TRAFFIC IMPACT ASSESSMENT

NSW Land and Housing Corporation Residential Development 25-29 Prospero Street, Maryland

> Prepared for: Stanton Dahl Architects PO Box 833 Epping NSW 1710



PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Stanton Dahl Architects (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
630.30566-R01-v1.3	26 April 2023	Suvam Pandey	Charlie Seventekin	Charlie Seventekin



1	INTRODUCTION	3
1.1	Overview	3
1.2	Assessment Scope	3
2	SUBJECT SITE	4
2.1	Site Context	4
2.2	Surrounding Road Network	5
2.3	Public Transport	5
2.4	Active Transport	7
2.5	Crash History	7
3	DEVELOPMENT OVERVIEW	9
3.1	Proposed Development	9
3.2	Vehicular Access	9
3.3	Car Parking	10
3.4	Bicycle Parking	11
3.5	Refuse Collection and Servicing	11
4	CAR PARKING CONSIDERATIONS	12
4.1	Statutory Requirements	12
4.2	PWD Car Parking Provision	13
4.3	Visitor Car Parking	13
5	SERVICING CONSIDERATIONS	14
5.1	Statutory Requirements	14
5.2	Servicing Arrangements	14
5.3	Refuse Collection Arrangements	14
6	DESIGN CONSIDERATIONS	15
6.1	Overview	15
6.2	Vehicular Access	15
6.2.1	Driveway Crossover	15
6.2.2	Circulation Road Width	15
6.2.3	Aisle Width	15
6.2.4	Pedestrian Path	
6.2.5	Queueing	
6.2.6	Sight Distance	
6.3	Car Parking and Internal Circulation	
7	OPERATIONAL ASSESSMENT	
7.1	Development Traffic Demand	18



8	SUMMARY	19
DOCU	MENT REFERENCES	
TABLES		
Table 1	Key Surrounding Roads	5
Table 2	Local Public Transport Services	
Table 3	Crash History in the Vicinity of the Site	
Table 4	Development Yield Summary	
Table 5	Required Car Parking Provision in an Accessible Area	
Table 6	Parking & Circulation Design Compliance Assessment	
Table 7	Net Development Trip Demand Forecast	18
FIGURES		
Figure 1	Site Location	4
Figure 2	Local Public Transport Facilities	
Figure 3	Crash History in the Vicinity of the Site	
Figure 4	Proposed Site Traffic Arrangements	
Figure 5	Parking and Bin Arrangements	11

APPENDICES

Appendix A Development Plans Appendix B Swept Path Assessment



1 Introduction

1.1 Overview

SLR Consulting Australia Pty Ltd (SLR) has been commissioned by NSW Land and Housing Corporation (LAHC) in the care of Stanton Dahl Architects (SAD) to prepare a Traffic Impact Assessment (TIA) report for a proposed residential development to be located at 25-29 Prospero Street, Maryland NSW.

Plans illustrating the proposal, prepared by SAD, are reproduced in Appendix A.

1.2 Assessment Scope

This Traffic Impact Assessment (TIA) has been prepared to assess the consistency of the proposed development with the traffic- and transport-specific provisions of the following:

- State Environmental Planning Policy (SEPP) (Housing) 2021; and
- The Newcastle Local Environmental Plan 2012 (LEP).

In order to identify any traffic and transport impacts of the proposed development on the surrounding road network, the following documents are of particular relevance for this assessment:

- Roads and Traffic Authority (RTA) Guide to Traffic Generating Developments (2002);
- Roads and Maritime Services (RMS) Updated Surveys TDT 2013/04a (2013);
- Australian Standard 2890.1:2004 Parking Facilities Part 1: Off-street car parking; and
- Building Code of Australia (BCA).



2 Subject Site

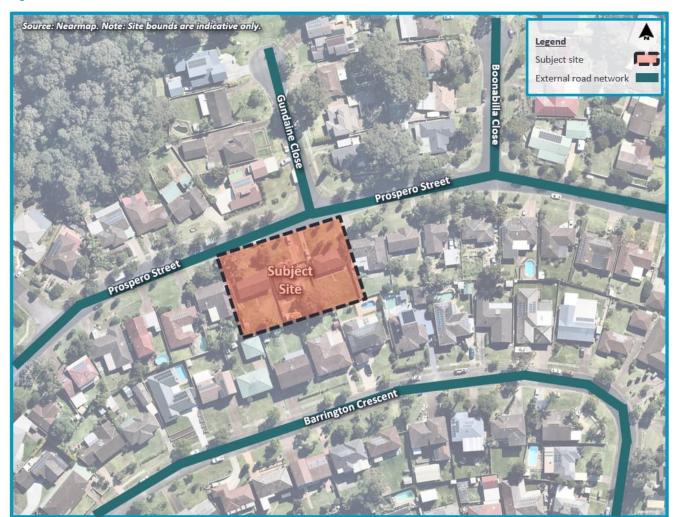
2.1 Site Context

The subject site is located at 25-29 Prospero Street, Maryland, within Zone R2 (Low Density Residential) of the Newcastle LEP 2012.

There are three existing detached dwelling houses with street addresses #25, #27 and #29 Prospero Street on the subject site. The site is formally described as lots 395, 396 and 397 of DP 702896; respectively. The site is bound by Prospero Street to the north and residential developments to the east, south and west.

The site location is shown in the context of the local area in Figure 1.

Figure 1 Site Location





2.2 Surrounding Road Network

Details of the key roads surrounding the subject site are provided in Table 1.

Table 1 Key Surrounding Roads

Road Name	Classification	Authority	Existing Form	Posted Speed Limit
Prospero Street			One trafficable lane in each direction, kerbside parking permitted in either direction, approximately 9.0m wide & undivided carriageway with urban cross-section, kerb, and channel.	
Berrico Avenue	Local Road	Newcastle	One trafficable lane in each direction, kerbside parking permitted in either direction, approximately 9.0m wide & undivided carriageway with urban cross-section, kerb, and channel.	50 km/h
Boundary Road		Council	One trafficable lane in each direction, kerbside parking permitted in either direction, approximately 12.8m wide & undivided carriageway with urban cross-section, kerb, and channel.	
Minmi Road	Unclassified Regional Road (7771)		One trafficable lane in each direction, kerbside parking not permitted in either direction, up to approximately 18m wide at some sections & undivided carriageway with no kerb and channel.	60 km/h

Source: Classified Roads Schedule, TfNSW

2.3 Public Transport

The site is reasonably well connected by, and accessible to, public transport, as shown in Figure 2 and Table 2 summarised as follows:

- There are two bus stops in Boundary Road near Prospero Street intersection that are within approximately 225m walking distance (less than 5-minute walk) from the subject site. These bus stops are serviced by route 260 and route 12, providing services from Minmi to University of Newcastle and Merewether Beach to Maryland; respectively.
- Two more bus stops are available in Bottlebrush Boulevard near Minmi Road intersection that are
 within approximately 700m walking distance (less than 10-minute walk) from the subject site. These
 bus stops are serviced by route 261, providing services between University of Newcastle and Fletcher.



Figure 2 Local Public Transport Facilities



Details of the services at the public transport facilities local to the subject site are summarised in Table 2.

Table 2 Local Public Transport Services

Туре	Stop	Routes	Frequency
Bus	Two bus stops in Boundary Road near Prospero Street as shown in Figure 2.	Route 260: Operates between Minmi and University of Newcastle, via Fletcher, Maryland, and Wallsend Route 12: Operates between Maryland and Merewether Beach via Wallsend and Newcastle Interchange	AM peak: ~2/4 services per hour PM peak: ~2/4 services per hour
	Two bus stops in Bottlebrush Boulevard near Minmi Road as shown in Figure 2.	Route 261: Operates between University of Newcastle and Fletcher via Wallsend and Maryland	AM peak: ~2 services per hour PM peak: ~2 services per hour

Table 2 indicates that the bus stops proximate to the subject site provide connectivity to the University of Newcastle and Newcastle Town Centre. Therefore, the site is considered well-connected to, and serviced by, public transport.



2.4 Active Transport

A review of Nearmap aerial imagery indicates that there are existing footpaths (constructed concrete) along either side of some of the carriageways in the wider road network. In some sections, there are footpaths on both sides. However it is of note, that there are no pedestrian footpaths on the southern side of Prospero Street or along the frontage of the subject site.

It should be noted that there is no formal cycling infrastructure (cycle lanes or dedicated cycle paths) in the vicinity of the proposed development, however the street network and footpaths can accommodate cyclists due to the local / residential nature of the streets in the site vicinity.

2.5 Crash History

In order to highlight any existing safety deficiencies on the road network in the vicinity of the subject site, SLR has conducted a review of TfNSW crash data for the most recent five-year period available (2017 – 2021).

The TfNSW crash data indicates that there were two reported crashes with serious injuries in this period. No fatal crashes were recorded in the vicinity of the site.

Figure 3 and Table 3 provide a summary of crash events that have occurred in the vicinity of the site between 2017 and 2021.

The historic crash history, and the minor additional traffic generation of the proposed development, is not so significant that the development would present any road safety risk.

Legend External Road Network 1217809 Serious Injury 1180870 1231159 Moderate Injury Minor/Other Injury rrington Crescent Non-Casualty (towaway) 1163461 John T Bell Drive Warkworth Stree 1153449 1230044 Source: Nearmap. Note: Site bounds are indicative

Figure 3 Crash History in the Vicinity of the Site

Table 3 Crash History in the Vicinity of the Site

Location	Crash ID	Year	Severity	Rum Code	Description
Minmi Rd & Bottlebrush Blvd	1180870	2018	Non-casualty (tow-away)	30	Rear end
Minmi Rd & Bottlebrush Blvd	1217809	2019	Non-casualty (tow-away)	73	Right off carriageway into object or parked vehicle
Mimmi Rd	1214001	2019	Non-casualty (tow-away)	30	Rear end
Minmi Rd & Warkworth St	1230044	2020	Serious Injury	13	Right near
Prospero St	1231159	2020	Non-Casualty (tow- away)	71	Left off carriageway into object or parked vehicle
Minmi Rd & Warkworth St	1153449	2017	Serious Injury	13	Right near
Boundary Rd & John T Bell Dr	1163461	2017	Minor / Other Injury	37	Left-turn sideswipe



3 Development Overview

3.1 Proposed Development

Based on the development plans prepared by Stanton Dahl Architects, which are reproduced at Appendix A, it is proposed to demolish all existing buildings and structures and construct a new development that will comprise a mixture of one-, two- and three-bedroom dwelling houses.

The proposed land uses, and associated yields, are described in terms of bedroom numbers and Gross Floor Area (GFA) in Table 4. This information is used for the estimation of traffic generation and car parking requirements.

Table 4 Development Yield Summary

Unit Type	Unit Number	Proposed Combined Yield
3-bedroom dwelling house	3	301.53m ² GFA
2-bedroom dwelling house	5	429.64m² GFA
1-bedroom dwelling house	1	49.38 m² GFA
TOTAL	9	780.55m² GFA

3.2 Vehicular Access

Vehicular access for the proposed development's off-street car park will be provided via a priority controlled, all-movements driveway crossover to / from Prospero Street. This driveway is proposed as 3.3m wide, single lane, two-way, with an adjacent pedestrian pathway which is 1.2m in width.

It is understood that the refuse collection will be undertaken on Prospero Street (i.e., on-street), similar to all nearby properties.

The pedestrian entry and exit will be provided via two dedicated paths. The path in the west will provide direct access to Unit 7, Unit 8 and Unit 9. The path in the east will run parallel to the vehicle access driveway and provide direct access to Unit 3, Unit 4, Unit 5 and Unit 6. Unit 1 and Unit 2 will have their individual direct access from Prospero Street.

The proposed site traffic arrangements are illustrated in Figure 4.



Figure 4 Proposed Site Traffic Arrangements



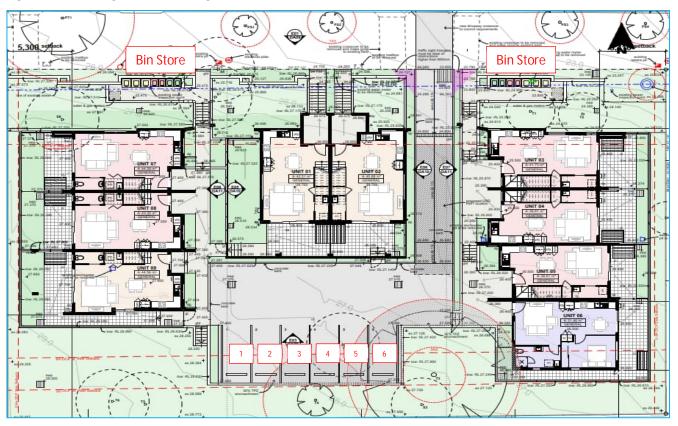
3.3 Car Parking

The development proposes a total of six parking spaces for nine dwellings. At this stage, it is anticipated that the parking will be shared (i.e., made available for use) by all residents.

A schematic illustration of the car parking plan is provided in Figure 5 below.



Figure 5 Parking and Bin Arrangements



3.4 Bicycle Parking

It is expected that each dwelling will have sufficient space to store bicycles (within each unit) and therefore it is considered not necessary to provide a separate dedicated bicycle parking facility. A review of the SEPP Housing 2021 indicated no requirements for the provision of bicycle parking spaces.

3.5 Refuse Collection and Servicing

It is understood that refuse collection will be undertaken on Prospero Street. Wheelie bins will be stored in the two separate locations in the northern frontage of the development lot as also shown in Figure 5 and taken to street frontage by the residents. Based on this, the development proposes no off-street parking bay for refuse collection vehicles.

Similarly, the infrequent service (maintenance) vehicles (such as 8.8m long medium rigid vehicles) will park in Prospero Street. However, any service vehicle that is up to the size of B99 design vehicle (such as 5.2m long VANs) can also be accommodated in the car park, with the exception of the parking space #1 (near wall).



4 Car Parking Considerations

4.1 Statutory Requirements

The statutory requirements for car parking provision are dependent on the planning context of the subject site as well as the land uses proposed for the development. It is understood that the development application will be lodged under SEPP Housing 2021.

The subject site is located in an "accessible" area as defined by SEPP Housing 2021. According to SEPP Housing 2021, which adopts from Australian Bureau of Statistics (ABS), an "accessible area" means land that is within,

- (a) 800m walking distance of a public entrance to—
- (i) a railway station, or
- (ii) a wharf from which a Sydney Ferries ferry service operates, or
- (b) 400m walking distance of—
- (i) a public entrance to a light rail station, or
- (ii) for a light rail station with no entrance—a platform of the light rail station, or
- (c) 400m walking distance of a bus stop used by a regular bus service, within the meaning of the *Passenger Transport Act 1990*, that has at least 1 bus per hour servicing the bus stop between—
- (i) 6am and 9pm each day from Monday to Friday, both days inclusive, and
- (ii) 8am and 6pm on each Saturday and Sunday.

A review of the location of the bus stops in Boundary Street near Prospero Street and the timetables of bus routes 12 and 260 revealed that "criterion c" is met according to the current timetable. Based on this, the proposed development satisfies the requirements of "accessible" land as per SEPP Housing 2021. Accordingly, the required car parking provisions for the subject development as specified in Division 6 Clause 42-1 of SEPP Housing 2021 (an accessible area) are detailed in Table 5.



Table 5 Required Car Parking Provision in an Accessible Area¹

Land Use	Parking Requirement per Unit (Minimum)	Total Units	Total Parking Requirement
1-bedroom dwelling house	0.4 parking space per unit	1	0.4
2-bedroom dwelling house	0.5 parking space per unit	5	2.5
3-bedroom dwelling house	1.0 parking space per unit	3	3
TOTAL		9	5.9

Table 5 indicates that a minimum of six parking spaces needs to be provided as part of this development to satisfy the requirements of SEPP Housing 2021.

Based on a development-wide parking provision calculation, the proposed six car parking spaces satisfy the requirements of the SEPP Housing 2021

Notwithstanding the above, a review of 62 high-resolution NearMap aerials captured between March 2010 and January 2023 revealed that there are sufficient vacant on-street parking spaces in Prospero Street on a consistent basis to provide for any overflow car parking requirements (i.e., beyond the SEPP Housing 2021 requirements).

4.2 PWD Car Parking Provision

The Building Code of Australia (BCA) stipulates the "Persons with Disability" (PWD) car parking requirements based on the class. The proposed residential development is categorised as a Class 1A building by the BCA, and as such, BCA does not specifically require a provision of PWD car parking spaces for Class 1A buildings.

4.3 Visitor Car Parking

A review of the SEPP Housing 2021 indicated that there are no requirements for the provision of visitor parking spaces as part of the proposed development.

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¹ Refer to Division 6 Clause 42-1 in SEPP Housing 2021 for further information.

5 Servicing Considerations

5.1 Statutory Requirements

A review of the SEPP Housing 2021 indicated that there are no statutory requirements for the provision of parking spaces for service and refuse collection vehicles.

5.2 Servicing Arrangements

Servicing will typically occur via VANs (5.2m), small rigid vehicles (SRVs – 6.4m) and medium rigid vehicles (MRVs – 8.8m) that can be parked on street at the development frontage in Prospero Street.

Swept path assessments have been prepared and are attached in Appendix B. These swept path assessments are adequate to demonstrate that a standard car (4.91m long B85 vehicle) is able to access all on-site parking spaces, as specified within AS2890.1.

The proposed SRV and MRV servicing arrangements are also considered appropriate for the following reasons:

- Servicing by SRVs / MRVs is expected to be very occasional, with the vast majority of servicing anticipated to occur by VANs due to the residential nature of the development; and
- There is adequate provision and availability of on-street parking on Prospero Street, adjacent to the site, to accommodate infrequent use by service vehicles.

5.3 Refuse Collection Arrangements

A review of 62 high-resolution NearMap aerials captured between March 2010 and January 2023 revealed that there are sufficient vacant on-street parking spaces in Prospero Street. Parking in Prospero Street is unrestricted, and the carriageway is sufficiently wide (approximately 9m) for a safe and efficient refuse collection activity by kerbside wheelie bin collection.

The proposed refuse collection arrangements are considered appropriate based on the following reasons:

- The RCV will service the site on only one weekday a week;
- The RCV will stand at the development frontage for only five to seven minutes every week; and
- It is expected that traffic volumes in Prospero Street will remain low.



6 Design Considerations

6.1 Overview

A review of the traffic components of the proposed internal design of the site was conducted with reference to the following regulatory documentation:

- State Environmental Planning Policy (Housing) 2021;
- Australian Standard for Parking Facilities Part 1: Off-street car parking (AS2890.1); and
- Austroads Guidelines: Guide to Road Design Part 6A: Paths for Walking and Cycling.

6.2 Vehicular Access

6.2.1 Driveway Crossover

Vehicular access for the proposed development's off-street car park will be provided via a priority-controlled, all-movements, shared and single lane driveway crossover which is 3.3m in width. This is the minimum circulation roadway width permitted by AS2890.1:2004 (consistent with *Table 3.1 and Table 3.2*) and applicable to domestic driveways with Class 1 or Class 1A requirements and for car parks with a capacity of 25 spaces or less.

6.2.2 Circulation Road Width

The circulation road width as per AS2890.1:2004, allows for two-way movement on a 3.0m wide circulation roadway where the following is satisfied:

- Prospero Street is not arterial or sub-arterial;
- The circulation road is less than 30m long;
- There will be less than 30 movements per hour, the expected traffic movements are in the order of 6 per hour.

6.2.3 Aisle Width

The aisle width adjacent to the parking spaces in the rear of the property is 5.8m, also consistent with AS2890.1:2004. It is recognised that the driveway for the car park at the rear of the site is a single lane width (3.3m) but will be used as two way. This is totally acceptable since the driveway only serves for six car spaces used by the residents; hence the frequency of activity and local & repeat users mean that traffic disruption / conflicts will be rare.

6.2.4 Pedestrian Path

As per the requirements of AS2890.1:2004, it is proposed that a dedicated pedestrian path will be provided alongside the entire length of the access driveway. The width of this proposed pedestrian path (1.2m) satisfies the requirements of Austroads Guide to Road Design Part 6A for pedestrian paths with low volumes.

However due to significant fall in levels, three sets of stairs are proposed at each of the two pedestrian paths. This means access to the units with a wheelchair is not possible through the pedestrian paths.



Based on above, it is concluded that the proposed development is not accessible with a wheelchair.

6.2.5 Queueing

Given the parking supply in the rear of the property is six spaces, the required queueing provision for the entry / exit queue is two vehicles (12m) as per the AS2890.1. This is measured as the distance between the roadway and the first conflict point (first parking space), which satisfies the minimum queuing provision requirement.

6.2.6 Sight Distance

The sight distance at the access location is considered to be suitable. Prospero Street slopes downwards on a consistent basis travelling in the eastbound direction (approx. 1 in 12.5 or -8%) with no significant crests or dips. There are no existing or proposed structures as part of this development that are considered to reduce the sight distance beyond an acceptable level.

A review of AS2890.1 indicated that ideally 45m (40m at a minimum) of sight distance must be provided at the driveway crossover based on the posted speed limit (50 km/h) in Prospero Street. A review of high-resolution NearMap aerials revealed that the proposed location of the driveway complies with the required sight distances.

6.3 Car Parking and Internal Circulation

The proposed designs of the internal car parking and vehicular circulation area have been assessed against the requirements of the relevant documents mentioned earlier in this report. The results of this assessment are summarised in Table 6.

Table 6 Parking & Circulation Design Compliance Assessment

Component	AS2890 Requirement	Provision	Compliant
Parking spaces	2.70m x 5.4m (near a wall) 2.4m x 5.4m (Class 1A)	2.70m x 5.4m (near a wall) ² 2.4m x 5.4m (all other spaces)	~
Blind Aisle End Space	Aisle length extended by 1m	Aisle length extended by 1m	~
Parking next to walls	300mm parking space extension	End space near a wall extended by 300mm	~
PWD parking spaces	-	Not applicable, no PWD spaces are proposed	
Parking aisle widths	5.8m	5.8m	*
Access Driveway Width	3.0m (Class 1A)	3.3m	~
Parking module	1:20 (5%) maximum – parallel to angle of parking	1:20 (5%)	
gradients	1:16 (6.25%) maximum – in any other direction	1:40 (2.5%) in any other direction	*
Ramp gradients	1:4 (25%)	1:5 (20%)	~
Grade transitions	12.5% maximum for summit 15% maximum for sag	1:8 (12.5%)	~

² It should be noted that the end parking space (parking space #1) can only accommodate a B85 design vehicle.



Page 16

Component	AS2890 Requirement	Provision	Compliant
Grade transition lengths	2m minimum length	Grade transition length of 2m	~

The outcomes of the parking and circulation design compliance assessment summarised within Table 6 show that the proposed car park design is compliant with the AS2890 requirements for each component and is therefore considered to be appropriate.



7 Operational Assessment

7.1 Development Traffic Demand

Peak hour traffic demands have been forecast for the subject development based upon the trip generation rates provided in Roads and Maritime Services (RMS) *Guide to Traffic Generating Developments 2002 and TDT 2013/04a* (RMS GTGD). This data represents the most recent and comparable source for this development type.

The peak hour traffic generation rates adopted for the land uses proposed as part of the development are as follows:

- Dwelling Houses:
 - Weekday AM peak hour: 0.95 per dwelling (based on RTA GTGD TDT 2013/04a).
 - Weekday PM peak hour: 0.99 per dwelling (based on RTA GTGD TDT 2013/04a).

Reflective of the above, the adopted peak hour traffic generation rates and resultant traffic demand forecast for the development are summarised in Table 7.

It should also be noted that three existing dwelling houses will be demolished as part of this proposal and therefore the traffic generated by these existing dwelling houses should be deducted to determine the net traffic impacts.

Table 7 Net Development Trip Demand Forecast

			Trip Rate		Peak Hour Trips	
Use	Bedrooms	Units	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Dwelling House	3	3	0.95 vph per dwelling	0.99 vph per dwelling	3vph	3vph
Dwelling House	2	5	0.95 vph per dwelling	0.99 vph per dwelling	5vph	5vph
Dwelling House	1	1	0.95 vph per dwelling	0.99 vph per dwelling	1vph	1vph
Dwelling House (to be demolished)	3 (assumed)	-3	-0.95 vph per dwelling	-0.99 vph per dwelling	-3vph	-3vph
Total	-	6	-	-	6vph	6vph

Table 7 indicates that the anticipated traffic generation of the development is very low, representing approximately one extra vehicle using the surrounding network in every 10 minutes during the peak hour. Therefore, the traffic generation is not expected to have a noticeable impact on the operation of the surrounding road network.

In SLR's opinion, given the small volume of the anticipated traffic generation, no further operational assessment is warranted.



8 Summary

SLR has been commissioned by LAHC in the care of SDA to prepare a TIA for a proposed residential development to be located at 25-29 Prospero Street, Maryland.

Plans illustrating the proposal, prepared by SDA, are reproduced in Appendix A.

Based on the analysis and assessment conducted as part of this TIA, the following conclusions have been made:

- The development provides safe and convenient connectivity to the surrounding active transport (walk and cycle) network however access to the units by a wheelchair is not possible due to the stairs at the pedestrian paths.
- The proximity of the development to nearby public transport stops is appropriate for the development.
- The proposed vehicular access, car parking and internal circulation arrangements are in accordance with the relevant provisions of either the Australian Standards or SEPP Housing 2021.
- The proposed refuse collection and servicing arrangements are considered appropriate.
- As detailed in Section 4.1 in this report, in the entirety of development, the proposed six car parking spaces satisfy the requirements of the SEPP Housing 2021.
 - Notwithstanding the above, a review of 62 high-resolution NearMap aerials captured between March 2010 and January 2023 revealed that there are sufficient vacant on-street parking spaces in Prospero Street on a consistent basis to accommodate any excess parking demands (beyond the SEPP Housing 2021 requirement).
- The proposed development is expected to have a net development traffic generation of six vehicles per peak hour. This equates to one vehicle movement every ten minutes in the peak hour and therefore in SLR's opinion, no further operational assessment is necessary.



APPENDIX A

Development Plans (Prepared by Stanton Dahl Architects)



Stanton Dahl Architects PO Box 833, Epping, NSW 1710, Australia Tel +61 2 8876 5300 www.stantondahl.com.au

Land & Housing Corporation, General Housing Development 25-29 Prospero Street, Maryland, NSW Lots 395-397, DP 702896 Part 5 Activity Submission 14th April 2023

Architectural Drawing Schedule

2869.23 DA01 Site 2869.23 DA02 Den 2869.23 DA03 Cut 2869.23 DA04 Site 2869.23 DA05 Lan 2869.23 DA06 Floo 2869.23 DA07 Floo 2869.23 DA08 Floo 2869.23 DA09 Elev 2869.23 DA10 Elev 2869.23 DA11 Elev 2869.23 DA12 Sec: 2869.23 DA14 Sha: 2869.23 DA14 Sha: 2869.23 DA16 View 2869.23 DA16 View 2869.23 DA16 View 2869.23 DA17 View 2869.23 DA17 View	er Sheet & Location Plan & Block Analysis Plan noiltion Plan & Fill Plan & External Works Plan dscape & Deep Soil Diagram r Plans (Units 1-2) r Plans (Units 3-6) r Plans (Units 3-6) r Plans (Sheet 1 ations - Sheet 1 ations - Sheet 2 ations - Sheet 3 tions - Sheet 1 tions - Sheet 1 dow Diagrams - Sheet 1 dow Diagrams - Sheet 2 v From Sun - Sheet 1 v From Sun - Sheet 1 v From Sun - Sheet 2 vrnal Colour Selection
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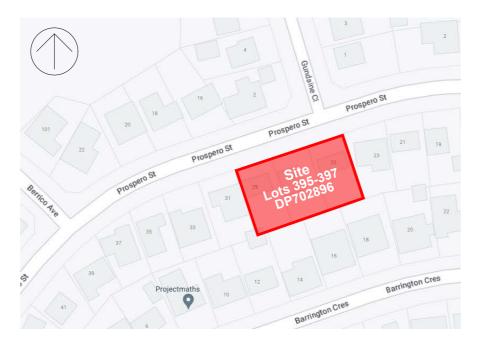
Civil Drawing Schedule

230135	C01	Notes & Legends
230135	C02	Ground Floor Drainage Plan
230135	C03	Site Stormwater Details Sheet 1

Landscape Drawing Schedule

2869.23 2869.23	L01 L02	Landscape Plan & Details Tree Protection Details
2869.23	L03	Landscape Specification & Maintenance Plan





01 Location Plan not to scale







Land & Housing Corporation

General Housing Developmen

25-29 Prospero Street, Maryland, NSW

Drawn; MP/DD/AT Checked; ML Plot date; 14/4/2023

Scale; as noted @ AI

Project No; BGWY9

Drawing No; Revision DA00 01

Cover Sheet & Location Plan

Coles Fletcher (895m) Fire & Rescue NSW Wallsend Fire Station (706m)

Bill Elliot Park (631m) → Wallsend Airfield (1,538m) Sandgate Train Station (4,325m)

Maryland Public School (320m) Grange Avenue Reserve (452m)

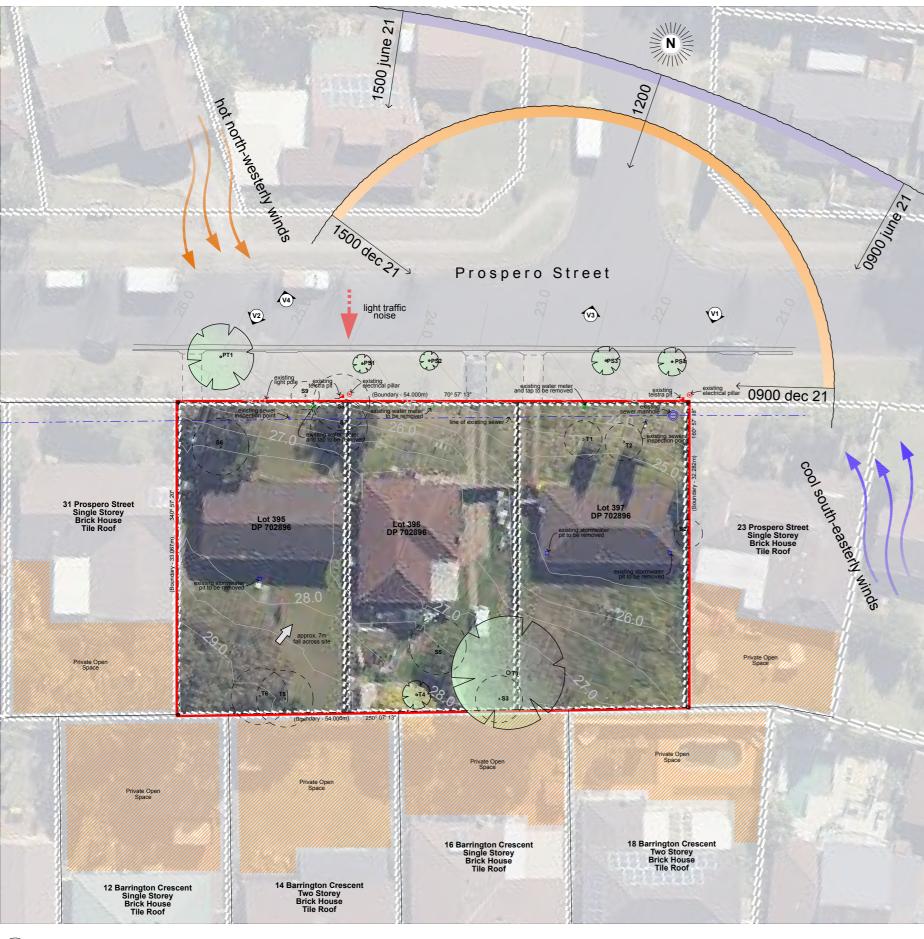




View towards Gundaine Close



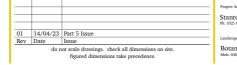
View towards 16 Prospero Street & 2 Gundaine Close



Site & Block Analysis Plan 1:200









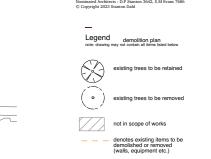


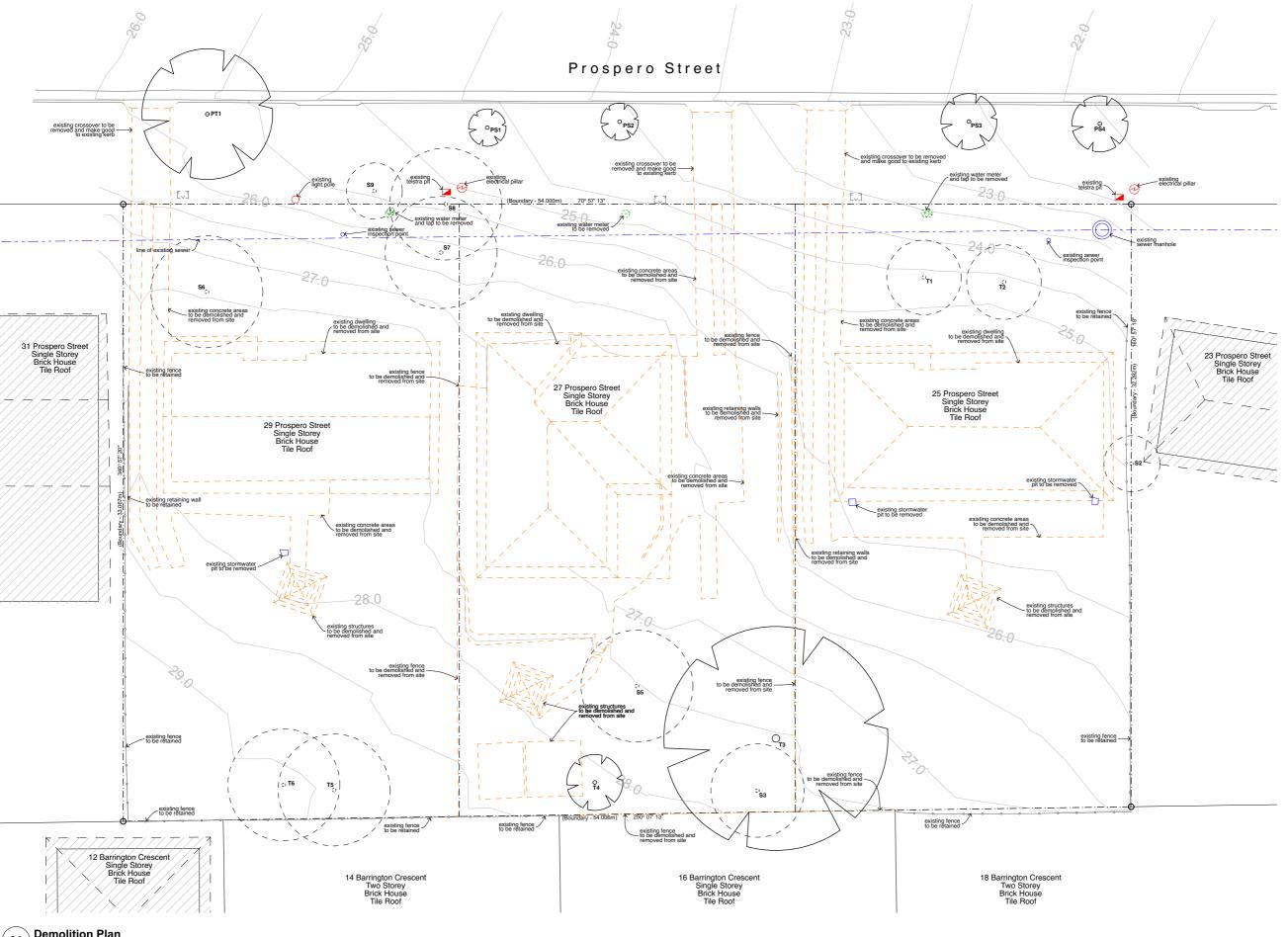
25-29 Prospero Street, Maryland 2869.23_25-29 Prospero St, Maryland_Part 5.pln

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View towards 31 Prospero Street





01 Demolition Plan 1:100





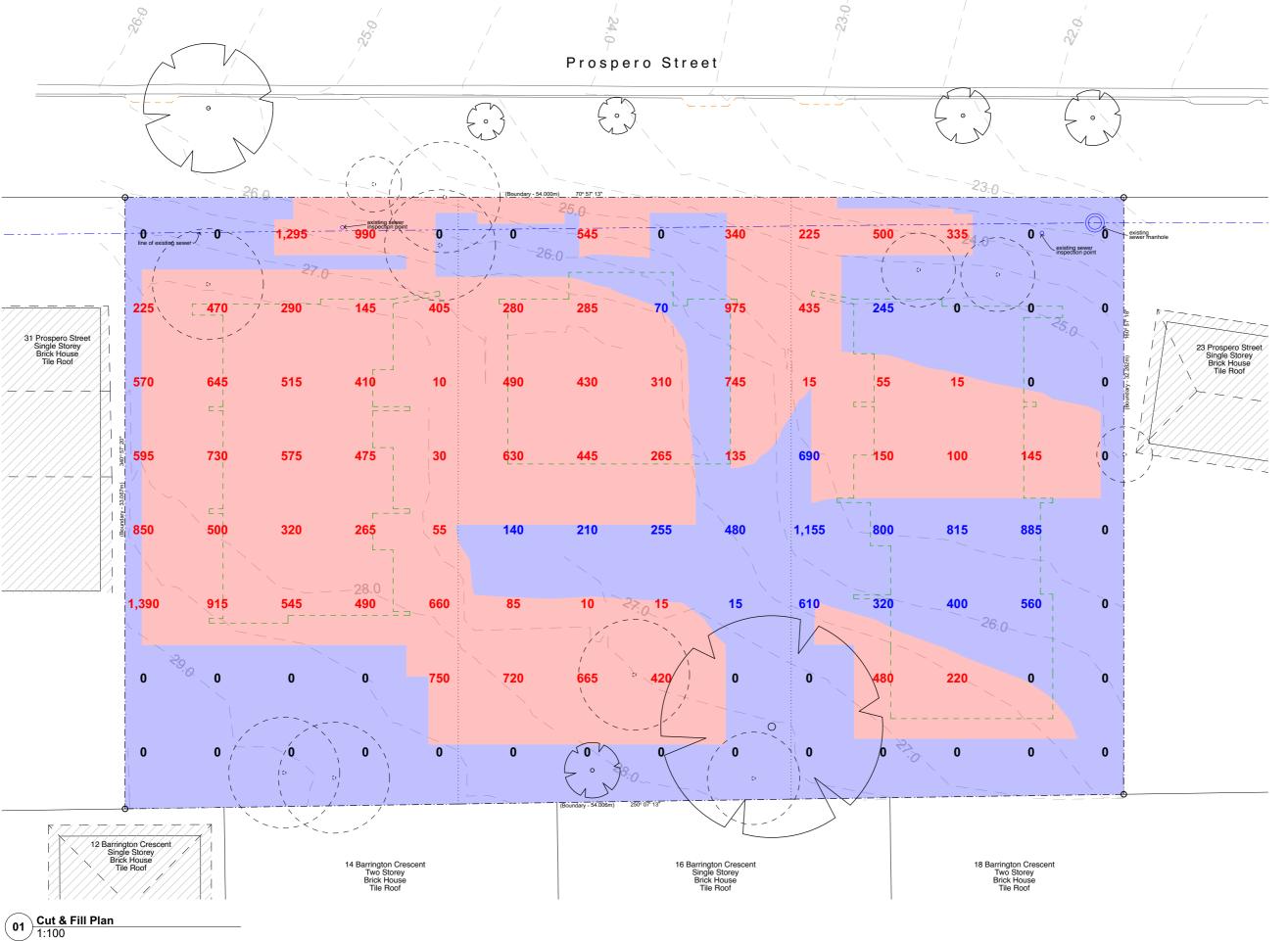






Project:
General Housing Development
Title:
Demolition Plan 25-29 Prospero Street, Maryland

2869.23_25-29 Prospero St, Maryland_Part 5.pln













General Housing Development Cut & Fill Plan 25-29 Prospero Street, Maryland

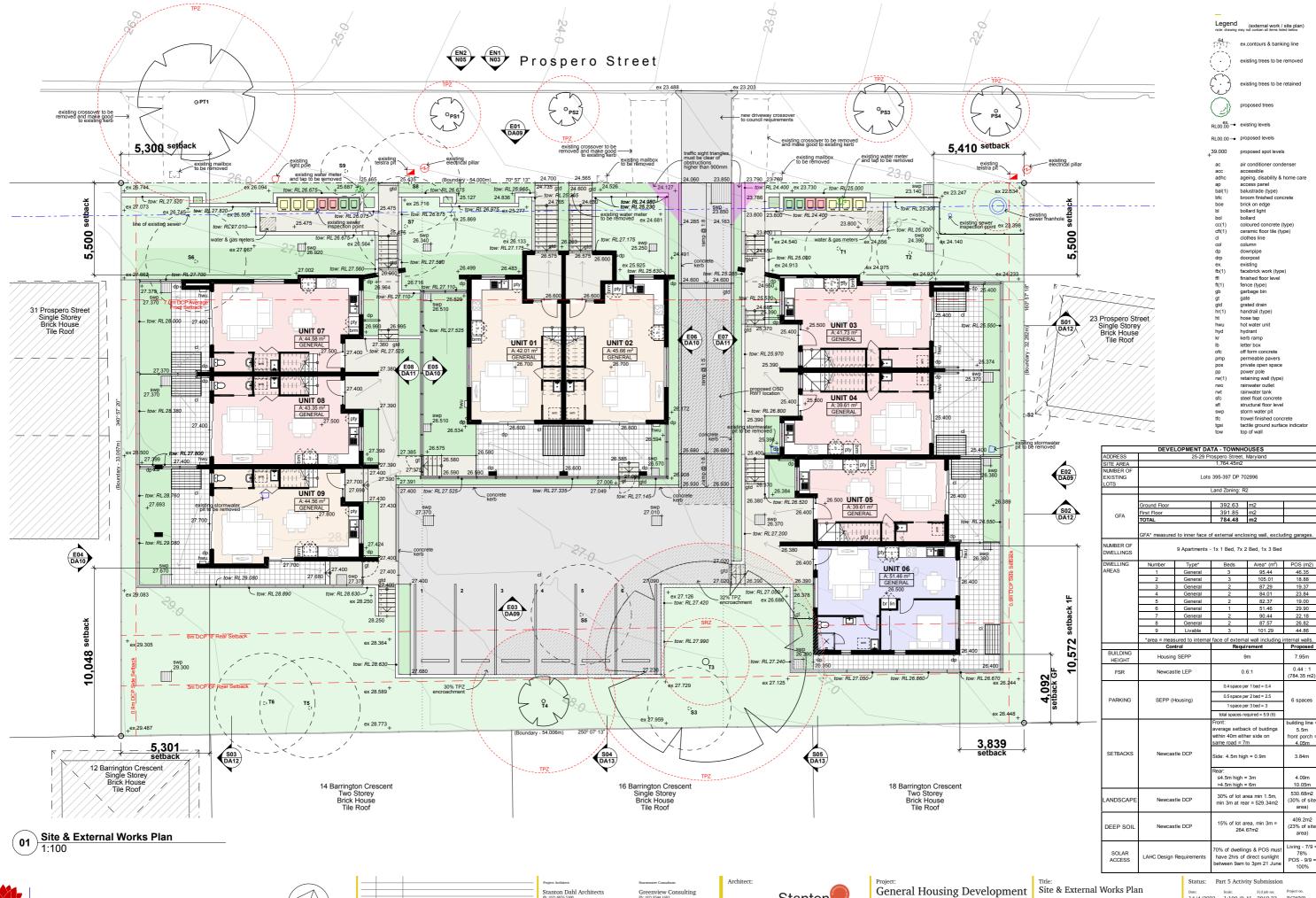
2869.23_25-29 Prospero St, Maryland_Part 5.pln

Date: S(d) ob no:

14/4/2023 1:100 @ AI 2869.23
Stage: Drawn: Checked:

Part 5 MP/DD/AT ML

Drawing: Sheet: Plotted: 14/4/2023 4:19 pm DA03 4 of 19 01



Planning & Environment









25-29 Prospero Street, Maryland

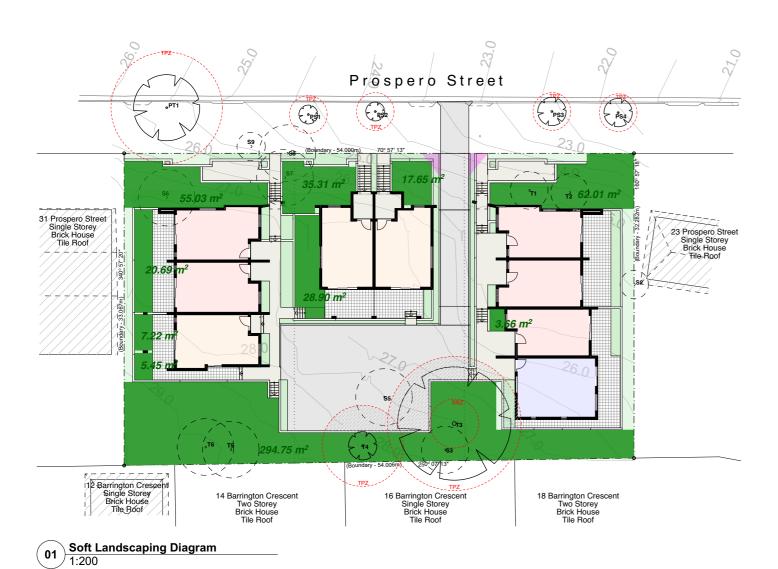
2869.23_25-29 Prospero St, Maryland_Part 5.pln

MP/DD/AT ML Plotted: 14/4/2023 DA04 5 of 19 01

soft landscape & deep soil y not contain all items listed below Dark Green area ind landscape area (min. dim 1.5x1.5m)

Dark Brown area deep soil zone (min. dim 3x3m)

Total: 409.2 m² (23% of site area)



Prospero Street *PS3 RS2 IPZ Egg1 PS4 37.43 m² ³T1 T2 44.54 m² 31 Prospero Street Single Storey Brick House Tile Roof 23 Prospero Street Single Storey Brick House Tile Roof ,T6 T5 294.75 m² 112 Barrington Crescent Single Storey Brick House Tile Boof 16 Barrington Crescent Single Storey Brick House Tile Roof 14 Barrington Crescent Two Storey Brick House Tile Roof 18 Barrington Crescent Two Storey Brick House Tile Roof

02 Deep Soil Diagram
1:200

Planning & Environment









25-29 Prospero Street, Maryland

wall type (as scheduled)

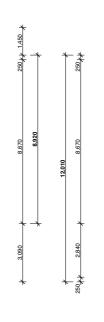
air conditioner condenser accessible ageing, disability & home care ambulant access panel balustrade (type) broom finish concrete bollard broom cupboard basin ceramic floor tile (type) control joint clothes line column communication cabinet carpet (type) cooktop downpipe doorpost electrical distribution box existing face brickwork (type) fire hose reel feature panel fridge space floor waste garbage bin gate grated drain handrail (type) hose tap hot water unit hydrant kerb ramp letter box linen cupboard microwave off form concrete privacy screen pantry reindgerator recessed floor mat wardrobe retaining wall (type) reinding door since the foat concrete shower skylight skylube sliding door store sheet vinyl (type) storm water pit tactile ground surface indicators vent pipe wood float concrete washing machine space wall oven wheel stop window casing

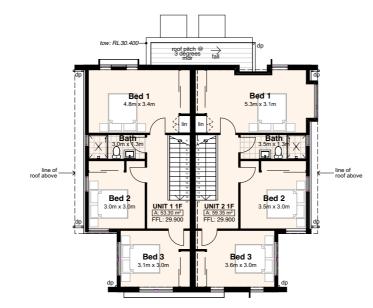
1,480 2,670

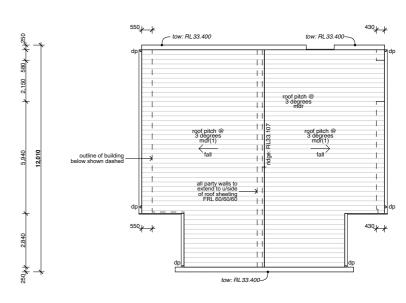
+780 + 2,320 350 + + 3.310 5.630

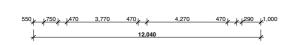




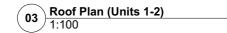












Ground Floor Plan (Units 1-2)
1:100

62 First Floor Plan (Units 1-2)
1:100









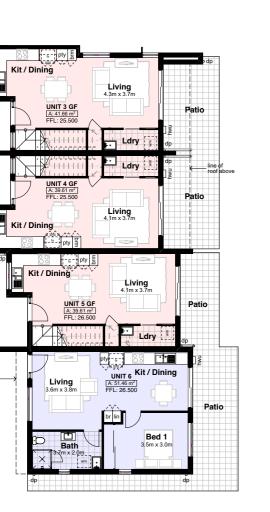




line of building _____

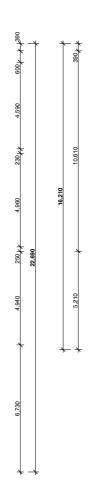
line of building ____

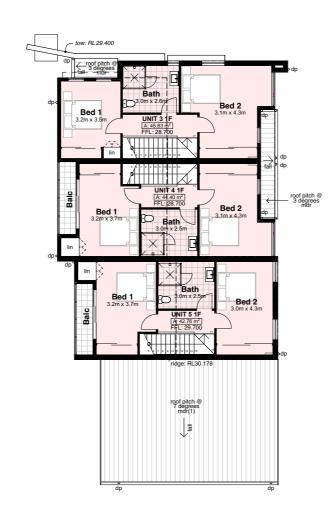
accessible
ageing, disability & home care
ambulant
access pand
balustrade (type)
broom finish concrete
bollard
broom cupboard
basin
ceramic floor tile (type)
control joint
clothes line
column
communication cabinet
carpet (type)
cooktop
downpipe
doorpost
electrical distribution box
existing
face brickwork (type)
fire hose reel
feature panel
fridge space
floor waste
garbage bin
gate
grated drain
handrail (type)
hose tap
hot water unit
hydrant
kerb ramp
letter box
linen cupboard
microwave
off form concrete
privacy screen
pantry
refridgerator
recessed floor mat
wardrobe
1 retaining wall (type)
rainwater tank
sink
steel column
steel float concrete
shower
skylight/skytube
sliding door
store
yes of the concrete
shower
shower
skylight/skytube
sliding door
store
yes of the concrete
shower
yes of the concrete
yes of the concrete
shower
yes of the concrete
shower
yes of the concrete
y

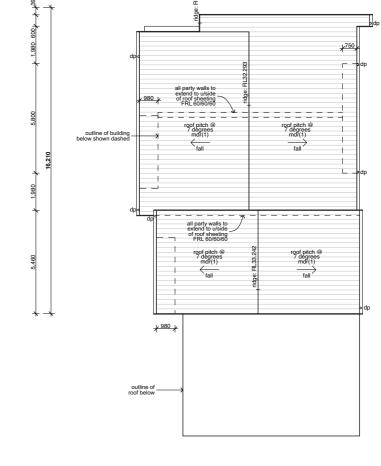


4,415

2,100 x







¥ 2,000 ¥

02 First Floor Plan (Units 3-5) 1:100

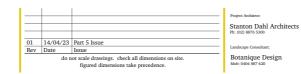
03 Roof Plan (Units 3-5) 1:100

Planning & Environment

Ground Floor Plan (Units 3-6)

1:100











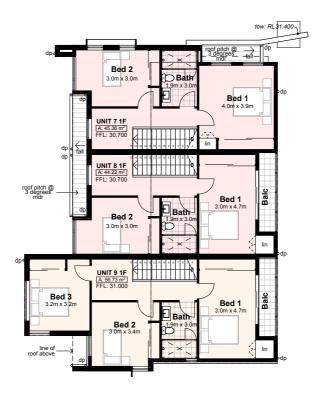


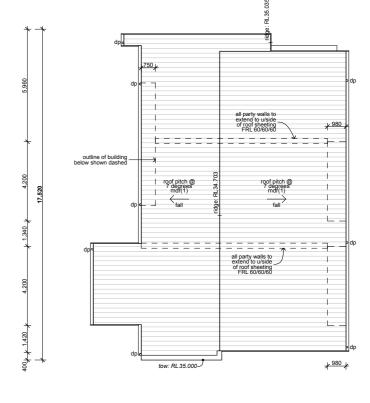
air conditioner condenser accessible ageing, disability & home care ambulant access panel balustrade (type) broom finish concrete bollard broom cupboard basin ceramic floor tile (type) control joint clothes line column communication cabinet carpet (type) cooktop downpipe doorpost electrical distribution box existing face brickwork (type) fire hose reel feature panel fridge space floor waste garbage bin gate grated drain handrail (type) hose tap hot water unit hydrant kerb ramp letter box linen cupboard microwave off form concrete privacy screen pantry refridgerator recessed floor mat wardrobe retaining wall (type) reinwater tank sink steel column steel float concrete shower shower shower shower shower shower shower shower shower put tactile ground surface indicators vent pipe wood float concrete washing machine space wall oven wheel stop window casing

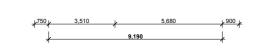


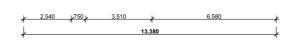










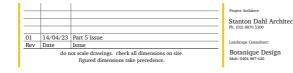




03 Roof Plan (Units 7-9) 1:100

Ground Floor Plan (Units 7-9)
1:100









air conditioner condenser ag pipe adjustable louvres aluminium framed window balustrade (type) barge capping box gutter brick on edge brickwork sill compessed fibre cement control joint concrete

concrete coved skirting cut soldier course

decorative metal screen eaves gutter existing ground line existing fixed sash window face brickwork (type) finished ceiling level finished foor level fixed louves feature panel fence (type) ground line gate handrail (type) insulated panel metal cladding (type) metal deck roof (type) metal deck roof (type) metal privacy screen non structural column obscure glazing off form concrete operable louvres paint (type) perforated acoustic panel (t plasterboard privacy screen photovoltaic cells rendered concrete raked metal soffit render & paint finish (type) rainwater head sliding sash window steel column skylight/skytube sliding door sun shade (type) timber skirting window casing

Fence Type

ft(1) 1.8m high powdercoated metal slatted fence (horizontal)

'--hand fence

1.8m high colorbond fence

1.8m high colorbond fence with 0.3m top lattice

0.9m high powdercoated metal slatted fence (vertical

downpipe door head



North Elevation (Prospero Street)



E02 East Elevation 1:100



South Elevation







General Housing Development | Elevations - Sheet 1 25-29 Prospero Street, Maryland

2869.23_25-29 Prospero St, Maryland_Part 5.pln

Date: Scale: S[d] ob no: 14/4/2023 1:100 @ AI 2869.23 Stage: Drawn: Checked: Part 5 MP/DD/AT ML Drawing: Sheet: Plotted: 14/4/2023 DA09 10 of 19 01

air conditioner condenser ag pipe adjustable louvres aluminium framed window balustrade (type) barge capping box gutter brick on edge brickwork sill compessed fibre cement control joint concrete

concrete
coved skirting
cut soldier course
downpipe
door head
decorative metal screen
eaves gutter
existing ground line
existing
fixed sash window
face brickwork (type)
finished ceiling level
finished floor level
fixed louvres
feature panel
fence (type)
ground line
gate
handrail (type)
insulated panel
metal cladding (type)
metal privacy screen
non structural column
obscure glazing
off form concrete
operable louvres
paint (type)
perforated acoustic panel (t
plasterboard
privacy screen
photovoltaic cells
rendered concrete
raked metal soffit
render & paint finish (type)
roller shutter
retaining wall (type)
rainwater head
sliding sash window
steel column
skylight/skytube
sliding door
sun shade (type)
timber skirting
window casing

1.8m high colorbond fence
 1.8m high colorbond fence
 with 0.3m top lattice

0.9m high powdercoated metal slatted fence (vertical



14 Barrington Crescent Two Storey Brick House Tile Roof V f OFirst Floor FFL: 29.900 _ tow: RL 26.975-Ground Floor FFL: 26.700 tow: RL 25.965natural ground line shown dashed

Units 1-2 West Internal Elevation 1:100

16 Barrington Crescent Single Storey Brick House Tile Roof $\nabla \nabla$ f OFirst Floor FFL: 29.900 _ Oceiling RL: 29.400 $\bigvee \bigvee$ _Ground Floor_FFL: 26.700 Ground Floor FFL: 26.700

E06 Units 1-2 East Internal Elevation











Plotted: 14/4/2023

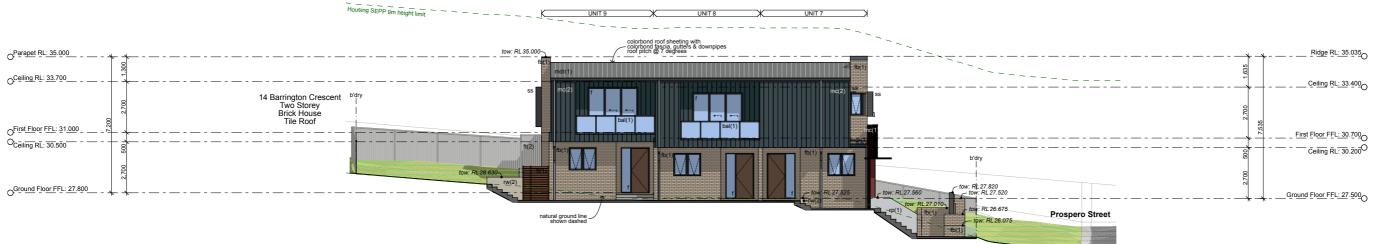
| Scale: | S DA10 11 of 19 01

(elevation & sections) y not contain all items listed below

air conditioner condenser ag pipe adjustable louvres aluminium framed window balustrade (type) barge capping box gutter brick on edge brickwork sill compessed fibre cement control joint concrete cowed skirting cut soldier course downpipe door head decorative metal screen eaves gutter existing ground line existing fround line existing fround line existing from the celling level finished floor level finishe



Units 3-6 West Internal Elevation 1:100



E08) Units 7-9 East Internal Elevation 1:100

Planning & Environment







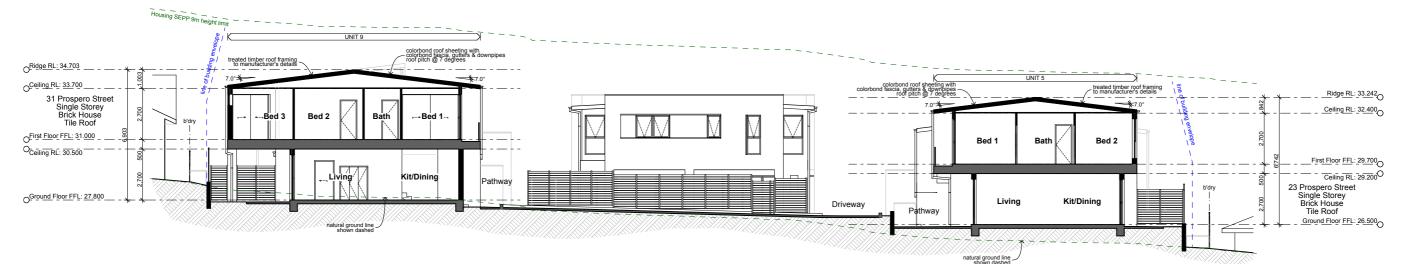


Fence Type

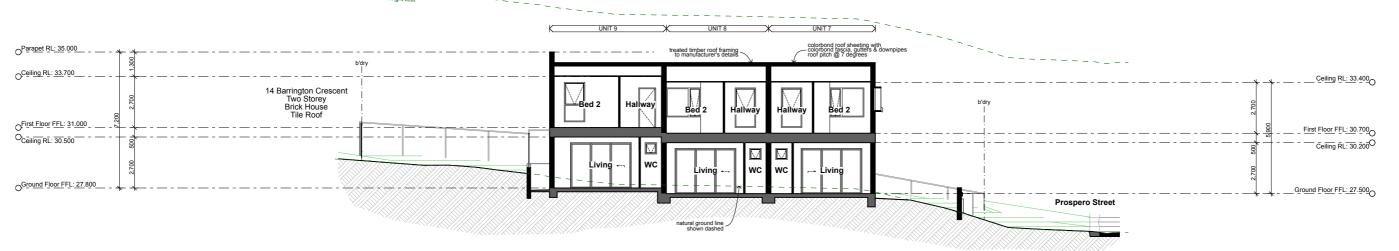
ft(1) 1.8m high powdercoated metal slatted fence (horizontal) 1.8m high colorbond fence
 1.8m high colorbond fence
 with 0.3m top lattice 0.9m high powdercoated metal slatted fence (vertical



South Section 1
1:100

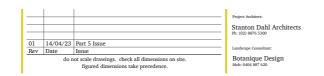


South Section 2 1:100



S03 East Section 1









Title: Sections - Sheet 1	
File:	Plotted:
2869.23_25-29 Prospero St,	

Date: S(d pb no:
14/4/2023 1:100 @ AI 2869.23
Stage: Drawn: Checked:
Part 5 MP/DD/AT ML
Drawing: Sheet: ± 14/4/2023 DA12 13 of 19 01

air conditioner condenser ag pipe adjustable louvres aluminium framed window balustrade (type) barge capping box gutter brick on edge brickwork sill compessed fibre cement control joint concrete coved skirting cut soldier course downpipe downpipe door head

decorative metal screen eaves gutter existing ground line existing fixed sash window face brickwork (type) finished ceiling level finished floor level fixed louves feature panel fence (type) ground line gate handrail (type) insulated panel metal cladding (type) insulated panel metal cladding (type) metal privacy screen non structural column obscure glazing off form concrete operable louvres paint (type) perforated acoustic panel (type) privacy screen photovottaic cells rendered concrete raked metal soffit render & paint finish (type) rainwater head sliding sash window steel column skylight/skytube sliding door sun shade (type) timber skirting window casing window casing

Fence Type

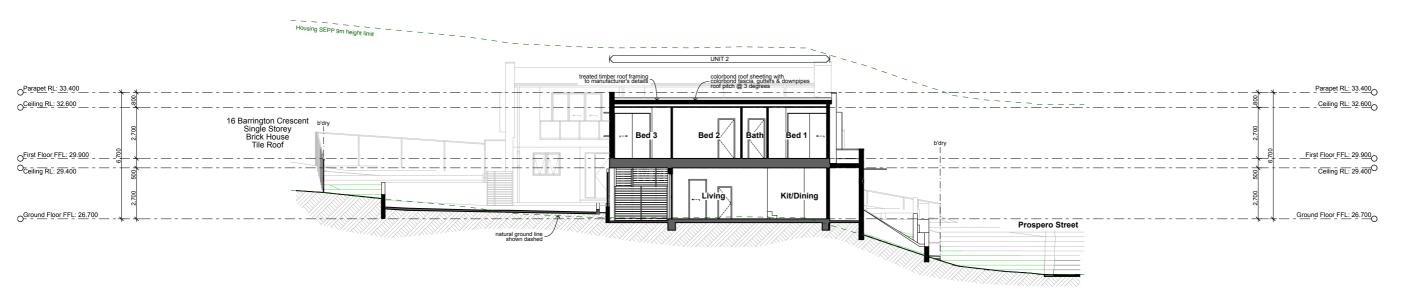
ft(1) 1.8m high powdercoated metal slatted fence (horizontal)

'--hand fence 1.8m high colorbond fence
 1.8m high colorbond fence
 with 0.3m top lattice

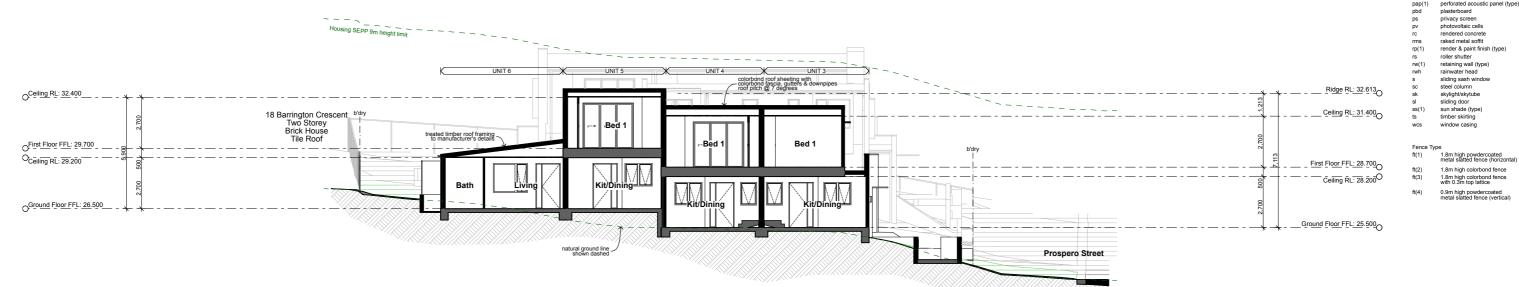
0.9m high powdercoated metal slatted fence (vertical

air conditioner condenser ag pipe adjustable louvres aluminium framed window balustrade (type) barge capping box gutter brick on edge brickwork sill compessed fibre cement control joint concrete cowed skirting cut soldier course downpipe door head decorative metal screen eaves gutter existing ground line existing ground line existing fround from the centre of the concrete finished floor level finished flo

 1.8m high colorbond fence
 1.8m high colorbond fence
 with 0.3m top lattice 0.9m high powdercoated metal slatted fence (vertical



S04 East Section 2 1:100



S05 East Section 3 1:100







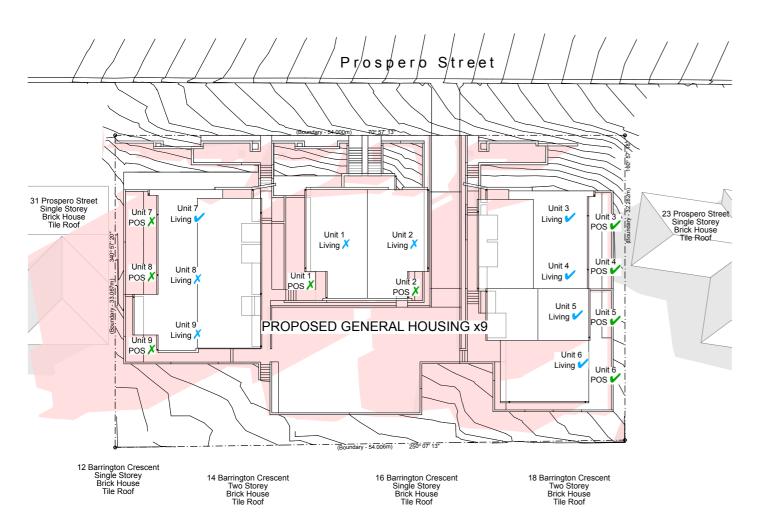




2869.23_25-29 Prospero St, Maryland_Part 5.pln

Date:	Scale:	S[4] joh no:	Project no.
14/4/2023	1:100 @ Al	2869.23	BGWY9
Stage:	Drawn:	Checket:	Approved:
Part 5	MP/DD/AT	ML	ML
Drawing:	Sheet:	Rev:	

Hotted: 14/4/2023 A:20 pm DA13 14 of 19 01



Pr/osperb S/tre/et 31 Prospero Street Single Storey Brick House Tile Roof Unit 7 POS 🗸 Unit 7 23 Prospero Street Single Storey Brick House Tile Roof Living 📢 Living V POS 🗸 💆 Unit 1 Unit 2 Living < Living 🗸 Unit 4 Unit 8 POS V Living X POS X Living 🕺 Unit 5 Living X PROPOSED GENERAL HOUSING x9 Unit 9 Living 🕺 Unit 9 Unit 6 Living 🗸 Unit 6 POS V (Boundary - 54.006m) - 250° 07' 13" 12 Barrington Crescent Single Storey Brick House Tile Roof 14 Barrington Crescent Two Storey Brick House Tile Roof 16 Barrington Crescent Single Storey Brick House Tile Roof 18 Barrington Crescent Two Storey Brick House Tile Roof

02 Shadow Diagram @ 12pm, 21 June 1:200

O1 Shadow Diagram @ 9am, 21 June 1:200

Planning & Environment

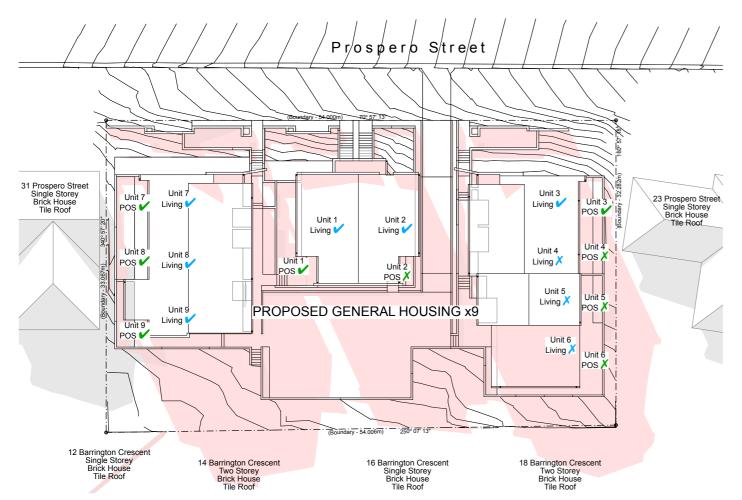








25-29 Prospero Street, Maryland



04	Shadow Diagram @ 3pm, 21 June	
(01)	1.200	

Solar Access	9am	10am	11am	12pm	1pm	2pm	3pm	Total		Complies
Unit 1	N	Υ	Υ	Ý	Y	Y	Y	5	hrs	Ý
Unit 2	N	Υ	Υ	Υ	Υ	Υ	Υ	5	hrs	Y
Unit 3	Υ	Υ	Υ	Υ	Υ	Υ	Υ	6	hrs	Y
Unit 4	Υ	Υ	Υ	N	N	N	N	3	hrs	Y
Unit 5	Υ	Υ	Υ	N	N	N	N	2	hrs	Y
Unit 6	Υ	Υ	Υ	Υ	N	N	N	3	hrs	Y
Unit 7	Υ	Y	Υ	Υ	Υ	Y	Υ	6	hrs	Y
Unit 8	N	N	N	N	N	N	Υ	0	hrs	N
Unit 9	N	N	N	N	N	N	Υ	0	hrs	N
Living areas of 70% of the dwellings must							•	Com	plies	- 7/9 = 78%
receive a minimum of 2 hours of sunlight										

Private Open	Space									
Solar Access	9am	10am	11am	12pm	1pm	2pm	3pm	To	tal	Complies
Unit 1	N	N	Υ	Υ	Υ	Υ	Υ	4	hrs	Y
Unit 2	N	Υ	Υ	Υ	N	N	N	2	hrs	Y
Unit 3	Υ	Υ	Υ	Υ	Υ	Υ	Υ	6	hrs	Y
Unit 4	Υ	Υ	Υ	Υ	Υ	Υ	N	5	hrs	Y
Unit 5	Υ	Υ	Υ	Υ	Υ	N	N	4	hrs	Y
Unit 6	Υ	Υ	Υ	Υ	Υ	N	N	4	hrs	Y
Unit 7	N	Υ	Υ	Υ	Υ	Υ	Υ	5	hrs	Y
Unit 8	N	N	N	N	Υ	Υ	Υ	2	hrs	Y
Unit 9	N	N	N	N	Υ	Υ	Υ	2	hrs	Υ
Private open space of 70% of the dwellings must							С	ompl	lies -	9/9 = 100%
receive a minimum of 2 hours of sunlight between										
9:00am and 3	:00pm	on 21 J	une.							













O1 View From Sun - 9am, June 21 not to scale



02 View From Sun - 10am, June 21 not to scale



View From Sun - 11am, June 21 not to scale



View From Sun - 12pm, June 21 not to scale



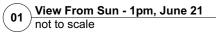
Stanton Dahl Architects

25-29 Prospero Street, Maryland

Project:
General Housing Development
Title:
View From Sun - Sheet 1

2869.23_25-29 Prospero St, Maryland_Part 5.pln







View From Sun - 2pm, June 21 not to scale











25-29 Prospero Street, Maryland

T 2

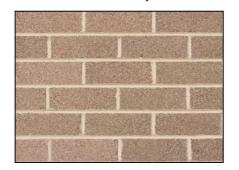
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| Stage: NP/DD/AT ML ML |
| Date: 14/4/2023 Agenvect: Sheet: Sheet: Rer. |
| DA17 18 of 19 01 2869.23_25-29 Prospero St, Maryland_Part 5.pln



View From Sun - 3pm, June 21 not to scale

General Housing Development 25-29 Prospero Street, Maryland, NSW

Lots 395-397, DP 702896



Face Brick - fb(1), rw(1) Austral "Bowral 76" Colour: "Simmental Silver"



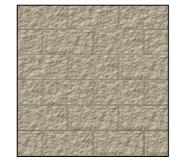
Metal Cladding - mc(1) Fielders "Prominence" Colour: "Colorbond - Aries"



Metal Cladding - mc(2) Fielders "Prominence" Colour: "Colorbond - Ironstone"



Metal Roof Sheeting - mdr(1) Colorbond "Trimdek"



Retaining Wall - rw(2) Austral - GB Split Face Colour: "Porcelain'

Render & Paint rp(1)

DULUX - 5W White on White

Gutters, Fascia, Downpipes, Letterboxes

Dulux - Colorbond "Ironstone"

Render & Paint rp(2), Cappings, Sunshades, Door & Window Frames, Balustrades

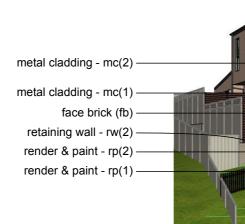
Dulux - Colorbond "Monument"

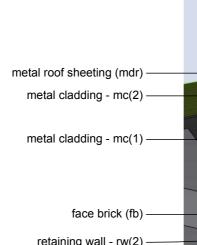
Fences ft(1) ft(4), Entry Doors

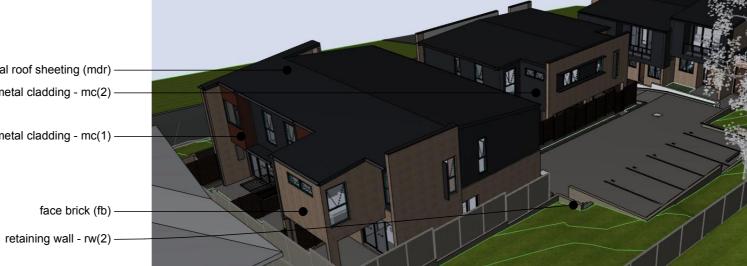
OULUX - Colorbond "Terrain"

Fences ft(2) ft(3)

DULUX - Colorbond "Surfmist"









Dahl Architects

Stanton

PART 5 ISSUE

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All dimensions to be verified on site and any discrepancies referred to architect for determination. figured dimensions to take precedence over scaled dimensions.

Land & Housing Corporation, General Housing Development 25-29 Prospero Street, Maryland, NSW

External Colour Selection

Project No; BGWY9

Drawing No; Revision#; **DA18** 01

Scale; as noted @ A3

Drawn; MP/DD/AT

Plot date; 14/4/2023

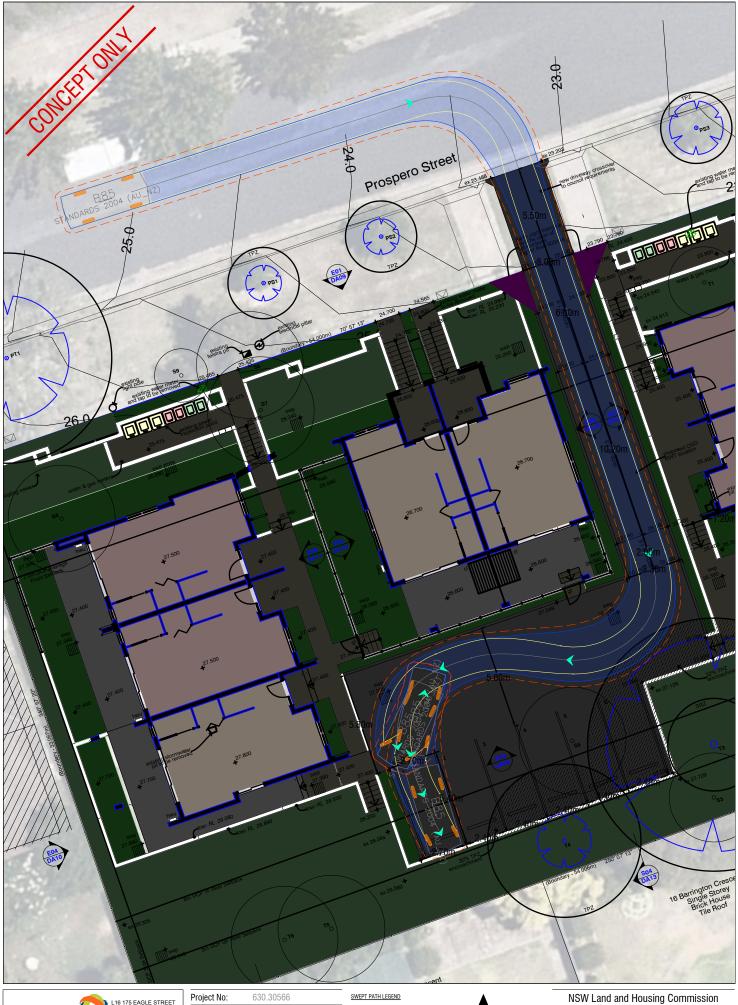
Stanton Dahl Architects PO Box 833, Epping, NSW 1710 Tel +61 2 8876 5300 www.stantondahl.com.au

Stanton Dahl & Associates Pty Limited. ABN 32 002 261 396 Nominated Architects: D.P Stanton 3642, S.M Evans 7686 © Copyright 2023 Stanton Dahl

APPENDIX B

Swept Path Assessments





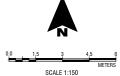


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Project No:	630.30566
Date:	26/04/2023
Drawn by:	SP
Scale:	AS SHOWN
Sheet Size:	A3
Projection:	(GDA2020) MGA Zone 56





25-29 Prospero Street, Maryland

B85 Design Review Forward Right Turn Entry Maneuver

FIGURE SK-01

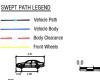




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SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

630.30566
26/04/2023
SP
AS SHOWN
A3
(GDA2020) MGA Zone 56





NSW Land and Housing Commission

25-29 Prospero Street, Maryland

B85 Design Review Forward Left
Turn Entry Maneuver

FIGURE SK-02

ASIA PACIFIC OFFICES

BRISBANE

Level 2, 15 Astor Terrace Spring Hill QLD 4000 Australia

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MACKAY

21 River Street Mackay QLD 4740 Australia

T: +61 7 3181 3300

SYDNEY

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AUCKLAND 68 Beach Road

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New Zealand

T: +64 27 441 7849

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T: +61 2 6287 0800 F: +61 2 9427 8200

MELBOURNE

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T: +61 3 9249 9400 F: +61 3 9249 9499

TOWNSVILLE

Level 1, 514 Sturt Street Townsville QLD 4810 Australia

T: +61 7 4722 8000 F: +61 7 4722 8001

NELSON

6/A Cambridge Street Richmond, Nelson 7020 New Zealand

T: +64 274 898 628

DARWIN

Unit 5, 21 Parap Road Parap NT 0820 Australia

T: +61 8 8998 0100 F: +61 8 9370 0101

NEWCASTLE

10 Kings Road New Lambton NSW 2305 Australia

T: +61 2 4037 3200 F: +61 2 4037 3201

TOWNSVILLE SOUTH

12 Cannan Street Townsville South QLD 4810 Australia T: +61 7 4772 6500

GOLD COAST

Level 2, 194 Varsity Parade Varsity Lakes QLD 4227 Australia

M: +61 438 763 516

PERTH

Ground Floor, 503 Murray Street Perth WA 6000 Australia T: +61 8 9422 5900

T: +61 8 9422 5900 F: +61 8 9422 5901

WOLLONGONG

Level 1, The Central Building UoW Innovation Campus North Wollongong NSW 2500

T: +61 404 939 922

