

APPLICATION ON NOTIFICATION – Notice Heading:

Applicant:	Nielsen Architects
Development Number:	252/E054/19
Nature of Development:	Staged construction of a Supermarket (Shop) with associated signage, acoustic wall, fencing, car parking, solar panels and landscaping
Development Type:	Merit
Subject Land:	263-271 Grange Road Findon
Development Plan:	Charles Sturt Development Plan Conslidated – 25 July 2019
Zone / Policy Area:	Neighbourhood Centre Zone – Findon Policy Area 10 – Precinct 84 Findon Centre East
Contact Officer:	Yasmine Alliu
Phone Number:	08 71097076
Consultation Start Date:	16 January 2020
Consultation Close Date:	30 January 2020
<p>During the notification period, hard copies of the application documentation can be viewed at the Department of Planning, Transport and Infrastructure, Level 5, 50 Flinders St, Adelaide, during normal business hours. Application documentation may also be viewed during normal business hours at the local Council office (if identified on the public notice).</p>	

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered or emailed to the State Commission Assessment Panel.

Any representations received after the close date will not be considered.

Postal Address:

The Secretary
State Commission Assessment Panel
GPO Box 1815
ADELAIDE SA 5001

Street Address:

Development Division
Department of Planning, Transport and Infrastructure
Level 5, 50 Flinders Street
ADELAIDE

Email Address: scapreps@sa.gov.au

**South Australian
DEVELOPMENT ACT, 1993
REPRESENTATION ON APPLICATION – CATEGORY 2**

Applicant: Nielsen Architects
Development Number: 252/E054/19
Nature of Development: Staged construction of a Supermarket (Shop) with associated signage, acoustic wall, fencing, car parking, solar panels and landscaping
Development Type: Merit
Zone / Policy Area: Neighbourhood Centre Zone – Findon Policy Area 10 – Precinct 84 Findon Centre East
Subject Land: 263-271 Grange Road Findon
Contact Officer: Yasmine Alliu
Phone Number: 08 71097076
Close Date: 30 January 2020

My Name: _____ My phone number: _____

Primary method(s) of contact: **Email:** _____
Postal Address: _____ **Postcode:** _____

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are:
(please tick one)

- owner of local property
- occupier of local property
- a representative of a company/other organisation affected by the proposal
- a private citizen

The address of the property affected is: _____
Postcode _____

My interests are:
(please tick one)

- I support the development
- I support the development with some concerns
- I oppose the development

The specific aspects of the application to which I make comment on are: _____

I: wish to be heard in support of my submission
(please tick one) do not wish to be heard in support of my submission
(Please tick one)

By: appearing personally
(please tick one) being represented by the following person
(Please tick one)

Signature: _____
Date: _____

Why have I received this notice?

The role of the State Commission Assessment Panel (SCAP) is to independently assess and determine specified kinds of development applications in South Australia in accordance with the *Development Act 1993*.

Some types of development application require public notification. This is determined by the relevant Development Plan and Schedule 9 of the *Development Regulations 2008*. Development applications fall into one of the following categories:

- Category 1: No public notification
- Category 2: Notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed. A person contacted in this way has the right to make a written representation to the SCAP. Representations from those with a right to be heard must be taken into consideration by SCAP when assessing the development application.
- Category 3: Written notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed and to any owner/occupier of land which the SCAP believes would be directly affected to a significant degree if the development were to proceed. Notice by newspaper advertisement to be given to the general public.

What is a valid representation?

Your representation must be made within the public notification period as described upon the notice you have received. Pursuant to the *Development Act 1993*, this period is 10 business days from the date notice is given.

Your representation must be signed, dated, set out the reasons for the representation and include your full name and address contact details.

What can I comment on?

It is important to be mindful that your representation should avoid raising matters that are not relevant to the planning assessment of the application. A planning assessment can only have regard to the relevant provisions of the Development Plan. A representation can raise issues both in support and in opposition to a development.

You can access the relevant Development Plan here: <https://www.sa.gov.au/topics/planning-and-property/development-plans>

What happens next?

All valid representations received through either a Category 2 or Category 3 process are forwarded to the applicant for a response and taken into consideration by a Planning Officer from the Department of Planning, Transport and Infrastructure in preparing their assessment.

Pursuant to the *Freedom of Information Act 1991* and *Development Act 1993* any information provided may become part of a public document and may be published as an attachment to the Planning Officer's report.

If you have indicated that you wish to be heard you will receive an invitation to appear personally before the SCAP, or be represented by counsel, solicitor or agent. This invitation must give five (5) business days notice of the meeting but, dependent on other issues to be assessed, this meeting may not occur for an indefinite period of time after your representation is made. Unfortunately, the meeting time and date cannot be adjusted to accommodate all attendees.

If you have not indicated that you wish to be heard in support of your submission, you will not receive any further correspondence on this matter until a decision is made.

What is a SCAP meeting?

SCAP meetings are generally held on the second and fourth Thursdays of each month in the Kardi Munaintya meeting room on the ground floor at 50 Flinders Street, Adelaide.

The SCAP will be assessing the development application against the relevant Council Development Plan. To assist, an assessment report will be prepared by a Planning Officer from the Department of Planning, Transport and Infrastructure. This report is publicly available from https://www.saplanningcommission.sa.gov.au/scap/agendas_minutes on the Monday afternoon prior to the meeting. This report will include a copy of your representation.

Representors wishing to be heard will be given the opportunity to make a short (5 minute maximum) verbal presentation to the SCAP. Please note that Representors are only provided with the opportunity to make a verbal presentation at the initial hearing of an application. At this meeting, the SCAP may also hear comments from the applicant, relevant agencies, and Council.

How do I know what decision is made?

You will be able to ascertain the outcome of the SCAP's deliberation when the meeting minutes are made available on the SCAP website on the afternoon of the day after a meeting.

Once a decision is made by the SCAP, valid representors will be sent a copy of the Decision Notification Form which includes any conditions relevant to the application.

Note: Dependent on the assessment process for the application, and if no Representors indicate that they wish to be heard, a decision may be made by a Delegate of the SCAP without the application being heard at a SCAP meeting.

Appeal rights

If the proposal is a Category 3 application, then you can appeal a decision made by the SCAP if you have made a valid representation

Such an appeal must be lodged at the Environment, Resources and Development Court fifteen (15) business days from the date of decision. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0300).



STATE
COMMISSION
ASSESSMENT
PANEL

A COMMITTEE OF THE STATE PLANNING COMMISSION

Representors do not have a right of appeal in relation to Category 2 development applications.

For more information

Contact the SCAP Secretariat on:

Telephone: 1800 752 664 (Select Option 4)

Direct: 7109 7061

E-mail: scapadmin@sa.gov.au

Postal: GPO Box 1815, Adelaide SA 5001

Street: Level 5, 50 Flinders Street, Adelaide SA 5000

Website: <https://www.saplanningcommission.sa.gov.au/scap>

DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS

COUNCIL: City of Charles Sturt

APPLICANT: Nielsen Architects

Postal Address: 108 Mount Barker Road
STIRLING

Owner: TBA

Postal Address: _____

BUILDER: TBC

Postal Address: _____

Licence No: _____

CONTACT PERSON FOR FURTHER INFORMATION

Name: Chris Carrey - Ekistics Planning and Design

Telephone: (08) 7231 0286 [work] 0434 484 046 [Ah]

Fax: _____ [work] _____ [Ah]

EXISTING USE: Vacant Commercial Buildings

FOR OFFICE USE

Development No: _____

Previous Development No: _____

Assessment No: _____

- Complying
- Non Complying
- Notification Cat 2
- Notification Cat 3
- Referrals/Concurrences
- DA Commission

Application forwarded to DA

Commission/Council on
_____ / _____ / _____

Decision: _____

Type: _____

Date: _____ / _____ / _____

	Decision required	Fees	Receipt No	Date
Planning:	_____	_____	_____	_____
Building:	_____	_____	_____	_____
Land Division:	_____	_____	_____	_____
Additional:	_____	_____	_____	_____
Development Approval				

DESCRIPTION OF PROPOSED DEVELOPMENT: Supermarket, advertising displays, acoustic wall, fencing, car parking, solar panels and landscaping

LOCATION OF PROPOSED DEVELOPMENT: 263-271 Grange Road, FINDON

House No: 263-271 Lot No: _____ Street: Grange Road Town/Suburb: FINDON

Section No [full/part] _____ Hundred: See Attached Volume: See Attached Folio: _____

Section No [full/part] _____ Hundred: _____ Volume: _____ Folio: _____

LAND DIVISION: N/A

Site Area [m²] _____ Reserve Area [m²] _____ No of existing allotments _____

Number of additional allotments [excluding road and reserve]: _____ Lease: YES NO

BUILDING RULES CLASSIFICATION SOUGHT: N/A Present classification: _____

If Class 5,6,7,8 or 9 classification is sought, state the proposed number of employees: Male: _____ Female: _____

If Class 9a classification is sought, state the number of persons for whom accommodation is provided: _____

If Class 9b classification is sought, state the proposed number of occupants of the various spaces at the premises: _____

DOES EITHER SCHEDULE 21 OR 22 OF THE DEVELOPMENT REGULATIONS 2008 APPLY? YES NO

HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 2008 LEVY BEEN PAID? YES NO

DEVELOPMENT COST [do not include any fit-out costs]: \$ \$5.45M

I acknowledge that copies of this application and supporting documentation may be provided to interested persons in accordance with the Development Regulations 2008.

SIGNATURE: 

Dated: 4 / 12 / 19

DEVELOPMENT REGULATIONS 1993
Form of Declaration
(Schedule 5 clause 2A)

To: State Commission Assessment Panel

From: Nielsen Architects

Date of Application: 4 / 12 / 19

Location of Proposed Development: 263-271 Grange Road, FINDON

House No: 263-271 Lot No: Street: Grange Road Town/Suburb: FINDON

Section No (full/part): Hundred: Refer Attached Certificates of Title


Volume: Folio:

Nature of Proposed Development:

Supermarket, advertising displays, acoustic wall, fencing, car parking, solar panels and landscaping

Nielsen Architects
Ibeing the applicant/
a person acting on behalf of the applicant (delete the inapplicable statement) for
the development described above declare that the proposed development will
involve the construction of a building which would, if constructed in accordance
with the plans submitted, not be contrary to the regulations prescribed for the
purposes of section 86 of the *Electricity Act 1996*. I make this declaration under
clause 2A(1) of Schedule 5 of the *Development Regulations 1993*.

Date: 4 / 12 / 19

Signed: 

Note 1

This declaration is only relevant to those development applications seeking
authorisation for a form of development that involves the construction of a building
(there is a definition of 'building' contained in section 4(1) of the *Development Act
1993*), other than where the development is limited to –

- a) an internal alteration of a building; or
- b) an alteration to the walls of a building but not so as to alter the shape of the building.

Note 2

The requirements of section 86 of the *Electricity Act 1996* do not apply in relation to:

- a) a fence that is less than 2.0 m in height; or
- b) a service line installed specifically to supply electricity to the building or structure by the operator of the transmission or distribution network from which the electricity is being supplied.

Note 3

Section 86 of the *Electricity Act 1996* refers to the erection of buildings in proximity to powerlines. The regulations under this Act prescribe minimum safe clearance distances that must be complied with.

Note 4

The majority of applications will not have any powerline issues, as normal residential setbacks often cause the building to comply with the prescribed powerline clearance distances. Buildings/renovations located far away from powerlines, for example towards the back of properties, will usually also comply.

Particular care needs to be taken where high voltage powerlines exist; where the development:

- is on a major road;
- commercial/industrial in nature; or
- built to the property boundary.

Note 5

Information brochures 'Powerline Clearance Declaration Guide' and 'Building Safely Near Powerlines' have been prepared by the Technical Regulator to assist applicants and other interested persons. Copies of these brochures are available from council and the Office of the Technical Regulator. The brochures and other relevant information can also be found at www.technicalregulator.sa.gov.au

Note 6

In cases where applicants have obtained a written approval from the Technical Regulator to build the development specified above in its current form within the prescribed clearance distances, the applicant is able to sign the form.

PLN/06/0024

ekistics

ALDI FINDON PLANNING STATEMENT

Proposed Retail Development at
263-271 Grange Road, Findon

Prepared for:
Nielsen Architects

Date:
December 2019

ekistics

Proprietary Information Statement

The information contained in this document produced by Ekistics Planning and Design is solely for the use of the Client as identified on the cover sheet for the purpose for which it has been prepared and Ekistics Planning and Design undertakes no duty to or accepts any responsibility to any third party who may rely upon this document.

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Document Control

Revision	Description	Author	Date
V1	Draft Planning Statement	CC	4 December 2019
V2	Final Planning Statement	CC	5 December 2019

Approved by: Kieron Barnes



Date: 5 December 2019

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1. Executive Summary

Category	Details
PROJECT	ALDI Findon
ADDRESS OF SITE	263-271 Grange Road, Findon
CERTIFICATE OF TITLE	<ul style="list-style-type: none"> • Allotment 36 in Certificate of Title Volume 6080 Folio 458; • Allotment 35 in Certificate of Title Volume 5301 Folio 952; • Allotment 10 in Certificate of Title Volume 5366 Folio 314; • Allotment 9 in Certificate of Title Volume 5366 Folio 397; and • Allotment 8 and Portion of Allotment 7 in Certificate of Title Volume 5284 Folio 711.
SITE AREA	5,686m ²
PRIMARY FRONTAGE (Grange Road)	Approximately 93m
SECONDARY FRONTAGE (Noblet Street)	Approximately 54m
LOCAL GOVERNMENT	City of Charles Sturt
RELEVANT AUTHORITY	State Commission Assessment Panel (SCAP) – Schedule 10 Cl. 20
DEVELOPMENT PLAN	City of Charles Sturt - Consolidated 25 July 2019
ZONING	Neighbourhood Centre Zone
POLICY AREA/PRECINCT	<ul style="list-style-type: none"> • Findon Policy Area 10 • Precinct 84 Findon Centre East
EXISTING USE	Vacant commercial buildings
PROPOSAL DESCRIPTION	Staged construction of a supermarket (shop) with associated signage, acoustic wall, fencing, car parking, solar panels and landscaping
AGENCY REFERRALS	Commissioner of Highways (DPTI)
PUBLIC NOTIFICATION	Category 2
APPLICANT	Nielsen Architects
CONTACT PERSON	Chris Carrey or Kieron Barnes – Ekistics Planning and Design – (08) 7231 0286
OUR REFERENCE	00863-001

2. Introduction/Background

Nielsen Architects, on behalf of ALDI Stores is seeking to construct a supermarket with associated signage, car parking, acoustic wall, fencing, solar panels and landscaping on a site situated at the intersection of Grange Road and Noblet Street, Findon.

This planning statement provides information about the subject site and proposed development and addresses the merits of the development application against the relevant provisions of Findon Policy Area 10 and Precinct 84 Findon Centre East of the Neighbourhood Centre Zone, within the City of Charles Sturt Development Plan, as well as the most relevant 'Council Wide' provisions.

For the purposes of this statement, the City of Charles Sturt Development Plan (consolidated 25 July 2019) will be referred to as the 'Development Plan', the *Development Act 1993* will be referred to as the 'Act' and the *Development Regulations 2008* will be referred to as the 'Regulations'.

This Planning Statement has been prepared based on the plans, elevations and perspectives prepared by Nielsen Architects, as well as other supporting documentation, which form part of the application and are appended as follows:

- *Appendix 1:* Relevant Certificates of Title
- *Appendix 2:* Survey Plan prepared by Alexander Symonds Surveyors
- *Appendix 3:* Architectural Plans and Perspectives by Nielsen Architects
- *Appendix 4:* Environmental Noise Assessment by Sonus
- *Appendix 5:* Email from South Australian Housing Association
- *Appendix 6:* Traffic Impact Assessment prepared by GTA Consultants
- *Appendix 7:* ALDI Loading Procedures
- *Appendix 8:* Landscape Plan prepared by Outerspace Landscape Architects
- *Appendix 9:* Stormwater Management Report prepared by Wallbridge Gilbert Aztec

3. The Site and Locality

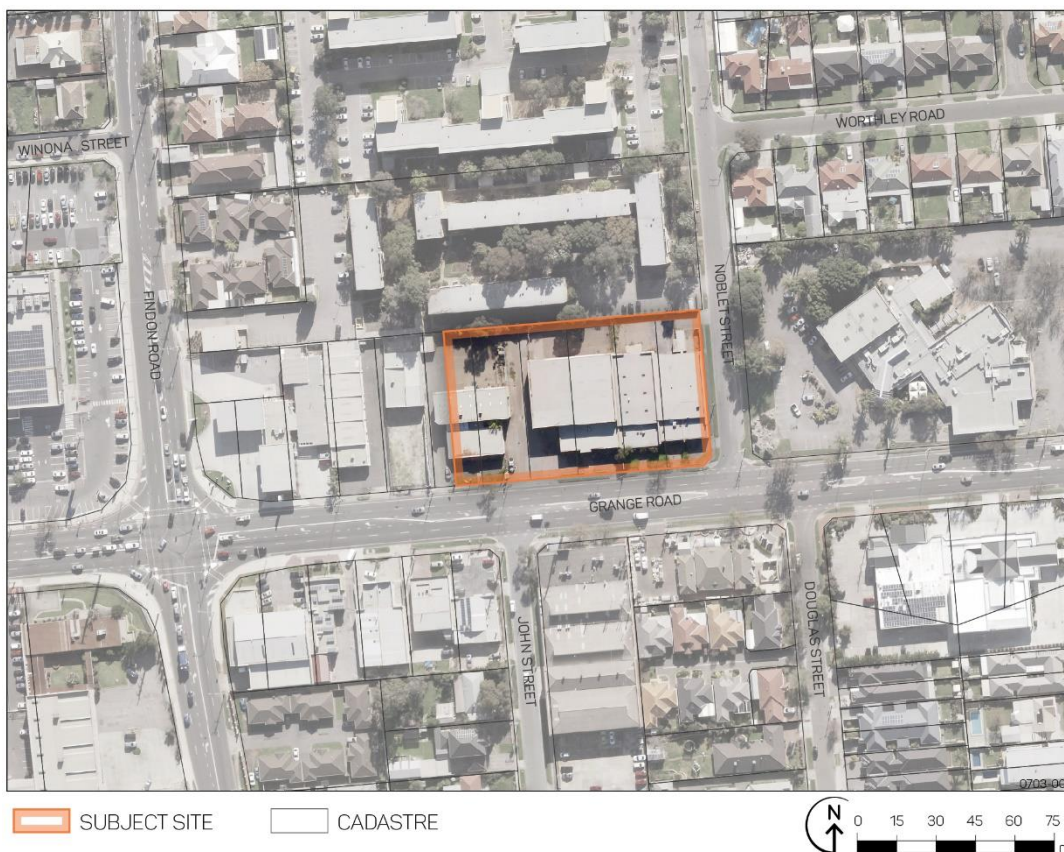
3.1 The Site

The subject land, illustrated in **Figure 3.1** below, is located at 263-271 Grange Road, Findon and comprises the following Certificates of Title which are all provided in **Appendix 1**:

- Allotment 36 in Certificate of Title Volume 6080 Folio 458;
- Allotment 35 in Certificate of Title Volume 5301 Folio 952;
- Allotment 10 in Certificate of Title Volume 5366 Folio 314;
- Allotment 9 in Certificate of Title Volume 5366 Folio 397; and
- Allotment 8 and Portion of Allotment 7 in Certificate of Title Volume 5284 Folio 711.

It is noted that Allotment 35 has a Right of Way (ROW) over a portion of land at the rear of Allotment 36. This ROW allows commercial vehicles to gain access to the existing building on Allotment 35 from Noblet Street. This ROW will no longer be required as part of the proposed development and will be extinguished once the ALDI Store has been approved. There are no other easements, rights of way, encumbrances or other dealings registered to the relevant Certificates of Title.

Figure 3.1 Aerial Photograph of the Site



A separate plan of division will be prepared and lodged by the Applicant for the purposes of creating an allotment which identifies and reflects the boundaries of the development site and extinguishes those existing easements. The intent is to enable ALDI to obtain and operate from an allotment described under one (1) single title. Accordingly, the 'balance' portion of Allotment 7 does not form part of the 'development site'.

The development site is located on the northern side of Grange Road, to the west of the Noblet Street intersection. The site is of a regular shape and comprises an area of approximately 5,686m². The site has a primary frontage to Grange Road of approximately 93 metres (excluding corner cut-off) and secondary frontage to Noblet Street of approximately 54 metres (excluding corner cut off).

The site contains several commercial buildings which are oriented towards Grange Road. At the time of our inspection these buildings were all vacant, however we understand they previously accommodated a variety of commercial related land uses including warehouses and retail showrooms. A separate development application has been lodged for the demolition of all existing structures.

The site and existing commercial premises are serviced by four (4) driveway/crossovers to Grange Road, and two (2) driveway/crossovers to Noblet Street. We note the southern-most crossover on Noblet Street is located very close to the Grange Road/Noblet Street intersection.

Existing car parking spaces are generally provided forward of the buildings, facing Grange Road, while the areas to the rear of the buildings accommodated outdoor storage, servicing and loading/unloading activities.

The majority of the site is sealed with concrete surfaces (or similar) with minimal areas of landscaping. The existing site offers a low level of amenity to the locality and the existing buildings are of an outdated style, poorly maintained with little or no contribution to streetscape activation. The existing site also fails to provide an address to Noblet Street, and the present arrangement comprises a high-level solid brick wall to a large portion of the boundary.

The rear of the existing buildings are configured to have multiple roller door openings facing north, directly towards the adjoining residential development. The northern boundary comprises solid metal fencing, in varying states of repair, with three (3) strands of barbed wire strung above.

A Survey Plan has been prepared by Alexander Symonds and is included as **Appendix 2** to this Report. As illustrated within the Survey Plan, the site is relatively flat with a gentle fall to the west.

There are no Regulated or Significant Trees on the site or on adjoining sites in proximity to the development site.

Images of the subject site are provided in **Figure 3.2** over page.

Figure 3.2 Images of the Subject Site



Looking north-east along Grange Road



Looking north-west along Noblet Street



Looking east along Grange Road



View to the east within the rear servicing area of the existing site



Looking south-west into the site on Noblet Street

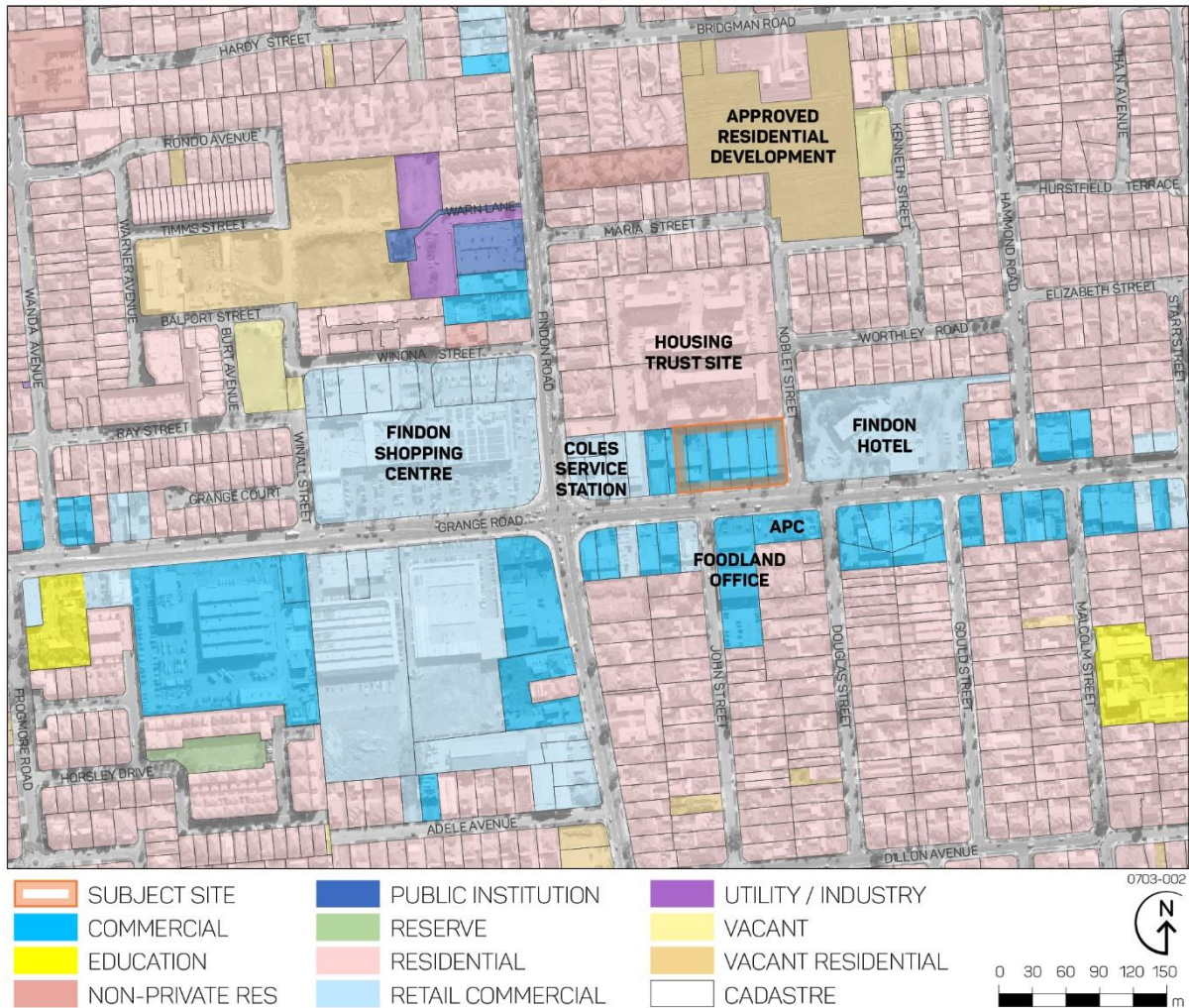


Looking north within the site, with the adjoining residential development in the background

3.2 The Locality and Surrounding Development

A land use and locality plan are provided in **Figure 3.3** below.

Figure 3.3 Land Use Mix within Locality



Land immediately adjoining/opposite the development site is described as follows:

- Immediately to the west (of the balance portion of Allotment 7) are vacant commercial buildings which, subject to a separate development application, are to be demolished. Further to the west, situated on the north-east corner of the Grange Road / Findon Road intersection, is an integrated petrol filling station complex, presently operated by Shell/Coles;
- Adjoining the site to the north is high density public housing in the form of residential flat buildings up to three (3) and four (4) storeys in height, operated by the SA Housing Authority;
- To the east of the subject site, on the opposite side of Noblet Street is the Findon Hotel (including Bottle Shop); and

- To the south, on the opposite side of Grange Road, there are a number of commercial premises including (but not limited to), Peter Elberg Funerals, Australian Paving Centre (APC), and Foodland Headquarters.

Beyond these immediate sites, the locality comprises a mix of commercial and residential land uses. In particular:

- Further to the west, on the opposite side of Findon Road is the Findon Shopping Centre which includes 'Coles' and 'Drakes Foodland' supermarkets, as well as a range of other smaller retail and commercial tenancies;
- The Grange Road corridor to the east, generally comprises commercial and retail type uses, dwellings adapted for commercial purposes with interspersed residential dwellings; and
- Beyond the Grange Road corridor, north and south, generally consists of residential development at low to medium density, with numerous examples of 'infill' development occurring.

We also understand that to the north of the site, situated between Northumberland Avenue and Bridgman Road, approval has been granted for a residential land division which will create in the order of 70 new residential allotments

Grange Road is a 'secondary arterial road' under the care and control of the Department of Planning, Transport and Infrastructure (DPTI). It comprises dual carriageways aligned in an east-west direction, with two (2) lanes in each direction, separated by a raised central median. A bicycle lane operating 7.00am to 9.00am (eastbound) and 4.00pm to 6.00pm (westbound) is provided on each carriageway. Kerbside parking is not permitted during bicycle lane operating hours.

Grange Road has a speed limit of 60km/h and carries approximately 25,000 vehicles per day.

There are pedestrian footpaths on both sides of Grange Road, with the nearest signalised pedestrian crossing located at the Grange Road / Findon Road intersection, approximately 100 metres west of the subject site.

Bus routes 110 and 112 service this portion of Grange Road for services travelling between the Adelaide CBD and West Lakes Shopping Centre. These routes include 'high-frequency' 15-minute services during weekdays and 30-minute frequency on weekends. The closest bus stop is located approximately 125 metres to the east of the site.

Findon Road is also a 'secondary arterial road' under the care and control of DPTI and is located approximately 100 metres from the western boundary of the 'development site'.

Noblet Street is a local road managed by the City of Charles Sturt with an urban default speed limit of 50km/h which carries approximately 650 vehicles per day. It is aligned in a north-south direction and forms a T-Junction with Grange Road. Kerbside parking is not permitted on the western side of the street, while it is allowed on the eastern side of the street, subject to time constraints.

The site does not contain any Heritage Places and there are no Heritage Places in proximity to the development site.

Advertising signage associated with existing commercial and retail uses forms highly evident features of the immediate locality. This is particularly notable with existing commercial developments located along the Grange Road and Findon Road corridors. As illustrated within **Figure 3.4** over page, established advertising strategies within the locality include freestanding pylon signs, on-building fascia signage, billboard and fencing signage, as well as flags and teardrop signs.

Figure 3.4 Images Within Locality



4. Proposed Development

4.1 Land Use

The proposed development involves the staged construction of an ALDI supermarket, with associated advertising signage, acoustic wall, fencing, solar panels, car parking and landscaping on a 5,686m² site.

The store will be located within the north-west portion of the site and comprises a net floor area of 1,792m² of which 1,186m² will be retail floor space and 526m² will be 'back of house' functions.

A supermarket is a form of a 'shop', as defined in Schedule 1 of the Regulations:

shop means—

(a) premises used primarily for the sale by retail, rental or display of goods, foodstuffs, merchandise or materials; or...

4.1.1 Operational Aspects

ALDI stores are in many ways similar to 'typical' supermarkets in that they offer traditional grocery products in a familiar aisle-by-aisle format. However, there are a number of key differences that distinguish ALDI from other supermarket operations. These differences include:

- Predominately exclusive ALDI label branded products;
- 'Hard discount' food and grocery model;
- Simplified, consistent supply chain, building development, internal layout, merchandising, store operations and marketing;
- All delivery and logistics undertaken by ALDI employees, with only two (2) 20.0 metre truck deliveries per day and one (1) daily bakery delivery via a small rigid vehicle;
- Low swept exhaust delivery vehicles. ALDI trucks are to European standards with the exhaust discharge at wheel level on the Prime Mover, i.e. there is no exhaust discharge above the vehicle cabin;
- Limited 'night fill' or store replenishment occurring outside of store operating hours, with staff leaving shortly after store closure;
- Regulated product range of approximately 1,350 items (compared with typical full-line supermarkets which offer between 20,000-30,000 items); and
- Considerably smaller retail floor area (in this case 1,186m²) compared with full-line supermarkets which are typically between 3,000m² to 4,000m².

Of particular note is that ALDI Stores, of which there are in excess of 520 across Australia in Victoria, NSW, ACT and QLD, successfully operate in close proximity to other major supermarket chains (i.e. Coles, Woolworths and Foodland), with direct competition in approximately 80% of the existing locations.

In South Australia, ALDI commenced its state-wide store roll-out in February 2016 and now has approximately 32 operating stores (25 in Greater Adelaide and 7 in Regional areas). Notwithstanding, ALDI has less than a 5% market share of supermarket and grocery store turnover in the state.

Unlike most supermarket operations, ALDI owns, operates and controls all its supply and logistics via its purpose-built distribution centre located in Regency Park, which is located approximately 9 kilometres (15 minute drive) from the subject site. This streamlined system of operation enables ALDI to position itself as a discount supermarket quite different to its competitors. To support deliveries, a loading bay will be situated on the northern side of the proposed building which will provide for ALDI's dedicated delivery by up to 20.0-metre-long semi-trailers.

A typical ALDI store employs 25 full-time equivalent (FTE) employees with 6-10 employees present on site at any one time.

The hours of operation for the supermarket will be in accordance with the *Shop Trading Hours Act, 1977* and *Shop Trading Hours Regulations, 2003*.

4.2 Built Form

A site responsive, spatially efficient and architecturally designed ALDI Store is proposed for the Findon site. The building provides at grade parking to the south and east of the site and the building has been designed to provide visual address to both Grange Road and Noblet Street while being respectful of adjoining properties.

Nielsen Architects ('Nielsen') have prepared perspective images of the ALDI Store as viewed from Grange Road which are provided over page.

Nielsen have developed a comprehensive plan package which clearly illustrates the built form proposed which is attached as **Appendix 3**.

The proposed building will be setback as follows:

- Approximately 20 metres from Grange Road;
- Approximately 45 metres from Noblet Street;
- A portion of the building is to be located on the northern boundary, with the remainder of the building setback approximately 8 metres; and
- The building is to be located on the western boundary of the development site.

The proposed ALDI building will have a maximum height of approximately 8.5 metres, measured from finished floor level. However, most of the building will have a height of 6.275 metres above finished floor level.

Figure 4.1 Perspective View - Looking North-West towards the site from Grange Road



Figure 4.2 Perspective View – Looking West with Grange Road on the left



The highest portion of the building will be the ‘tower’ element which will be located to the northern end of the building adjacent Noblet Street. The tower element is a key design feature of ALDI Stores and is intended to create visual interest while also clearly identifying the main frontage of the store for customers. As noted on the elevations, the tower will be a different colour from the bulk of the store and will feature a graphic image which will create visual interest and reinforce the ALDI brand.

The main entrance to the ALDI Store will be located in the south-east corner and the main shopfront of the store will face Noblet Street. A canopy will project out from the shop frontage (east), which will also wrap around a portion of the southern elevation to provide shelter for customers and create additional articulation.

The eastern elevation will feature glass automatic doors at the entrance to the Store. In addition, high level windows will be installed along the eastern elevation, as well as within the south-eastern corner of the building directly below the canopy.

The Noblet Street and Grange Road elevations of the building will be primarily constructed of the following materials and colours:

- Precast concrete panel walls painted Dulux ‘Fluorescent Fire’;
- Precast concrete panels for the tower element – painted Dulux ‘Drive Time’;
- Fibre cement fascia to the canopy – painted Dulux ‘Drive Time’;
- Shopfront windows – anodised aluminium frames in a natural finish; and
- Colorbond® capping – colour to match adjacent precast panel finish.

In addition, a portion of the Grange Road elevation will benefit from an additional series of high-level windows (natural finish), projecting sunscreens (painted steel frames in Dulux ‘Basalt Grey’), textured precast concrete panel walls and painted precast banding, all to enhance the appearance of the Store when viewed from the car park and public realm.

The variation in building height together with the high-level feature windows, design elements and colour and material variations will provide articulation to the building façades facing the public realm.

The loading dock and associated facilities will be located on the northern side of the building and will be cut into the ground to enable efficient transfer of goods from trucks to the Store. Accordingly, a small retaining wall in ‘cut’, with a maximum height of approximately 1.37 metres, will be constructed along a portion of the northern boundary. The retaining wall will generally only be visible from within the loading dock and will not be visible from the adjoining site to the north.

The recessed loading dock is designed to complement the overall appearance of the ALDI building and will consist of pre-cast concrete panel walls finished in ‘Fluorescent Fire’; panel lift door finished in Dulux ‘Basalt Grey’; compactor door and frame finished in Dulux ‘Olde Pewter’; and will include structural steel frames (no roof) extending from the northern boundary wall to the building.

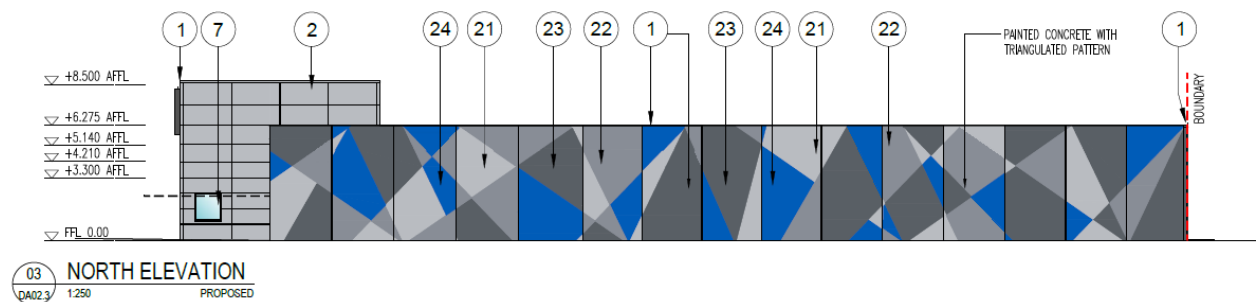
As mentioned above, a portion of the building, measuring 6.275 metres in height will be located on the northern boundary. Where this portion of the building ends, a 6.275 metre acoustically treated wall will then continue along the northern boundary towards the east, generally for the length of the loading dock. The boundary wall will serve as both an acoustic and visual screen, separating the loading dock from the adjoining residential site to the north.

The remainder of the northern boundary will comprise a 2.4-metre-high Colorbond © fence.

Treatment of the northern boundary and design of the overall development has been designed and assessed by Sonus Acoustic Engineers (refer **Appendix 4**) to ensure an appropriate environmental outcome from an acoustic perspective.

Importantly, the proposed northern boundary arrangement has been discussed at length with the adjoining landowner to the north, the South Australian Housing Authority (SAHA). Multiple wall design options have been presented to the SAHA who expressed a preference for the proposed design which is illustrated in **Figure 4.3** below.

Figure 4.3 Proposed Northern Boundary Wall Treatment



The wall design has been selected as it will offer an interesting and vibrant outlook from the SAHA site, while also being of low maintenance and resistant to graffiti and vandalism. Separately, and outside of this development application, ALDI have also agreed to undertake landscape works on the SAHA site which will complement and further enhance the overall appearance of the wall.

Accordingly, the SAHA have provided written ‘in-principle’ support for the proposed treatment of the northern boundary, which is attached as **Appendix 5**.

The western elevation of the building, located on the boundary of the development site, will comprise precast concrete wall panels with ‘face’ finish. This is an appropriate outcome having regard to the setback of the ALDI Store from Grange Road and recognising the vacant site to the west is likely to be developed further in the future.

The external rooftop plant area will be screened from view by the tower fascia and powder-coated plant louvres and frames finished in Colorbond® ‘Basalt’.

Solar panels will be installed on the roof of the ALDI Store and will, generally, be located behind the parapet. Consequently, the majority of the solar panels won’t be visible from surrounding land. While final design and configuration for the solar array will be determined during the detailed design phase, it is anticipated that a 99-kilowatt (kw) system will be adopted. As an approximation, this is forecast to generate energy of around 140-145MWh per year and a specific energy generation of around 1,400-1,450 kWh/KWp per year.

4.3 Transport, Parking and Access

GTA Consultants have undertaken a detailed traffic and parking assessment to confirm the proposed access/egress, vehicle manoeuvring, and parking arrangements are feasible, safe and achieve the relevant Australian Standards (refer to **Appendix 6**). GTA’s report sets out an assessment of the anticipated transport implications of the proposed development, including:

- Existing traffic and parking conditions surrounding the site;
- Parking demand likely to be generated by the proposed development;
- Suitability of the proposed parking in terms of supply (quantum) and layout;
- Traffic generation characteristics of the proposed development;
- Proposed access arrangements for the site; and
- Transport impact of the development proposal on the surrounding road network.

4.3.1 Grange Road Access/Egress

A new access point is proposed on Grange Road which will replace the four (4) existing driveways which currently service the site. The proposed access point will be located between the John Street and Noblet Street junctions and outside of the prohibited zones for driveways as specified in *Australian Standard (AS) AS2890.1:2004*.

Vehicle movements will be left turn entry and left turn exit only, with right turns restricted by the existing raised median. The access point will be designed to accommodate the entry and exit of a 20-metre-semi-trailer, which is the largest vehicle anticipated for the development.

A raised pedestrian refuge island is proposed within the new access to separate entry and exit movements and improve pedestrian safety.

4.3.2 Noblet Street Access/Egress

A new access point is proposed on Noblet Street which will replace the two (2) existing driveways which currently service the site. The proposed access point will be located to the northern end of the site, located well away from the Grange Road intersection to provide for light vehicle entry and exit movements only.

4.3.3 Parking

A total of 82 at-grade car parking spaces are proposed for the site, located to the south and east of the ALDI Store.

The parking layout has been reviewed by GTA who have confirmed that it has been designed in accordance with the relevant Australian Standards.

4.3.4 Deliveries

A loading area is proposed to be located to the northern side of the ALDI building, with the loading dock designed in accordance with ALDI's standard detail. Given the proximity of the site to ALDI's Regency Park Distribution Centre, and the presence of 3-storey residential apartments immediately adjoining the site to the north, ALDI will restrict deliveries from semi-trailers to between 7.00am and 10.00pm, across 7 days.

These trucks will enter the site in a forward direction from Grange Road, reverse into the loading dock and exit back on to Grange Road in a forward direction. A dedicated area is provided to the northern side of the site to facilitate the reverse manoeuvre.

As mentioned, ALDI oversees and undertakes its own deliveries and therefore has full control of operations and logistics, which enables the business to minimise the impact of deliveries on customers and nearby residents. A copy of the ALDI Delivery and Loading procedures is located at **Appendix 7**.

A third delivery, via a small rigid vehicle, will deliver bakery products once a day prior to 6.00am. The 'bakery' delivery vehicle will enter and exit the site in a forward direction via Grange Road and deliver products via the Stores front 'airlock' (i.e. it will not deliver via the loading dock).

GTA has assessed the movements associated with delivery vehicles entering and exiting the loading area and has concluded that they meet relevant standards and will allow vehicles to enter and exit the site in a forward direction.

4.3.5 Refuse Collection

Recycling and rubbish will be stored within the compactor and bin enclosure which are located within the loading dock.

The compactor and bins will be emptied regularly in accordance with ALDI's standard operating procedures.

4.3.6 Pedestrian and Cyclist Accessibility

The subject site is well served by pedestrian infrastructure with footpaths located on both sides of Grange Road and to the western side of Noblet Street. A signalised Pedestrian Actuated Crossing is also located in close proximity at the Grange Road/Findon Road intersection, approximately 100 metres west of the site.

In addition, the site is well serviced by existing public transport routes, as well as dedicated bicycle lanes (time controlled) located on both sides of Grange Road.

4.4 Signage

The application proposes to erect one (1) 6.0 metre high internally illuminated pylon sign at the corner of Grange Road and Noblet Street. The main face of the sign will be 2.0 metres wide by 2.4 metres tall and feature the ALDI logo, with a small triangular sign below with store opening hours identified.

Two (2) internally illuminated gable signs measuring 2.0 metres by 2.4 metres will be attached to the tower element of the proposal. In addition, a 'lifestyle graphic', measuring 7.0 metres by 3.3 metres, will be located on the eastern elevation of the tower element to provide additional visual interest. The graphic will be externally illuminated from above.

A digital display freestanding poster box measuring 2.2 metres in height and 0.95 metres in width will be located near the entrance to the ALDI Store.

Specific details of each proposed sign are outlined in the Nielsen Architectural drawings located in **Appendix 3**.

4.5 Landscaping

A landscape plan, prepared by Outerspace Landscape Architects, is included in **Appendix 8**.

Outerspace have selected a large feature tree, the *Ulmus parvifolia* (Lacebank Elm), to define the Grange Road and Noblet Street frontages and to provide shade within the car park. Specifically, six (6) trees are to be planted along the Grange Road frontage, directly in front of the ALDI Store, three (3) trees are to be planted along the Noblet Street frontage, with a further three (3) trees to be planted within the eastern car park. These trees are semi-deciduous and fast growing, with a broad vase-shaped habit, pendulous branches and attractive foliage.

In addition, a further eight (8) small-medium trees, *Pyrus calleryana* (Capital Pear), are proposed along the northern boundary, adjacent the Noblet Street point of entry and manoeuvring area. These trees are intended to form a tall and dense 'green screen' which will soften the appearance of the northern fence.

The trees will be complemented by landscape beds located around the site which will be densely planted with a range of shrubs, grasses and groundcovers. In particular, 1.5 metre wide landscaping strips will be established along the Noblet Street frontage, within the corner of the site adjacent the Grange Road/Noblet Street intersection, as well as adjacent to each point of entry, which will all assist to soften the appearance of the built form and the car park.

4.6 Stormwater Management

Wallbridge Gilbert Aztec (WGA) has been engaged to prepare a Stormwater Management Report for the proposed development (refer to **Appendix 9**). The purpose of the report is to conceptually outline the stormwater management design for the proposed development and detail the stormwater management methodology. A final detailed design and construction documentation will be prepared once Development Plan Consent has been issued.

WGA has discussed the stormwater requirements of the proposal with the City of Charles Sturt who have confirmed that:

- Mapping of the 100-year ARI flood event indicates the current site layout is inundated in the major storm event, with up to 190mm depth near the front property boundary and approximately 70mm close to the rear (northern) fence line;
- The Finished Floor Level (FFL) should be a minimum of 150mm (freeboard) above the 100-year ARI flood event water level;
- Post development stormwater discharge rates (up to and including the 100-year ARI event) are not to exceed the pre-development 5-year ARI rate;

- The direct pipe outlet to existing Grange Road infrastructure is the preferred main discharge point; and
- Stormwater quality improvement devices are required to ensure appropriate treatment prior to discharge to Council's drainage system.

Based on discussions with the Council, WGA has proposed the following methodology for the management of stormwater:

- The proposed FFL of the ALDI building will be 8.90;
- Stormwater run-off will be captured from both roof (via box gutters) and car park surfaces and be directed in a controlled manner to the existing stormwater branch connecting to the Grange Road stormwater network;
- While there is no increase to the impermeability of the site, to provide for onsite 'major storm' detention capacity, a portion of the eastern and southern car park will be 'dished' to provide necessary ponding and controlled release;
- As the recessed loading dock is exposed, stormwater run-off will be collected and pumped / discharged via the proposed stormwater system and basin;
- A small 45m² of pavement at the Noblet Street driveway will be drained to the nearby water table, in order to allow for formation of a protective ridgeline; and
- A proprietary 'oil and grease arrestor' such as the Rocla First Defense model will be installed to remove solid and liquid pollutants prior to discharge from the site.

4.7 Waste Management

ALDI Stores have a consistent and environmentally sound approach to waste management which includes:

- Waste disposed of in the general/waste bin is limited to waste generated by staff on their lunch breaks (food packaging) and office-based waste;
- Organic waste comprising fruit, vegetables and meat that are nearing the product's best before date are collected and re-distributed every day by ALDI's partner companies – Foodbank and SecondBite;
- Cardboard waste generated from used cardboard packaging is collected and stored in an onsite compactor within the loading dock area and collected and returned by ALDI transport to the Distribution Centre for recycling;
- Plastic wrapping is collected by ALDI transport and recycled at the ALDI distribution centre;
- The ALDI Store will have a single 1.5 cubic metre bin which will be equipped with a hinged lid and contained in the Bin Enclosure in the loading dock; and
- The collection of the bin is undertaken by a third-party contractor who will attend the Store on average three times per week to collect the contents of the bin utilising a 10.5 metre front load truck.

ALDI Stores produce minimal putrescible waste as no food is cooked or prepared within the Stores (there being no onsite butcher, bakery or deli preparation).

5. Procedural Requirements

5.1 Relevant Authority

The relevant authority to assess and determine the Development Application is the State Commission Assessment Panel (SCAP) with referral being made to the City of Charles Sturt. A request made under Schedule 10, Clause 20 of the Regulations was accepted by the State Coordinator-General for the proposed development in correspondence dated 31 October 2019.

5.2 Nature of Development

The proposal is most accurately described as the staged development of a new supermarket (shop) with associated signage, acoustic wall, fencing, solar panels, car parking and landscaping.

As mentioned above, separate development applications will be lodged for the demolition of all existing structures and for amalgamation of the existing land parcels (land division).

Pursuant to the 'procedural matters' section of the Development Plan, the application is neither complying nor non-complying and must, therefore, be assessed on its merits against the relevant provisions of the Development Plan.

In forming this opinion, we have had regard to the following non-complying 'trigger' relating to 'advertisements' which is listed within the Neighbourhood Centre Zone as follows:

Advertisement and/or advertising hoarding that:

(a) is roof mounted and projects above the roof line

(b) is parapet mounted and protrudes above the top of the parapet

(c) is animated or flashing

(d) is freestanding and greater than 6 metres in height within Findon Policy Area 10 and within Findon Road Policy Area 11

(e) is freestanding and greater than 4 metres in height within Henley Square Policy Area 12

(f) is freestanding signs or sign trees on Tapleys Hill Road, south of Poplar Street within Royal Park Policy Area 13.

As discussed within Section 4.4, the proposed freestanding pylon sign is six (6) metres in height, and all on-building signage is located below the roof line of the building. While the proposed signage is illuminated, it does not move, flash or rotate and does not include animations.

Accordingly, the proposed development meets relevant listed exceptions ((b), (c) and (d)) and therefore the development is for a **Consent Use** to be assessed **on merit** against the relevant provisions of the Development Plan.

5.3 Public Notification

The proposed development is located within the Neighbourhood Centre Zone which identifies that categories of public notification are prescribed in Schedule 9 of the Regulations.

Schedule 9, Clause 6(1)(h) of the Regulations identifies that *any kind of development* within a Neighbourhood Centre Zone is Category 1 for public notification purposes. However, as the subject site abuts a different zone (i.e. the Residential Zone to the north and Mixed-Use Zone to the east), the proposal is a **Category 2** form of development as identified within Schedule 9, Clause 19 of the Regulations.

5.4 Agency Referrals

Given that the State Commission Assessment Panel (SCAP) is the relevant Planning Authority and the subject site is located within the bounds of the **City of Charles Sturt**, we understand the proposal will be referred to Council.

In accordance with Schedule 8 of the Regulations, a referral to the **Commissioner of Highways** via the Department of Planning, Transport and Infrastructure (DPTI) will be required as the proposed development seeks to create a new access to Grange Road, a 'secondary arterial road'.

6. Development Plan Assessment

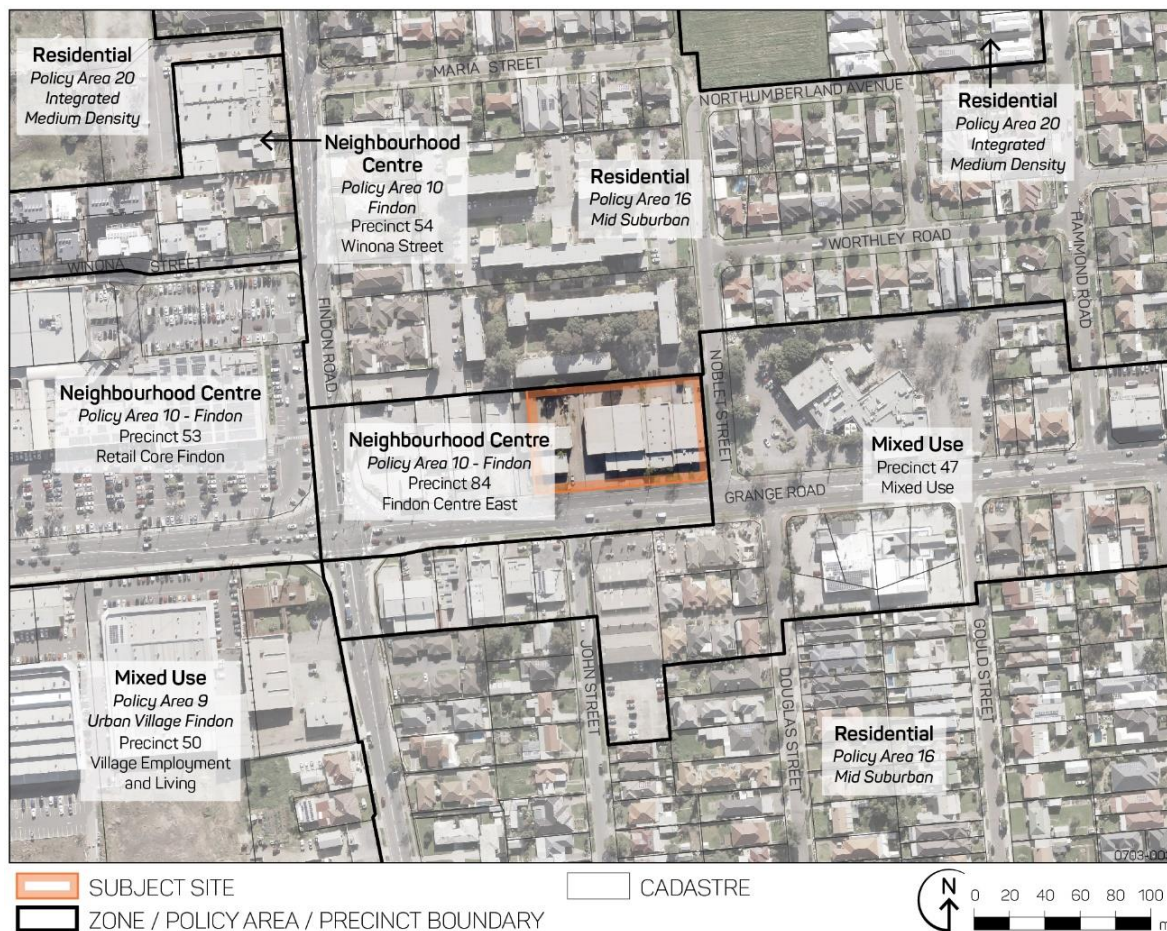
6.1 Overview

At the outset, it is noted that the subject site was recently rezoned to ‘Neighbourhood Centre’ by the ‘Grange Road, Findon Road Development Plan Amendment (DPA)’. This DPA specifically anticipated a small-scale supermarket in the form of an ALDI Store and was supported by detailed investigations including a Traffic Impact Assessment and economic analysis.

Accordingly, and as illustrated in **Figure 6.1** below, the subject site is located within **Precinct 84 Findon Centre East**, within **Findon Policy Area 10** of the **Neighbourhood Centre Zone** as identified within the Development Plan.

Adjoining the site to the north is Mid Suburban Policy Area 16 of the Residential Zone. Immediately to the east, and to the south (on the opposite side of Grange Road) is Precinct 47 Mixed Use of the Mixed-Use Zone.

Figure 6.1 Zoning and Policy Areas



The following section provides an assessment of the proposal against the Development Plan. For convenience, this assessment has been grouped under a series of headings which reflect the key relevant planning 'themes' from the Development Plan.

Emphasis (underlining) has been added where relevant to highlight specific provisions which are of particular relevance to the assessment of the proposal.

6.2 Land Use Suitability

As outlined in Objectives 1 and 2 and PDC 1, the Neighbourhood Centre Zone encourages a diverse range of activities intended to meet the needs of the community, with both a 'shop' and 'supermarket' identified as appropriate land use activities.

This position is further reinforced by the Desired Character Statement of Findon Policy Area 10 which states *"the policy area will serve as the centre for the daily to weekly shopping and business needs for the surrounding areas"*.

More specifically, the Desired Character statement of Precinct 84 Findon Centre East identifies that *"the precinct will accommodate a small-scale supermarket of up to 2000 square metres of gross leasable floor area, along with limited specialty retail and bulky goods facilities"*.

The proposal seeks to develop a small-scale supermarket with a retail net area of 1,186m² and total building area (gross) of 1,849m² which is well within the floor space provision contemplated by the Desired Character Statement.

The subject site is conveniently located on an arterial road which will support the proposed land use, and the ALDI Store will provide a range of groceries and other goods to serve the needs of the local community, as well as bringing a range of benefits to the locality more generally.

On this basis, the proposed land use is entirely consistent with the intent of the Zone, Policy Area and Precinct.

In addition, and as will be discussed further within this Planning Statement, we are of the view the development will significantly enhance the visual amenity of the site; provide more efficient loading and servicing arrangements relative to the existing situation; and greatly improve access/egress to and from the site.

We also note, given the relatively small spatial footprint of the ALDI Store (when compared with typical supermarkets), a substantial portion of the Precinct will remain available and viable to support future development opportunities aligned with the overall policy intent to provide a range of shopping and business services to the surrounding community.

6.3 Design and Appearance

6.3.1 External Appearance

The following Zone-specific and General Section provisions are of most relevance to an assessment of the external appearance and design of the proposed ALDI Store.

Findon Policy Area 10

Desired Character (excerpt)

It is important that development within the centre results in better integration between the centre facilities within and across all of the precincts and a high standard of design providing a wide range of tenancies, facilities and activities.

The improvement of the appearance of the Centre from adjacent residential areas is supported.

Precinct 84 Findon Centre East (Desired Character excerpt)

Development will be sited and designed to provide active facades and avoid the presentation of blank walls to the Grange Road and Findon Road frontages while also balancing the need to provide appropriate loading facilities and parking areas to support envisaged forms of development.

Design and Appearance

PDC 1 Buildings should reflect the desired character of the locality while incorporating contemporary designs that have regard to the following:

- (a) building height, mass and proportion
- (b) external materials, patterns, colours and decorative elements
- (c) roof form and pitch
- (d) façade articulation and detailing
- (e) verandas, eaves, parapets and window screens.

PDC 3 The external walls and roofs of buildings should not incorporate highly reflective materials which will result in glare to neighbouring properties, drivers or cyclists.

PDC 4 Structures located on the roofs of buildings to house plant and equipment should be screened from view and form an integral part of the building design in relation to external finishes, shaping and colours.

PDC 16 Building design should emphasise pedestrian entry points to provide perceptible and direct access from public street frontages and vehicle parking areas.

PDC 20 *Outdoor storage, loading and service areas should be:*

(a) *screened from public view by a combination of built form, solid fencing and/or landscaping.*

(b) *conveniently located and designed to enable the manoeuvring of service and delivery vehicles*

(c) *sited away from sensitive land uses.*

The proposed development represents a high standard of design which will significantly upgrade the visual amenity of the locality and presentation to the public realm and adjoining sites, when compared with the existing situation. By necessity, it also represents a practical and functional design outcome which reflects the overarching retail nature of the development. This has resulted in a design which features:

- A building of a size and shape that enables the efficient display of products for sale;
- A loading dock and manoeuvring area for semi-trailers; and
- Substantial car parking areas conveniently located on the site.

In addition, ALDI stores have specific design requirements to enable the efficient operation and function of their supermarkets which are replicated wherever possible.

The proposed development responds to the key provisions of the Development Plan, and assists to achieve the desired character sought by the Policy Area and Precinct in the following ways:

- Through a range of design elements intended to, avoid blank walls exposed to public view and reduce visual bulk, including the use of:
 - » Large windows, canopy and ‘tower’ element to clearly identify the entrance to the store, create visual interest and activate the Noblet Street frontage;
 - » High level windows, projecting sunshade screens, canopy projection and contrasting colours along the southern elevation, oriented towards the car park and Grange Road;
 - » Landscaping to soften the appearance of the building when viewed from Grange Road and Noblet Street while also providing an attractive environment for customers; and
 - » A range of colours on the precast concrete panels facing the public realm;
- Incorporating design elements such as a variety of colours, and the vertical element of the ALDI tower which contrasts with the horizontal elements of the building to create visual interest and reduce massing;
- Avoiding highly reflective materials that could cause glare to neighbouring properties, drivers and cyclists;
- Incorporating landscaping around the perimeter of the site and within the car park to soften the appearance of the building and provide an attractive environment for customers;

- Integration of plant equipment and solar panels within the overall design of the building which will be screened from view; and
- Locating the loading and service areas away from the main frontage of the building, and appropriately screening these areas from the adjoining residential site to the north.

Overall the development is of a high design standard and will contribute positively to the character of the streetscape and satisfies the key design provisions of the Development Plan. Importantly, the proposed development responds to the Desired Character of the Precinct which seeks to achieve a balance between the functional elements of retail development and the provision of active facades.

6.3.2 Building Height

As discussed within Section 4.2, the majority of the building has a height of approximately 6.275 metres, while the ‘taller’ element relates to the feature ‘tower’ which is appropriately located away from property boundaries.

The ‘tower’ element is an important feature of the overall design which adds visual interest to the building and elevates its overall appearance.

The proposed height of the building is entirely compatible with existing building heights in the locality; is of a lower height than the adjoining 3-storey residential apartments to the north; and is well within the building height quantitative parameter identified by Policy Area PDC 3:

PDC 3 *Development should be a maximum of 12 metres in height.*

6.3.3 Northern Boundary Wall – Height and Design

As discussed within Section 4.2, the placement and design of the northern boundary wall has been discussed at length with the adjoining landowner, the South Australian Housing Association (SAHA), who have provided ‘in-principle’ support for the arrangement.

The placement and design of the wall responds to Policy Area PDC 2 which identifies that *development should be carried out in accordance with Concept Plan Map ChSt/7 (Findon Policy Area 10)* and thereby accommodate an ‘interface treatment’ adjacent the northern boundary of the site. The Desired Character of the Policy Area notes this will be achieved *“through the provision of appropriate interface treatments along the residential interface which may include acoustic walls, landscaping or other similar measures”* (our emphasis).

While we will discuss specific interface impacts elsewhere within this Planning Statement (noise, lighting, odour etc.), and the benefit of the wall in delivering an improved outcome relative to the existing situation, it is important to consider the impact of the proposed boundary treatment from a design perspective. In this regard, the following Council Wide provisions of the Development Plan are relevant:

Design and Appearance

PDC 2 *Where a building is sited on or close to a side or rear boundary, the boundary wall should minimise:*

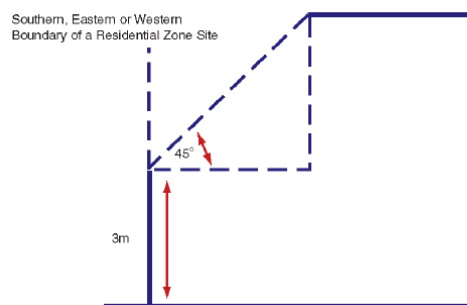
(a) the visual impact of the building as viewed from adjoining properties

(b) overshadowing of adjoining properties and allow adequate sunlight access to neighbouring buildings.

Interface Between Land Uses

PDC 7 Where the site of a building located in a centre zone or Suburban Activity Node Zone:

(b) abuts the southern, eastern or western boundary of a site in a zone where residential development is envisaged, building development should not intrude into a plane angled 45 degrees above the horizontal into the site, as measured from a point 3 metres above the boundary, as shown in the figure below:



Given the siting of the wall on the boundary, and the height of the wall at 6.275 metres, the proposed arrangement is at odds with Interface Between Land Uses PDC 7(a). However, as mentioned previously SAHA has expressed its preference for the wall to be located on the boundary rather than setback approximately 1 to 1.5 metres.

In addition, having regard to the orientation and layout of both sites, the design will not result in any overshadowing of the adjoining SAHA residential apartments, and therefore accords with Design and Appearance PDC 2(b).

Accordingly, we are of the view the key design matter relates to the visual outlook of the wall when viewed from the SAHA site, and alignment with the intent of the Policy Area, as well as PDC2(a).

In this regard, the wall delivers a contemporary design outcome, which includes an interesting pattern and range of contrasting colours to provide visual interest and enhancement of the outlook from the SAHA site. In addition, the modern pattern will break up the visual bulk of the wall.

Further, it is noted that the closest apartment building faces away from the subject site towards an internal landscaped courtyard. Therefore, the windows on the southern elevation of the building are for bedrooms and bathrooms and will not be used for lounge, family or dining rooms.

Importantly, the proposed arrangement will upgrade the view and level of amenity that is presently experienced by residents within the SAHA site. Under present arrangements, the existing outdated boundary fencing, as well as sporadic provision of boundary landscaping, does little to screen activities occurring within the subject site. As a consequence, and as illustrated in Figure 6.2 below, the area to the south of the apartment buildings (immediately adjacent the subject site) is largely disused and offers little in the way of utility or amenity to those residents.

In addition, and while separate to this application, the design of the wall will be complemented by landscape works, undertaken by ALDI on the SAHA site to complement the overall design of the wall and enhance the usability and functionality of this space for the SAHA residents. This landscaping will be subject to a 'Deed of Agreement' between ALDI and the SAHA.

The wall pattern, coupled with the (separate) landscape treatments, will deliver a low maintenance outcome (the preferred position of SAHA) which discourages vandalism and graffiti.

Accordingly, we are of the view that the placement and design of the northern boundary wall sufficiently accords with the intent of the Development Plan to deliver both an appropriate interface treatment and improved outlook for the adjoining residential site to the north.

Figure 6.2 Existing Boundary Outlook



6.4 Transport, Access and Parking

The Development Plan contains numerous provisions which seek to ensure that traffic can move efficiently and safely while also ensuring that an appropriate amount of car parking is provided to meet the demands generated by the development. Given the number of ‘traffic and parking’ related provisions within the Development Plan, only the provisions of particular relevance to the proposed development have been referenced:

Transportation and Access

OBJ 2 *Development that:*

(a) provides safe and efficient movement for all transport modes

(b) *ensures access for vehicles including emergency services, public infrastructure maintenance and commercial vehicles*

(c) provides off street parking

(d) *is appropriately located so that it supports and makes best use of existing transport facilities and networks.*

(e) *provides convenient and safe access to public transport stops.*

PDC 9 *Development at intersections, pedestrian and cycle crossings, and crossovers to allotments should maintain or enhance sightlines for motorists, cyclists and pedestrians to ensure safety for all road users and pedestrians.*

PDC 12 *Development should be designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive land uses.*

PDC 14 *Development should provide for the on-site loading, unloading and turning of all traffic likely to be generated.*

PDC 24 *Development should be provided with safe and convenient access which:*

(a) *avoids unreasonable interference with the flow of traffic on adjoining roads*

(b) *provides appropriate separation distances from existing roads or level crossings*

(c) *accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision*

(d) *is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.*

PDC 26 *The number of vehicle access points onto arterial roads as shown on Overlay Maps - Transport should be minimised, and where possible access points should be:*

(a) limited to local roads (including rear lane access)

(b) shared between developments.

PDC 27 *Development with access from Primary and Secondary Arterial Roads shown on Overlay Map ChSt/1 – Transport should be sited to avoid the need for vehicles to reverse onto or from the road.*

PDC 28 *Vehicle access points servicing a corner allotment should be located at least 6 metres from the road intersection or junction in accordance with Australian Standard AS 2890.*

PDC 37 *Development should be sited and designed to provide convenient access for people with a disability.*

PDC 40 *Development should be consistent with Australian Standard AS 2890 Parking facilities.*

6.4.1 Access/Egress

GTA have reviewed the proposed access/egress arrangements for the site and have confirmed that the access points are appropriately located outside of the prohibited zones for driveways as specified in AS2890.1.2004 (Off Street car parking) and provide clear and unrestricted sight lines along Grange Road and Noblet Street respectively.

In addition, GTA have confirmed that the Grange Road access/egress point will accommodate the largest vehicle anticipated to service the site (20.0 metre semi-trailer) and all vehicles are able to enter and exit the site in a forward direction.

Importantly, the proposed access points will rationalise the number of existing access points presently servicing the site from Grange Road and Noblet Street.

Accordingly, the proposed development aligns with the key relevant Transportation and Access provisions and the following Policy Area and Precinct specific provisions as they relate to access location and design:

Findon Policy Area 10

PDC 5 *Vehicular access points to Grange Road or Findon Road should be provided in accordance with Concept Plan Map ChSt/7 - Findon Policy Area 10.*

Precinct 84 Findon Centre East

PDC 11 *Development should result in the rationalisation of access points onto Grange Road and Findon Road.*

6.4.2 Parking

GTA Consultants have assessed the proposed development against the relevant provisions of the Development Plan, as well as the applicable Australian Standards. The GTA assessment confirms that the parking layout has been designed in accordance with the relevant Australian Standards. This includes:

- The dimensions of the parking spaces (2.6 metre wide by 5.4 metre long) with a minimum 6.6 metre aisle width;
- The car park fronting Grange Road will be a 'dead end' and as such will have a turning space and a blind aisle extension at its western end;
- Two (2) disabled car parking spaces will be located adjacent the main doors with an associated shared space; and
- Appropriate grades within the parking area.

GTA have also undertaken an assessment of the car parking requirements for the proposed development. This assessment has included a review of the standards for off-street vehicle parking contained in Table ChSt/2A - Off Street Vehicle Parking Requirements for Designated Areas of the Development Plan, recognising that the site is located within a Designated Area given it is located within 200 metres of a high frequency bus service on Grange Road.

For non-residential development, Table ChSt/2A identifies a minimum of 3 spaces and maximum of 6 spaces per 100 square metres of gross leasable floor area (GLFA).

Based on the proposed GLFA of 1,792m² (including Back of House), this equates to a minimum parking provision of 54 spaces and maximum of 108 spaces. Accordingly, the proposed car parking supply of 82 spaces sits comfortably within the minimum/maximum range stipulated by Table ChSt/2A.

In addition, GTA have also had regard to parking demand surveys which have been undertaken at other standalone ALDI Stores. These surveys have demonstrated that ALDI generates an average peak demand of 4.1 car parking spaces per 100m² of GLFA. Based on this average demand, and the proposed retail area of 1,792m², the proposed ALDI Store would generate a peak parking demand of 73 car parking spaces.

Through provision of 82 spaces (which equates to 4.6 spaces per 100m² of GLFA), the development exceeds this calculated average demand and GTA conclude that sufficient onsite car parking is provided to satisfy the demand generated by the ALDI Store.

6.4.3 Pedestrian and Cycling Accessibility

Table ChSt/2 specifies a bicycle parking rate of 3 spaces per 50 employees for 'non-residential' development.

Further, PDCs 20 and 21 of the General Section: Transportation and Access module provide guidance regarding appropriate placement and design of bicycle parking facilities:

PDC 20 *Developments should encourage and facilitate cycling as a mode of transport by incorporating end-of-journey facilities including:*

(a) showers, changing facilities, and secure lockers

(b) signage indicating the location of bicycle facilities

(c) secure bicycle parking facilities provided at the rate of 3 spaces per 50 employees.

PDC 21 *On-site secure bicycle parking facilities should be:*

(a) located in a prominent place

(b) located at ground floor level

(c) located undercover

(d) located where surveillance is possible

(e) well lit and well signed

(f) close to well used entrances

(g) accessible by cycling along a safe, well lit route.

The proposed development includes provision of one (1) bicycle rail, capable of accommodating at least five (5) bicycles, which is to be located close to the entrance of the shop, sheltered by the proposed canopy and in a highly visible position, both from inside and outside of the Store.

GTA note that based on observations of other ALDI Stores, the proposed level of provision will adequately cater for anticipated bicycle parking demands, and significantly exceeds the bicycle parking rate identified within Table ChSt/2.

With regards to pedestrian connectivity, the ALDI Store provides pedestrian connection to Grange Road which aligns with the entrance to the store. Consequently, the development provides appropriate connection to the existing public pedestrian network.

6.4.4 Traffic Impact

GTA have undertaken an analysis of traffic generation, distribution and impact on the road network. Their assessment is summarised as follows:

- The proposed development is predicted to generate up to 220 peak two-way movements during the Thursday PM Peak Hour period and 274 two-way movements during the Saturday Peak Hour;
- While it is anticipated that the majority of traffic will utilise the proposed Grange Road point of entry and exit, it is also recognised that the Grange Road/Noblet Street intersection will ‘feed’ a proportion of the traffic. As such SIDRA Intersection Analysis and Gap Surveys were used to assess the performance of the intersection during the weekday and weekend peak hour. The analysis determined;

- » The right turn into Noblet Street from Grange Road would be acceptable based on the anticipated increase in traffic. The average delay and queue length would remain similar to pre-development conditions;
- » The right turn out of Noblet Street would experience a more pronounced increase in average delay and queue length during both peak periods. Notwithstanding, there is capacity and sufficient gap opportunities within the road network to cater for these movements;
- » The left turn out of Noblet Street would also experience a more pronounced increase in average delay and queue length, however GTA anticipate the majority of traffic will use the Grange Road exit to turn left onto Grange Road;
- » The ALDI access onto Grange Road will operate as left in/left out and there are sufficient gaps in traffic to safely accommodate these movements; and
- » The ALDI access onto Noblet Street will operate adequately given the low volume nature of Noblet Street.

On this basis, GTA concludes that while the overall increase in traffic associated with the proposed ALDI will generate some delays and queues associated with movements out of Noblet Street, the proposed development will not adversely impact the function and nature of Grange Road.

In addition, and following liaison with the City of Charles Sturt, GTA also considered the cumulative post-development impact of the ALDI Store and the recently approved residential land division to the north of the site (between Northumberland Avenue and Bridgman Road) on the operation of the Grange Road/Noblet Street intersection.

On the basis that the residential land division is anticipated to generate 30 additional trips onto Noblet Street during the weekday PM Peak Hour, and 24 additional trips during the weekend PM Peak Hour, GTA concluded the cumulative impact will not have an adverse impact on the operation of the intersection.

Accordingly, and having regard to the expert assessment of GTA, we conclude the impact on the local road network is acceptable and the proposal will meet the relevant provisions of the Development Plan as they relate to traffic, parking and access.

6.5 Signage

The Development Plan contains a number of provisions which seek to ensure that advertising signage is sensitively designed and integrated with the associated building design while avoiding visual clutter. In addition, the Development Plan seeks to ensure that advertisements do not distract drivers from the task of driving or obstruct a driver's view of other vehicles.

The Development Plan provisions that follow are considered directly relevant to the issue of signage:

Advertisements

OBJ 1 *Urban and rural landscapes that are not disfigured by advertisements and/or advertising hoardings.*

OBJ 2 *Advertisements and/or advertising hoardings that do not create a hazard.*

PDC 1 *Advertising and/or advertising hoardings should have regard to the suitable outdoor advertising types outlined in Table ChSt/3 – Suitable Outdoor Advertising Types.*

PDC 2 *The location, siting, design, materials, size, and shape of advertisements and/or advertising hoardings should be:*

(a) consistent with the predominant character of the urban or rural landscape

(b) in harmony with any buildings or sites of historic significance or heritage value in the area

(c) coordinated with and complement the architectural form and design of the building they are to be located on.

PDC 3 *The number of advertisements and/or advertising hoardings associated with a development should be minimised to avoid:*

(a) clutter

(b) disorder

(c) untidiness of buildings and their surrounds

(d) driver distraction.

PDC 15 *Freestanding advertisements and/or advertising hoardings should be:*

(a) limited to only one primary advertisement per site or complex

(b) of a scale and size in keeping with the desired character of the locality and compatible with the development on the site.

The locality incorporates a wide range of prominent signage which all form notable character elements of the urban landscape. The diversity of land uses and desire for visual exposure along Grange Road and Findon Road have resulted in streetscapes which comprise freestanding signage, fascia signage, billboard signage and other forms of signage such as painted walls, on-fence signage and A-Frame signage.

The development proposes one (1) 6 metre tall internally illuminated pylon sign, which is the primary advertisement for the ALDI Store. The pylon is to be located in the south-east corner of the site at the Grange Road/Noblet Street intersection.

The height of the pylon sign is consistent with the maximum sign height (6 metres) identified within Table ChSt/3 (Suitable Outdoor Advertising Types) for the Findon Policy Area. The pylon is also lower in height than the proposed tower element of the ALDI Store, and is generally consistent with the building height for the majority of the Store.

The pylon is also compatible with the height of existing pylon signs within the locality as sought by PDC 15. This includes the nearby Coles/Shell Service Station (approximately 6 metres height) and Findon Shopping Centre (approximately 8 metres) (see **Figure 6.3 and 6.4** below).

Figure 6.3 Existing Coles/Shell Service Station sign to west of site



Figure 6.4 Existing Findon Shopping Centre sign, west of subject site



In addition, the development proposes two (2) façade ‘wall signs’ which are all lower in height than the proposed ALDI Store. Placement of the proposed signage provides maximised commercial exposure for ALDI along Grange Road and Noblet Street without resulting in undue signage clutter.

In terms of the proposal’s consistency with the signage provisions within the Development Plan, it is noted that:

- The location, siting, design, materials and shape of the proposed signs are coordinated with, and complimentary to, the architectural form and design of the proposed building;
- The content of the advertising displays will be limited to information relating to the legitimate use of the subject land;
- Advertising displays are contained within the boundaries of the subject land;
- The advertising displays are coordinated in appearance, proportionate to the scale of the associated building and form integral architectural elements and features of the building;
- The advertising displays are designated to clearly identify the retail activity to passing traffic, without any flashing or animations;
- The advertising displays will not hinder the exposure of surrounding commercial sites or existing advertising signage within the locality; and
- The illuminated advertising displays will not cause discomfort to an approaching driver or create difficulty in the driver's perception of the road or persons or objects on the road due to their location and height above ground level.

For these reasons, the signage associated with the proposed development satisfies the relevant provisions of the Development Plan.

6.6 Landscaping

The following Precinct specific and General Section provisions are considered directly relevant to the assessment of landscaping:

Precinct 84 Findon Centre East

Desired Character (excerpt)

The amenity of the precinct will be improved through the provision of landscaping comprising trees, shrubs and groundcovers along the road frontages and within the car parking areas.

Landscaping, Fences and Walls

OBJ 1 *The amenity of land and development enhanced with appropriate planting and other landscaping works, using locally indigenous plant species where possible.*

PDC 1 *Development should incorporate open space and landscaping in order to:*

(a) complement built form and reduce the visual impact of larger buildings (eg taller and broader plantings against taller and bulkier building components)

(b) enhance the appearance of road frontages

(c) screen service yards, loading areas and outdoor storage areas

- (d) minimise maintenance and watering requirements*
- (e) enhance and define outdoor spaces, including car parking areas*
- (f) maximise shade and shelter*
- (g) assist in climate control within buildings*
- (h) maintain privacy*
- (i) maximise stormwater re-use*
- (j) complement existing, including native vegetation, vegetation*
- (k) contribute to the viability of ecosystems and species*
- (l) promote water and biodiversity conservation*
- (m) minimise heat absorption and reflection.*

PDC 2 *Landscaping should:*

- (a) include the planting of locally indigenous species where appropriate*
- (b) be oriented towards the street frontage*
- (c) result in the appropriate clearance from powerlines and other infrastructure being maintained.*

In order to address these provisions, Outerspace Landscape Architects have prepared a Landscape Plan (refer **Appendix 8**). The Landscape Plan proposes a range of trees, shrubs, grasses and groundcovers which have been selected to give a strong identity to the ALDI Store, with each species serving a specific function.

Six (6) large feature trees ('Lacebank Elm') are to be planted along the Grange Road frontage, and a further three (3) trees of the same species are to be planted along the Noblet Street frontage. These trees will assist to soften the appearance of the built form and car park when viewed from the public realm, as well as improving the internal amenity for users of the site. In addition, a further three (3) 'Lacebank Elm' are to be provided within the eastern section of the car park which will provide shade and further enhance the visual amenity. These trees have been selected as they are semi-deciduous, fast growing and have an attractive canopy and foliage.

In addition, eight (8) 'Capital Pear' trees are to be planted along the northern boundary. These tall, upright trees will form a dense 'green screen' which will soften the appearance of the northern boundary fence and loading dock area and enhance the overall amenity of the site.

The trees will be complemented by landscape beds located around the site which will be densely planted with a range of shrubs, grasses and groundcovers. In particular, landscaping strips will be established along the Noblet Street frontage, within the corner of the site adjacent the Grange Road/Noblet Street intersection, as well as adjacent to each point of entry, which will all assist to soften the appearance of the built form and the car park. For these reasons, the proposed landscaping strategy satisfies the relevant provisions of the Development Plan. In addition, we are of the view the proposed landscape design offers a significant ‘upgrade’ vis-à-vis the existing situation whereby minimal landscaping is offered.

6.7 Crime Prevention

The Crime Prevention module contains several provisions which seek to ensure that development provides a safe environment where the risk of crime is minimised. The key provisions are reproduced as follows:

- OBJ 1*** *A safe, secure, crime resistant environment where land uses are integrated and designed to facilitate community surveillance.*
- PDC 1*** *Development should be designed to maximise surveillance of public spaces through the incorporation of clear lines of sight, appropriate lighting and the use of visible permeable barriers wherever practicable.*
- PDC 5*** *Development, including car park facilities should incorporate signage and lighting that indicate the entrances and pathways to, from and within sites.*

The proposed development will front both Grange Road and Noblet Street which will activate these frontages and encourage casual surveillance of the public realm. We note this will result in a significant upgrade, when compared to existing site arrangements, particularly along Noblet Street which presently comprises a high level, blank wall for much of the eastern boundary.

The car parking areas are open to view from both road frontages and will include lighting to Australian Standards. Signage will be provided to assist with wayfinding and to highlight entrances and pathways to and within the site.

Proposed landscaping will maintain view-lines to entrances and exits, as well as allowing clear views to areas where people may gather.

The risk of vandalism and graffiti will be minimised through the use of a variety of building materials and colours and through the opportunities for casual surveillance which have been built into the design of the development.

The articulation of the building combined with clearly defined entrances will assist visitors to orient themselves and gain an understanding of their surroundings.

In addition, a Closed-Circuit Television system (CCTV) will be installed, providing coverage both within and outside the Store which will assist with site security during business hours and outside of shop trading hours.

Finally, positioning the ALDI Store and acoustic wall on the northern boundary, negates the requirement for a boundary setback. Provision of this ‘hard’ edge, removes the risk of potential entrapment areas being located between the ALDI Store and the boundary, which ensures a safe and easily maintained outcome for the adjoining SAHA site.

Accordingly, the proposed development satisfies Objective 1 and PDC 1 and 5 of the Crime Prevention module.

6.8 Interface between Land Uses

There are a number of relevant provisions in the Development Plan which seek to address potential negative impacts and minimise conflict between land uses. In this regard, Objective 1 of the Interface Between Land Uses module provides overarching guidance:

OBJ 1 *Development located and designed to minimise adverse impact and conflict between land uses.*

More specifically, while the development is located within the Neighbourhood Centre Zone where a range of non-residential and commercial land uses are envisaged, as the subject site abuts the Residential Zone to the north, the potential interface impacts associated with the proposed land use must be carefully assessed.

As previously discussed, the importance of this interface is articulated within Findon Policy Area 10 (Desired Character) which states:

Development will be located and designed to minimise impacts on the amenity of residential properties abutting the precinct, particularly with regard to....noise and odour from servicing arrangements and plant equipment...this will be achieved through the provision of appropriate interface treatments along the residential interface which may include acoustic walls, landscaping or other similar measures.

Having regard to the nature of the land use proposed and noting that visual impacts associated with the built form have been addressed within Section 6.3, we consider the potential key interface issues relevant to the assessment of the proposal include noise and hours of operation, light spill and odour. These will be addressed below under separate headings.

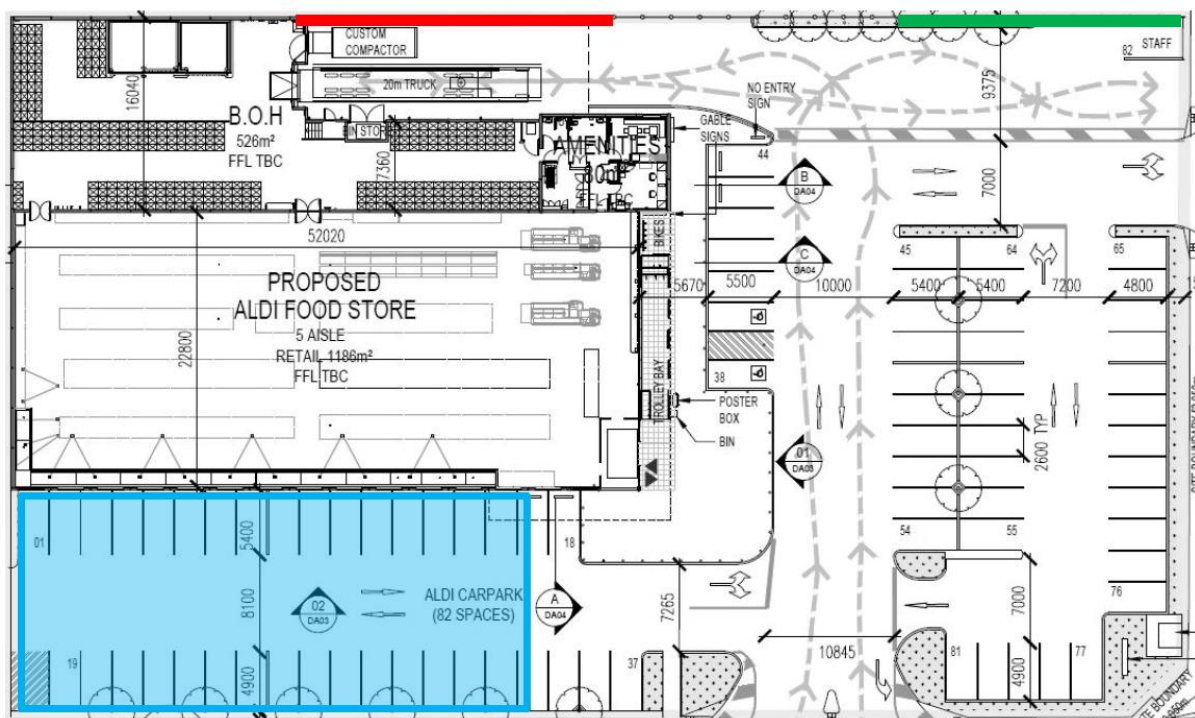
6.8.1 Noise and Hours of Operation

In order to confirm that the proposed development satisfies the requirements of the Development Plan, Sonus have prepared an Environmental Noise Assessment (**Appendix 4**). Sonus have reviewed the proposal against the Environment Protection (Noise) Policy 2007 (‘the Noise Policy’) and have considered potential noise generating activities on the site including noise from car park activity and vehicle movements, the mechanical plant, deliveries, rubbish collection and compactor activity. To support the assessment, Sonus have undertaken an assessment of the existing acoustic environment, which included noise logging over a 5-day period.

Sonus have advised that, subject to the following acoustic treatments and operational procedures, the proposed development will satisfy and/or exceed the requirements of the Environment Protection (Noise) Policy 2007:

- Large ALDI truck deliveries (semi-trailers) restricted to the hours between 7.00am and 10.00pm;
- Ensure smaller 'bread truck' deliveries delivering to the site prior to 7.00am utilise Grange Road for access and egress, and use the car park area to the south of the ALDI Store for unloading and reversing (i.e. the area shown in blue in Figure 6.5 below);
- Restrict the hours of rubbish collection and use of the refuse area to between the hours of 9.00am and 7.00pm on a Sunday, and 7.00am to 7.00pm on any other day;
- Restrict the hours of the compactor to the hours between 7.00am and 10.00pm;
- As documented on the architectural plans:
 - Construct a barrier around roof mounted mechanical plant;
 - Construct the boundary fence shown in red (refer Figure 6.5 below) to a height of 6.2m and from a material such as precast concrete;
 - Construct the remaining northern boundary fence to a height of 2.4m, noting the portion shown in green (refer Figure 6.5 below) can taper down in height if required.

Figure 6.5 Sonus Recommendations



Sonus concludes that with the above-mentioned acoustic measures in place, the development will be designed such that it will not detrimentally affect the amenity of the locality or cause unreasonable interference by the emission of noise, thereby achieving compliance with the Noise Policy, as well as PDCs 6 and 8 of the General Section: Interface Between Land Uses module:

PDC 6 Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses.

PDC 8 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises.

In addition, we also note that the proposed design and layout of the site, supported by the proposed acoustic treatments will significantly improve interface impacts as they relate to noise, when contrasted with existing site arrangements – particularly as it relates to the rear of the site and its adjacency to the SAHA site to the north.

As illustrated within **Figure 6.6** below, under current arrangements, a low-level (non-acoustically treated) metal fence separates these sites, with rear loading, servicing and truck manoeuvring areas visible from the upper levels of the residential apartments (as well as from Noblet Street) with roller door openings of the building facing directly north.

Figure 6.6 Rear of Existing Site - Current Interface Arrangements



6.8.2 Light Spill

PDC 1(e) of the General Section: Interface Between Land Uses module provides appropriate guidance regarding the management and design of lighting for the proposed development:

PDC 1 *Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:*

(e) light spill

Although the specific location and nature of outdoor lighting is yet to be determined, all lighting will be designed in accordance with *Australian Standard 4282 – 1997 ‘Control of the obtrusive effects of outdoor lighting’*, to ensure lux levels and light glare does not unreasonably impact on the amenity of the locality. Additionally, all lighting within the car park will be designed in accordance with *Australian Standard AS 1158 – Lighting for roads and public spaces*.

Accordingly, the proposal satisfies PDC 1(e) and it is anticipated that lighting operating from within the site will not adversely impact on the amenity of the locality and can be managed through appropriately worded conditions attached to the Development Plan Consent.

6.8.3 Odour

Having regard to the nature of the proposed land use, potential odour impacts will be addressed by ALDI’s waste management practices.

More specifically, Section 4.8 of this Planning Statement outlined the overall waste management strategy associated with the development, and accordingly, there are no anticipated odour impacts having regard to the streamlined waste management practices that are proposed, or the types of wastes that are expected to be generated.

An appropriately sized and dedicated waste storage area is provided within the loading dock, and the waste bin is emptied on a regular basis.

Accordingly, there are no anticipated odour impacts associated with the proposed development and the proposed storage and management arrangements associated with waste accords with the following key provisions of the Development Plan:

Interface Between Land Uses

PDC 1 *Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:*

(a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants

Centres and Retail Development

- PDC 3** Development within centres should provide:
(c) unobtrusive facilities for the storage and removal of waste materials

Waste

- PDC 2** The storage, treatment and disposal of waste materials from any development should be achieved without risk to health or impairment of the environment.
- PDC 5** Development should include appropriately sized area to facilitate the storage of receptacles that will enable the efficient recycling of waste.

6.9 Energy Efficiency

The design of the development has been assessed against the following Energy Efficiency provisions of the Development Plan:

Energy Efficiency

- OBJ 1** Development designed and sited to conserve energy and minimise waste.
- PDC 5** Development should be designed to minimise consumption of non-renewable energy through designing the roof of buildings with a north facing slope to accommodate solar collectors.

The following design features will reduce the buildings reliance on non-renewable resources:

- A flat roof with northerly aspect to accommodate photovoltaic cells which will not result in unreasonable overshadow or visual impact to adjoining properties;
- The use of landscaping to provide shade and additional vegetation across the site;
- Sunshade screens and canopy projections to provide shade to windows on the eastern and southern elevations.

6.10 Stormwater

The Development Plan seeks to ensure that stormwater is managed appropriately to improve the quality of stormwater, minimise pollutant transfer to receiving waters, protect downstream receiving waters from high levels of flow or flooding and minimise the concentrated discharge of stormwater from the site.

The Development Plan provisions that follow are considered directly relevant to the issue of stormwater:

Natural Resources

- OBJ 2** Protection of the quality and quantity of South Australia's surface waters, including inland, marine and estuarine and underground waters.
- OBJ 5** Development consistent with the principles of water sensitive design.

PDC 8 Water discharged from a development site should:

(a) be of a physical, chemical and biological condition equivalent to or better than its pre-developed state

(b) not exceed the rate of discharge from the site as it existed in pre-development conditions.

PDC 9 Development should include stormwater management systems to protect it from damage during a minimum of a 1 in 100-year average return interval flood.

PDC 10 Development should have adequate provision to control any stormwater over-flow run-off from the site and should be sited and designed to improve the quality of stormwater and minimise pollutant transfer to receiving waters.

PDC 11 Development should include stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.

PDC 12 Development should include stormwater management systems to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system.

As outlined in Section 4.6, WGA Engineers have been engaged to prepare a Stormwater Management Report for the proposed development (refer to **Appendix 9**). As part of this report, WGA have provided advice on the management of stormwater and have prepared a management plan with supporting documentation which responds to Council and DPTI requirements, while also ensuring that stormwater is managed effectively and efficiently.

In essence, WGA have recommended:

- The proposed Finished Floor Level of the ALDI building should be at 8.90m AHD to minimise the risk of flooding;
- Stormwater run-off will be captured from both roof (via box gutters) and car park surfaces and be directed in a controlled manner to the existing stormwater branch connecting to the Grange Road stormwater network;
- While there is no increase to the impermeability of the site, to provide for onsite 'major storm' detention capacity, a portion of the eastern and southern car park will be 'dished' to provide necessary ponding and controlled release;
- As the recessed loading dock is exposed, stormwater run-off will be collected and pumped / discharged via the proposed stormwater system and basin;
- A small 45m² of pavement at the Noblet Street driveway will be drained to the nearby water table, in order to allow for formation of a protective ridgeline; and

- A proprietary ‘oil and grease arrestor’ such as the Rocla First Defense model will be installed to remove solid and liquid pollutants prior to discharge from the site.

On this basis, the proposed development satisfies the relevant provisions of the Development Plan in relation to the provision of infrastructure to manage stormwater.

7. Conclusion

This development application seeks to establish an ALDI Store within a Neighbourhood Centre Zone of the City of Charles Sturt. Given the location and zoning of the site and its ability to provide convenient access for customers and delivery trucks, the site is well suited for its intended use for retail development.

Following an inspection of the subject site and locality, a review of the proposed plans and associated documentation accompanying the application and a detailed assessment of the proposed development against the relevant provisions of the Charles Sturt Council Development Plan, we have formed the opinion that the proposed development represents appropriate and orderly development that deserves favourable consideration for approval. More specifically:

- The Desired Character statement of Precinct 84 specifically seeks a ‘small scale supermarket of up to 2,000m²’;
- The proposed land use is of an appropriate form and scale, consistent with the intent of the Zone, Policy Area and Precinct;
- The ALDI Store will provide a range of groceries and other shopping products which will serve the needs of the local and broader community;
- The building features a contemporary design which, combined with the proposed materials and finishes, appropriately responds to the desired character of the locality and will enhance the overall appearance and function of the subject site;
- The design and treatment of the northern boundary is appropriately sensitive to the adjoining residential site (as confirmed by the Sa Housing Authority);
- The proposal will not result in unreasonable interface or visual impacts to adjoining residential land uses or the locality more generally;
- The proposed landscaping will significantly improve the aesthetics of the proposed development and provide an attractive environment around the site, providing appropriate address to both street frontages;
- Projected traffic generation and distribution will not adversely impact on the intended function and/or capacity of the adjacent road networks;

- The site has been designed to accommodate safe and convenient vehicle access, egress and circulation, including service vehicles that will enter the site in forward direction, safely reverse into the loading dock and exit the site in a forward direction;
- The supply of car parking spaces will satisfy the anticipated demand generated by the proposed ALDI Store;
- The development is located close to existing public transport routes, has been integrated with the existing pedestrian network, and provides safe and convenient access for pedestrians from the public realm and car park;
- The development provides an appropriate response to the energy efficiency and crime prevention modules of the Development Plan; and
- The proposed advertising signage will clearly and concisely identify the intended use, while also achieving consistency with the architectural style of the building and complementing the established character of the locality.

The proposed development is therefore highly aligned with the most relevant provisions of the Charles Sturt Council Development Plan and warrants Development Plan Consent, subject to reasonable and relevant conditions.

Appendix 1. Certificates of Title

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 6080 Folio 458

Parent Title(s) CT 5301/943
Creating Dealing(s) SC 11597674
Title Issued 19/07/2011 Edition 3 Edition Issued 12/10/2015

Estate Type

FEE SIMPLE

Registered Proprietor

OLYMPIC SOLAR ENERGY PTY. LTD. (ACN: 126 384 110)
OF 84 RIVERSIDE DRIVE FULHAM SA 5024
1 / 2 SHARE

OLYMPIC RESTAURANTS PTY. LTD. (ACN: 606 177 315)
OF 84 RIVERSIDE DRIVE FULHAM SA 5024
1 / 2 SHARE

Description of Land

ALLOTMENT 36 FILED PLAN 117548
IN THE AREA NAMED FINDON
HUNDRED OF YATALA

Easements

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED A

Schedule of Dealings

NIL

Notations

Dealings Affecting Title NIL

Priority Notices NIL

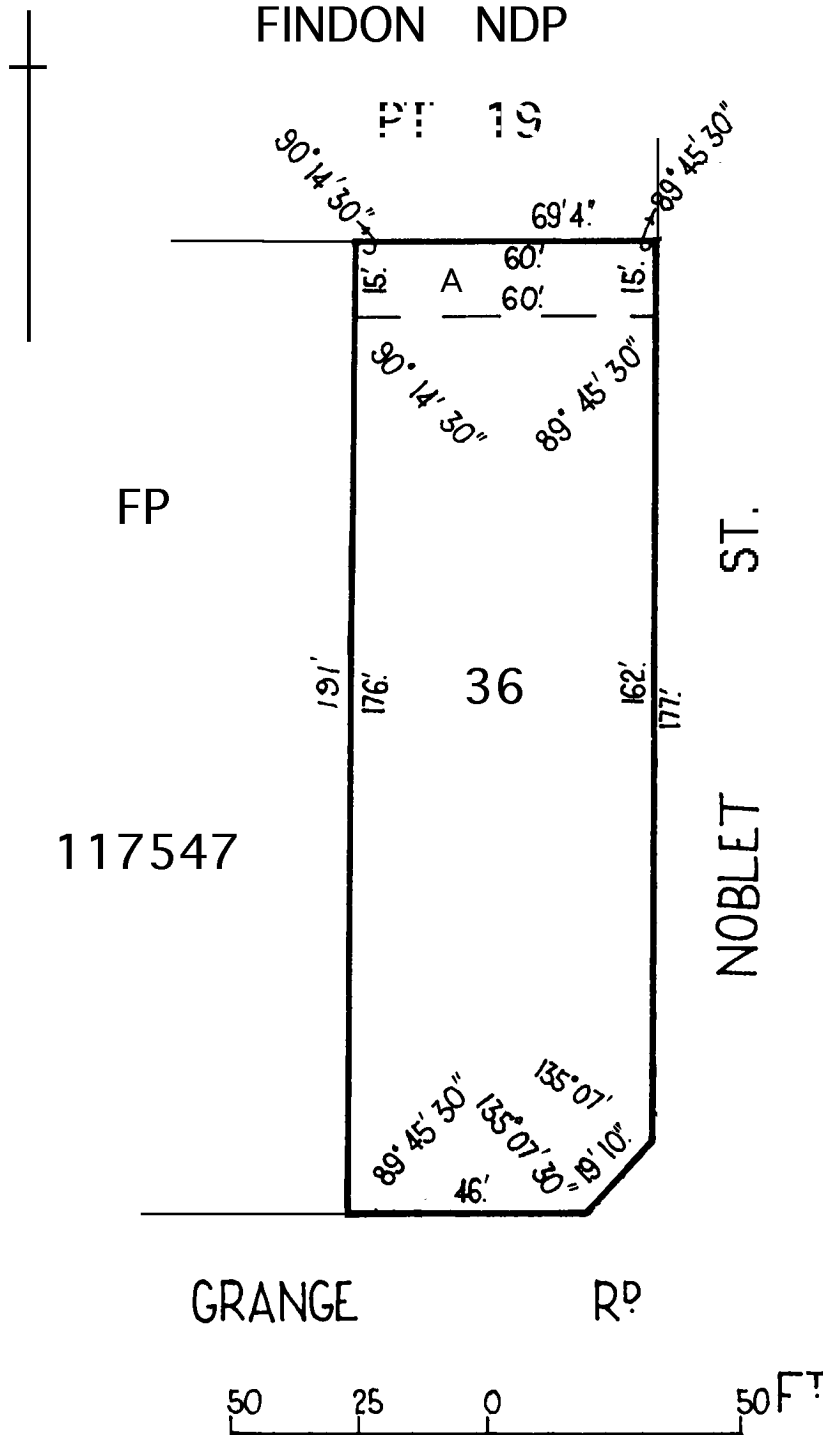
Notations on Plan NIL

Registrar-General's Notes

APPROVED G783/1970

Administrative Interests NIL

This plan is scanned for Certificate of Title 3920 / 168
See title text for easement details.



DISTANCES ARE IN FEET AND INCHES
FOR METRIC CONVERSION
1 FOOT = 0.3048 metres
1 INCH = 0.0254 metres

Note : Subject to all lawfully existing plans of division

REAL PROPERTY ACT, 1886



South Australia

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5301 Folio 952

Parent Title(s) CT 3920/169
Creating Dealing(s) CONVERTED TITLE
Title Issued 24/10/1995 **Edition** 4 **Edition Issued** 06/10/2015

Estate Type

FEE SIMPLE

Registered Proprietor

OLYMPIC RESTAURANTS PTY. LTD. (ACN: 606 177 315)
OF 84 RIVERSIDE DRIVE FULHAM SA 5024

Description of Land

ALLOTMENT 35 FILED PLAN 117547
IN THE AREA NAMED FINDON
HUNDRED OF YATALA

Easements

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED A

Schedule of Dealings

NIL

Notations

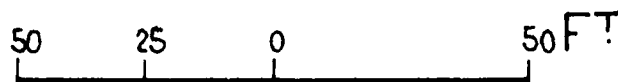
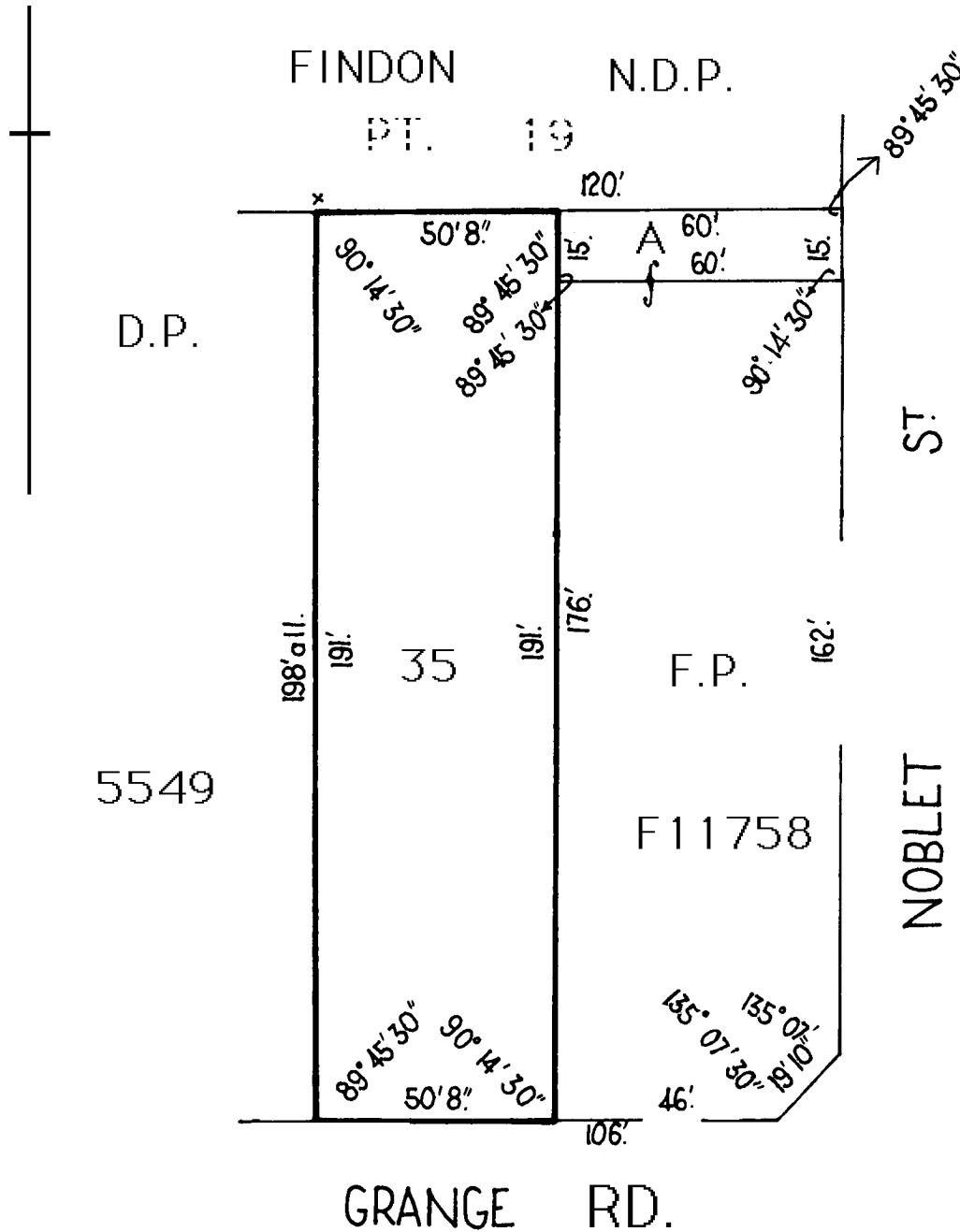
Dealings Affecting Title NIL
Priority Notices NIL
Notations on Plan NIL

Registrar-General's Notes

PLAN FOR LEASE PURPOSES VIDE G426/1985

Administrative Interests NIL

This plan is scanned for Certificate of Title 3920/169
See title text for easement details.



DISTANCES ARE IN FEET AND INCHES
FOR METRIC CONVERSION
1 FOOT = 0.3048 metres
1 INCH = 0.0254 metres

Note : Subject to all lawfully existing plans of division

REAL PROPERTY ACT, 1886



South Australia

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5366 Folio 314

Parent Title(s) CT 3502/168
Creating Dealing(s) CONVERTED TITLE
Title Issued 03/10/1996 **Edition** 6 **Edition Issued** 29/01/2017

Estate Type

FEE SIMPLE

Registered Proprietor

AUSCELL PTY. LTD. (ACN: 007 762 987)
OF 11-13 STREIFF ROAD WINGFIELD SA 5013

Description of Land

ALLOTMENT 10 DEPOSITED PLAN 5549
IN THE AREA NAMED FINDON
HUNDRED OF YATALA

Easements

NIL

Schedule of Dealings

Dealing Number	Description
11157291	MORTGAGE TO WESTPAC BANKING CORPORATION

Notations

Dealings Affecting Title NIL

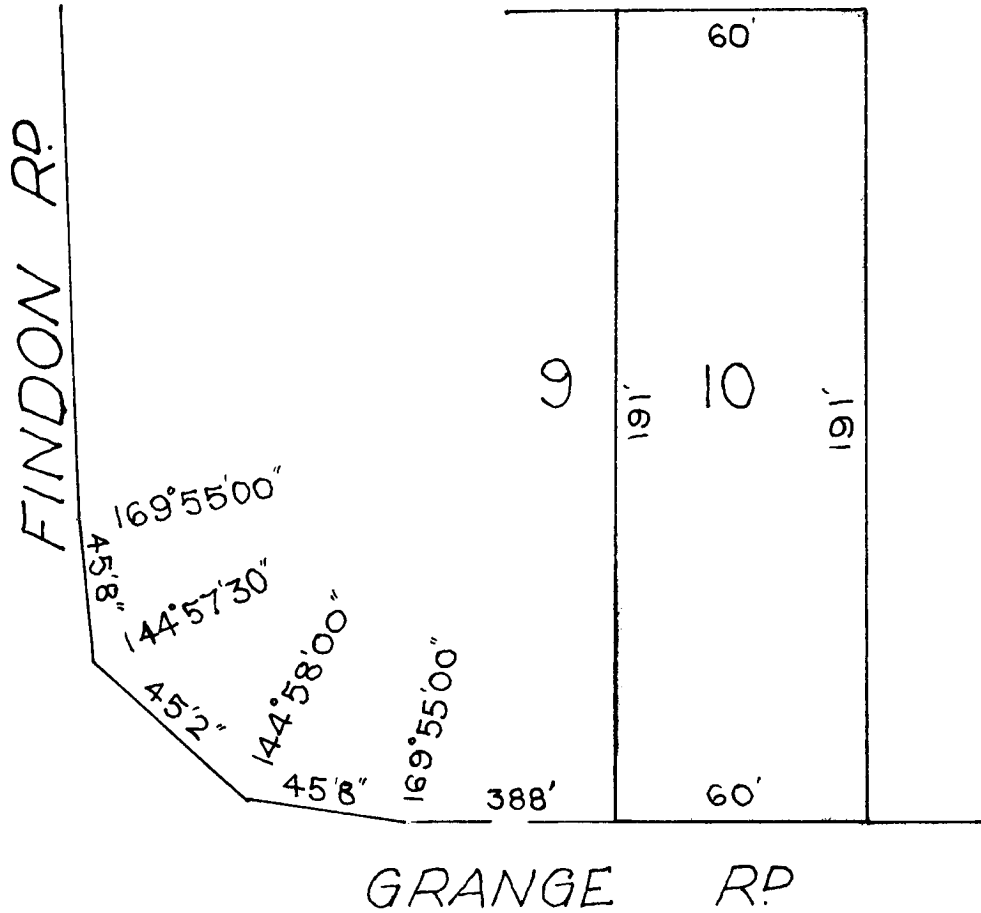
Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

NEW EDITION CREATED DUE TO EXPIRATION OF LEASE

Administrative Interests NIL



**DISTANCES ARE IN FEET AND INCHES
FOR METRIC CONVERSION**

1 FOOT = 0.3048 METRES
1 INCH = 0.0254 METRES

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5366 Folio 397

Parent Title(s) CT 3502/167
Creating Dealing(s) CONVERTED TITLE
Title Issued 03/10/1996 Edition 6 Edition Issued 29/01/2017

Estate Type

FEE SIMPLE

Registered Proprietor

VOLTA BATTERIES PTY. LTD. (ACN: 093 184 251)
OF 11-13 STREIFF ROAD WINGFIELD SA 5013

Description of Land

ALLOTMENT 9 DEPOSITED PLAN 5549
IN THE AREA NAMED FINDON
HUNDRED OF YATALA

Easements

NIL

Schedule of Dealings

Dealing Number	Description
11157290	MORTGAGE TO WESTPAC BANKING CORPORATION

Notations

Dealings Affecting Title NIL

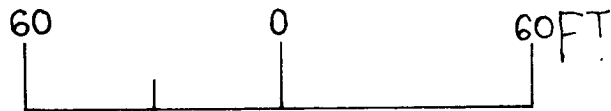
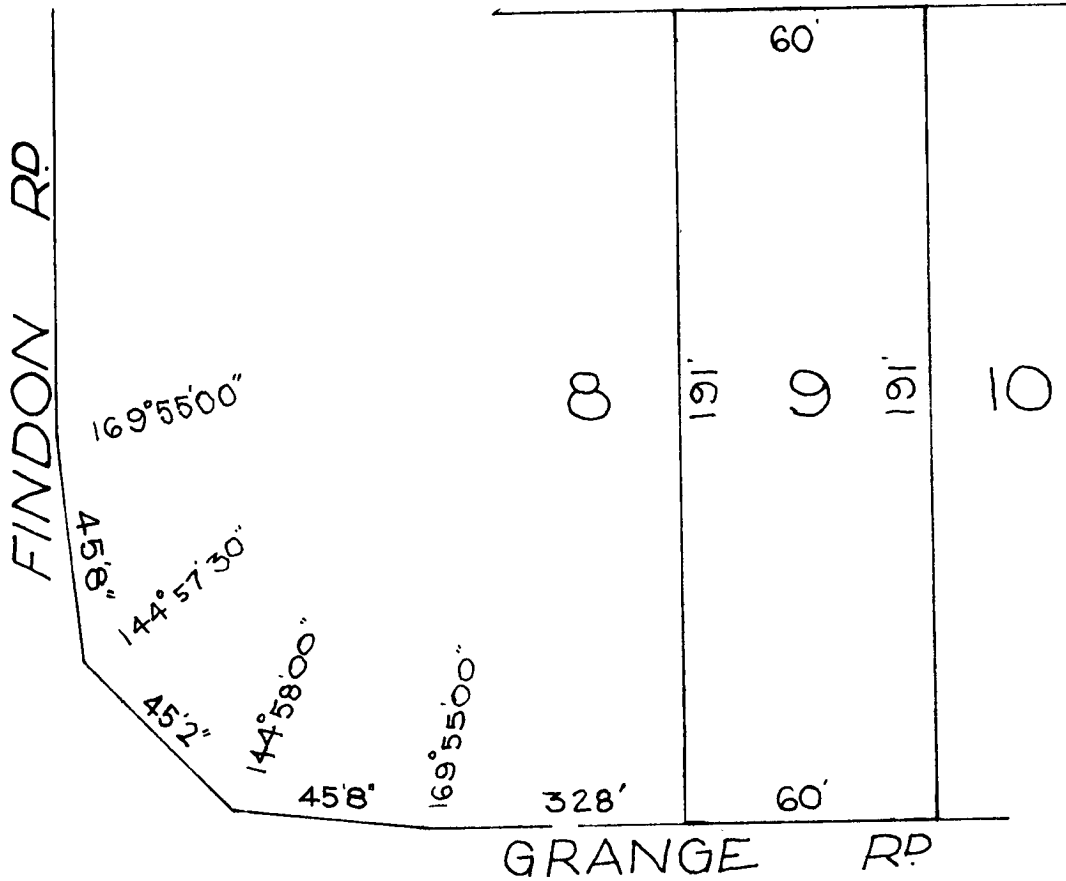
Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

NEW EDITION CREATED DUE TO EXPIRATION OF LEASE

Administrative Interests NIL



**DISTANCES ARE IN FEET AND INCHES
FOR METRIC CONVERSION**

1 FOOT = 0.3048 METRES
1 INCH = 0.0254 METRES

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5284 Folio 711

Parent Title(s) CT 3502/166
Creating Dealing(s) SC 7925587
Title Issued 08/08/1995 Edition 6 Edition Issued 12/08/2015

Estate Type

FEE SIMPLE

Registered Proprietor

AUSCELL PTY. LTD. (ACN: 007 762 987)
OF 13 STREIFF ROAD WINGFIELD SA 5013
1 / 2 SHARE

OLYMPIC DEVELOPMENTS PTY. LTD. (ACN: 008 140 289)
OF CORNER GRAND JUNCTION AND SOUTH ROAD WINGFIELD SA 5013
1 / 2 SHARE

Description of Land

ALLOTMENTS 7 AND 8 DEPOSITED PLAN 5549
IN THE AREA NAMED FINDON
HUNDRED OF YATALA

Easements

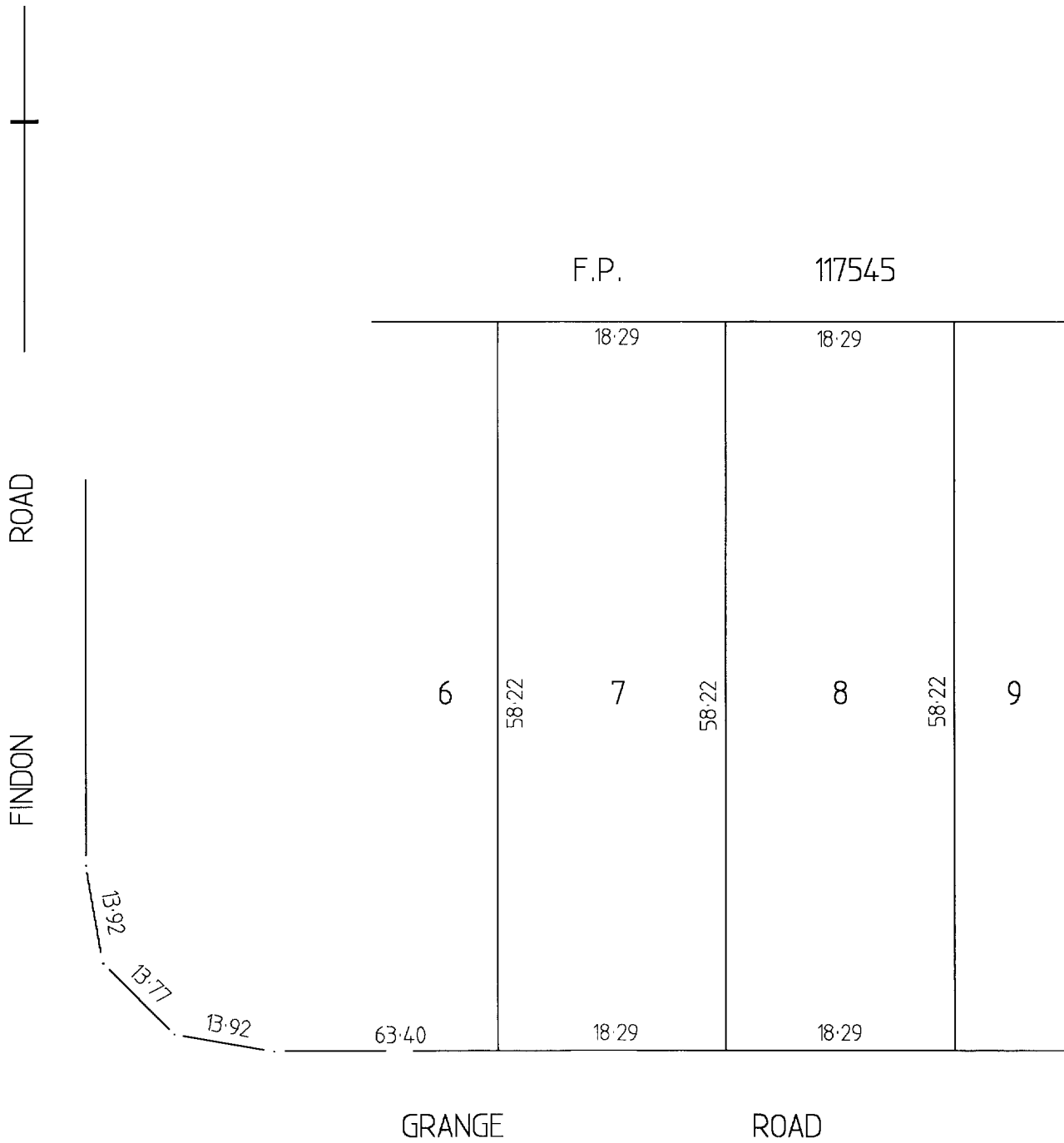
NIL

Schedule of Dealings

Dealing Number	Description
12418652	MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA (ACN: 123 123 124)

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL



Appendix 2. Survey Plan
(Alexander Symonds)



0	04.10.2019	INITIAL RELEASE		
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

NJS		LEGEND	
47.51TK	TOP KERB	47.36TW	TOP WINDOW SILL LEVEL
47.36WT	WATER TABLE	45.16WS	WINDOW SILL LEVEL
45.16FL	FLOOR LEVEL	48.12RR	ROOF LEVEL
48.12IL	INVERT LEVEL	48.12TW	TOP WALL LEVEL
48.12LW	LIGHTING LUMINAIRE	48.12OV	OVERHEAD WIRE
48.12OV	VERANDAH LEVEL	48.12OH	OVERHEAD WIRE
48.12OH	OVERHEAD WIRE	48.12SH	SIGN / BUS SIGN
48.12SH	SIGN / BUS SIGN	48.12TM	TICKET MACHINE
48.12TM	TICKET MACHINE	48.12DN	DOWNPIPE
48.12DN	DOWNPIPE	48.12DS	DOMESTIC SUMP
48.12DS	DOMESTIC SUMP	48.12SW	STORMWATER WHOLE
48.12SW	STORMWATER WHOLE	48.12GW	GAS SERVICE
48.12GW	GAS SERVICE	48.12GP	SEP / GRATING
48.12GP	SEP / GRATING	48.12PS	POST / BOLLARD
48.12PS	POST / BOLLARD	48.12SI	SEWER MH / IO / SIP
48.12SI	SEWER MH / IO / SIP	48.12UN	UNKNOWN POINT / SERVICE
48.12UN	UNKNOWN POINT / SERVICE	48.12TC	TEL. COMM. PILLAR / PIT
48.12TC	TEL. COMM. PILLAR / PIT	48.12BO	BOTTOM OF BANK
48.12BO	BOTTOM OF BANK	48.12TO	TOP OF BANK
48.12TO	TOP OF BANK	48.12CB	CHANGE OF GRADE
48.12CB	CHANGE OF GRADE	48.12DR	DRAIN
48.12DR	DRAIN	48.12SP	SEWER PIPE UG
48.12SP	SEWER PIPE UG	48.12WP	WATER PIPE UG
48.12WP	WATER PIPE UG	48.12BL	BUILDING
48.12BL	BUILDING	48.12WA	WALL
48.12WA	WALL	48.12GB	GI BUILDING
48.12GB	GI BUILDING	48.12CN	CONCRETE
48.12CN	CONCRETE	48.12FF	FENCE
48.12FF	FENCE	48.12GA	GATE
48.12GA	GATE	48.12RV	ROAD SIGN / HOARD
48.12RV	ROAD SIGN / HOARD	48.12TV	TREE / SHRUB
48.12TV	TREE / SHRUB	48.12SM	Significant Tree
48.12SM	Significant Tree	48.12SM	Significant Tree

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54
SCALE:	GROUND (CSF = 1.00022239)
ADOPTED STATION & AUTHORITY	
PSM 6628/8385	RL: 8.692 SDB
PSM 6628/8385	E: 274807.486 SDB
	N: 6134670.424 SDB
SDB denotes SA Government survey data base values (Dated: / / 2015)	

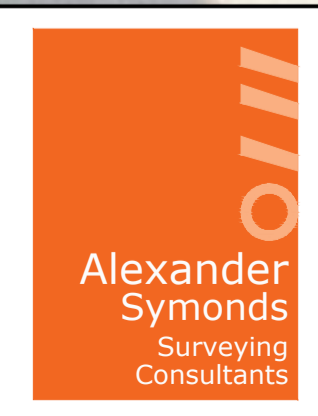
Notes:
 Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.
 No underground services have been located.
 All underground services must be identified prior to any excavation or construction work on site.

CONTOUR INTERVAL:	0.2m MIN 1.0m MAJ
SURVEY:	NJS 28.09.2019
DRAWN:	JB 04.10.2019
CHECKED:	04.10.2019

Alexander & Symonds Pty Ltd
 11 King William Street Kent Town,
 South Australia 5067
 PO Box 1000 Kent Town, SA 5071
 ABN 93007 753 988

T (08) 8130 1666
 F (08) 8362 0099
 W www.alexander.com.au
 E adelaide@alexander.com.au

+ Property + Land Development +
 + Construction + Mining +
 + Spatial Information Management +



DETAIL AND LEVEL SURVEY	
263-275 GRANGE ROAD	
FINDON	
DRAWING No.	A093219 Detail Rev(0)
SHEET	1 OF 3
REVISION	0



0	04.10.2019	INITIAL RELEASE			
REV	DATE	DESCRIPTION	CALC	FIELD	
ADDITIONS, AMENDMENTS AND APPROVALS					

NJS		LEGEND	
47.51TK	TOP KERB	47.36TW	TOP WINDOW SILL LEVEL
47.36WT	WATER TABLE	45.16WS	WINDOW SILL LEVEL
45.16FL	FLOOR LEVEL	48.12RR	ROOF LEVEL
48.12IL	INVERT LEVEL	48.12TW	TOP WALL LEVEL
○ or ○	TAP	○	15.30LIGHT LIGHTING LUMINAIRE
○	WATER METER	48.12CV	VERANDAH LEVEL
○	SPRINKLER / RRIG VALVE	48.12OH	OVERHEAD WIRES
○	HYDRANT	○	SIGN / BUS SIGN
○	DOMESTIC OUTLET	○	TICKET MACHINE
○	DOWNPIPE	○	ROAD / ELEC. SERVICE
○	DOMESTIC SUMP	○	WATER SV / FP
○	STORMWATER WHOLE	○	ELEC. / GAS METER
○	SEP / GRATING	○	GAS SERVICE
○	PSM	○	POWER / LIGHT POLE
○	PEG / TBM	○	CABLE MARKER
○	SURVEY MARKS	○	STONE / WOODEN POLE
○	BOREHOLE	○	POST / BOLLARD
○	ROAD SIGN / HOARD	○	SEWER RM / IO / SIP
○	EDGE OF VEGET.	○	UNKNOWN POINT / SERVICE
○	ROAD SIGN / HOARD	○	TEL. COMM. PILLAR / PIT
○	TREE / SHRUB	○	PROBABLY REGULATED / SIGNIFICANT TREE BY MEASUREMENT ONLY (TRUNK GREATER THAN 2.0m CIRCUMFERENCE). PROFESSIONAL ADVICE FROM COUNCIL / ARBORIST REQUIRED.
○	CHANGE OF GRADE	○	NO UNDERGROUND SERVICES HAVE BEEN LOCATED. ALL UNDERGROUND SERVICES MUST BE IDENTIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION WORK ON SITE.
○	DRAIN	○	SDB DENOTES SA GOVERNMENT SURVEY DATA BASE VALUES (DATED: / / 2015)
○	SEWER PIPE UG	○	
○	TEL. COMM. UG	○	
○	WATER PIPE UG	○	
○	BUILDING	○	
○	WALL	○	
○	GI BUILDING	○	
○	CONCRETE	○	
○	FENCE	○	
○	XXXXXXXX GATE	○	

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54
SCALE: GROUND	(CSF = 1.00022239)
ADOPTED STATION & AUTHORITY	
PSM 6628/8385	RL: 8.692 SDB
PSM 6628/8385	E: 274807.486 SDB
	N: 6134670.424 SDB

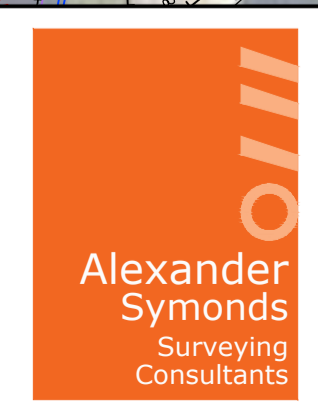
Notes:	
Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.	
No underground services have been located. All underground services must be identified prior to any excavation or construction work on site.	

CONTOUR INTERVAL:	0.2m MIN 1.0m MAJ
SURVEY:	NJS 28.09.2019
DRAWN:	JB 04.10.2019
CHECKED:	04.10.2019

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 W www.alexander.com.au
 E adelaide@alexander.com.au

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DETAIL AND LEVEL SURVEY	
263-275 GRANGE ROAD	
FINDON	
DRAWING No.	A093219 Detail Rev(0)
SHEET	2 OF 3
REVISION	0



0	04.10.2019	INITIAL RELEASE	JOB	NJS
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

LEGEND	
47.51TK TOP KERB	47.36TW TOP WINDOW SILL LEVEL
47.36WT WATER TABLE	45.16WB WINDOW SILL LEVEL
45.16FL FLOOR LEVEL	48.12RR ROOF LEVEL
48.12IL INVERT LEVEL	48.12TW TOP WALL LEVEL
○ TAP	○ 15.30LIGHT LIGHTING LUMINAIRE
○ WATER METER	48.12CVR VERANDAH LEVEL
○ SPRINKLER / RRIG VALVE	○ 48.12CH OVERHEAD WIRES
○ HYDRANT	○ SIGN / BUS SIGN
○ DOMESTIC OUTLET	○ TICKET MACHINE
○ DOWNPIPE	○ ROAD / ELEC. SERVICE
○ DOMESTIC SUMP	○ WATER SV / FP
○ STORMWATER WHOLE	○ ELEC. / GAS METER
○ SEP / GRATING	○ GAS SERVICE
□ PSM	□ PEG / TBM
○ SURVEY MARKS	○ BOREHOLE
○ POWER / LIGHT POLE	○ CABLE MARKER
○ STONE / WOODEN POLE	○ POST / BOLLARD
○ SEWER RM / IO / SIP	○ UNKNOWN POINT / SERVICE
○ TEL COMM. PILLAR / PIT	
— EDGE OF VEGET.	— ROAD SIGN / HOARD.
— TREE / SHRUB	— SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.
— BOTTOM OF BANK	— TOP OF BANK
— CHANGE OF GRADE	— DRAIN
— SEWER PIPE UG	— TEL COMM. UG
— WATER PIPE UG	— BUILDING
— WALL	— GI BUILDING
— CONCRETE	— FENCE
— GATE	

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54
SCALE: GROUND	(CSF = 1.00022239)
ADOPTED STATION & AUTHORITY	
PSM 6628/8385	RL: 8.692 SDB
PSM 6628/8385	E: 274807.486 SDB
	N: 6134670.424 SDB
SDB denotes SA Government survey data base values (Dated: / / 2015)	

0 2 4 8 12 16 20 m

1:200 ORIGINAL SHEET SIZE A1

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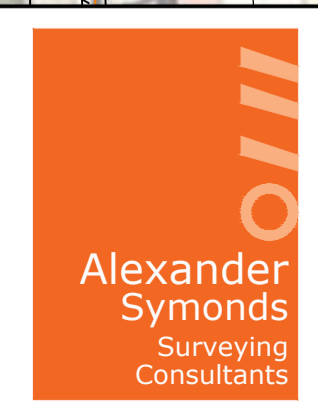
Notes:
 Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.
 No underground services have been located.
 All underground services must be identified prior to any excavation or construction work on site.

CONTOUR INTERVAL:	0.2m MIN 1.0m MAJ
SURVEY:	NJS 28.09.2019
DRAWN:	JB 04.10.2019
CHECKED:	04.10.2019

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 E adelalde@alexander.com.au

+ Property + Land Development +
 + Construction + Mining +
 + Spatial Information Management +

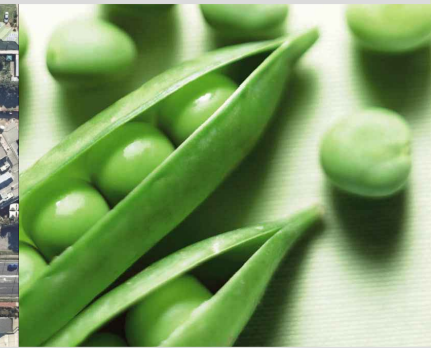


DETAIL AND LEVEL SURVEY	
263-275 GRANGE ROAD	
FINDON	
DRAWING No.	SHEET 3 OF 3
A093219 Detail Rev(0)	REVISION
	0

Appendix 3. Architectural Plans
(Nielsen)

PROPOSED ALDI FINDON

263-271 GRANGE ROAD,
FINDON, SOUTH AUSTRALIA



108 Mt Barker Road Stirling
South Australia 5152
p: 08 8339 8008
f: 08 8339 2004
P.O. Box 691 Stirling SA 5152
admin@nielsenarchitects.com.au
www.nielsenarchitects.com.au


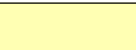
PROPOSED ALDI FINDON

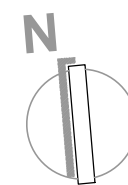
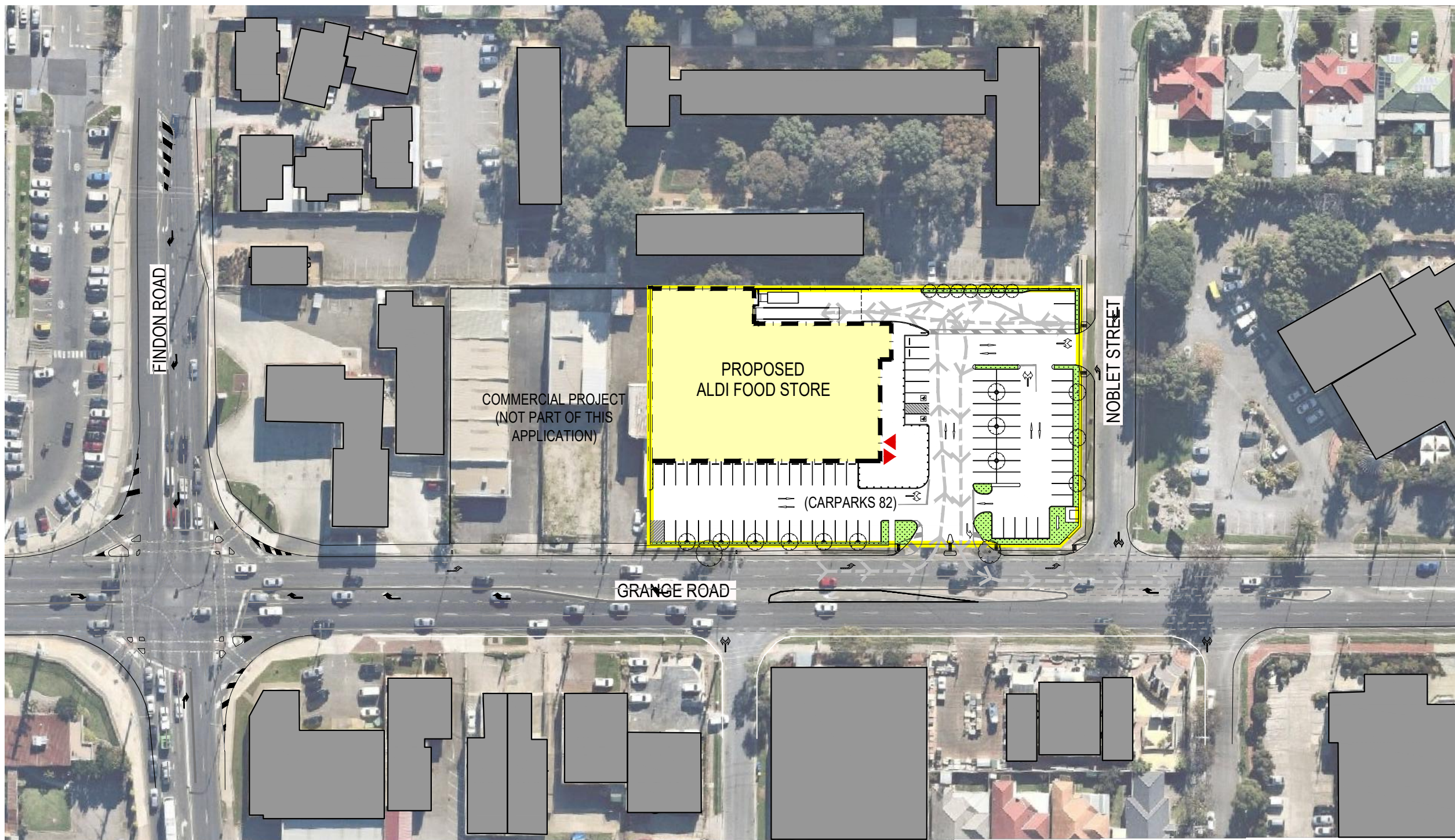
TABLE OF CONTENTS

DRAWING NO	REVISION	DRAWING TITLE	SCALE
DA01	A	LOCATION PLAN	1:1500
DA02.1	A	EXISTING SITE PLAN	1:1000
DA02.3	A	PROPOSED SITE PLAN	1:500
DA02.4	A	PROPOSED ROOF PLAN	1:500
DA03	A	ALDI EXTERNAL ELEVATIONS	1:250
DA04	A	PROPOSED SECTIONS	1:250
DA05.1	A	SIGNAGE PLAN	1:500
DA05.2	A	SIGNAGE DETAILS	1:50
DA06.1	A	PROPOSED 3D VISUAL RENDERS - SHEET 1	NTS
DA06.2	A	PROPOSED 3D VISUAL RENDERS - SHEET 2	NTS
DA06.3	A	PROPOSED 3D VISUAL RENDERS - SHEET 3	NTS

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REV	DATE	DESCRIPTION	DRN	CHKD
A	04.12.19	PLANNING	BS	TB

LEGEND	
BOUNDARY	
ALDI STORE	



01 LOCATION PLAN
1:1000 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.


DRAWING
LOCATION PLAN
PROPOSED

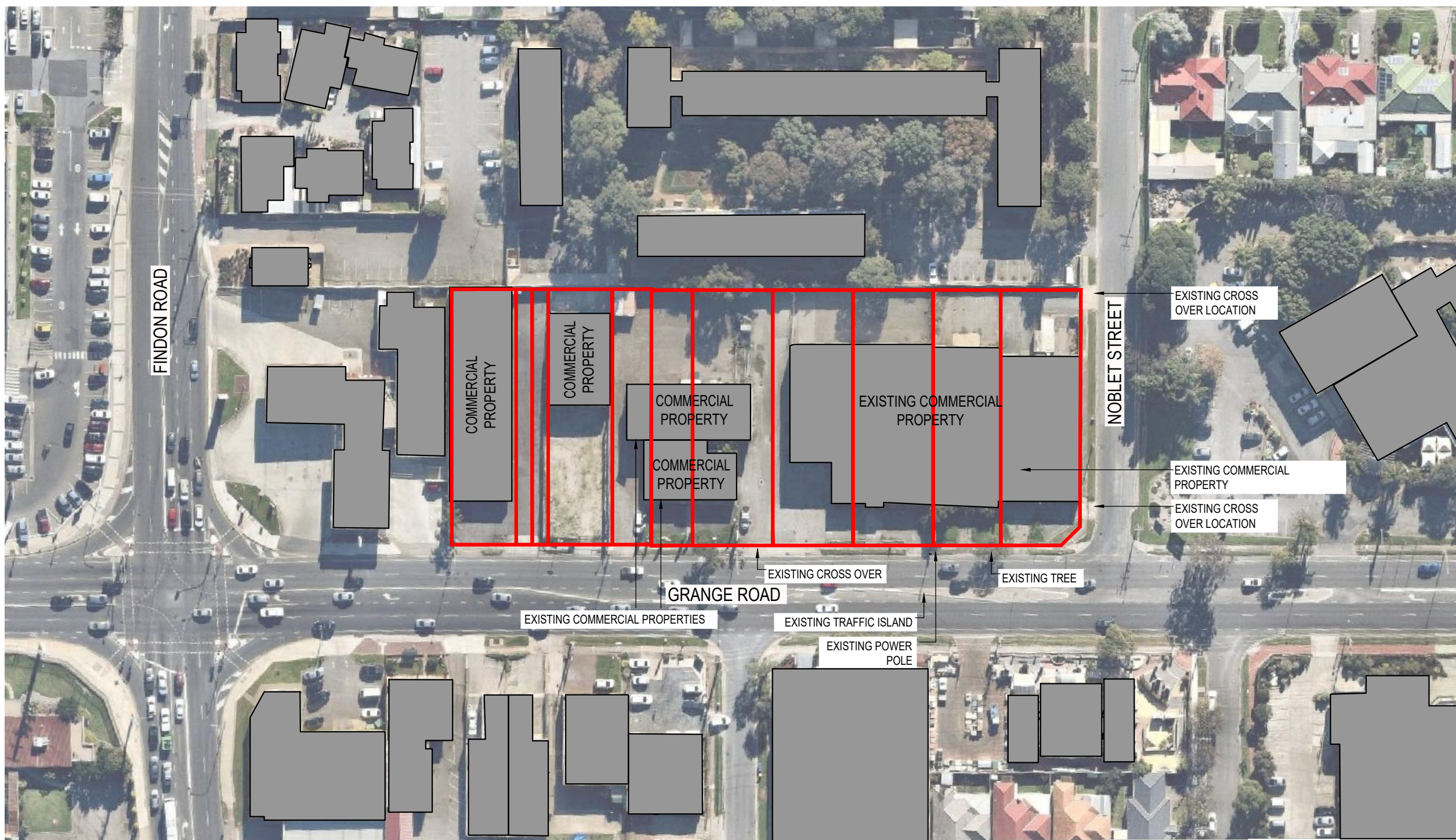
 108 Mt Barker Road Stirling
South Australia 5152
p: 08 8339 8008
f: 08 8339 2004
P.O. Box 691 Stirling SA 5152
admin@nielsenarchitects.com.au
www.nielsenarchitects.com.au

SCALE	DATE	DRAWN	CHECKED
1:1000	DEC 2019	BS	TB
PROJECT No	DRAWING No	STATUS	REV
2354	DA01	DA	A

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REV	DATE	DESCRIPTION	DRN	CHKD
A	04.12.19	PLANNING	BS	TB

LEGEND	
EXISTING BOUNDARY	
EXISTING CONTOUR	0.00
EXISTING LEVEL	EX 0.00
DESIGN LEVEL	RL 0.00



01 EXISTING SITE PLAN
1:1000 EXISTING

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

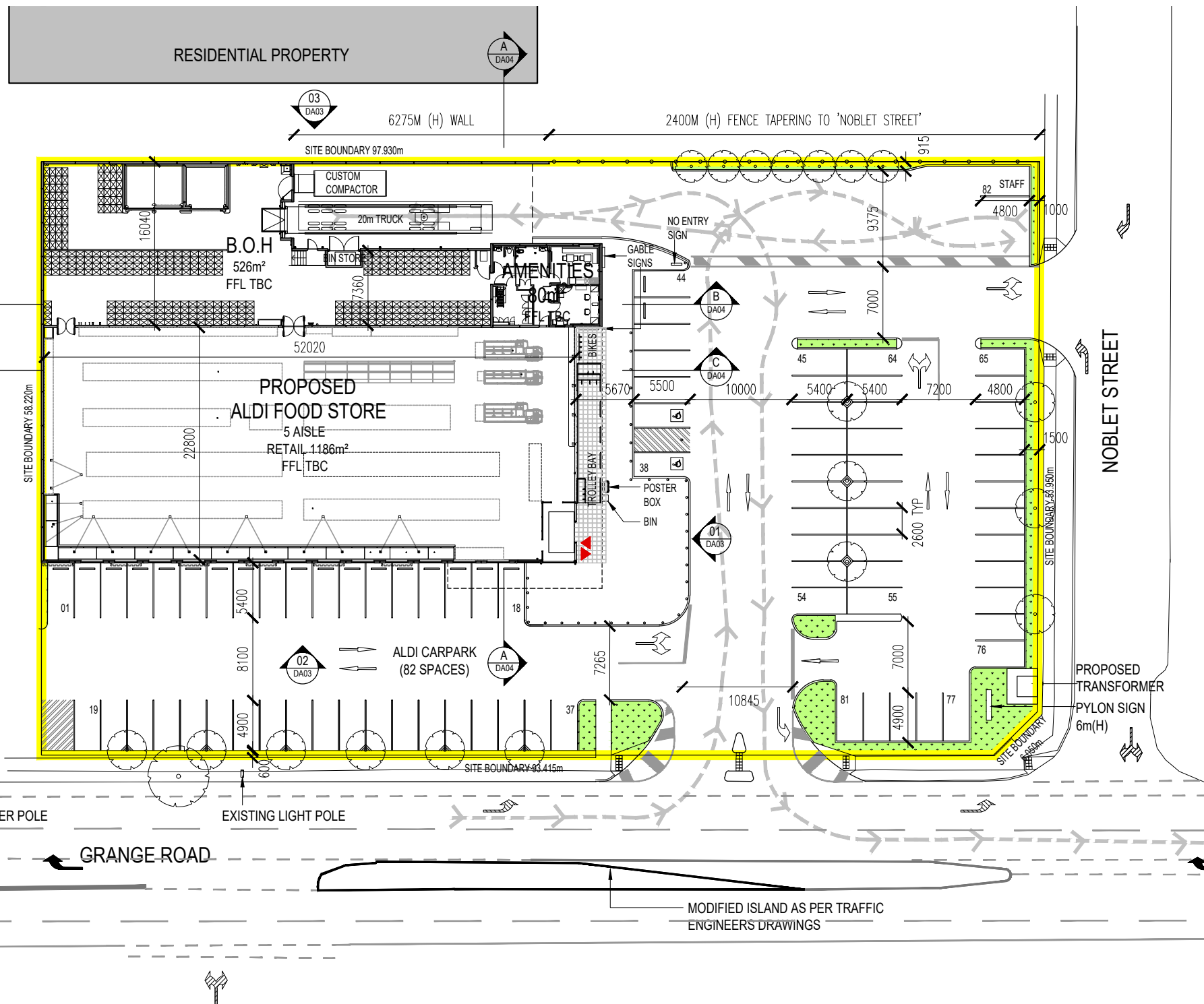
DRAWING
EXISTING SITE PLAN

 NIELSEN ARCHITECTS
108 Mt Barker Road Stirling
South Australia 5152
p: 08 8339 8008
f: 08 8339 2004
P.O. Box 691 Stirling SA 5152
admin@nielsenarchitects.com.au
www.nielsenarchitects.com.au

SCALE 1:1000	DATE DEC 2019	DRAWN BS	CHECKED TB
PROJECT No 2354	DRAWING No DA02.1	STATUS DA	REV A

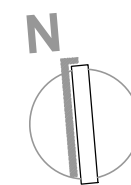
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REV	DATE	DESCRIPTION	DRN	CHKD
A	04.12.19	PLANNING	BS	TB



PROPERTY DESCRIPTION	
TOTAL SITE AREA	5686m ²
TOTAL ALDI SITE AREA	5686m ²
BUILDING GROSS AREA	1849m ²
BUILDING NETT AREA	1792m ²
RETAIL NETT AREA	1186m ²
BOH NETT AREA	526m ²
AMENITIES NETT AREA	80m ²
REMAINING NETT AREA	606m ²
RESERVE AREA	-
PARK / TRAFFIC AREA	3225m ²
NUMBER OF CARS	82
BOH PALLETS	356
LANDSCAPED AREA	
CHILLER LENGTH	43.75m
TRUCK LENGTH	20m

ALDI SITE	
-----------	--



01 PROPOSED PLAN
1:500 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
PROPOSED SITE PLAN

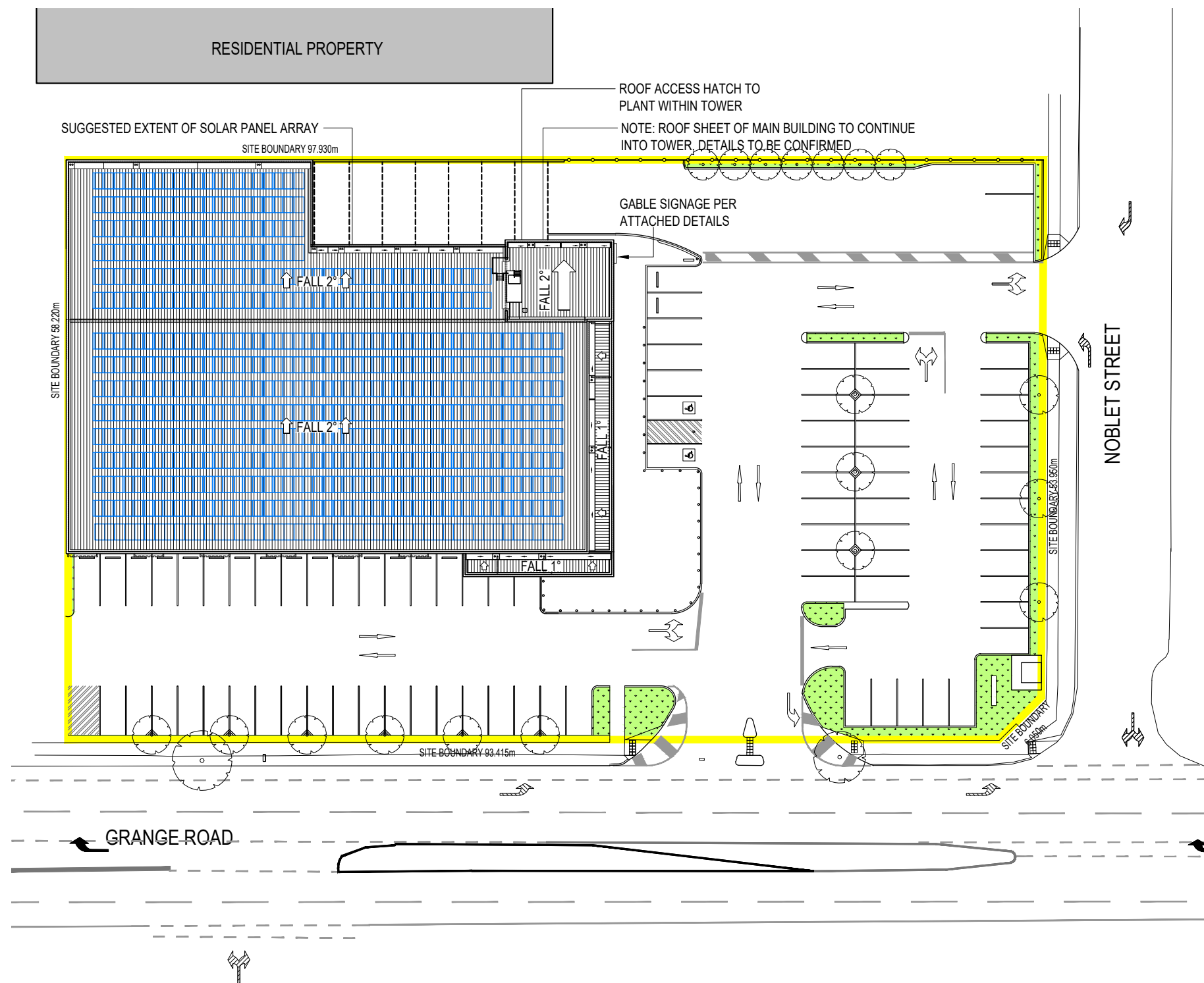
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01 ROOF PLAN
1:500 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
PROPOSED ROOF PLAN

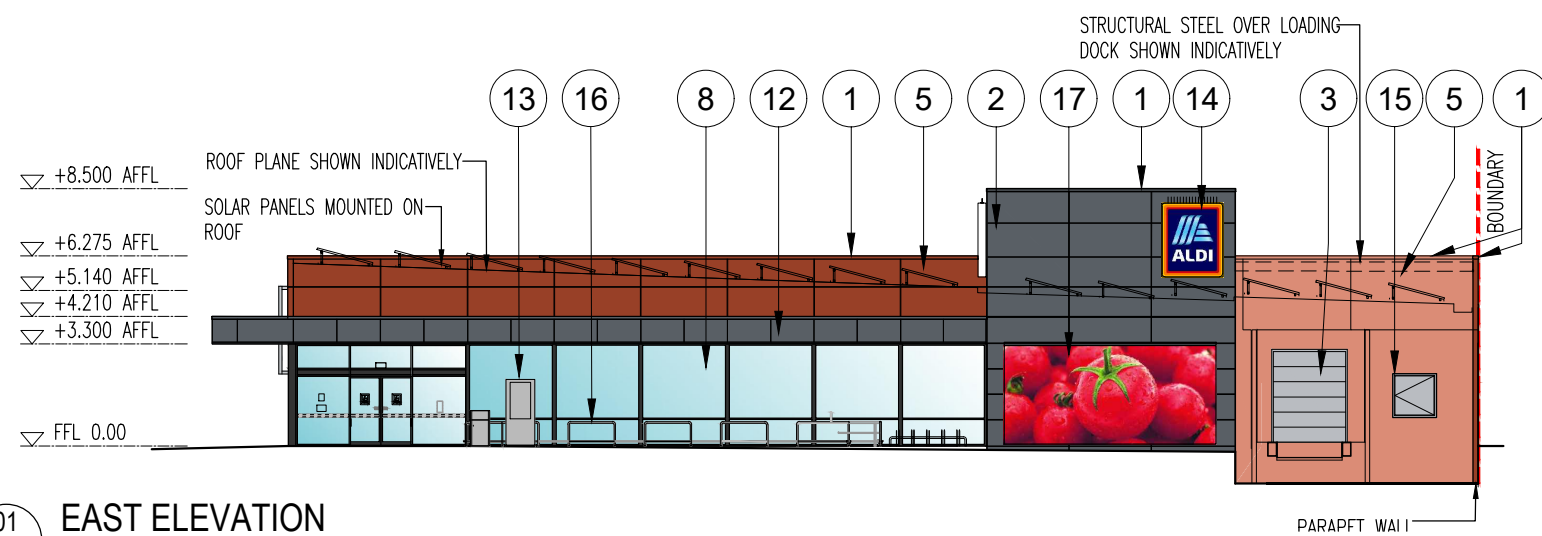
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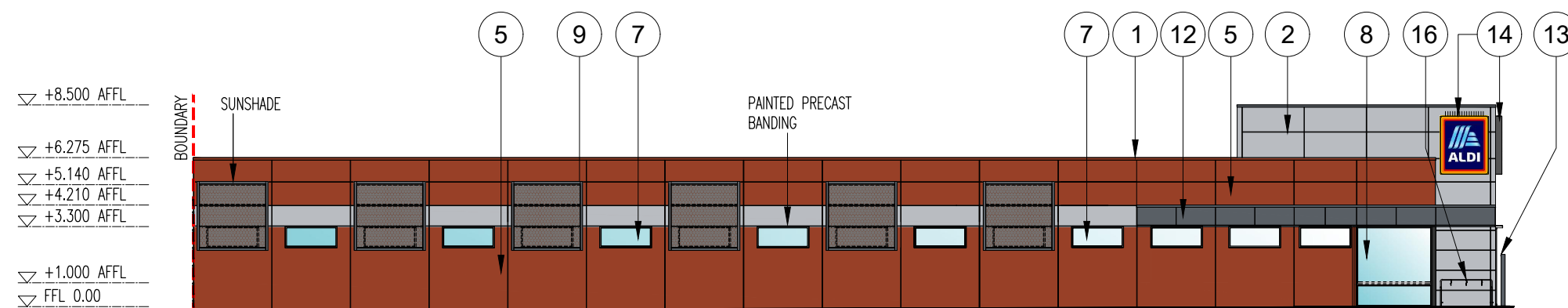
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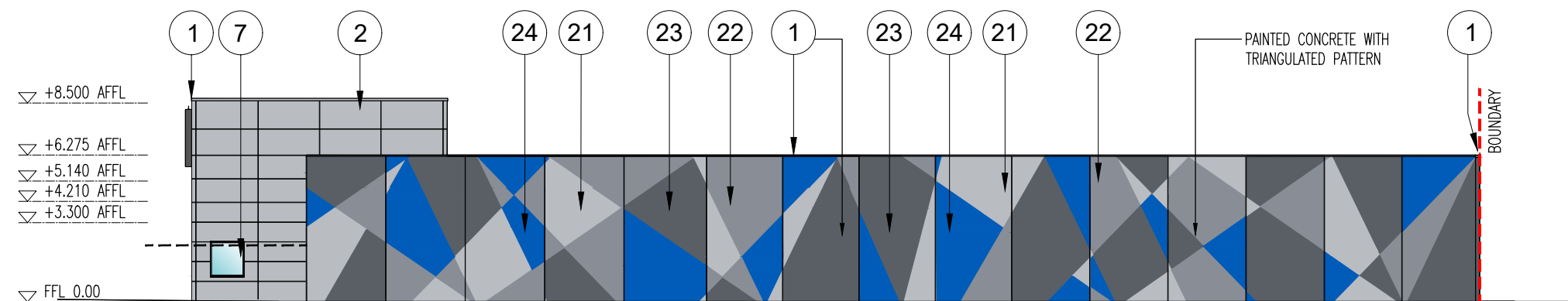
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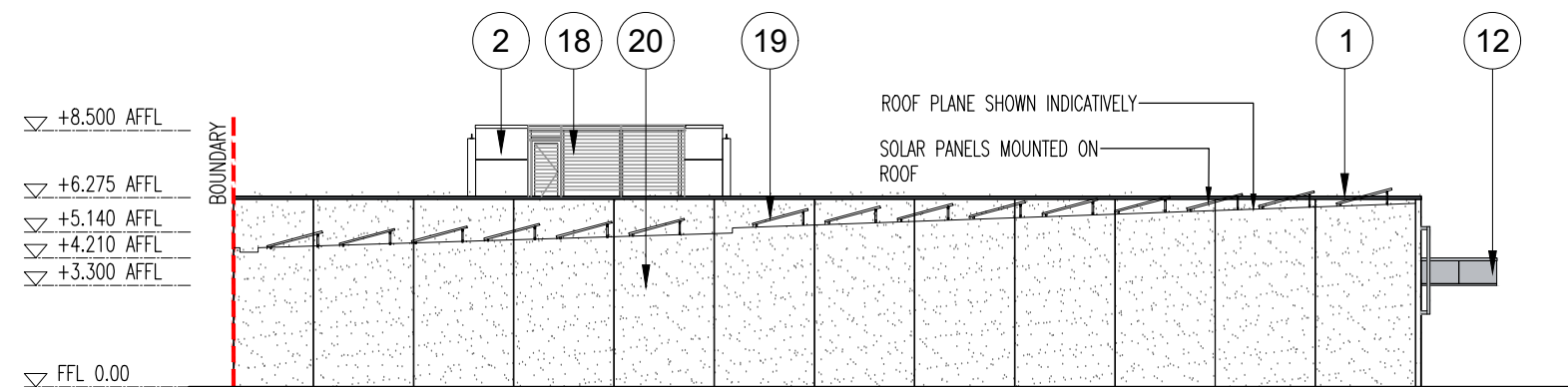
01 EAST ELEVATION
DA02.3 1:250 PROPOSED



02 SOUTH ELEVATION
DA02.3 1:250 PROPOSED



03 NORTH ELEVATION
DA02.3 1:250 PROPOSED



04 WEST ELEVATION
DA02.3 1:250 PROPOSED

MATERIAL SCHEDULE	
1 -	COLORBOND CAPPING, COLOUR TO MATCH ADJACENT WALL PANEL FINISH
2 -	WALL PANEL, PAINT FINISH DULUX 'DRIVETIME'
3 -	PANEL LIFT DOOR, PRE PAINT FINISH - DULUX 'BASALT'
4 -	COLORBOND ROOF SHEETING, 'SURFMIST'
5 -	WALL PANEL, PAINT FINISH DULUX 'FLUORESCENT FIRE'
7 -	WINDOWS - ANODISED ALUMINIUM FRAMES, NATURAL FINISH
8 -	SHOPFRONT - ANODISED ALUMINIUM FRAMES, NATURAL FINISH
9 -	SUNSCREEN - PAINTED STEEL FRAME, DULUX 'BASALT'
12 -	FIBRE CEMENT FASCIA, DULUX 'DRIVETIME'
13 -	POSTER BOX
14 -	ALDI ILLUMINATED SIGNS
15 -	COMPACTOR DOOR & FRAME - 'OLDE PEWTER'
16 -	TROLLEY BAY
17 -	EXTERNAL LIFESTYLE IMAGE (TOMATO)
18 -	PLANT LOUVERS - POWDERCOATED DULUX 'BASALT'
19 -	SOLAR PANELS
20 -	PRECAST CONCRETE WALL PANEL, FACE FINISH
21 -	WALL PANEL, PAINT FINISH LIGHT GREY
22 -	WALL PANEL, PAINT FINISH MID GREY
23 -	WALL PANEL, PAINT FINISH DARK GREY
24 -	WALL PANEL, PAINT FINISH BLUE

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
ALDI EXTERNAL ELEVATIONS

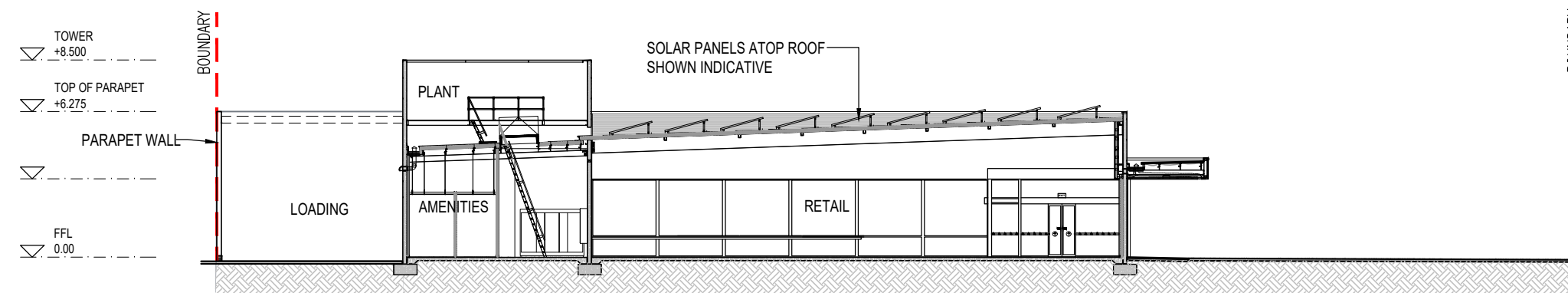
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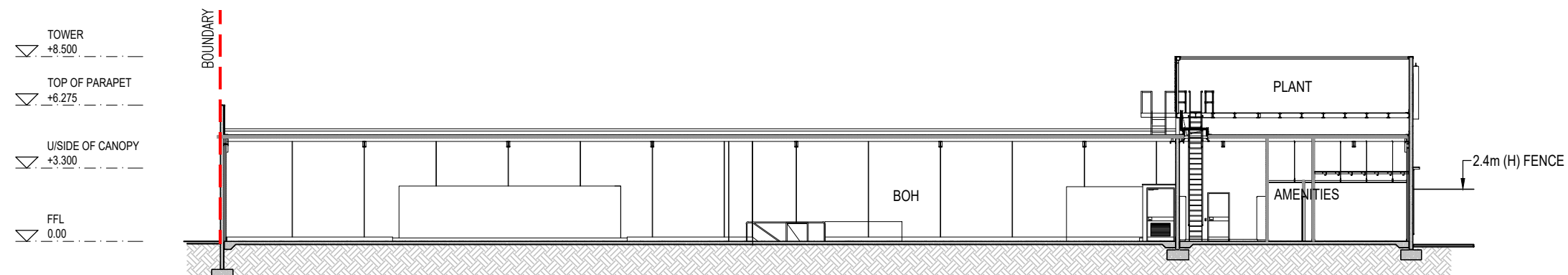
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PROJECT No	DRAWING No	STATUS	REV
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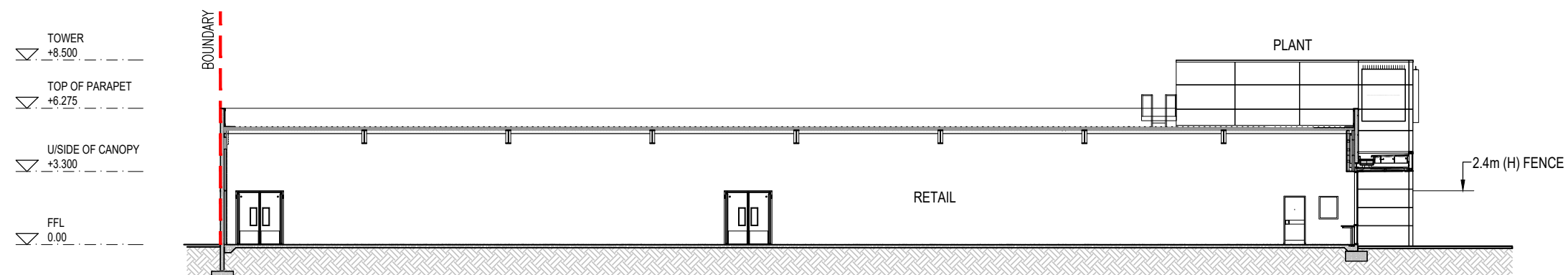
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01 SECTION A-A
DA02.3 1:250 PROPOSED



02 SECTION B-B
DA02.3 1:250 PROPOSED



03 SECTION C-C
DA02.3 1:250 PROPOSED

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ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
PROPOSED SECTIONS



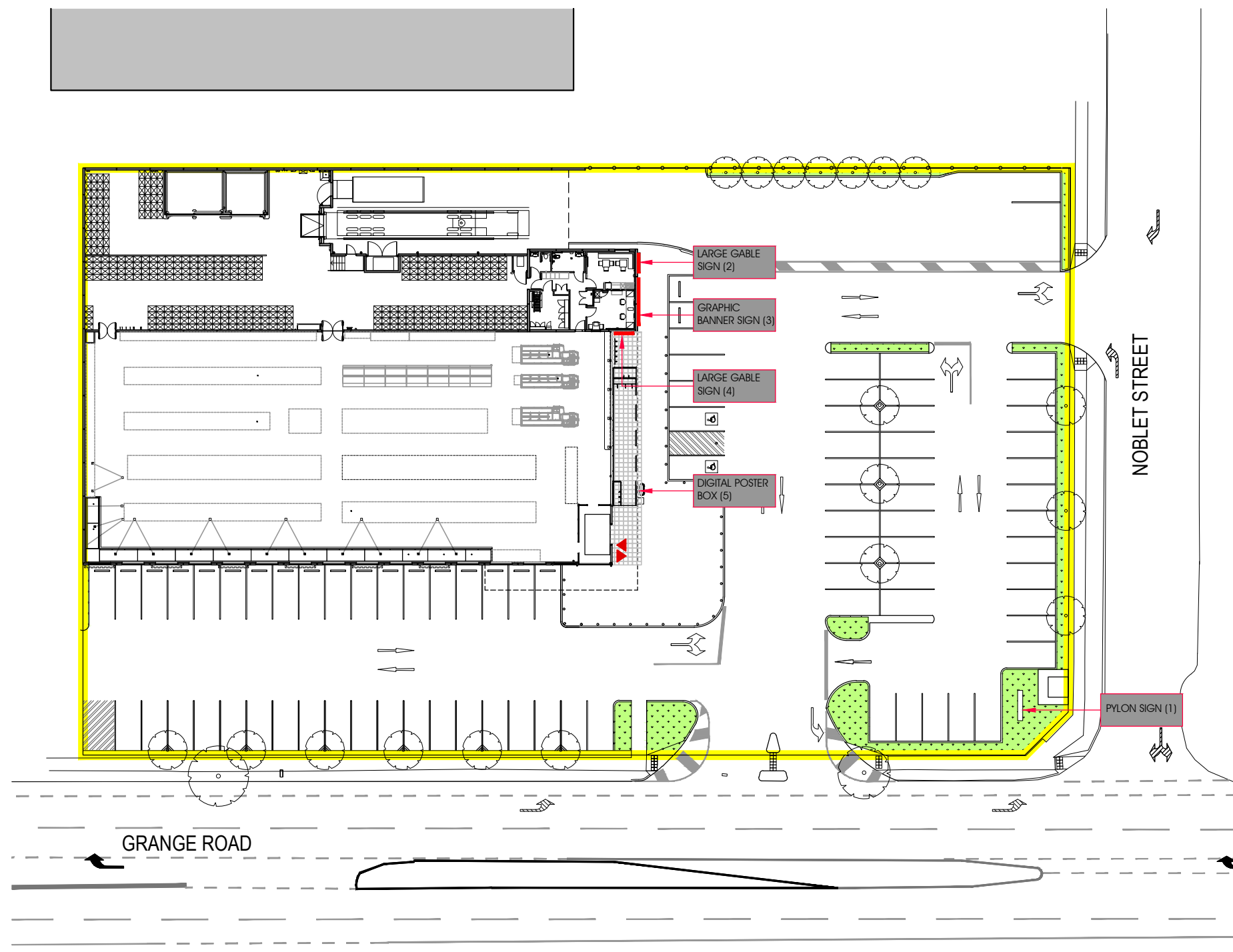
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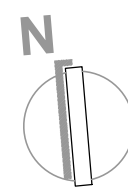
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2354	DA04	DA	A

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01 SIGNAGE PLAN
1:500 PROPOSED



CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
SIGNAGE PLAN

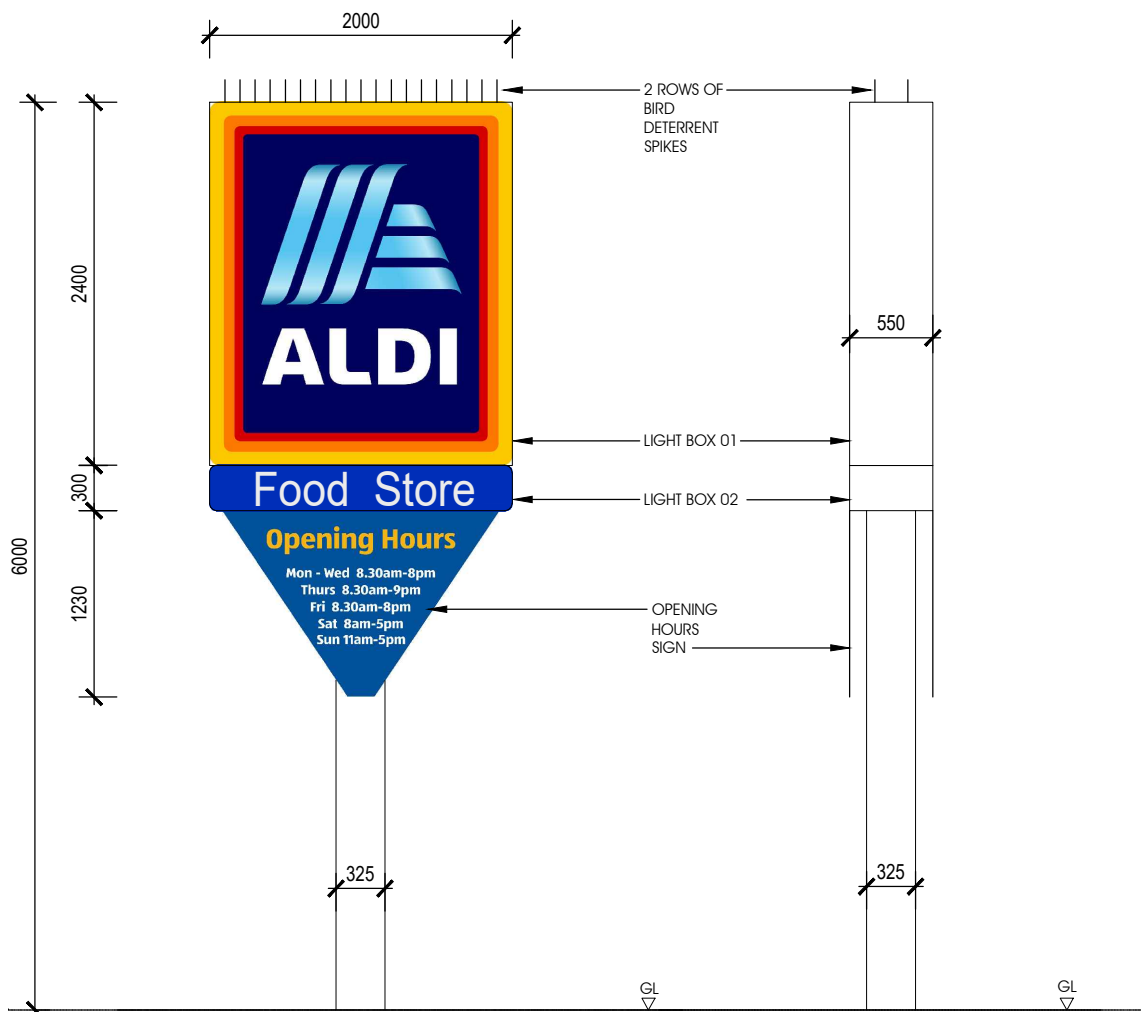
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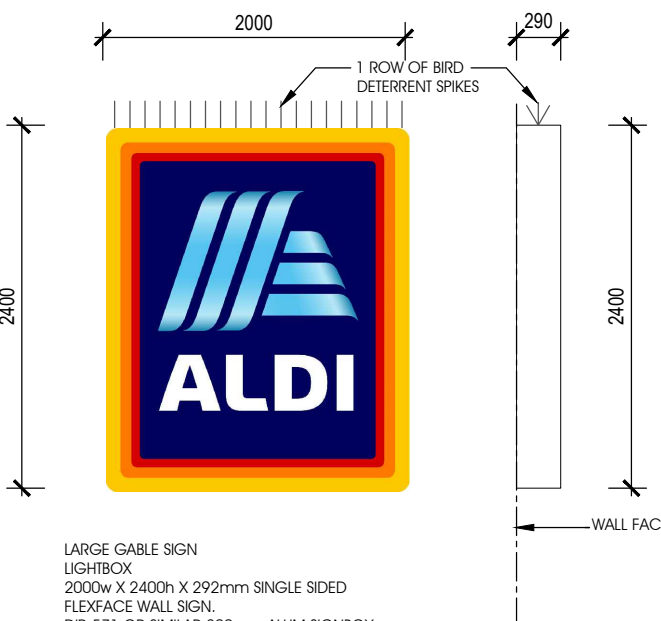
POLE
324 DIA. X 6MM CHS
3.150m TALL
32mm MS BASE PLATE
HOT DIPPED GALVANISED
MIO PAINT FINISH

FOOTING
CONCRETE FOOTING TO ENGINEERS DETAIL

OPENING HOURS SIGN
P1 OPENING HOURS SIGN - 1800W X 1230H
SAPPHIRE BLUE 4MM ACM
INSTALLED VIA SUITABLE MOUNTING BRACKETS TO PYLON AND UNDERSIDE OF SIGN
BRACKETS TO BE PAINTED DULUX 'OLDE PEWTER'

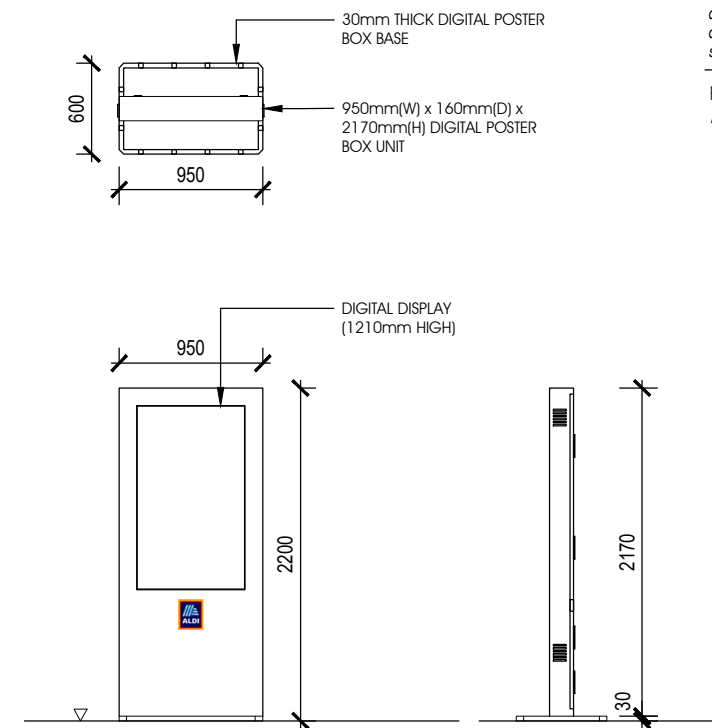
01 ALDI PYLON SIGN (1)
DA05.1 1:50 PROPOSED

LIGHTBOX
LIGHT BOX 01-2400 X 2000 X 550 DOUBLE SIDED FLEX FACE BOX
LIGHT BOX 02-300 X 2000 X 550 DOUBLE SIDED FLEX FACE BOX
INTERNAL MILD STEEL FRAME
ALUMINIUM 'OZ' FLEX FACE EXTRUSION
1.6mm ALUMINIUM EXTERNAL CLADDING
2 PACK POLYURETHANE INTERNAL PAINT FINISHES
MIO PAINT FINISH TO EXTERNAL SURFACE
INTERNAL 'DAYLIGHT' FLUORESCENT LIGHTING
MULFORDS SX GRADE FLEX FACE (NO VISIBLE JOINS)
TECHNOGRAPH AND 3M SELF-ADHESIVE VINYL
LIGHT OUTPUT; CALVIN - 40,000 LUMENS 16,500



LARGE GABLE SIGN
LIGHTBOX
2000w X 2400h X 292mm SINGLE SIDED FLEXFACE WALL SIGN.
DIR-571 OR SIMILAR 200mm ALUM SIGNBOX EXTRUSION WITH 1.6mm ALUMINIUM CLADDING TO BACK
PAINT FINISH EXTERNAL: DULUX OLD PEWTER 50243 70% GLOSS IN 2 PACK POLYURETHANE OR POWDERCOAT FP964
PAINT FINISH INTERNAL: FLAT WHITE
INTERNAL ILLUMINATION: 'DAYLIGHT' FLUORESCENT TUBES SPACED EVENLY
LIGHT OUTPUT: CALVIN - 40,000 LUMENS 16,500

02 LARGE GABLE SIGN (2 & 4)
DA05.1 1:50 PROPOSED



04 DIGITAL POSTER BOX (5)
DA05.1 1:50 PROPOSED



EXTERNAL LIFESTYLE IMAGE
7000 x 3300 x 250mm SINGLE FACED DIBOND GRAPHIC PANEL
INTERNAL ALUMINIUM FRAME
50mm ALUMINIUM ANGLE COVER TRIM.
POWDERCOAT FINISH (BLACK)
3mm DIBOND PANEL
APPLIED DIGITAL PRINT C/W ANTI GRAFFITI COAT
EXTERNALLY ILLUMINATED FROM ABOVE

03 EXTERNAL LIFESTYLE GRAPHIC (3)
DA05.1 1:50 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
SIGNAGE DETAILS

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01 3D RENDERED IMAGE
NTS IMAGE 01

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
3D RENDERED IMAGE
IMAGE 01

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01 3D RENDERED IMAGE
- NTS IMAGE 02

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
3D RENDERED IMAGE
IMAGE 02

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01 3D RENDERED IMAGE
NTS IMAGE 03

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
3D RENDERED IMAGE
IMAGE 03

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2354	DA06.3	DA	A

Appendix 4. Noise Assessment
(Sonus)

ALDI Findon

Environmental Noise Assessment

December 2019

S4217.19C6

sonus.

Chris Turnbull
Principal
Email: ct@sonus.com.au
www.sonus.com.au

Document Title : ALDI Findon
Environmental Noise Assessment

Document Reference : S4217.29C6

Date : December 2019

Author : Alexander Lee

Reviewer : Chris Turnbull, MAAS

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INTRODUCTION

An environmental noise assessment has been made of the proposed ALDI supermarket at 263-271 Grange Road, Findon.

The closest noise sensitive receivers to the proposed ALDI Supermarket are the three storey apartment buildings to the immediate north of the facility, the two storey accommodation facilities at the Findon Hotel to the East and the single storey dwellings further to the northeast on the opposite side of Nobble Street. The site layout and nearby noise sensitive locations are shown in Appendix A.

This assessment considers noise levels at the existing noise sensitive receivers from the following activity at the site:

- car park activity and vehicle movements;
- operation of mechanical plant;
- operation of the compactor;
- deliveries; and,
- rubbish collection.

The assessment has been based on the following:

- *Nielsen Architects* drawings titled "Proposed Aldi Findon" with project number "2354", dated November 2019;
- the assumption that the ALDI store will not trade before 7:00am or after 10:00pm;
- the understanding that only small bread truck deliveries will occur between the hours of 10:00pm to 7:00am, with larger ALDI truck deliveries occurring only between 7:00am and 10:00pm;
- implementation of measures described in the ALDI SA, "Delivery and loading procedures" (such as turning off refrigeration and reversing beepers when delivering) to minimise the noise; and
- low level exhausts and attenuated compressed air release on all ALDI trucks.

CRITERIA

The proposed site is located within a Neighbourhood Centre Zone, Findon Policy Area of the Charles Sturt Council Development Plan (the Development Plan). The noise sensitive locations are within the Residential Zone to the north and northeast and the Mixed Use Zone, Mixed Use Precinct to the east, as highlighted in Appendix A. The Development Plan has been reviewed and the following provisions considered relevant to the assessment;

General Section – Interface Between Land Uses

OBJECTIVES

- 1 Development located and designed to minimise adverse impact and conflict between land uses.*
- 2 Protect community health and amenity from adverse impacts of development.*
- 3 Protect desired land uses from the encroachment of incompatible development.*

PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:
....
(b) Noise
...*
- 2 Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.*
- 6 Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses.*

Noise Generating Activities

- 8 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant "Environment Protection (Noise) Policy" criteria when assessed at the nearest noise sensitive premises.*
- 9 Development with the potential to emit significant noise (e.g. industry) should incorporate noise attenuation measures that prevent noise from causing unreasonable interference with the amenity of noise sensitive premises.*

Environment Protection (Noise) Policy 2007

Principle of Development Control 8 from the Development Plan references the *Environment Protection (Noise) Policy 2007*, which provides goal noise levels to be achieved at residences from general activity at a site and specific provisions for other activity such as rubbish collection.

The Policy is based on the World Health Organisation Guidelines to prevent annoyance, sleep disturbance and unreasonable interference on the amenity of an area. Therefore, compliance with the Policy is considered to be sufficient to satisfy all provisions of the Development Plan relating to environmental noise.

Noise from Rubbish Collection

The Policy deals with rubbish collection by limiting the collection hours to the least sensitive period of the day. Division 3 of the Policy requires rubbish collection to only occur between the hours of 9am and 7pm on Sunday or public holiday, and between 7am and 7pm on any other day, except where it can be shown that the maximum (L_{max}) noise level from such activity is less than 60 dB(A).

Noise from all other Activity

The Policy sets goal noise levels based on the principally promoted land use in which the noise source (proposed ALDI supermarket) and noise sensitive receivers are located. In this instance, the Policy applies the following goal noise levels to be achieved at the noise sensitive receivers;

- within the Residential Zone:
 - An average (L_{eq}) noise level of 52 dB(A) during the daytime (7am to 10pm);
 - An average (L_{eq}) noise level of 45 dB(A) at night (10pm to 7am); and,
 - a maximum instantaneous (L_{Amax}) noise level of 60 dB(A) at night (10:00pm to 7:00am).
- within the Mixed Use Zone:
 - An average (L_{eq}) noise level of 55 dB(A) during the daytime (7am to 10pm); and,
 - An average (L_{eq}) noise level of 48 dB(A) at night (10pm to 7am).

When measuring or predicting noise levels for comparison with the Policy, adjustments may be made to the average goal noise levels for each “annoying” characteristic of tone, impulse, low frequency, and modulation of the noise source. The characteristic must be considered dominant in the existing acoustic environment and therefore application of a penalty varies depending on the assessment location and time of day. The application of penalties is discussed further in the following sections.

Existing Acoustic Environment

In order to assess the existing acoustic environment, the background noise level has been measured on the subject site, adjacent the three storey apartment building to the immediate north. The results provided in Appendix B show that noise levels are high during the day, with an average (L_{Aeq}) noise level of no less than 50 dB(A) at any time, however during the night periods there is limited activity, resulting in times when the noise levels is less than 40 dB(A).

ASSESSMENT

The noise levels at nearby residences from the proposed Aldi development have been predicted based on a range of previous noise measurements of similar activity and manufacturer's data which includes:

- car park activity, such as;
 - people talking as they vacate or approach their vehicles, the opening and closing of vehicle doors, vehicles starting, vehicles idling, and vehicles moving into and accelerating away from their park position; and,
 - general vehicle movements on site.
- Small bread trucks delivering to a supermarket;
- ALDI trucks for each of the following processes, conducted in accordance with the ALDI SA "Delivery & Loading Procedures" (refer Appendix C):
 - driving into a site;
 - reversing into a loading dock and stopping the engine;
 - unloading, and;
 - starting the engine, accelerating and driving out of the site.
- Mechanical plant serving the ALDI building.

The overall sound power level data for the above activities are summarised in Appendix D.

As is typical at the development application stage, the proposed cool room and air conditioning plant have not yet been designed or selected. The assessment of the mechanical plant has therefore been based on previous noise measurements and manufacturer's data for similar facilities. The overall sound power level for the following mechanical plant units are summarised in Appendix D:

- 3 x Daikin RX(Y)Q12TY1A air conditioning units;
- 1 x Daikin RX(Y)Q18TY1A air conditioning units;
- 1 x Daikin RX(Y)Q20TY1A air conditioning units; and,
- 1 x condenser unit;

The noise level and any acoustic treatment associated with mechanical plant should be reviewed during the detailed design phase, should the final equipment selections have different sound power levels or should a different number of units be proposed to those specified within this report.

Rubbish Collection

To ensure there is not unreasonable interference from the noise associated with rubbish collection, it is recommended that the hours of this activity at the site be restricted to that of Division 3 of the *Environment Protection (Noise) Policy 2007*. That is, only between the hours of 9:00am and 7:00pm on a Sunday or public holiday, and 7:00am and 7:00pm on any other day.

General Activity

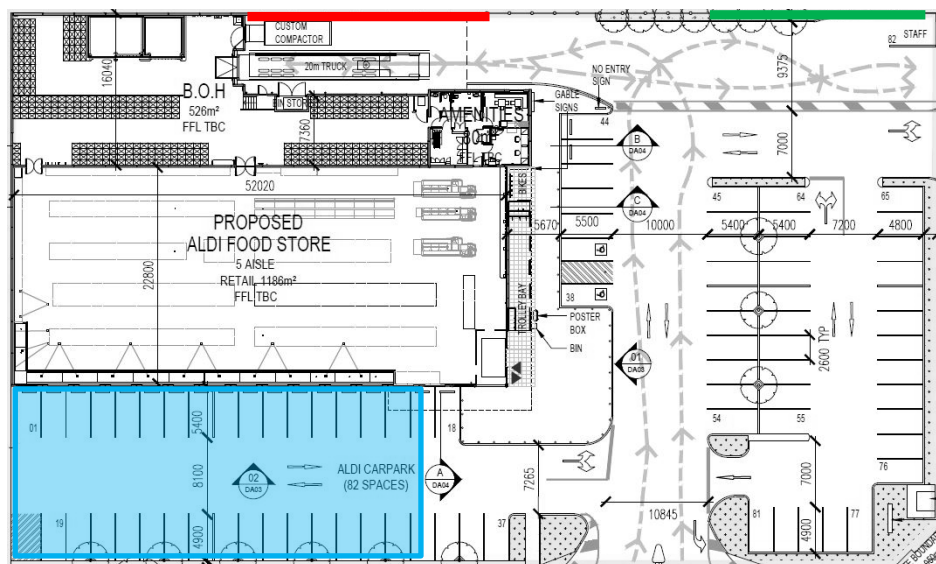
The predictions of noise from activity other than rubbish collection have been based on the following operational assumptions for use of the site in any 15-minute¹ period:

- During the day (7:00am to 10:00pm):
 - Continuous operation of mechanical plant on the building roof and the compactor within the loading bay;
 - A single delivery to the site by an Aldi truck, including the movement either into or out of the site.
 - 20 vehicle movements into and out of the carpark;
 - Car park activity associated with the above, including people talking as they vacate or approach their vehicles, the opening and closing of vehicle doors, vehicles starting, vehicles idling, and vehicles moving into and accelerating away from their park position.
- During the night (10:00pm to 7:00am):
 - Continuous operation of mechanical plant on the building roof;
 - A single delivery to the site by a small bread truck, including the movement into and out of the site and delivering products by hand to the front of the ALDI store.

¹ The default assessment period of the Policy.

Based on the above, the following acoustic treatment of the site is recommended to ensure the noise criteria are achieved;

- Restrict the operation of the compactor to be between the hours of 7am and 10pm only.
- As currently documented:
 - construct a barrier around the roof mounted mechanical plant to block line of sight between the equipment and the closest residences (apartment building to the north).
 - construct the boundary fence shown below as **RED** to a height of 6.2m and from a material such as precast concrete. The fence must be sealed airtight at all junctions, including at the ground, at the building wall and at the 2.4m high boundary fence extending to the east.
 - construct the remaining portion of the northern boundary fence from a minimum of sheet steel (“Colorbond” or similar) and to a height of 2.4m. The portion of fence shown below as **GREEN** may taper from 2.4m down to a height of 1m at the Nobel Street boundary.
- Ensure that any bread truck delivering to the site between the hours of 10:00pm to 7:00am:
 - uses the Grange Road crossover to drive into and out of the site and does not idle during the delivery process (engine is switched off once parked); and,
 - uses the area shown below as **BLUE** for unloading and any reversing which is required. That is, line of sight to the residences shall be blocked by the ALDI building at all times during these activities.



Predicted Noise Level

The noise level from activity at the facility as described above has been predicted and with the inclusion of the acoustic treatments detailed in this report will achieve the relevant requirements of the *Environment Protection (Noise) Policy 2007* during the day and night.

The average noise level during the day time hours is predicted to be no more than 51 dB(A) at any location² and during the night time, the highest predicted noise level is 35 dB(A).

These predicted noise levels are lower than the existing noise in the environment and therefore, a penalty for noise character is not considered to be warranted.

At receivers in the Residential Zone, the maximum instantaneous (L_{Amax}) noise level from a bread truck delivery during the night time hours has also been predicted. The noise level from the compressed air brake release on a truck or from moving into or out of the site is predicted to be 52 dB(A) or less at receivers within the Residential Zone, easily achieving the 60 dB(A) criterion.

² The highest predicted noise level is at the apartment building to the immediate north of the site.

CONCLUSION

An environmental noise assessment has been made of the proposed ALDI supermarket at 263-271 Grange Road, Findon.

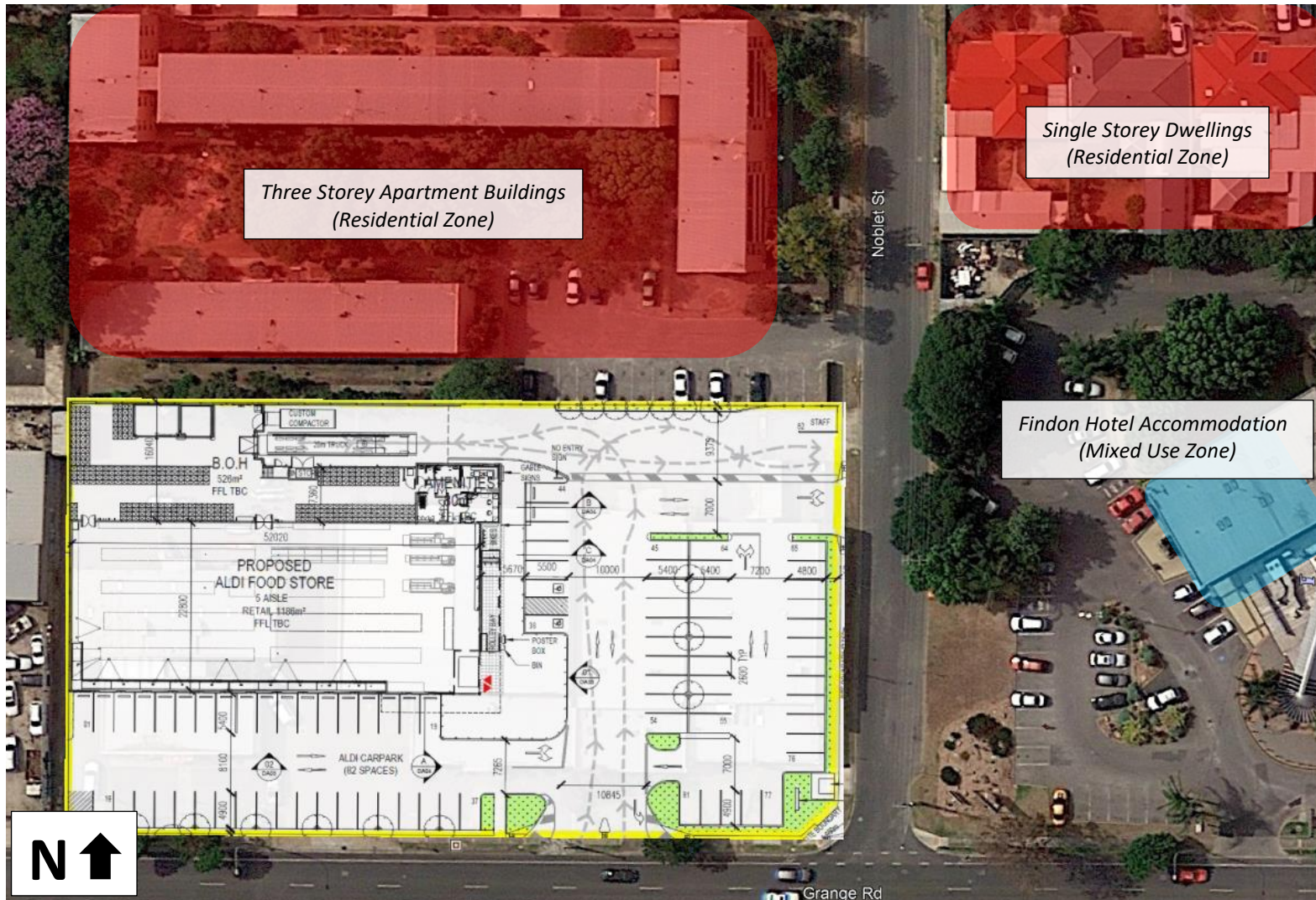
The assessment considers noise at nearby residences from car park activity, vehicle movements, delivery activity, compactor operation, mechanical plant, and rubbish collection in the context of the surrounding acoustic environment.

The predicted noise levels from the development will achieve the relevant requirements of the *Environment Protection (Noise) Policy 2007* subject to the treatments in this report, comprising;

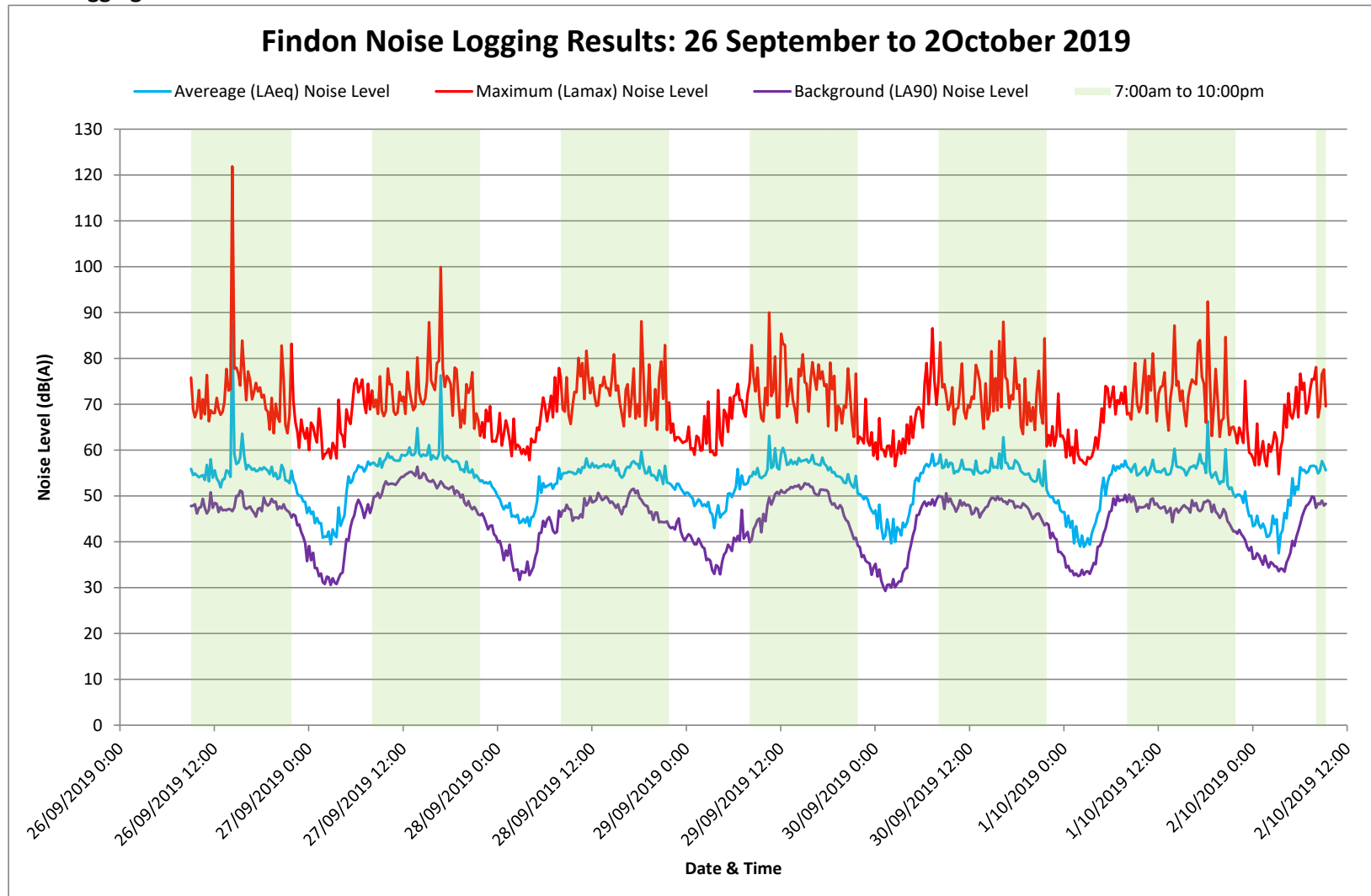
- Specific screening of mechanical plant;
- Specific fence heights and constructions;
- Restricting the area which is used for bread truck deliveries during the night time hours; and,
- Restricting the times for rubbish collection, use of the compactor and deliveries by ALDI trucks.

It is therefore considered that the facility has been designed to *minimise adverse impact and conflict between land uses, avoid unreasonable interference on amenity, and will not detrimentally affect the locality by way of noise*, thereby achieving the relevant provisions of the Development Plan related to environmental noise.

Appendix A: Site Plan & Residences

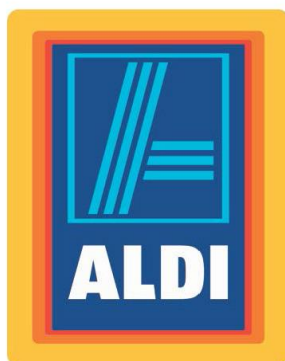


Appendix B: Noise Logging Results



APPENDIX C: ALDI Delivery & Loading Procedures

ALDI SOUTH AUSTRALIA



DELIVERY & LOADING PROCEDURES

ALDI DELIVERY & LOADING PROCEDURES

- ALDI own, operate and control all of its supply and logistics via its purpose built Distribution Centre. South Australia's Distribution Centre is under construction in Regency Park.
- ALDI's supply chain and logistics operates on a palletised system. All products are delivered to our Distribution Centre on pallets. The same product is then loaded onto delivery trucks; delivered to the store and in many cases the same pallet is then located on the retail floor. This streamlined system of operation enables ALDI to position itself as a discount supermarket quite differently to its competitors.
- With all ALDI supplies delivered directly to our Distribution Centre, ALDI then undertake consolidated store deliveries to each store via its own fleet of trucks/trailers and ALDI employed drivers.
- ALDI Stores do not undertake "night fill" or store replenishment outside retail trading hours therefore the stores close and staff leave very shortly after retail close. Deliveries are however enabled to be undertaken throughout a full 24 hour period to any store given the Distribution Centre operates 24/7 and our own truck and drivers are able to access and unload to a store without the store being open or trading.
- With the dedicated ALDI supply chain direct from our Distribution Centre to a store, only a maximum of two ALDI deliveries are undertaken within a 24 period to each store. The only exception is one bread delivery from a bakery supplier, which is undertaken in a small rigid truck, once per day.
- The ALDI truck movement, on any site, typically takes between 1 to 2 minutes, with the truck moving onto the site, stopping, reversing and engaging with the purpose built loading dock.
- The prime mover is always turned off during unloading.
- Given the palletised system and dedicated dock connection the total delivery period is on average 15 minutes from the moment the truck is docked. The unloading is undertaken by only one person being the ALDI truck driver.
- All products are unloaded from within the trailer directly inside the building using a manually operated pallet jack. (No forklifts are used and no external activity occurs outside the truck). The trailers are sealed and connected to the building via a dedicated dock leveller and dock curtain.
- The ALDI prime movers and trailers are purpose built to ALDI specifications.
 - All trailers are built with a reversing camera which is connected to a driver display in the cabin of the prime mover.
 - All trailers are also able to be controlled from within the cabin to turn-off the reversing beepers (if required) and the refrigeration units (if required).
- All ALDI loading docks are fitted with motion sensors and automatic lighting to ensure that night time deliveries benefit from appropriate surveillance including safe reversing manoeuvres without reversing beepers (where required).
- All drivers are briefed and aware of each site and any site specific circumstances or restrictions that are applicable for that store.
- If an acoustic assessment requires any specific noise management then either or both the refrigeration and reversing beepers can be turned off including any requirement to do so whilst transiting past any noise sensitive areas.
- As a result of the above, where other retailers cannot, ALDI consistently can comply with any prescribed operational or acoustic requirements of either the Environmental Protection Authority and any relevant local statutory requirements when performing night time deliveries.
- Coupled with the above where additional on-site acoustic mitigation measures are required/recommended ALDI will construct these to further alleviate and mitigate any potential noise interface issues i.e. Acoustic screens, fences and/or gates.

Appendix D: Noise Source Sound Power Level Data

Equipment/Activity		Sound Power Level
Carpark Activity and Vehicle Movements	Car movement	82 dB(A)
	General carpark activity	77 dB(A)
Mechanical Plant	Condenser	86 dB(A)
	Daikin RX(Y)Q12TY1A	68 dB(A)
	Daikin RX(Y)Q18TY1A	70 dB(A)
	Daikin RX(Y)Q20TY1A	71 dB(A)
Bread Truck Delivery	Truck Forward	95 dB(A)
ALDI Truck Deliveries	Truck forward 5km/h	98 dB(A)
	Truck forward 5km/h	102 dB(A)
	Truck reverse	102 dB(A)
Other	Compactor	81 dB(A)

Appendix 5. Email from SAHA

Chris Carrey

From: Mitchell, Patrick (Housing) <Patrick.Mitchell@sa.gov.au>
Sent: 03 December 2019 16:41
To: Chris Carrey
Cc: Nigel.Uren@aldi.com.au; Kieron Barnes; Evan Drage; Stoneham, Danielle (Housing); Lowe, Grant (Housing)
Subject: RE: ALDI Findon
Attachments: Delivery & Loading Procedures.pdf; 00863 ALDI Findon Letter to SA Housing 27 November 2019.pdf; S4217.19C5.pdf

Hi Chris,

Further to our discussions regarding the proposed ALDI store at Grange Road Findon, please accept this advice as providing “in principle” support for the construction of a boundary wall sharing the common boundary between the SA Housing Trust property at 1 Noblet Street, Findon and the proposed ALDI development site at Grange Road, Findon. The Planning Authority is advised that “in principle” support is provided in accordance with the email below, associated attachments and ALDI’s commitment to work closely with SA Housing to address potential interface issues.

Kind regards

Pat

Patrick Mitchell
Senior Program Manager
Homes and Partnerships
SA Housing Authority

Level 5, SW Riverside Centre, North Terrace, Adelaide SA 5000
P: 08 8207 0793 | E: patrick.mitchell@sa.gov.au
Visit SA Housing Authority at: www.housing.sa.gov.au



www.housing.sa.gov.au

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Act for a sustainable future: only print if needed.

Appendix 6. Traffic Impact Assessment
(GTA)

Proposed ALDI Store - Findon, SA

Transport Impact Assessment

Prepared by: GTA Consultants (SA) Pty Ltd for ALDI Australia

on 22/11/19

Reference: S181360

Issue #: A



GTA consultants

Proposed ALDI Store - Findon, SA

Transport Impact Assessment

Client: ALDI Australia

on 22/11/19

Reference: S181360

Issue #: A

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	22/11/19	Final	Richard Frimpong	Paul Morris	Paul Morris	

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1. INTRODUCTION

1.1. Background

An ALDI Store is proposed on a site located at 263-271 Grange Road in Findon. GTA Consultants were engaged by ALDI Australia to undertake a Transport Impact Assessment for the proposed development.

1.2. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

1. Existing traffic and parking conditions surrounding the site
2. Parking demand likely to be generated by the proposed development
3. Suitability of the proposed parking in terms of supply (quantum) and layout
4. Traffic generation characteristics of the proposed development
5. Proposed access arrangements for the site
6. Transport impact of the development proposal on the surrounding road network.

1.3. References

In preparing this report, reference has been made to the following:

- Charles Sturt (City) Council Development Plan (consolidated 25th July 2019)
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking For People With Disabilities AS/NZS 2890.6:2009
- Plans for the proposed development prepared by Nielsen Architects dated November 2019
- Traffic surveys undertaken by HDS adjacent the site on Saturday 19 October 2019
- An inspection of the site and surrounds were conducted by GTA Consultants on Thursday 24 October 2019
- Various technical data as referenced in this report
- Other documents as nominated.

2. EXISTING CONDITIONS

2.1. Subject Site

The subject site is located at 263-271 Grange Road in Findon, on the north-western corner of the intersection of Grange Road and Noblet Street. It is currently occupied by vacant commercial buildings and associated car parking areas. The subject site has an area of approximately 5,676 sq. m and has a frontage of approximately 93 metres to Grange Road and approximately 54 metres to Noblet Street. The existing site has four access points on Grange Road, and two access points on Noblet Street. The site is located within a Neighbourhood Centre Zone, with the surrounding land uses being a mix of residential and commercial properties including a hotel to the west.

The location of the subject site and the surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject Site and its Environs



(PhotoMap courtesy of NearMap Pty Ltd)

2.2. Road Network

2.2.1. Adjoining Roads

Grange Road

Grange Road is an arterial road managed and maintained by the Department of Planning, Transport and Infrastructure. It comprises dual carriageways that are 7.9 metres wide aligned in an east-west direction and configured with two lanes in each direction separated by a raised central 2.6 metre median. A bicycle lane operating 7-9am (eastbound) and 4-6pm (westbound) is provided on each carriageway.

The road reserve is approximately 24.5 metres wide adjacent the site. Kerbside parking is not permitted along the site frontage during the bicycle lane operation hours. No other parking controls apply.

Grange Road has a posted speed limit of 60km/h and carries approximately 25,000 vehicles per day¹.

Figure 2.2 shows Grange Road adjacent the site looking east.

Figure 2.2: Grange Road (adjacent subject site) – Looking east (site on left)



Noblet Street

Noblet Street is a local road managed by the Charles Sturt Council and is aligned in a north-south direction forming a T-junction with Grange Road. It is a single carriageway two-way road configured with one lane in each direction. The carriageway width is 9.7 metres (approx.) and is set within a 15.2 metre wide road reserve. Noblet Street has been narrowed at the Grange Road intersection with a kerb extension on the eastern side of the road. The carriageway is 7.7 metres wide at the kerb extension which provides for one lane in each direction. No parking is permitted on the west side adjacent the site, whilst a ½ hour time limit applies to the eastern side.

Noblet Street has an urban default speed limit of 50km/h and carries approximately 650 vehicles per day.¹

Figure 2.3 shows Noblet Street adjacent the site looking north.

¹ DPTI traffic survey dated 11 September 2019.

Figure 2.3: Noblet Street Road (adjacent subject site) – Looking north



Douglas Street

Douglas Street is a local road managed by the Charles Sturt Council and is aligned in a north-south direction forming a T-junction with Grange Road. It is located on the south side of Grange Road. It is a single carriageway two-way road configured with one lane in each direction. The carriageway width is 8.0 metres (approx.) and is set within a 15.2 metre wide road reserve.

Douglas Street has an urban default speed limit of 50km/h and carries approximately 490 vehicles per day.¹

2.2.2. Surrounding Intersections

The following intersections currently exist in the vicinity of the site:

- Grange Road/Findon Road – signalised intersection
- Grange Road/Noblet Street – unsignalised T-junction
- Grange Road/Douglas Street – unsignalised T-junction
- Grange Road/John Street – unsignalised T-junction

2.2.3. Traffic Volumes

Traffic surveys were undertaken at the Grange Road and Noblet Street/Douglas Street intersections on Wednesday 11 September 2019 by DPTI and on Saturday 19 October 2019 by HDS Australia (commissioned by GTA Consultants). The Wednesday survey is considered suitable for use in this analysis with traffic flows replicating a Thursday operation with regards to peak hour flows on Grange Road.

The Wednesday PM peak hour occurred between 5:00pm and 6:00pm while the Saturday peak hour occurred between 11:45am and 12:45am. The traffic volumes are shown in Figure 2.4 and Figure 2.5, respectively.

Figure 2.4: Existing Weekday PM Peak Hour Traffic Volumes (5:00pm – 6:00pm)

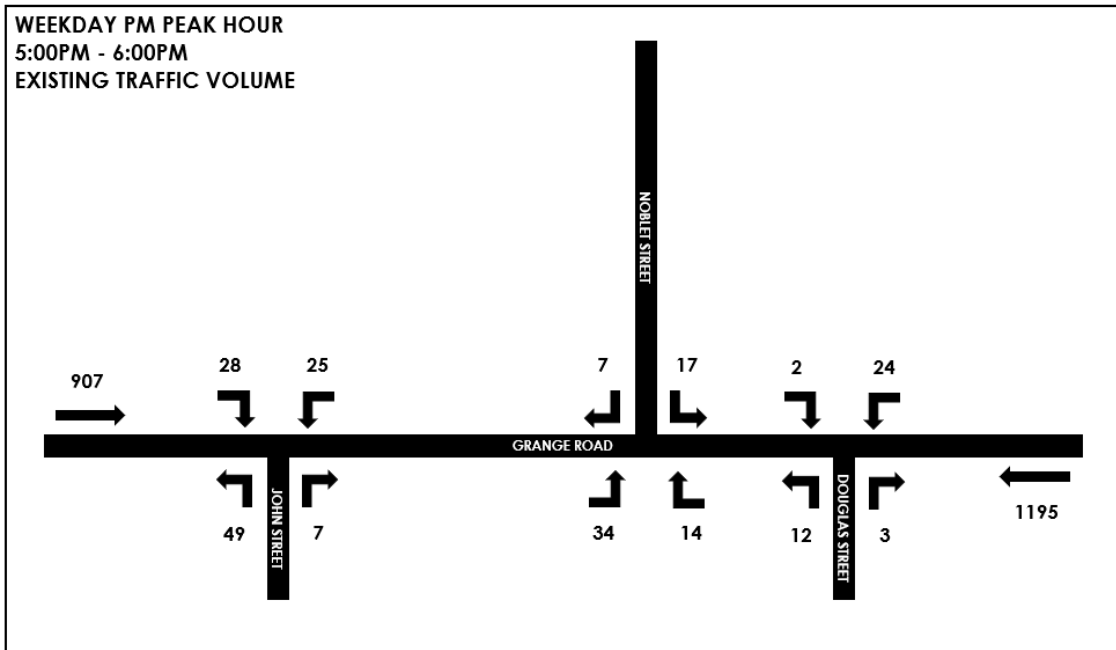
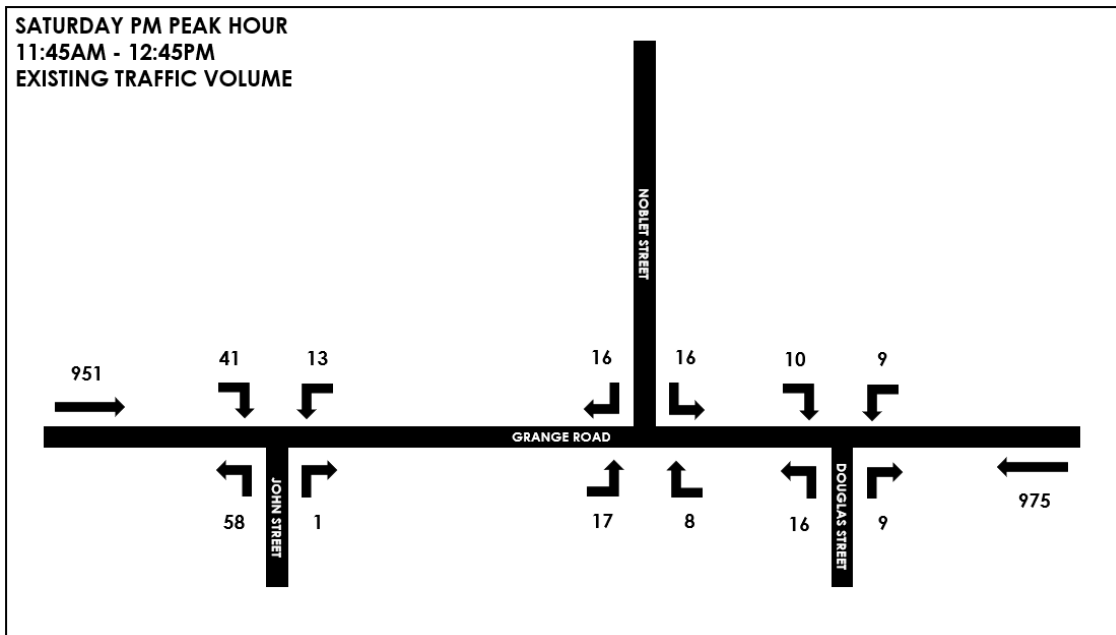


Figure 2.5: Existing Saturday Peak Hour Traffic Volumes (11:45am – 12:45am)



2.2.4. Intersection Operation

The operation of the intersection of Grange Road and Noblet Street has been assessed using *SIDRA INTERSECTION* ⁸², a computer based modelling package which calculates intersection performance.

The commonly used measure of intersection performance is referred to as the *Degree of Saturation (DOS)*. The DOS represents the flow-to-capacity ratio for the most critical movement on each leg of the intersection. For signalised

² Program used under license from Akcelik & Associates Pty Ltd.

intersections, a DOS of around 0.95 has been typically considered the 'ideal' limit, beyond which queues and delays increase disproportionately³. The SIDRA INTERSECTION model has been calibrated utilising the traffic surveys which included recording of queues and gaps on each leg of the intersection in accordance with the standard DPTI traffic survey methodology (refer section 2.2.5 and 2.2.6).

The results for the Weekday PM Peak Hour is summarised in Table 2.1, while the results for the Saturday Peak Hour is described in Table 2.2.

Table 2.1: Grange Road / ALDI Access – Weekday Peak Hour – Existing Conditions

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1264	1.6	0.328	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	15	0.0	0.044	14.1	LOS B	0.1	1.0	0.68	0.87	0.68	44.7
Approach		1279	1.6	0.328	0.2	NA	0.1	1.0	0.01	0.01	0.01	59.7
North: Noblet Street												
7	L2	18	0.0	0.338	19.9	LOS C	1.0	6.7	0.01	0.53	0.01	28.3
9	R2	7	0.0	0.338	158.6	LOS F	1.0	6.7	0.01	0.53	0.01	28.3
Approach		25	0.0	0.338	60.4	LOS F	1.0	6.7	0.01	0.53	0.01	28.3
West: Grange Road												
10	L2	37	0.0	0.256	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	57.9
11	T1	956	0.9	0.256	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach		993	0.8	0.256	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles		2297	1.2	0.338	0.9	NA	1.0	6.7	0.00	0.02	0.00	59.0

Based on the above:

- The right turn lane into Noblet Street would operate at a LOS of B, with a DOS of 0.044. The 95th percentile queue length was 0.1 vehicles, which was similar to observed conditions, while the average delay would be 14.3 seconds, which reflected minimal delays observed on-site.
- The right turn out of Noblet Street operates with a 95th percentile queue length of 1 vehicle, which reflects the observed conditions. The average delay based on SIDRA INTERSECTION was 158.6 seconds with a LOS of F, however this was considerably higher than observed conditions, with several gaps being available on both sides of Grange Road to enable right turn movements from the site. All vehicles turning right out of Noblet Street did so within 60 seconds.
- The left turn out of Noblet Street operates at a LOS of C, with an average delay of 19.9 seconds and a 95th percentile queue length of 1 vehicle, which was relatively consistent with observed conditions.
- All other approaches operated at a LOS of A.

³ SIDRA INTERSECTION adopts the following criteria for Level of Service assessment:

		Intersection Degree of Saturation (X)	
		Unsignalised Intersection	Signalised Intersection
A	Excellent	<=0.50	<=0.60
B	Very Good	0.50-0.70	0.60-0.75
C	Good	0.70-0.80	0.75-0.90
D	Acceptable	0.80-0.90	0.90-0.95
E	Poor	0.90-1.00	0.95-1.00
F	Very Poor	>=1.0	>=1.0

Table 2.2: Grange Road / ALDI Access – Saturday Peak Hour – Existing Conditions

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1027	1.1	0.268	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	8	0.0	0.026	14.4	LOS B	0.1	0.6	0.69	0.84	0.69	44.5
Approach		1036	1.1	0.268	0.1	NA	0.1	0.6	0.01	0.01	0.01	59.8
North: Noblet Street												
7	L2	18	0.0	0.420	22.4	LOS C	1.3	9.0	0.01	0.53	0.01	28.2
9	R2	17	0.0	0.420	101.9	LOS F	1.3	9.0	0.01	0.53	0.01	28.2
Approach		35	0.0	0.420	60.9	LOS F	1.3	9.0	0.01	0.53	0.01	28.2
West: Grange Road												
10	L2	19	0.0	0.263	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	58.0
11	T1	1002	1.1	0.263	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach		1021	1.0	0.263	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles		2092	1.1	0.420	1.1	NA	1.3	9.0	0.00	0.02	0.00	58.7

Based on the above:

- The right turn lane into Noblet Street would operate at a LOS of B, with a DOS of 0.026. The 95th percentile queue length was 0.1 vehicles, which was similar to observed conditions, while the average delay would be 14.4 seconds, which reflected minimal delays observed on-site.
- The right turn out of Noblet Street operates with a 95th percentile queue length of 1.3 vehicle, which approximately reflects the observed conditions. The average delay based on SIDRA INTERSECTION was 101.3 seconds with a LOS of F. As per the Weekday PM Peak, this was considerably higher than observed conditions. All but a couple of vehicles were able to turn right out of the Noblet Street within 60 seconds.
- The left turn out of Noblet Street operates at a LOS of C, with an average delay of 22.4 seconds and a 95th percentile queue length of 1.3 vehicles, which was relatively consistent with observed conditions.
- All other approaches operated at a LOS of A.

2.2.5. Gap Analysis Survey

GTA Consultants also commissioned a gap survey analysis to be undertaken for Grange Road during the Saturday Peak Period on 19 October 2019.

Gaps of 7 seconds or longer were recorded for both Grange Road approaches to reflect a hypothetical scenario for vehicles to turn right out of Noblet Street onto Grange Road (southbound). A follow up headway of 4 seconds was used to determine the number of vehicles which could turn right within the specified gap.

Gaps of 5 seconds or longer were recorded for the Grange Road south approach to reflect conditions to undertake a right turn into Noblet Street from Grange Road (east approach). A follow up headway of 3 seconds was used to determine the quantity of vehicles which could theoretically turn right in within the allotted time.

Saturday Peak Hour (11:45am – 12:45pm)

Figure 2.6: Gap Analysis Saturday Peak Hour (Two Way) in seconds

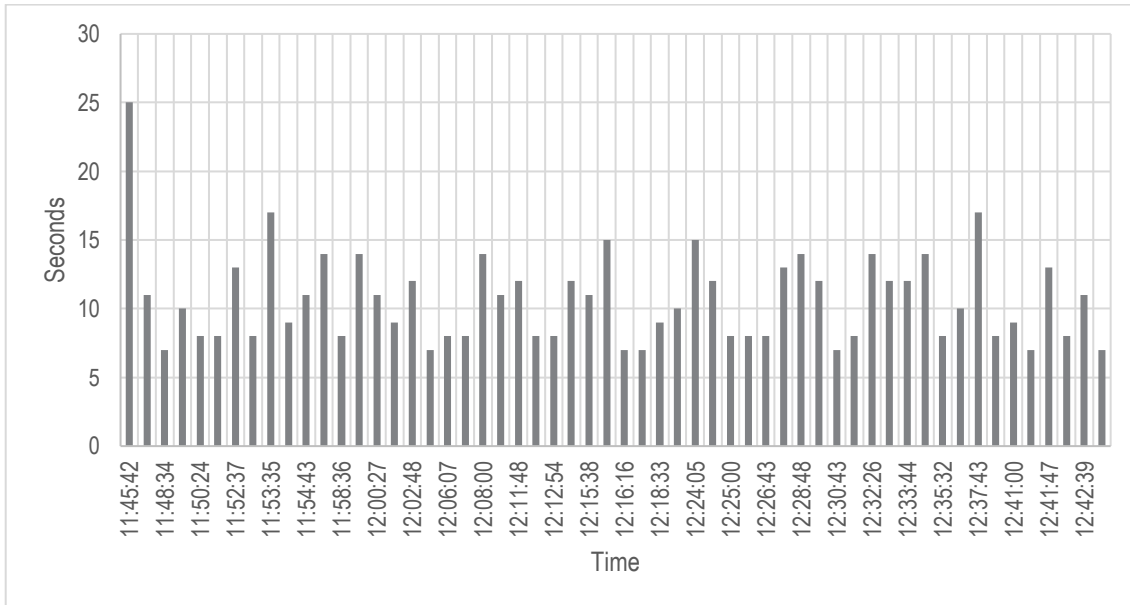
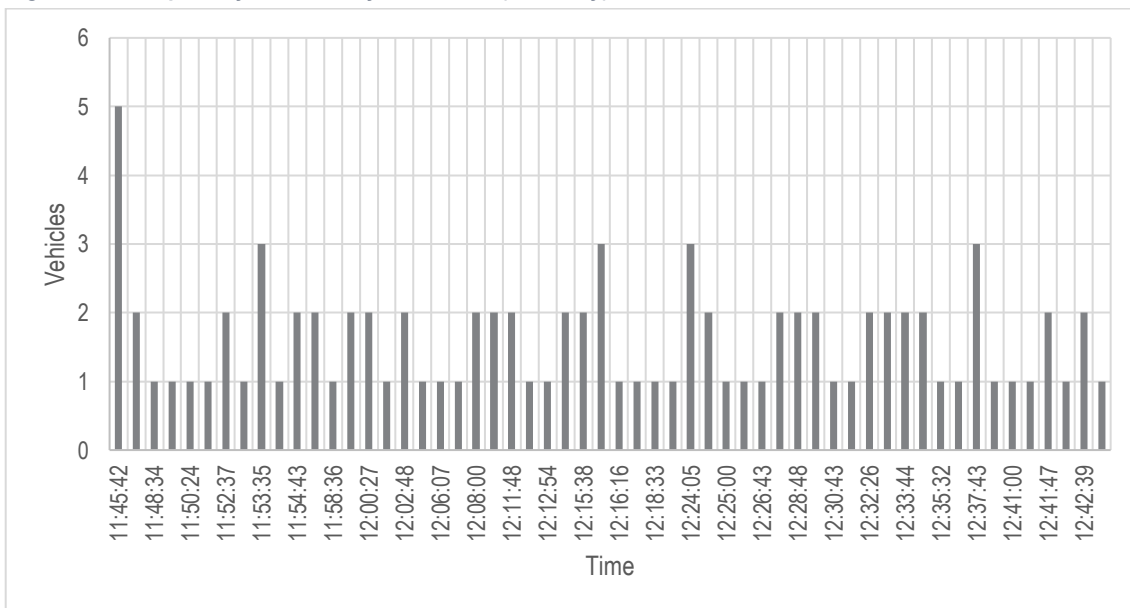


Figure 2.7: Gap Analysis Saturday Peak Hour (Two Way) for vehicles



Based on the above:

- There were 56 separate opportunities during the Saturday Peak Hour where there was a critical gap of 7 seconds or more.
- Allowing for a follow up headway of 4 seconds, up to 90 vehicles can perform a right turn out onto Grange Road during the Saturday Peak.
- Over the peak hour duration, there were sufficient gaps on both approaches for 10 minutes for vehicles to potentially turn right out of Noblet Street.

Figure 2.8: Gap Analysis Saturday Peak Hour (One Way Eastbound) in seconds

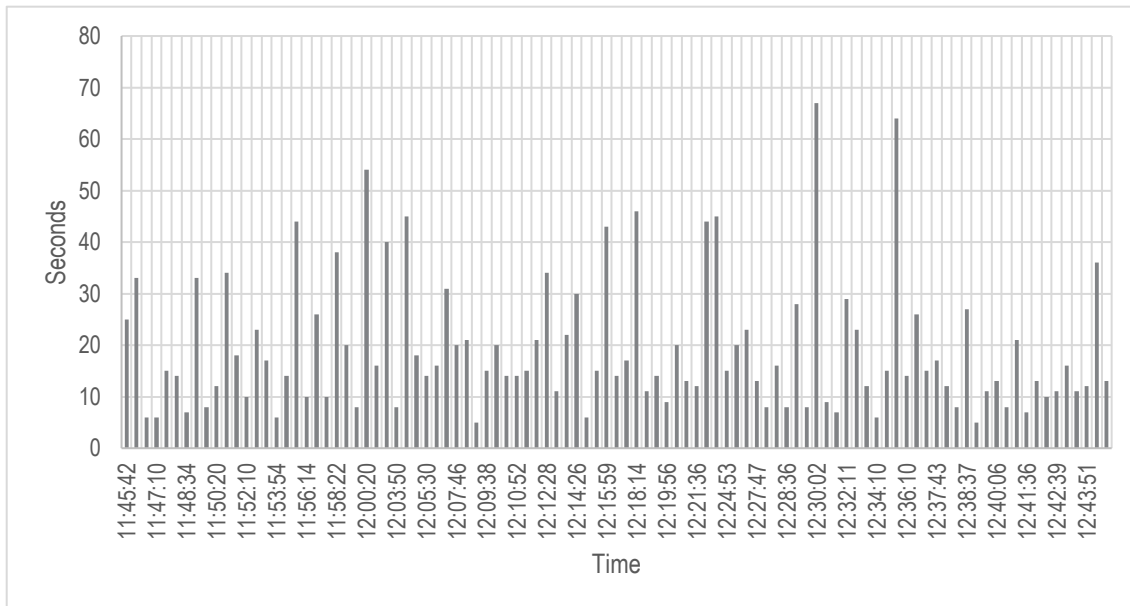
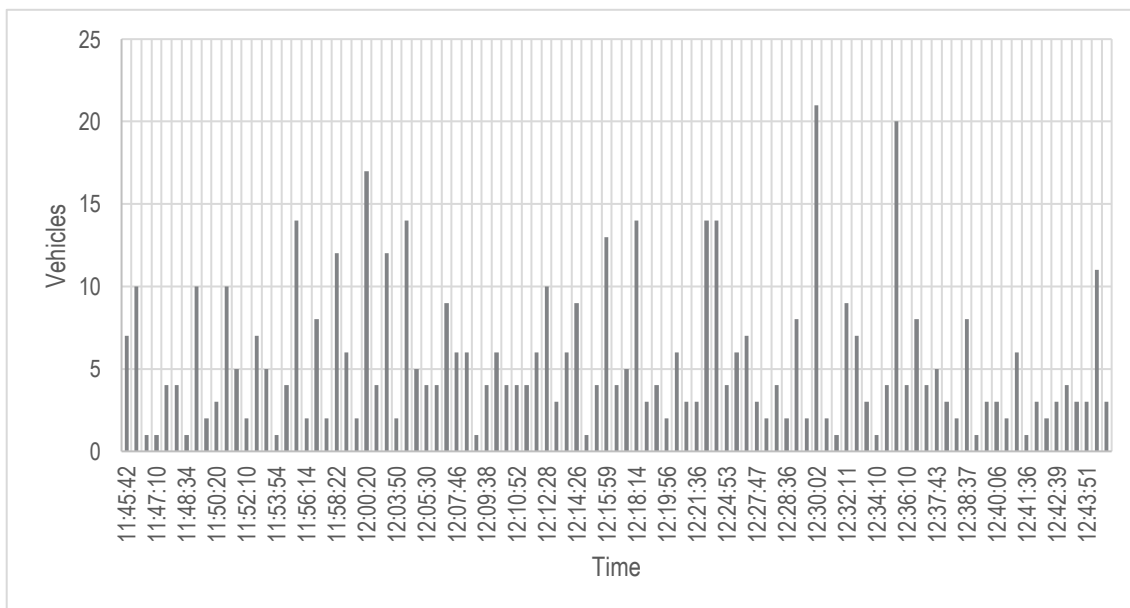


Figure 2.9: Gap Analysis Saturday Peak Hour (One Way Eastbound) in vehicles



Based on the above:

- There were 99 separate opportunities during the Saturday Peak Hour where there was a critical gap of 5 seconds or more.
- Allowing for a follow up headway of 3 seconds, up to 541 vehicles could potentially perform a right turn into Noblet Street during the peak hour.
- The gaps within the eastbound through lanes equated to 31 minutes and 47 seconds (more than 50 % of the busiest peak hour).

Weekday PM Peak Hour (5:00pm – 6:00pm)

While formal surveys weren't commissioned to undertake a gap analysis survey for Noblet Street during the weekday PM Peak Hour, GTA Consultants undertook site observations on Thursday 24 October 2019. It was generally observed that vehicles were comfortably able to turn right into Noblet Street and turn right out of Noblet Street without significant delays. Given the platooning of the down-stream signals at the Grange Road/Findon Road intersection, there were abundant gaps for vehicles to turn in/out of Noblet Street. This is similar to as observed and recorded for the Saturday surveys.

2.2.6. Queue Length Observation

Noblet Street

GTA commissioned HDS to conduct a queue length survey for right turn in, left turn out and right turn out movements from Noblet Street Saturday between 10:00am and 1:00pm. As discussed in the previous chapter, the peak hour was identified between 11:45am and 12:45pm.

GTA Consultants also undertook a queue length survey on Thursday 24 October between 5:00pm and 6:00pm for these movements.

The queue lengths for the abovementioned movements are detailed in Table 2.3.

Table 2.3: Queue Length Analysis – Noblet Street

	Right Into Noblet St		Left Out of Noblet St		Right Out of Noblet St	
	Max Queue (veh)	95 th Percentile Queue (veh)	Max Queue (veh)	95 th Percentile Queue (veh)	Max Queue (veh)	95 th Percentile Queue (veh)
Saturday 19/10/19 (11:45am – 12:45pm)	1	<1	1	1	1	1
Thursday 24/10/19 (5:00pm – 6:00pm)	1	<1	0	0	1	<1

Based on the above:

- The maximum queue observed over any peak period for each of the approaches was 1 vehicle.
- The 95th percentile queue length for each approach varied between 0 and 1 vehicle.
- Generally, right turn activity to/from Noblet Street was infrequent and localised.

Grange Road

General queue observations were undertaken at the Grange Road/Findon Road intersection on 24 October 2019 during the PM Peak Hour. The back of queue on the east approach to the Grange Road / Findon Road signals typically extended just beyond John Street, but typically didn't extend back to Noblet Street. Queues for the right turns into Noblet Street were one (1) vehicle maximum at any time.

2.2.7. Crash History

A review of the reported accident casualty history for the roads and intersections adjoining the subject site has been sourced from DPTI between 2014 and 2018. A total of 8 crashes have been recorded adjacent the site as shown in Figure 2.10 and described in greater detail in Table 2.4.

Figure 2.10: Crash History 2013-2017



Source: Data.gov.au crash history database

Table 2.4: Crash History – 2014 – 2018

Segment	Total Crashes (Casualties)	Crash Type	No. of Crashes	Casualty Severity	
				Minor	Serious
Grange Road/Douglas Street Intersection	1	Right Angle	1		
Grange Road/Noblet Street Intersection	2 (3)	Rear End	1	1	
		Right Angle	1	2	
Grange Road midblock (between John Street & Noblet Street)	2	Rear End	1		
		Hit Parked Vehicle	1		
Grange Road/John Street Intersection	3	Rear End	1		
		Right Angle	1		
		Right Turn	1		

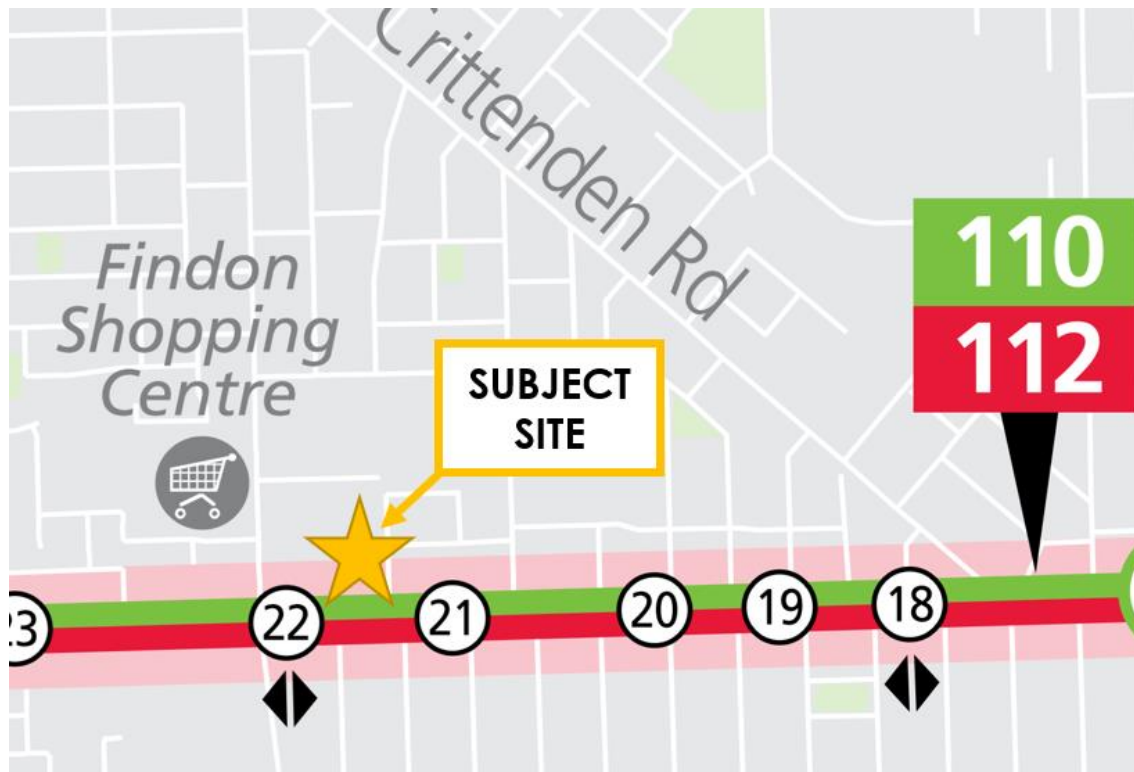
Based on the above, the most common types of crashes occurred in vicinity of the site was 'rear end' which would be associated with queuing on Grange Road. A right angle collision has occurred at the Noblet Street, which resulted in minor injuries to two individuals and Douglas Street intersections. The rear end crash at Noblet Street also resulted in one minor injury, however, was a consequence of a driver with a disqualified licence travelling straight into two vehicles stopped on the carriageway. No specific pattern of crashes is evident from the data with each location of crashes being approximately 0.2 crashes per year on average.

2.3. Sustainable Transport Infrastructure

2.3.1. Public Transport

Bus routes 110 and 112 service this portion of Grange Road for services travelling between the Adelaide CBD and West Lakes Shopping Centre which has a bus interchange. The routes and stops are shown on Figure 2.11. These routes include high frequency 15 minute services during weekdays and 30 minute frequency on weekends.

Figure 2.11: Public Transport Map



Source: AdelaideMetro

Bus Stop 21 is located approximately 125 metres to the east of the subject site.

2.3.2. Pedestrian Infrastructure

There are sealed footpaths located on both sides of Grange Road, and on the west side of Noblet Street.

2.3.3. Cycle Infrastructure

Bicycle lanes operate on Grange Road between 7.30-9:00am (eastbound) and 4.30-6:00pm (westbound).

3. DEVELOPMENT PROPOSAL

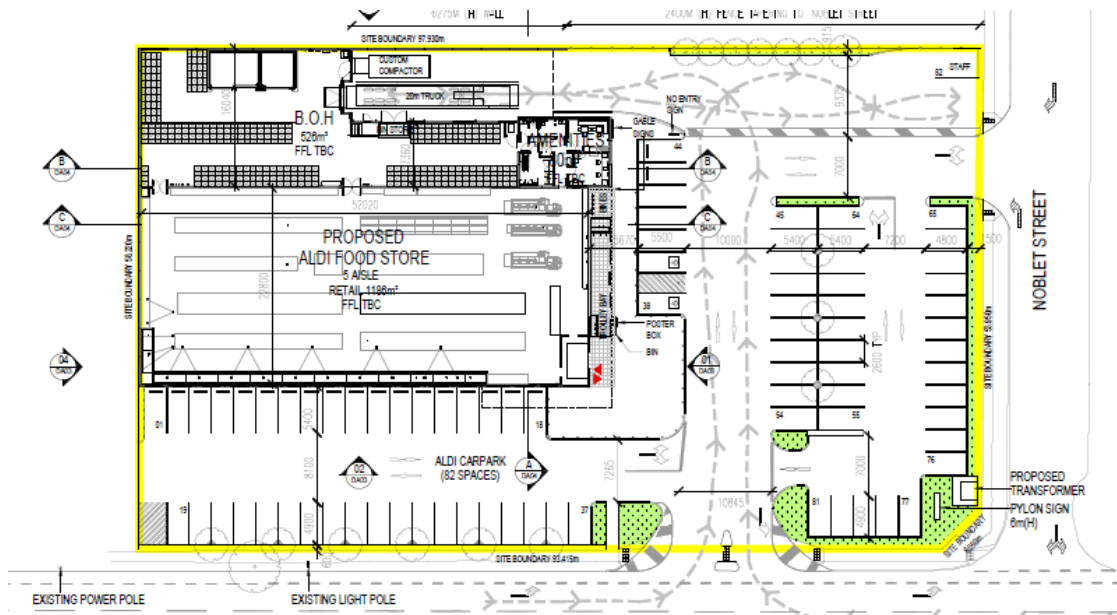
3.1. Land Uses

The proposed development includes:

- ALDI Supermarket of approximately 1,792 sq. m gross leasable floor area (GLFA)
- 82 off-street car parking spaces
- An access point located on Grange Road and an access point on Noblet Street
- Loading facilities accommodating up to a 20.0 metre Semi-Trailer.
- Pedestrian connectivity from Grange Road to the main entrance.

Figure 3.1 shows the proposed layout.

Figure 3.1: Proposed Layout



4. CAR PARKING

4.1. Development Plan Car Parking Rates

Car parking rates for the proposed development have been sourced from **Table ChSt/2A - Off Street Vehicle Parking Requirements for Designated Areas** of the Charles Sturt Development Plan. The subject site is located within a Neighbourhood Centre Zone which is a Designated Area on the basis that it is located within 200 metres of a high frequency bus service on Grange Road.

Table ChSt/2A includes for non-residential development in all designated areas, a minimum of 3 spaces per 100 square metres and maximum of 6 spaces per 100 square metres of gross leasable floor area (GLFA).

Based on a GLFA of 1,792 sq. m, this equates to minimum parking provision of 54 spaces, and a maximum of 108 spaces.

4.2. Empirical Assessment

Parking demand surveys were undertaken by GTA Consultants at stand-alone ALDI Stores including surveys at the same sites on more than one occasion. Table 4.1 presents the results of the parking demand surveys for the most recent dates for each site.

Table 4.1: Parking Demand Surveys (Weekends) – ALDI Stores

Location	Retail Floor Area (sq.m)	Date	Peak Parking Demand (spaces per 100 sq.m)
Sunbury	1,274	17&18/02/2006	3.4
Hampton Park	1,291	17&18/02/2006	3.2
Carrum Downs	1,284	24&25/02/2006	4.6
Rosebud	1,454	24&25/02/2006	3.7
Corio	1,445	18&19/04/2008	5.3
Kangaroo Flat	1,285	18&19/04/2008	5.5
Morwell	1,424	2&3/05/2008	2.7
Sebastopol	1,434	2&3/05/2008	2.7
Warragul	1,447	18&19/04/2008	3.7
Ferntree Gully	1,274	15&31/07/2010	6.1
Pakenham	1,382	15&31/07/2010	3.5
Drysdale	1,400	12&13/09/2014	4.5
Hawthorn	1,566	24/05/2017	3.7
Hawthorn	1,566	25/05/2017	3.6
Hawthorn	1,566	27/05/2017	4.6
AVERAGE			4.1

Table 4.1 demonstrates that an ALDI store generates an average peak parking demand of 4.1 car parking spaces per 100 square metres GLFA.

On this basis, the proposed ALDI Store of 1,792 sq. m would generate a peak parking demand of 73 car parking spaces.

4.3. Adequacy of Parking Supply

The proposed parking supply of 82 car parking spaces which equate to 4.6 spaces per 100 square metres GLFA which will be within the range specified by the Development Plan, and exceed the parking demand identified at other ALDI Stores.

The proposed development will meet the requirements of the Development Plan for off-street parking.

5. PARKING LAYOUT AND ACCESS

5.1. Vehicle Access

5.1.1. Grange Road Access

A new access point is proposed on Grange Road and will replace the existing four driveways currently located on the site. The proposed access point will be located between the John Street and Noblet Street junctions and outside of the prohibited zones for driveways as specified in AS2890.1:2004 Off-street car parking.

Vehicle movements will be left turn entry and left turn exit only, with right turns restricted by the existing raised median. The access point will be designed to accommodate the entry and exit movement of a 20 metre semi-trailer, which will accommodate the largest vehicles anticipated for the development.

A raised pedestrian refuge island is proposed to separate entry and exit movements and provide a safe position for pedestrians given the width of the driveway.

The straight alignment of Grange Road provides appropriate sight distance for vehicles exiting the driveway, with clear sight distance to the Findon Road intersection to the west, including the footpath on each side of the driveway.

The internal aisle will form a T-junction on the west side of the driveway with two-way access, and a single lane on the eastern side to simplify movements and remove the possibility of delays due to right turns into the eastern parking area adjacent the Grange Road access.

5.1.2. Noblet Street Access

A new access point is proposed on Noblet Street, and will replace the existing two driveways currently located on the site. The proposed access point will be located on the northern portion of the site and will provide for light vehicle entry and exit movements from Noblet Street. There is adequate sight distance at this access point to Noblet Street in both directions, including pedestrian sight distance at the footpath.

5.2. Car Parking Layout

The car parking bays will be designed in accordance with AS/NZS2890.1:2004 & AS/NZS2890.6:2009 as follows:

- The car parking spaces will be 2.6 metres wide x 5.4 metres long and is set within a minimum 6.6 metre aisle width, which exceeds the User Class 3A requirements for short term, high turnover parking.
- The car park fronting Grange Road will be a dead end and as such will have a turning space and a blind aisle extension at its western end, and
- Two (2) disabled car parking spaces will be located adjacent the main doors with an associated shared space.

5.2.1. General Parking Layout Requirements

Further to the above, the grades within the parking area must conform to the following requirements (as per AS/NZS2890.1:2004, AS/NZS2890.6:2009 and AS2890.2:2018):

- Maximum grade of 1 in 20 (5%) across nature strip
- Maximum grade of 1 in 40 (2.5%) across any footpath
- Maximum grade of 1 in 20 (5%) for 10 metres into the site (where commercial vehicles use the driveway)
- A maximum grade of 1 in 6.5 (15.4%) along commercial vehicles circulation roads, the maximum grade shall be 1 in 8 (12.5%) where reverse manoeuvres are required
- A maximum grade of 1 in 20 (5%) measured parallel to the angle of parking
- A maximum grade of 1 in 16 (6.25%) measured in any other direction to the angle of parking.

6. SUSTAINABLE TRANSPORT INFRASTRUCTURE

6.1. Bicycle End of Trip Facilities

Bicycle parking rates for developments are specified within the Charles Sturt Development Plan in *Table ChSt/2 - Off Street Vehicle Parking Requirements* as follows:

On site secure bicycle parking racks for non-residential development
3 bicycle spaces per 50 employees.

Given the number of employees at an ALDI Store is generally less than 10 at any one time, only 1 bicycle rack would be required.

Observations of other ALDI stores indicates that the provision of 2 bicycle parking spaces would adequately cater for anticipated bicycle parking demands.

6.2. Walking and Cycling Network

A pedestrian connection will be provided between the footpath on Grange Road and the proposed ALDI forecourt to the west of the Grange Road driveway. This will provide convenient and safe access for people from all directions given the crossing facilities at the existing intersection and footpath network around the site. Pedestrians will not be required to use vehicle access points for access to the site.

6.3. Public Transport

The site is accessible to public transport for buses with Stop 21 Grange Road located to the east of the site.

7. LOADING FACILITIES

7.1. Development Plan Requirements

Principle of Development Control (PDC) in the 'Transport and Access' section of the Charles Sturt Development Plan sets out the requirements for loading applicable to the proposed development. PDC 14 is as follows:

14 Development should provide for the on-site loading, unloading and turning of all traffic likely to be generated

7.2. Heavy Vehicle Demands

ALDI Stores typically generate the following heavy vehicle demands:

Deliveries	19.0 metre semi-trailer	2 per day
Waste Collection	Medium to Large Truck (Heavy Rigid Vehicle)	1 per week
Cardboard Bailer Collection	Medium Truck (Medium Rigid Vehicle)	1 per week
Bread Deliveries	Small Truck (Small Rigid Vehicle)	1 per day

ALDI utilises its own fleet vehicles for deliveries from its distribution centre in Regency Park. This enables ALDI to manage delivery times and sizes of vehicles as required for each store.

It should be noted that whilst the site has been designed to accommodate 20 metre semi-trailers, these are not currently used by ALDI at this time. Grange Road is a PBS Level 1 route which accommodates vehicles up to 20 metres in length. Figure 7.1 shows the existing PBS Level 1 (up to 20 metres) heavy vehicle routes available between the ALDI Distribution Centre and the proposed Findon store extracted from DPTI's RAVNET system.

Figure 7.1: RAVNET – PBS LEVEL 1A Route



7.3. Proposed Loading Arrangements

A loading area is proposed to be located at the northern part of the site, adjacent the northern boundary.

The site will facilitate loading for a Semi-Trailer up to 20.0 metres long which would occur on average 2 times per day.

Entry for the truck will occur via a left turn into the site from Grange Road as shown in Figure 7.2. The truck would turn left in from Grange Road and turn into the manoeuvring area. Within this area, the truck will reverse back into the dock.

Exit will occur via a right turn from the loading dock back to the Grange Road driveway, and then a left turn onto Grange Road as per Figure 7.3.

The loading dock will be designed in accordance with ALDI's standard detail. A bin store and compactor will also be located in the loading dock area.

ALDI places a high level of safety for truck manoeuvres in the car park with trucks equipped with reversing cameras, which would alert drivers of other users and furniture within the vicinity, as well as wide angle mirrors on each side of the cabin. This facilitates safe deliveries for ALDI at each store as part of standard operating procedures. It is further noted that the site would only expect up to 2 semi-trailer deliveries per day.

Figure 7.2: Semi Trailer – Entry

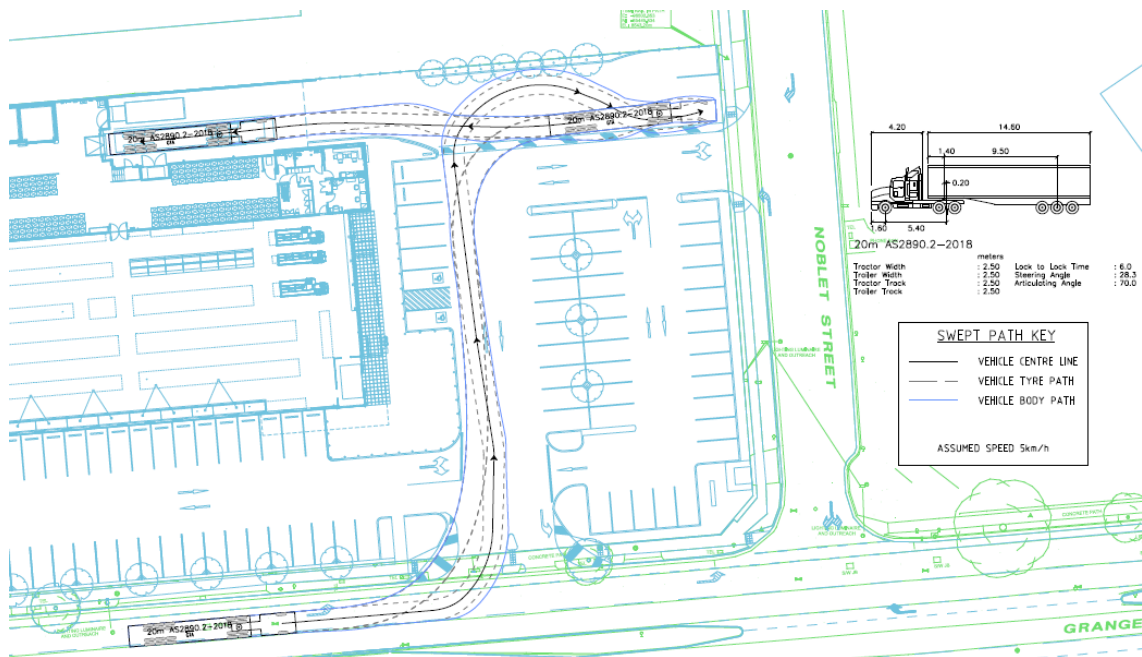
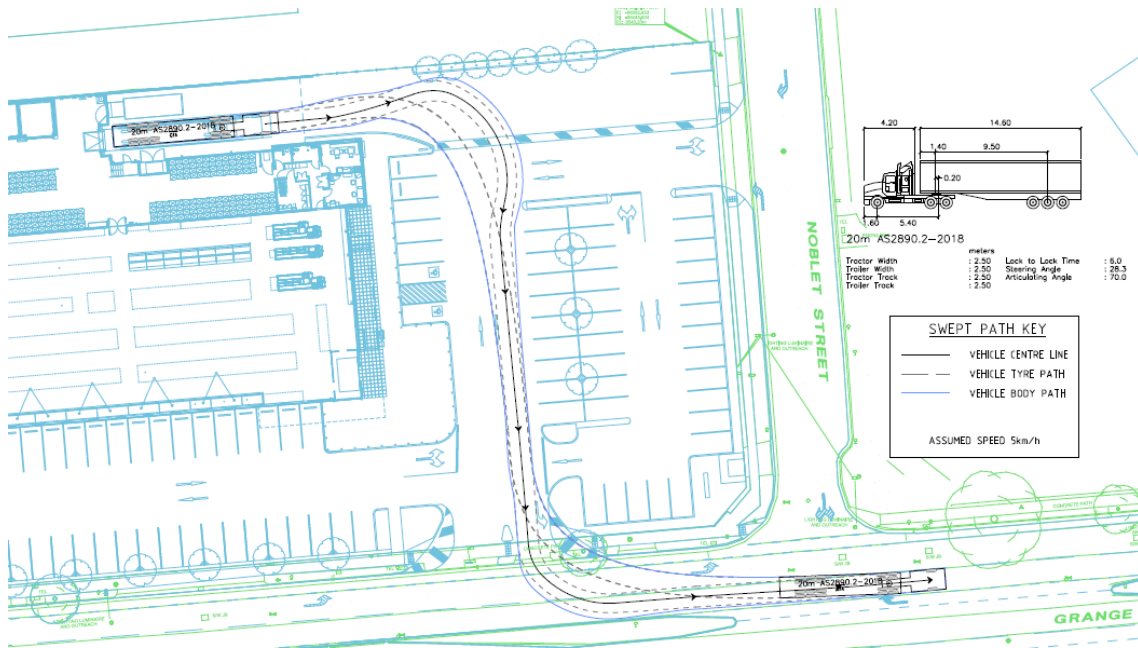


Figure 7.3: Semi Trailer – Exit



7.4. Refuse/Compactor Collection

Refuse and compactor vehicles will access the site in medium rigid vehicles. These vehicles will undertake manoeuvres similar to that performed by Semi-Trailers. As the loading dock has been designed to accommodate a 20 metre Semi Trailer, the compactor and refuse collection vehicles will be smaller, with a more flexible turning manoeuvre.

8. TRAFFIC IMPACT ASSESSMENT

8.1. Traffic Generation

8.1.1. Empirical Design Rates

The proposed ALDI Store will comprise 1,792 sq. m. of Gross Leasable Floor Space (GLFA). Table 8.1 presents the results of traffic generation surveys undertaken by GTA at standalone ALDI stores.

Table 8.1: Traffic Generation Surveys – ALDI Stores

Location	Retail Floor Area (sq.m)	Date	Traffic Generation (trips per 100sq.m)	
			Daily	PM Peak Hour
Sunbury	1,274	17/02/2006	136.5	13.5
Hampton Park	1,291	17/02/2006	126.2	14.6
Carrum Downs	1,284	24/02/2006	-	13.2
Rosebud	1,454	24/02/2006	-	10.7
Ferntree Gully	1,274	15&31/07/2010	-	27.5
Pakenham	1,382	15&31/07/2010	-	12.0
AVERAGE			131.0	15.3

Based on the traffic generation survey results the following traffic generation rates have been adopted:

Weekday (Daily): 131 trips per 100sq.m gross retail floor area
 Weekday (PM Peak Hour): 15.3 trips per 100sq.m gross retail floor area

Based on empirical traffic data for other ALDI Stores in Australia, the weekday PM Peak traffic generation is 15.3 trips per 100 sq. m. Notwithstanding, more recent survey data has been collected for the ALDI Store in Hawthorn, SA, indicating a peak rate of 10.7 trips per 100 sq. m during the Thursday PM Peak.

Albeit, the rate of 12.3 trips per 100 sq. m from the RTA Guidelines was used for this assessment as a conservative measure, which equates to 220 peak hour trips.

Based on traffic data obtained at the ALDI Hawthorn Store on a Saturday, the trip generation during the road network peak was recorded at 15.3 trips between 10:00am and 1:00pm. This rate was used to assess the Saturday impact, which equates to an additional 274 peak hour trips on the road network.

While passing trade is usually a key component for ALDI Stores, as a conservative assessment, no passing trade discount has been applied in this model.

8.1.2. Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

1. Configuration of the arterial road network in the immediate vicinity of the site
2. Existing operation of intersections providing access between the local and arterial road network
3. Distribution of households in the vicinity of the site
4. Likely distribution of employee's residences in relation to the site
5. Configuration of access points to the site.

Having consideration to the above, for the purposes of estimating vehicle movements, the following directional distributions for entry movements has been assumed:

Inbound

- Grange Road (east) – 50%
- Grange Road (west) – 40%
- Noblet Street (north) – 10%

Outbound

- Grange Road (east) – 60%
- Grange Road (west) – 30%
- Noblet Street (north) – 10%

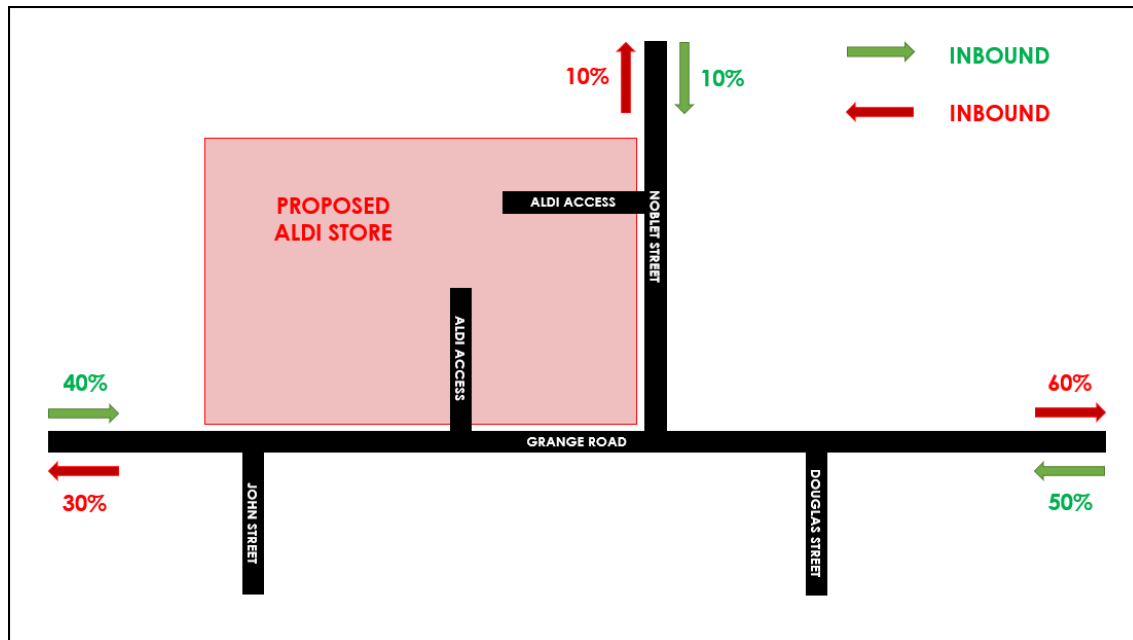
The above assumptions are primarily based on the anticipated catchment area for the store and the proximity of other ALDI Stores. A higher skewed volume for the east approach was assumed given the proximity of the ALDI Stores at West Lakes and Adelaide Airport.

For the outbound movements, a higher proportion of vehicles were assumed to turn left out instead of right out, which is not uncommon during peak times when the queue length and delay times for right turns are higher than during other periods. Most of the vehicles turning left out would use the access point over Noblet Street

Some traffic is likely to travel north on Noblet Street based on customers living in the residential areas to the north.

Figure 8.1 has been prepared to consider the directional split during both Weekday PM Peak and Saturday Peak.

Figure 8.1: Directional Split



In addition, the directional split of traffic (i.e. the ratio between the inbound and outbound traffic movements) is assumed to be 50:50.

Figure 8.2 and Figure 8.3 has been prepared to show the site generated traffic during the Weekday PM Peak and Saturday Peak respectively.

Figure 8.2: Weekday PM Peak – Site Generated Traffic Volume

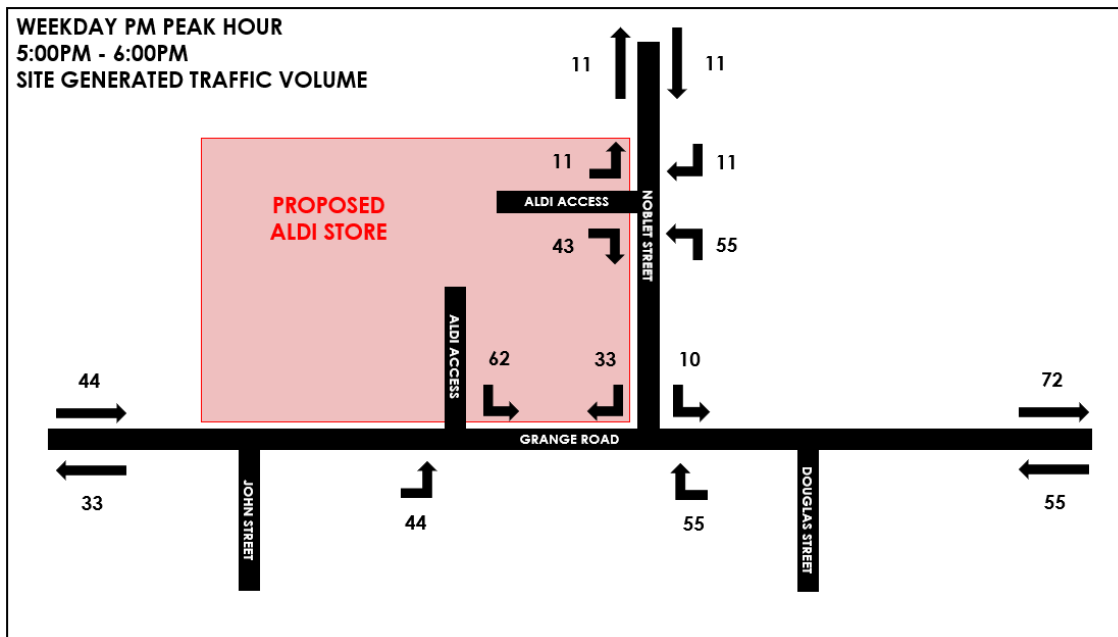
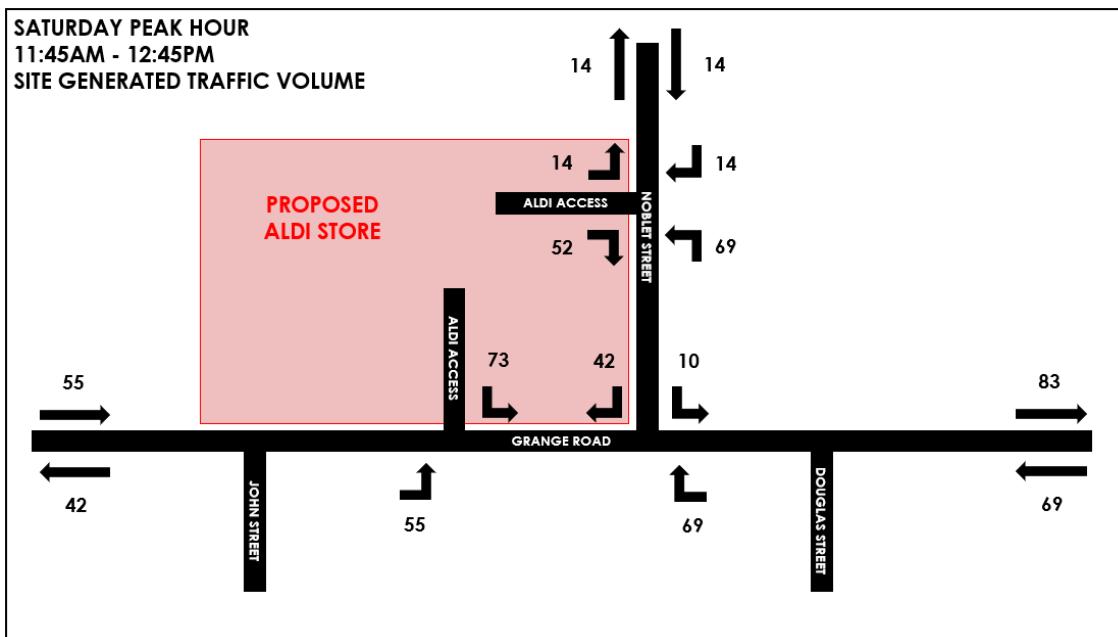


Figure 8.3: Saturday Peak – Site Generated Traffic Volume



8.1.3. Post Development Traffic

Figure 8.4 and Figure 8.5 have been prepared to show the anticipated traffic volume within the site and the surrounding road network following the construction of the ALDI Store for both the Weekday PM and Saturday peak hour.

Figure 8.4: Weekday PM Peak (5:00pm – 6:00pm) – Post Development Traffic

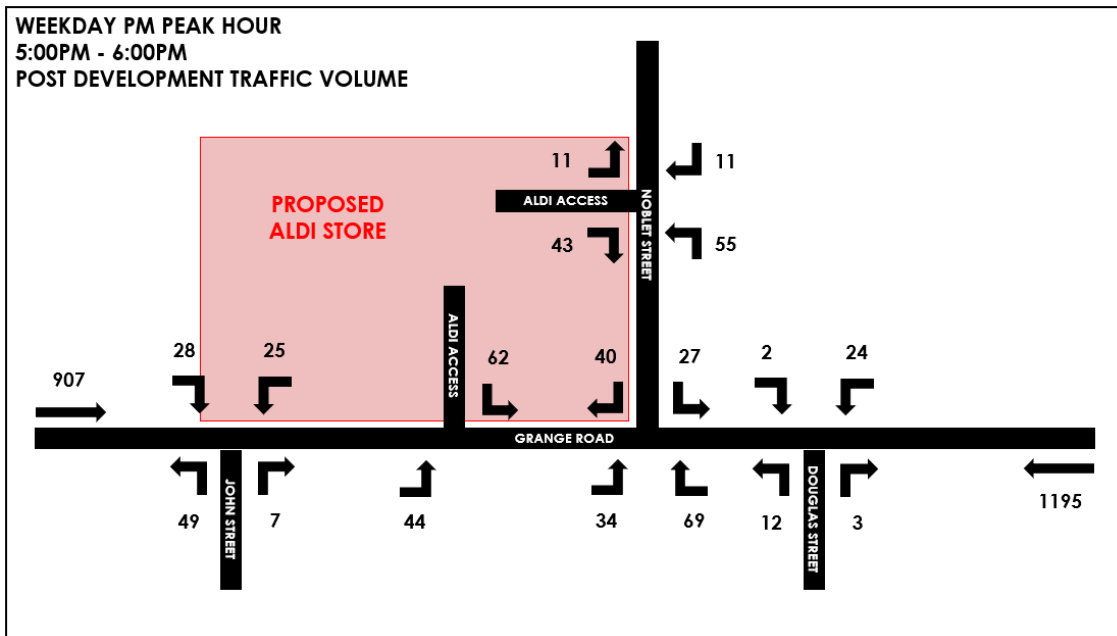
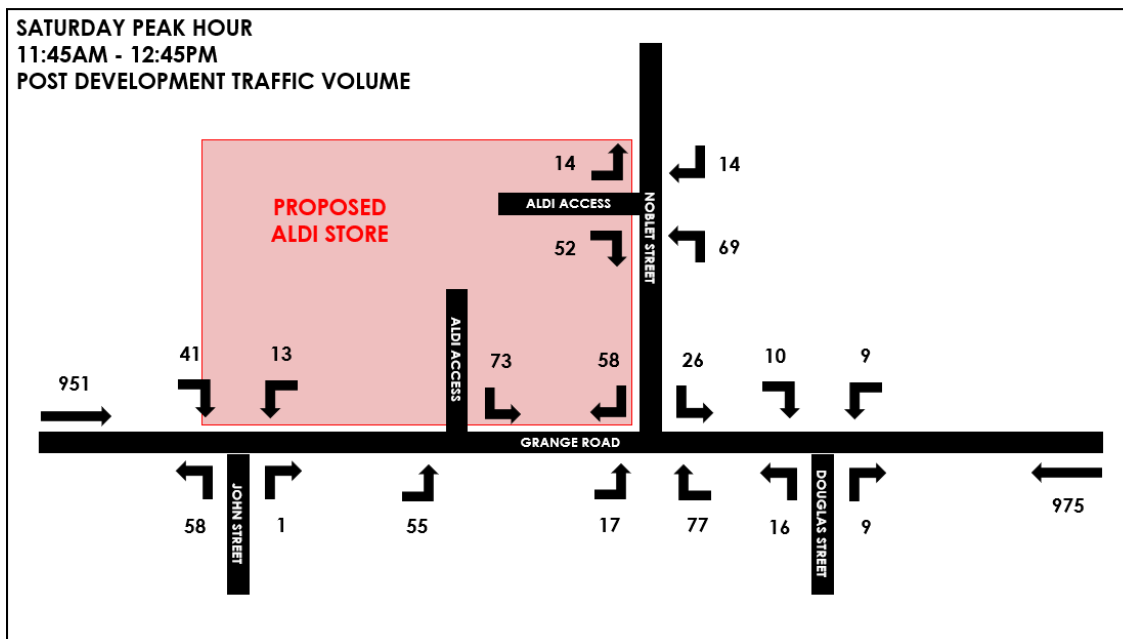


Figure 8.5: Saturday Peak (11:45am – 12:45pm) – Post Development Traffic



8.2. Intersection Analysis

The operation of the Grange Road and Noblet Street Intersection has been assessed using *SIDRA Intersection 8* under post development conditions during the Weekday PM Peak Hour and the Saturday Peak Hour.

The ALDI Access intersection with Grange Road would operate left in, left out, and as such would function adequately, based on the available gaps from the gap survey.

The ALDI Access intersection with Noblet Street would also operate adequately given the low volume nature of Noblet Street.

The results for the Weekday PM Peak Hour is summarised in Table 8.2, while the results for the Saturday Peak Hour is described in Table 8.3.

Table 8.2: Grange Road / ALDI Access – Weekday Peak Hour – Post Development

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1264	1.6	0.328	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	73	0.0	0.215	15.3	LOS C	0.8	5.3	0.72	0.89	0.77	44.1
Approach		1337	1.5	0.328	0.9	NA	0.8	5.3	0.04	0.05	0.04	58.8
North: Noblet Street												
7	L2	28	0.0	1.000	148.5	LOS F	6.6	46.2	0.01	0.54	0.04	13.9
9	R2	42	0.0	1.000	226.1	LOS F	6.6	46.2	0.01	0.54	0.04	13.9
Approach		71	0.0	1.000	194.8	LOS F	6.6	46.2	0.01	0.54	0.04	13.9
West: Grange Road												
10	L2	37	0.0	0.256	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	57.9
11	T1	956	0.9	0.256	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach		993	0.8	0.256	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles		2400	1.2	1.000	6.3	NA	6.6	46.2	0.02	0.05	0.02	54.0

Based on the above:

- All approaches would operate efficiently, with the exception being the left and right turn out of Noblet Street, which would operate with a higher delay and longer 95th percentile queue.
- The right turn lane into Noblet Street would operate at a LOS of C, with a DOS of 0.215. The 95th percentile queue length would still remain within one (1) vehicle as per existing conditions, while the average delay would be 15.3 seconds, which is marginally higher than existing conditions.
- The right turn out of Noblet Street would operate at a LOS of F. The average delay for this approach would be an increase of 70 seconds compared to existing conditions. The 95th percentile queue length for this approach would be 6.6 vehicles, which extend back to the proposed ALDI Driveway on Noblet Street. While the queue length and delay would be notably higher compared to existing conditions, this is not dissimilar to other local intersections to major roads during peak times.
- The left turn out of Noblet Street would operate at a LOS of F, with a higher delay and a 95th percentile queue length of 6.6 vehicles. This is also higher than existing conditions, however, this is in part compounded by the delay for vehicles to turn right. In practice, a majority of left turning traffic would do-so at the ALDI Access directly onto Grange Road.

Table 8.3: Grange Road / ALDI Access – Saturday Peak Hour – Post Development

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1027	1.1	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	81	0.0	0.250	16.3	LOS C	0.9	6.4	0.74	0.92	0.83	43.5
Approach		1108	1.0	0.267	1.2	NA	0.9	6.4	0.05	0.07	0.06	58.3
North: Noblet Street												
7	L2	27	0.0	1.000	115.7	LOS F	7.0	49.0	0.01	0.54	0.05	16.5
9	R2	61	0.0	1.000	170.3	LOS F	7.0	49.0	0.01	0.54	0.05	16.4
Approach		88	0.0	1.000	153.4	LOS F	7.0	49.0	0.01	0.54	0.05	16.4
West: Grange Road												
10	L2	19	0.0	0.263	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	58.0
11	T1	1002	1.1	0.263	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach		1021	1.0	0.263	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles		2218	1.0	1.000	6.8	NA	7.0	49.0	0.03	0.06	0.03	53.5

Based on the above:

- All approaches would operate efficiently, with the exception being the left and right turn out of Noblet Street, which would operate with a higher delay and longer 95th percentile queue.
- The right turn lane into Noblet Street would operate at a LOS of C, with a DOS of 0.250. The 95th percentile queue length would still remain within one (1) vehicle as per existing conditions, while the average delay would be 16.3 seconds, which is marginally higher than existing conditions.
- The right turn out of Noblet Street would operate at a LOS of F. The average delay for this approach would also experience an increase of 70 seconds compared to existing conditions. The 95th percentile queue length for this approach would be 7.0 vehicles, which extend back to the proposed ALDI Driveway on Noblet Street. While the queue length and delay would be notably higher compared to existing conditions, this is not dissimilar to other local intersections to major roads during peak times. The queue length survey identified up to 90 vehicles would be able to turn out of Noblet Street, therefore the anticipated volume of right turners (58 vehicles), sits within this theoretical capacity.
- Similar to the Weekday PM Peak, the queue length and delay for the left turn out of Noblet Street would operate higher, due to the compound effect of the right turn out of Noblet Street. As per the Weekday PM Peak, it is anticipated a high proportion of left turning traffic would do-so at the ALDI Access directly onto Grange Road.

8.3. Traffic Impact

The proposed ALDI Store is envisaged to generate 220 trips during the Weekday PM Peak Hour and 274 trips during the Saturday Peak Hour.

The intersection of Noblet Street and Grange Road would likely feed a proportion of this traffic and as such a SIDRA model was conducted to assess the performance during the Weekday PM Peak Hour and the Saturday Peak Hour.

The SIDRA Output in conjunction with the gap surveys confirms the right turn into Noblet Street from Grange Road would be acceptable based on the increase in traffic associated with the proposed ALDI Store. The average delay and 95th Percentile Queue length would remain similar to existing conditions during both peak periods.

The right turn out of Noblet Street would experience a more pronounced increase in average delay and 95th percentile queue length during both peak periods. The average delay would be increased by approximately 70 seconds, with an increase in the 95th percentile queue length by six (6) vehicles. Notwithstanding, there would still be capacity in the network to cater for these movements, which is substantiated by the gap survey, which was undertaken on the Saturday afternoon, and general observations conducted during the weekday.

The left turn out of Noblet Street would also experience a more pronounced increase in average delay and 95th percentile queue, which is compounded by the increase in delay and queue length for the right turn out. It is anticipated the majority of ALDI Traffic would use the access point on Grange Road to turn left out.

The ALDI Access onto Grange Road would operate as left in and left out. Vehicles turning left out would have more than sufficient gaps based on the gap survey to turn left out.

The ALDI Access onto Noblet Street would operate adequately given the low volume nature of Noblet Street.

Overall, the increase in traffic associated with the proposed ALDI would generate more delay and queues associated with movements out of Noblet Street. Otherwise, the proposed ALDI Store wouldn't adversely impact the function and nature of Grange Road.

8.4. Residential Land Division

Location SA Map Viewer identifies residentially zoned land greater than 4,000 sq. m, which has a reasonably long term probability of being utilised for urban in-fill. There is a brownfield site located approximately 200 metres north of the proposed ALDI Store, which is located between Bridgeman Road and Northumberland Avenue. This is shown in Figure 8.6.

Figure 8.6: Approved Residential Land Division – Findon



GTA Consultants have liaised with the City of Charles Sturt and have sought traffic data associated with the proposed land division. The proposed land division is anticipated to generate 30 additional trips onto Noblet Street as shown in Figure 8.7. No traffic volume associated with the proposed residential subdivision was provided for the Saturday Peak.

As such, it was assumed the traffic associated with the residential development would equate to 80 % of PM Peak Hour Trips (24 Trips). An inbound: outbound split of 50:50 was assumed in conjunction with an east: west split of 50:50. The anticipated turning volumes for the Saturday Peak Hour is shown in Figure 8.8.

Figure 8.7: Weekday PM Peak Hour – Residential Generated Traffic

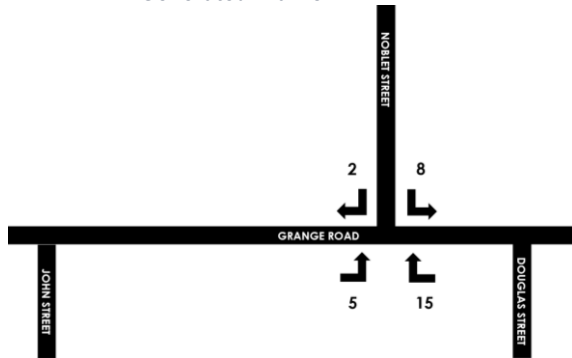


Figure 8.8: Thursday Peak Hour – Residential Generated Traffic

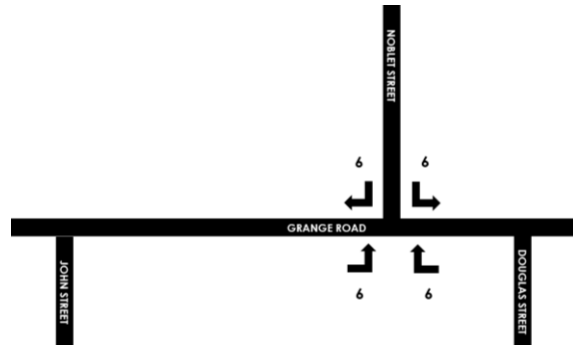


Figure 8.9 and Figure 8.10 have been prepared to show the expected traffic distribution following the construction of the ALDI Store and subsequent in-fill of the proposed brownfield for the Weekday PM Peak Hour and Saturday Peak Hour.

Figure 8.9: Weekday PM Peak (5:00pm – 6:00pm) – Post Development ALDI Traffic + Future Residential Traffic

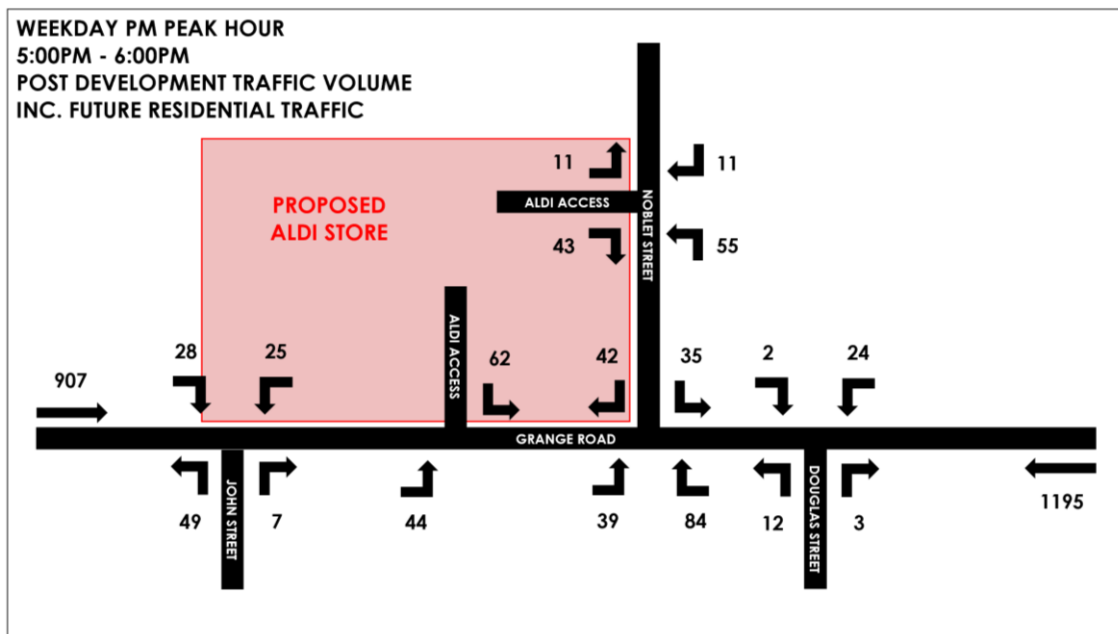
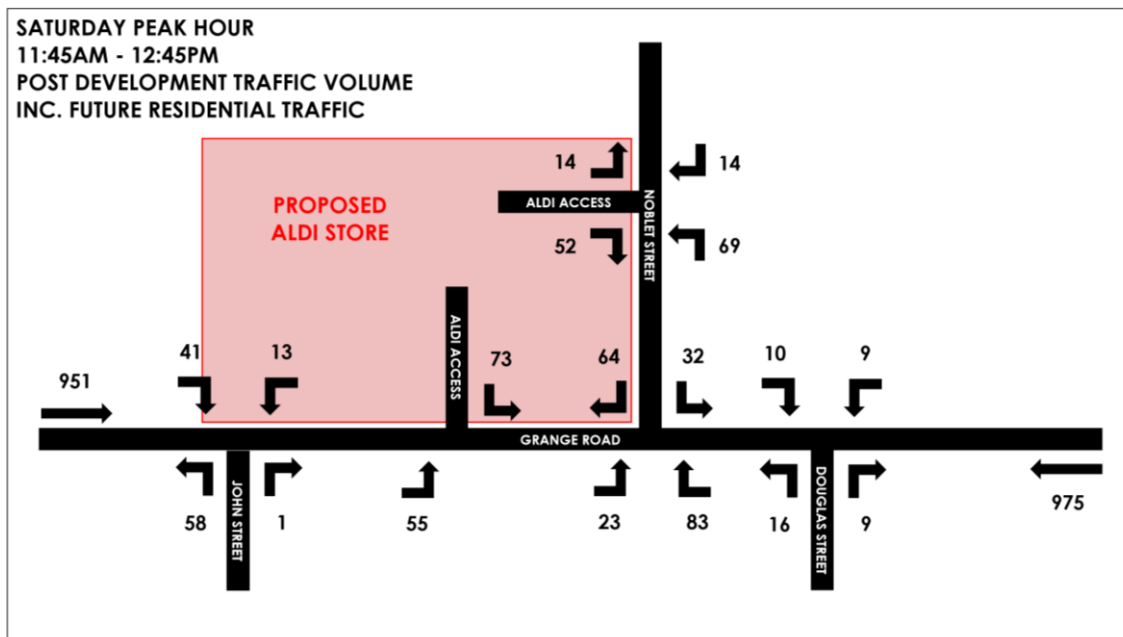


Figure 8.10: Saturday Peak (11:45am – 12:45pm) – Post Development ALDI Traffic + Future Residential Traffic



The operation of the Grange Road and Noblet Street Intersection has been assessed using SIDRA INTERSECTION under post development conditions and assuming traffic associated with the residential land division. The model was conducted during the Weekday PM Peak Hour and the Saturday Peak Hour as displayed in Table 8.4 and Table 8.5 respectively.

Table 8.4: Grange Road / ALDI Access – Weekday Peak Hour – Post Development

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1264	1.6	0.328	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	88	0.0	0.263	16.0	LOS C	1.0	6.9	0.74	0.92	0.84	43.7
Approach		1353	1.5	0.328	1.1	NA	1.0	6.9	0.05	0.06	0.05	58.5
North: Noblet Street												
7	L2	37	0.0	1.000	142.3	LOS F	7.3	51.2	0.01	0.54	0.04	14.5
9	R2	44	0.0	1.000	216.4	LOS F	7.3	51.2	0.01	0.54	0.04	14.5
Approach		81	0.0	1.000	182.7	LOS F	7.3	51.2	0.01	0.54	0.04	14.5
West: Grange Road												
10	L2	42	0.0	0.257	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	57.8
11	T1	956	0.9	0.257	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach		998	0.8	0.257	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.6
All Vehicles		2432	1.2	1.000	6.8	NA	7.3	51.2	0.03	0.06	0.03	53.5

Based on the above:

- The operation of the intersection when adding future residential traffic onto the network, would operate similar to post development conditions for the ALDI Store.
- The notable approaches where there is an increase in queuing is the left and right turn movements out of Noblet Street. Notwithstanding, the additional residential traffic would represent an increase to the 95th percentile queue length by less than 1 vehicle.

Table 8.5: Grange Road / ALDI Access – Saturday Peak Hour – Post Development

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Grange Road												
5	T1	1027	1.1	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	87	0.0	0.272	16.7	LOS C	1.0	7.1	0.75	0.93	0.86	43.3
Approach		1115	1.0	0.272	1.3	NA	1.0	7.1	0.06	0.07	0.07	58.2
North: Noblet Street												
7	L2	34	0.0	1.000	107.0	LOS F	7.5	52.7	0.01	0.54	0.04	17.5
9	R2	67	0.0	1.000	156.4	LOS F	7.5	52.7	0.01	0.54	0.04	17.5
Approach		101	0.0	1.000	139.9	LOS F	7.5	52.7	0.01	0.54	0.04	17.5
West: Grange Road												
10	L2	25	0.0	0.265	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	58.0
11	T1	1002	1.1	0.265	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach		1027	1.0	0.265	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles		2243	1.0	1.000	7.0	NA	7.5	52.7	0.03	0.07	0.04	53.2

Based on the above:

- The operation of the intersection when adding future residential traffic onto the network, would operate similar to post development conditions for the ALDI Store only.
- The notable approaches where there is an increase in queuing is the left and right turn movements out of Noblet Street. Notwithstanding, the additional residential traffic would represent an increase to the 95th percentile queue length by less than 1 vehicle.

Overall, the impact of the residential subdivision in conjunction with ALDI Store won't adversely impact on the intersection.

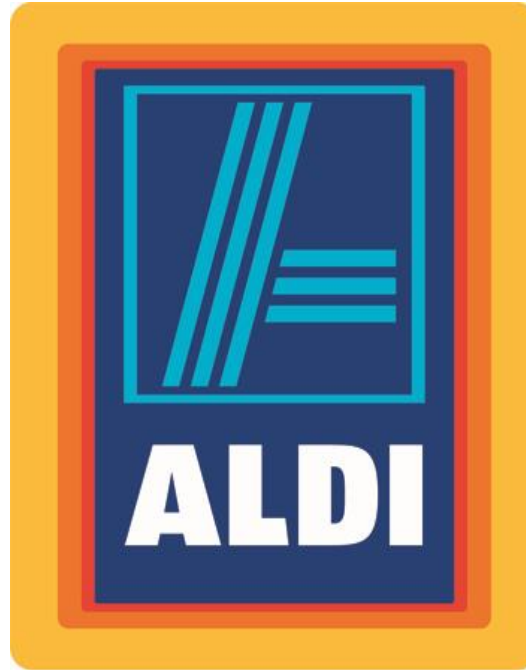
9. CONCLUSIONS

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The proposed development will generate a Development Plan Parking Requirement between 54 and 108.
2. The proposed supply of 82 car parking spaces (4.6 spaces per 100 sq. m) meets the Development Plan requirement and exceeds the empirical rate for ALDI Stores (4.1 spaces per 100 sq. m).
3. The proposed car parking layout is consistent with the dimensional requirements set out in the Australian/New Zealand Standard for Off-Street Car Parking (AS/NZS2890.1:2004) and the Australian Standard for Parking for People with Disabilities (AS2890.6:2009).
4. The provision of two (2) bicycle parking spaces will exceed the requirements of the Development Plan.
5. Two new access points are proposed, with an access being provided on Grange Road, which will facilitate left in and left out, while an access is also proposed on Noblet Street which will enable un-restricted turning movements.
6. The loading facility for the ALDI Store will accommodate truck access up to a 20.0 metre Semi Trailer, with trucks entering via a left turn in and exiting via a left turn out. Access for recycling and waste collection vehicles will also be suitable.
7. The proposed development is predicted to generate up to 220 and 274 two-way vehicle movements during the Weekday PM Peak and Saturday Peak Hour.
8. An analysis of the additional traffic by the proposed development during peak periods indicates the intersections and surrounding road network would operate adequately, although it is expected the queue length and delay for vehicles turning out of Noblet Street will increase.
9. Right turns out of the site will experience higher queue lengths and delays, however based on gap analysis, there would be more than sufficient opportunities to facilitate the anticipated demands.
10. There is adequate capacity in the surrounding road network to cater for the traffic generated by the proposed development.
11. Assuming additional traffic from an approved land division to the north on Noblet Street, the intersection of Noblet Street and Grange Road would continue to operate similar to post development traffic as calculated for the ALDI Store, with only a minor increase in traffic on Noblet Street.

Appendix 7. ALDI Loading Procedures

ALDI SOUTH AUSTRALIA



DELIVERY & LOADING PROCEDURES

ALDI DELIVERY & LOADING PROCEDURES

- ALDI own, operate and control all of its supply and logistics via its purpose built Distribution Centre. South Australia's Distribution Centre has been constructed in Regency Park.
- ALDI's supply chain and logistics operates on a palletised system. All products are delivered to our Distribution Centre on pallets. The same product is then loaded onto delivery trucks; delivered to the store and in many cases the same pallet is then located on the retail floor. This streamlined system of operation enables ALDI to position itself as a discount supermarket quite differently to its competitors.
- With all ALDI supplies delivered directly to our Distribution Centre, ALDI then undertake consolidated store deliveries to each store via its own fleet of trucks/trailers and ALDI employed drivers.
- Deliveries can be undertaken throughout a full 24 hour period to any store given the Distribution Centre operates 24/7 and our own truck and drivers are able to access and unload to a store without the store being open or trading.
- With the dedicated ALDI supply chain direct from our Distribution Centre to a store, only a maximum of two ALDI deliveries are undertaken within a 24 period to each store. The only exception is one bread delivery from a bakery supplier, which is undertaken in a small rigid truck, once per day.
- The ALDI truck movement, on any site, typically takes between 1 to 2 minutes, with the truck moving onto the site, stopping, reversing and engaging with the purpose built loading dock.
- The prime mover is always turned off during unloading.
- Given the palletised system and dedicated dock connection the total delivery period is on average 30 minutes from the moment the truck is docked. The unloading is undertaken by only one person being the ALDI truck driver.
- All products are unloaded from within the trailer directly inside the building using a manually operated pallet jack. (No forklifts are used and no external activity occurs outside the truck). The trailers are sealed and connected to the building via a dedicated dock leveller and dock curtain.
- The ALDI prime movers and trailers are purpose built to ALDI specifications.
 - All trailers are built with a reversing camera which is connected to a driver display in the cabin of the prime mover.
 - All trailers are also able to be controlled from within the cabin to turn-off the reversing beepers (if required) and the refrigeration units (if required).
- All ALDI loading docks are fitted with motion sensors and automatic lighting to ensure that night time deliveries benefit from appropriate surveillance including safe reversing manoeuvres without reversing beepers (where required).
- All drivers are briefed and aware of each site and any site specific circumstances or restrictions that are applicable for that store.
- If an acoustic assessment requires any specific noise management then either or both the refrigeration and reversing beepers can be turned off including any requirement to do so whilst transiting past any noise sensitive areas.
- As a result of the above, where other retailers cannot, ALDI consistently can comply with any prescribed operational or acoustic requirements of either the Environmental Protection Authority and any relevant local statutory requirements when performing night time deliveries.
- Coupled with the above where additional on-site acoustic mitigation measures are required/recommended ALDI will construct these to further alleviate and mitigate any potential noise interface issues i.e. Acoustic screens, fences and/or gates.

ALDI DELIVERY & LOADING PROCEDURES



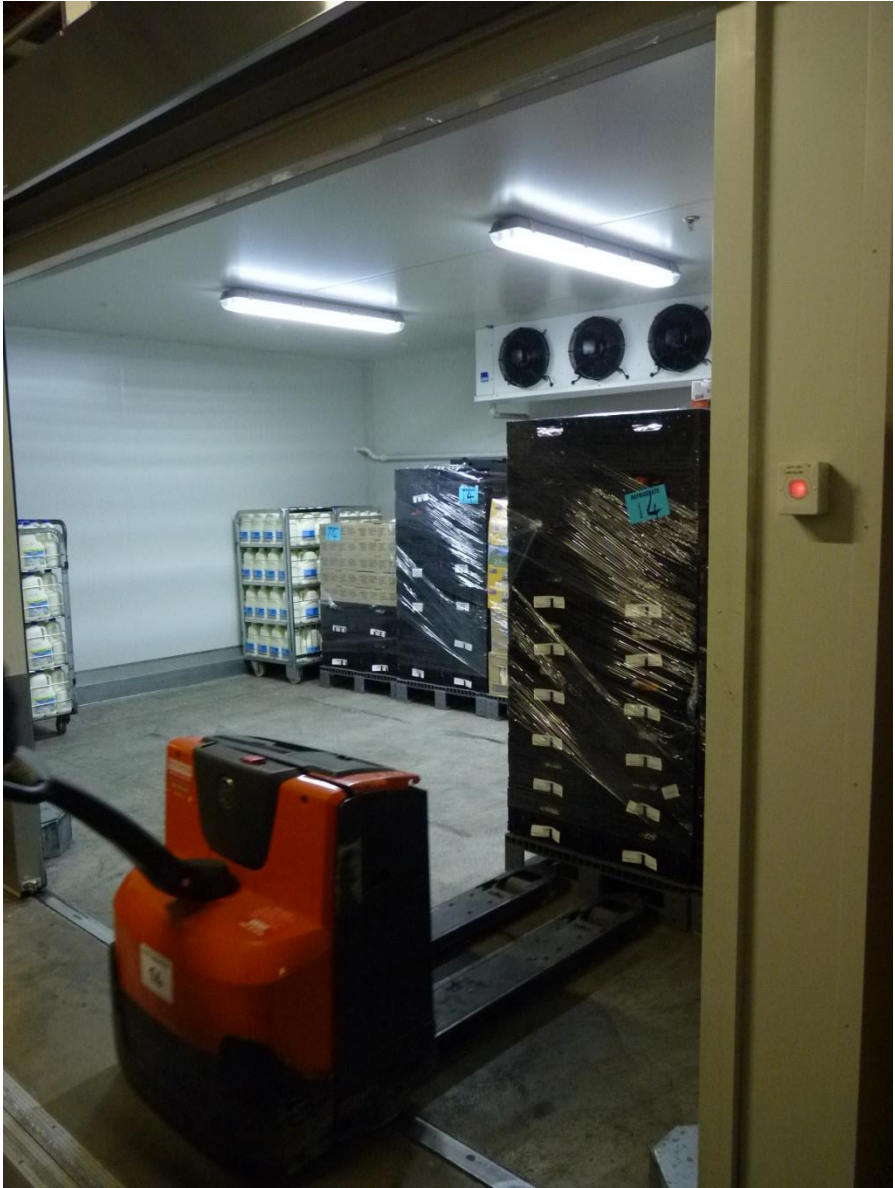
ALDI DELIVERY & LOADING PROCEDURES



ALDI DELIVERY & LOADING PROCEDURES

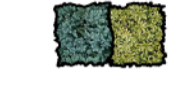


ALDI DELIVERY & LOADING PROCEDURES



Appendix 8. Landscape Plan
(Outerspace)

LEGEND

-  PROPOSED MEDIUM TREE
Ulmus parvifolia
-  PROPOSED UPRIGHT TREES
Pyrus calleryana 'Capital'
-  PROPOSED MEDIUM SHRUBS
-  PROPOSED LOW SHRUBS - GROUNDCOVERS
-  MULCH ONLY BED
-  IRRIGATION CONDUIT
-  PROPERTY BOUNDARY

PLANT PALETTE

TREES



Pyrus calleryana 'Capital'
Capital Callery Pear
Height: 9m
Width: 3m



Ulmus parvifolia
Lacebark Elm
Height: 12m
Width: 8m

SHRUBS & GROUNDCOVERS



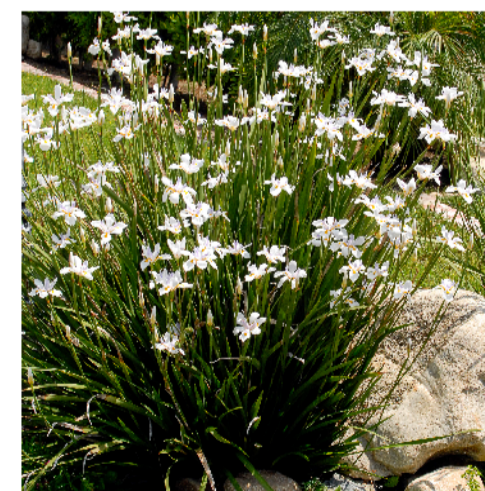
Coprosma kirkii
Coprosma
Height: 0.5m
Width: 1.5m



Correa backhouseana 'Dusky Bells'
Australian Fuschia
Height: 0.8m
Width: 1.5m



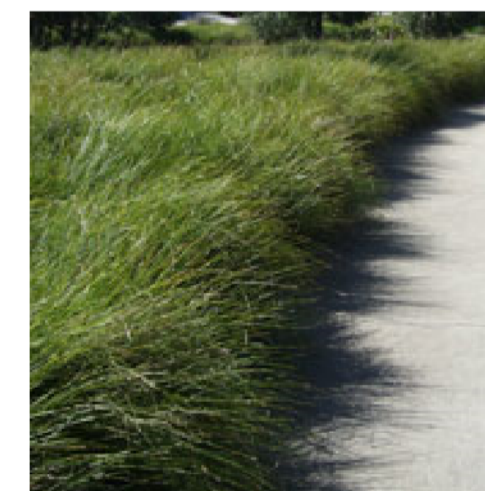
Dianella caerulea 'Little Jess'
Little Jess Flax Lily
Height: 0.4m
Width: 0.4m



Diets grandiflora
Butterfly Iris
Height: 0.9m
Width: 0.9m



Leucophyta brownii
Cushion Bush
Height: 0.7m
Width: 1m



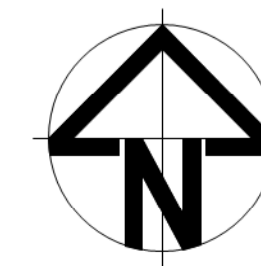
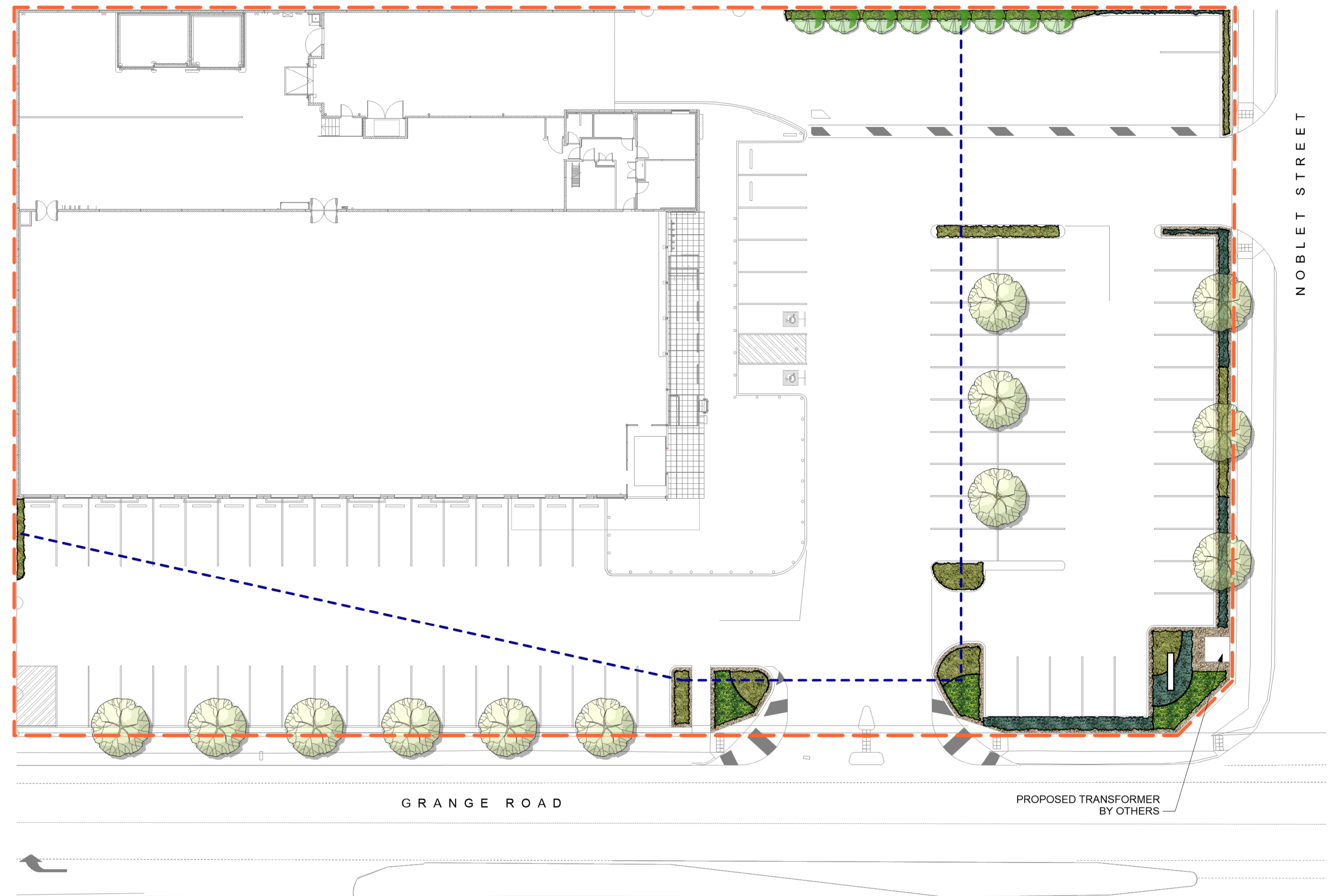
Lomandra longifolia 'Tanika'
Tanika Mat Rush
Height: 0.6m
Width: 0.6m



Rosmarinus officinalis
Rosemary
Height: 1.5m
Width: 1.5m



Westringia fruticosa 'Grey Box'
Grey Box
Height: 0.4m
Width: 0.4m



Appendix 9. Stormwater Management
(WGA)

WGA

WALLBRIDGE GILBERT
AZTEC

Nielsen Architects Pty Ltd

Aldi Findon

**STORMWATER MANAGEMENT
REPORT**

Project No. 170244

Doc No. WGA170244-RP-CV-0001

Rev. C

04 December 2019

WGA

Revision History

Rev	Date	Issue	Originator	Checker	Approver
A	28/10/2019	For Comment	WRS	WRS	WRS
B	25/11/2019	For Comment	WRS	WRS	WRS
C	04/12/2019	For Comment	WRS	WRS	WRS

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Appendices

Appendix A Engineering Survey

Appendix B Site Photographs

Appendix C Architectural Plans

Appendix D Council Stormwater Requirements

Appendix E Council Flood Mapping

Appendix F Stormwater Detention Calculations

Appendix G Site Civil Concept

1

INTRODUCTION

1.1 BACKGROUND

Wallbridge Gilbert Aztec (WGA) has been engaged to prepare a Stormwater Management Plan and Concept for a proposed ALDI supermarket and on-grade carparks at the corner Grange Road and Noblet Street in Findon. The specific site address is 263-271 Grange Road, Findon.

This report is intended to conceptually outline the stormwater management design for the proposed development and to detail the stormwater management methodology intended for the site. Consideration is given to possible site levels and adjacent developments. The final detailed design must be carried out to provide construction documentation, to incorporate the stormwater design principles outlined in this report, and to ensure level and grade compliances are assured. The final documentation is considered to be beyond the scope of this report.

1.2 SCOPE OF THE ASSESSMENT

The preparation of the plan comprises the scope of services listed below:

- Site visit
- Liaise with the City of Charles Sturt (Council) staff to determine appropriate and relevant stormwater requirements for the specific site
- Prepare a Stormwater Management Plan report detailing the proposed method of collection and the disposal of site-generated stormwater runoff
- Prepare preliminary sketch Concept Plans, showing likely site drainage infrastructure, discharge points and effective and compliant site grading
- Provide supporting stormwater calculations as required to match the intent of the concept plans

1.2.1 Documentation

The client has provided preliminary Architectural Plans for the proposed developments and structures.

2 DETAILED REPORT

2.1 DEVELOPMENT DESCRIPTION

The proposed development is to be located on the corner of Noblet Street and Grange Road, on the north-western side of the intersection. The proposed ALDI store would be on-grade within the north-western section of the land parcel, with a recessed loading dock running alongside part of the northern fenceline. On-grade carpark areas are planned for the southern and eastern portions of the site, comprising 82 carparks in total.

Refer to Appendix A for the Aerial Photograph and Engineering Survey of the subject site.

2.2 CATCHMENT DESCRIPTION

Incorporating a total of 5686m², the ALDI site is currently occupied by a series of dilapidated warehouses and shop/office fronts facing to the south. Away from the significant roof areas, the remainder is nearly completely sealed by hardstand pavements, with minor green areas remaining at the Grange Road frontage. The existing site is fully developed to total impermeability.

The site land falls very gently and consistently to the west, away from Noblet Street. Across the 95m (approximately) of Grange Road frontage, the street 'top of kerb' levels are seen to fall west by 300mm.

A series of Site Photographs is attached in Appendix B.

Copies of the proposed architectural plans may be found attached within Appendix C for comparison with the existing site. The drawings outline the development proposal, and the subsequent roof and carpark catchments.

2.3 EXISTING STORMWATER DRAINAGE

The existing roof(s) discharges are directed to the (above ground) street water table, or the underground Council stormwater system in a variety of locations

There is evidence of existing roof and hardstand areas being drained via a surface box drain to the Noblet Street kerb and watertable A larger catchment is drained via in-ground pipework through to the Grange Road stormwater system.

The centre of the proposed site currently contains a main driveway and stormwater pipe branch, which will be capturing much of the surrounding roof and pavement flows. There are potentially two outflow stormwater links to the Grange Road infrastructure. One runs via the 'tilted' grated inlet pit within the Grange Road watertable and driveway, whilst a nearby (internal) stormwater pit system appears to run out separately itself.

2.4 COUNCIL REQUIREMENTS

The City of Charles Sturt has provided some detail of the expected flooding risk on site, and the subsequent design requirements to be adhered to. Whilst Council Stormwater Infrastructure plans for the pipework system are not available, a clear directive on the relevant design imperatives is obtainable. This document included Council's requirements on the need to provide on-site stormwater detention to lessen the external flooding risk.

Refer to Appendix D for Council Stormwater Guidelines and Requirements, and to Appendix E for Flood Mapping information.

Mapping of the 100 year ARI flood events indicate that the current site layout is inundated substantially in the major storm event, with up to 190mm depth near the front boundary but also approximately 70mm at the rear fenceline. Depths are indicated within Appendix E, and can be translated against the survey data

The City of Charles Sturt documentation demands that all new Finished Floor Levels (FFL) are a minimum of 150mm (freeboard) above the 100 year ARI flood event water levels. Based upon levels near the street intersection (away from the building), the minimum design floor level should be 8.85, whereas in the building zone it is 8.81. The design proposal is to set the building at FFL 8.90, which also enhances suitable grading within the project site

Council have also confirmed the following stormwater requirements with respect to the site:

- Post-Development stormwater discharge rates (up to and including 100 year ARI events) are not to exceed the Pre-Development, 5 year ARI rates. Stormwater Detention measures are necessary, on-site, to provide temporary storage capacity for the balance of flood water in these future storm events.
- The direct pipe outlet to Grange Road's infrastructure is the preferable main discharge point
- Stormwater quality improvement devices "to remove solid and liquid pollutants" are required "prior to discharge to Council's drainage system".

Further Council Stormwater Information or relevant guidelines may be found within Appendix D and E

2.5 STORMWATER MANAGEMENT METHODOLOGY

Based on the information received from Council representatives, the following stormwater management methodology is proposed.

The proposed Finished Floor Level of the Aldi Store is FFL 8.90.

Stormwater runoff will be captured from both roof and carpark surfaces and directed in a controlled manner to the existing stormwater branch connecting to Council's Grange Road system.

Roof capture is via box gutters with collection mostly near the northern boundary and ramped dock area. Future ground surface levels will require that flying downpipes (fixed to the wall) are used to maintain suitable head height, in order to access the levels of the in-ground stormwater system. Any other may require pumping.

The recessed loading dock is exposed, and its stormwater run-off will be collected and pumped out / discharged via the same stormwater system and potential basin. A small 45m² of pavement at the Noblet Street driveway will be drained out to the nearby watertable, in order to allow formation of a protective ridgeline without compromising the main carpark's drainage and capacity for storage

There is no increase in the 'impermeability' of the site, but significant 'major storm' detention capacity is required on-site, due to Council's requirements to effectively reduce these outflows to 'minor storm' size. The eastern carpark is to be dished to provide the necessary storage ability.

Refer to Appendix F for preliminary calculations relating to the required stormwater detention capacity. The full site requirement if passed via an orifice restriction is 85m³ of capacity, which will be storable within the proposed eastern carpark shape.

Use will be made of a proprietary "Oil and Grease Arrestor" such as the Rocla 'First Defense' model to clean up almost all carpark run-off.

Refer to Appendix G for the relevant Civil Stormwater and Level Concept Plan, including proposed site levels, capture points and drainage layouts.

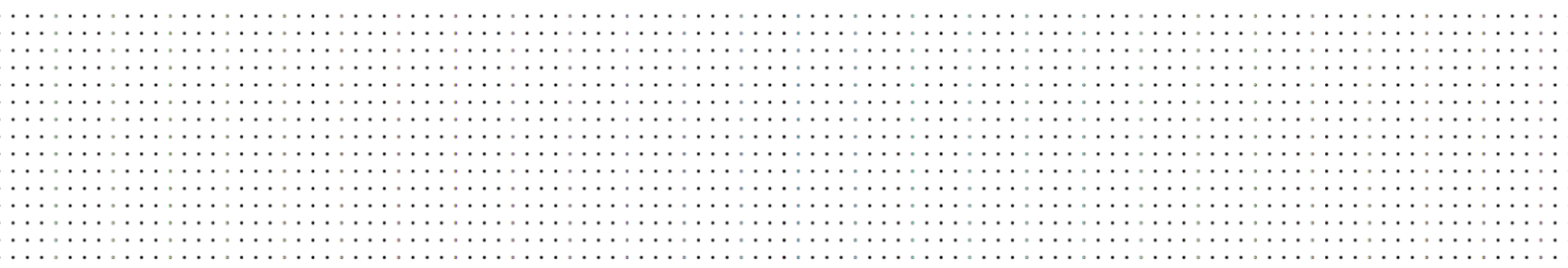
2.6 SUMMARY

The preliminary Concept Plans and details contained within this report have been prepared to demonstrate the philosophy behind the proposed treatment and disbursement of the stormwater runoff at the proposed development.

Consideration has been given to the probable flood levels, the site surface levels and gradings, the stormwater discharge issues and the general interfaces. The information provided is preliminary and will be subject to the final detailed design and documentation necessary.

APPENDIX A

ENGINEERING SURVEY





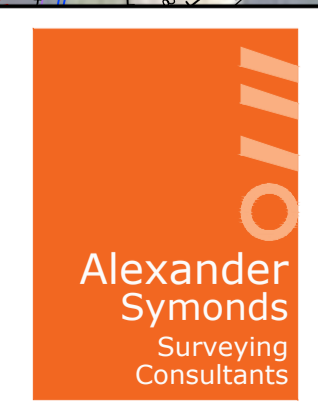
0	04.10.2019	INITIAL RELEASE	JOB	NJS
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

LEGEND	
47.51TK TOP KERB	47.36TW TOP WINDOW SILL LEVEL
47.36WT WATER TABLE	45.16WB WINDOW SILL LEVEL
45.16FL FLOOR LEVEL	48.12RR ROOF LEVEL
48.12IL INVERT LEVEL	48.12TW TOP WALL LEVEL
WATER METER	15.30LIGHT LIGHTING LUMINAIRE
SPRINKLER / RRIG VALVE	48.12CVR VERANDAH LEVEL
HYDRANT	48.12OH OVERHEAD WIRES
DOMESTIC OUTLET	SIGN / BUS SIGN
DOWNPIPE	TICKET MACHINE
DOMESTIC SLUMP	ROAD / ELEC. SERVICE
STORMWATER WHOLE	WATER SV / FP
SEP / GRATING	ELEC. / GAS METER
	GAS SERVICE
PSM	PEG / TBM
SURVEY MARKS	BOREHOLE
POWER / LIGHT POLE	CABLE MARKER
STONE / WOODEN POLE	POST / BOLLARD
SEWER RM / IO / SIP	UNKNOWN POINT / SERVICE
TEL COMM. PILLAR / PIT	
EDGE OF VEGETATION	ROAD SIGN / HOARD
TREE / SHRUB	POSSIBLY REGULATED / SIGNIFICANT TREE BY MEASUREMENT ONLY (TRUNK GREATER THAN 2.0m GROUNDLEVEL). PROFESSIONAL ADVICE FROM COUNCIL / ARBORIST REQUIRED.
BOTTOM OF BANK	TOP OF BANK
CHANGE OF GRADE	DRAIN
SEWER PIPE UG	TEL COMM. UG
WATER PIPE UG	BUILDING
WALL	GI BUILDING
CONCRETE	FENCE
GATE	

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GRO: ND PLANE ORIENTED TO: MGA 2020 / ONE 54
SCALE:	GRO: ND (CSF) 1:10002223
ADOPTED STATION & AUTHORITY	
PSM 2 3 5	RL: 2 4 0 4 1 1
PSM 2 3 5	E: 2 4 0 4 1 1
	N: 134 0 424 SDB
SDB denotes SA Government survey data base values (Dated: / / 2015)	

Notes:	
Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.	
No underground services have been located. All underground services must be identified prior to any excavation or construction work on site.	
CONTO R INTER: AL:	0.2 MIN 1.0 MAI
S R EY: N S:	2.0 201
DRA: N: B:	04.10.201
CHEC: ED:	04.10.201

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+ Property + Land Development + + Construction + Mining + + Spatial Information Management +	



DETAIL AND LEVEL SURVEY	
263-275 GRANGE ROAD	
FINDON	
DRAWING No.	SHEET 2 OF 3
A013210 D 00 R 00	REVISION
	0



0	04.10.2019	INITIAL RELEASE	JOB	NJS
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

LEGEND	
47.51TK TOP KERB	47.36TW TOP WINDOW SILL LEVEL
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45.16FL FLOOR LEVEL	48.12RR ROOF LEVEL
48.12IL INVERT LEVEL	48.12TW TOP WALL LEVEL
○ TAP	○ 15.30LIGHT LIGHTING LUMINAIRE
○ WATER METER	48.12OV OVERHEAD WIRE
○ SPRINKLER / RRIG VALVE	○ SIGN / BUS SIGN
○ HYDRANT	○ TICKET MACHINE
○ DOMESTIC OUTLET	○ ROAD / ELEC. SERVICE
○ DOWNPIPE	○ WATER SV / FP
○ DOMESTIC SLUMP	○ STORMWATER WHOLE
○ STORMWATER WHOLE	○ ELEC. / GAS METER
○ SEP / GRATING	○ GAS SERVICE
□ PSM	□ PEG / TBM
△ SURVEY MARKS	○ BOREHOLE
○ POWER / LIGHT POLE	○ CABLE MARKER
○ STONE / WOODEN POLE	○ POST / BOLLARD
○ SEWER RM / IO / SIP	○ UNKNOWN POINT / SERVICE
○ TEL COMM. PILLAR / PIT	
— EDGE OF VEGET.	— ROAD SIGN / HOARD.
— TREE / SHRUB	— SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.
— BOTTOM OF BANK	— TOP OF BANK
— CHANGE OF GRADE	— DRAIN
— SEWER PIPE UG	— TEL COMM. UG
— WATER PIPE UG	— BUILDING
— WALL	— GI BUILDING
— CONCRETE	— FENCE
— GATE	

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GRO: ND PLANE ORIENTED TO: MGA 2020 ONE 54
SCALE:	GRO: ND (CSF 1.0002223)
ADOPTED STATION & AUTHORITY	
PSM 2 3 5	RL: 2 4 0 4 2 SDB
PSM 2 3 5	E: 2 4 0 4 2 SDB
	N: 134 0 424 SDB
SDB denotes SA Government survey data base values (Dated: / / 2015)	

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1:200 ORIGINAL SHEET SIZE A1

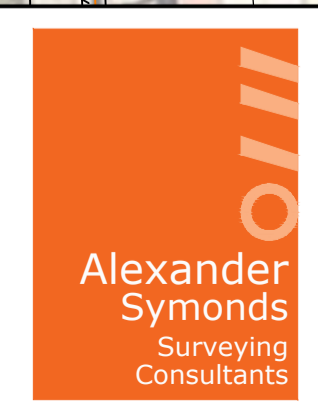
Notes:
 Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.
 No underground services have been located.
 All underground services must be identified prior to any excavation or construction work on site.

CONTO: R INTER: AL: 0.2 MIN 1.0 MAI
 S R EY: N S 2.0 2011
 DRAL: N: B 04.10.2011
 CHEC: ED: 04.10.2011

Alexander & Symonds Pty Ltd
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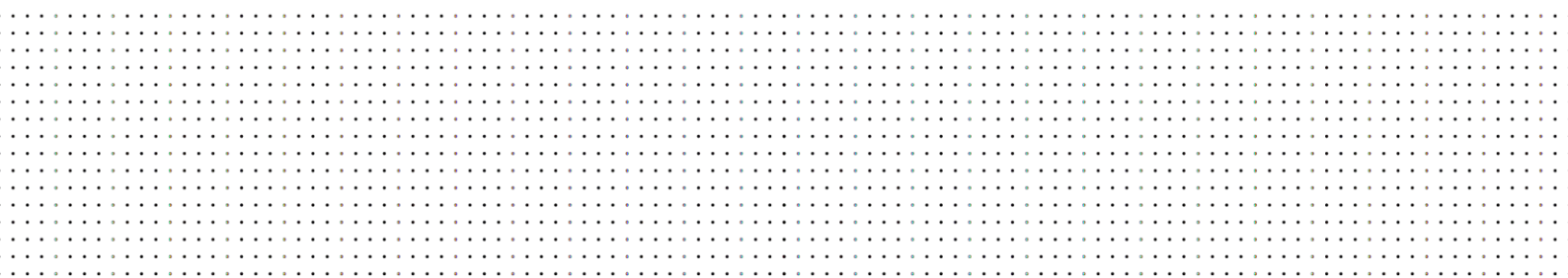


DETAIL AND LEVEL SURVEY
263-275 GRANGE ROAD
FINDON

DRAWING No. A013211 D | R | (0) SHEET 3 OF 3 REVISION 0

APPENDIX B

SITE PHOTOGRAPHS









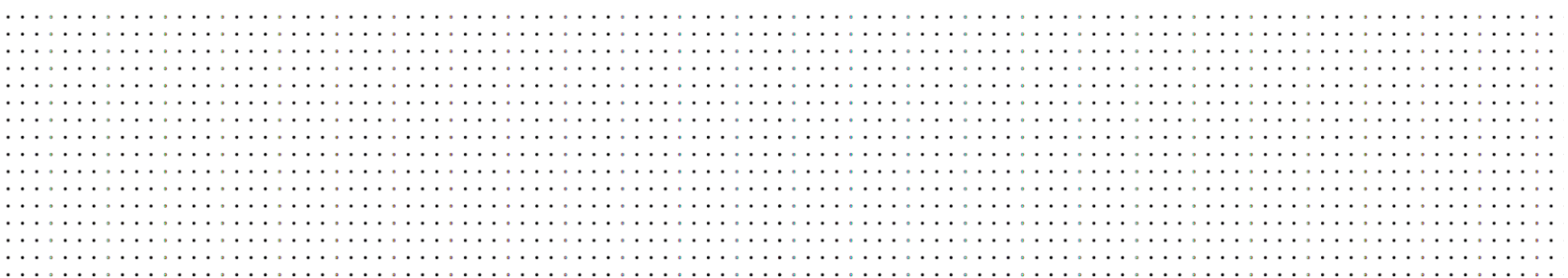




APPENDIX C

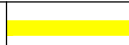

ARCHITECTURAL

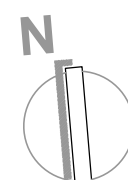
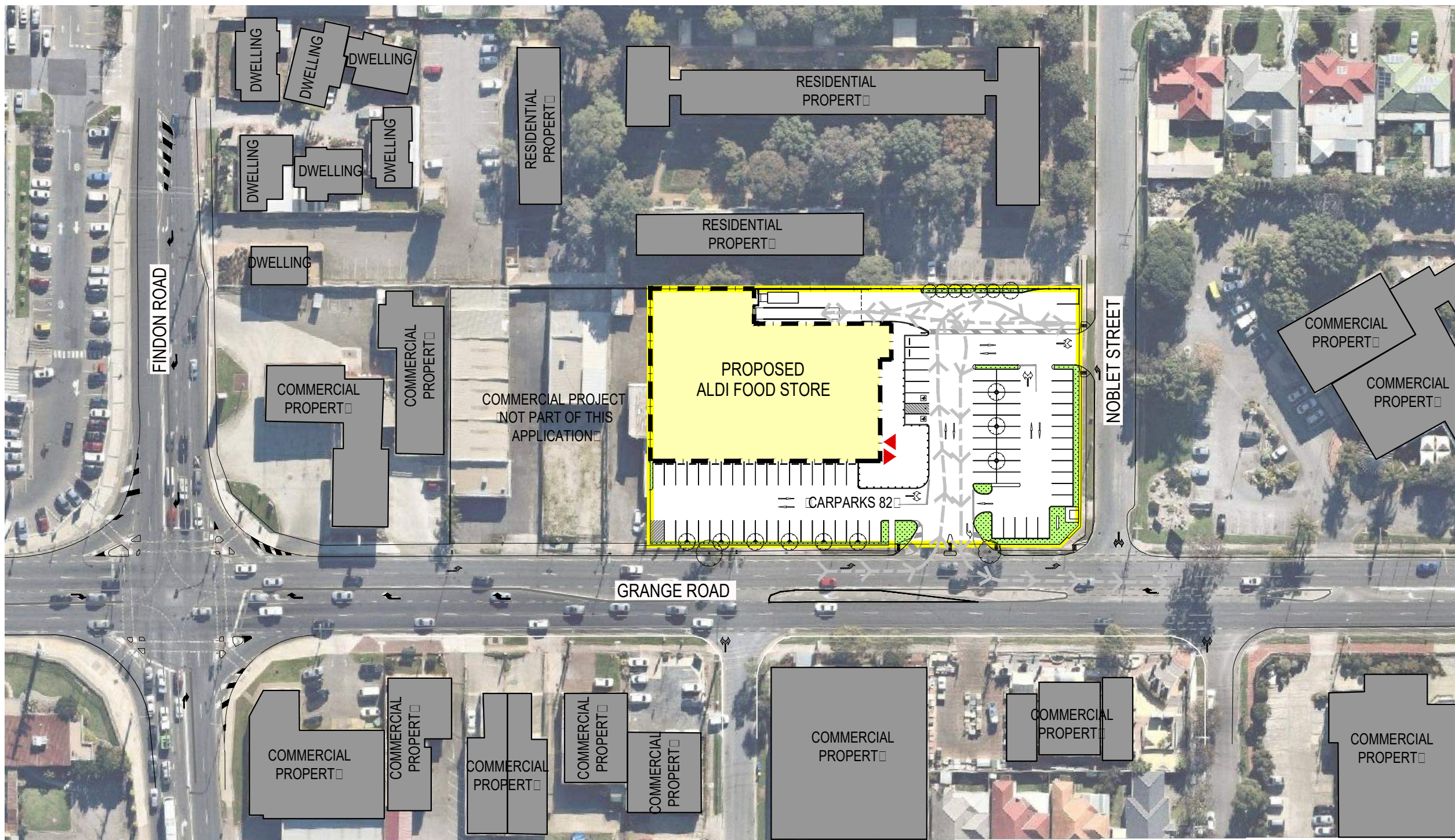
PLANS



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F	01.11.19	PLANNING	BS	TB
G	06.11.19	PLANNING	BS	TB
H	19.11.19	PLANNING	BS	TB

LEGEND	
BO: NDARY	
ALDI STORE	



01 LOCATION PLAN
1:1000 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
LOCATION PLAN
PROPOSED

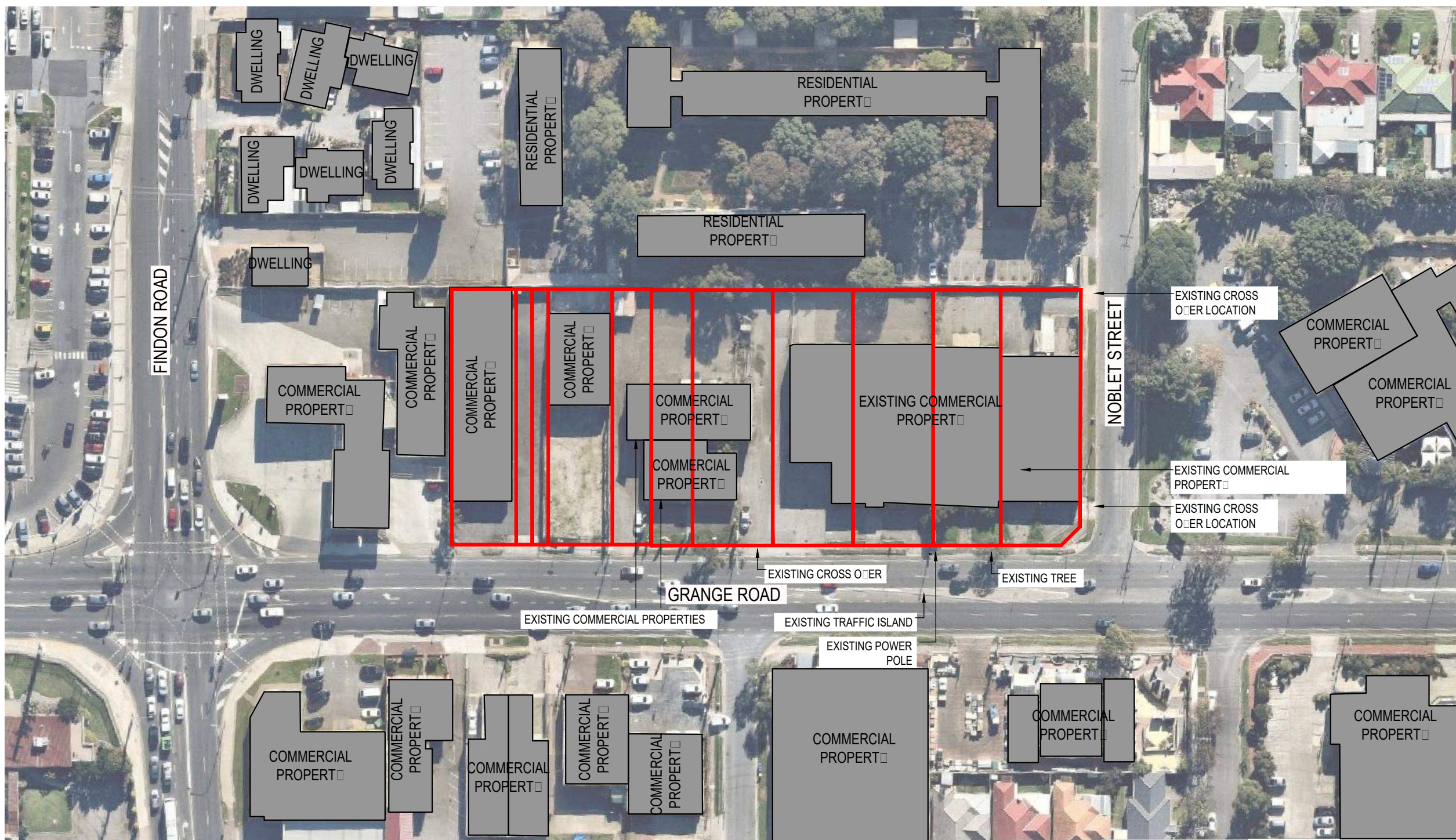
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2354	DA01	DA	H

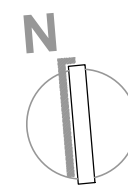
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B	17.10.19	PLANNING	BS	TB

LEGEND	
EXISTING BOUNDARY	
EXISTING CONTROLLER	0.00
EXISTING LEVEL	EX 0.00
DESIGN LEVEL	RL 0.00



01 EXISTING SITE PLAN
1:1000 EXISTING



CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
EXISTING SITE PLAN

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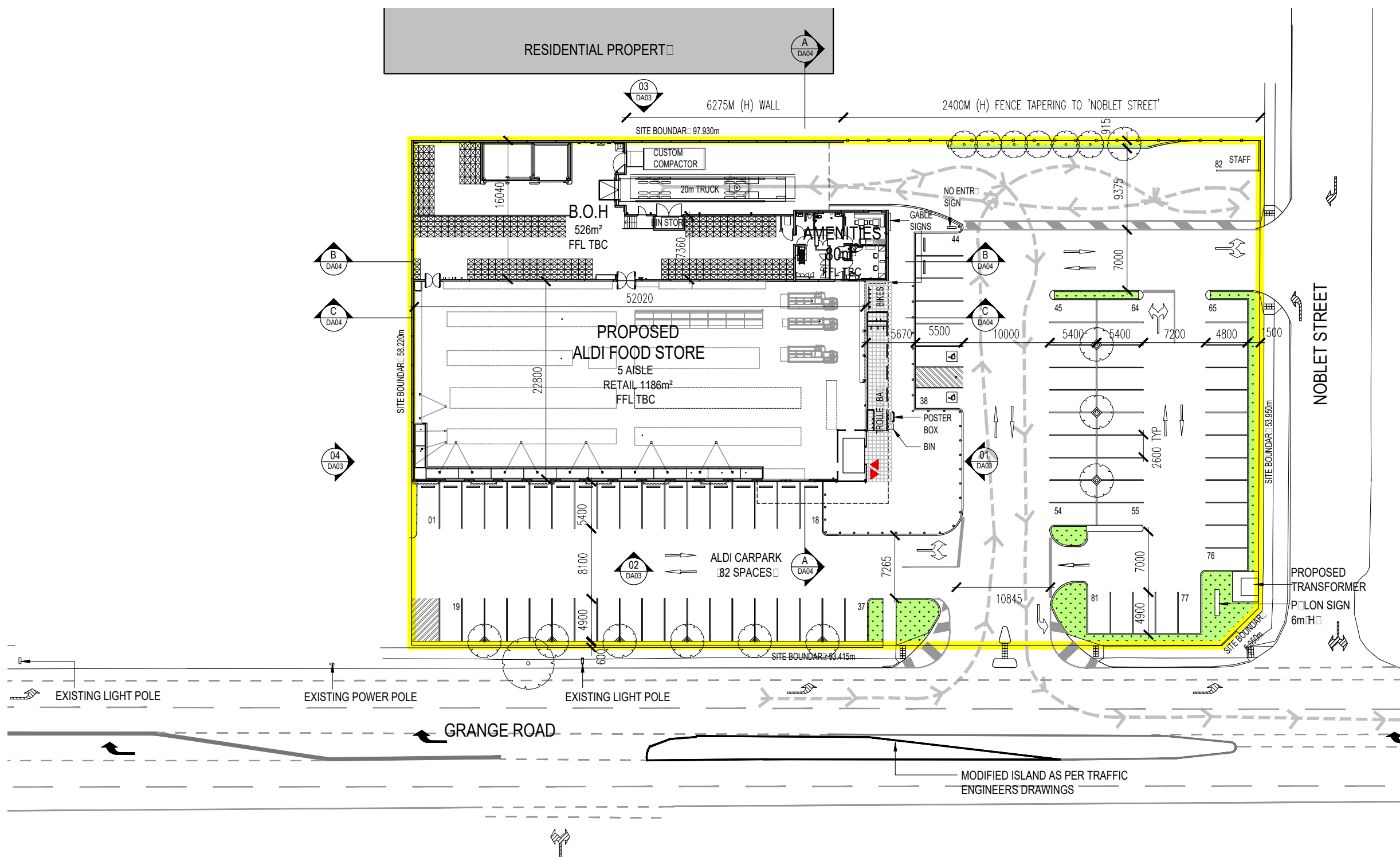
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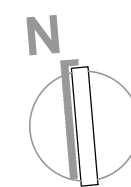
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G	20.11.19	PLANNING	BS	TB
H	21.11.19	PLANNING	BS	TB
I	22.11.19	PLANNING	BS	TB

PROPERTY DESCRIPTION	
TOTAL SITE AREA	5686m ²
TOTAL ALDI SITE AREA	5686m ²
BUILDING GROSS AREA	1849m ²
BUILDING NETT AREA	1792m ²
RETAIL NETT AREA	1186m ²
BOH NETT AREA	526m ²
AMENITIES NETT AREA	80m ²
REMAINING NETT AREA	606m ²
RESERVE AREA	∅
PARK / TRAFFIC AREA	3225m ²
NUMBER OF CARS	∅ 2
BOH PALLETS	35∅
LANDSCAPED AREA	∅
CHILLER LENGTH	43.∅ 5∅
TRUCK LENGTH	20∅

ALDI SITE	∅
-----------	---



01 PROPOSED PLAN
1:500 PROPOSED



CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
PROPOSED SITE PLAN

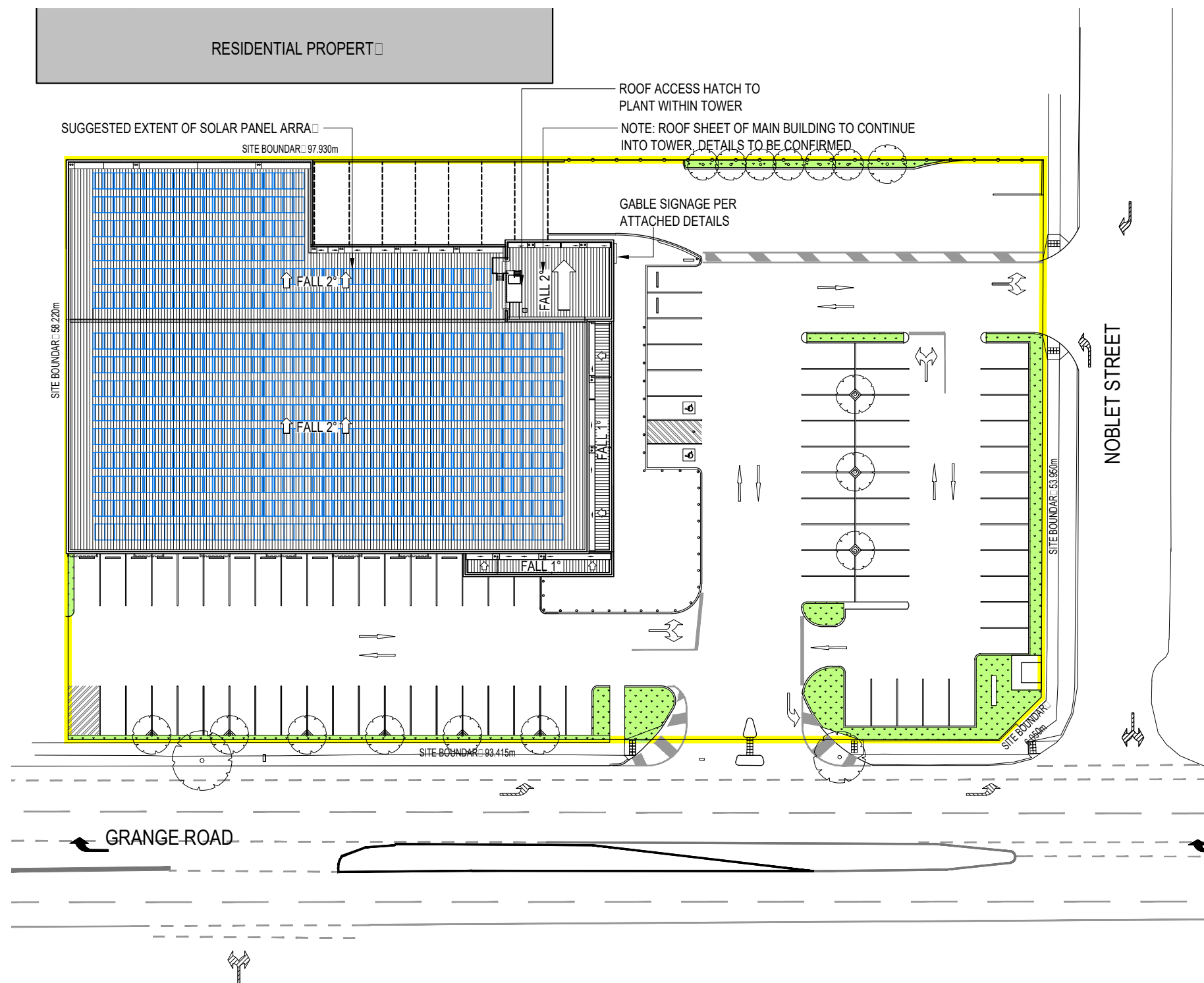
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G	06.11.19	PLANNING	BS	TB
H	20.11.19	PLANNING	BS	TB
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01 ROOF PLAN
1:500 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
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DRAWING
PROPOSED ROOF PLAN

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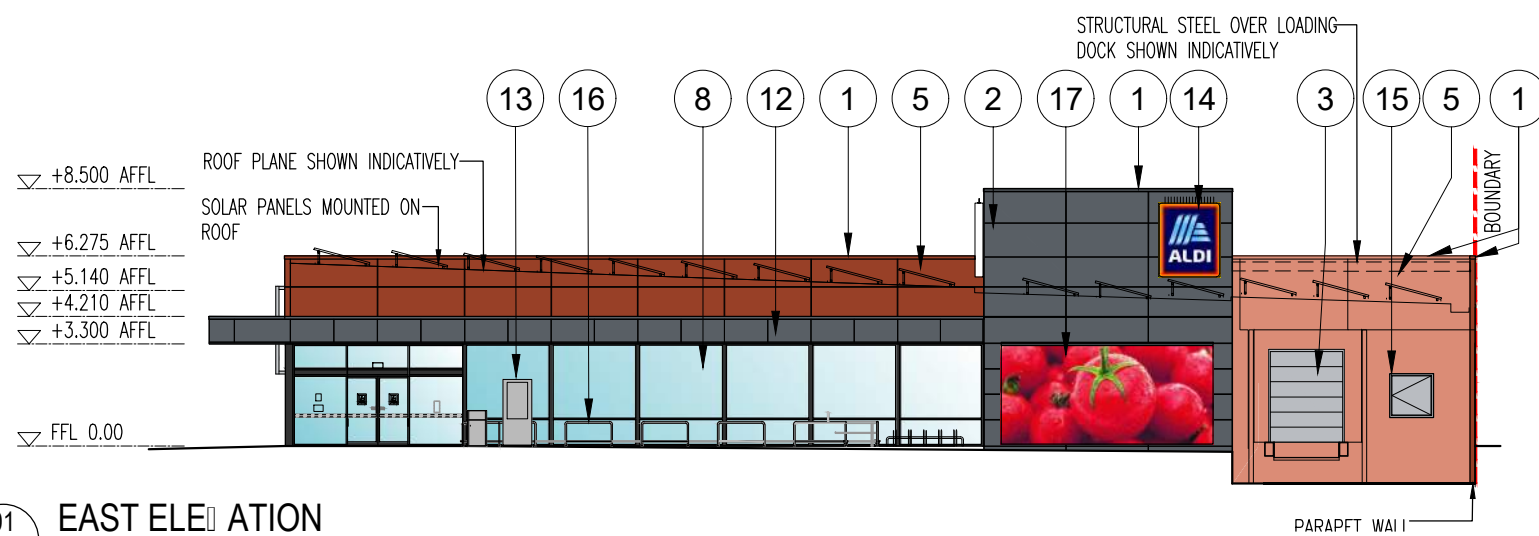
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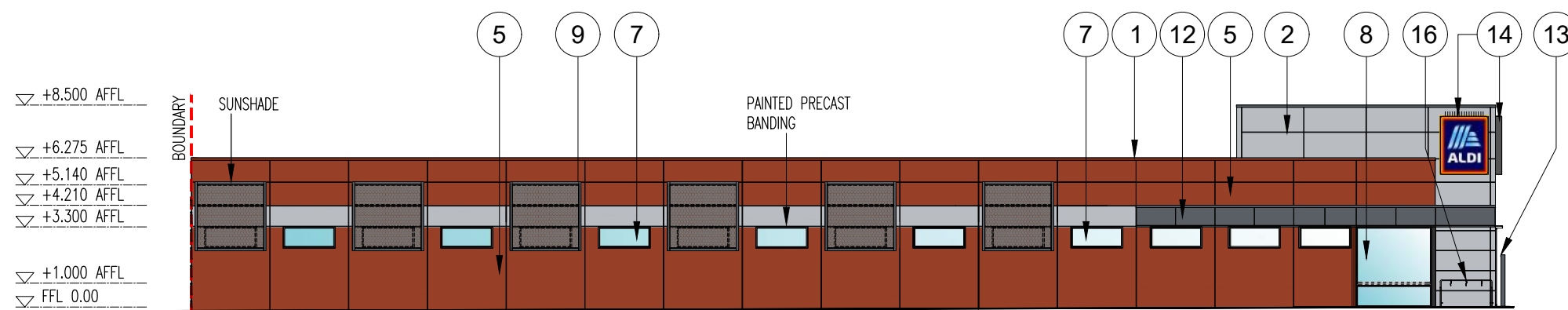
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G	20.11.19	PLANNING	BS	TB
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I	22.11.19	PLANNING	BS	TB

MATERIAL SCHEDULE

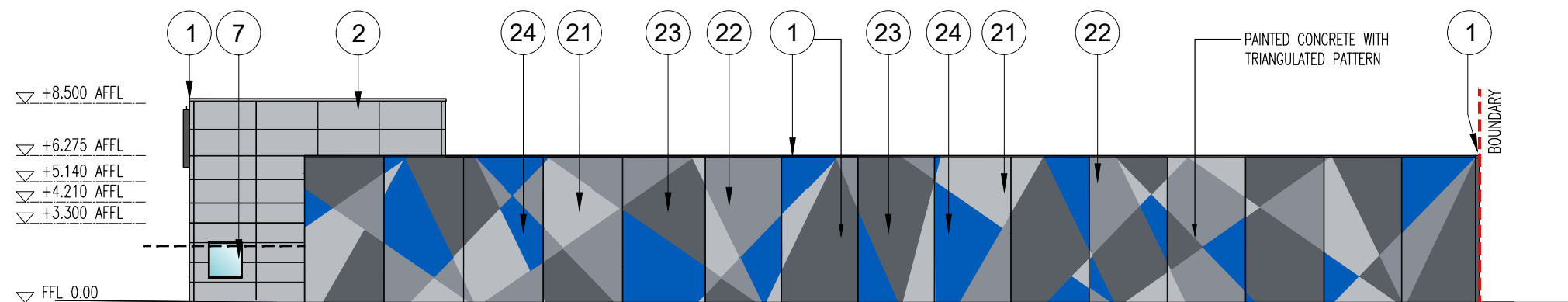
1 - COLORBOND CAPPING, COLOUR TO MATCH ADJACENT WALL PANEL FINISH
2 - WALL PANEL, PAINT FINISH DULUX 'DRIVETIME'
3 - PANEL LIFT DOOR, PRE PAINT FINISH - DULUX 'BASALT'
4 - COLORBOND ROOF SHEETING, 'SURFMIST'
5 - WALL PANEL, PAINT FINISH DULUX 'FLUORESCENT FIRE'
7 - WINDOWS - ANODISED ALUMINIUM FRAMES, NATURAL FINISH
8 - SHOPFRONT - ANODISED ALUMINIUM FRAMES, NATURAL FINISH
9 - SUNSCREEN - PAINTED STEEL FRAME, DULUX 'BASALT'
12 - FIBRE CEMENT FASCIA, DULUX 'DRIVETIME'
13 - POSTER BOX
14 - ALDI ILLUMINATED SIGNS
15 - COMPACTOR DOOR [] FRAME - 'OLDE PEWTER'
16 - TROLLEY BAY
17 - EXTERNAL LIFESTYLE IMAGE (TOMATO)
18 - PLANT LOUVERS - POWDERCOATED DULUX 'BASALT'
19 - SOLAR PANELS
20 - PRECAST CONCRETE WALL PANEL, FACE FINISH
21 - WALL PANEL, PAINT FINISH LIGHT GREY
22 - WALL PANEL, PAINT FINISH MID GREY
23 - WALL PANEL, PAINT FINISH DARK GREY
24 - WALL PANEL, PAINT FINISH BLUE



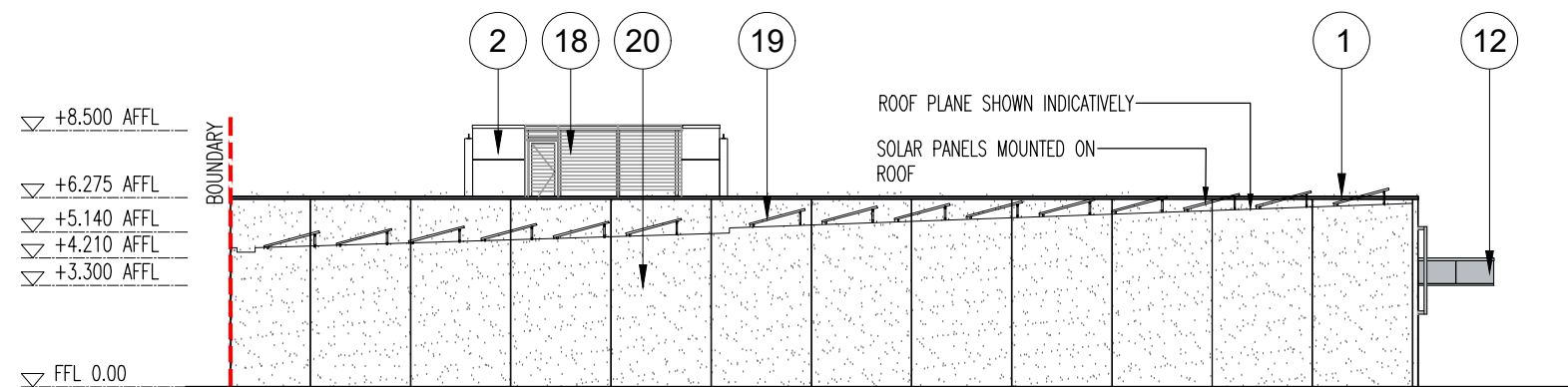
01 EAST ELEVATION
DA02.3 1:250 PROPOSED



02 SOUTH ELEVATION
DA02.3 1:250 PROPOSED



03 NORTH ELEVATION
DA02.3 1:250 PROPOSED



04 WEST ELEVATION
DA02.3 1:250 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

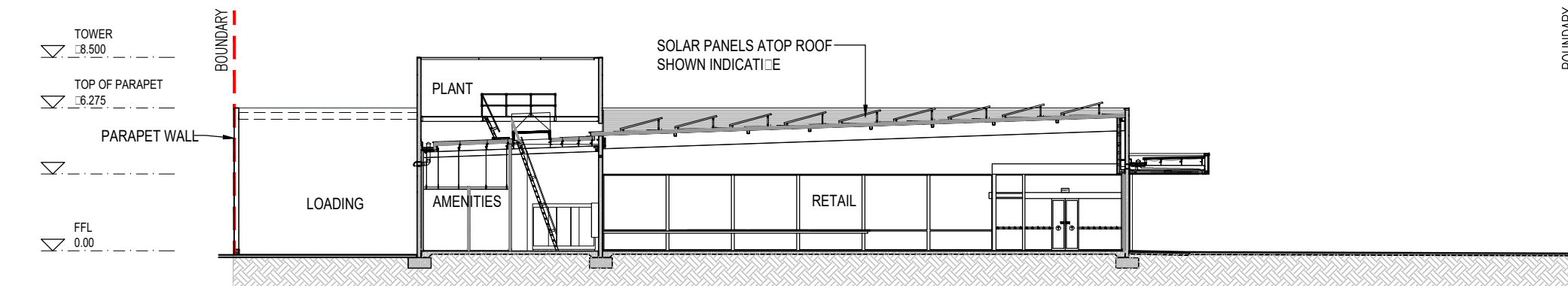
DRAWING
ALDI EXTERNAL ELEVATIONS

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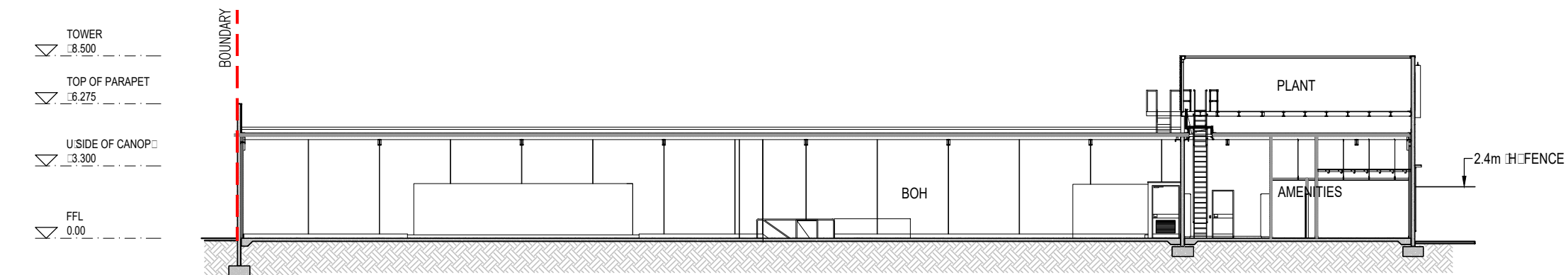
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PROJECT No	DRAWING No	STATUS	REV
2354	DA03	DA	I

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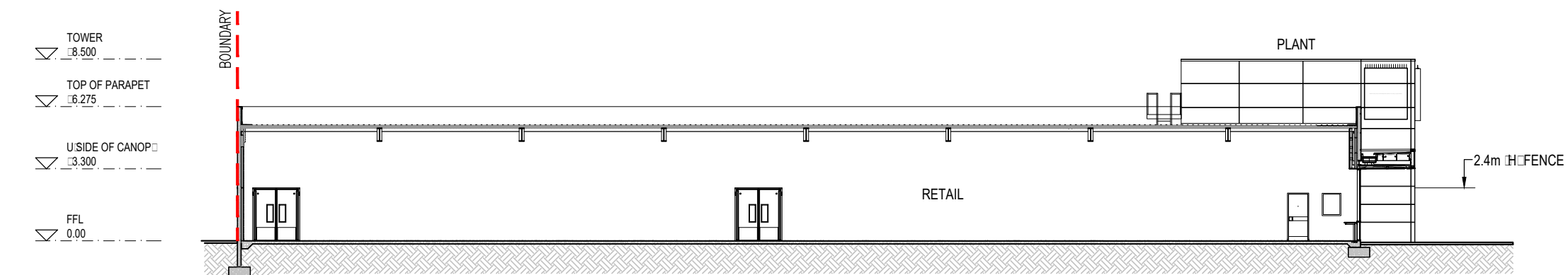
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D	20.11.19	PLANNING	BS	TB



01 SECTION A-A
DA02.3 1:250 PROPOSED



02 SECTION B-B
DA02.3 1:250 PROPOSED



03 SECTION C-C
DA02.3 1:250 PROPOSED

CLIENT
ALDI STORES



PROJECT
ALDI FINDON
263-271 GRANGE ROAD,
FINDON, S.A.

DRAWING
PROPOSED SECTIONS

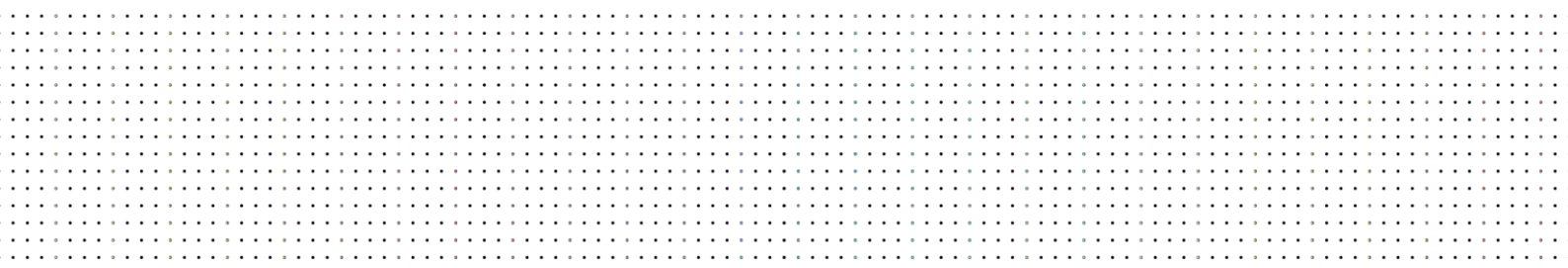
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PROJECT No	DRAWING No	STATUS	REV
2354	DA04	DA	D

APPENDIX D

COUNCIL STORMWATER REQUIREMENTS



Warren Smith

From: Carmine D'Amico <cdamico@charlessturt.sa.gov.au>
Sent: 25 October 2019 1:09 PM
To: Warren Smith
Cc: Gerard Peters
Subject: RE: Proposed ALDI Findon; Grange Road

Hi Warren,

All well here – just flat out busy.

Hope this email finds you well.

Answers to your query are below in **RED**.

Thanks

Carmine D'Amico MIEAust NER
Development Project Engineer
Engineering Strategy & Assets

72 Woodville Rd, Woodville 5011

T: (08) 8408 1189 M: 0488229923 F: (08) 8408 1122

cdamico@charlessturt.sa.gov.au

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<https://filedrop.charlessturt.sa.gov.au/filedrop/cdamico@charlessturt.sa.gov.au>



From: Warren Smith <WSmith@wga.com.au>
Sent: Monday, 21 October 2019 1:47 PM
To: Carmine D'Amico <cdamico@charlessturt.sa.gov.au>
Cc: Gerard Peters <gpeters@charlessturt.sa.gov.au>
Subject: Proposed ALDI Findon; Grange Road

Hi Carmine, Gerard,

Hope you are well.

I'm working up a Stormwater Management Plan for a proposed Aldi store at the corner of Grange Road and Noblet St in Findon. Attached is a bunch of information that we've received – survey, draft arch plans etc – plus some bits and pieces I've sourced on-line.

Looks like:

- Site does get some flood inundation and we'll need to look closely at FFL
- There is an obvious stormwater connection 'branch' which we'll propose to use; having inspected on site it looks like a 300mm RCP passing out there
- Site is impermeable currently with stormwater discharge to each street watertable and via underground 'branch'

Yes – preferred connection point is to existing SEP/JB in Grange Road – not Noblet street. This is currently a GIP and will need to be converted to a standard Council double SEP if the driveway is moved.

Are you able to please provide for our use:

- Confirmation of the required stormwater design detention requirements that apply here
Detention requirements are Council standard for commercial development. 1 in 5 year PRE Development flows can not be exceeded by the 1 in 100 year POST Development flows from the site. Preference is to discharge 1 in 5 year pre development flow directly into the council underground network at the SEP/JB in grange road. The 300 RCP pipe will also need to be checked and validated it can take the flows from the site and roadway to check if it needs to be upsized to a 375 RCP class 4.
- Plans of the Council stormwater infrastructure at the front
We don't have any plans of this area – just the GIS location information. We don't have a depth either.

Many thanks; much appreciated

Regards

Warren Smith SENIOR CIVIL ENGINEER

BE, MIEAust



60 Wyatt Street, Adelaide SA 5000

PHONE 08 8223 7433

MOBILE 0403 177 915

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D34 Stormwater Management Plan

What is a Stormwater and Siteworks Plan?

All applications must identify the method of stormwater disposal. Plans, specifications and computations must be provided to demonstrate compliance with the requirements in *Table 1: Requirements and Guidelines*. This is a requirement for planning approval.

The following check list is provided to assist in identifying and specifying components of the proposed stormwater systems:

- Pervious and impervious area identification
- Existing site and adjacent road levels
- Existing and proposed floor levels
- Proposed site levels
- Directions of flow
- Pollutant control devices
- All proposed drainage lines
- Pipe sizes
- Pipe gradients
- Pipe levels
- Collection points
- Discharge points
- Pits, sumps
- Soakage systems

Table 1: Requirements and Guidelines

Requirements	Guidelines
<p>1. No run-off shall be directed from the development site to adjacent properties.</p>	<p>Runoff from the whole site shall be directed to the street gutter via one or more of the following:</p> <ul style="list-style-type: none"> • Gravity drains • Sealed pressure drains • Overflows from soakage pits • Overflows from detention/retention systems • Pump systems • Site-works grading • Overflow paths.
<p>2. The floor levels, site works and drainage system shall be designed to provide 100-year ARI protection against inundation of buildings and any flood intolerant structures.</p>	<ul style="list-style-type: none"> • This applies to a 1 in 100 year ARI storm over the development site. • This is to be achieved by a combination of the above drainage systems and the setting of safe floor and site-works levels. • All finished floor levels (excluding undercroft car park) shall be a minimum of 0.3m above the highest adjacent street water table level. • It is required to be demonstrated that driveway profile(s) comply with the vehicle clearance and grade requirements of AS2890. The levels, distances, gradients and any required transitions for the entire driveway (from the roadway crossfall and including the footpath) are required to be specified. Any required alterations to a footpath are required to be detailed, must comply with AS1428 (limiting longitudinal gradient 1 in 14) and Council's requirement for a maximum crossfall of 2.5%. • Reference must also be made to the Development Information Guide Stormwater Inundation Mitigation for requirements for dwellings at risk to stormwater inundation in a 1 in 100 year ARI event. These requirements may exceed the requirements here in this document.
<p>3. Measures shall be incorporated within the site-works along the property boundary to contain gutter flows.</p>	<ul style="list-style-type: none"> • Driveway and property levels along the property/road reserve boundary shall be specified at least 225mm above the adjacent street gutter levels (unless in a flood zone, refer to Development Information Guide D33 – Stormwater Inundation). • If the property falls away from the roadway or the floor levels are less than 0.3m above the highest adjacent street

Requirements	Guidelines
	<p>gutter level, measures are to be specified to form a continuous (including its driveway) barrier along or near the lot frontage at a minimum of 0.3m above adjacent street gutter levels.</p>
<p>4. Measures shall be incorporated in all development to ensure no stormwater borne pollutants (including litter, silt and any harmful substances) are discharged into Council's drainage system.</p>	<ul style="list-style-type: none"> • For Residential development: by the provision of silt and litter traps. • For Commercial/Industrial development: by the provision of devices to remove solid and liquid pollutants, prior to discharge to Council's drainage system. (For Commercial/Industrial development at risk to large fuel spills additional EPA requirements may be applicable.)
<p>5. Soakage systems shall be safely located, shall provide effective detention and shall be environmentally appropriate.</p>	<p>Soakage systems:</p> <ul style="list-style-type: none"> • Shall be located only class A and S sites OR alternatively borelog testing is required for council assessment to determine if the site soil conditions are sufficient for soakage system. • Shall be designed for a 1 in 100 year ARI. • Shall not be located within 3m of any footing or property boundary and not be located on ground sloping more than 30 degrees. • Shall collect only roof and surface runoff from clean, non-vehicular areas and comply with EPA requirements. • For Detention purposes systems shall be demonstrated to be empty within 24 hours of a storm. • Shall incorporate an overflow for when/if the storage capacity is exceeded.
<p>6. Pump System Design and pump system failure. When pump system failure may result in inundation of any building or adjacent property, measures shall be incorporated to minimise the risk of failure during a storm.</p>	<p>If failure of the pump system is likely to result in flooding of a building, under-croft or adjacent properties then the following shall apply:</p> <ul style="list-style-type: none"> • Two pumps shall be provided, each capable of the design flow rate. • The pumps shall be configured to automatically alternate as the duty pump. • The system shall be configured to automatically revert to the alternate pump should the duty pump fail. • An Audible Alarm system must be provided • Either a back-up power supply or a safe power failure storage (below and/or above ground) with a volume equal

Requirements	Guidelines
	to a 5 year ARI, 4 hour duration storm run-off without pump operation and without flooding of buildings, under-crofts or any properties shall be provided.
7. When a development property abuts a Council laneway, buildings shall be located safely and have safe floor levels to reduce flood risk from the laneway.	<p>Where a building or structure is proposed at a location abutting a Council lane-way, the following additional minimum requirements apply:</p> <ul style="list-style-type: none"> • Proposed buildings and structures shall be set back a minimum distance of 2m from the property/laneway boundary. • Proposed floor levels shall comply with other applicable requirements and shall be a minimum of 0.20m above the highest adjacent laneway level, whichever is the highest. • No stormwater is permitted to discharge to a laneway.
8. All works necessary beyond the property boundaries shall be to Council's requirements and standard details.	All works (e.g. connections across Council's footpath, connection to Council's drains, new entranceways and removal and reinstatement of abandoned entranceways) shall be specified on the plan to meet Councils requirements and standard details.
9. Discharge rates	<ul style="list-style-type: none"> • The maximum discharge rate per development to council street water table is 10L/s. • All residential development is required to be discharge stormwater to the street water table. • Development with large pre development flows will be assessed on their own merits.
10. Maintenance	It is the responsibility of the property owner to ensure all Drainage Infrastructure within the development site shall be maintained, serviced, cleaned and sustained operational as required by the stormwater design.

Note: Further requirements will apply for sites identified as flood prone. See [City of Charles Sturt Development Information Guide D33 – Stormwater Inundation](#).

What are the requirements for stormwater detention on site?

For some development, Council requires the discharge of stormwater from the site to Council's drainage system to be restricted. The objectives are to minimize flooding and the impact of increased runoff from infill development within catchments. Compliance with Council's requirements can require detailed engineering analysis and computations. To simplify this process for Applicants, two options are provided. Option 1 is a simplified requirement which can be applied for specific conditions. All other development or Applicants not choosing to comply with Option 1, are required to comply with Option 2.

Option 1

For new dwellings or extensions to a dwelling, with total proposed roof area up to 400 m² and a street frontage of more than 5m, provision of an above ground rainwater detention tank, collecting a minimum 90% of the total proposed roof area, draining to Council's drainage system or street gutter via a 20mm orifice restriction such that the volume is available at all times, will be considered as complying with Council's detention requirements without computations.

The minimum detention tank volumes are:

<u>Total proposed roof area (m²):</u>	<u>Detention volume (litres):</u>
Up to 50 m ²	Nil
Up to 200 m ²	2000 litres
Up to 300 m ²	4000 litres
Up to 400 m ²	6000 litres
Greater than 400 m ²	Option 2 applies

For underground detention tank(s) and all other development, stormwater detention systems and computations are required as per Option 2.

Option 2

- All commercial and industrial development
- Sites identified as at risk of flooding (as defined by City of Charles Sturt to [Development Information Guide D33 – Stormwater Inundation](#))
- Development Applications for more than two dwellings
- Sites which abut laneways
- Vacant Land
- Sites which; form part of a larger development, where detention has already been incorporated, may be exempt from this requirement. Please refer to Council's Planning Department for advice regarding exemptions.
- Note development of less than 50 square meters is excluded from this requirement.

For the above identified development, the post development peak rate of runoff from the development site from the "design" storm must not exceed that from the pre development site from a 5 year ARI storm.

Note:

- The critical storm duration must be identified.
- For residential development of less than 3 dwellings and more than 50m², the "design" storm is 5 year Average Recurrence Interval (ARI).
- For all other development the "design" storm is 100 year ARI.

- Any required detention storage can be either above or below ground tanks, soakage systems or graded site areas or any combination.
- Any outflow restriction device shall be calculated and specified on the plan.
- Computations shall be provided to demonstrate compliance with the requirements.
- Impervious, detained and un-detained catchments shall be identified.
- Detention storages must be available at all times and must be demonstrated to be emptied within 24 hours of a storm.
- Retention storages for re-use or plumbing to a dwelling are not permitted for detention purposes. Detention tanks must be empty at the beginning of a rain event.

What are the requirements for stormwater retention on site?

Requirements: An additional water supply must supplement mains water:

- For all new dwellings; and
- For extensions and additions which include a toilet, laundry or water heater.

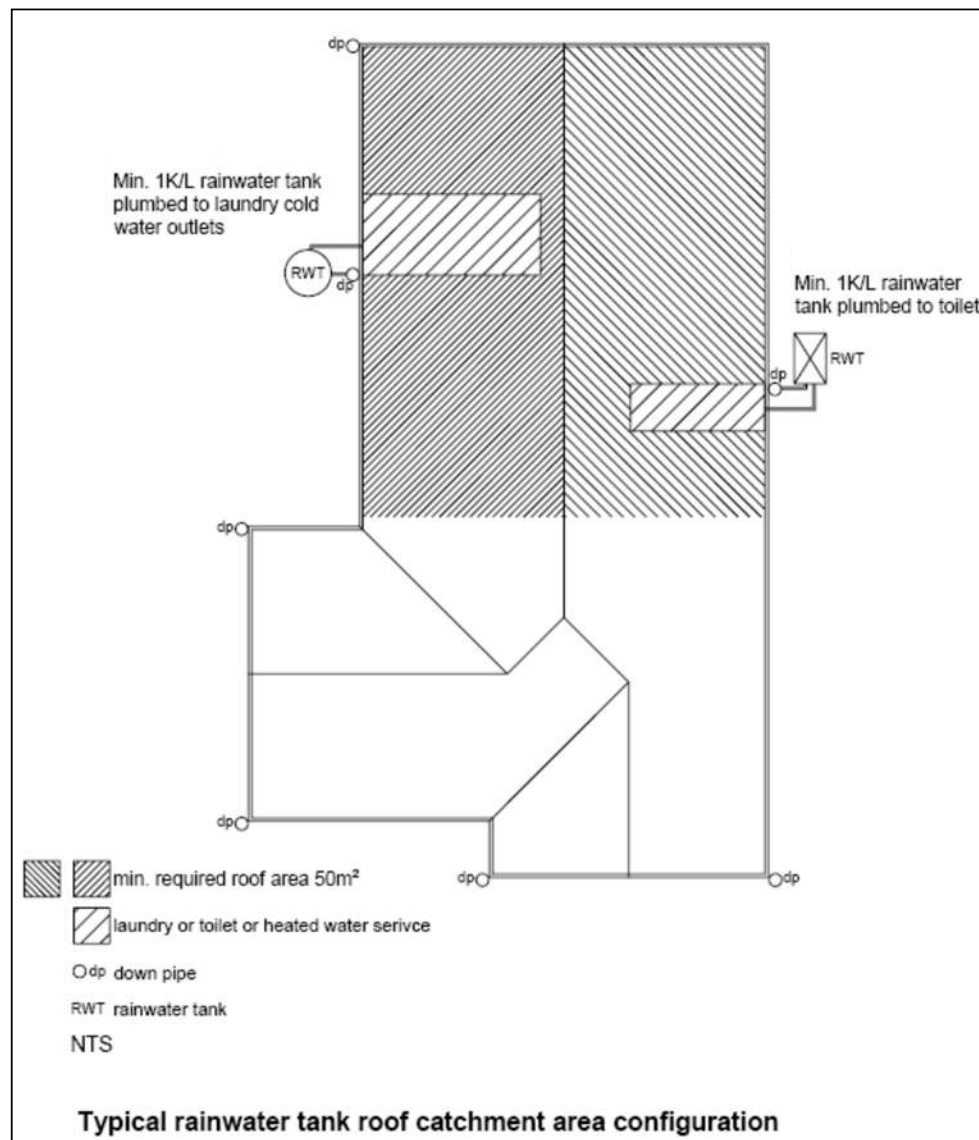
What minimum size rainwater tank do I require and does it need to be plumbed into my house?

Rainwater from a minimum of 50m² of the roof catchment area must be collected by gutters and downpipes; stored in a rainwater tank with a minimum capacity of 1 kilolitre (1000 litres) and plumbed to either:

- A toilet; water heater; or all cold water laundry outlets.

The Floor Plan / Plan View must include:

- Roof layout showing catchment area and location of downpipes and water tanks.
- An overflow device must be fitted to the tank and to ensure water quality a mosquito proof, non-degradable screen must be attached.



Example of roof water re-use plan provided by Department of Planning and Local Government above.

Where multiple dwellings utilise a communal rainwater tank, the minimum capacity of the tank must be multiplied by the number of dwellings contributing to it. Plumbing work must be done by a licensed plumber and comply with AS/NZS 3500:2003, the National Plumbing and Drainage Code and any SA variations published by SA Water. The technical requirements of rainwater tanks are contained in Section 14 of AS/NZS 3500:2003 and the SA Water variations.

Further Information:

Department of Planning, Transport and Infrastructure

Web: <http://www.dpti.sa.gov.au/>

SA Water

Web: www.sawater.com.au

Phone: 1300 650 950

Department of Environment, Water and Natural Resources

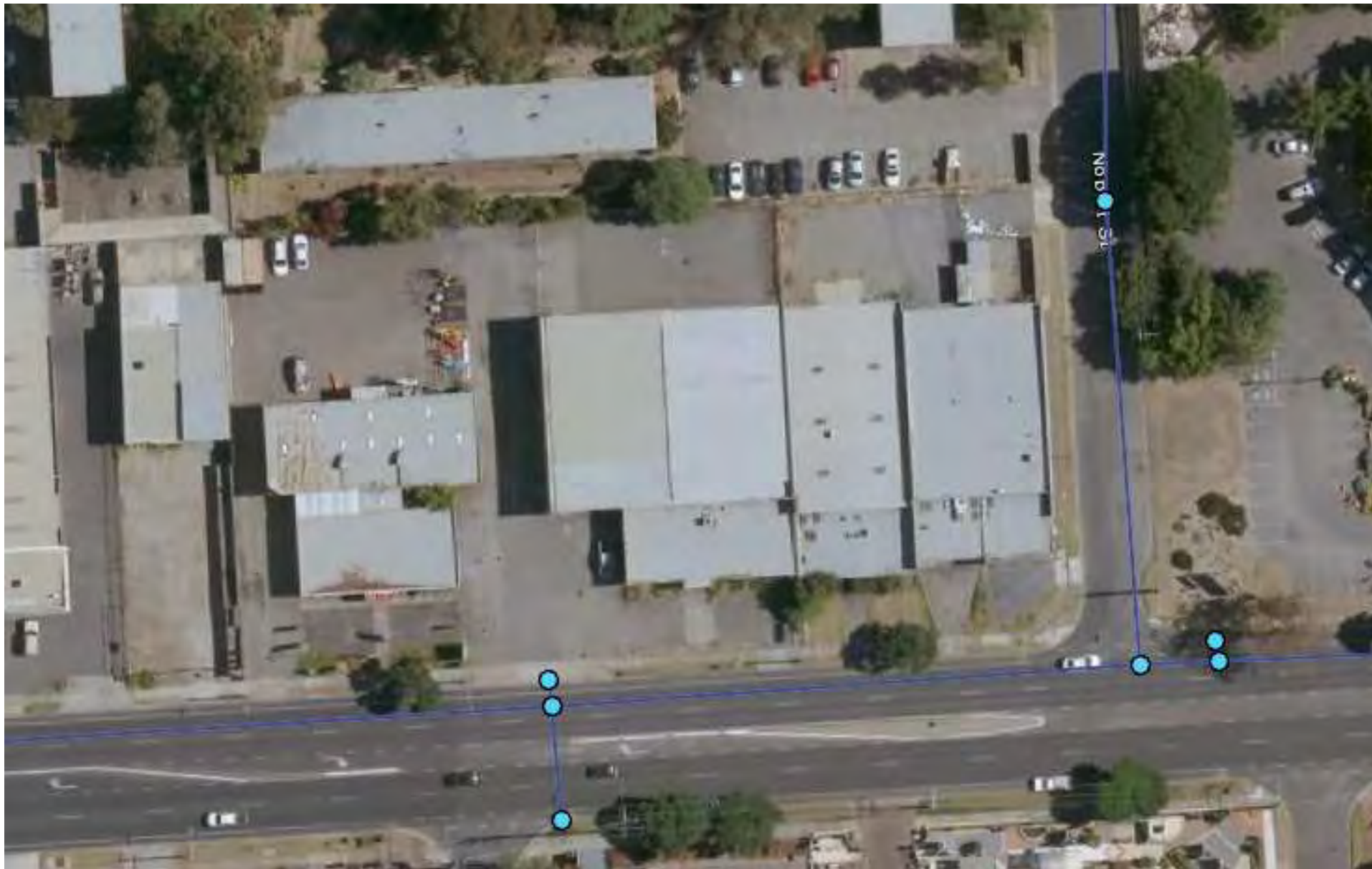
Web: <http://www.environment.sa.gov.au>

EPA

Web: www.epa.sa.gov.au

Phone: 8204 2004

Development Information Guides are intended to help applicants to submit applications which are complete, well prepared, and can be processed efficiently. The information provided is intended as a general guide only and applicants are encouraged to refer to the City of Charles Sturt Development Plan and to seek professional advice if necessary. This information is subject to frequent updates. This version last updated October 2019. Access the Development Plan and current versions of information guides at www.charlessturt.sa.gov.au.



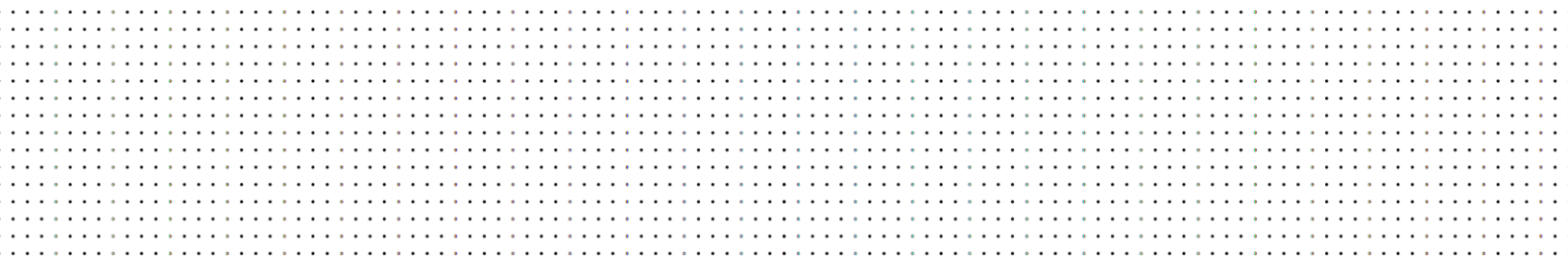
263 - 271 GRANGE ROAD, FINDON

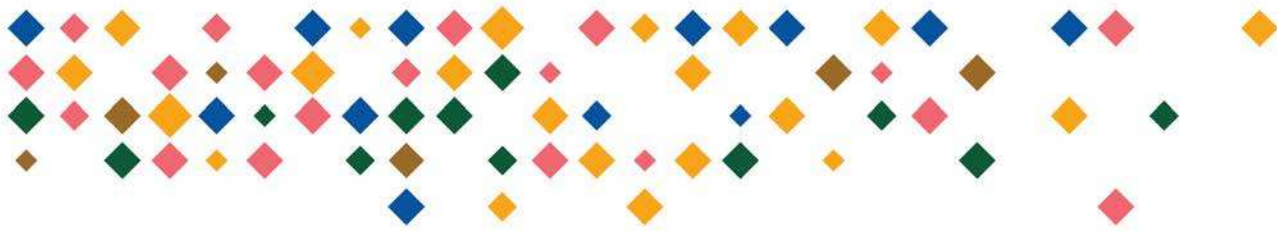
LOCATIONS SA STORMWATER INFRASTRUCTURE MAP

APPENDIX E

COUNCIL FLOOD

MAPPING





D33 Stormwater Inundation Mitigation

Introduction

The Council has identified the risk of flooding across the entire City of Charles Sturt by preparing Stormwater Inundation maps.

This development information guide is designed to assist the preparation of applications for development on properties that have been identified as being at risk of Stormwater Inundation. Please refer to [Stormwater Flood Plain Mapping](#) on Council's website.

This guide provides suggestions about minimum measures that might assist your development proposal to meet the requirements of the Council's Development Plan. However, the suggestions should be considered to provide broad guidance only. Council cannot provide design advice and you are strongly encouraged to seek professional assistance from a qualified Civil Engineer in preparing your proposal.

Development Policy

In relation to flooding, the Development Plan requires that all new development meets the following requirements:

- It is developed with a public stormwater system capable of catering for a 1 in 100 year Average Return Interval (ARI) flood event.
- Buildings are designed and constructed to prevent the entry of floodwaters in a 1 in 100 year ARI flood event.
- Development should include stormwater management systems to protect it from damage during a minimum of a 1 in 100 year average return interval flood.

The Council assesses each development application in detail and determines whether it meets the criteria, and in doing so requires that all new development complies with appropriate standards for stormwater and flood management.

If your development proposal is for non-habitable, non-storage type structures (eg: open, unenclosed pergolas, garages and carports), or wet areas which do not form part of a larger development application, there may be more flexibility in the way the structure is built as the level of risk may be lower. Please discuss your proposal with Council's Planning and Development staff if you consider this may apply.

Flood Mitigation Checklist

If you are considering lodging a Development Application and your property has been identified as being at risk of flooding, the following process will be of assistance in ensuring your application meets the requirements of the Development Plan and therefore increases the likelihood of a timely approval.

Once completed, this document along with supporting attachments can be submitted as part of your Development Application at the planning stage, to assist Council in the assessment process.

Step 1	<p>Is the site (land) at risk of flooding?</p> <p>Has the property been identified at risk of flooding?</p> <p><i>This information can be located on Council's website</i></p>	<p>If No, these guidelines do not apply. However, you may still wish to consider them as a precaution.</p> <p>If Yes, continue to Step 2.</p>
Step 2	<p>Is the proposed development (building work) at risk of flooding when complete?</p> <p>This can be checked by reviewing the information provided below to owners of properties at risk of flooding on our website. Council can provide limited information, and for properties at risk of flooding Council may need you to provide a survey plan of the site showing contours of the site.</p>	<p>If Yes, refer to the Flood Mitigation Guide in this guide.</p>
Step 3	<p>Prepare and submit your Development Application to Council.</p>	

Flood Mitigation Guide

Preventing Inundation – Finished Floor Levels

- For all proposed development on sites that are not at risk of flooding, all finished floor levels (excluding any under-croft car park) should be a **minimum of 0.30 m** above the adjacent road water table level as measured at the centre of the allotment
- For all proposed development on sites at risk of flooding, all finished floor levels(excluding any under-croft car park) should provide a **minimum 0.15 m** “freeboard” above 100 year ARI flood levels, for all floor levels (refer Figures 1 and 2).
- If the allotment slopes away from the road by a grade of more than 0.25% the site finished floor levels (excluding under-croft car park) should be as high as practical within the site constraints (refer Figure 2).

Managing Water Flows

The proposed development should not increase the flood risk to other properties during a 1 in 100 year ARI flood.

New driveway levels at the road frontage lot boundary should be raised to minimise water entering the property from the roadway.

Note: Any changes to existing finished floor levels will require planning approval.

Figure 1 –
Properties that slope towards the road

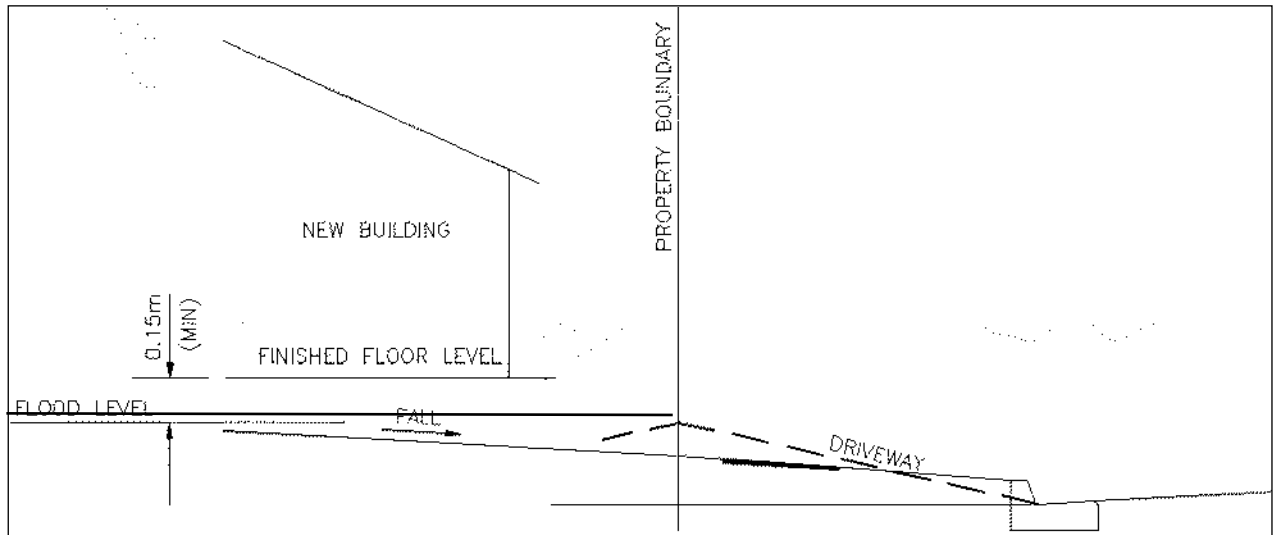
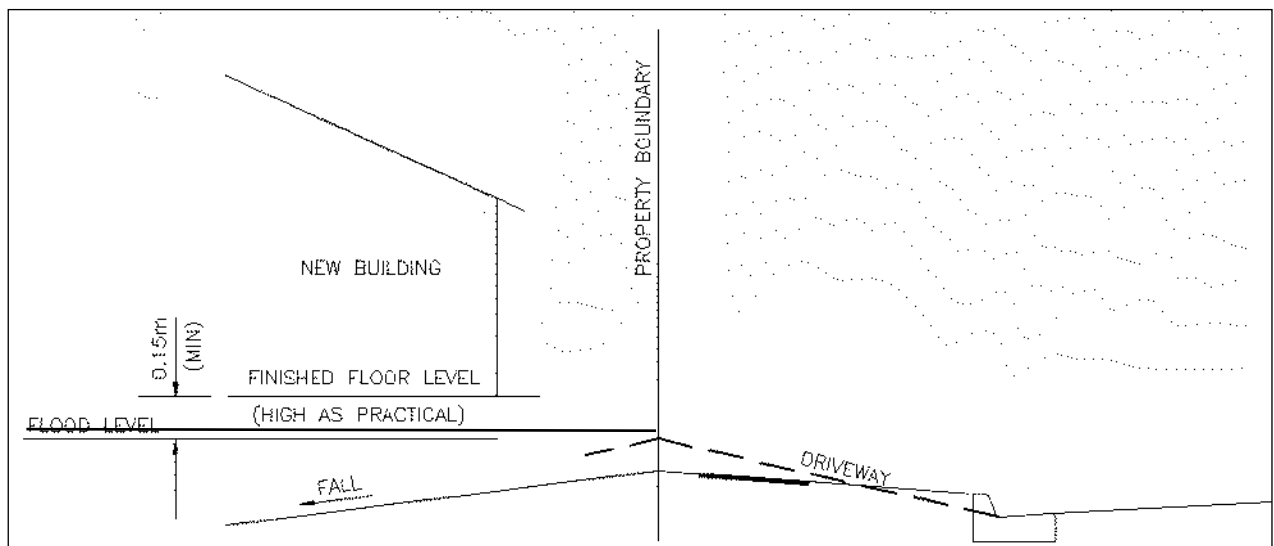


Figure 2 –
Properties that slope away from the road by a grade of more that 0.25%

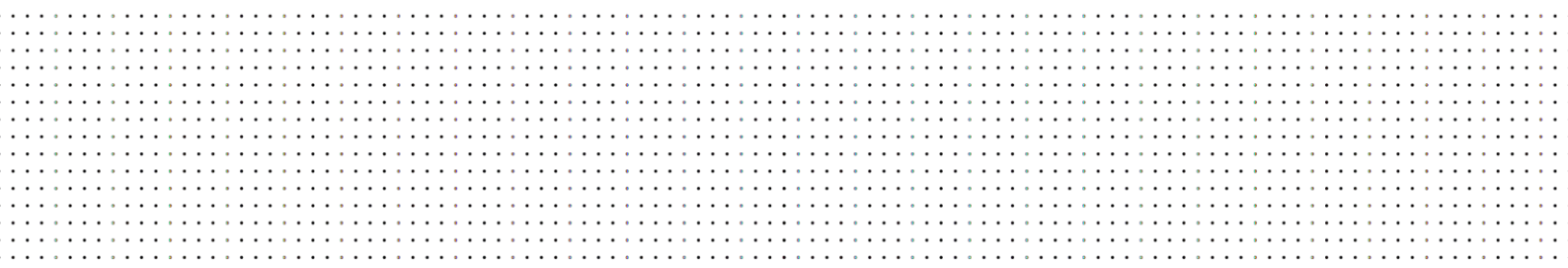


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APPENDIX F

STORMWATER DETENTION CALCULATIONS



STORM WATER DETENTION CALCULATIONS

ALDI FINDON

263-271 GRANGE ROAD, FINDON

City of Charles Sturt require that outflow from the "post-development" 1 in 100 year ARI event, does not exceed that outflow resulting from the "pre-development" 1 in 5 year event.

Impermeability of the site (pre/post) is unchanged and near total \Rightarrow consider $C_w = 0.9$

Consider 5 year, 10 min event ($I = 60.1 \text{ mm/hr}$)
 $A = 5676 \text{ m}^2$

$$\Rightarrow \text{5yr, 10min Pre-Development } Q = \frac{0.9 \times 60.1 \times 5676}{3600}$$
$$= \underline{85.3 \text{ L/sec allowable.}}$$

\therefore Restrict outflow in "post" 100 year ARI events to 85.3 L/sec .

Refer to SWC2 + SWC3

Approx 85 m^3 detention capacity required if all controlled via orifice

Basic Stormwater Detention Assessment **Page: SWC2**

Title : ALDI Findon

Job No: WGA170244

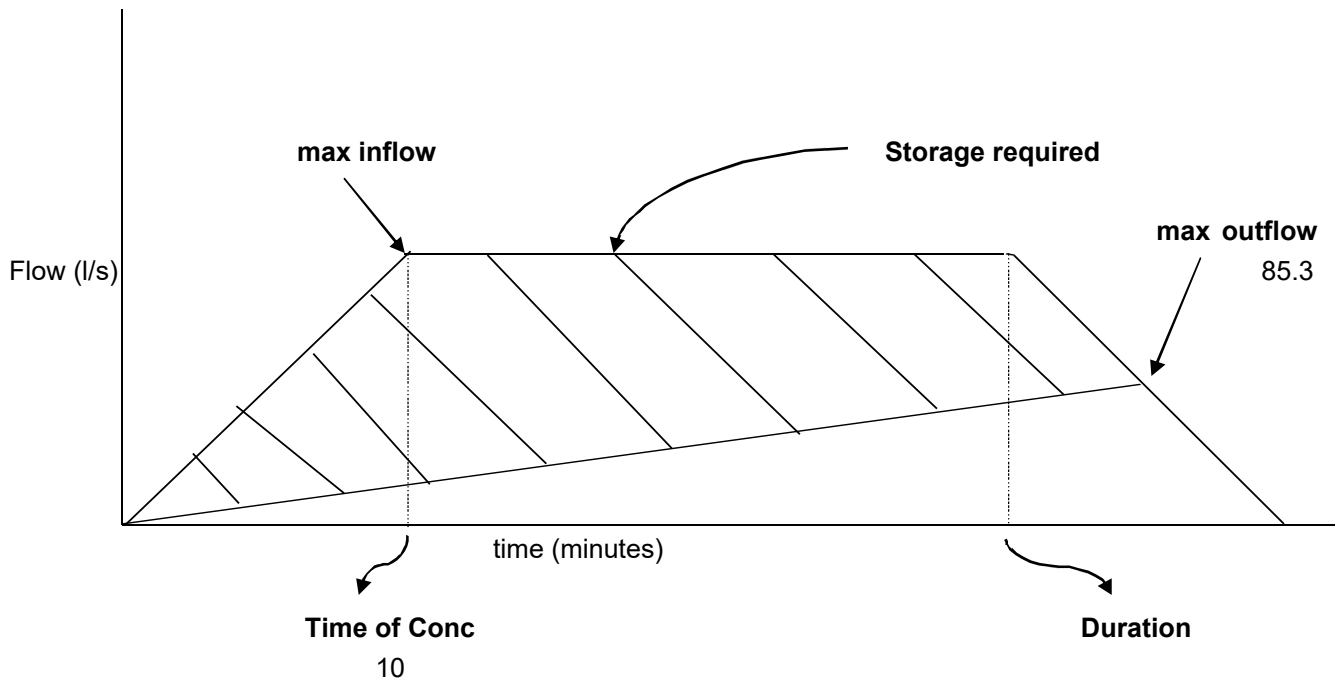
Area 5676 m²
 Coeff Permeability 0.9
 Time of conc. 10 min
 ARI Storm 100 Year
 Max Outflow Qp 85.3 l/sec

Location: Findon, S.A.

Duration min	Intensity mm/hr	Inflow rate Ip l/sec	Inflow Vol Vi m3	Max Storage Smax m3
5	186	263.9	79.18	40.80
5.5	178	252.6	83.35	43.69
6	172	244.1	87.86	46.92
6.5	166	235.6	91.87	49.64
7	161	228.5	95.95	52.45
7.5	156	221.4	99.61	54.83
8	151	214.3	102.85	56.79
8.5	147	208.6	106.38	59.04
9	143	202.9	109.58	60.95
9.5	139	197.2	112.43	62.53
10	136	193.0	115.79	64.61
11	129	183.1	120.81	67.07
12	124	176.0	126.69	70.39
13	119	168.9	131.71	72.85
14	114	161.8	135.88	74.47
15	110	156.1	140.48	76.51
16	106	150.4	144.40	77.86
17	103	146.2	149.08	79.99
18	99	140.5	151.72	80.07
19	96	136.2	155.30	81.08
20	94	133.4	160.06	83.29
21	91	129.1	162.70	83.37
22	88	124.9	164.83	82.94
23	86	122.0	168.41	83.96
24	84	119.2	171.64	84.64
25	82	116.4	174.54	84.97
26	80	113.5	177.09	84.97
27	78	110.7	179.30	84.62
28	76	107.8	181.18	83.94
29	75	106.4	185.18	85.38
30	73	103.6	186.46	84.10
32	70	99.3	190.71	83.24
34	68	96.5	196.84	84.25
36	65	92.2	199.23	81.51
38	63	89.4	203.83	80.99
40	61	86.6	207.74	79.79

CRITICAL

	45	57	80.9	218.38	77.64
	50	53	75.2	225.62	72.08
(hours)	55	49.5	70.2	231.79	65.46
1	60	46.6	66.1	238.05	58.92
1.25	75	40.2	57.0	256.70	39.18
1.5	90	35.5	50.4	272.02	16.12
1.75	105	31.9	45.3	285.18	-9.11
2	120	29.1	41.3	297.31	-35.36
2.25	135	26.8	38.0	308.04	-63.02
2.5	150	24.9	35.3	318.00	-91.44
2.75	165	23.3	33.1	327.32	-120.50
3	180	21.9	31.1	335.62	-150.59
3.25	195	20.8	29.5	345.33	-179.27
3.5	210	19.7	28.0	352.22	-210.76
3.75	225	18.8	26.7	360.14	-241.22
4	240	17.9	25.4	365.76	-273.99
4.5	270	16.5	23.4	379.30	-337.22
5	300	15.4	21.9	393.35	-399.94

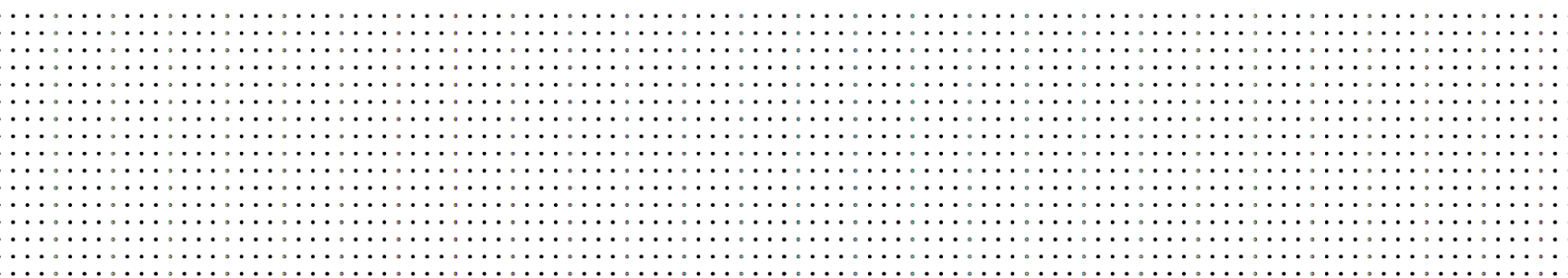


Orifice Flow Calculation

Hydrostatic Head	0.6	m (difference upstream/ downstream)
Required Flow	0.0853	m ³ /sec
Cd	0.65	
Hole width	0.02	m (if Rectangular)
Hole Ht	1.912	m (if rectangular)
Hole Dia	0.221	m - ORIFICE SIZE

APPENDIX G

SITE CIVIL CONCEPT





Warren Smith
SENIOR CIVIL ENGINEER

Telephone: 08 8223 7433
Email: WSmith@wga.com.au

ADELAIDE

60 Wyatt St
Adelaide SA 5000
Telephone: 08 8223 7433
Facsimile: 08 8232 0967

MELBOURNE

Level 2, 31 Market St
South Melbourne VIC 3205
Telephone: 03 9696 9522

PERTH

634 Murray St
West Perth WA 6005
Telephone: 08 9336 6528

DARWIN

Suite 7/9 Keith Ln
Fannie Bay NT 0820
Telephone: 08 8941 1678
Facsimile: 08 8941 5060

WHYALLA

1/15 Darling Tce
Whyalla SA 5600
Phone: 08 8644 0432

WALLBRIDGE GILBERT AZTEC

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adelaide@wga.com.au
