

Traffic Impact Assessment

Proposed townhouses at 83-85 Canberra Street, Oxley Park, NSW



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December 2021

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Appendix A Site & Floor Plans

Appendix B Swept Path Diagrams

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	Name	Signature	Date
Approved by:	Abdun Noor		December 2021

1. Introduction

This report has been prepared for Penrith City Council in support of a proposed townhouse development application at 83-85 Canberra Street, Oxley Park, NSW. The purpose of this study is to assess the parking and access requirements of the site and determine the impacts of the proposed development on the surrounding road network. This report will focus on the traffic generation and the potential impacts of the additional traffic associated with the proposed development on the existing road network and the suitability of the proposed parking on site, both in terms of the number of spaces and the layout of the parking areas and access requirements to the parking area.

2. Locality map

The following plan in Figure-1 shows the location of the proposed development in the context of the surrounding road network.



Figure-1: Locality Plan

3. Scope of works

The scope of this report is outlined below:

- Assessment of the existing traffic and parking environment.
- Assessment of the traffic generation of the proposed town houses and its impact on surrounding street network.
- Assessment of the parking requirements of the proposed development in accordance with Council's Development Control Plan.
- Assessment of the public transport and alternative transport accessibility of the site.
- Assessment of the access requirements of the site in accordance with AS2890.1.
- Assessment of the layout and design of the proposed parking facility and access driveway in accordance with AS2890.1 and AS2890.6 where applicable.
- Sustainable transport Initiatives.

This report should be read in conjunction with the architectural plans, reduced copies of which are contained within **Appendix A**.

4. Proposed development scheme

4.1 Site context and existing use

The development site (Figure 2) located at 80-85 Canberra Street, Oxley Park, and occupies two rectangular-shaped allotment. The site has frontage to Canberra Street, and 2 older style residential dwellings currently occupy the site.

The surrounding land uses comprise a mix of old and recently completed residential developments.

4.2 Proposed development

The proposed development scheme involves the demolition of existing buildings on the site and minor earthworks to construct 12 small lot residential townhouses.

It is proposed to demolish the existing buildings and outbuildings on the site, undertake minor earthworks to provide a level building platform, and construct a residential complex of 12 townhouses, ranges between 3-4 bedrooms.

Vehicle access will involve a shared driveway off Canberra Street. Each townhouse will have 2 car parking spaces provided for its residents in the form of a tandem garage as shown in the plans in **Appendix A**.

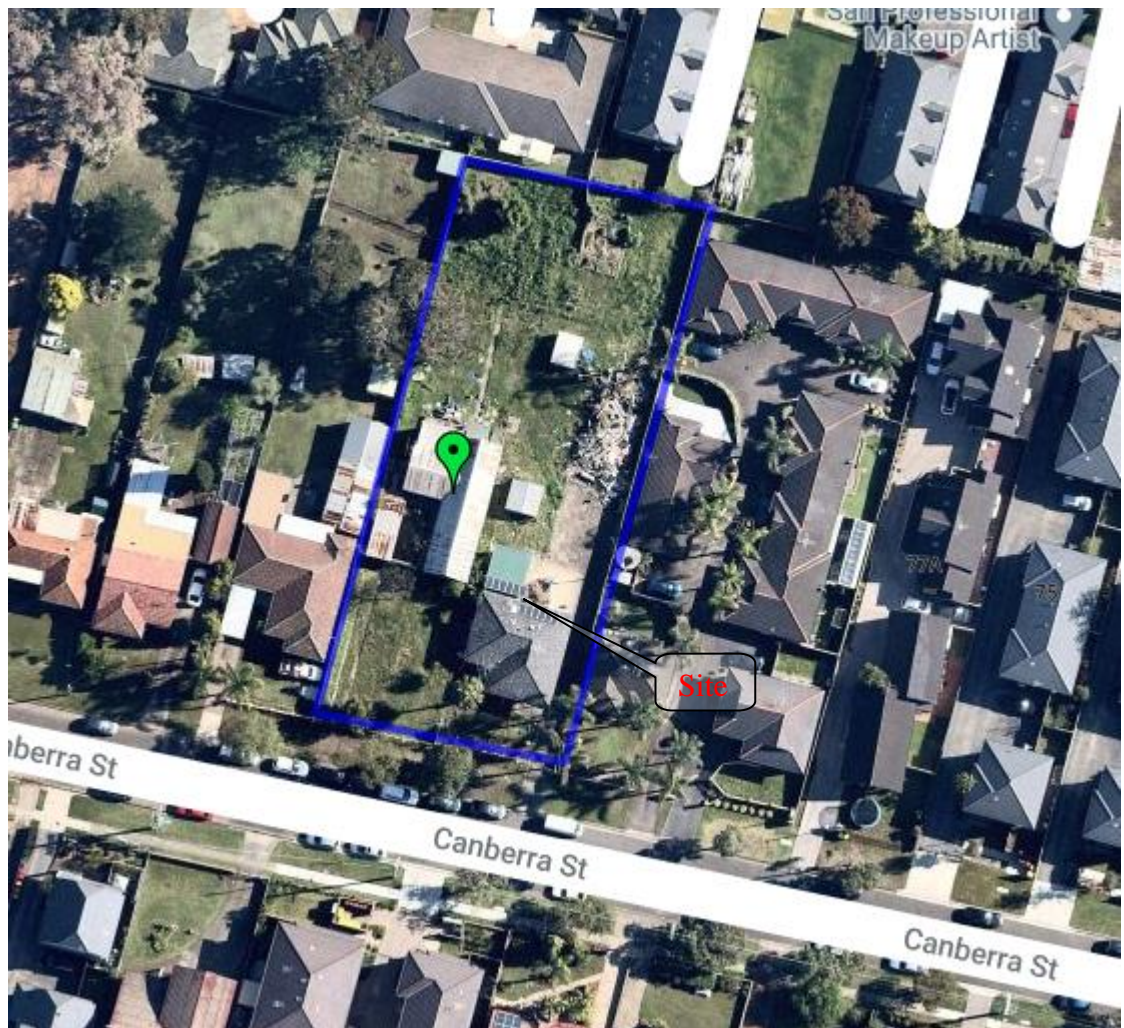


Figure-2: Site

5. Existing roads and traffic environment

5.1 Existing Traffic Controls

Canberra Street is a two-lane tow-way road providing access to the properties along the Street. Canberra Street has a carriageway width of approximately 10.0m. Parking is allowed on both sides of the road. The proposed development site is located at approximately 130m to the west from the corner of the x-intersection of Canberra Street and Perth Street. To the West Canberra Street connects with Sydney Street at a single lane roundabout. Sydney Street runs in the north-south direction and meet with Great Western Highway in the south at a signalised intersection.

The speed limit in the area is the default 50km/hr.

5.2 Existing Trip Generation

The existing uses of the sites are residential dwelling houses.

The former RTA's "Guide to Traffic Generating Developments -2002" has been used to calculate the trip generation of the existing developments at the sites as shown in Table-1 and 2 below.

Table-1: Trip Generation Rate

Use	Rates	
	Daily	Peak hour
Dwelling Houses	9/dwelling	0.85/dwelling

Table-2: Existing Site Trip Generation

Use	Number	Trip Generation	
		Daily	Peak hour
Dwelling houses	2	9x2= 18 trips	0.85x2=1.7 trips
Total		18 trips	2 trips

5.3 Development trip generation

The proposed development is a medium density housing development comprised of 12 town houses.

Trip generation for the proposed development has been calculated below using the trip generation rate extracted from former RTA's "Guide to Traffic Generating Developments -2002" a recognised reference documents for this purpose.

Land Use	Traffic generation rates	
	Daily Vehicle Trips	Peak Hour Vehicle Trips
Medium density residential flat building	4-5 / dwelling	0.4-0.5 / dwelling (Up to 2 bedrooms)
	5-6.5 / dwelling	0.5-0.65 / dwelling (3 bedrooms or more)

Based on the model above the trip generation for the proposed town house development has been calculated as below:

Table-3: Trip Generation

Use	Floor area/units	Peak Hour Generation	
		Daily	Peak Hour
Town Houses	12 Town houses	$6.5 \times 12 = 78$	$0.5 \times 12 = 6$
Total		78 trips	6 trips

5.4 Net trip generation

Due to the proposed change of use a maximum net increase of trips from the site would be $(6-2 = 4)$ 4 vehicular movements combined in and out in the peak hour.

5.5 Development impact

The midblock capacity of an urban road and its relation with the level of service has been identified in Table 4.4 of former RTA's "*Guide to Traffic Generating Developments -2002*" and stipulated below:

Table-3: Urban road peak hour flows per direction

Level of Service	One Lane (veh/hr)	Two Lane (veh/hr)
A	200	900
B	380	1400
C	600	1800
D	900	2200
E	1400	2800

Source: Table 4.4: RTA's "*Guide to Traffic Generating Developments -2002*"

The proposed development has been projected to generate in the order of 4 additional peak hour vehicle trips to and from the development site. Such level of traffic represents one additional vehicle movement every 15 or so minutes during peak hours within Canberra Street and throughout the surrounding road network. This level of additional traffic is not expected to have any significant impacts on the overall operation of the surrounding road network.

The abovementioned extent of additional traffic is unlikely to have an adverse impact on the capacity of Canberra Street, Melbourne Street and Sydney Street.

Therefore, the estimated additional trips due to the proposed development can readily be accommodated within the surrounding street network, without any adverse impact on the capacity and level of service of Canberra Street, Melbourne Street and Sydney Street.

Furthermore, the daily increase in traffic within Canberra Street, Melbourne Street and Sydney Street due to the proposed development is unlikely to exceed the environmental capacity of these streets.

6. Parking

6.1 DCP parking requirement

Parking requirements relevant to the proposed development can be found in Penrith Development Control Plan 2014, Part C, Section 10. Following parking rates have been extracted from Penrith DCP that is relevant to the proposed uses of the site:

Multi Dwelling Housing	<p>On-site resident parking for each dwelling:</p> <p>1 car space per 1 bedroom</p> <p>1.5 car spaces per 2 bedrooms or part thereof</p> <p>2 car spaces per 3 or more bedrooms</p> <p>In addition, visitor parking is to be provided for developments that have 5 or more dwellings: 1 space for every 5 dwellings (or part thereof)</p>
------------------------	---

The proposed development is classified as multi dwelling housing. Therefore, the parking requirements of the proposed development, in accordance with Council's Development Control Plan are shown in Table 4.

Table-4: DCP off-street parking requirements for the proposed townhouses

	Number	DCP Rate	Required Parking
Multi dwellings	12	2 space per dwelling	12x2 = 24 spaces
Visitor	12	1 space per 5 dwellings	12/5 = 2.4 =3 spaces
	Total		27 spaces

6.2 Proposed parking provision

A total of 28 off-street parking spaces have been proposed for the development. This includes 12 tandem garages for townhouses and 4 visitor parking spaces as shown in the plans in **Appendix A**. The proposed parking provisions exceed the parking requirements of Council's Development Control Plan.

7. Public transport accessibility of the site

New South Wales Government released a fact sheet in May 2011, where it states the requirements for a development site to be considered as public transport accessible. For the purpose of this study the fact sheet has been used to assess the public transport accessibility of the site at 83-85 Canberra Street, Oxley Park.

Following are the requirements for a site to be within accessible area as stipulated in the; Fact Sheet; May 2011:

Accessibility requirements:

(a) Sydney Region

- Within 800m walking distance of a railway station or a Sydney Ferries wharf;
- Within 400m walking distance of a light rail station;

Or

- Within 400m walking distance of a bus stop used regularly between 6am and 9pm Monday to Friday, and 8am to 6pm weekends.

The following plan in Figure- 2 indicates the available public transport within 400m radius of the development site.



Figure-2: Public transport within 400m radius

The nearest bus stop is located on Adelaide Street is approximately 100m walking distance from the site. Bus route S11 runs between St Marys and St Clair via Adelaide Street.

The following table shows the summary of availability of bus services at this bus stop are extracted from the time-tables for the route:

TABLE: Bus Service Availability

Bus Route	Walking Distance	Availability
Route S11	100m	7:00am-8:15pm
Route 774	400m	6:00am-8:15pm
Route 835	500m	6:00am-9:15pm

Following has been extracted from ‘Walkscore’ website associated with the development site:

Following has been extracted from 'Walkscore' website associated with the development site:

Transit Score
38 **Some Transit** [Add to your site](#)

83 Canberra Street has some transit which means a few nearby public transportation options.

Rail lines:

T1 Western Line	1.8 km
-----------------	--------

Bus lines:

S11 St Marys to St Marys via...	0.1 km	774 Penrith to Mt Druitt via ...	0.1 km
835 Prairiewood to UWS Pe...	0.5 km		

[Less ▲](#)

From the above discussion it is clear that the proposed development site is well within the reach of the available public transport in the area.

7.1 Sustainable transport initiatives

Local Governments in New South Wales have set a strategic goal of increasing sustainable transport in the local area and for the journey to work. Sustainable transport includes walking, cycling, **the use of public transport** and car sharing initiatives. Sustainable transport aims to reduce car trips and hence decrease congestion, save time and money and reduce the environmental impact of transport. Penrith LGA is well connected by train, bus, road and cycle networks. New developments can provide opportunities to support and encourage the use of sustainable transport by providing car share parking,

developing travel plans, providing bicycle parking and end of trip facilities and other initiatives.

In adhering to the above strategy, the following sustainable transport initiatives could be considered implementing as part of the proposed development.

7.2 Education and information:

The provision of information is an effective way to allow people to make informed decisions about their transport choices and understand the impacts of their choices. Understanding transport services and travel choices is a key element for a well-designed public transport system. Information can be in a wide variety of formats including websites, posters, hotlines and flyers. Trip planner in Transport for NSW website, should be promoted as a good source of information about the most convenient way to undertake trips.

7.3 Walking and Cycling:

A car parking demand assessment should also consider the likely generation of active transport to the venue.

We have utilised the ‘WalkScore’ website tool to ascertain the likelihood of Active Travel to the development site from surrounding areas. The WalkScore website provides a ‘walkability’ assessment of a locality taking various factors which promote walking, specifically pedestrian generating developments and associated infrastructure, into account when providing that score.

Walkability Rating

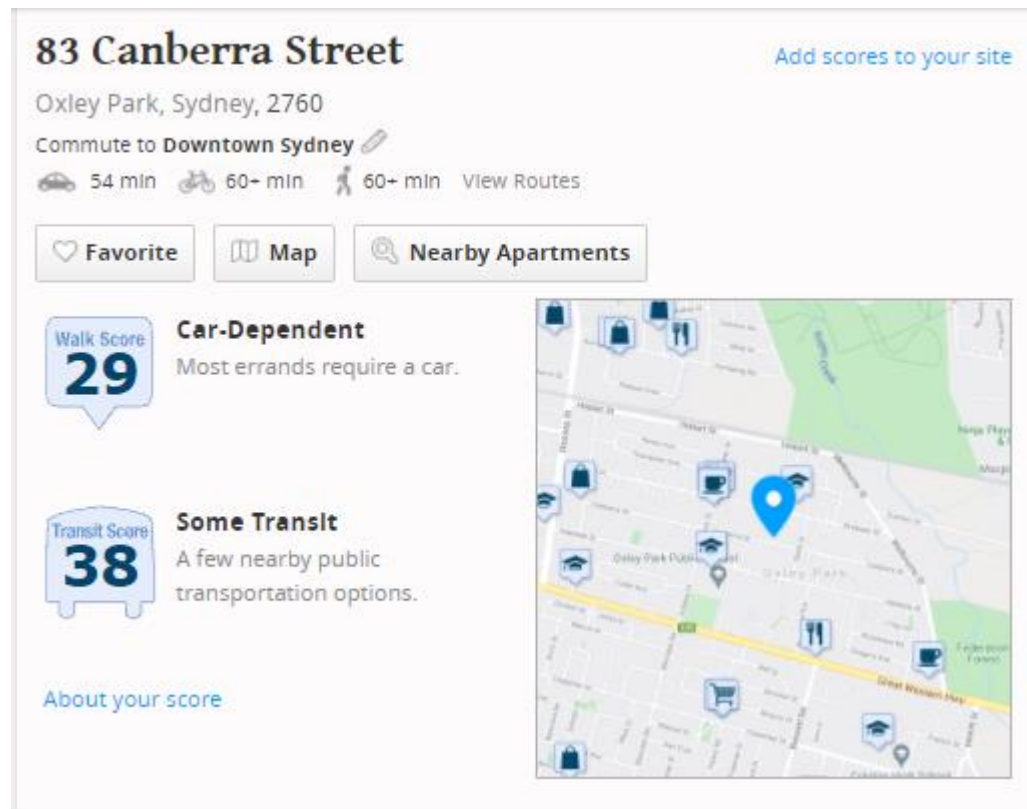


Figure: Walkability Rating

83 Canberra Street has a Walk Score of 29 out of 100. This location is a Car-Dependent neighborhood so most errands require a car. The following images are taken directly from the WalkScore site:

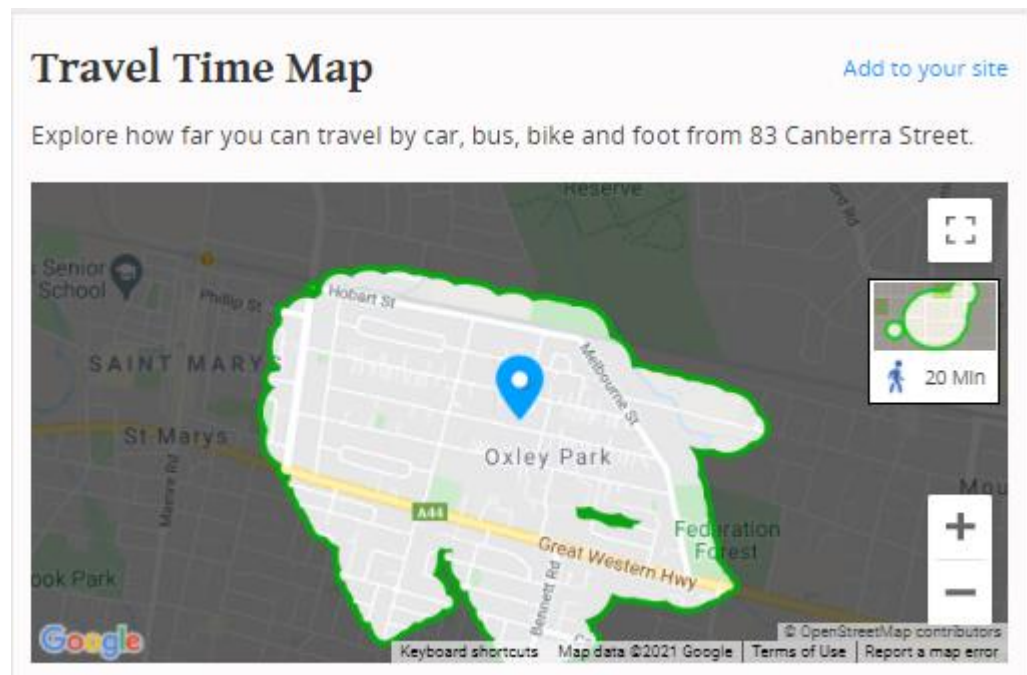


Figure: Walking Map (20 Minutes Radius)

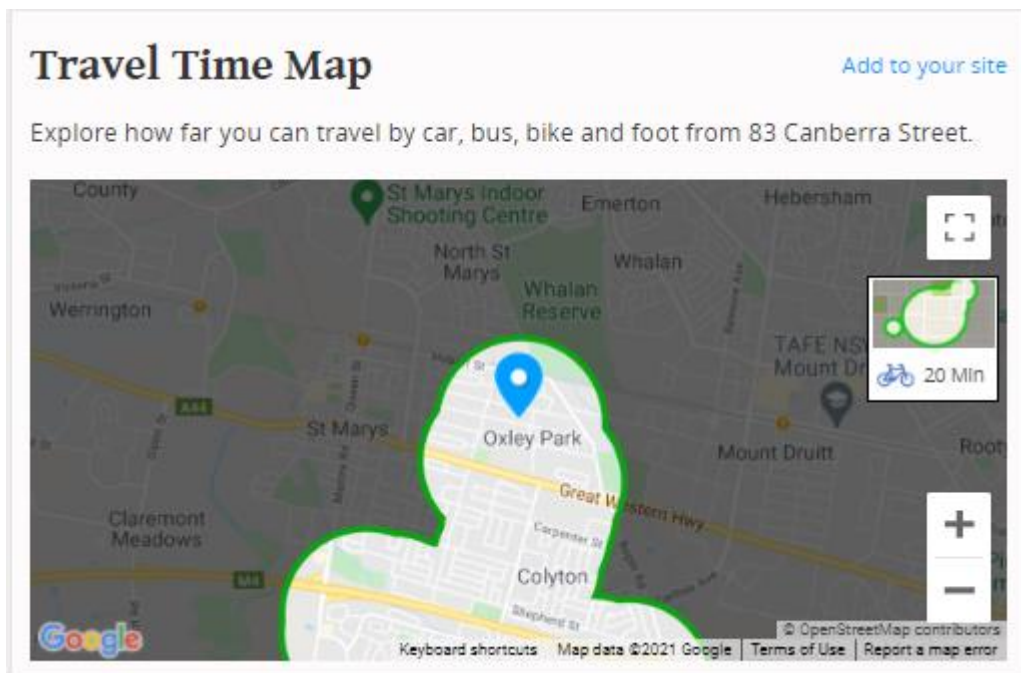


Figure: Bicycle Map (20 Minutes Radius)

From the above discussion it is clear that the proposed development site is well connected by available pedestrian and bicycle network in the area.

8. Assessment of parking layout and access

An assessment of the access-way and the proposed car parking layout has been undertaken in accordance with Australian standard AS2890.1:2004-off street parking facility. A new 6.5m wide shared driveway has been proposed off Canberra Street for vehicular access to the proposed garages for townhouses as shown in the plans in **Appendix A**.

8.1 Accessway Width

The user Class of the proposed parking facility as part of the proposed development is determined to be user class 1A from the Table 1.1 of AS/NZS 2890.1.200 as shown below.

TABLE 1.1
CLASSIFICATION OF OFF-STREET CAR PARKING FACILITIES

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospital and medical centres
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit	Short term, high turnover parking at shopping centres
4	Size requirements are specified in AS/NZS 2890.6 (Note 2)		Parking for people with disabilities

Canberra Street is a local road, and a total of 28 off-street parking spaces have been proposed to gain access via the shared access. Based on the user Class of the proposed parking facility, type of frontage road and number of parking spaces proposed, the access facility category of the proposed driveway is determined from table 3.1 of AS/NZS 2890.1.2004 as shown below. The category of the proposed driveway is determined to be Category 1 in accordance with Table 3.1 below:

TABLE 3.1
SELECTION OF ACCESS FACILITY CATEGORY

Class of parking facility (see Table 1.1)	Frontage road type	Access facility category				
		Number of parking spaces (Note 1)				
		<25	25 to 100	101 to 300	301 to 600	>600
1.1A	Arterial	1	2	3	4	5
	Local	1	1	2	3	4
2	Arterial	2	2	3	4	5
	Local	1	2	3	4	4
3.3A	Arterial	2	3	4	4	5
	Local	1	2	3	4	4

Therefore, the minimum combined (entry and exit) width requirement for the driveway of the proposed parking facility is 3.0-5.5m as shown below in the table 3.2 of AS/NZS 2890.1.2004.

TABLE 3.2
ACCESS DRIVEWAY WIDTHS

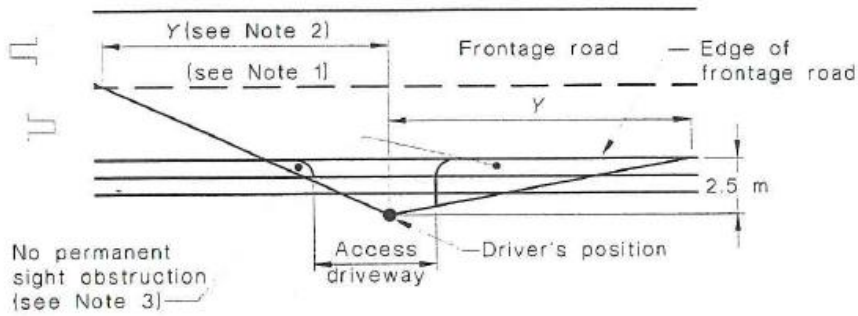
metres			
Category	Entry width	Exit width	Separation of driveways
1	3.0 to 5.5	(Combined) (see Note)	N/A
2	6.0 to 9.0	(Combined) (see Note)	N/A
3	6.0	4.0 to 6.0	1 to 3
4	6.0 to 8.0	6.0 to 8.0	1 to 3
5	To be provided as an intersection, not an access driveway, see Clause 3.1.1.		

NOTE: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0 m min.

Therefore, the proposed 6.5m width of the shared driveway meets the requirement for this class of parking facility as per Australian Standard AS2890.1:2004.

8.2 Vehicular Sight Lines

Canberra Street is a local road in an urbanised area. Default speed limit of 50km/h would apply at the frontage of the proposed development site. The minimum sight distance requirement at a driveway with a frontage road of 50km/h speed limit can be determined from figure 3.2 of AS/NZS 2890.1.2004 below. From figure 3.2 below the sight distance requirement at the proposed combined entry/exit driveway is 45m minimum and 69m desirable.



Frontage road speed (Note 4) km/h	Distance (Y) along frontage road m		
	Access driveways other than domestic (Note 5)		Domestic property access (Note 6)
	Desirable 5 s gap	Minimum SSD	
40	55	35	30
50	69	45	40
60	83	65	55
70	97	85	70
80	111	105	95
90	125	130	Use values from 2 nd and 3 rd columns
100	139	160	
110	153	190	

FIGURE 3.2 SIGHT DISTANCE REQUIREMENTS AT ACCESS DRIVEWAYS

The proposed development is located at a straight section of Canberra Street. Approximately 100m of sightline is available in both directions at the proposed location of the driveway. Therefore, the available sight distances at the proposed driveway meet the minimum requirements AS/NZS2890.1.2004.

8.3 Pedestrian Sight Lines

An assessment of minimum sight lines for pedestrian safety at the proposed driveway has been undertaken in accordance with Figure 3.3 of AS2890.1 below and referring to the site plan. The assessment indicated no obstruction to pedestrian sightlines.

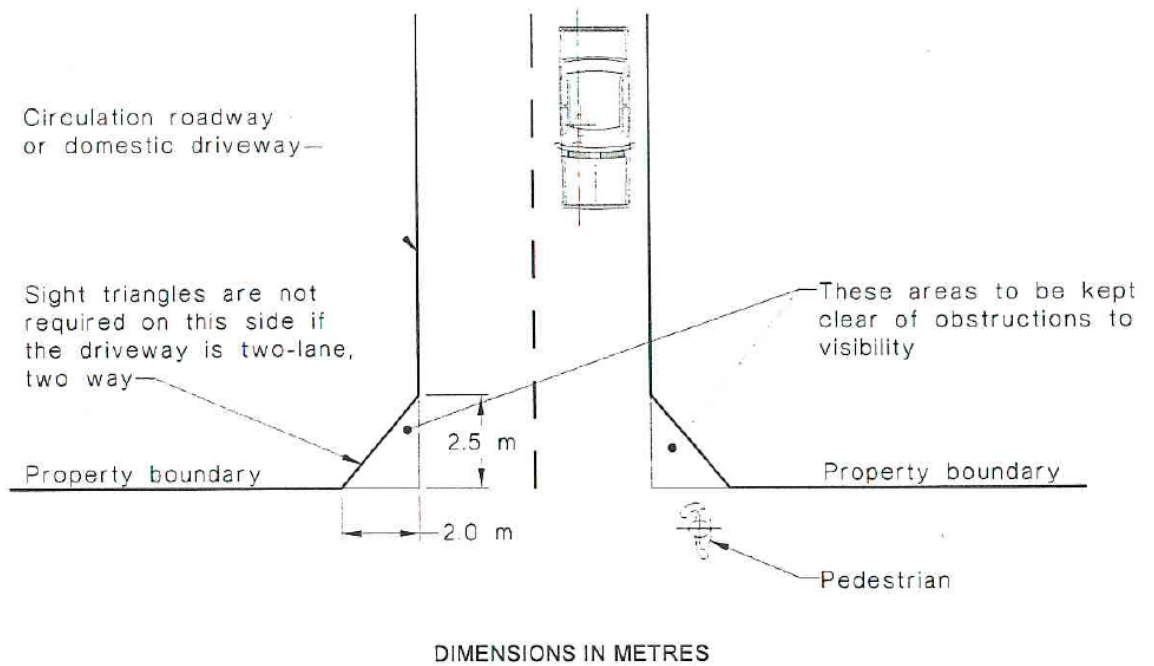
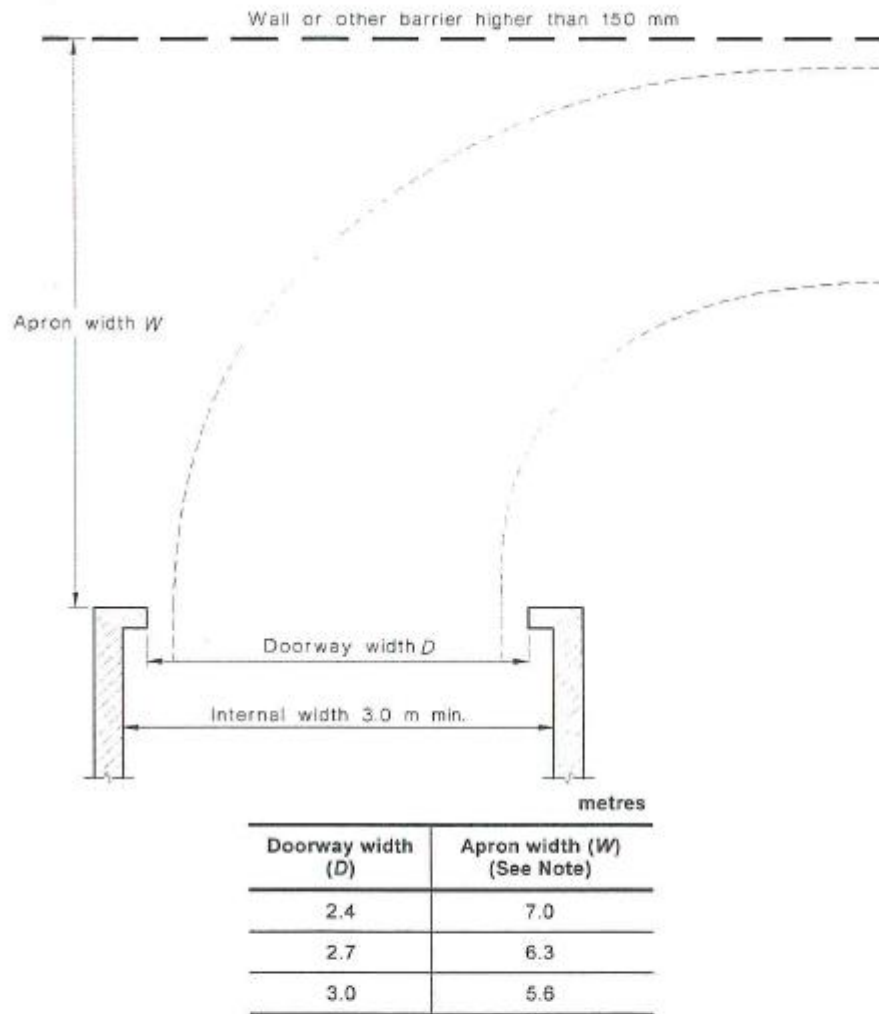


FIGURE 3.3 MINIMUM SIGHT LINES FOR PEDESTRIAN SAFETY

8.4 Dimensions

Dimensions of the proposed garages and aisle width have been shown in the plans in Appendix A. The proposed garage spaces have been assessed against clause 5.4 and Figure: 5.4 of AS2890.1:2004.



NOTE: Vehicles larger than the B85 vehicle (see Appendix B) may need to make a 3-point turn at the apron widths shown. The apron width may be reduced by 0.3 m where the edge opposite the doorway is a kerb 150 mm or less in height with a clearance of at least 0.3 m behind the kerb.

FIGURE 5.4 APRON WIDTHS FOR RIGHT ANGLE ACCESS TO SINGLE VEHICLE GARAGES

The following table shows the assessed dimensions of the proposed garages:

Component	Minimum Standard Dimension(m)	Dimension provided(m)	Compliance/ Comments
Width single garage	3.0	3.1	Compliant
Doorway width single garage	2.4	2.6	Compliant
Length	5.5	11.3	Compliant
Apron width	5.8	6.9	Compliant

The garage spaces comply with the requirement of Australian Standard AS2890.1:2004. The apron width opposite the parking spaces has been proposed to be of minimum 6.0m which is in excess of the Australian Standard requirement.

8.5 Manoeuvring

The proposed parking layout fully complies with the aisle width and space dimensions requirement of Australian Standards AS2890.1:2004, therefore meet the standard minimum manoeuvring requirements. Swept paths diagram for critical movements have been shown in **Appendix B**.

8.6 Driveway Grades

Section 3.3 of AS/NZS 2890.1.2004 stipulates the gradient requirement at or near the access driveway as follows:

3.3 GRADIENTS OF ACCESS DRIVEWAYS

At entry and exit points, the access driveway should be graded to minimize problems associated with crossing the footpath and entering the traffic in the frontage road.

Maximum gradients on and near access driveways, other than at domestic properties (see Clause 2.6), shall be as follows:

- (a) *Property line/building alignment/pedestrian path*—max. 1 in 20 (5%) between edge of frontage road and the property line, building alignment or pedestrian path (except as provided in Item (d)), and for at least the first 6 m into the car park (except as provided below).

The grade of the first 6 m into the car park may be increased to 1 in 8 (12.5%) under the following conditions:

- (i) The grade is a downgrade for traffic leaving the property and entering the frontage road.
- (ii) The user class is Class 1, 1A or 2 only.
- (iii) The maximum car park size is—
 - (1) for entry into an arterial road—25 car spaces, or
 - (2) for entry onto a local road—100 car spaces.

The maximum grade across the property line shall remain at 1 in 20 (5%).

The proposed gradient at the driveway between the edge of the frontage road and the property line should be maximum 1:20. The plan in Appendix A shows that the driveway for the six (6) metres within the property boundary has a gradient of 5%.

Therefore, the proposed driveway grades, as shown in the plan in **Appendix A**, should comply with Australian Standards AS2890.1:2004.

9. Conclusion

The proposed townhouse development at 83-85 Canberra Street, Oxley Park, NSW has been assessed in terms of, trip generation and its impact on the public street network, off-street parking demand and supply, design of the proposed parking layout; access driveway and traffic circulation within site. The following conclusions are made:

1. The proposed development will have minimal impact on the traffic capacity of Canberra Street, Melbourne Street and Sydney Street and the surrounding street network in the area.
2. The proposed provisions for car parking satisfy the requirements of Councils Development Control Plan.
3. The proposed parking layout complies with the Australian Standard in terms of space dimensions, aisle width, and manoeuvring requirements of Australian Standard AS2890.1:2004.
4. The proposed driveway location meets the sight distance requirements of Australian Standard AS2890.1:2004 both for vehicles and pedestrians.
5. The proposed grades of the driveway meet the requirements of Australian Standard AS2890.1:2004.
6. The proposed widths of the driveway meet the requirements of Australian Standard AS2890.1:2004.
7. Minimal traffic impact on the amenity of the surrounding development has been anticipated.
8. Manoeuvring and circulation within the site can be accommodated with minimal safety concerns.
9. The development site is accessible by the available public transport in the area.

Based on the findings of this report, the proposed townhouse development at 83-85 Canberra Street, Oxley Park, NSW could be supported given that the development will have minimal impact on the existing traffic and parking environment in the area.

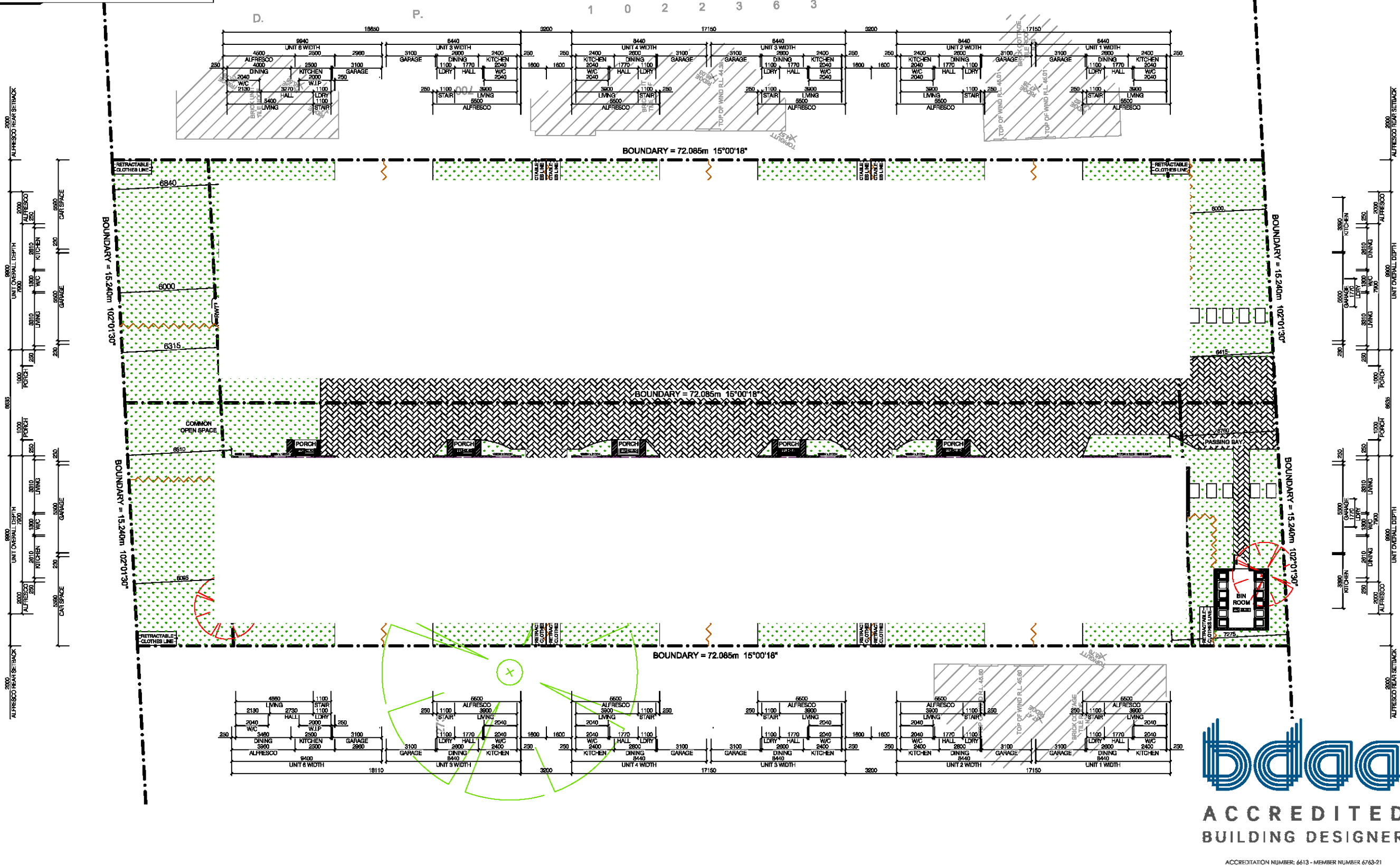
Appendix A

SITE & FLOOR PLANS

CONSTRUCTION NOTES

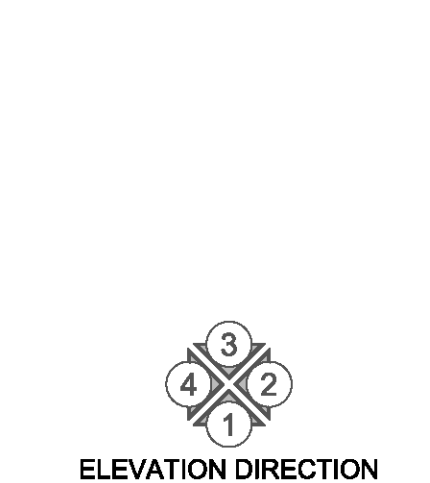
- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- SUPPLY AND INSTALL 'BIFLEX' CHEMICAL TERMITE TREATMENT (UNLESS OTHERWISE APPROVED) TO COMPLY WITH AS3660.1 AND MANUFACTURER'S SPECIFICATIONS
- ALL BRICKWORK (INCLUDING BRICK VENEER) SHALL BE IN ACCORDANCE WITH AS3700- MASONRY CODE
- ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH AS1684. - UNLESS OTHERWISE APPROVED ROOF FRAMING SHALL BE OF TRADITIONAL TIMBER FRAMED CONSTRUCTION
- FOR ALL STRUCTURAL MEMBERS, FOOTINGS, & LOAD BEARING WALLS REFER TO STRUCTURAL DOCUMENTATION PREPARED BY ENGINEERS.

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WALL SCHEDULE
 WALL SARKING & BULK INSULATION AS REQUIRED BY ENERGY ASSESSMENT

	BRICK VENEER WALL. SELECTED, EXPOSED FACE BRICK (RE-USE RECYCLED BRICK FROM DEMOLITION). INTERIOR FINISH OTHER - PROVIDE FLUSH PLASTER FINISH.
	EXTERIOR TIMBER STUD WALL. SELECTED, HORIZONTAL WEATHERBOARDS FIXED TO TIMBER STUD. INTERIOR FINISH TO BE FLUSH PLASTER UNLESS SPECIFIED OTHERWISE.
	INTERIOR TIMBER STUD WALL. SELECTED PLASTERBOARD SHEETING TO BOTH SIDES. BUILDER TO PROVIDE WATERPROOF FIBRE CEMENT SHEETING TO ALL WET AREAS FOR SELECTED TILES.

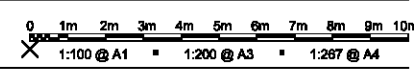


01	DEVELOPMENT APPLICATION	SK	DD.MM.YY
REV	AMENDMENT DETAILS	BY	DATE
PROJECT STAGE DEVELOPMENT APP.			
PROJECT DETAILS TOWNHOUSE DEVELOP.			
83-85 CANBERRA STREET, OXLEY PARK, NSW 2760			
CLIENT DETAILS AHMET YESIL			
DRAWING TITLE PROPOSED GROUND FLOOR PLAN			
DRAWN SK		DESIGNED FB	
CHECKED FB		DATE DRAWN DEC 2021	
DRAWING SCALE 1 : 125		SHEET SIZE A1	



ACCREDITATION NUMBER: 6613 - MEMBER NUMBER 6763-21

PROJECT NUMBER FB0053	DRAWING NUMBER A.02.1	REVISION 01
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PROPOSED GROUND FLOOR PLAN

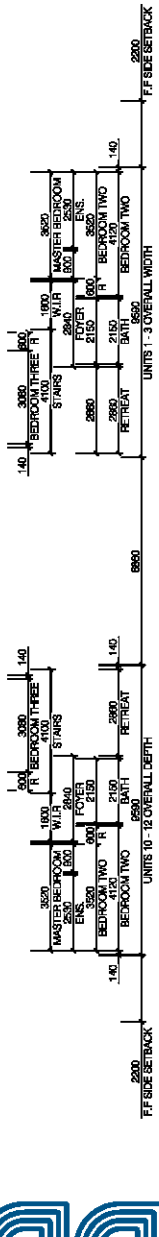
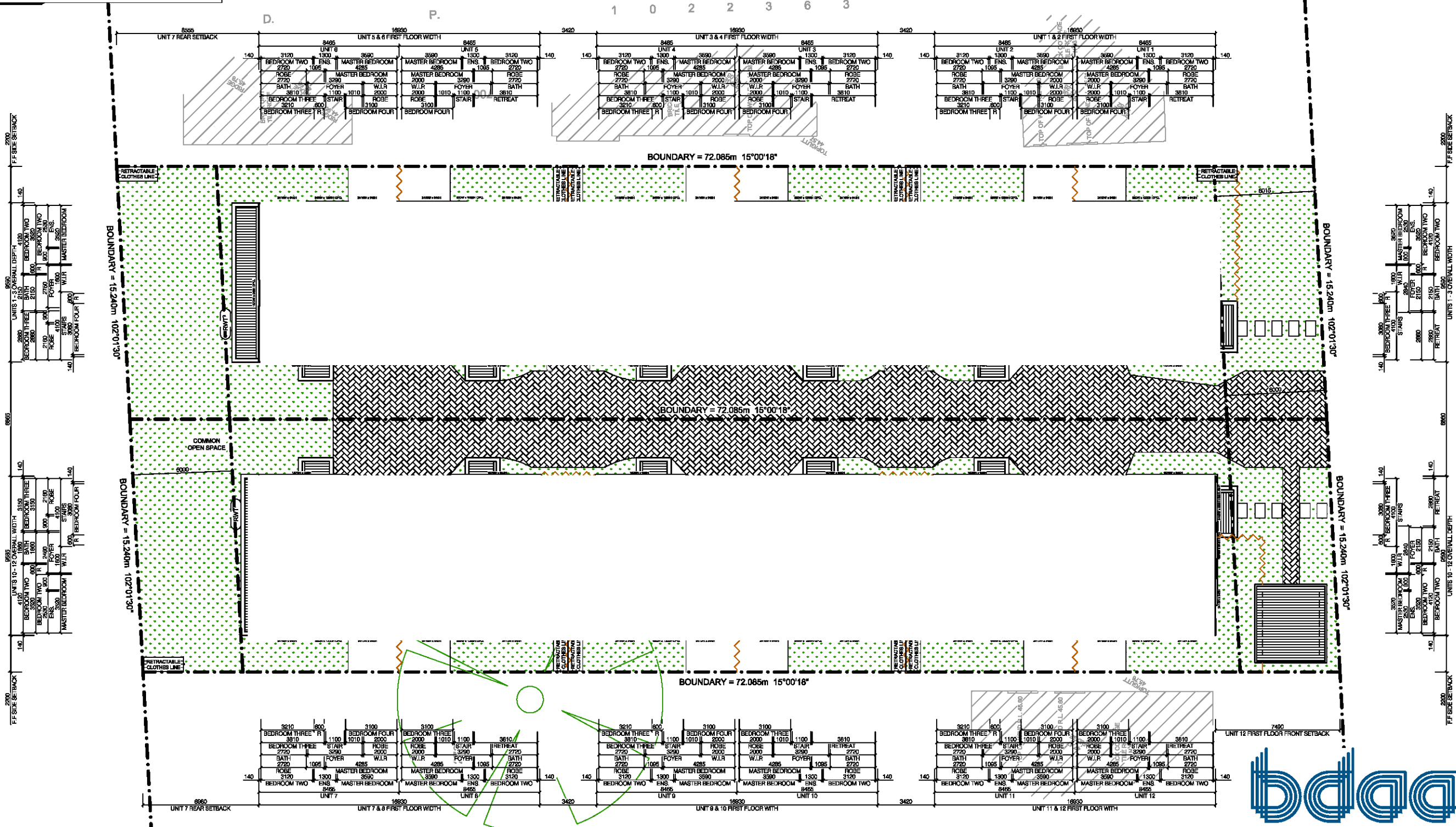
CONSTRUCTION NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
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- ALL BRICKWORK (INCLUDING BRICK VENEER) SHALL BE IN ACCORDANCE WITH AS3700- MASONRY CODE
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- FOR ALL STRUCTURAL MEMBERS, FOOTINGS, & LOAD BEARING WALLS REFER TO STRUCTURAL DOCUMENTATION PREPARED BY ENGINEERS.

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WALL SCHEDULE

- WALL SARKING & BULK INSULATION AS REQUIRED BY ENERGY ASSESSMENT**
- BRICK VENEER WALL.**
 SELECTED. EXPOSED FACE BRICK (RE-USE RECYCLED BRICK FROM DEMOLITION).
 INTERIOR FINISH OTHER - PROVIDE FLUSH PLASTER FINISH.
 - EXTERIOR TIMBER STUD WALL.**
 SELECTED. HORIZONTAL WEATHERBOARDS FIXED TO TIMBER STUD. INTERIOR FINISH TO BE FLUSH PLASTER UNLESS SPECIFIED OTHERWISE.
 - INTERIOR TIMBER STUD WALL.**
 SELECTED PLASTERBOARD SHEETING TO BOTH SIDES. BUILDER TO PROVIDE WATERPROOF FIBRE CEMENT SHEETING TO ALL WET AREAS FOR SELECTED TILES.



01	DEVELOPMENT APPLICATION	SK	DD.MM.YY
REV	AMENDMENT DETAILS	BY	DATE

PROJECT STAGE
 DEVELOPMENT APP.

PROJECT DETAILS
 TOWNHOUSE DEVELOP.

83-85 CANBERRA STREET,
 OXLEY PARK, NSW 2760

CLIENT DETAILS
 AHMET YESIL

DRAWING TITLE
 PROPOSED FIRST FLOOR PLAN

DRAWN: SK
 DESIGNED: FB
 CHECK: FB
 DATE DRAWN: DEC 2021

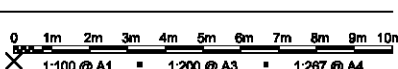


bdada
 ACCREDITED
 BUILDING DESIGNER

ACCREDITATION NUMBER: 6613 - MEMBER NUMBER 6763-21

PROJECT NUMBER	DRAWING NUMBER	REVISION
FB0053	A.02.2	01

DRAWING SCALE: 1:125
 SHEET SIZE: A1



PROPOSED FIRST FLOOR PLAN

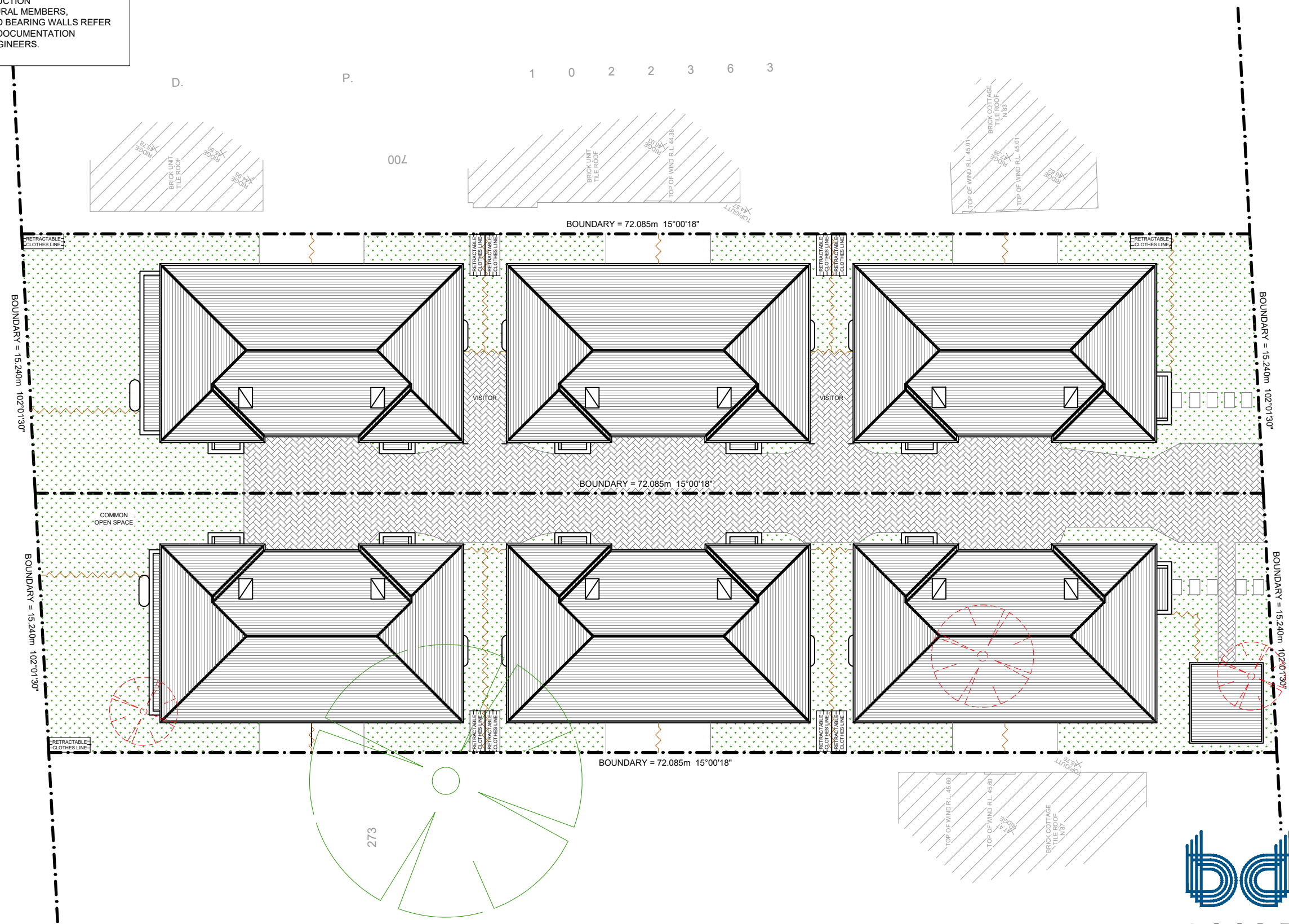
CONSTRUCTION NOTES

- CONFIRM ALL DIMENSIONS ON SITE TO EXISTING RESIDENCE PRIOR TO COMMENCEMENT OF ANY WORK.
- SUPPLY AND INSTALL 'BIFLEX' CHEMICAL TERMITE TREATMENT (UNLESS OTHERWISE APPROVED) TO COMPLY WITH AS3660.1 AND MANUFACTURER'S SPECIFICATIONS
- ALL BRICKWORK (INCLUDING BRICK VENEER) SHALL BE IN ACCORDANCE WITH AS3700- MASONRY CODE
- ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH AS1684 - UNLESS OTHERWISE APPROVED ROOF FRAMING SHALL BE OF TRADITIONAL TIMBER FRAMED CONSTRUCTION
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ELEVATION DIRECTION

01	DEVELOPMENT APPLICATION	SK	DD.MM.YY
REV	AMENDMENT DETAILS	BY	DATE

PROJECT STAGE
DEVELOPMENT APP.

PROJECT DETAILS
TOWNHOUSE DEVELOP.

83-85 CANBERRA STREET,
 OXLEY PARK, NSW 2760

CLIENT DETAILS
AHMET YESIL

DRAWING TITLE
PROPOSED ROOF PLAN

DRAWN
 SK
 DESIGNED
 FB
 CHECK
 FB

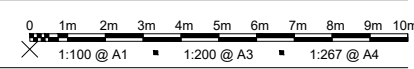


DATE DRAWN
 DEC 2021
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 A3

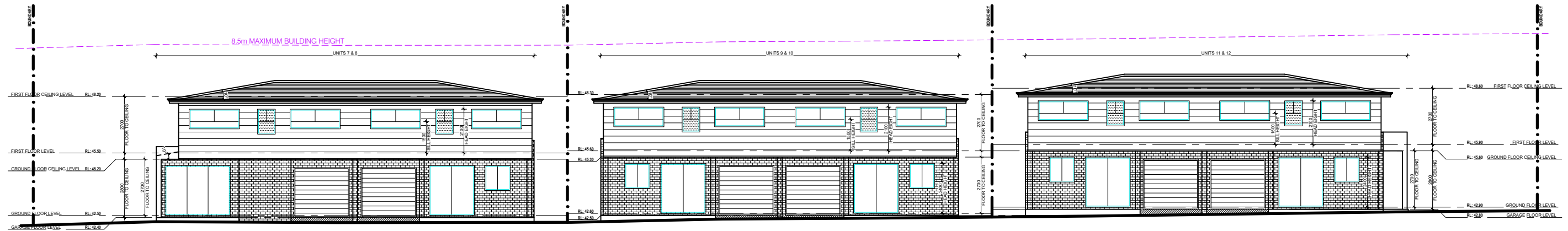
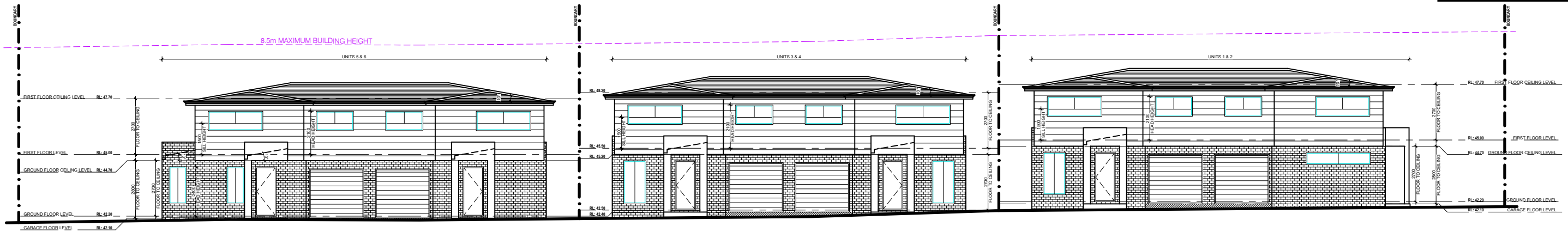


ACCREDITATION NUMBER: 6613 - MEMBER NUMBER 4763-21

PROJECT NUMBER	DRAWING NUMBER	REVISION
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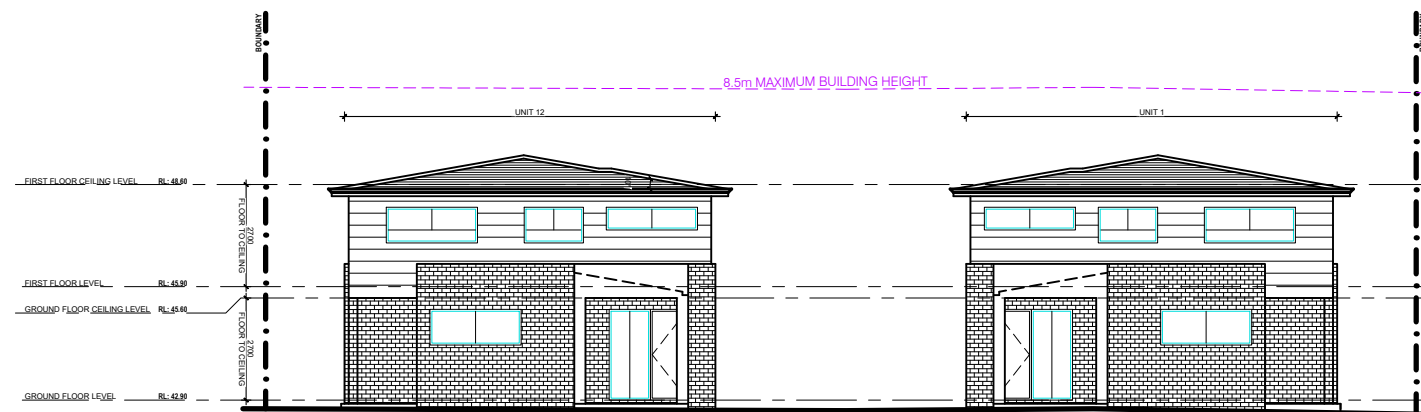


PROPOSED ROOF PLAN



1. PROPOSED WESTERN ELEVATION

SCALE - 1 : 100



2. PROPOSED SOUTHERN ELEVATION

SCALE - 1 : 100

REV	DESCRIPTION	SK	DD	MM	YY
01	DEVELOPMENT APPLICATION				
	AMENDMENT DETAILS				

PROJECT STAGE
DEVELOPMENT APP.

PROJECT DETAILS
TOWNHOUSE DEVELOP.

83-85 CANBERRA STREET,
OXLEY PARK, NSW 2760

CLIENT DETAILS
AHMET YESIL

DRAWING TITLE
**PROPOSED
ELEVATIONS 1 & 2**

DRAWN
SK

DESIGNED

FB

CHECK

FB

DATE DRAWN
DEC 2021

DRAWING SCALE
1 : 100

SHEET SIZE
A1

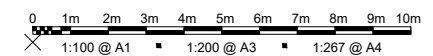


ACCREDITATION NUMBER: 6613 - MEMBER NUMBER 4763-21

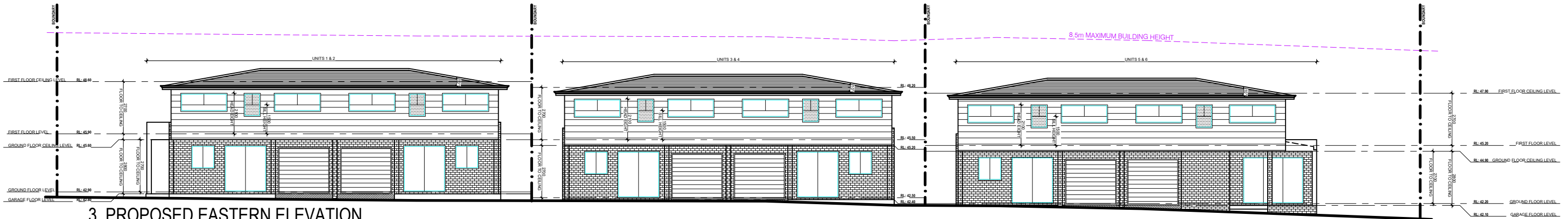
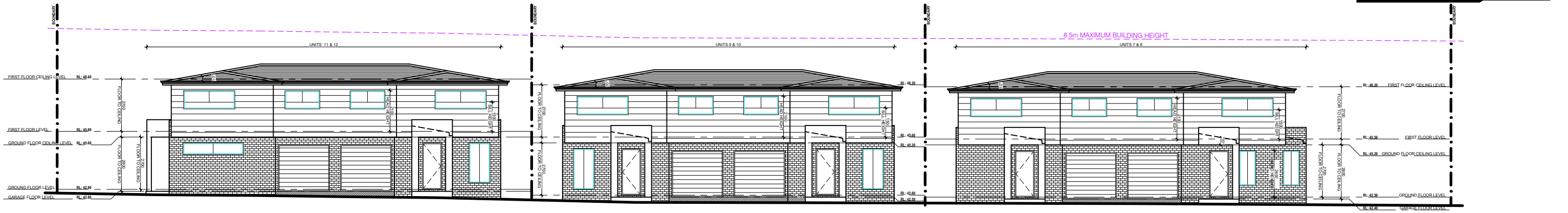
PROJECT NUMBER
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DRAWING NUMBER
A.03.1

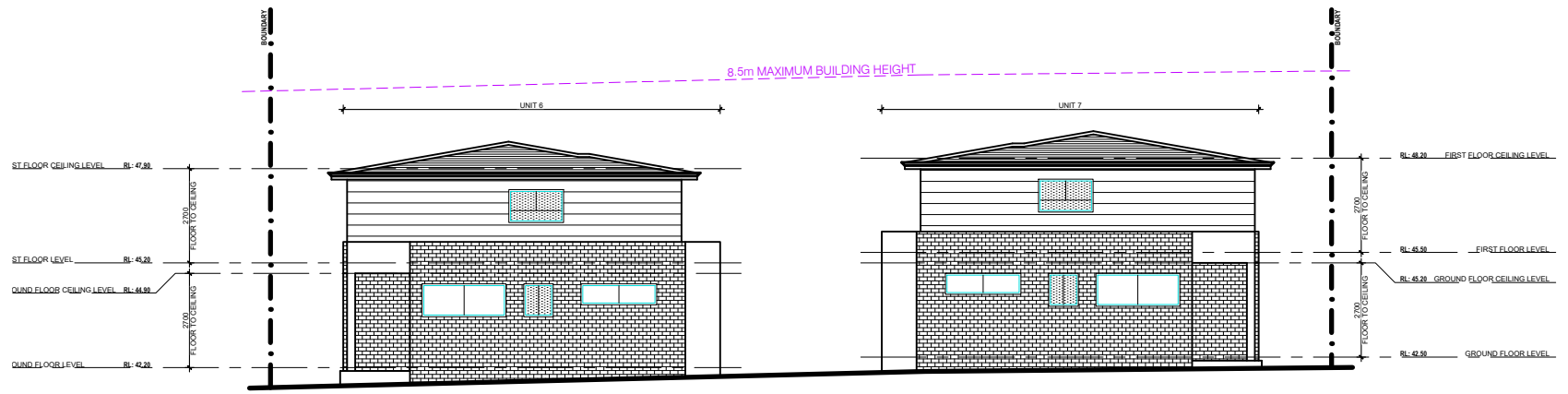
REVISION
01



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3. PROPOSED EASTERN ELEVATION
 SCALE - 1 : 100



4. PROPOSED NORTHERN ELEVATION
 SCALE - 1 : 100

01	DEVELOPMENT APPLICATION	SK	DD.MM.YY
REV	AMENDMENT DETAILS	BY	DATE

PROJECT STAGE
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83-85 CANBERRA STREET,
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CLIENT DETAILS
AHMET YESIL

DRAWING TITLE
PROPOSED ELEVATIONS 3 & 4

DRAWN
 SK
 DESIGNED
 FB
 CHECK
 FB

DATE DRAWN
DEC 2021

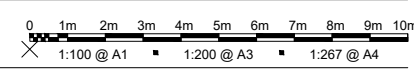
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SHEET SIZE
A3



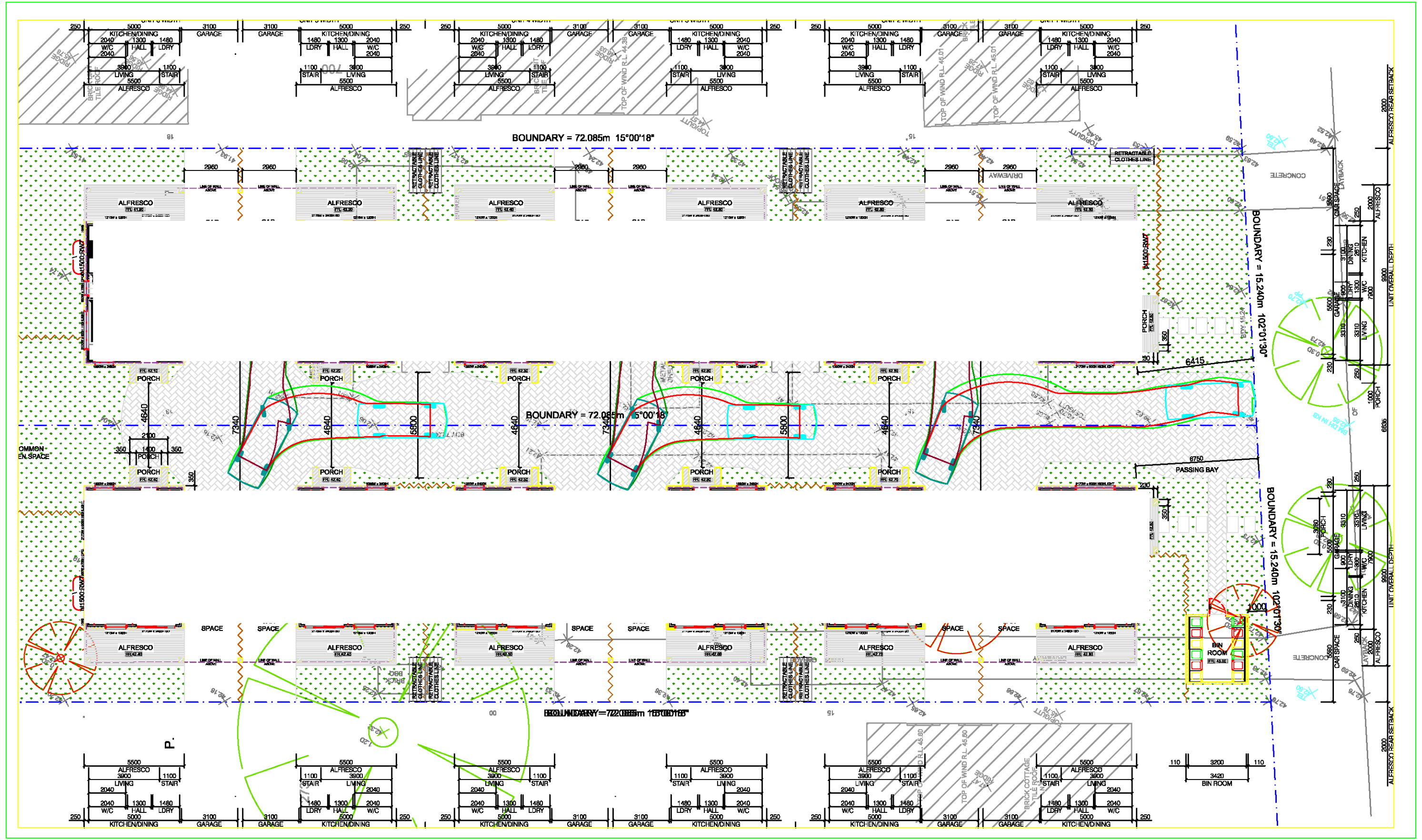
ACCREDITATION NUMBER: 6613 - MEMBER NUMBER 4763-21

PROJECT NUMBER	DRAWING NUMBER	REVISION
FB0053	A.03.2	01



Appendix B

SWEPT PATH DIAGRAMS

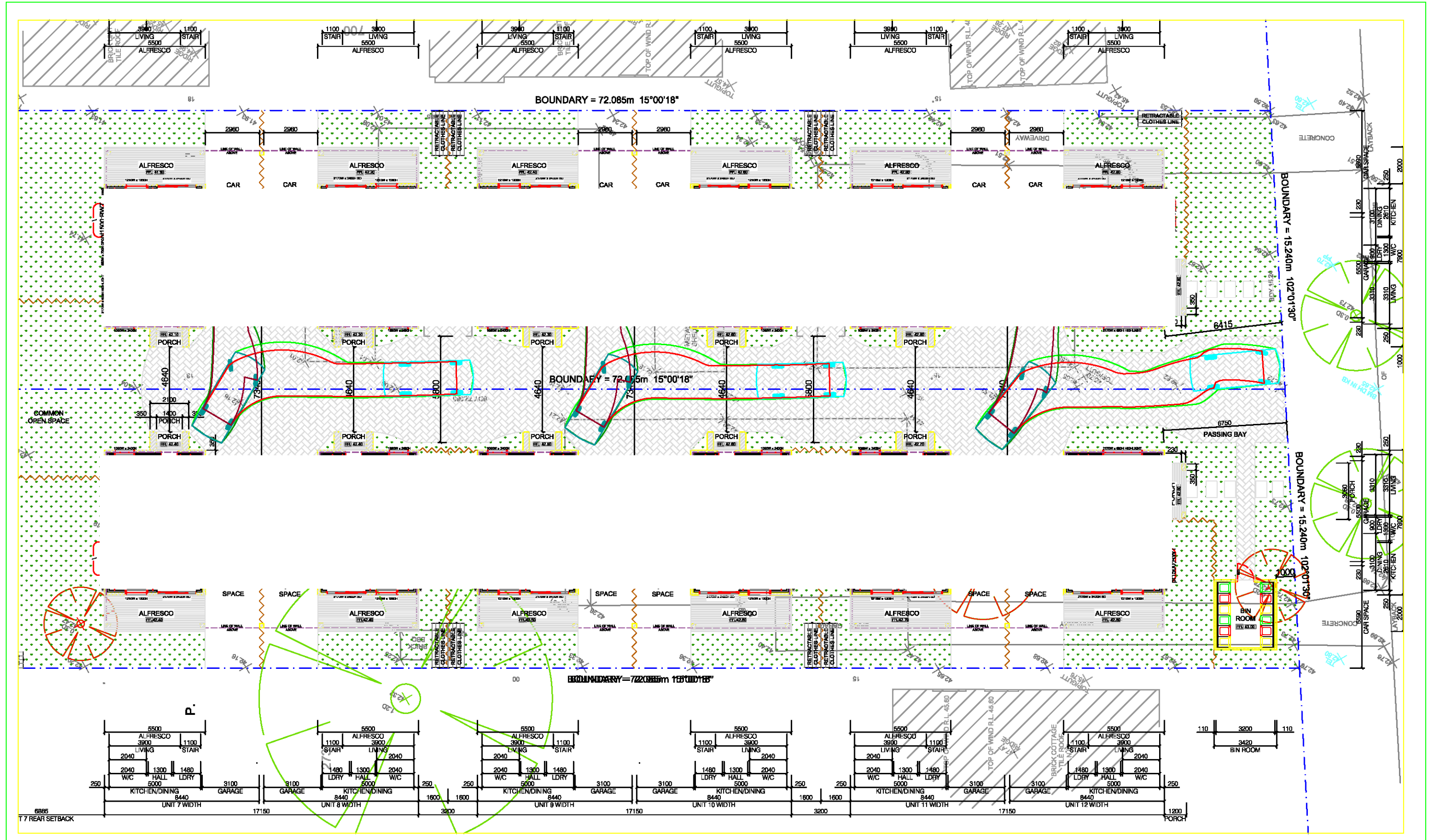


Express Traffic Engineering Solutions

83-85 Canberra Street, Oxley Park
 Swept path diagrams-B85 design vehicle (AS2890.1)

Not to Scale





Express Traffic Engineering Solutions

83-85 Canberra Street, Oxley Park
 Swept path diagrams-B85 design vehicle (AS2890.1)

Not to Scale

