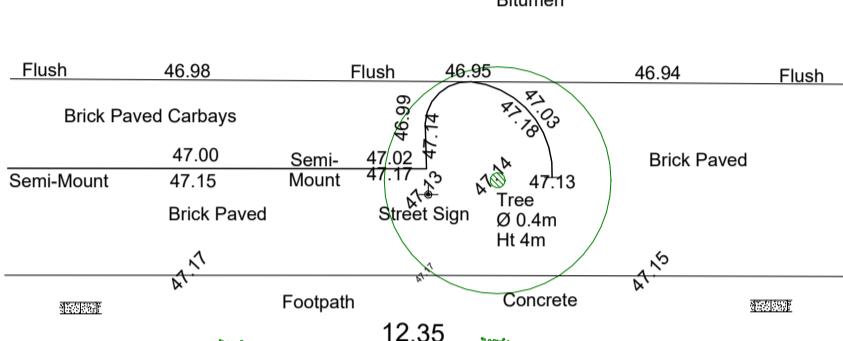
PLANT LEGEND

No	No Off	Pot Size	PLANT TYPE
TALL SHRUBS (TO 2M) AND SMALL TREES			
1	4	25 L	CHINESE PISTACHE
2	1	25 L	CORYLINE-PURPLE DAZZLER
GROUND COVERS (0 - 1m) SPACINGS 1 - 2m			
3	9	25cm	CORYLINE-PURPLE DAZZLER
4	10	25cm	TRACHELOSPERMUM JASMINOIDES (STAR JASMINE)
POTTED PLANTS			
5	45	25cm	LITTLE JESS- DIANELLA CAERULEA
6	34	25cm	AMETHYST- LIRIOPE MUSCARI

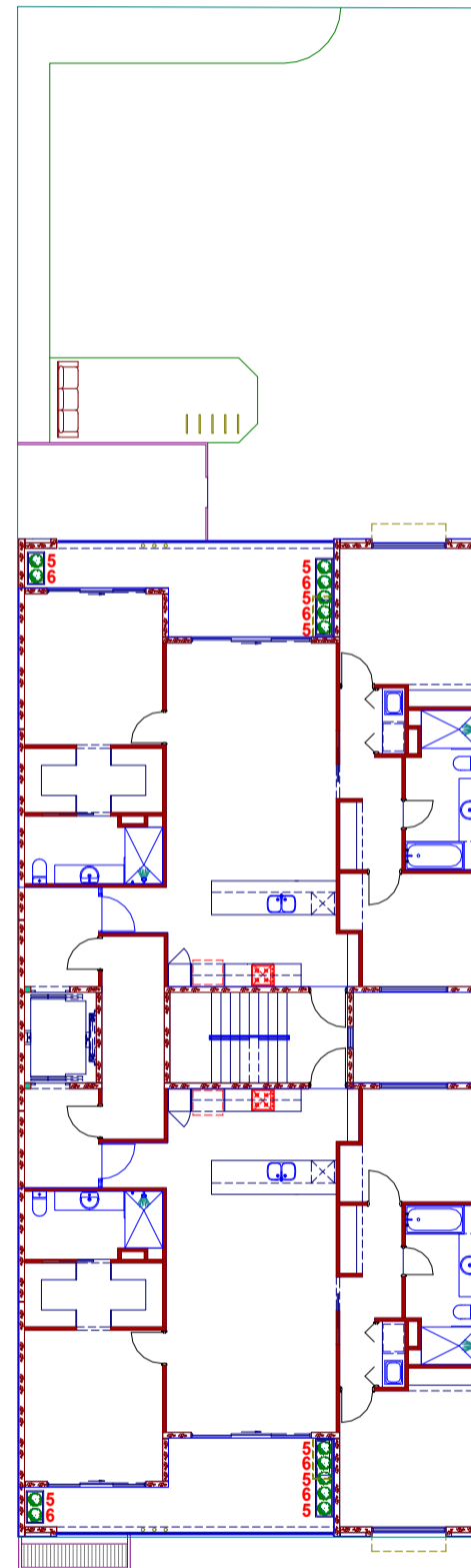
NOTE :
 * PROVIDE MULCH TO A DEPTH OF 100mm ON ALL UNCOVERED SOIL
 * IRRIGATION TO BE CONNECTED TO MAINS WATER SUPPLY NEAR TAP TO BIN AREA
 * PROVIDE AUTOMATIC RETICULATION TO LAWN & LANDSCAPED AREAS

SITE AREA	500 m ²
PAVED AREA	388 m ² 77.6 %
LANDSCAPED AREA	38.98 m ² 7.80 %

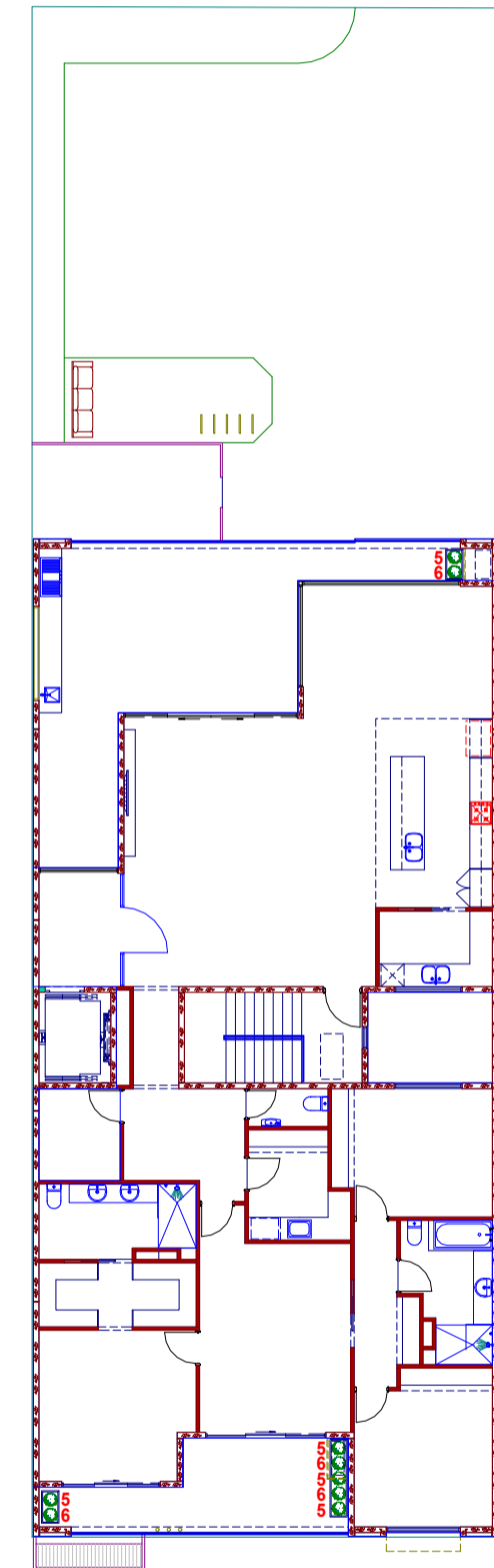
McLarty Avenue



GROUND LANDSCAPING PLAN

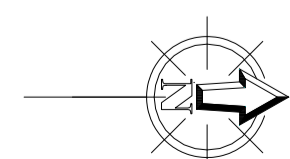
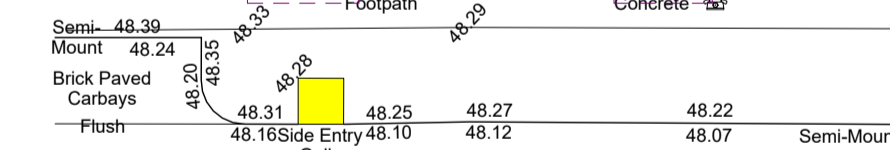


LEVELS 2, 3 & 4 LANDSCAPING PLAN



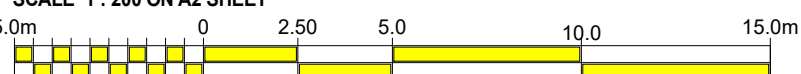
LEVEL 5 LANDSCAPING PLAN

Tottenham Road



LANDSCAPING PLANS

JOB No 20-2079
 SCALE 1 : 200 ON A2 SHEET



PROPOSED APARTMENTS LOT 503 (Hse # 9) TOTTENHAM ROAD JOONDALUP

AMENDED PLANS
 Received: 31 March 2022

DRAWING No : DA 01
 REV 07
 DATE 29.03.22
 SHEET 12 OF 12



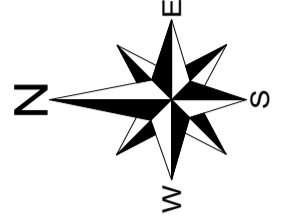
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NOTE:
LOT MISCLOSE
(0.000 m)

SOIL DESCRIPTION
Sand
Light Grass Cover w/ Sm.
Trees Over Lot

NOTE:
RESTRICTIVE COVENANT.
REFER TO SEC 129BA T.L.A.
SEE DOCUMENT I859734
(NO VEHICULAR ACCESS
TO TOTTENHAM ROAD
AND KYLE COURT)

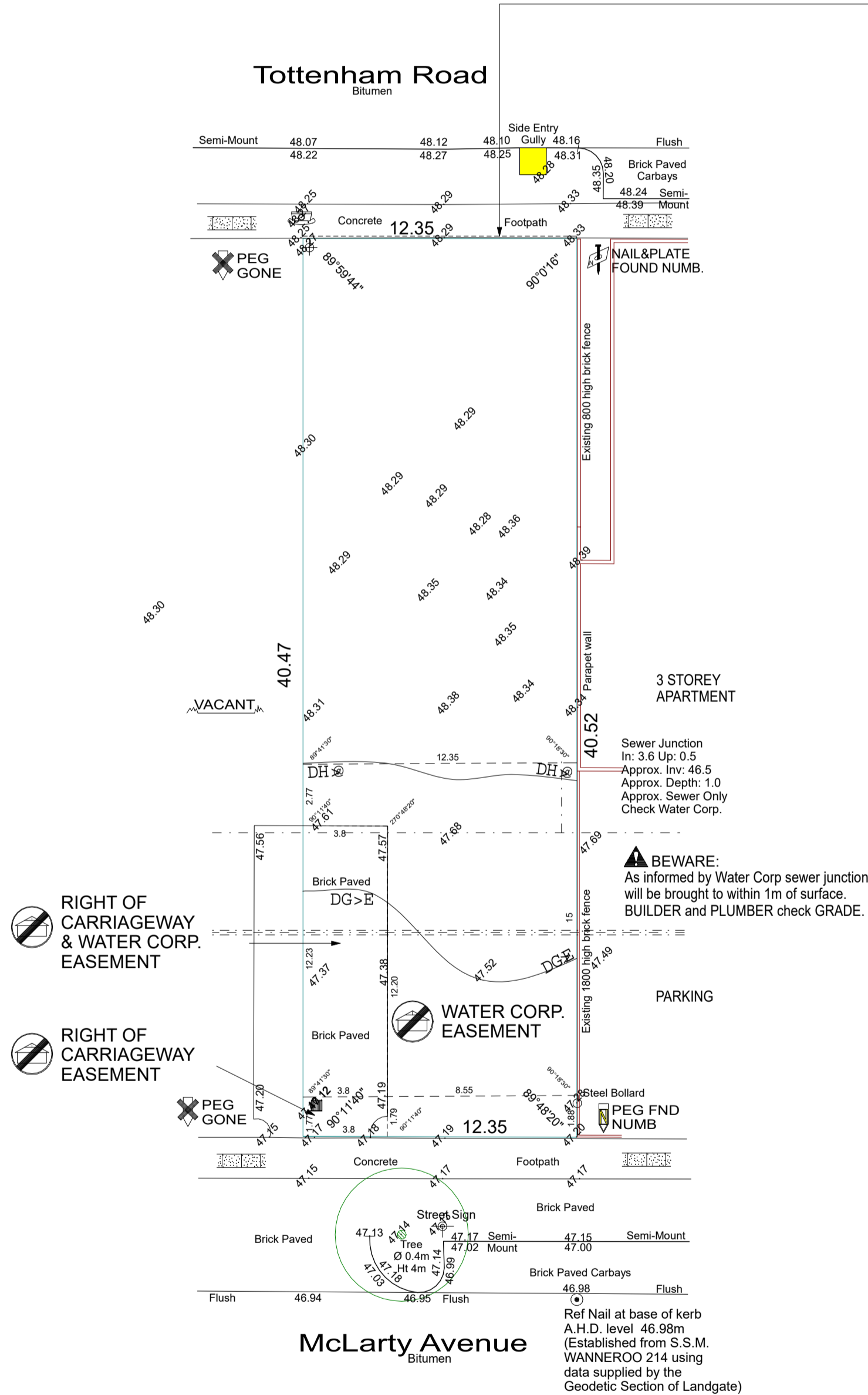


NOTE: EARTHWORKS / SET OUT DIMENSIONS MAY VARY ON SITE AT BUILDERS DISCRETION. SEWER / DRAINAGE MAY VARY FROM SCHEMATIC REPRESENTATION. CHECK MINIMUM CLEARANCES. RETAINING WALLS, ETC. INCLUDED IN CONTRACT - RETAINING DIMENSIONS RESPONSIBILITY. THIS SURVEY DOES NOT GUARANTEE THE LOCATION OF BOUNDARY PEGS OR FENCES. CHECK TITLE FOR EASEMENTS / COVENANTS ETC.

NOTE: COTTAGE & ENGINEERING SURVEYS ACCEPT NO RESPONSIBILITY FOR ANY PHYSICAL ON SITE CHANGES TO THE PARCEL OR PORTION OF THE PARCEL OF LAND SHOWN ON THIS SURVEY INCLUDING ANY ADJOINING NEIGHBOURS LEVELS AND FEATURES THAT HAVE OCCURRED AFTER THE DATE ON THIS SURVEY.

NOTE: All Sewer details plotted from information supplied by Water Corporation.

NOTE: ALL FEATURES SHOWN ON SURVEY ARE POSITIONED FROM EXISTING PEGS/FENCES & WALLS WHICH MAY NOT BE ON THE CORRECT ALIGNMENT.



FEATURE SURVEY

JOB No 20-2079
SCALE 1 : 200 ON A2 SHEET

PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP

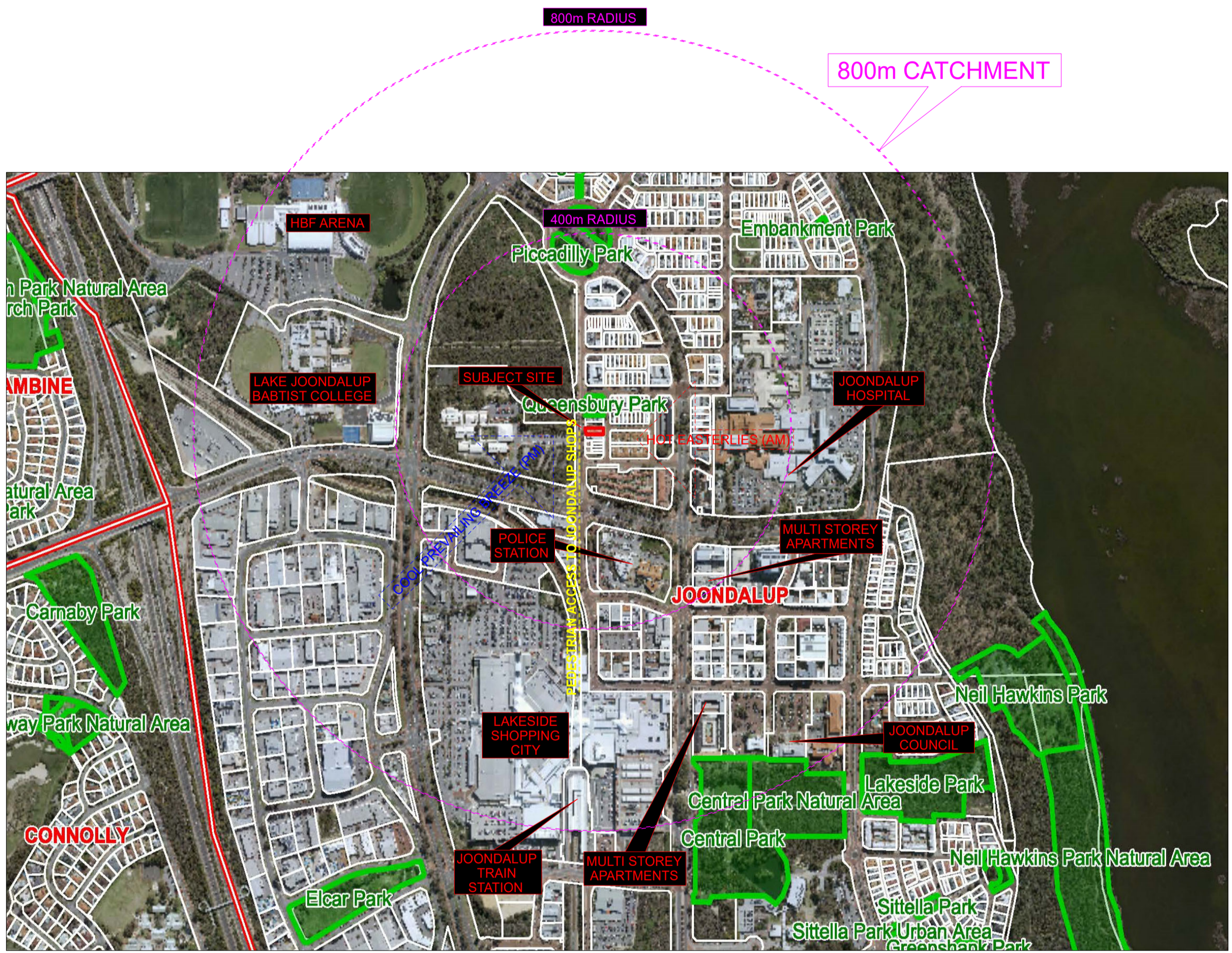
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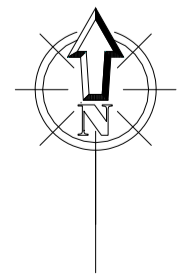
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PLACES OF INTEREST & DESTINATION		
1	QUEENSBURY PARK	32m
2	POLICE STATION	322m
3	JOONDALUP HOSPITAL	369m
4	HBF ARENA	825m
5	LAKESIDE SHOPPING	462m
6	TRAIN STATION	725m
7	NEIL HAWKINS PARK	1270m
8	COUNCIL OFFICES	900m
9	MITCHELL FREEWAY	1048m

AMENDED PLANS
Received: 31 March 2022

DRAWING No : DA 01 REV 07	DATE 29.03.22 SHEET 1 OF 12
--	--



CONTEXT ANALYSIS 01

JOB No 20-2079
SCALE N.T.S ON A2 SHEET

PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP



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Tottenham Road Elevation



McLarty Avenue Elevation



LOCAL CONTEX PLAN

AMENDED PLANS
Received: 31 March 2022

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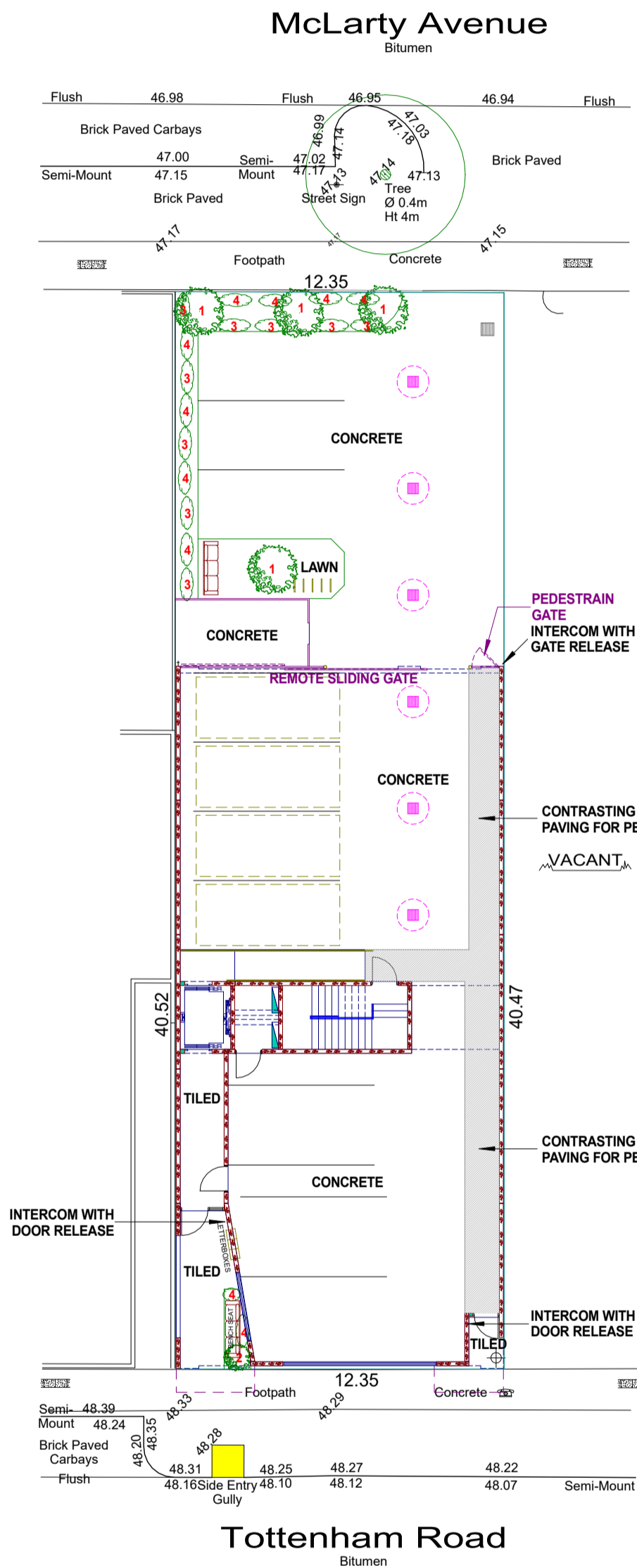




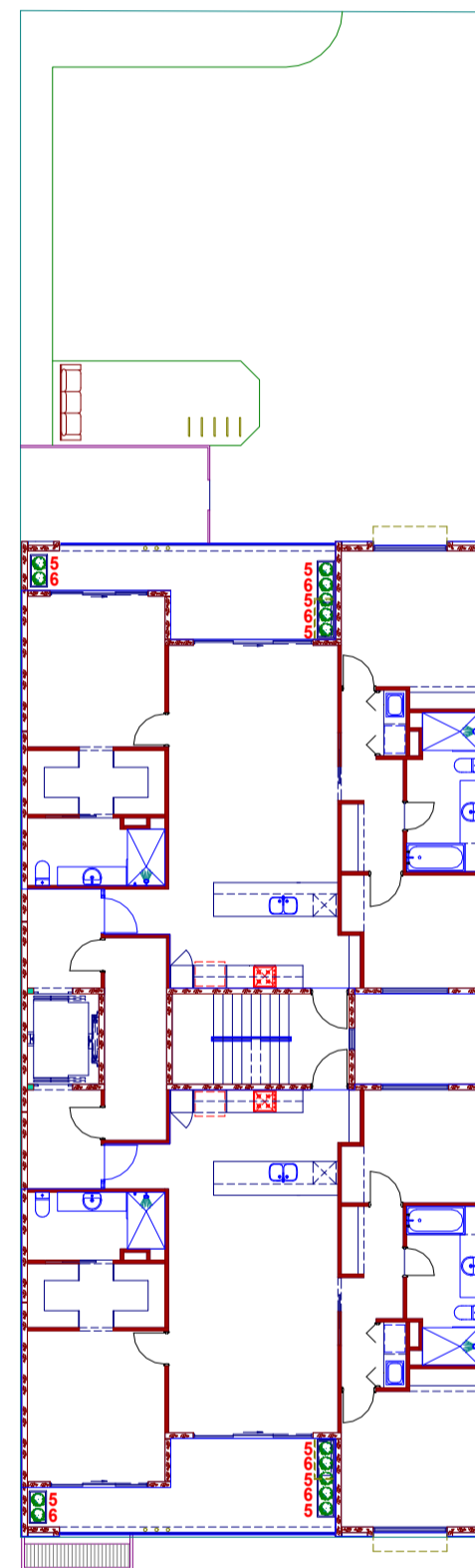
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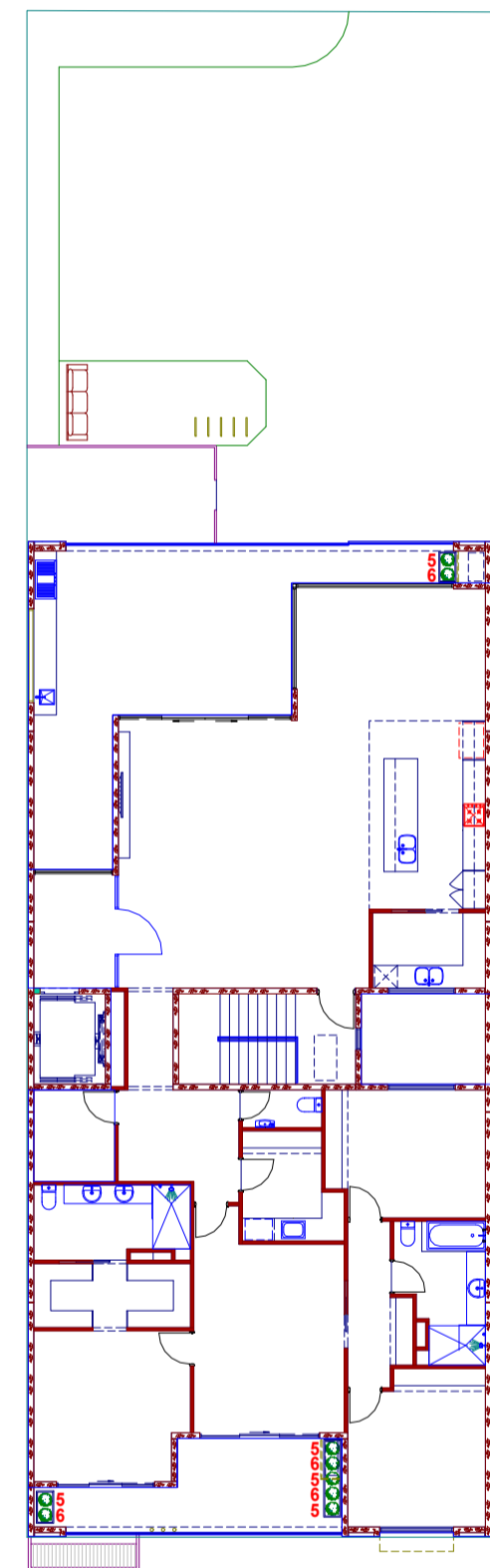
SITE AREA	500 m ²
PAVED AREA	388 m ² 77.6 %
LANDSCAPED AREA	38.98 m ² 7.80 %



GROUND LANDSCAPING PLAN



LEVELS 2, 3 & 4 LANDSCAPING PLAN



LEVEL 5 LANDSCAPING PLAN

AMENDED PLANS
 Received: 31 March 2022

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 REV 07
 DATE 29.03.22
 SHEET 12 OF 12



PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP

LANDSCAPING PLANS
 JOB No 20-2079
 SCALE 1 : 200 ON A2 SHEET

5.0m 0 2.50 5.0 10.0 15.0m

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DEVELOPMENT APPLICATION REPORT

PROPOSED SEVEN (7) MULTIPLE DWELLINGS

LOT 503 (NO.9) TOTTENHAM ROAD, JOONDALUP



CITY OF JOONDALUP

Prepared for:

Spire Corporation Pty Ltd & Anthony Michael Designs

Prepared by:

CF Town Planning & Development
Planning & Development Consultants

Address: 3/1 Mulgul Road, Malaga WA 6090

Tel: 9249 2158

Mb: 0407384140

Email: carlof@people.net.au

January 2022

This report has been prepared by CF Town Planning & Development on behalf of Spire Corporation Pty Ltd & Anthony Michael Designs for a proposed multiple dwelling development on Lot 503 (No.9) Tottenham Road, Joondalup.



Carlo Famiano
Director
CF Town Planning & Development

carlof@people.net.au
3/1 Mulgul Road
Malaga WA 6090

Document Revisions:

- Planning Report (i) – Dated 25 August 2021
- Planning Report (ii) – Dated 7 January 2022

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6.5 State Planning Policy No.7.0 - 'Design of Built Form Environment'

When viewing the 'streetscape character types' prescribed within the R-Codes ('Suburban Context'), it is concluded that the application in its environment is reflected by 'Medium -Rise Urban Centre' given its location within an Activity Centre. Appendix 2 of the R-Codes provides the following details regarding the

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‘Mid-rise Urban Centres’ character:

Context: Urban centres may include town/district centres, urban corridors, activity centres and station precincts. Urban centres typically comprise development up to approximately 6-storeys that has direct street frontage and is often built to boundary. Urban centres are highly walkable with close proximity to high-frequency transit services, public open space, commercial and/or retail uses and community infrastructure.

Character: Urban centres are characterised by mid-rise buildings and contiguous, pedestrian friendly street frontages that include some activation. New development should create an attractive and coherent street frontage that complements adjoining buildings, has a pedestrian scale and provides passive surveillance of the street.

The following table provides responses to the ‘design principles’ outlined with the Western Australian Planning Commission’s State Planning Policy No.7.0 for consideration by the Joondalup Design Review Panel:

Table 1 – Design Principles

DESIGN PRINCIPLE	RESPONSE
<p><u>Context and character</u></p> <p><i>“Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.”</i></p>	<ul style="list-style-type: none"> A review of the immediate locality has identified that there is no distinct character or heritage value within the area. The current residential built form varies from the older single dwellings established during the early growth period of the Joondalup Activity Centre, to large grouped and multiple dwelling development emerging in the recent years. In addition, the core area of the Activity Centre includes large/bulky commercial developments. In light of the above, the area is currently comprising a built form ranging from single storey developments to four storey development and the emergence of larger/taller buildings close to the core area of the Activity Centre. The newer, larger built form within the area reflects the growth of the Activity Centre and the current planning framework. This part of Joondalup Activity Centre contains an eclectic mix of dwelling types and built form that has evolved as a result of the ongoing development of the Centre. The new development will provide distinguishable architectural features and high level of passive surveillance of the public realm. Overall, the proposed development reflects upon both the anticipated development within a key Activity Centre encouraged by the City’s planning framework and the streetscape character types for ‘Mid-Rise Urban Centre’ (‘Suburban Context’) prescribed within the R-Codes. This includes the vision that the streetscape character will contain developments up to a potential height of six (6) storeys. As such, the proposed built form on the new development on the subject land reflects the current planning framework (i.e. proposed 5 storeys).
<p><u>Landscape quality</u></p> <p><i>“Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.”</i></p>	<ul style="list-style-type: none"> A review of the subject land has revealed that there is not vegetation on the land that can be retained (the land is vacant & cleared of vegetation). As such, any new vegetation to be planted in support of the development will be a far improvement on the current situation on the land. The McLarty Avenue verge area abutting the subject land currently comprises a mature street tree that will be retained as part of this application. It should be noted

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	<p>that the Tottenham Road verge area abutting the subject land does not comprise any street trees due to the narrow verge width.</p> <ul style="list-style-type: none"> • The proposed development will include landscaping throughout, in particular within the car parking area to the rear of the subject land. • It should be noted that city centres typically comprise large multi-storey developments with limited landscaping at ground level. In this instance the development will include landscaping within the rear car parking area and the balcony areas of the development. • The landscaping within the balcony areas of each dwelling will assist with softening the appearance of the development when viewed from the street. • The development will include the planting of trees to the rear of the site (abutting the hard stand areas) to provide canopy coverage.
<p><u>Built Form and scale</u></p> <p><i>“Good design provides development with massing and height that is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.”</i></p>	<ul style="list-style-type: none"> • The proposed development features good massing as the façade is broken up by multiple elements and articulation, including the use of varying materials (i.e. render, glass and feature panelling) and the inclusion of open balconies along the front façade. Given these key elements, it is contended that the future development on the land will contribute to the desired built form character of the streetscape and the Activity Centre in general. • In addition to the above point, the development will locate the outdoor living areas for each multiple dwellings to comprise an outlook over the adjoining streets. This will provide some activation of the development along the street and provide an active frontage. The inclusion of major openings to habitable rooms along the frontage of the building will further assist with improved passive surveillance of the street, along with promoting community interaction. • The proposed development will comprise setbacks that are consistent with the ‘Joondalup Activity Centre Plan’ and reflect a typical inner city type development. • The car parking area has been located to the rear of the development along McLarty Avenue, which is reflective of other exiting development along the street. It should be noted that the rear portion of the land comprises a Water Corporation easement which restricts the extent of development that would be accommodated to the rear of the land. • The proposed development will comprise five (5) storeys, is generally compliant with the building height limits of the ‘Joondalup Activity Centre Plan’ and is common within a city centre environment. • The proposed development will be constructed of high quality materials and finishes that will provide an improved appearance when viewed from the street. This includes the use of render, different colours, a concealed roof form, windows and glass balustrade to the balconies and a feature panel along the front façade. • The development will include the concealment of the resident car parking area behind the front setback area and screened from view from the public realm.
<p><u>Functionality and build quality</u></p> <p><i>“Good design meets the needs of users efficiently and effectively, balancing functional requirements to deliver optimum benefit and performing well over the full life-cycle.”</i></p>	<ul style="list-style-type: none"> • The design of each dwelling within the development is considered to be functional, with the internal living area for each dwelling being designed to be utilised in conjunction with the external living areas to create large entertainment areas. • The development will include the use of robust materials and construction methods that will comprise a long life cycle. • The development has been designed to allow for access to natural light and cross ventilation (air flow through the dwelling), despite the poor orientation of the land.

	<ul style="list-style-type: none"> • The development will comprise a clearly definable entry point at ground level and a sense of place for the future occupants and visitors to the development • Each dwelling has been provided with sufficient storage, on-site car parking and an outdoor living area of sufficient dimension and width to meet the needs of the future occupants. • The landscaping provided will assist with enhancing the appearance of the development and provide for improved amenity for the future occupants of the building.
<p><u>Sustainability</u></p> <p><i>“Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.”</i></p>	<ul style="list-style-type: none"> • The proposed development has been designed to obtain access to natural light where possible, given the poor orientation of the land. In addition, the development will allow for cross ventilation through the use of a light well. It is contended that the design layout of the development will assist with reduced running costs of each dwelling and allow for access to natural light and ventilation, • The placement of landscaping along the balconies (east & west facing) will provide some protection of the western and eastern summer sun. • Landscaping within the car parking area will provide shade over the hardstand area and limit the extent of heat generated by the paved area. • The location of the outdoor living areas with orientation towards the street (i.e. Tottenham Road and/or McLarty Avenue will provide for improved connectivity between the public and private realms that will assist with social interaction. • The proposed development will assist with the provision of a diversity of housing stock within the Joondalup Activity Centre, which comprise a wide range of services and facilities. The close proximity to the public transport and a comprehensive pedestrian network will assist with reducing motor vehicle dependency and is consistent with the State Government’s aim to increase the use of the existing public transportation network and commercial centres. • The proposed development allows for additional housing within close proximity to various key services and infrastructure which.
<p><u>Amenity</u></p> <p><i>“Good design optimises internal and external amenity for occupants, visitors and neighbours, contributing to living and working environments that are comfortable and productive.”</i></p>	<ul style="list-style-type: none"> • Each dwelling features a living area which can be used in conjunction with the external living area. This creates a usable internal and external area that is functional and will accommodate the needs of the future occupants of the development, which provides sufficient area to entertain visitors to each dwelling. • Outdoor living areas are considered to be well designed, particularly as all dwellings will enjoy views/outlook of the public realm, promote passive surveillance of the street and allow for effective connectivity with the public realm. • The building will be constructed to provide for a barrier/buffer with the adjoining properties to limit any potential impact associated with visual privacy and/or noise. • The development has been designed to avoid any direct overlooking of the adjoining properties to preserve the amenity of both the internal and external living areas on the adjoining properties. • Adequate storage and bicycle parking is also provided for each dwelling, along with a bin storage area located in a position to minimise any impact on the future occupants of the development and allow for easy access. • The development has been designed to allow for easy access for both the occupants and visitors to the development.

<p><u>Legibility</u></p> <p><i>“Good design results in buildings and places that are legible, with clear connections and memorable elements to help people find their way around.”</i></p>	<ul style="list-style-type: none"> • The proposed development is legible in that it provides a distinctive façade and conceals the on-site car parking area from the public realm (i.e. parking located to rear of the site). • One (1) crossover/driveway is proposed for the development to provide a clear vehicle entry point for both occupants and visitors. • The main entry into the development provides easy access, with the entry being directly from the street and allowing for easy access for visitors to the development and to individual dwellings through a foyer area. This entry is easily distinguishable through the use of an awning and signage. This will allow for clear and easy access for visitors to the development and to individual dwellings, whilst providing good connectivity between the dwellings and the street. • The development has been designed to establish clear definable areas for residents and visitors. This includes a clear entry point and designated car parking area to the rear of the site. • All dwellings will comprise a covered entry point (via an enclosed foyer) that will provide protection from the elements.
<p><u>Safety</u></p> <p><i>“Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.”</i></p>	<ul style="list-style-type: none"> • The proposal provides multiple major openings for various dwellings facing the street to avoid enticing criminal activity and intrusion. The development will have sufficient surveillance over both the public and private realms. • The development will include major openings and balconies/terrace overlooking the adjoining Tottenham Road, therefore providing for improved passive surveillance of the public realm and improved pedestrian safety. • The development has been designed to allow for all vehicles to enter the street in a forward gear. The vehicle access point comprises adequate visual sightlines to provide a safe pedestrian environment. • The proposed development will include security access into the building and an enclosed resident car parking area to allow for improved security. • The development will include security cameras and intercom systems to provide a safe environment for both the occupants and visitors to the development. • The development has been designed to provide good passive surveillance of the public realm, whilst protecting the privacy of the individual dwellings (i.e. separation is provided between the access paths and the windows).
<p><u>Community</u></p> <p><i>“Good design responds to local community needs as well as the wider social context, providing buildings and spaces that support a diverse range of people and facilitate social interaction.”</i></p>	<ul style="list-style-type: none"> • The smaller dwelling size (as opposed to a single detached dwelling) will provide an opportunity for aged residents within the locality to downsize and remain within the suburb with easy access to public open space, the Joondalup Activity Centre. The proposed dwelling types also cater for a variety of demographics such as first homebuyers, singles and couples without children. • The development provides affordable housing to the community, whilst increasing the housing density within the Joondalup Activity Centre. In addition, the development will provide small housing typology to accommodate occupants working within the Activity Centre or students studying at the nearby educational establishments. • The proposed development will be provided with an informal communal area at the entry of the development to provide a meeting place (or breakout area) for visitors and residents of the development. The landscape area to the rear of the building will also allow for passive recreational activities.

	<ul style="list-style-type: none"> • The proposed development provides outdoor living areas and main habitable areas which address the street to provide an active frontage and improved connectivity between both the private and public realms. • The proposed development accords with the State Government's directive to increase residential densities within key Activity Centres to provide affordable housing within these important nodes. • The increase of densities and the provision of additional housing within close proximity to public transport will assist with reducing motor vehicle usage and reduce the extent of the Perth Metropolitan area expanding into the rural and bushland areas along the City's urban fringe. This will assist with providing a positive outcome for the environment and the community in general.
<p><u>Aesthetics</u></p> <p><i>“Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.”</i></p>	<ul style="list-style-type: none"> • Aesthetics of the proposed street facing facades is highly demonstrated by the use of a variety of materials and renders, inclusion of balconies/terrace and major openings of varying sizes. • The proposed façade provides visual interest and an active frontage that provides a connection between the public and private realms within the residential complex. This includes providing an articulated front facade. • The design of the proposed development incorporates sufficient and safe pedestrian movements, whilst allowing for ease of access to various on-site facilities such as bin storage areas, storerooms and car parking. • The building height for the development is consistent with the expected built form within an Activity Centre and will not result in the development being over bearing along the street. In addition the proposed development the subject land is consistent in terms of bulk, scale and height to the recently completed development on the Joondalup Activity Centre. • The proposed development has been designed to include active spaces (i.e. balcony/terrace) and some landscaping, which will provide an attractive and articulated front façades. The impressive façade designs will appeal to all passers-by and engage interest from the public realm.

WASTE MANAGEMENT PLAN

PROPOSED SEVEN (7) MULTIPLE DWELLINGS

LOT 503 (NO.9) TOTTENHAM ROAD, JOONDALUP



CITY OF JOONDALUP

Prepared for:

Spire Corporation Pty Ltd & Anthony Michael Designs

Prepared by:

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March 2022

CF Town Planning & Development

This Waste Management Plan has been prepared by CF Town Planning & Development on behalf of Spire Corporation Pty Ltd & Anthony Michael Designs for a proposed multiple dwelling development on Lot 503 (No.9) Tottenham Road, Joondalup.



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1.0 BACKGROUND & DESCRIPTION

CF Town Planning & Development have been commissioned by Spire Corporation Pty Ltd & Anthony Michael Designs to prepare a Waste Management Plan (WMP) in support of the development application being considered by the City of Joondalup for the construction of seven (7) new multiple dwellings on Lot 503 (No.9) Tottenham Road, Joondalup.

The subject land is located within the northern part of the Joondalup Activity Centre approximately 260 metres north of the Joondalup Shopping Centre and approximately 700 metres north of the Joondalup Train Station.

Lot 503 is classified 'Centre' zone under the City of Joondalup's current operative Local Planning Scheme No.3 (LPS No.3). Furthermore, the subject land is located within 'Joondalup Activity Centre Plan' and is located within the 'Health and Wellness' Precinct.

Under the terms of Table 3B ('Joondalup Activity Centre Zoning Table') of LPS No.3, any development and use of land within the 'Health and Wellness Precinct' for 'Multiple Dwelling' purposes is identified as a discretionary ("D") use, meaning that the use is not permitted unless the local government has exercised its discretion by granting development approval.

As previously mentioned, the development application for subject land proposes the construction of seven (7) new multiple dwellings, with the following configuration:

- i) Six (6) two bedroom, two bathroom dwellings and
- ii) One (1) three bedroom, two bathroom dwelling.

It is significant to note that each dwelling has been designed to include a study to accommodate the opportunity for the future occupants of each dwelling to work from home, given the current impact of Covid-19.

A copy of the site development plans are provided in Appendix 3 (Site Development Plans).

2.0 PURPOSE OF WASTE MANAGEMENT PLAN

This Waste Management Plan has been prepared and submitted with the City of Joondalup in support of the development application lodged with the City for the construction of seven (7) new multiple dwellings on the subject land.

The aim of this Plan is to:

1. Identify the indicative volume of waste.
2. Ensure adequate facilities are provided to serve the future occupants of the proposed multiple dwelling development on the subject land.
3. Demonstrate the proposed design meets industry best practice.
4. Provide for an adequate on-site bin pick-up location and avoid impacting traffic safety and movements along the adjoining road network.
5. Identify methods available for the future occupants of the development to minimize waste generation and reduce potential landfill.

3.0 KEY REFERENCE MATERIAL

- *WALGA Multiple Dwelling Waste Management Plan Guidelines;*
- *Sustainability Victoria (Victorian State Government);*
- *New South Wales (NSW) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities; and*
- *Discussions with the City of Joondalup Waste Management Division.*

4.0 ESTIMATED VOLUMES & BIN TYPE

4.1 Waste Generation Volume

The proposed multiple dwelling development on the subject land consists of the following dwelling configuration:

- Six (6) two bedroom, two bathroom dwellings; and
- One (1) three bedroom, two bathroom dwelling

The *WALGA Multiple Dwelling Waste Management Plan Guidelines* indicates that on average, each multiple dwelling (i.e. 'apartment') will generate the following waste (Table 1):

Table 1 – WALGA Waste Guidelines

Waste Stream	Dwelling Size	Waste Generation
General Waste	1 bedroom	80L/week
	2 bedroom	160L/week
	3 bedroom	240L/week
Recycle Waste	1 bedroom	40L/fortnight
	2 bedroom	80L/fortnight
	3 bedroom	240L/fortnight
Organic/Food Waste	1 bedroom	40L/fortnight
	2 bedroom	80L/fortnight
	3 bedroom	120/fortnight

Reference: Table 2 of the WALGA Multiple Dwelling Waste Management Plan Guidelines

Following discussions with the City of Joondalup's Waste Management Department (Mr Chris Hoskisson – Waste Operations Coordinator), the following information was provided:

- The City requires on-site pick-up for developments comprising more than five (5) dwellings;
- The City does not currently have Food Organic and combined Garden Organic (FOGO), but will introduce a service in the future. As such, adequate space will be needed in storage area to cover the 3 services; and
- The following waste generation ratios have been applied by the City of Joondalup and have been applied as part of this Waste Management Plan:

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Table 2 – City of Joondalup Waste Generation Rates

Waste Stream	Dwelling Size	Waste Generation
General Waste	1 bedroom	80L/week
	2 bedroom	110L/week
	3 bedroom	140L/week
Recycle Waste	1 bedroom	80L/fortnight
	2 bedroom	110L/fortnight
	3 bedroom	240L/fortnight
Organic/Food Waste	1 bedroom	40L/fortnight
	2 bedroom	80L/fortnight
	3 bedroom	240L/fortnight

As previously mentioned, the proposed development on the subject land includes six (6) two bedroom dwellings and one (1) three bathroom dwellings (all multiple dwellings).

The following equation has been used to calculate the anticipated weekly/fortnightly general waste and recycling generation:

- Waste & recycle generation calculations

Total amount of Waste Type = Dwelling Number/Type x Waste Rate (weekly or fortnightly)

The following waste generation calculations (i.e. Table 3) is provided in support of the development for the purpose of establishing the number of bins required, based on the dwelling type within the development:

Table 3 – Weekly Waste Generation

Dwelling Type	Number of Bedrooms	General Waste	Recycle Waste	Greens/FOGO
Multiple Dwelling	2 bedroom (6 dwellings)	660 litres/per week	660 litres/per fortnight	480 litres/per fortnight
	3 bedroom (1 dwelling)	140 litres/per week	240 litres/per fortnight	240 litres/per fortnight
	Total Waste	800 litres (weekly)	900 litres (fortnightly)	720 litres (fortnightly)

4.2 Bin Type

The City of Joondalup have advised that the usage of 240 litre mobile bins per waste stream for the proposed multiple dwelling development on the subject land could be adopted given the small size of the development. In addition, the City requires an on-site pick up service for developments comprising greater than five (5) dwellings. As such, the waste bins for the proposed development on the subject land will be collected on-site by the City's contractor (Suez) with a rear loading truck equipped with a reverse camera system (see Figure 1). Figure 2 illustrates the bin size and dimensions being provided in support of this development.

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Given the City's waste generation rates, the proposed development will be provided with three (3) bin types (i.e. general waste, recycle & greens). It should be noted that the green bins have been provided to accommodate the City's introduction of a FOGO bin ('Food Organics, Garden Organics') in the future.

In light of the above, the following bin requirements are to be applied to the proposed development on the land:

- General waste bins- 4 x 240L
- Recycle waste bins- 4 x 240L
- FOGO waste bins - 3 x 240L (greens or future FOGO)

The following equation has been used to calculate the number of bins required to service the development and the capacity of the bins for each waste stream:

- Total bins required for general/recycle waste

$$\text{Total number of bins required} = \text{Total waste generation/bin size (i.e. 240L)}$$

The following calculation (i.e. Table 4) is provided in support of the waste generation and the number of bins required and the bin capacity to service the development:

Table 4 – Bin Capacity

WASTE TYPE	BIN SIZE	NUMBER OF BINS	PROPOSED BIN CAPACITY	ACTUAL WASTE GENERATION
General Waste	240L	4	960L per week	800L per week
Recycle Waste	240L	4	960L per fortnight	900L per fortnight
Green/FOGO	240L	3	720L per fortnight	720L per fortnight

In light of the above bin capacity calculations, it is contended that the provision of the bin numbers listed in Table 4 is sufficient to accommodate the needs of the future occupants of the development on the subject land. This includes setting aside adequate space/provisions for the future FOGO service.

In addition to the bin provision for the development, there is sufficient space within the verge area abutting the subject land (i.e. Tottenham Road) to accommodate a skip bin. The area will be used to accommodate a skip bin to service the development and the storage of white goods, mattresses and any annual bulk green waste collection. Access to the area by the occupants will be through the lift and stairs. It is noted that the verge area does comprise a footpath and that adequate space is available to ensure that the pedestrian path will not be obstructed or not impact the pedestrian thoroughfare (see Figure 3 & Appendix 1).

Vehicle specifications

Overall length	8.0m
Overall width	2.5m
Height (travel)	3.4m
Height (in operation)	3.4m
Weight (vehicle only)	13.0t
Weight (payload)	9.5t
Turning circle	25.0m



Figure 1 – Rubbish truck & specifications to be adopted for the development (which includes a reversing camera to access/egress the subject land)

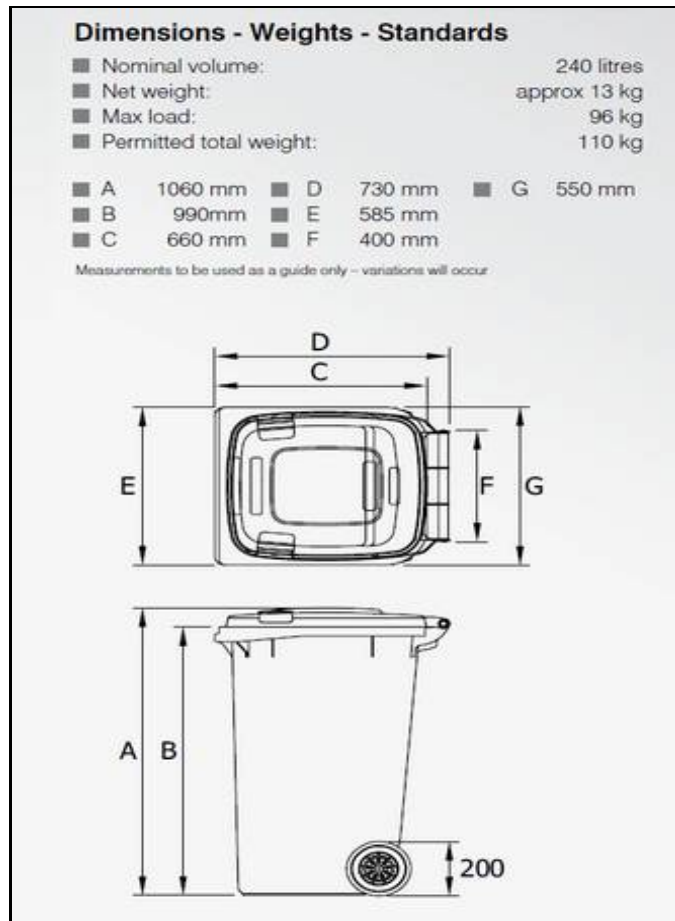


Figure 2 – Bin type & dimensions

All bins will comprise appropriate colour coding (i.e. red, yellow & green) and signage to clearly indicate the types of waste to be placed in the relevant bins. This will assist with ensuring that cross contamination of waste is avoided by the future occupants of the development. This will also allow for the reduction of landfill and potentially increase recycling.

5.0 COLLECTION FREQUENCY & PROVIDER

The City of Joondalup is the rubbish collection service provider (also via its contractor – Suez), with the following collection services being provided to residential within the new development on the subject land:

- Weekly general waste mobile bin collection (every Friday).
- Fortnightly recycle mobile bin collection (every second Friday).
- Fortnightly green waste mobile bin collection (every second Friday alternative to the recycle waste collection).
- One (1) skip bin (bulk bin) per year for bulk rubbish/junk collection.
- Annual collection of tree prunings.
- White goods pick-up.

In addition to the above services, the City provides collection points for the general public (i.e. library/civic centres) for mobile phone, globes & battery collection.

As previously mentioned, the City has advised that all bins will be collected on-site by the contractor, with the rubbish truck likely to access the site with a rear loading vehicle that will reverse onto the property along the driveway to service the bins (see Appendix 1 – Bin Storage Location & Figure 3). Adequate space will be provided between the stationary truck and the driveway to allow for vehicles to still access the car parking area.

The collection service will be undertaken on a weekly basis for general waste and fortnightly for recycle waste and green waste. It is recognized that the bins will need to be transferred from the bin store to the driveway for collection and returned once serviced.

Adequate space has been provided along the common driveway to accommodate the rubbish truck on-site. On collection day, the truck will be stationary for a short period of time, with collection time being anytime between 6am and 5pm. This reflects the current waste collection service along Tottenham Road & McLarty Avenue (therefore resulting in little disruption to the surrounding residents on bin collection day).

In light of the weight of the rubbish truck, the portion of driveway to be utilized by the truck will be constructed to a higher standard to accommodate the truck without damaging the driveway.

It is significant to note that the bin collection associated with other existing developments with frontage to Tottenham Road is within the McLarty Avenue verge area (i.e. on-street pick up). The proposed on-site bin collection for Lot 503 is a far better outcome and will result in less impacts on traffic and pedestrian movements along McLarty Avenue.

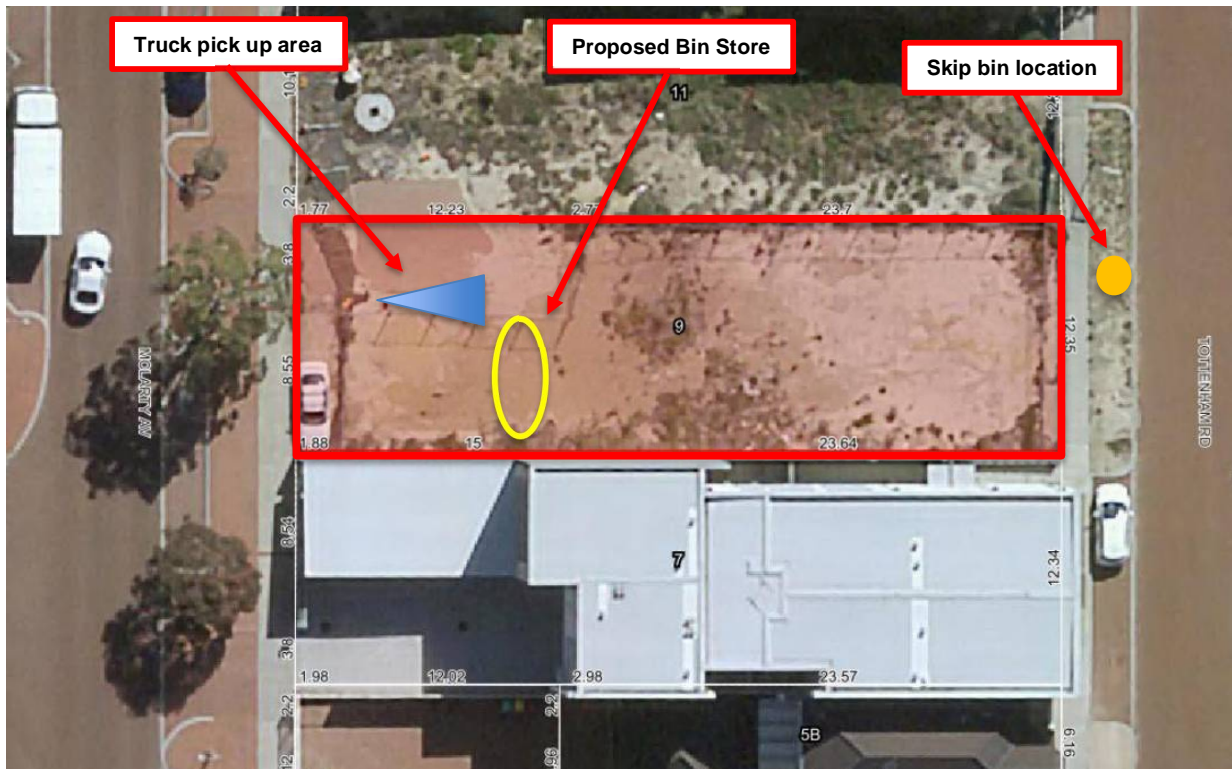


Figure 3 – Aerial Site Plan. Location of the bin store on the subject land.

6.0 LOCATION, SIZE & FEATURES OF BIN STORAGE AREA

6.1 Bin Store Area & layout

As previously mentioned, the proposed multiple dwelling development on the subject land will include a total of eleven (11) 240 litre mobile garbage bins. The following table provides a breakdown of the required area for the bin storage area to accommodate the required bins (the required areas have been adopted using the New South Wales Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities):

Table 5 – Bin Storage Area

BIN SIZE	BIN AREA ALLOWANCE (FOOTPRINT)	QUANTITY	MANOEUVERING SPACE ALLOWANCE	AREA REQUIRED
240L MGB (General Waste)	0.43m ²	4 bins	X 2 (shared access)	3.44m ²
240L MGB (Recycle Waste)	0.43m ²	4 bins	X 2 (shared access)	3.44m ²
240L MGB (Greens/FOGO)	0.43m ²	3 bins	X 2 (shared access)	2.58m ²
		Total Area Required		9.46m²
		Total Area provided		12.45m²

As outlined above, the bin storage area proposed for the development is adequate to accommodate the needs of the development. Furthermore, the bin store area proposed for the development will comprise

gates to allow for easy access and storage of the bins. The store has been designed to provide easy removal of the bins for servicing and cleaning (see Appendix 1 – Bin Store Location).

6.2 Bin Store Location & Features

Bin storage area will be located within the property boundaries, along the land's southern side boundary and behind the building line (also well setback from the secondary street). The bin store will be enclosed and no visible from the street and/or the adjoining properties. The bins will be collected on-site and moved from the bin store area and returned once serviced. It is proposed that the rubbish collection truck will enter the site in a reserve gear and exit in a forward gear (see Appendix 1 – Bin Store Location).

The location of the bin store will be abutting a solid dividing fence and carports for existing residential development on the adjoining southern property. It should be noted that the bin store on the subject land will be well clear of any major openings and the outdoor living area for the existing dwellings on the adjoining southern property. Given these facts, the bin store will not have an adverse impact on the occupants of the existing development on the adjoining southern property (see Figure 3). Furthermore, the bin storage area will also be located away from any dwellings within the new development on the subject land.

The proposed location of the bin storage area will:

- i) Minimise odour levels impacting on the occupants of the development;
- ii) The bin store is located away from any habitable rooms of the existing dwellings on the adjoining western property;
- iii) Provide easy access to all future occupants of the development; and
- iv) Accommodate the City's rubbish truck access.

Key design points of the common bin storage area are as follows:

- The bin storage area will comprise a tap and connection to sewer for wash-down purposes.
- The bin storage area will comprise a 100mm concrete floor.
- The bin store area will be screened and gated to hide its view from the street, common property area and provide security.
- A galvanized pipe will be installed along the walls to prevent the bins from hitting and damaging the walls of the bin store.
- The bin storage area will be secure and screened from the future occupants of the development. The screen will include a masonry wall and landscaping along the frontage of the bin store to provide additional screening from being viewed from the public realm.
- Adequate on-site collection area (see Appendix 1 – Bin Store location).

7.0 NOISE, ODOUR & MINIMIZING LANDFILL

It is anticipated that the location of the bin storage area for new multiple dwelling development on the subject land will provide easy access by the occupants of each individual dwelling and minimize disruption to neighbors and residents.

Noise

The bin storage area will be screened and located within the subject land, well away from any dwellings on the subject land or the adjoining properties. The adjoining southern property comprises a solid dividing fence along the property boundary and open carports adjacent to the bin store on the subject land. The

bin storage area will comprise a masonry wall around the perimeter of the compound and landscaping along the frontage of the storage area.

It is expected that the bin storage area will generate minimal vertical and horizontal noise transfer during use. As such, it is contended that the noise generated from the bin storage area will not result in any undue noise that would not be consistent with that generated by the adjoining properties.

In light of the above, it is contended that there will be no notable impacts on the residential dwellings on the adjoining properties from the development on the subject land in terms of waste management.

Odour

Strategies to minimize odour are:

- Locating the common bin storage area to the rear of the development, away from any sensitive areas.
- The bin storage area will not abutting any habitable space for the existing dwelling on the adjoining southern property.
- Construction of a masonry wall around the perimeter of the bin storage area.
- Screening the bin storage area.
- Allowing for natural ventilation of the bin storage area.
- Regular washing of the bins and storage area.

Minimising landfill

Given that the City of Joondalup provide three (3) separate bins (i.e. general waste, recycling & greens), it allows occupants of the development to sort rubbish accordingly. The provision of recycling bins will enable occupants of the development to place the following items for recycle collection:

- Glass bottles and jars (excluding broken glass, plates, pottery etc.).
- All plastic bottles.
- Newspapers and glossy magazines, paper, envelopes
- Cardboard boxes, cereal boxes, pizza boxes, egg cartons etc.
- Cans - steel and aluminum, including aerosols cans.
- Milk and juice cartons.

Furthermore, the City of Joondalup provides annual bulk waste (i.e. skip bin), greens pickup and white goods pickup to reduce the amount of waste being placed within the general waste bin.

In light of the above services, it is contended that adequate measures are available for the future occupants of the development to minimize disposal of rubbish within the general waste bin resulting in long term reduction of landfill.



In light of the above services, it is contended that adequate measures are available for the future occupants of the development to minimize disposal of rubbish within the general waste bin resulting in long term reduction of landfill.

Vermin

The bin lids will remain closed at all times to reduce access by vermin. The use of bait stations could be implemented/considered by the occupier of each dwelling in instances of vermin appearing.

8.0 SCREENING OF BIN STORE AREAS

The proposed multiple dwelling development on the subject land has been designed to be relatively small and comprises a masonry wall where it abuts the adjoining property. Furthermore, the bin store area will abut non-habitable spaces (i.e. carports) of the dwellings on the adjoining southern property. Given this separation, it is concluded that an adequate buffer is provided between the bin store and the livable spaces on the adjoining property.

It is contended that the bin storage area is consistent with a bin storage area akin to a conventional residential development (i.e. grouped dwelling development). Notwithstanding this fact, it is significant to note that the bin store for the proposed development on the subject land is well located and will be constructed to minimize any adverse impacts on the adjoining properties.

In light of the above, it is contended that any potential impacts on the adjoining properties from the proposed bin storage area on Lot 503 is expected to be minimal and would be consistent with the waste disposal activities of a typical grouped and/or multiple dwelling development within the immediate locality.

9.0 IMPACT ON ADJOINING/ADJACENT PROPERTIES

The proposed multiple dwelling development on the subject land has been designed to be relatively small and comprises a masonry wall where it abuts the adjoining property. Furthermore, the bin store area will abut non-habitable spaces associated with the existing dwellings on the adjoining properties (i.e. the bin store abuts carports on the adjoining southern property). Given this separation, it is concluded that an adequate buffer is provided between the bin store and the livable spaces on the adjoining property.

Planning & Development Consultants

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It is contended that the bin storage area is consistent with a bin storage area akin to a conventional residential development (i.e. grouped dwelling development). Notwithstanding this fact, it is significant to note that the bin store for the proposed development on the subject land is well located and will be constructed to minimize any adverse impacts on the adjoining properties.

In light of the above, it is contended that any potential impacts on the adjoining properties from the proposed bin storage area on the subject land is expected to be minimal and would be consistent with the waste disposal activities of a typical grouped and/or multiple dwelling development within the immediate locality.

10.0 STRATA MANAGEMENT COMPANY REQUIREMENTS

The appointed Strata Management Company contracted to manage the multiple dwellings on the subject land will be responsible to:

- i) Appoint a site manager (i.e. a resident) to be responsible for coordinating the occupants of the complex to arrange cleaning of the bins and bin storage areas every two (2) to three (3) weeks;
- ii) Ensure litter is cleaned up through regular landscape maintenance;
- iii) Deal promptly with any issues or complaints relating to hygiene, noise, odour or other inconvenience;
- iv) Arrange for a private contractor to collect and disposal of green waste (i.e. small garden prunings etc.) as part of maintaining the landscaping areas for the development (i.e. private gardener); and
- v) Provide the City with relevant authorization to access the site and any required indemnification regarding liability (see Appendix 2).

The abovementioned procedure will also be implemented if a sole landowner has control of the development (i.e. appoint a tenant to undertake the aforementioned tasks).

The future prospective purchases/occupants of the complex will be provided with a copy of the approved Waste Management Plan on occupancy of a dwelling. The Waste Management Plan will also be incorporated or referred to in any Strata Management Plan or Strata By-Laws or any rental agreements prepared for the development.

11.0 CONSTRUCTION WASTE

During construction, a waste compound will be provided on-site to store any waste produced during the construction process and will be serviced regularly (when required) by a private contractor. The contractor will provide off-site sorting of the waste to ensure that waste is recycled where possible to minimize landfill waste.

Sub-contractors will be responsible for pre-sorting of waste products into appropriate areas within the waste compound as much as possible to reduce overall construction costs. The site manager will monitor the disposal of waste and sorting of recycle material.

No waste compounds or rubbish will be placed or stored on the street verge area or footpaths surrounding the project boundaries. All pedestrian and vehicle access areas will remain clear from construction debris at all times.

More details regarding on-site management during the construction phase of the development will be provided as part of a Construction Management Plan to be prepared by the builder prior to the commencement of construction.

12.0 CONCLUSION

The proposed multiple dwelling development on the land in small in nature, does not generate high quantities of waste and is consistent with other similar multiple dwelling developments approved by the City of Joondalup within the immediate locality. As demonstrated within this Waste Management Plan, the proposed multiple dwelling development on subject land provides sufficient bin storage and adequate bins to service the needs of the occupants for each individual dwelling for all waste streams provided by the City of Joondalup and has made allowance for the City intention to introduce a FOGO service in the future.

14 March 2022

CF Town Planning & Development
Planning & Development Consultants

Planning & Development Consultants

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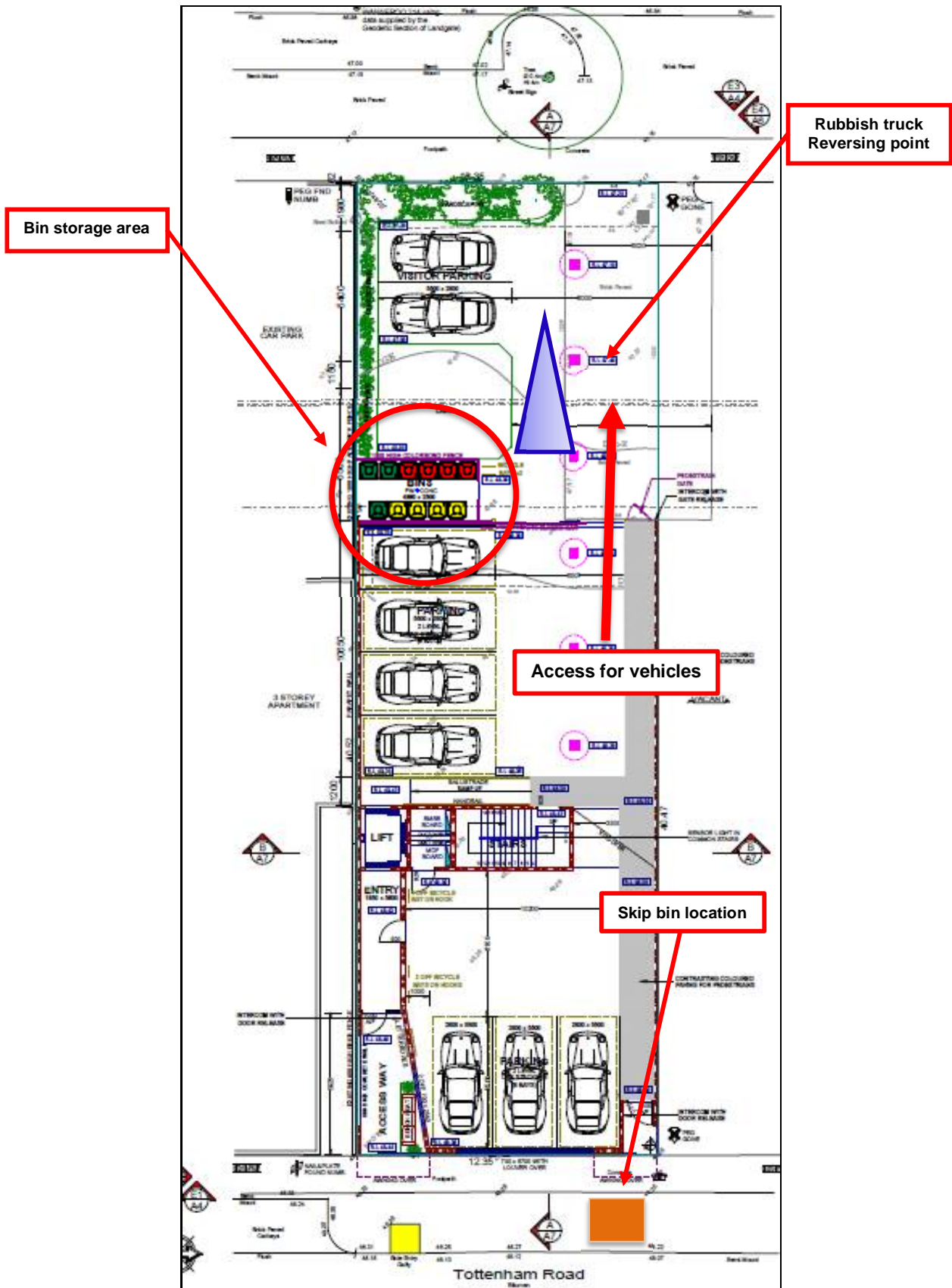
APPENDIX 1 – BIN STORE LOCATION

Planning & Development Consultants

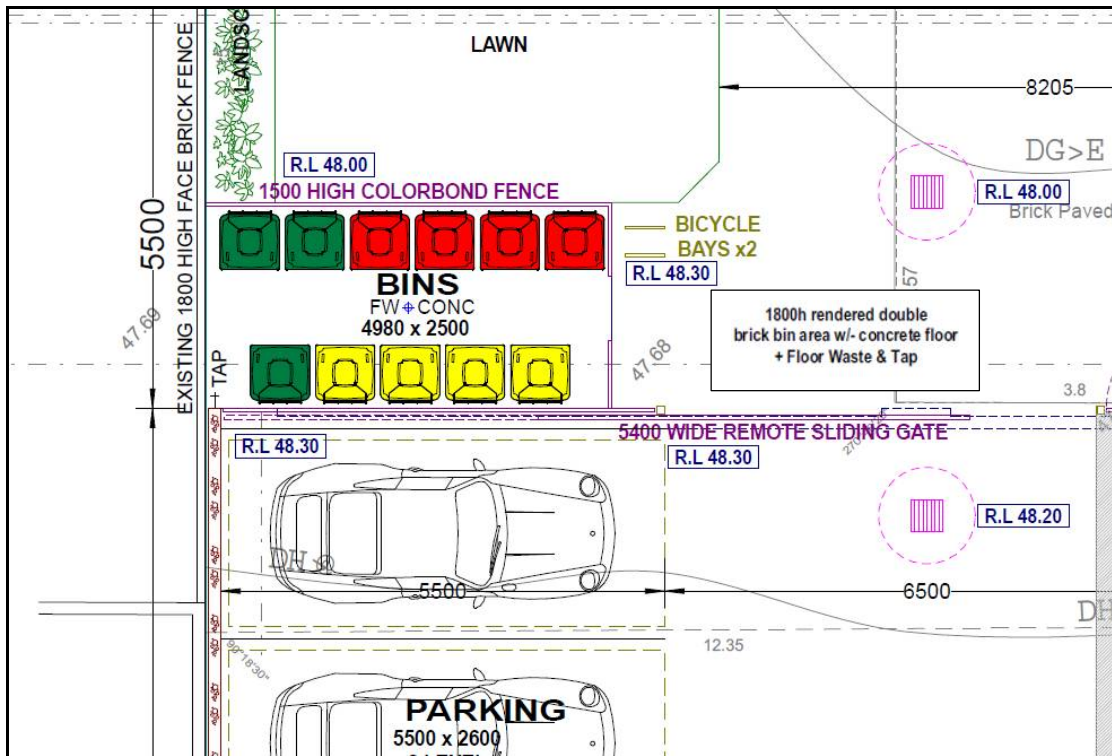
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Above - Site Plan



Bin Storage Area



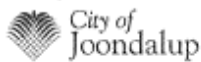
APPENDIX 2 – CITY OF JOONDALUP INDEMNITY FORM

Planning & Development Consultants

Address: 3/1 Mulgul Road, Malaga WA 6090

Tel: 9249 2158 Mb: 0407384140 Email: carlof@people.net.au

CVF Nominees Pty Ltd ABN: 86 110 067 395



DEED OF RELEASE

Household Waste Collection Services on Private Property

THIS DEED POLL IS GIVEN BY:

(insert name of Owners Corporation or Strata Manager) ("OWNERS REPRESENTATIVE")

Of

(Insert property address) ("PROPERTY")

FOR THE BENEFIT OF:

SUEZ Recycling & Recovery Pty Ltd (ABN 70 002 902 650) (SUEZ)

City of Joondalup (ABN 64 245 472 416) ("The City")

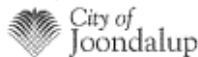
BACKGROUND

- A. The Owners Representative has requested household waste or recycling collection services ("**Services**") to be carried out at the Property by SUEZ on behalf of The City.
- B. SUEZ has conducted a risk assessment and determined that there is no suitable delivery point on land at or near the Property on which to collect the bins as part of the Services, but that SUEZ could conduct the Services by driving a collection vehicle onto the Property.
- C. The Owners Representative has requested SUEZ to provide the Services by driving the collection vehicle onto the Property and SUEZ has agreed to provide the Services in this manner on the terms and conditions of this Deed Poll.

OPERATIVE PART

1. Consent to provide services on private property

The Owners Representative gives its consent to SUEZ and grants a licence to SUEZ's representatives to enter onto the Property in a collection vehicle for the purpose of carrying out the Services.



2. Indemnity

The Owners Representative indemnifies and will continue to indemnify SUEZ and The City and each of their officers, employees, agents and contractors and related bodies corporate (**Indemnified Persons**) from and against all actions, claims, losses, damages, penalties, demands, costs and expenses (**Loss**) whatsoever which may be brought or made against an Indemnified Person by any person, including (without limitation) the Owners Representative or any resident, owner, tenant or invitee, in respect of property damage caused to the common areas at the Property (including but not limited to access and egress points, driveways, car parking areas, bin storage areas) arising out of or incidental to the performance by SUEZ of the Services, except to the extent any Loss is caused by the negligence of SUEZ, its employees or contractors.

3. Release

Without limiting clause 2, the Owners Representative releases and forever discharges the Indemnified Persons from all liability for any Loss that the Indemnified Persons may have caused in relation to the subject matter of this deed.

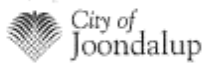
4. Warranties

The Owners Representative represents and warrants to SUEZ and The City that the person signing this deed poll has the legal authority to enter into this deed poll on behalf of the Owners Representative and on behalf of the owners of the Property.

5. Acknowledgement

The Owners Representative acknowledges the weights of SUEZ's collection vehicles:
(a) collection vehicles to service plastic bins - up to 23 tonnes; and
(b) collection vehicles to service steel bins - up to 28 tonnes,
and that it is the Owners Representative's responsibility to ensure that these vehicles can be accommodated within the common areas on the Property where the Services are to be provided.

EXECUTED as a DEED POLL



SIGNED for and on behalf of the Owners Representative by its duly authorised representative in the presence of:

.....	Signature of witness
Signature of Owners Representative
.....	Print name
Print name
.....	Print address
Position
.....	Date
Date

Please return the completed form via one of the following methods:

Email: joondalup@suez-env.com.au

Fax to: (08) 9350 7196

In person to: City of Joondalup Administration Centre 90 Boas Drive, Joondalup WA 6027
(Monday- Friday 8:30am to 5:00pm)

OFFICE USE ONLY

Booking Number: _____

Resident Name: _____

Contact Number: _____

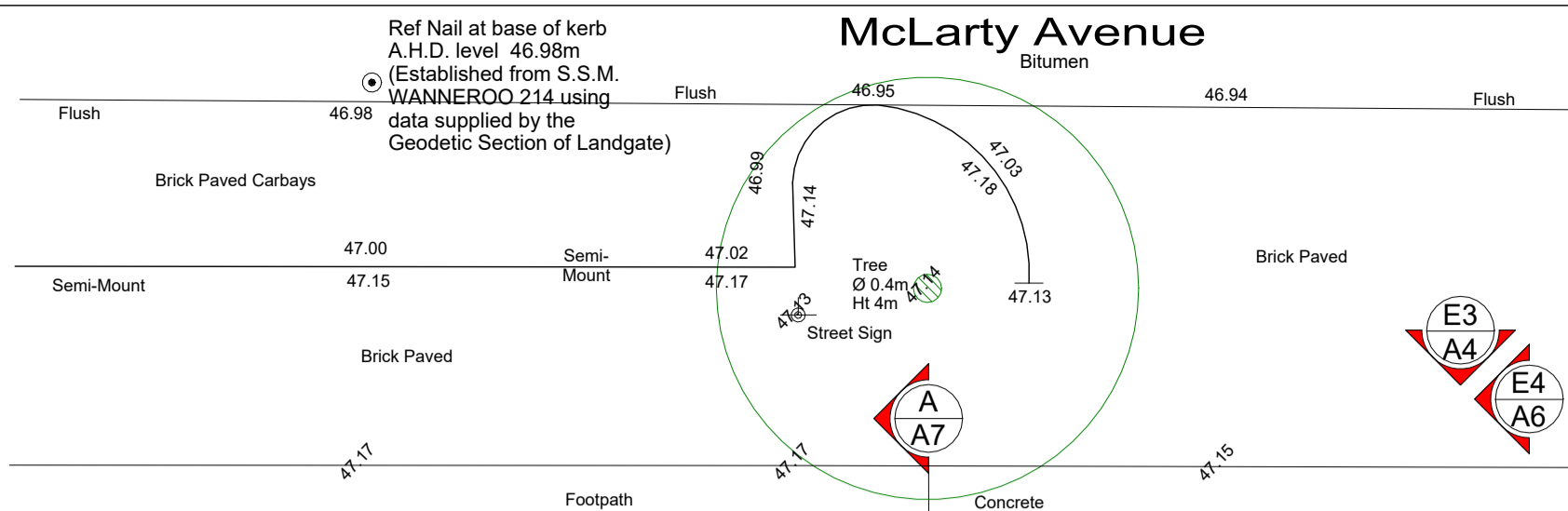
APPENDIX 3 – SITE DEVELOPMENT PLANS

Planning & Development Consultants

Address: 3/1 Mulgul Road, Malaga WA 6090

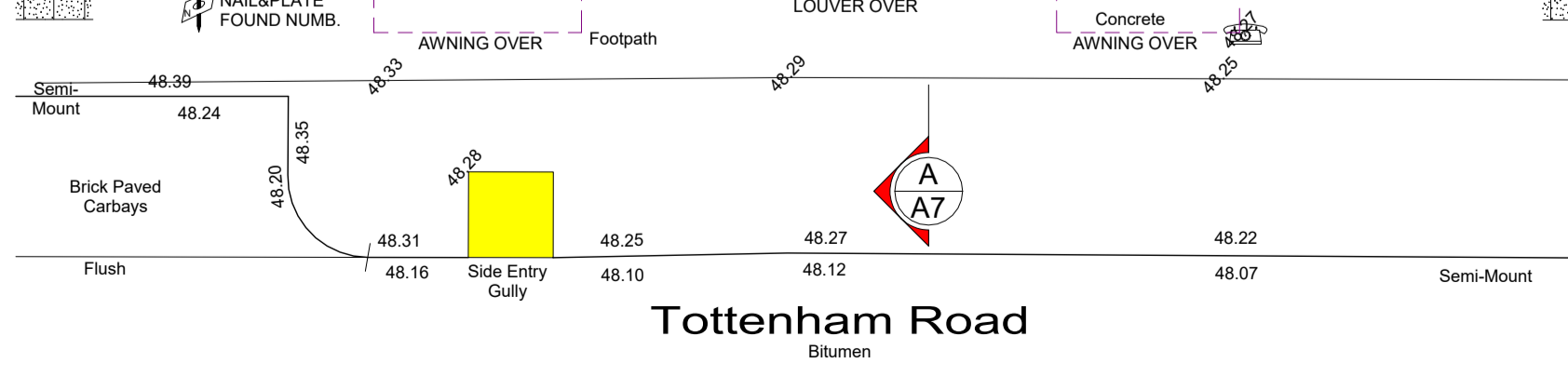
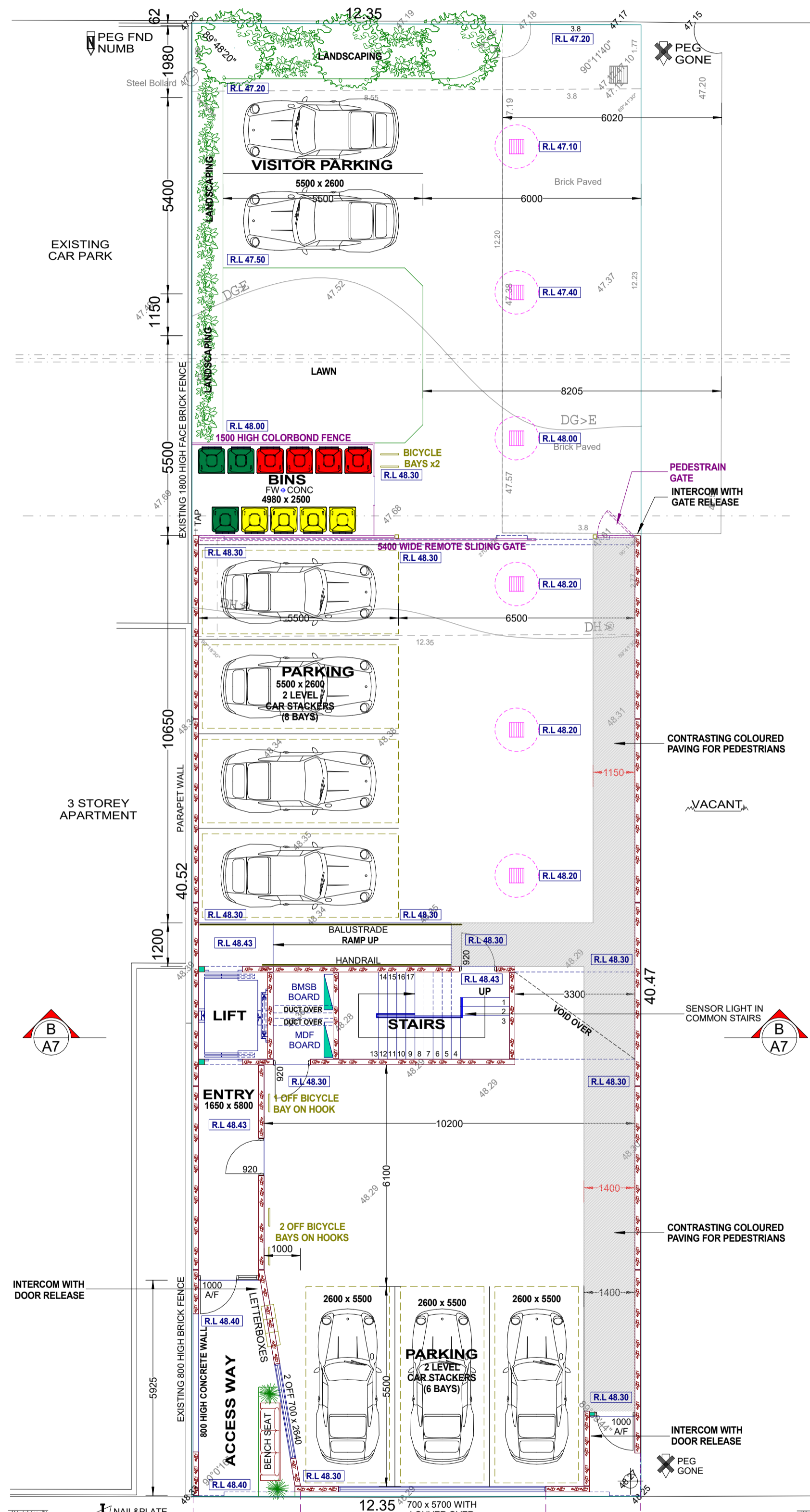
Tel: 9249 2158 Mb: 0407384140 Email: carlof@people.net.au

CVF Nominees Pty Ltd ABN: 86 110 067 395



AREAS							
LEVEL	A'MENT	# OF BEDS	MAIN AREA	BALCONY	STORE	COMMON AREA	CARBAYS
1	-	-	-	-	-	22 m ²	-
2	1	2	127 m ²	16 m ²	4 m ²	16 m ²	2
2	2	2	127 m ²	16 m ²	4 m ²	16 m ²	2
3	3	2	127 m ²	16 m ²	4 m ²	16 m ²	2
3	4	2	127 m ²	16 m ²	4 m ²	16 m ²	2
4	5	2	127 m ²	16 m ²	4 m ²	16 m ²	2
4	6	2	127 m ²	16 m ²	4 m ²	16 m ²	2
5	7	4	246 m ²	62 m ²	4.76 m ²	16 m ²	2

SITE AREA	500 m ²
PLOT RATIO	2.016
SITE COVER	64.4 %



BASEMENT PLAN

JOB No 20-2079
SCALE 1:100 ON A2 SHEET

**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

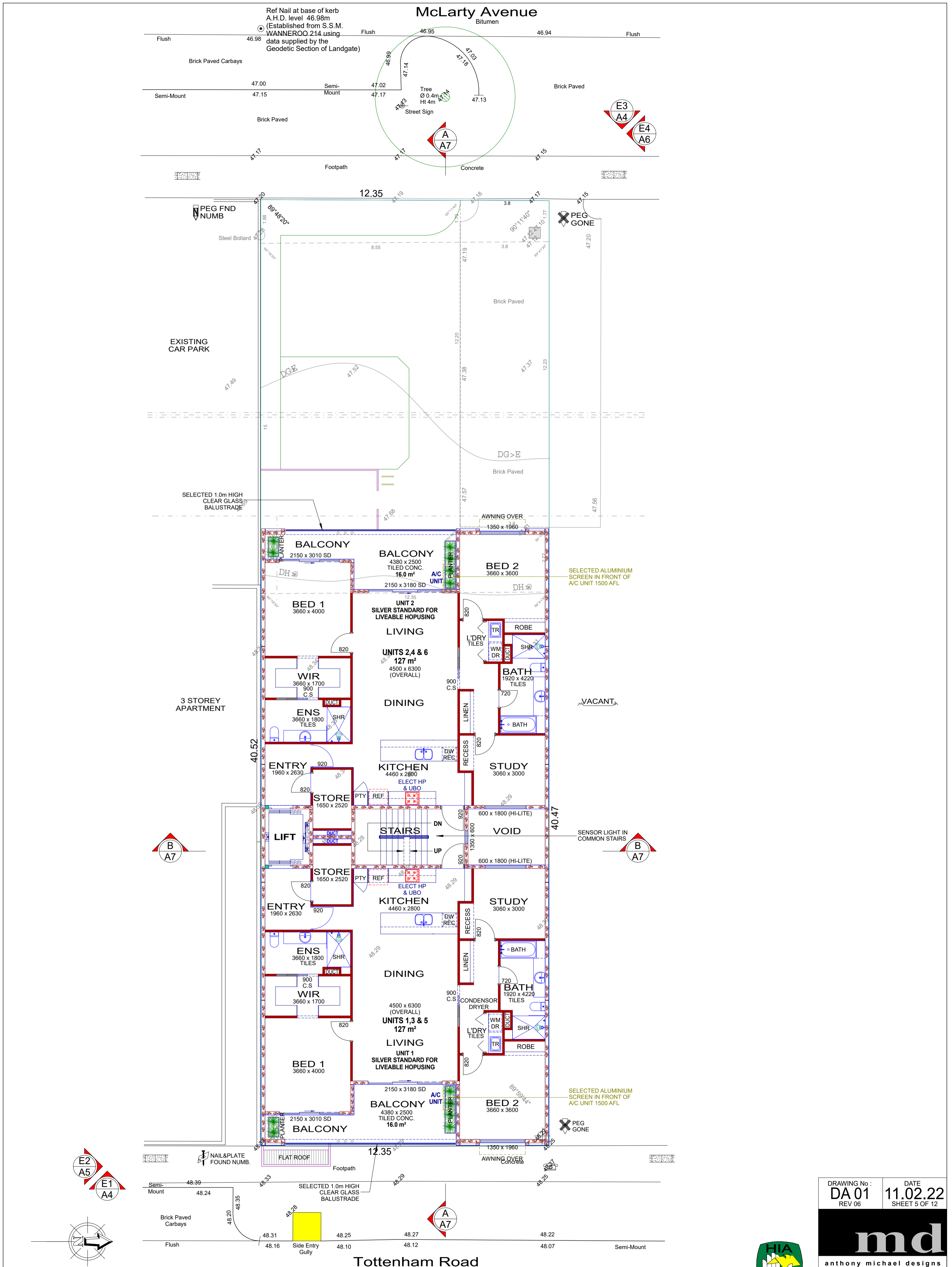
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REV 06

DATE: 11.02.22
SHEET 4 OF 12



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**TYPICAL FLOOR PLANS
TO LEVELS 2, 3 & 4**

JOB No 20-2079
SCALE 1 : 100 ON A2 SHEET



**PROPOSED APARTMENTS
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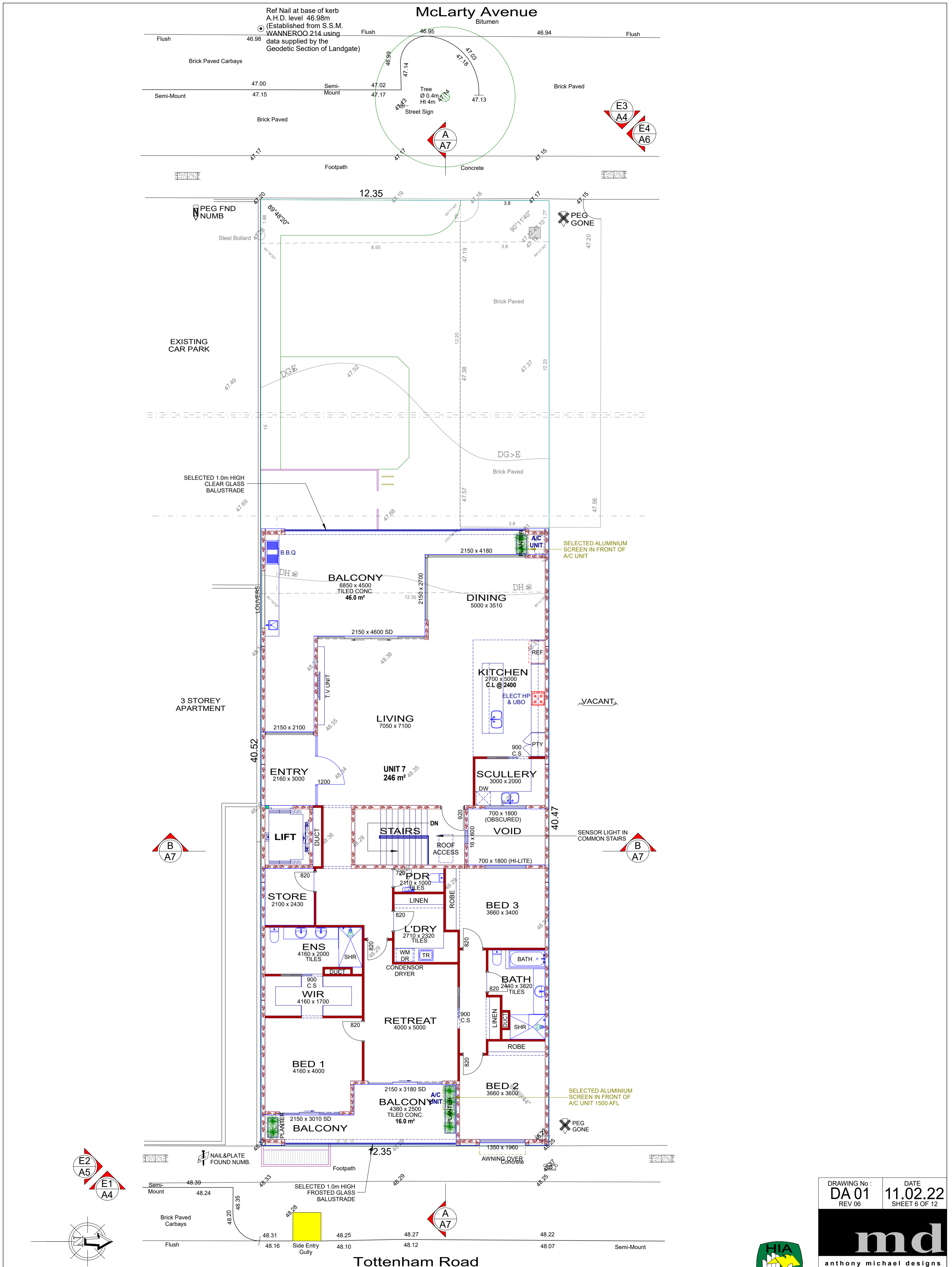
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FLOOR PLAN TO LEVEL 5

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SCALE 1: 100 ON A2 SHEET



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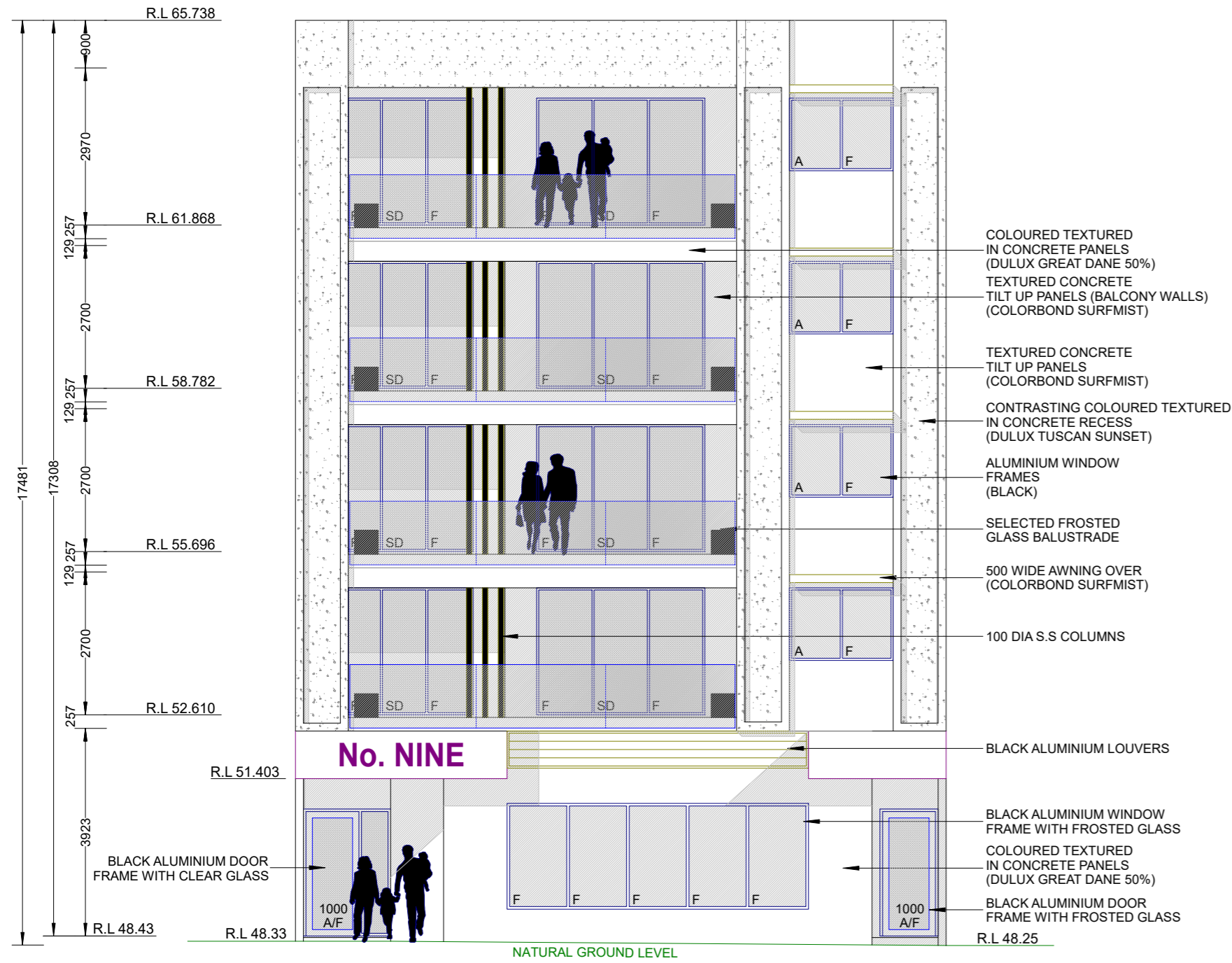
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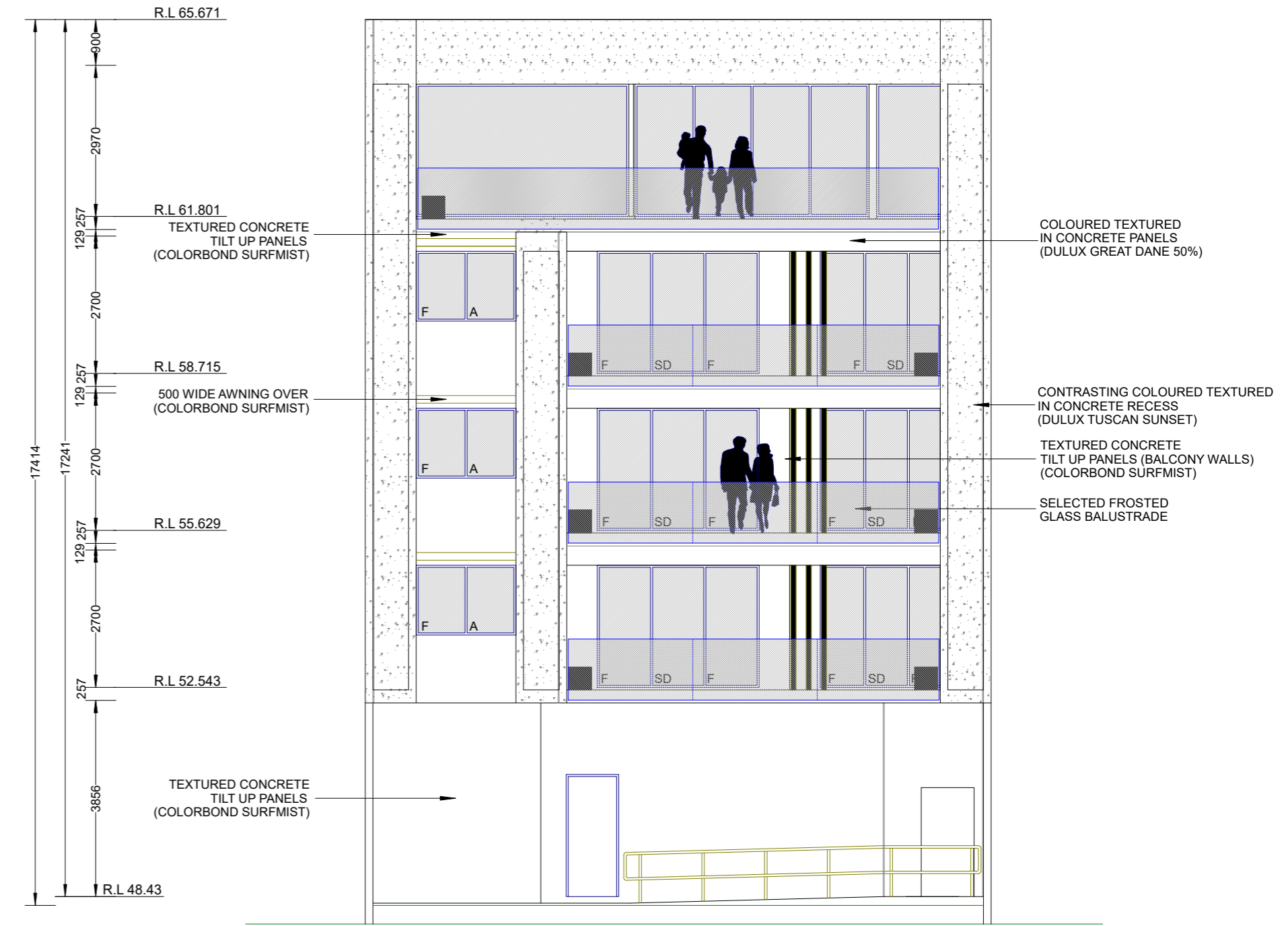
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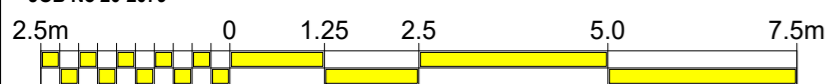
ELEVATION 01 (TOTTENHAM ROAD)



ELEVATION 03 (Mc LARTY AVENUE)
(BIN STORE & FENCE NOT SHOWN FOR CLARITY)

ELEVATIONS 01

SCALE 1 : 100 ON A2 SHEET
JOB No 20-2079



**PROPOSED APARTMENTS
LOT 503 (Hse # 9)
TOTTENHAM ROAD JOONDALUP**

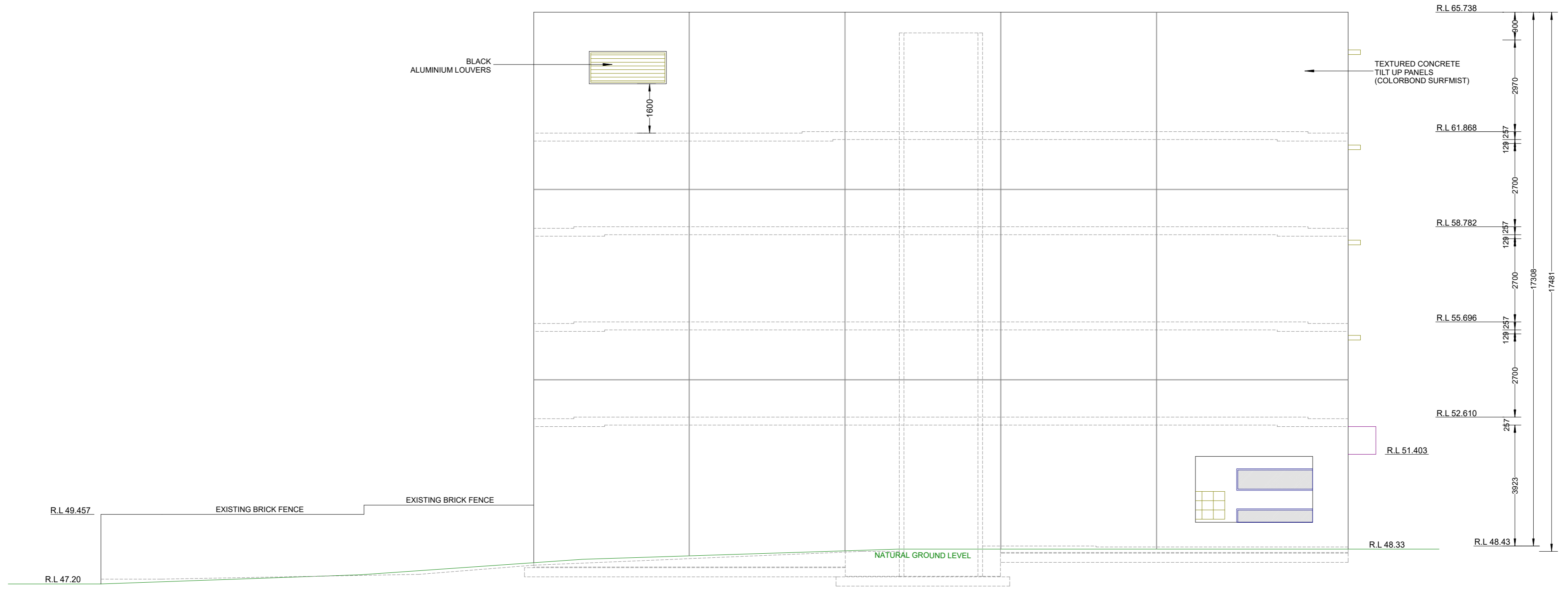
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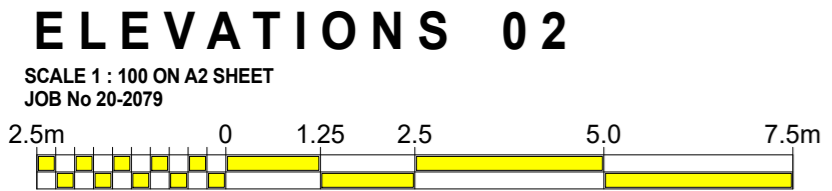
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ELEVATION 02



**PROPOSED APARTMENTS
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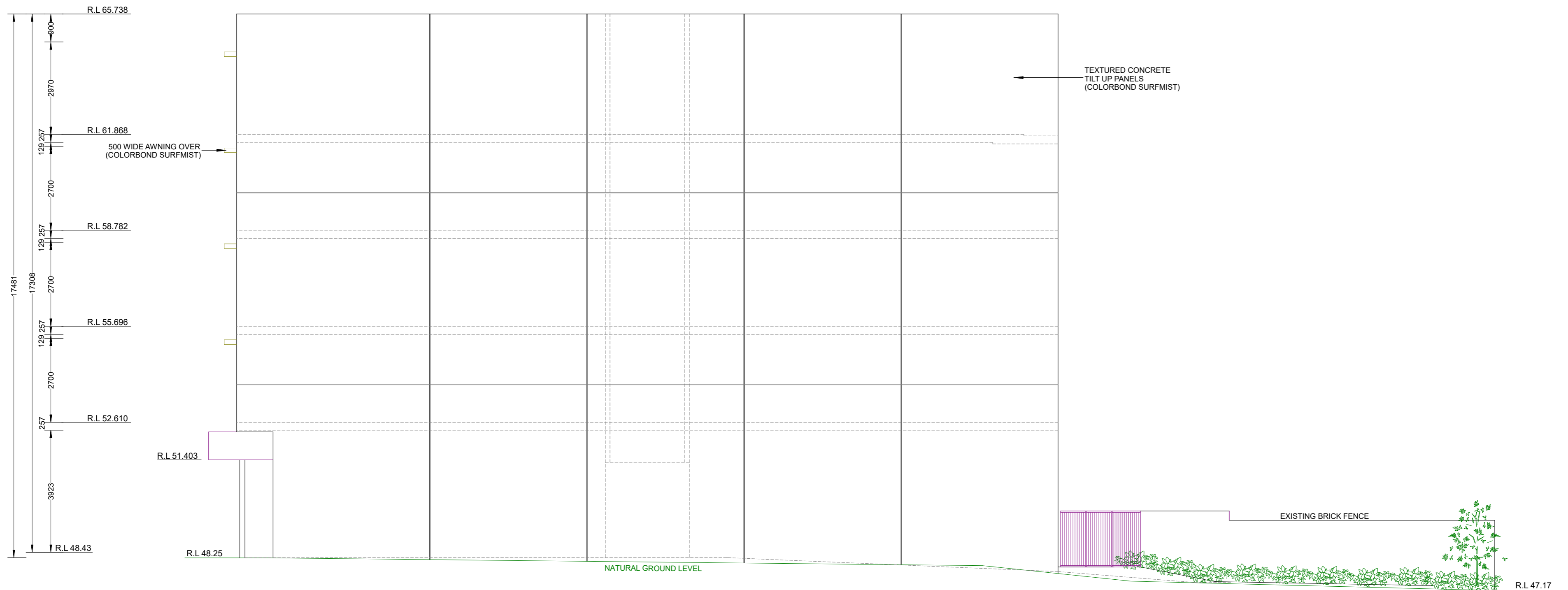
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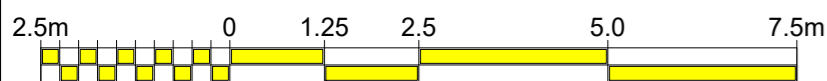




ELEVATION 04

ELEVATIONS 03

SCALE 1 : 100 ON A2 SHEET
JOB No 20-2079



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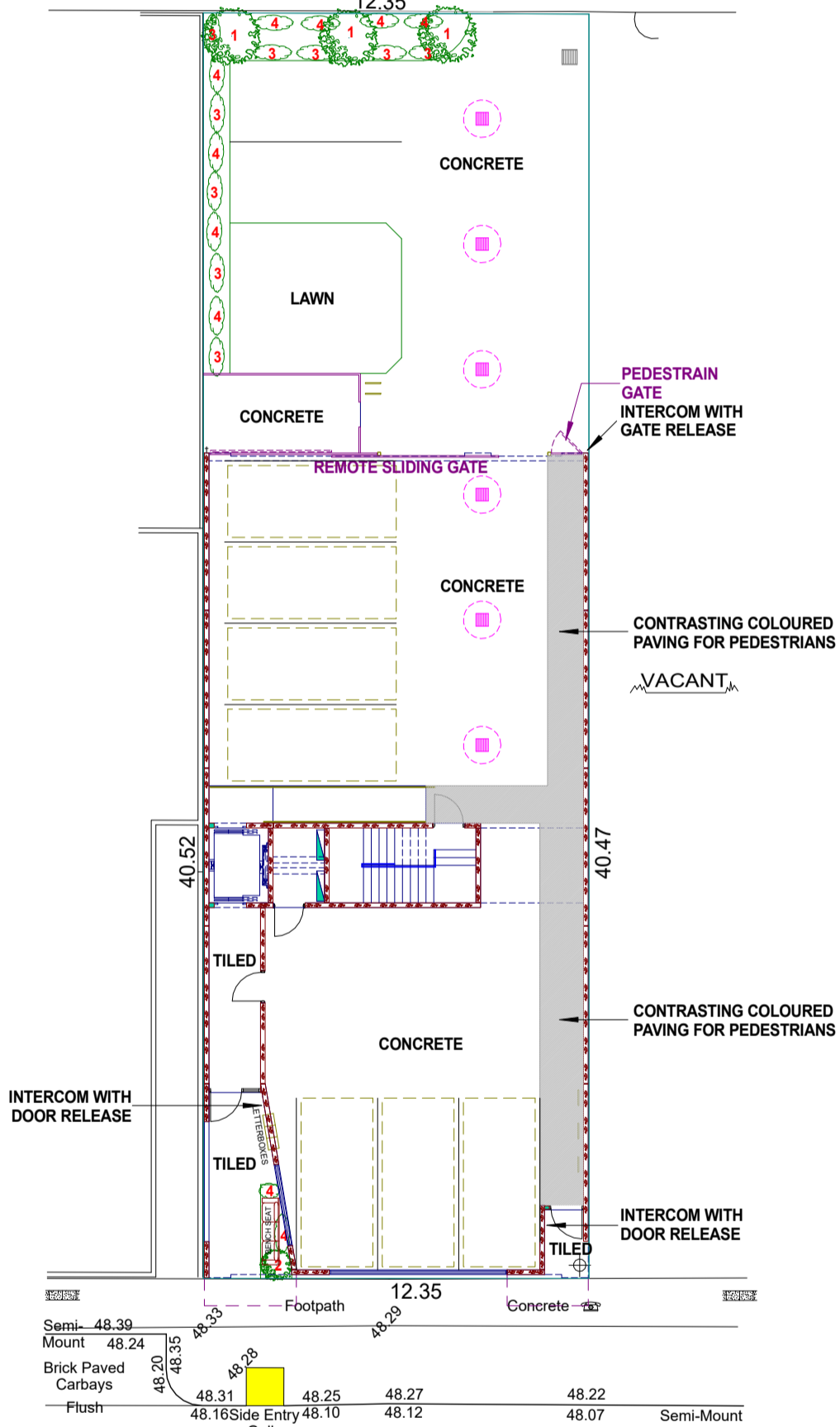
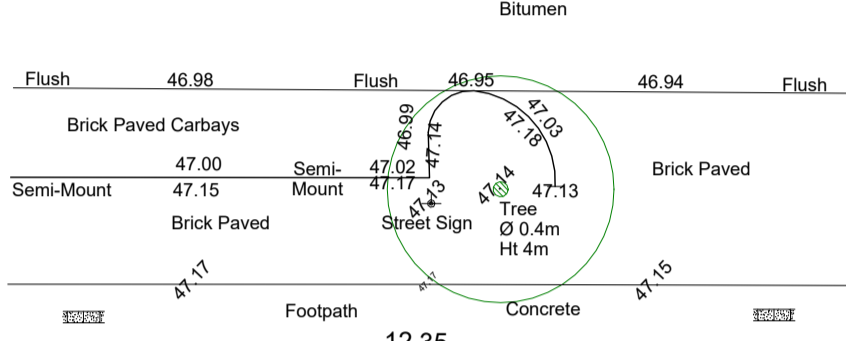
PLANT LEGEND

No	No Off	Pot Size	PLANT TYPE
TALL SHRUBS (TO 2M) AND SMALL TREES			
1	3	25 L	CHINESE PISTACHE
2	1	25 L	CORYLINE-PURPLE DAZZLER
GROUND COVERS (0 - 1m) SPACINGS 1 - 2m			
3	9	25cm	CORYLINE-PURPLE DAZZLER
4	10	25cm	TRACHELOSPERMUM JASMINOIDES (STAR JASMINE)
POTTED PLANTS			
5	45	25cm	LITTLE JESS- DIANELLA CAERULEA
6	34	25cm	AMETHYST- LIRIOPE MUSCARI

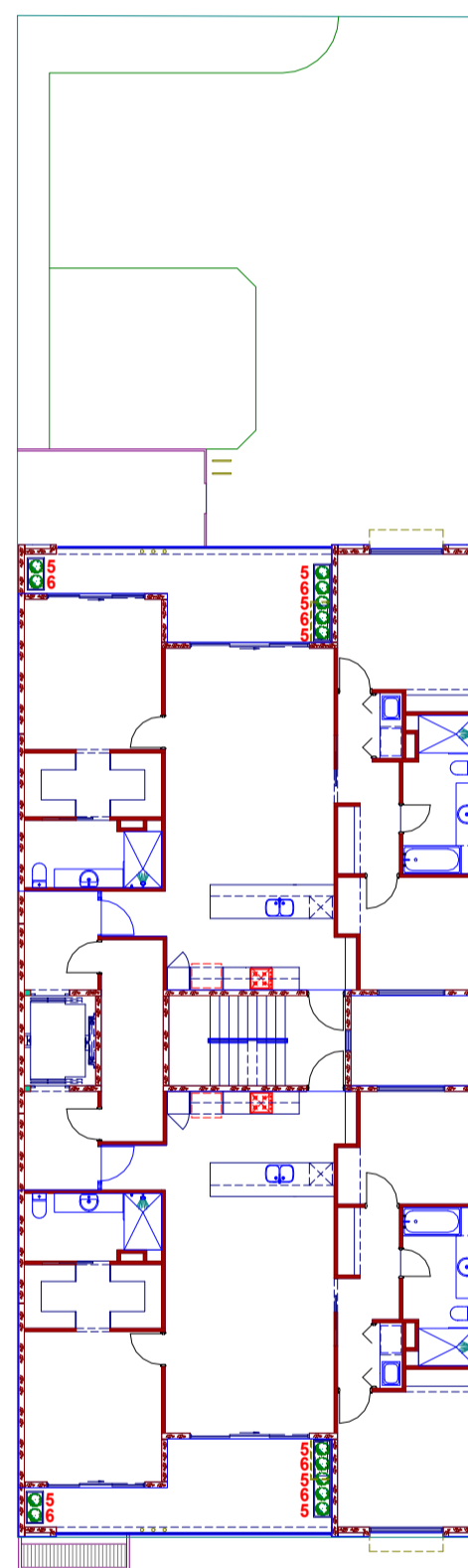
NOTE :
 * PROVIDE MULCH TO A DEPTH OF 100mm ON ALL UNCOVERED SOIL
 * IRRIGATION TO BE CONNECTED TO MAINS WATER SUPPLY NEAR TAP TO BIN AREA
 * PROVIDE AUTOMATIC RETICULATION TO LAWN & LANDSCAPED AREAS

SITE AREA	500 m ²
PAVED AREA	388 m ² 77.6 %
LANDSCAPED AREA	53.12 m ² 10.62 %

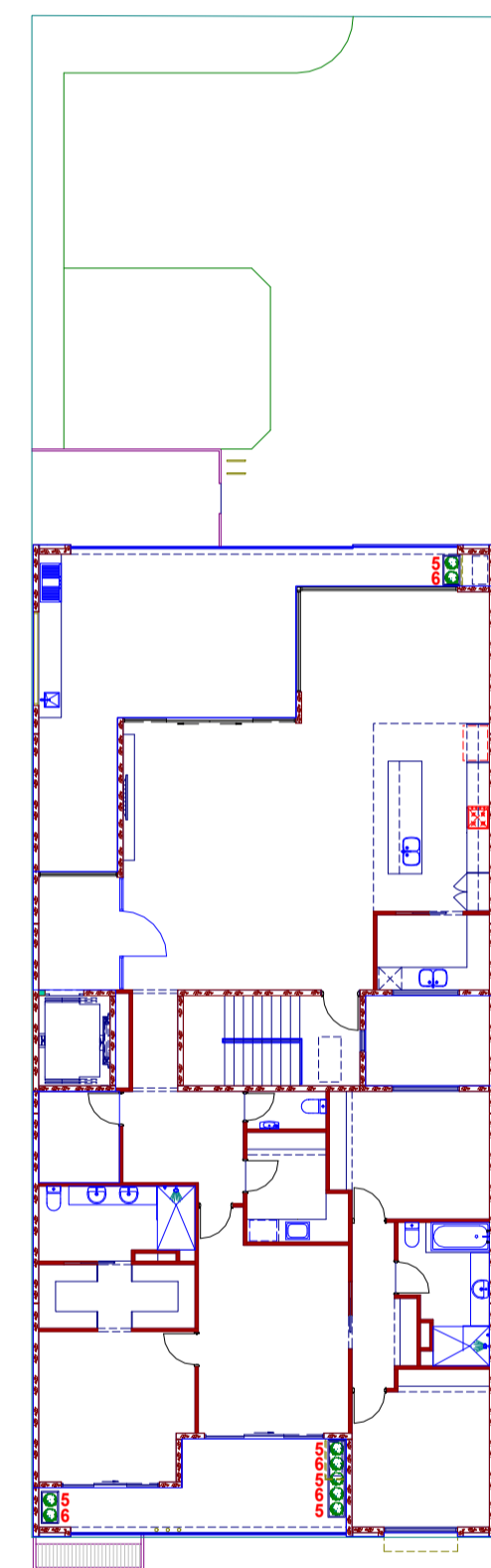
McLarty Avenue



GROUND LANDSCAPING PLAN

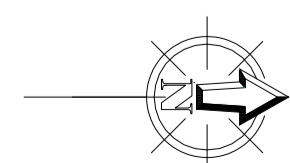


LEVELS 2, 3 & 4 LANDSCAPING PLAN



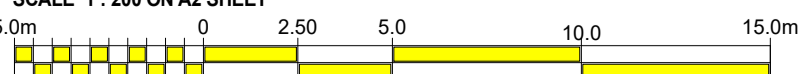
LEVEL 5 LANDSCAPING PLAN

Tottenham Road



LANDSCAPING PLANS

JOB No 20-2079
 SCALE 1 : 200 ON A2 SHEET



PROPOSED APARTMENTS LOT 503 (Hse # 9) TOTTENHAM ROAD JOONDALUP



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 SHEET 12 OF 12

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Assessment summary

Joondalup Activity Centre Plan

Item	Required	Proposed	Comment
Building Height	Minimum 13.5m Maximum 20.5m	18.14 metres	The proposed height meets the requirements of the JACP.
Street Interface	Where an active or semi-active frontage is not required the following applies: <ul style="list-style-type: none"> Passive frontage provided to GF office and residential uses. Attractive frontage provided to improve visual appearance. Multi-storey parking decks treated aesthetically. 	Subject site not considered active or semi-active frontage. No residential or office on ground floor. Rendered brickwork and glazing provided to ground floor to improve visual appearance of car-park.	The development incorporates facades which promote activation and surveillance over the public realm.
Screening of Equipment	All equipment shall be screened from view and located to minimise any visual and noise impact to adjoining developments and public spaces.	All air conditioning units are located on the balconies and screened from the street. No structures are to be located on the roof of the building.	The services associated with the development are not considered to have any adverse impact on the street. The air conditioning units are screened from the street frontages. A condition is recommended should the development be approved for full details on screening of services and utilities for provided.
Service Areas	Waste storage area must be provided. Facilities for loading/unloading of service/delivery vehicles	Bin store located to the rear of the building, set back approximately 11.5 metres from the McLarty Avenue boundary. The bin store is enclosed by a 1.5m high Colorbond Fence	Service facilities and refuse and recycling facilities are located so as not to be visible from the street. A Waste Management Plan has been provided to ensure appropriate location and ease of collection.
Adaptable Building	Buildings to have minimum floor to floor height of 4.5m at ground floor.	The ground floor has a minimum floor to floor height of 4.1m.	The proposal does not meet the minimum floor to floor heights. This is discussed in the body of the report.
Street Setbacks	Primary Street - Minimum: nil - Maximum: 3m Side and rear setbacks - No openings or balconies: nil.	Primary Street Minimum: nil Maximum 2.0m Side and rear setbacks: North and south: nil.	The proposed setbacks meet the minimum and maximum setback requirements as specified under the JACP.

	- Openings or balconies: 4.0 metres	West (rear): 14.16 metres	
Street Interface	Building entrances must be clearly visible, directly accessible from the street and provide pedestrian shelter.	Entrance faces the primary street and is articulated by the use of the cantilevered porch space which provides pedestrian shelter.	The proposal meets the minimum requirements for the street interface, providing a clearly defined entrance from the primary street. The depth of the entrance way plus the awning ensure pedestrian shelter can be provided.
	Any fencing to a public road shall be a maximum height of 1.2m and shall be visually permeable.	Fencing removed from the rear portion of the lot (to McLarty Avenue). No fencing proposed to Tottenham Road.	
Open space and landscape	Private courtyards or balconies provided per dwelling, minimum 2m dimension, minimum 10m ²	All balconies have a minimum 10m ² with a minimum dimension of 2 metres.	The development ensures that each dwelling has private outdoor living areas which can be appropriately used by the residents of the dwelling.
Car Parking and Access	As per R-Codes	See SPP7.3 assessment below.	

State Planning Policy 7.3 (SPP7.3)

Element	Objectives	Acceptable Outcome	Proposed	Design Guidance
2.2 Building height	N/A – Replaced by JACP as discussed in the body of the report.			
2.3 Street setbacks	N/A – Replaced by JACP as discussed in the body of the report.			
2.4 Side and rear setbacks	N/A – Replaced by JACP as discussed in the body of the report.			
2.5 Plot ratio	Not applicable	RAC-0 Plot ratio restricted by setback, parking and building height requirements.		Not applicable
2.6 Building depth	Achieved.	20m for single aspect apartments (A2.6.1)	All apartments are dual aspect.	Not applicable
2.7 Building separation	Not applicable	Applies to multiple buildings on a single site.	Single building only.	Not applicable
3.2 Orientation	Achieved.	Buildings on street orientated to face public realm and incorporate direct access from the street.	Direct access is provided from the street to internal stair and lift. All dwellings front either the primary street (Tottenham Road) or the rear boundary (McLarty Avenue).	Satisfied

		No overshadowing requirement. Buildings orientated to maintain 4 hours per day for existing solar collectors on neighbouring site.	Setbacks as permissible by JACP. No solar collectors on adjoining site. No solar collectors on adjoining property.	
3.3 Tree canopy and deep soil areas	N/A – Replaced by JACP as discussed in the body of the report.			
3.4 Communal open space	N/A – Replaced by JACP as discussed in the body of the report.			
3.5 Visual privacy	Achieved	Bedroom window: 3.0m from adjoining lot boundary Balcony: 6.0 metres from adjoining lot boundary	Units 2,4,6 and 7 Bed 2: 1.43m to south. Units 2,4,6 and 7 Balcony: 1.71m to south	Considered to meet the element objectives as discussed in the main body of the report.
3.6 Public domain interface	N/A – Replaced by JACP as discussed in the body of the report.			
3.7 Pedestrian access and entries	Achieved.	Pedestrian entries connected Pedestrian entries protected from weather. Pedestrian entries well-lit, visible from public domain and enable casual surveillance. Pedestrian access via shared zone, path is clearly delineated and/or incorporated to prioritise pedestrian and constrain vehicle speed. Services and utilities located at pedestrian entry are screened from view. Bins not located at primary pedestrian entry.	Pedestrian entries are connected. Awning to pedestrian entry provided, with a portion enclosed to three sides for protection. Pedestrian entry is visible from public domain and is provided casual surveillance. Pedestrian path provided in carpark that is clearly delineated by the use of contrasting paving. No service and utilities located at pedestrian entry. Bins located to rear of development and concealed from primary entry.	Satisfied DG3.7.2 The design of entries is well lit, clearly visible and allow direct access.
3.8 Vehicle access	Achieved.	Vehicle access one opening per 20m.	One vehicle access within	Satisfied.

		<p>Vehicle entries identifiable from the street, integrated with faced and/or located behind primary building line.</p> <p>Vehicle entries have adequate separation from street intersection.</p> <p>Vehicle circulation areas avoid headlights shining into habitable rooms within the development and adjoining properties.</p> <p>Driveway width minimum for functionality.</p> <p>Driveway designed for two-way access.</p>	<p>vehicle access easement. Vehicle entry is identifiable</p> <p>Vehicle and pedestrian access points separate.</p> <p>Vehicle circulation areas appropriate. No dwellings on same level and car park therefore no headlight glare.</p> <p>Driveway provided which allows two-way access. Driveway is unobstructed to maximise sightlines for vehicles entering or exiting the site.</p>	
3.9 Car and bicycle parking	Achieved as discussed in the body of the report.	<p>Bicycle parking: - 5 secure, undercover resident bicycle parking and 1 visitor bicycle parking bay accessed via a continuous path of travel from the entry.</p> <p>Resident Parking - 7 bays</p> <p>Visitor Parking - 2 bays</p> <p>Maximum parking provision does not exceed double the minimum.</p> <p>Car parking areas and vehicle circulation areas designed in accordance with AS2890.1.</p> <p>Carparking areas not located within street setback and not visually prominent from the street (A3.9.5).</p>	<p>5 bicycle parking bays are provided which are unsecured and uncovered, located adjacent to bin store.</p> <p>11 bays</p> <p>2 bays</p> <p>Parking provision is less than double the minimum.</p> <p>Car parking and circulation as per AS2890.1.</p> <p>Nil setback permissible, therefore no street setback area.</p>	With the inclusion of a condition for 5 resident bicycle bays to be located adjacent to the Unit 6 car bay, it is considered that this requirement is satisfied.

		<p>Car parking designed, landscaped or screened to mitigate visual impacts when viewed from the dwellings and private outdoor spaces (A3.9.6).</p> <p>Visitor parking clearly visible from driveway, signed and accessible.</p>	<p>Parking predominantly located under the building. Landscaping assists in screening impact from the outdoor living areas.</p> <p>Visitor parking clearly visible from the McLarty Avenue Street, and is unobstructed by building or fencing.</p>	
4.1 Solar and daylight access	Achieved as discussed in the body of the report.	<p>Minimum 70% dwellings having living rooms and private open space obtaining at least 2 hours direct sunlight; and maximum 15% receiving no direct sunlight (A4.1.1).</p> <p>Habitable rooms one window in external wall, visible from all parts of room, glazed area not less than 10% of floor area and minimum 50% clear glazing.</p> <p>Light wells and/or skylights not primary source of daylight to any habitable room.</p> <p>Building orientated and incorporates external shading devices.</p>	<p>100% of dwellings have at least two hours of direct sunlight. No apartments receive no direct sunlight.</p> <p>Units 1 – 6: - Study: 8.8% glazing - Unit 7: - Bed 3: 8.8% glazing</p> <p>No lightwells proposed.</p> <p>Awnings to bedroom 2 windows, and balconies providing shading devices to reduce direct sunlight in the summer months.</p>	Satisfied.
4.2 Natural ventilation	Achieved.	<p>Habitable rooms have openings on at least two walls with straight line distance 2.1m</p> <p>Minimum 60% of dwellings are naturally cross ventilated; and single aspect</p>	<p>Minimum distance of 2.1m between internal doors and external openings.</p> <p>All units have multiple aspect as which permits cross ventilation.</p>	Satisfied.

		apartments included must have ventilation openings oriented to prevailing cooling winds; and room depth no greater than 3 times the ceiling height.		
		No habitable room relies on light wells.	No reliance solely on lightwells.	
4.3 Size and layout of dwellings	Achieved as discussed in the body of the report.	Dwellings internal floor areas as per Table 4.3a. Habitable room floor areas as per Table 4.3b. Floor to ceiling height 2.7m for habitable rooms, 2.4m for non-habitable rooms, and other as per National Construction Code. Maximum length of single aspect open plan living area 9m (A4.3.4)	All units are in excess of 100m ² . Minimum internal bedroom dimension of 3.0 metres. Living rooms 4.46 metres. Ceiling height 2.7minimum. All units meet maximum lengths. No single aspect apartments.	Satisfied
4.4 Private open space and balconies	N/A – Replaced by JACP as discussed in the body of the report.			
4.5 Circulation and common spaces	Achieved.	Circulation corridor 1.5m min. Circulation and common space capable of passive surveillance. Circulation and common spaces lit without light spill to habitable rooms.	1.5m on ground floor, 1.2m on stairs and upper floors. No passive surveillance from houses but common area does provide some level of surveillance over vehicle access. Internal lighting to be provided. No light spill onto adjacent dwellings.	Satisfied.
4.6 Storage	Achieved as discussed in the body of the report.	Store sizes as per Table 4.6. 3 bedroom dwelling: minimum dimension 1.5m and 5m ² and minimum height of 2.1m.	Store sizes acceptable with exception of store under stairs which has minimum height of 1.9m Stores acceptable.	Satisfied. DG4.6.4: Store areas are considered to be wide enough to accommodate larger and less

		Stores conveniently located, safe, well-lit, secure and subject to passive surveillance. Stores provided separately from dwellings or within or adjacent to private open spaces (A4.6.3).	Ground floor stores not visible from public domain. Upper floor stores sufficiently screened.	frequently access items.
4.7 Managing the impact of noise	Achieved.	Exceed National Construction Code requirements. Potential noise sources not adjacent external wall habitable room or within 3m of bedroom (A4.7.2). Major openings oriented away/shielded from external noise sources.	Noise sources setback from external wall to habitable room and >3m from bedrooms. Major openings located away from AC units, bin stores and parking area.	DG4.7.1: No windows to habitable spaces are in close proximity/impacted.
4.8 Dwelling mix	Achieved.	Acceptable Outcome is not applicable as less than 10 dwellings are proposed.	All units feature either two bedrooms and one study plus two bathrooms, or three bedroom two bathrooms.	Satisfied.
4.9 Universal design	Achieved.	20% of dwellings achieve Silver Level requirements as defined in the <i>Liveable Housing Design Guidelines</i> , or 5% achieve Gold Level requirements.	Across the total development 25% of dwellings (Apartment 4 & 6) have been designed to meet Liveable Housing Design Guidelines Silver Level requirements.	Satisfied.
4.10 Façade design	Achieved.	Façade design includes scaling, articulation, materiality and detailing at lower levels that reflect the scale, character and function of the public realm. The façade design provides rhythm and interest achieved by a combination of building articulation, the composition of different elements and changes in texture, material and colour. Façade includes elements that relate to key datum lines of adjacent buildings.	Façade is considered to use various materials and colours and articulation to improve public realm. The front façade includes extensive glazing to windows, doors and balustrading, in combination with rendered brick work, which adds to the texture and colours as viewed from the street.	Satisfied.

		Building services fixtures integrated in design and not visually intrusive from public realm.	Building services elements are screened from the public realm.	
4.11 Roof design	Achieved.	Roof form or top of building complements façade design and desired streetscape character. Building services located on roof not visually obtrusive from street. (A4.11.3 N/A)	Roof form acceptable. No services located on the roof.	Satisfied.
4.12 Landscape design	Achieved.	Landscaping plan required to be prepared by competent landscape designer demonstrating plant species and irrigation plan demonstrating achievement of Waterwise design principles. Landscaping areas located and design to support trees and improve outlook and amenity. Building services integrated with landscaping and not visually obtrusive.	Landscape plan and irrigations drawings provided. Landscaping provision acceptable as per the requirements of the JACP.	Satisfied.
4.13 Adaptive reuse	N/A	Not applicable as development not heritage.	N/A	N/A
4.14 Mixed use	N/A	Ground floor units are designed for future adaption to non-residential uses. Ground floor uses including non-commercial uses address, enhance and activate the street.	Possibility for ground floor to be designed for future non-residential uses, however unlikely as parking for the residential and any new commercial uses would need to be accommodated on site.	N/A
4.15 Energy efficiency	Achieved.	Incorporate at least one significant energy efficiency initiative; or all dwellings exceed minimum NATHERS requirements for apartments by 0.5 stars.	Use of thermal mass in building materials for storing heat and use of insulation and draft sealing.	Satisfied.

4.16 Water management and conservation	Achieved.	<p>Dwellings are individually metered for water usage. Storm water runoff is managed on-site.</p> <p>Provision of an overland flow path for safe conveyance of runoff from major rainfall events to the local stormwater drainage system.</p>	<p>All units are individually metered. All stormwater will be contained on-site.</p> <p>Overland path via existing driveway.</p>	Satisfied.
4.17 Waste management	Achieved as discussed in the body of the report.	<p>Waste storage facilities. Waste Management Plan.</p> <p>Sufficient area for storage of green waste, recycling and general waste (separate).</p> <p>Communal waste storage sited and designed to be screened from view from the street, open space and private dwellings.</p>	<p>Waste management plan provided and satisfies City's requirements.</p> <p>Sufficient area provided for bin storage that is screened from street.</p>	Satisfied.
4.18 Utilities	Achieved.	<p>Utilities located within front setback or on visible parts of rooms are integrated into design.</p> <p>Developments fibre-to-premises ready.</p> <p>Hot water units, AC condenser units and clotheslines not visually obtrusive.</p> <p>Laundries are designed and located to be convenient, weather protected and well ventilated and size appropriate.</p>	<p>Utilities appropriately located and screened.</p> <p>Development includes fibre-to-premises connections.</p> <p>Airconditioning units located on rear façade on ground or first level to reduce impact.</p> <p>Instant gas hot water within balcony but not considered to impact streetscape.</p> <p>Laundries provided within each dwelling.</p> <p>No clothes lines proposed, with condenser dryers provided within the dwellings.</p>	Satisfied.

Please note that the acceptable outcomes stated above is a summary only and when considering compliance with these requirements, please refer to the full requirement as detailed in *State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments*.

SUBMISSIONS AGAINST THE PROPOSAL NO.9 TOTTENHAM ROAD, JOONDALUP		
Design element	Issue raised	Applicant response
Building height	<ul style="list-style-type: none"> • <i>At five storeys, the proposal dwarfs the surrounding single and two level homes.</i> • <i>Building substantially taller than property next door which is three levels.</i> • <i>Buildings greater than 3 storey should be located to the city centre.</i> 	<ul style="list-style-type: none"> • The planning framework has changed since the initial development of the Joondalup City Centre. This has resulted in a higher maximum building height and the introduction of a minimum building height. Given this, the immediate locality will experience a wide range of building heights. • The proposed development reflects upon both the anticipated development within a key Activity Centre encouraged by the City's planning framework and the streetscape character types for 'Mid-Rise Urban Centre' ('Suburban Context') prescribed within the R-Codes. This includes the vision that the streetscape character will contain developments up to a potential height of six (6) storeys. As such, the proposed built form on the new development on the subject land reflects the current planning framework (i.e. proposed 5 storeys). • The objector should be made aware that the subject land is located within the Joondalup City Centre. • In addition, according to the Joondalup Activity Centre Plan, the minimum building height of the subject land is 13.5 (approx. three storey), with a maximum building height of 20.5 metres (approx. 5 storey). <p>In light of the above responses, it is clear that the objector does not understand the planning framework set for this part of the Joondalup City Centre and that the comments should be dismissed.</p>
Façade	<ul style="list-style-type: none"> • <i>Proposal is no more or less distinguishable than any other development in the area.</i> • <i>Ground floor façade is blank, imposing and does not engage with the street.</i> 	<ul style="list-style-type: none"> • The façade features a number of elements and articulation, including the use of varying materials (i.e. render, glass and feature panelling) and the inclusion of open balconies along the front façade. Given these key elements, it is contended that the proposed development on the land will contribute to the desired built form character of the streetscape and the Activity Centre in general. • In addition to the above point, the development will locate the outdoor living area for each multiple dwelling to comprise an outlook over the adjoining streets. This will provide some activation of the development along the street and provide an active frontage. The inclusion of major openings to habitable rooms along the frontage of the building will further assist with improved passive surveillance of the street, along with promoting community interaction. • The plans have been amended to include more defined entry points at ground level and additional glazing along the front façade. Given this, the blank walls have been removed.

		In light of the above responses, the objectors comments unsubstantiated and should be dismissed.
Bulk and Scale	<ul style="list-style-type: none"> • <i>The proposal ignores the existing bulk, scale and character of the area.</i> • <i>The proposal will impact substantially on the amenity of the surrounding properties.</i> • <i>Proposal inconsistent with existing scale. Currently 'space' between houses and sufficient road width to allow the vista across the road to not be dominated by the taller buildings.</i> 	<ul style="list-style-type: none"> • The objector appears to be unaware of the current planning framework in terms of building height and boundary setbacks. In addition, according to the Joondalup Activity Centre Plan, the minimum building height of the subject land is 13.5 (approx. three storeys), with a maximum building height of 20.5 metres (approx. 5 storeys). The proposed development complies with this requirement and is in fact lower than the maximum permitted height. • The comment has not outlined how the proposed development will impact the amenity of the adjoining properties. The development is under the maximum permitted building height and complies with visual privacy provisions. In addition, the subject land is located within a City Centre, where such developments are encouraged. • The planning framework has changed since the initial development of the Joondalup City Centre. This has resulted in a higher maximum building height and the introduction of a minimum building height. Given this, there will be large differences in building height expected. • A review of the City Centre has noted that there are a number of developments emerging throughout the City Centre comprising taller buildings. This is common within a City Centre and reflects the current planning framework. <p>In light of the above responses, the objectors comments are unsubstantiated and should be dismissed.</p>
Communal open space	<ul style="list-style-type: none"> • <i>The proposed 'informal community area' is just a bench seat near the entrance and does not appear to represent any meaningful attempt to create an engaging meeting place.</i> 	<ul style="list-style-type: none"> • The proposed development is not required to have a formal communal open space area for under the Volume 2 of the R-Codes. Notwithstanding this, the proposed development has been designed to include a communal space to the rear of the building for the benefit of the future occupants. • The entry has been made larger, with the bench being provided as a 'meeting spot' only or being made available for visitors whilst waiting for entry into the building or waiting for the occupant to come down. The bench seating is not a formal communal open space area or informal communal area. <p>In light of the above responses, the objectors comments incorrect, are unsubstantiated and should be dismissed.</p>
Visual privacy	<ul style="list-style-type: none"> • <i>Not respectful of current residents' privacy.</i> 	<ul style="list-style-type: none"> • The proposed development complies with the visual privacy provision of the planning framework.

	<ul style="list-style-type: none"> • <i>Upper floors would look directly across into adjoining properties.</i> 	<ul style="list-style-type: none"> • The comment is incorrect. It appears the objector has not reviewed the plans (i.e. the development proposed parapet walls along the lot boundaries and does not allow for any overlooking of the adjoining properties). <p>In light of the above responses, the objectors comments are incorrect and should be dismissed</p>
Vehicle access	<ul style="list-style-type: none"> • <i>Parking and vehicle access will affect the neighbouring streets.</i> 	<ul style="list-style-type: none"> • The objector has failed to provide any details on how the vehicular access will impact the adjoining streets. The proposed development has been designed to provide vehicular access from McLarty Avenue (secondary street), in accordance with other developments along this part of Tottenham Road and in accordance with the designated shared vehicular access point (i.e. shared access easement). Given this, the comment is unsubstantiated, fails to recognise the current built form along the street and does not take into account the designated access point for the land. As such, the comment should be dismissed.
Car parking	<ul style="list-style-type: none"> • <i>The manoeuvring spaces are not sufficient for the turning of an average-sized car. Risk of accidents in the car park due to the layout.</i> • <i>The city has claimed that there are too many vehicles clogging the road in this area and has reduced parking permits. Two on-site visitor parking bays is inadequate.</i> • <i>The car park does not appear to be in compliance with Australian Standards.</i> • <i>The tight parking arrangement will result in residents parking on the street, further congesting the area.</i> 	<ul style="list-style-type: none"> • The City's Engineering Department have reviewed the plans and has not raised any issues regarding the turning area. In addition, the turning area has been designed to satisfy the Australian Standards. • According to the parking standards prescribed within Volume 2 of the R-Codes, the proposed development only requires one (1) bay per dwelling. The application proposes two (2) bays per dwelling, which is well above the minimum requirements. • The City's Engineering Department have reviewed the plans and has not raised any issues regarding the turning area and car parking layout. • This comment is speculative and should dismissed. The proposed development includes an oversupply of on-site car parking. <p>In light of the above responses, the objectors comments incorrect, are unsubstantiated and should be dismissed.</p>
Natural ventilation	<ul style="list-style-type: none"> • <i>The design is not solar passive and the north facing void, which will be right next to another building in the future will provide poor ventilation.</i> 	<ul style="list-style-type: none"> • The proposed development has been designed to obtain access to natural light where possible, given the poor orientation of the land. In addition, the development will allow for good cross ventilation through the use of a light well and large openings to the west and east of the building to allow for ventilation and natural light to penetrate into the building. <p>In light of the above responses, the objectors comment is unsubstantiated and should be dismissed.</p>
Size and layout of dwellings	<ul style="list-style-type: none"> • <i>Proposal does not contribute to housing diversity within the City of Joondalup.</i> 	<ul style="list-style-type: none"> • The objectors comments does not provide sufficient information on why the development does not provide housing diversity. • The proposed development comprises multiple dwellings in an area that contains grouped and single dwellings. As such, the multiple dwelling typology on the land provides housing diversity within this part of the Joondalup City Centre. In addition, the development includes dwellings within varying rooms numbers and floor areas.

		<ul style="list-style-type: none"> In addition, the proposed development is consistent with the current planning framework. <p>The comment is unsubstantiated, incorrect and should be dismissed.</p>
Landscaping	<ul style="list-style-type: none"> <i>Landscaping to communal area would not survive given it will be in constant shade.</i> 	<ul style="list-style-type: none"> The comment is incorrect and demonstrates that the objector has not reviewed the plans in detail having due regard for the lot orientation. The proposed communal area and landscaping to the rear of the development will only be in shadow during the morning period. From midday to sunset, the area will have exposure to sun and will not be overshadowed. In addition, Volume 2 of the R-Codes does not require the provision of a communal open space area for developments comprising less than ten (10) dwellings. Given this, the communal open space area provided for the proposed development on the subject land is beyond the requirements of the R-Codes and could be removed if not supported and if it raises any concerns with the local residents/City of Joondalup. Whilst deletion of the communal space would address the objector's concerns, it would be a very poor planning outcome. <p>The comment is incorrect and should be dismissed.</p>
Miscellaneous	<ul style="list-style-type: none"> <i>Noise from people on the balconies.</i> <i>High turnover of residents.</i> <i>Proposed apartments do not cover affordable housing. Each is of a considerable size and will unlikely be unaffordable for older 'down-sizers.'</i> <i>Where is the claim that there is much need housing?</i> 	<ul style="list-style-type: none"> The comment regarding noise from people on the balcony is speculative. The balconies provide for an active frontage to the building, allows for good passive surveillance of the street and allow for social interaction between the public and private realms. These are all positive planning outcomes for a residential building within a City Centre. The comment that there will be a high turnover of residents is speculative and unsubstantiated. Furthermore, it is common for multiple dwelling type developments to be located within City Centres to provide for a diversity of housing. The dwelling being constructed are for residential purposes and not for short stay/holiday accommodation. The objector has failed to provide any evidence that the dwellings being proposed are unaffordable. The proposed dwellings are smaller than a conventional grouped of single dwelling. Given this, it will provide more affordable housing and the opportunity for older occupants to downsize. It should be noted that the proposed development is not specifically an aged development and will cater for a varying demographic. The subject land is located within a City Centre. The State Government's strategic direction for the Perth Metropolitan Area is to provide more residential dwellings within City Centres and areas that are well serviced. The proposed development is consistent with the State Government's Strategic direction.

	<ul style="list-style-type: none"> • <i>The proposal will create a precedent for the remaining vacant lots along Tottenham Road.</i> • <i>Noise issues from car stackers</i> • <i>Proposed scale is based purely on profit and does not take into account the effect on future residents.</i> 	<ul style="list-style-type: none"> • In light of the above, the objectors comments is out of context, fails to recognise the strategic planning direction of the State Government and should be dismissed. • The planning framework has changed since the initial development of the Joondalup City Centre. This has resulted in a higher maximum building height and the introduction of a minimum building height. Given this, there will be large differences in building height expected. In short, the City is anticipating taller buildings within this part of the Joondalup City Centre. • The proposed development (including the car stackers) are required to comply with the relevant legislation in regard to noise generation. Furthermore, the car stackers are within the basement area, with concrete walls, which would block the transfer of noise. • The economic return of the development to the landowner is not a planning matter. Furthermore, the comment is unsubstantiated and fails to recognise the current planning framework. <p>In light of the above, the comments are speculative, unsubstantiated and should be dismissed.</p>
<p>Construction</p>	<ul style="list-style-type: none"> • <i>Concerns regarding construction noise and dust.</i> 	<ul style="list-style-type: none"> • This issue regarding construction noise and dust is address under different legislation and would be reviewed by the City's Environmental Health officers. Given this, the concerns raised are not planning matters. • The City is likely to require a construction management plan for the construction phase of the development which will address these issues. <p>In light of the above, the comment is not relevant and should be dismissed.</p>
<p>Waste management</p>	<ul style="list-style-type: none"> • <i>Existing verge does not provide adequate space for waste collection.</i> 	<ul style="list-style-type: none"> • Comment noted. • A waste management plan has been prepared in support of the application and proposes an on-site pick up service in accordance with the City's requirements. <p>In light of the above, the comment should be dismissed.</p>

Environmentally Sustainable Design – Checklist

Under the City's planning policy, *Environmentally Sustainable Design in the City of Joondalup*, the City encourages the integration of environmentally sustainable design principles into the construction of all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

Environmentally sustainable design is an approach that considers each building project from a 'whole-of-life' perspective, from the initial planning to eventual decommissioning. There are five fundamental principles of environmentally sustainable design, including: siting and structure design efficiency; energy efficiency; water efficiency; materials efficiency; and indoor air quality enhancement.

For detailed information on each of the items below, please refer to the *Your Home Technical Manual* at: www.yourhome.gov.au, and *Energy Smart Homes* at: www.clean.energy.wa.gov.au.

This checklist must be submitted with the planning application for all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

The City will seek to prioritise the assessment of your planning application and the associated building application if you can demonstrate that the development has been designed and assessed against a national recognised rating tool.

Please tick the boxes below that are applicable to your development.

Siting and structure design efficiency

Environmentally sustainable design seeks to affect siting and structure design efficiency through site selection, and passive solar design.

Does your development retain:

- existing vegetation; and/or
- natural landforms and topography

Does your development include:

- northerly orientation of daytime living/working areas with large windows, and minimal windows to the east and west
- passive shading of glass
- sufficient thermal mass in building materials for storing heat
- insulation and draught sealing
- floor plan zoning based on water and heating needs and the supply of hot water; and/or
- advanced glazing solutions

Energy efficiency

Environmentally sustainable design aims to reduce energy use through energy efficiency measures that can include the use of renewable energy and low energy technologies.

Do you intend to incorporate into your development:

- renewable energy technologies (e.g. photo-voltaic cells, wind generator system, etc); and/or
- low energy technologies (e.g. energy efficient lighting, energy efficient heating and cooling, etc); and/or
- natural and/or fan forced ventilation

Water efficiency

Environmentally sustainable design aims to reduce water use through effective water conservation measures and water recycling. This can include stormwater management, water reuse, rainwater tanks, and water efficient technologies.

Does your development include:

- water reuse system(s) (e.g. greywater reuse system); and/or
- rainwater tank(s)

Do you intend to incorporate into your development:

- water efficient technologies (e.g. dual-flush toilets, water efficient showerheads, etc)

Materials efficiency

Environmentally sustainable design aims to use materials efficiently in the construction of a building. Consideration is given to the lifecycle of materials and the processes adopted to extract, process and transport them to the site. Wherever possible, materials should be locally sourced and reused on-site.

Does your development make use of:

- recycled materials (e.g. recycled timber, recycled metal, etc)
- rapidly renewable materials (e.g. bamboo, cork, linoleum, etc); and/or
- recyclable materials (e.g. timber, glass, cork, etc)
- natural/living materials such as roof gardens and "green" or planted walls

Indoor air quality enhancement

Environmentally sustainable design aims to enhance the quality of air in buildings, by reducing volatile organic compounds (VOCs) and other air impurities such as microbial contaminants.

Do you intend to incorporate into your development:

- low-VOC products (e.g. paints, adhesives, carpet, etc)

'Green' Rating

Has your proposed development been designed and assessed against a nationally recognised "green" rating tool?

- Yes
- No

If yes, please indicate which tool was used and what rating your building will achieve:

If yes, please attach appropriate documentation to demonstrate this assessment.

If you have not incorporated or do not intend to incorporate any of the principles of environmentally sustainable design into your development, can you tell us why:

ONCE WE HAVE RECEIVED DEVELOPMENT APPROVAL WE WILL
ENGAGE AN ENERGY ASSESSOR TO DO AN ENERGY REPORT SO
THAT WE COMPLY WITH THE RELEVANT BCA AND ALL OTHER
STANDARDS.

Is there anything else you wish to tell us about how you will be incorporating the principles of environmentally sustainable design into your development:

- WE HAVE INCORPORATED BALCONIES ON THE EAST & WEST OF THE DEVELOPMENT WHICH SHADE THE LIVING AREAS & HABITABLE ROOMS, WE HAVE AWNINGS OVER WINDOWS WHICH DON'T HAVE COVER.
- CROSS FLOW OF NATURAL AIR WHEN THE WINDOWS ARE OPEN.

When you have checked off your checklist, sign below to verify you have included all the information necessary to determine your application.

Thank you for completing this checklist to ensure your application is processed as quickly as possible.

Applicant's Full Name: ANTHONY MICHAEL Contact Number: 0412 453438

Applicant's Signature:  Date Submitted: 04/10/2021

Accepting Officer's Signature: _____

Checklist Issued: March 2011



City of Joondalup Record: DOCUMENT REGISTRATION
 INW REF: INW/16/14894
 CONTAINER: 70560
 DATE RECEIVED: 26-07-2016
 RESPONSIBILITY: Planning Approvals Inwards Mail
 ACTION: ASSIGNED - No Written response. Must record action
 NOTES: ORIG TO P/APPROVALS L/PLANS

AS 3959 Bushfire Attack Level (BAL)

Assessment Report

This report has been prepared by a representative from Structerre Consulting Engineers using the Simplified Procedure (Method 1) as detailed in Section 2 of AS 3959 – 2009 (Incorporating Amendment No 1, 2 and 3) All enquiries related to information and conclusion presented in this report must be forwarded to the representative whose details appear below.

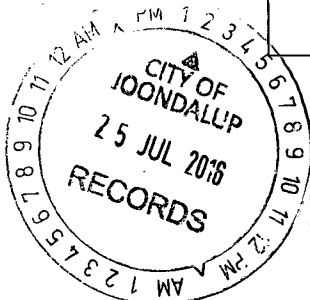
Client details	
Client	WA BUILDING SURVEYORS
Number	

Site Details			
Address	# 11 TOTTENHAM RD		
Suburb	JOONDALUP	State	WA
Local Government	CITY OF JOONDALUP		
Building Type	CLASS 1A		

Report Details	
Job Number	S803311
Assessment Date	22 June 2016
Report Date/Version	24 June 2016 V1

Structerre Consulting Engineers Representative	
Name	Roddy Cameron
Employee Title	Site Section Assistant Manager
Signature	
Accreditation No:	BPAD37279
Accreditation Expiry Date:	April 2017

WA BUILDING SURVEYORS PTY LTD	
DATE:	WABS REF No:
19/07/2016	15/133
<small>This plan is issued as part of the Certificate Of Design Compliance subject to compliance with the WA Building Act 2011 and the WA Building Regulations 2012.</small>	




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 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Structerre Consulting Engineers

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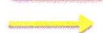



	WA BUILDING SURVEYORS PTY LTD
DATE:	WABS REF No:
19/07/2016	15/133
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1.0 SITE ASSESSMENT & SITE PLANS

The assessment of this site / development was undertaken on 22/6/2016 for the purpose of determining the Bushfire Attack Level (BAL) in accordance with AS 3959 – 2009 Simplified Procedure (Method 1).



Key

-  150m Wide buffer
-  Vegetation extents
-  Distance to vegetation
-  Photo location and direction
-  North direction
-  Proposed building

 WA BUILDING SURVEYORS PTY LTD

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The image seen above was acquired from <http://www.nearmaps.com>. The photo was taken on 23/4/2016. Please note that minor changes may have occurred to the area since the image was taken. The BAL rating is a reflection of the site / proposed development current condition at the time of our assessment/site visit.

Note: The 150m radius depicted on the site plan is used to identify any classifiable vegetation from the centroid of the proposed building envelope. Any vegetation greater than 100m from the proposed building envelope is excluded from classification as per AS-3959.

2.0 VEGETATION CLASSIFICATION

All vegetation within 100m of the site/proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation area with the potential to determine the bushfire level is identified below.



3.0 RELEVANT FIRE DANGER INDEX

The fire danger index for this site has been determined in accordance with Table 2.1 or otherwise determined in accordance with jurisdictional variation applicable to the site.

FDI 40 <input type="checkbox"/> Table 2.4.5	FDI 60 <input type="checkbox"/> Table 2.4.4	FDI 80 <input checked="" type="checkbox"/> Table 2.4.3	FDI 100 <input type="checkbox"/> Table 2.4.2
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4.0 POTENTIAL BUSHFIRE IMPACTS

The potential bushfire impact to the site / proposed development from each of the identified vegetation areas are identified below.

Plot	Vegetation Classification	Effective slope	Separation	Exclusions	BAL
1	Class D - Scrub	Downslope 2°	39m	-	12.5
2	Class D - Scrub	Downslope 1°	42m	-	12.5


Exclusions apply to AS3959-2009 pg15 sections 2.2.3.2

5.0 DETERMINED BUSHFIRE ATTACK LEVEL (BAL)

The Determined Bushfire Attack level (highest BAL) for the site / proposed development has been determined in accordance with clause 2.2.6 of AS 3959-2009 using the above analysis.

Determined Bushfire Attack Level	BAL – 12.5
----------------------------------	-------------------

Please note the Bushfire Attack Level has been assigned based on the vegetation within 100m of the site at the time of the assessment. Modification of the surrounding vegetation may occur due to the further development and/or parkland clearing to be maintained as Low Threat Vegetation, this will result in a lower Bushfire Attack Level. Please contact this office for a reassessment if any modification of vegetation takes place.


WA BUILDING SURVEYORS PTY LTD
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6.0 EXPLANATORY NOTES

A bushfire attack level (BAL) Assessment is a means of measuring the severity of a buildings potential exposure to ember attack, radiant heat and direct flame contact in a bushfire event, and thereby determining the construction measures required for the dwelling.

The methodology used for the determination of the BAL rating, and the subsequent building construction standards, are directly referenced from the Australian Standard AS3959-2009 construction of buildings in bushfire prone areas.

The BAL rating is determined through identification and assessment of the following parameters


- Fire Danger index (FDI) Rating; assumed to be FDI-80 for WA;
- All classified vegetation **within 100m** of the subject building;
- Separation distance between the building and the classified vegetation source/s; and
- Slope of the land under the classified vegetation.

AS3959-2009 has six (6) levels of BAL, based on the radiant heat flux exposure to the building, and also identifies the relevant sections for building construction; this is shown in the table below.

Bushfire Attack Level (BAL)	Classified vegetation within 100m of the site and heat flux exposure thresholds	Description of predicted bushfire attack and levels of exposure	Construction Sections (within AS 3959-2009)
BAL-LOW	See clause 2.2.3.2	There is insufficient risk to warrant specific construction requirements.	4
BAL-12.5	$\leq 12.5\text{kW/m}^2$	Ember attack.	3 & 5
BAL-19	$\geq 12.5\text{kW m}^2$ to $\leq 19\text{kW m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux.	3 & 6
BAL-29	$\geq 19\text{kW m}^2$ to $\leq 29\text{kW m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux.	3 & 7
BAL-40	$\geq 29\text{kW m}^2$ to $\leq 40\text{kW m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with the increased likelihood of exposure to flames.	3 & 8
BAL-FZ	$> 40\text{kW m}^2$	Direct exposure to flames from fire front in addition to heat flux and ember attack.	3 & 9

Reference: AS 3959 Construction of buildings in bushfire-prone areas Table 3.1

This report is valid for a period of 12 months from the date of issue.

 WA BUILDING SURVEYORS PTY LTD	
DATE:	WABS REF No:
19/07/2016	15/133
This plan is issued as part of the Certificate Of Design Compliance subject to compliance with the WA Building Act 2011 and the WA Building Regulations 2012.	

APPENDIX A: PROPOSED SITE PLAN

Whilst AS 3959 sets out to improve the performance of buildings when subjected to bushfire attack in a designated bushfire-prone area, it does not guarantee that a building will survive a bushfire event on every occasion.

This assessment has been conducted in conjunction with the site plans provided by the client (reference 14-1830 dated 11/7/2014) as provided in Appendix A, and is limited to the surrounding environment within 100m of the proposed building at the time of the assessment only.

