

CITY OF UNLEY
COUNCIL ASSESSMENT PANEL

Dear Member

I write to advise of the Council Assessment Panel Meeting to be held on Tuesday 18 January 2022 at 6:00pm in the Unley Council Chambers, 181 Unley Road Unley.



Don Donaldson
ASSESSMENT MANAGER

Dated 11/1/2022

KAURNA ACKNOWLEDGEMENT

Ngadlurlu tampinhi, ngadlu Kurna yartangka inparrinhi. Ngadlurlu parnuku tuwila yartangka tampinhi.

*Ngadlurlu Kurna Miyurna yaitya yarta-mathanya Wama Tarntanyaku tampinhi. Parnuku yaitya, parnuku tapa purruna yalarra puru purruna.**

We would like to acknowledge this land that we meet on today is the traditional lands for the Kurna people and that we respect their spiritual relationship with their country.

We also acknowledge the Kurna people as the traditional custodians of the Adelaide region and that their cultural and heritage beliefs are still as important to the living Kurna people today.

*Kurna Translation provided by Kurna Warra Karrpanthi

CITY OF UNLEY

COUNCIL ASSESSMENT PANEL

18 January 2022

MEMBERS:

Mr Brenton Burman (Presiding Member)
Mrs Colleen Dunn
Mr Ross Bateup
Mrs Emma Wright
Mr Michael McKeown

APOLOGIES:

CONFLICT OF INTEREST:

CONFIRMATION OF MINUTES:

MOVED:

SECONDED:

That the Minutes of the City of Unley, Council Assessment Panel meeting held on Thursday 21 December 2022, as printed and circulated, be taken as read and signed as a correct record.

AGENDA

Apologies
Conflict of Interest
Confirmation of the minutes

Item No	Development Act Applications	Page
Item No	Planning, Development Infrastructure Act Applications	Page
1.	196 Glen Osmond Road & 1A Gladstone Street, Fullarton – 21027177	4 - 450
Item No	Appeals Against Decision of Assessment Manager (PDI Act)	Page
	Nil	-
Item No	ERD Court Compromise Reports - CONFIDENTIAL	Page
	Motion to move into confidence	
	Nil	-
	Motion to move out of confidence	
Item No	Council Reports	Page
	Nil	
	Any Other Business	
	Matters for Council's consideration	

DEVELOPMENT NO:	1
DEVELOPMENT NO:	21027177
APPLICANT:	Development Holdings Pty Ltd
ADDRESS:	1A GLADSTONE ST FULLARTON SA 5063 196 GLEN OSMOND RD FULLARTON SA 5063
NATURE OF DEVELOPMENT:	Construction of a two-storey childcare centre (pre-school) and associated car parking, landscaping, fencing, retaining walls and six (6) signage displays
ZONING INFORMATION:	<p>Zones:</p> <ul style="list-style-type: none"> • Business Neighbourhood <p>Overlays:</p> <ul style="list-style-type: none"> • Airport Building Heights (Regulated) • Future Road Widening • Major Urban Transport Routes • Prescribed Wells Area • Regulated and Significant Tree • Traffic Generating Development <p>Technical Numeric Variations (TNVs):</p> <ul style="list-style-type: none"> • Maximum Building Height (9 Metres) • Maximum Building Height (2 Levels)
LODGEMENT DATE:	14 Sep 2021
RELEVANT AUTHORITY:	Assessment panel/Assessment manager at City of Unley
PLANNING & DESIGN CODE VERSION:	9 September 2021 - 2021.13
CATEGORY OF DEVELOPMENT:	Code Assessed - Performance Assessed
NOTIFICATION:	Yes
RECOMMENDING OFFICER:	Brendan Fewster Planning Officer
REFERRALS STATUTORY:	Commissioner of Highways
REFERRALS NON-STATUTORY:	Arboriculture Civil/Stormwater Traffic

CONTENTS:

Attachment 1:	Relevant P&D Code Provisions
Attachment 2:	Application Documents
Attachment 3:	Representations
Attachment 4:	Response to Representations
Attachment 5:	Statutory Referral Response
Attachment 6:	Internal Referral Responses

DETAILED DESCRIPTION OF PROPOSAL:

The proposal is for the construction of a two-storey childcare centre (pre-school) and associated car parking, landscaping, fencing, retaining walls and six (6) signage displays.

More specifically, the proposal includes:

- Construction of a two storey building with a floor area of approximately 600m² comprising internal play areas, sleep/cot rooms, a reception and office, bathroom facilities and staff amenities;
- A maximum of 103 children between the ages of 0 to 5;
- The building is of a modern design that features skillion-style roofs, a glass entrance, perimeter verandahs and a maximum building height of 6.25 metres. External materials include Colorbond wall and roof cladding with standing seam and mini orb profile finished in windspray and surfmist;
- Provision of 26 car parking spaces with access from Gladstone Street;
- Provision of landscaping adjacent to the proposed car park and within the outdoor play areas;
- Operating hours between 6.30am and 6.30pm Monday to Friday (excluding public holidays);
- Boundary fencing of Colorbond, palisade and brick construction ranging between 1.5 and 2.7 metres in height; and
- Six signs for business identification displayed on the building fascia and attached to the masonry fence on both the Glen Osmond Road and Gladstone Street frontages.

BACKGROUND

Development Approval was granted by Council on 7 August 2020 to divide the southern (rear) portion of the subject land into three allotments under DA 090/115/2020/DIV. Development Plan Consent has also been granted for the construction of four two storey dwellings at the rear of the site with access to be gained via a common driveway located to the south of 1A Gladstone Street (DA 775/2019/C2). While the development is yet to take place, the approvals remain valid.

SUBJECT LAND & LOCALITY:

Site Description:

Location reference: 1A GLADSTONE ST FULLARTON SA 5063

Title ref.: CT 5220/650 **Plan Parcel:** F15150 AL268 **Council:** CITY OF UNLEY

Location reference: 196 GLEN OSMOND RD FULLARTON SA 5063

Title ref.: CT 5494/46 **Plan Parcel:** F15150 AL269 **Council:** CITY OF UNLEY

The subject land comprises two contiguous allotments that are situated at 196 Glen Osmond Road and 1A Gladstone Street, Fullarton. The land has a frontage of 30.0 metres to Glen Osmond Road to the north, a frontage of 35.5 metres to Gladstone Road and a site area of 2246m². The southern portion of 196 Glen Osmond Road does not form part of the subject site as this land is to accommodate an approved residential development.

There are no easements, encumbrances or Land Management Agreements registered on the titles.

The subject site is occupied by two single storey dwellings and several outbuildings. These buildings do not have any heritage status. There is an existing crossover on Glen Osmond Road that is located close to the intersection of Gladstone Street, with a second crossover located on Gladstone Street that adjoins the boundary of 1 Gladstone Street to the south-west. Vehicle access from Glen Osmond Road to Gladstone Street is not permitted and there is on-street parking controls along Gladstone Street.

The land is mostly flat with a gentle cross-fall of around 1.3 metres towards Gladstone Street to the north-west.

While there are several large trees on the site, none of the trees are Regulated or Significant and therefore are not protected.

Locality

The northern and eastern parts of the locality comprise mostly commercial land uses that include a motel immediately to the east and on the northern side of Glen Osmond Road, a car dealership opposite Gladstone Street to the north, and various office, restaurant and shop uses. The car park of the Arkaba Shopping Centre and Hotel is adjacent to Gladstone Street to the west. The amenity in the vicinity of Glen Osmond Road is quite low due to the mixed built form character and the high volume and frequency of traffic.

Land to the south and to the west along Gladstone Street is primarily residential and is characterised by single storey dwellings on large rectangular allotments. This part of the locality is of high amenity, which is derived from the character and quality of the existing housing stock, vegetated front yards and mature street trees.



Subject Land



Locality

CONSENT TYPE REQUIRED:

Planning Consent

CATEGORY OF DEVELOPMENT:

- **PER ELEMENT:**
Advertisement: Code Assessed - Performance Assessed
Pre-school: Code Assessed - Performance Assessed
Fences and walls
Fence: Code Assessed - Performance Assessed
- **OVERALL APPLICATION CATEGORY:**
Code Assessed - Performance Assessed
- **REASON**
P&D Code

PUBLIC NOTIFICATION

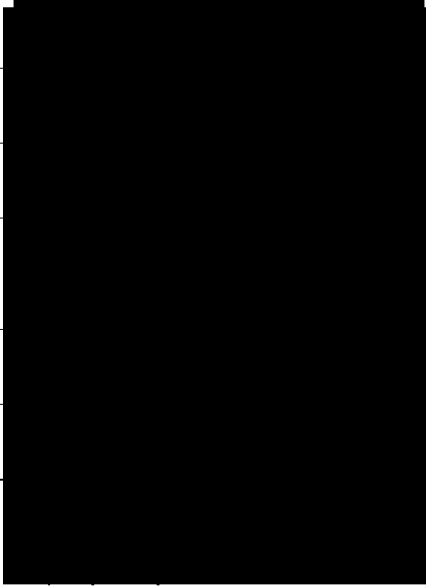
- **REASON**

Pre-school is not exempt from notification as per Zone Table 5.

- **LIST OF REPRESENTATIONS**

Seven (7) representations were received, with 4 representors requesting to be heard.

- **SUMMARY**

Representor Name / Address	Support / Support with concerns / Oppose	Request to be heard
	Oppose	Yes
	Oppose	Yes
	Oppose	Yes
	Support with concerns	No
	Oppose	No
	Oppose	No
	Oppose	Yes

The main concerns raised within the representations are summarised below:

- Increased traffic and congestion
- Traffic safety
- No access should be provided from Gladstone Street
- Increased litter and noise
- Lack of community engagement
- Loss of existing buildings
- Design is out of character

The applicant has provided a response to these concerns.

AGENCY REFERRALS

Commissioner of Highways

With comments, conditions and/or notes

The conditions and notes have been included within the recommendation.

INTERNAL REFERRALS

Civil/Stormwater

The following issues have not been addressed in regard to how the proposed underground system will operate hydraulically (i.e. running full under pressure):

- The email states that the system is designed for a 1% AEP to ensure no overflows. Clarification is required as to the capacity of the roof gutters and downpipes and the calculations or model to verify that the 225mm pipes have capacity; and
- The hydraulic operation of the system has only considered invert levels. Clarification is required to verify the hydraulic operation of the 225mm pipe given the low surface levels/top of pit of the rear of allotment at GIP5 (67.35) compared to the front carpark GIP 2 (67.365) and the loss due to the length of pipe/pits. The HGL of water to the rear pit should have adequate freeboard to the surface level for the minor storm event.

Traffic

- Access way dimensions have been provided in accordance with the Planning and Design Code.
- Updated plans provided by the applicant indicate that pedestrian sight triangles have been provided in accordance with AS2890.1.
- Updated plans provided by the applicant indicate appropriate signage and line marking will be installed adjacent the ingress only crossover on Glen Osmond Road, this is considered acceptable.
- A reduced access aisle of 5.8m is considered appropriate in this case. Therefore, the proposed 90-degree parking spaces are considered acceptable.
- The 45-degree parking spaces exceed the Australian Standards and is considered acceptable.
- The updated plans provided by the applicant have included appropriate staff only line marking for all staff parking spaces, this is considered acceptable.
- Given the applicant proposes to provide 26 off-street parking, this is in accordance with both Table 1 and table 2 of the Planning and Design Code and is considered acceptable.
- Council officers will not change any existing on-street parking restrictions along Gladstone Street or Glen Osmond Road to cater for either pick-up/drop-off parking or long-term staff parking, noting the traffic report indicates that all parking generated by the development will be contained within the site.
- The swept path provided indicates that an 8.8m MRV will be required to utilize the entire parking area, including staff and visitor parking spaces, with the traffic report indicating that waste collection is to occur outside of opening hours. This is considered acceptable, however will need to be included as part of a planning condition noting an unacceptable safety risk should waste collection occur during opening hours.
- Based on the appropriate traffic generation rates, the site is expected to generate 82 vehicle movements in the AM peak and 72 vehicle movements in the PM peak. Can the traffic report please be updated to reflect the appropriate traffic generation rates, including updating the SIDRA assessment.
- The traffic report has assumed that all traffic generated by the site will be split 50% between ingress and egress movements, this is considered acceptable given the use of the site and typical drop off and pick up activities.
- The updated traffic report has indicated that any future no right-turns into or out of Gladstone Street at Fullarton Road would not impact on egress movements

from the development and any impacted ingress movements would be redistributed via nearby local streets with negligible impact.

Arboriculture

- Two (2) street trees are proposed for removal. One (1) to facilitate an entrance vehicle crossover on Glen Osmond Road and the other one (1) to support the egress vehicle crossover via Gladstone Street. I support the removal of the two (2) mentioned trees providing no alternative design solutions, retaining the trees, are reasonably practical. Furthermore, the applicant will be required to cover the costs associated with tree removal, loss of amenity, and tree replacement. The costs will total \$5,921.05 + GST and the applicant should be made aware of these costs up front, as this may influence their design.
- The regulated Lemon Scented Gum tree growing within the dilapidated traffic protuberance on Gladstone Street, I note that the subject tree presents in good condition with attributes that deem it worthy of its legislative status. The tree shall be afforded a 7.80 metre radius Tree Protection Zone (TPZ) and I note the distance between the tree and the mentioned allotment is 6.20 metres at the closest point, thus the development impacts will be minimal.
- I support the tree protection measures outlined within the 'Pre-development Arboricultural Impact Assessment' by Project Green dated 15 September 2021. However, I further recommend that the property boundary is delineated without a fence or only a light weight fence with minimal footings, the proposed 'bin pad' is moved outside of the TPZ; and the most northern wing of the proposed crossover is shifted at least 2.00 metres west of the existing traffic protuberance.

The above matters have either been addressed by the applicant or by reserved matters or conditions of approval.

PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Planning & Design Code, which are contained in Appendix One.

Land Use

The proposal is for a childcare centre for children between the ages of 0 to 5 years. A childcare centre is a form of 'pre-school' as defined by *Part 7 – Land Use Definitions* of the Planning and Design Code.

The subject land is situated within the Business Neighbourhood Zone of the Planning and Design Code. The Desired Outcome (DO) 1 for the zone envisages a mix of housing as well as business uses that are compatible with the surrounding neighbourhood character. While a pre-school is not specifically listed in DPF 1.1 as a preferred land use, PO 1.1 supports other non-residential uses provided such uses do not compromise the residential amenity of the area.

As considered in more detail below, the proposed development has been designed and sited in a manner that would minimise external impacts on the surrounding residential area and maintain the existing amenity and character.

The childcare building is of moderate size with a floor area of approximately 600m², is mostly single storey scale and is well setback from the boundary of adjacent residential properties. Further, the proposal includes appropriate operating hours, on-site management, noise mitigation and traffic controls.

The proposal will also contribute positively to the function and liveability of the surrounding neighbourhood by providing local residents with childcare facilities that are conveniently located adjacent to an arterial road.

Accordingly, the proposed childcare centre is considered to satisfy the policy intent for development in the Business Neighbourhood Zone by balancing the business function of the area with the needs of local residents and existing residential amenity. The proposal is therefore considered acceptable from a land use perspective.

Built Form, Scale and Siting

The proposed building is of a modern design that features skillion-style roofs, a glass entrance and perimeter verandahs. External materials Colorbond wall and roof cladding with standing seam and mini orb profile finished in windspray and surfmist. The building design is of a relatively high standard with a low roof profile that will complement the adjacent commercial and residential areas in accordance with PO 2.1 of the zone.

The building will have a maximum height of 6.25 metres, which is well within the maximum building height of 9.0 metres and two level prescribed by DTS 3.1 of the zone. Similarly, the setbacks of some 25.0 metres to Glen Osmond Road and 6.5 metres to Gladstone Street satisfy PO 3.2 and 3.3 and provide sufficient area for car parking and landscaping at the interface with adjoining residential properties. The rear setback of 11.0 metres to the approved residential development and 5.0 metre setback to the eastern side boundary are also acceptable.

The associated car park is appropriately located adjacent to Glen Osmond and would be screened from the adjacent residences to the south and west by the proposed building.

The design and appearance of the proposal is of an acceptable standard and when considered against the existing site conditions and the intent of the Business Neighbourhood Zone, the proposed development would respond positively to the surrounding built form character. DO 1 (Design in Urban Areas) and the above-mentioned provisions are therefore satisfied.

Interface and Operational Considerations

The site adjoins residential properties to the south and west and land further west along Gladstone Street comprises an established residential area. Several owners along Gladstone Street have submitted a representation and raised concerns with the potential for increased noise, traffic congestion and nuisance as well as visual impacts.

DO1 and PO 1.2 (Interface between Land Uses) seek to ensure that new development is designed and operated in a manner that adequately protects

the amenity of the locality. The applicant has submitted an Environmental Noise Assessment prepared Sonus, which provides an analysis of the existing acoustic environment and the predicted noise levels against Environment Protection Authority (EPA) noise criteria. Based on a maximum of 103 children and restricted operating hours, the assessment recommends certain boundary fencing requirements in order for the development to meet the goal noise levels of the *Environment Protection (Noise) Policy 2007*. The proposal plans and supporting documents indicate that the recommended acoustic measures will be incorporated into the development and this has been reinforced with a condition of approval. With the acoustic measures in place, the proposed development is considered achieve the relevant *Environment Protection (Noise) Policy* criteria when assessed at the nearest existing noise sensitive premises in accordance with DTS 4.1 (Interface between Land Uses).

At a maximum height of 2.7 metres, which is only 600mm higher than a standard fence that does not require approval, the proposed acoustic fence/barrier along the western side boundary would not unduly impact on the amenity of this adjoining property as it would abut the driveway of the approved residential development to the rear.

The proposed operating hours are between 6.30am and 6.30pm Monday to Friday (excluding public holidays). These hours allow for morning and evening drop-off/pick-up and are not dissimilar to other business along Glen Osmond Road, such as the Arkaba shopping centre, McDonalds and several offices. The operating hours are reasonable given the noise attenuation measures and the relatively low-level traffic generation. Also, the amount of noise and general disturbance from vehicles accessing the site is not expected to be significant as the peak drop-off would occur between 7.00am and 9.00am with the peak pick-up between 4.00pm and 6.00pm. These peak times coincide with the typical morning and evening commute of surrounding residents and are appropriate from an amenity perspective.

For these reasons, the proposal would not adversely impact upon the amenity of nearby sensitive uses by way of noise, light spill, glare or traffic all of which can be appropriately managed.

Traffic Impact, Access and Parking

The proposal includes an in-only access from Glen Osmond Road and an entry/exit access onto Gladstone Street. Following some initial concerns raised by Council's Traffic Engineer with respect to pedestrian sight lines and on-site traffic controls (line marking and signage) the proposed access arrangements are considered to facilitate safe vehicle movements onto the adjacent roads. The application has also been referred to the Department for Infrastructure and Transport (DIT) and no concerns have been raised. PO 2.1, 3.1, 3.3 and 3.4 (Transport, Access and Parking) are therefore satisfied.

A car park with a total of 26 car parking spaces will be provided adjacent to Glen Osmond Road. Table 1 - General Off-Street Car Parking Requirements prescribes a parking rate of 0.25 spaces per child for a childcare centre. With a maximum of 103 children, there is a requirement for 26 car parking spaces. The proposed car parking provision therefore satisfies DPF 5.1 (Traffic, Access and Parking) and Council's Traffic Engineer also considers the car park design to be acceptable.

The applicant has provided a Traffic and Parking Report prepared by Cirqa consultants. The report establishes that:

- Vehicle access to the site will be provided via a two-way access point on Gladstone Street at which all movements will be permitted;
- An additional ingress only access will be provided on Glen Osmond Road;
- A total of 26 parking spaces will be provided on-site with such provision satisfying the Planning and Design Code parking requirements;
- The parking area will be provided in accordance with the requirements of the relevant Australian Standard.
- It is forecast that the proposal will generate in the order of 50 trips in the am and 44 trips in the pm peak hours with such movements readily accommodated at the proposed access points and the adjacent road network;
- Vehicle movements will be distributed via the site's two access point and assuming a 50% ingress and 50% egress split, in the order of 25 ingress and 25 egress trips are forecast during the am peak and 22 ingress and 22 egress trips during the pm peak;
- Assuming that ingress movements were split 32.5%/67.5% between the Glen Osmond Road access and the Gladstone Street access point, the forecast movements for Gladstone Street will be 17 ingress movements and 25 egress movements in the morning and 15 ingress movements and 22 egress movements in the evening; and
- SIDRA modelling of the future upgrade of the Glen Osmond Road and Fullarton Road intersection has as indicated that the Fullarton Road/Gladstone Street intersection and the Glen Osmond Road/Gladstone Street intersection will operate within capacity and the existing level of service at the Gladstone Street approaches will be retained.

It is noted that Council's Traffic Engineer raised some concerns with the applied traffic generation rates and the distribution of traffic on surrounding roads. Cirqa have since confirmed that the forecast peak hour trips of 50 morning trips and 44 evening trips are consistent with the RTA Guide for childcare centres. Further, Council's Traffic Engineer is satisfied with the projected traffic distribution given the use of the site and the typical drop-off and pick-up activities. The proposal is therefore supported from a traffic perspective.

The proposal would sufficiently meet the anticipated car parking demand generated during peak periods and would not lead to conditions detrimental to the free flow and safety of pedestrian and vehicular traffic on the surrounding road network. The relevant provisions of the General Section (Transport, Access and Parking) have been satisfied.

Landscaping and Trees

The proposal includes designated landscaping areas adjacent to the proposed car park and within the outdoor play areas. While these areas are suitable for shade, screening and visual enhancement of the development, the proposal does not include any planting details.

The applicant has however confirmed that the outdoor play areas will be designed during the detailed design phase of the development and therefore has requested for a detailed landscaping plan to be provided prior to Development Approval. In this instance, it is reasonable for the proposed landscaping to be addressed by a Reserved Matter.

While there are several large trees on the site, none of the trees are Regulated or Significant and therefore are not protected. There is however a Regulated street tree (Lemon Scented Gum) on the Gladstone Street verge adjacent to the proposed access. An Arboricultural Assessment prepared by Project Green has determined the total encroachment of the proposed site paving and footpath crossover to be 17m² (8.9%), which would comprise a 'minor encroachment' under AS4970. The impacts of the proposed development will be offset by adopting 'tree sensitive' construction materials and methods.

Council's arborist considers the development impacts to be minimal and supports the tree protection measures outlined within the 'Pre-development Arboricultural Impact Assessment'. A condition of approval has been included to reinforce the need for such measures.

Waste Management

The proposal includes a bin store located in the front corner of the site that will be screened by a 1.8 metre high brick fence. Waste will be collected by a private contractor at least once a week outside of the childcare operating hours in order to avoid potential vehicle conflict. Council's Traffic Engineer is satisfied that an 8.8 metre MRV vehicle can safely access the site.

The proposed waste storage and collection arrangements satisfy PO 11.1 (Design in Urban Areas).

Stormwater Management

A civil plan has been prepared by Sagero with all roof and surface water to be collected and diverted to a junction pit located within the parking area and then to a detention tank/pumping station. Stormwater within the detention tanks will be pumped to the street water table on Glen Osmond Road.

Although Council's Civil Engineer is satisfied in principle with the civil design, as there is an outstanding matter concerning the proposed underground system and how it will operate hydraulically, a Reserved Matter is recommended so this matter can be addressed prior to the granting of Development Approval.

Advertising

The proposal includes six signs for business identification to be displayed on the building fascia and attached to the masonry fence on both the Glen Osmond Road and Gladstone Street frontages. The proposed advertising displays are coordinated and complementary to the proposed business in terms of their size, scale and appearance. The number of signs and their siting are such that they would not detract from streetscape or amenity of

neighbouring properties or cause distraction to drivers on the adjacent road network.

The proposal would not be at variance to DO 1 (Advertisements).

CONCLUSION

Having considered all the relevant assessment provisions, the proposal is considered to be not seriously at variance with the Planning and Design Code.

In particular, the proposal:

- comprises a low-impact land use that would contribute positively to the function and liveability of the surrounding neighbourhood by providing local residents with conveniently located childcare facilities;
- is appropriately designed and setback from property boundaries so as to contribute positively to the surrounding built form character;
- would not significantly impact upon the amenity of nearby residential properties or the locality given the moderate size of the building and inclusion of appropriate measures for the control and management of noise, light spill and traffic; and
- includes adequate on-site car parking and safe and convenient access so as not lead to conditions detrimental to the free flow and safety of pedestrian and vehicular traffic within the site and on the adjacent road network.

For these reasons, the proposal would achieve the Desired Outcome for the Business Neighbourhood Zone and warrants the granting of Plan Consent subject to reserved matters and conditions.

RECOMMENDATION

It is recommended that the Council Assessment Panel/SCAP resolve that:

1. Pursuant to Section 107(2)(c) of the Planning, Development and Infrastructure Act 2016, and having undertaken an assessment of the application against the Planning and Design Code, the application is NOT seriously at variance with the provisions of the Planning and Design Code; and
2. Development Application Number 21027177, by Development Holdings Pty Ltd is granted Planning Consent subject to the following reserved matters and conditions:

The following information shall be submitted for further assessment and approval by the City of Unley as reserved matters under Section 102(3) of the *Planning, Development and Infrastructure Act 2016*:

1. A detailed landscaping plan that provides an appropriate mix of trees, shrubs and ground covers to provide shade and visually soften the car park, road frontages and the proposed building.
2. A detailed stormwater management system and computations for the development that includes:
 - Stormwater design techniques to manage peak flows and the rate of discharge; and
 - Hydraulic operation of the underground system.

Pursuant to Section 127(1) of the *Planning, Development and Infrastructure Act 2016*, the Council reserves its decision on the form and substance of any further conditions of Development Plan Consent that it considers appropriate to impose in respect of the reserve matters outlined above.

Planning Conditions

1. The Development herein approved shall be undertaken in accordance with all plans, drawings, specifications and other documents submitted to Council and forming part of the relevant Development Application except where varied by conditions set out below (if any) and the development shall be undertaken to the satisfaction of Council.
2. All driveways, parking and manoeuvring areas will be formed, surfaced with concrete, bitumen or paving, and be properly drained prior to occupation and shall be maintained in reasonable condition at all times to the satisfaction of Council.
3. All car parking areas shall be marked and signed in accordance with the approved plans and documents prior to the occupation of the development.
4. The proposed car parking layout and access areas and vehicle head clearances shall conform to Australian Standard AS 2890.1:2004- Off-street Car parking and Australian Standard 2890.6:2009 - Off-Street Parking for People with Disabilities.
5. The operation of the childcare centre shall be between 6.30am and 6.30pm Monday to Friday (excluding public holidays).
6. Waste collection shall take place between 6.30pm and 9.00pm Monday to Friday or between 8.00am and 6.00pm Saturday and Sunday (excluding public holidays).
7. The tree protection measures outlined in recommendations of the Pre-development Arboricultural Impact Assessment prepared by Project Green dated 15/09/21 and 07/10/21 shall be undertaken during demolition and construction of the development to the satisfaction of Council's arborist.
8. The development approved herein shall incorporate the acoustic measures outlined in the Environmental Noise Assessment (September 2021) prepared by Sonus to the satisfaction of Council prior to occupation/operation of the development.

9. Stormwater must be disposed of in such a manner that it does not flow or discharge onto land of adjoining owners, lie against any building or create insanitary conditions.
10. External lighting shall be restricted to that necessary for security purposes only and be designed, directed and shielded in accordance with AS 4282-1997 *Control of the obtrusive effects of outdoor lighting* so as to cause no adverse light overspill nuisance to nearby properties.

Conditions imposed by Commissioner of Highways under Section 122 of the Act

11. Vehicular access and configuration to serve the site shall be in accordance with the Site Plan by Redshed Architects (Drawing No. 02, Rev K, dated 1 June 2021) and the Traffic Report by CIRQA (Project Number 21151, dated 27 August 2021).
12. All vehicles shall enter and exit the site in a forward direction.
13. The access and all on-site vehicle manoeuvring areas shall remain clear of any impediments.
14. Signage and/or line marking shall be installed as required, to reinforce the desired flow of traffic to, from and through the site.
15. The redundant crossover on Glen Osmond Road shall be closed and reinstated to Council's kerb and gutter standards at the applicant's expense.
16. Stormwater run-off shall be collected on-site and discharged without impacting the adjacent road network. Any alterations to the road drainage infrastructure required to facilitate this shall be at the applicant's cost.

ADVISORY NOTES

- The applicant is required to pay Council the sum of \$5921.05 (plus GST) to cover the cost of tree removal, tree replacement and associated works.

Advisory Notes imposed by Commissioner of Highways under Section 122 of the Act

- It is recommended that any proposed signage is consistent with DIT's publication '*Advertising Signs: Assessment Guidelines for Road Safety*'.
- The car park spaces numbered 1-4 and 21-26 on the plan should be a staff car parks (or for longer duration use) to mitigate potential internal queueing which may affect the functional performance of Glen Osmond Road.
- The Metropolitan Adelaide Road Widening Plan currently shows a possible requirement for a strip of land up to 2.13 metres in width from the Glen

Osmond Road frontage of this site for future road purposes. The consent of the Commissioner of Highways under the Metropolitan Adelaide Road Widening Plan Act 1972 is required to all building works on or within 6 metres of the possible requirement.

OFFICER MAKING RECOMMENDATION

Name: Brendan Fewster

Title: Planning Officer

Date: 02/01/21

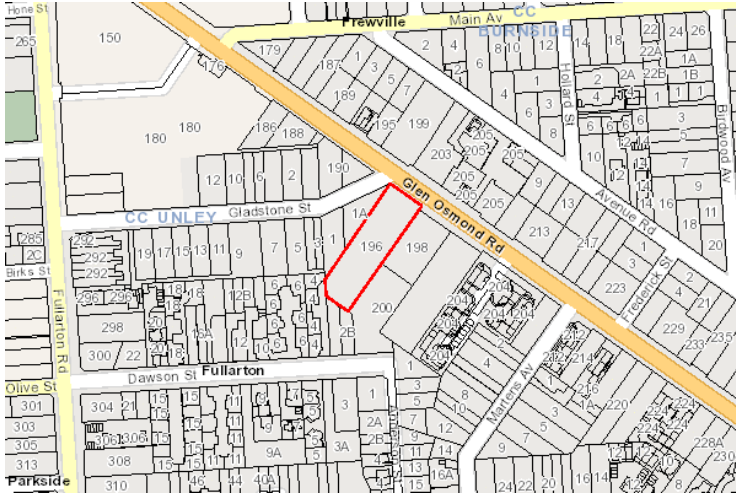
ATTACHMENT 1

196 GLEN OSMOND RD FULLARTON SA 5063

Address:

Click to view a detailed interactive [SAILIS](#) in SAILIS

To view a detailed interactive property map in SAPPA click on the map below



Property Zoning Details

Local Variation (TNV)

Maximum Building Height (Metres) *(Maximum building height is 9m)*

Maximum Building Height (Levels) *(Maximum building height is 2 levels)*

Overlay

Airport Building Heights (Regulated) *(All structures over 45 metres)*

Future Road Widening

Major Urban Transport Routes

Prescribed Wells Area

Regulated and Significant Tree

Traffic Generating Development

Zone

Business Neighbourhood

Development Pathways

[BLANK]

Property Policy Information for above selection

Part 2 - Zones and Sub Zones

Business Neighbourhood Zone

Assessment Provisions (AP)

Desired Outcome	
DO 1	A variety of housing and accommodation types and compatible employment-generating land uses in an environment characterised by primarily low-rise buildings
DO 2	Buildings of a scale and design that complements surrounding built form, streetscapes and local character and provide for landscaping and open space.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
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Land Use and Intensity	
<p>PO 1.1</p> <p>Housing and accommodation types appropriate to the locality complemented by shops, offices, consulting rooms and other non-residential uses that do not materially impact residential amenity.</p>	<p>DTS/DPF 1.1</p> <p>Development comprises one or more of the following:</p> <ul style="list-style-type: none"> (a) Community facility (b) Consulting room (c) Dwelling (d) Office (e) Residential flat building (f) Shop
<p>PO 1.2</p> <p>Business and commercial land uses complement and enhance the prevailing or emerging neighbourhood character.</p>	<p>DTS/DPF 1.2</p> <p>Shops, offices and consulting rooms (or any combination thereof) do not exceed 250m² in gross leasable floor area.</p>
<p>PO 1.3</p> <p>Changes in the use of land between similar businesses encourages the efficient reuse of commercial premises and supports continued local access to a range of services compatible to the locality.</p>	<p>DTS/DPF 1.3</p> <p>A change of use to a shop, office or consulting room or any combination of these uses where all of the following are achieved:</p> <ul style="list-style-type: none"> (a) the area to be occupied by the proposed development is in an existing building and is currently used as a shop, office, consulting room or any combination of these uses (b) if the proposed change of use is for a shop: <ul style="list-style-type: none"> (i) the total gross leasable floor area of the shop will not exceed 250m² (ii) if primarily involving the handling and sale of foodstuffs, areas used for the storage and collection of refuse are sited at least 10m from the site of a dwelling (other than a dwelling directly associated with the proposed shop) (iii) if primarily involving heating and cooking of foodstuffs in a commercial kitchen and is within 30m of any residential allotment within a neighbourhood-type zone or a dwelling (other than a dwelling directly associated with the proposed shop), an exhaust duct and stack (chimney) exists or is capable of being installed for discharging exhaust emissions (c) off-street vehicular parking exists in accordance with the rate(s) specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas to the nearest whole number, except where: <ul style="list-style-type: none"> (i) the required contribution will be made into a relevant car parking offset scheme (other than where a relevant contribution has previously been made) or (ii) the building is a local heritage place.
Built Form and Character	
<p>PO 2.1</p> <p>Buildings are of a scale and design that complements surrounding built form, streetscapes and local character.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Development provides attractive landscaping to the primary street frontage.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>PO 2.3</p> <p>Site coverage is limited to provide space for landscaping, open space and pervious areas.</p>	<p>DTS/DPF 2.3</p> <p>Development does not result in site coverage exceeding 60%.</p>
Building height and setbacks	

<p>PO 3.1</p> <p>Buildings are generally of low-rise construction, with taller buildings positioned towards the centre of the zone and away from any adjoining neighbourhood-type zone to positively contribute to the built form character of the locality.</p>	<p>DTS/DPF 3.1</p> <p>Except on a Catalyst site in the Melbourne Street West Subzone, Building height (excluding garages, carports and outbuildings) is no greater than:</p> <p>(a) the following:</p> <table border="1"> <tr> <td style="text-align: center;">Maximum Building Height (Metres)</td> </tr> <tr> <td>Maximum building height is 9m</td> </tr> <tr> <td style="text-align: center;">Maximum Building Height (Levels)</td> </tr> <tr> <td>Maximum building height is 2 levels</td> </tr> </table> <p>(b) in all other cases (ie there is a blank field for both values):</p> <ul style="list-style-type: none"> (i) 2 building levels or 9m where the development is located adjoining a different zone that primarily envisages residential development (ii) 3 building levels or 12m in all other cases. <p>In relation to DTS/DPF 3.1, in instances where:</p> <p>(c) more than one value is returned in the same field:</p> <ul style="list-style-type: none"> (i) for the purpose of DTS/DPF 3.1(a), refer to the Maximum Building Height (Metres) Technical and Numeric Variation layer or Maximum Building Height (Levels) Technical and Numeric Variation layer in the SA planning database to determine the applicable value relevant to the site of the proposed development (ii) only one value is returned for DTS/DPF 3.1(a), (i.e. there is one blank field), then the relevant height in metres or building levels applies with no criteria for the other. 	Maximum Building Height (Metres)	Maximum building height is 9m	Maximum Building Height (Levels)	Maximum building height is 2 levels
Maximum Building Height (Metres)					
Maximum building height is 9m					
Maximum Building Height (Levels)					
Maximum building height is 2 levels					
<p>PO 3.2</p> <p>Buildings are set back from primary street boundaries consistent with the existing streetscape.</p>	<p>DTS/DPF 3.2</p> <p>The building line of a building set back from the primary street boundary:</p> <ul style="list-style-type: none"> (a) at least the average setback to the building line of existing buildings on adjoining sites which face the same primary street (including those buildings that would adjoin the site if not separated by a public road or a vacant allotment) (b) where there is only one existing building on adjoining sites which face the same primary street (including those that would adjoin if not separated by a public road or a vacant allotment), not less than the setback to the building line of that building or (c) not less than 5m where no building exists on an adjoining site with the same primary street frontage. 				
<p>PO 3.3</p> <p>Buildings set back from secondary street boundaries (other than rear laneways) contribute to a consistent streetscape.</p>	<p>DTS/DPF 3.3</p> <p>Building walls are set back from the secondary street frontage:</p> <ul style="list-style-type: none"> (a) the average of any existing buildings on adjoining sites having frontage to the same street or (b) not less than 900mm where no building exists on an adjoining site. 				
<p>PO 3.4</p> <p>Dwelling boundary walls are limited in height and length to manage visual and overshadowing impacts on adjoining residential properties.</p>	<p>DTS/DPF 3.4</p> <p>Except where the dwelling is located on a central site within a row dwelling or terrace arrangement, side boundary walls occur only on one side boundary and satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) side boundary walls adjoin or abut a boundary wall of a building on adjoining land for the same or lesser length and height (b) side boundary walls do not: <ul style="list-style-type: none"> (i) exceed 3.2m in height from the lower of the natural or finished ground level (ii) exceed 11.5m in length (iii) when combined with other walls on the boundary of the subject development site, exceed a maximum 45% of the 				

	<p>length of the boundary</p> <p>(iv) encroach within 3m of any other existing or proposed boundary walls on the subject land.</p>
<p>PO 3.5</p> <p>Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.</p>	<p>DTS/DPF 3.5</p> <p>Dwelling walls of dwellings in a semi-detached or row arrangement are set back at least 900mm from side boundaries shared with allotments outside the development site.</p>
<p>PO 3.6</p> <p>Buildings are set back from side boundaries to provide:</p> <p>(a) separation between dwellings in a way that complements the established character of the locality</p> <p>(b) access to natural light and ventilation for neighbours.</p>	<p>DTS/DPF 3.6</p> <p>Other than walls located on a side boundary, building walls are set back at least 900mm from side boundaries.</p>
<p>PO 3.7</p> <p>Buildings are set back from rear boundaries to provide:</p> <p>(a) separation between dwellings in a way that complements the established character of the locality</p> <p>(b) access to natural light and ventilation for neighbours</p> <p>(c) open space recreational opportunities</p> <p>(d) space for landscaping and vegetation.</p>	<p>DTS/DPF 3.7</p> <p>Buildings walls are set back from the rear boundary at least:</p> <p>(a) 3m for the first building level</p> <p>(b) 5m for any second building level.</p>
Land Division	
<p>PO 4.1</p> <p>Land division and / or site amalgamation creates allotments that vary in size and are suitable for a variety of residential and commercial activities and improve the level of development integration.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
Advertisements	
<p>PO 5.1</p> <p>Advertisements complement the scale of buildings and are not visually dominant within the locality.</p>	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>
Concept Plans	
<p>PO 6.1</p> <p>Development is compatible with the outcomes sought by any relevant Concept Plan contained within Part 12 - Concept Plans of the Planning and Design Code to support the orderly development of land through staging of development and provision of infrastructure.</p>	<p>DTS/DPF 6.1</p> <p>The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant:</p> <p>In relation to DTS/DPF 6.1, in instances where:</p> <p>(a) one or more Concept Plan is returned, refer to Part 12 - Concept Plans in the Planning and Design Code to determine if a Concept Plan is relevant to the site of the proposed development. Note: multiple concept plans may be relevant.</p> <p>(b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 6.1 is met.</p>
Ancillary Buildings and Structures	
<p>PO 7.1</p> <p>Residential ancillary buildings are sited and designed to not detract from the streetscape or appearance of primary residential buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 7.1</p> <p>Ancillary buildings and structures:</p> <p>(a) are ancillary to a dwelling erected on the same site</p> <p>(b) have a floor area not exceeding 60m²</p> <p>(c) are not constructed, added to or altered so that any part is situated</p> <p>(i) in front of any part of the building line of the dwelling to which it is ancillary</p>

	<p>or</p> <ul style="list-style-type: none"> (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads) <p>(d) in the case of a garage or carport, the garage or carport:</p> <ul style="list-style-type: none"> (i) is set back at least 5.5m from the boundary of the primary street (ii) when facing a primary street or secondary street, has a total door / opening not exceeding: <ul style="list-style-type: none"> A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width <p>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:</p> <ul style="list-style-type: none"> (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent <p>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</p> <p>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</p> <p>(h) have a wall height or post height not exceeding 3m above natural ground level</p> <p>(i) have a roof height where no part of the roof is more than 5m above the natural ground level</p> <p>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour</p> <p>(k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:</p> <ul style="list-style-type: none"> (i) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>201-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> (ii) the amount of existing soft landscaping prior to the development occurring. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	150-200	15%	201-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site										
<150	10%										
150-200	15%										
201-450	20%										
>450	25%										

PO 7.2
 Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements or result in over-development of the site.

DTS/DPF 7.2
 Ancillary buildings and structures do not result in:

- (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space
- (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or

Table 5 - Procedural Matters (PM) - Notification

The following table identifies, pursuant to section 107(6) of the *Planning, Development and Infrastructure Act 2016*, classes of performance assessed development that are excluded from notification. The table also identifies any exemptions to the placement of notices when notification is required.

Interpretation

A class of development listed in Column A is excluded from notification provided that it does not fall within a corresponding exclusion prescribed in Column B. In instances where development falls within multiple classes within Column A, each clause is to be read independently such that if a development is excluded from notification by any clause, it is, for the purposes of notification excluded irrespective of any other clause.

Class of Development (Column A)	Exceptions (Column B)
1. A kind of development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.	None specified.
2. All development undertaken by: <ul style="list-style-type: none"> (a) the South Australian Housing Trust either individually or jointly with other persons or bodies or (b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust. 	Except development involving any of the following: <ul style="list-style-type: none"> 1. residential flat building(s) of 3 more more building levels 2. the demolition of a State or Local Heritage Place 3. the demolition of a building (except an ancillary building) in a Historic Area Overlay.
3. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> (a) advertisement (b) air handling unit, air conditioning system or exhaust fan (c) ancillary accommodation (d) building work on railway land (e) carport (f) community facility (g) deck (h) dwelling (i) dwelling addition (j) fence (k) outbuilding (l) pergola (m) private bushfire shelter (n) residential flat building (o) retaining wall (p) shade sail (q) solar photovoltaic panels (roof mounted) (r) student accommodation (s) swimming pool or spa pool (t) verandah (u) water tank. 	Except development that: <ul style="list-style-type: none"> 1. exceeds the maximum building height specified in Business Neighbourhood Zone DTS/DPF 3.1 or 2. is on a Catalyst Site that exceeds the maximum building height in Business Neighbourhood Zone DTS/DPF 3.1 that applies to development not on a Catalyst Site or 3. involves a building wall (or structure) that is proposed to be situated on a side boundary (not being a boundary with a primary street or secondary street) and: <ul style="list-style-type: none"> (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment) or (b) the height of the proposed wall (or post height) exceeds 3.2m measured from the lower of the natural or finished ground level (other than where the proposed wall abuts an existing wall or structure of greater height on the adjoining allotment).
4. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> (a) consulting room (b) office (c) shop. 	Except development that: <ul style="list-style-type: none"> 1. does not satisfy Business Neighbourhood Zone DTS/DPF 1.2 or 2. exceeds the maximum building height specified in Business Neighbourhood Zone DTS/DPF 3.1

	<p>or</p> <p>3. is on a Catalyst Site that exceeds the maximum building height in Business Neighbourhood Zone DTS/DPF 3.1 that applies to development not on a Catalyst Site</p> <p>or</p> <p>4. involves a building wall (or structure) that is proposed to be situated on a side boundary (not being a boundary with a primary street or secondary street) and:</p> <p>(a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment)</p> <p>or</p> <p>(b) the height of the proposed wall (or post height) exceeds 3.2m measured from the lower of the natural or finished ground level (other than where the proposed wall abuts an existing wall or structure of greater height on the adjoining allotment).</p>
<p>5. Any development involving any of the following (or of any combination of any of the following):</p> <p>(a) internal building work</p> <p>(b) land division</p> <p>(c) replacement building</p> <p>(d) temporary accommodation in an area affected by bushfire</p> <p>(e) tree damaging activity.</p>	<p>None specified.</p>
<p>6. Demolition.</p>	<p>Except any of the following:</p> <p>1. the demolition of a State or Local Heritage Place</p> <p>2. the demolition of a building (except an ancillary building) in a Historic Area Overlay.</p>

Placement of Notices - Exemptions for Performance Assessed Development

None specified.

Placement of Notices - Exemptions for Restricted Development

None specified.

Part 3 - Overlays

Airport Building Heights (Regulated) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Management of potential impacts of buildings and generated emissions to maintain operational and safety requirements of registered and certified commercial and military airfields, airports, airstrips and helicopter landing sites.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Built Form	
PO 1.1 Building height does not pose a hazard to the operation of a certified or registered aerodrome.	DTS/DPF 1.1 Buildings are located outside the area identified as 'All structures' (no height limit is prescribed) and do not exceed the height specified in the Airport Building Heights (Regulated) Overlay which applies to the subject site as shown on the SA Property and Planning Atlas. In instances where more than one value applies to the site, the lowest value relevant to the site of the proposed development is applicable.
PO 1.2 Exhaust stacks are designed and sited to minimise plume impacts on aircraft movements associated with a certified or registered aerodrome.	DTS/DPF 1.2 Development does not include exhaust stacks.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Any of the following classes of development: (a) building located in an area identified as 'All structures' (no height limit is prescribed) or will exceed the height specified in the <i>Airport Building Heights (Regulated) Overlay</i> (b) building comprising exhaust stacks that generates plumes, or may cause plumes to be generated, above a height specified in the <i>Airport Building Heights (Regulated) Overlay</i> .	The airport-operator company for the relevant airport within the meaning of the <i>Airports Act 1996</i> of the Commonwealth or, if there is no airport-operator company, the Secretary of the Minister responsible for the administration of the <i>Airports Act 1996</i> of the Commonwealth.	To provide expert assessment and direction to the relevant authority on potential impacts on the safety and operation of aviation activities.	Development of a class to which Schedule 9 clause 3 item 1 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Future Road Widening Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development which is consistent with and will not compromise efficient delivery of future road widening requirements.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Future Road Widening	
PO 1.1 Development does not compromise or is located and designed to minimise its impact on future road widening requirements.	DTS/DPF 1.1 Development does not involve building work, or building work is located wholly outside the land subject to the 6m Consent Area, the C Type Requirement or the Strip Requirement of the Metropolitan Adelaide Road

	Widening Plan.
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Procedural Matters (PM)

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Other than where all deemed-to-satisfy criteria for all policies relevant to this referral are met, development (including the division of land) that is within or may encroach within a Future Road Widening Area.	Commissioner of Highways.	To provide expert technical assessment and direction to the relevant authority on the safe and efficient operation and management of all roads relevant to the Commissioner of Highways as described in the Planning and Design Code.	Development of a class to which Schedule 9 clause 3 item 4 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Major Urban Transport Routes Overlay

Assessment Provisions (AP)

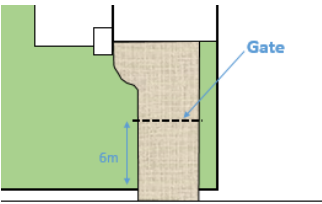
Desired Outcome	
DO 1	Safe and efficient operation of Major Urban Transport Routes for all road users.
DO 2	Provision of safe and efficient access to and from Major Urban Transport Routes.

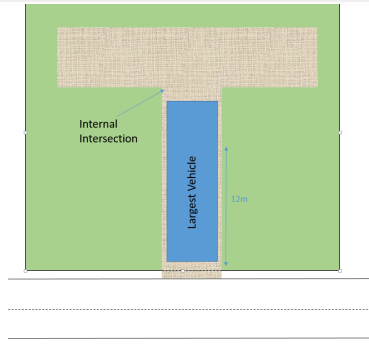
Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Access - Safe Entry and Exit (Traffic Flow)	
PO 1.1 Access is designed to allow safe entry and exit to and from a site to meet the needs of development and minimise traffic flow interference associated with access movements along adjacent State Maintained Roads.	<p>DTS/DPF 1.1</p> <p>An access point satisfies (a), (b) or (c):</p> <ul style="list-style-type: none"> (a) where servicing a single (1) residential dwelling / residential allotment: <ul style="list-style-type: none"> (i) it will not result in more than one access point (ii) vehicles can enter and exit the site in a forward direction (iii) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees (iv) passenger vehicles (with a length up to 5.2m) can enter and exit the site wholly within the kerbside lane of the road (v) have a width of between 3m and 4m (measured at the site boundary). (b) where the development will result in 2 and up to 6 dwellings: <ul style="list-style-type: none"> (i) it will not result in more than one access point servicing the development site (ii) entry and exit movements are left turn only (iii) vehicles can enter and exit the site in a forward direction

	<ul style="list-style-type: none"> (iv) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees; (v) passenger vehicles (with a length up to 5.2m) can enter and exit the site wholly within the kerbside lane of the road (vi) have a width of between 5.8m to 6m (measured at the site boundary) and an access depth of 6m (measured from the site boundary into the site). <p>(c) where the development will result in over 7 dwellings, or is a non-residential land use:</p> <ul style="list-style-type: none"> (i) it will not result in more than one access point servicing the development site (ii) vehicles can enter and exit the site using left turn only movements (iii) vehicles can enter and exit the site in a forward direction (iv) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees (v) have a width of between 6m and 7m (measured at the site boundary), where the development is expected to accommodate vehicles with a length of 6.4m or less (vi) have a width of between 6m and 9m (measured at the site boundary), where the development is expected to accommodate vehicles with a length from 6.4m to 8.8m (vii) have a width of between 9m and 12m (measured at the site boundary), where the development is expected to accommodate vehicles with a length from 8.8m to 12.5m (viii) provides for simultaneous two-way vehicle movements at the access; <ul style="list-style-type: none"> A. with entry and exit movements for vehicles with a length up to 5.2m vehicles being fully within the kerbside lane of the road <li style="padding-left: 20px;">and B. with entry movements of 8.8m vehicles (where relevant) being fully within the kerbside lane of the road and the exit movements of 8.8m vehicles do not cross the centreline of the road.
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Access - On-Site Queuing

<p>PO 2.1</p> <p>Sufficient accessible on-site queuing adjacent to access points is provided to meet the needs of development so that all vehicle queues can be contained fully within the boundaries of the development site, to minimise interruption of the functional performance of the road and maintain safe vehicle movements.</p>	<p>DTS/DPF 2.1</p> <p>An access point in accordance with one of the following:</p> <p>(a) will not service, or is not intended to service, more than 6 dwellings and there are no internal driveways, intersections, car parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site) as shown in the following diagram:</p> <div style="text-align: center;">  <p>The diagram illustrates a site boundary on the left, shaded in green. A dashed line extends 6.0m from the boundary to a vertical line representing a 'Gate'. The gate is positioned within the kerbside lane of a road, which is shown as a horizontal line at the bottom. A blue arrow points to the gate with the label 'Gate'.</p> </div> <p>(b) will service, or is intended to service, development that will generate less than 60 vehicle movements per day and:</p> <ul style="list-style-type: none"> (i) is expected to be serviced by vehicles with a length no greater than 6.4m (ii) there are no internal driveways, intersections, parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site). <p>(c) will service, or is intended to service, development that will generate less than 60 vehicle movements per day and:</p> <ul style="list-style-type: none"> (i) is expected to be serviced by vehicles with a length greater than a 6.4m small rigid vehicle (ii) there are no internal driveways, intersections, parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site) (iii) any termination of, or change in priority of movement within the main car park aisle is located far enough into the site so that the largest vehicle expected on-site can store fully within the site before being required to stop (iv) all parking or manoeuvring areas for commercial vehicles are located a minimum of 12m or the length of the largest vehicle expected on site from the access (measured from the site boundary into the site) as shown in the following diagram:
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Access – Location (Spacing) - Existing Access Points

PO 3.1
Existing access points designed to accommodate the type and volume of traffic likely to be generated by the development.

- DTS/DPF 3.1
An existing access point satisfies (a), (b) or (c):
- (a) it will not service, or is not intended to service, more than 6 dwellings
 - (b) it is not located on a Controlled Access Road and will not service development that will result in a larger class of vehicle expected to access the site using the existing access
 - (c) it is not located on a Controlled Access Road and development constitutes:
 - (i) change of use between an office less than 500m² gross leasable floor area and a consulting room less than 500m² gross leasable floor area or vice versa
 - (ii) change in use from a shop to an office, consulting room or personal or domestic services establishment
 - (iii) change of use from a consulting room or office less than 250m² gross leasable floor area to shop less than 250m² gross leasable floor area
 - (iv) change of use from a shop less than 500m² gross leasable floor area to a warehouse less than 500m² gross leasable floor area
 - (v) an office or consulting room with a gross leasable floor area less than 500m².

Access – Location (Spacing) – New Access Points

PO 4.1
New access points are spaced apart from any existing access point or public road junction to manage impediments to traffic flow and maintain safe and efficient operating conditions on the road.

- DTS/DPF 4.1
A new access point satisfies (a), (b) or (c):
- (a) where a development site is intended to serve between 1 and 6 dwellings and has frontage to a local road (not being a Controlled Access Road) with a speed environment of 60km/h or less, the new access point is provided on the local road and located a minimum of 6.0m from the tangent point as shown in the following diagram:

TP = Tangent point
 - (b) where the development site is intended to serve between 1 and 6 dwellings and access from a local road (being a road that is not a State Maintained Road) is not available, the new access:
 - (i) is not located on a Controlled Access Road
 - (ii) is not located on a section of road affected by double barrier lines
 - (iii) will be on a road with a speed environment of 70km/h or less
 - (iv) is located outside of the bold lines on the diagram shown in the diagram following part (a)
 - (v) located minimum of 6m from a median opening or pedestrian crossing.
 - (c) where DTS/DPF 4.1 part (a) and (b) do not apply and access from an alternative local road at least 25m from the State Maintained Road is not available, and the access is not located on a Controlled Access Road, the new access

is separated in accordance with the following:

Speed Limit	Separation between access points	Separation from public road junctions and merging/terminating lanes
50 km/h or less	No spacing requirement	20m
60 km/h	40m	123m
70 km/h	55m	151m
80 km/h	70m	181m
90 km/h	90m	214m
100 km/h	110m	248m
110 km/h	135m	285m

Access - Location (Sight Lines)

PO 5.1

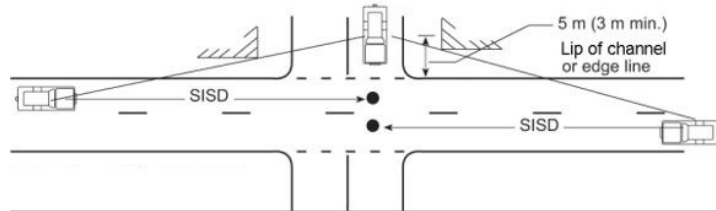
Access points are located and designed to accommodate sight lines that enable drivers and pedestrians to navigate potential conflict points with roads in a controlled and safe manner.

DTS/DPF 5.1

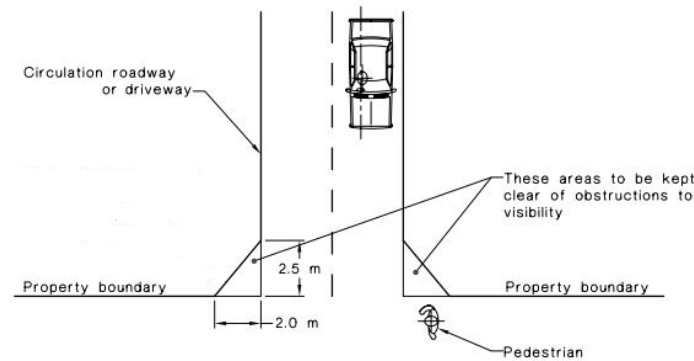
An access point satisfies (a) or (b):

- (a) drivers approaching or exiting an access point have an unobstructed line of sight in accordance with the following (measured at a height of 1.1m above the surface of the road):

Speed Limit	Access Point serving 1-6 dwellings	Access point serving all other development
40 km/h or less	40m	73m
50 km/h	55m	97m
60 km/h	73m	123m
70 km/h	92m	151m
80 km/h	114m	181m
90 km/h	139m	214m
100 km/h	165m	248m
110km/h	193m	285m



- (b) pedestrian sightlines in accordance with the following diagram:



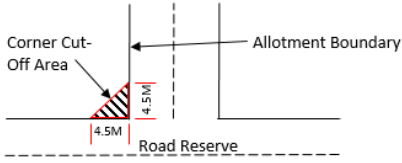
Access - Mud and Debris

PO 6.1

Access points constructed to minimise mud or other debris being carried or transferred onto the road to ensure

DTS/DPF 6.1

Where the road has an unsealed shoulder and the road is not kerbed the access way is sealed from the edge of seal on the road for a minimum of 10m or to the property boundary (whichever is closer)

safe road operating conditions.	
Access - Stormwater	
PO 7.1 Access points designed to minimise negative impact on roadside drainage of water.	DTS/DPF 7.1 Development does not: (a) decrease the capacity of an existing drainage point (b) restrict or prevent the flow of stormwater to an existing drainage point and system.
Building on Road Reserve	
PO 8.1 Buildings or structures that encroach onto, above or below road reserves designed and sited to minimise impact on safe movements by all road users.	DTS/DPF 8.1 No encroachment of buildings or structures onto, above or below the road reserve.
Public Road Junctions	
PO 9.1 New junctions with public roads (including the opening of unmade public road junctions) or modifications to existing road junctions located and designed to ensure safe and efficient road operating conditions are maintained on the State Maintained Road.	DTS/DPF 9.1 Development does not comprise any of the following: (a) creating a new junction with a public road (b) opening an unmade public road junction (c) modifying an existing public road junction.
Corner Cut-Offs	
PO 10.1 Development is located and designed to maintain sightlines for drivers turning into and out of public road junctions to contribute to driver safety.	DTS/DPF 10.1 Development does not involve building work, or building work is located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram: 

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Except where all of the relevant deemed-to-satisfy criteria are met, development (including the division of land) that involves any of the following to/on a State Maintained Road or within 25 metres of an intersection with any such road: (a) creation of a new access or junction	Commissioner of Highways.	To provide expert technical assessment and direction to the Relevant Authority on the safe and efficient operation and management of all roads relevant to the Commissioner of Highways as	Development of a class to which Schedule 9 clause 3 item 7 of the

<p>(b) alterations to an existing access or public road junction (except where deemed to be minor in the opinion of the relevant authority)</p> <p>(c) development that changes the nature of vehicular movements or increase the number or frequency of movements through an existing access (except where deemed to be minor in the opinion of the relevant authority).</p>		<p>described in the Planning and Design Code.</p>	<p>Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>
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Prescribed Wells Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in prescribed wells areas.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
<p>PO 1.1</p> <p>All development, but in particular involving any of the following:</p> <ul style="list-style-type: none"> (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry <p>has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed wells areas.</p>	<p>DTS/DPF 1.1</p> <p>Development satisfies either of the following:</p> <ul style="list-style-type: none"> (a) the applicant has a current water licence in which sufficient spare capacity exists to accommodate the water needs of the proposed use or (b) the proposal does not involve the taking of water for which a licence would be required under the <i>Landscape South Australia Act 2019</i>.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
<p>Any of the following classes of development that require or may require water to be taken in addition to any allocation that has already been granted under the <i>Landscape South Australia Act 2019</i>:</p> <ul style="list-style-type: none"> (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry. <p>Commercial forestry that requires a forest water licence under Part 8 Division 6 of the <i>Landscape South Australia Act 2019</i>.</p>	<p>The Chief Executive of the Department of the Minister responsible for the administration of the <i>Landscape South Australia Act 2019</i>.</p>	<p>To provide expert technical assessment and direction to the relevant authority on the taking of water to ensure development is undertaken sustainably.</p>	<p>Development of a class to which Schedule 9 clause 3 item 13 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>

Regulated and Significant Tree Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Tree Retention and Health	
<p>PO 1.1</p> <p>Regulated trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important visual contribution to local character and amenity (b) are indigenous to the local area and listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species and / or (c) provide an important habitat for native fauna. 	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Significant trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important contribution to the character or amenity of the local area (b) are indigenous to the local area and are listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species (c) represent an important habitat for native fauna (d) are part of a wildlife corridor of a remnant area of native vegetation (e) are important to the maintenance of biodiversity in the local environment and / or (f) form a notable visual element to the landscape of the local area. 	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>A tree damaging activity not in connection with other development satisfies (a) and (b):</p> <ul style="list-style-type: none"> (a) tree damaging activity is only undertaken to: <ul style="list-style-type: none"> (i) remove a diseased tree where its life expectancy is short (ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like (iii) rectify or prevent extensive damage to a building of value as comprising any of the following: <ul style="list-style-type: none"> A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value <p>and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity</p> (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from 	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>

<p>bushfire</p> <p>(v) treat disease or otherwise in the general interests of the health of the tree and / or</p> <p>(vi) maintain the aesthetic appearance and structural integrity of the tree</p> <p>(b) in relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.</p>	
<p>PO 1.4</p> <p>A tree-damaging activity in connection with other development satisfies all the following:</p> <p>(a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible</p> <p>(b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.</p>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>
<p>Ground work affecting trees</p>	
<p>PO 2.1</p> <p>Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>Land Division</p>	
<p>PO 3.1</p> <p>Land division results in an allotment configuration that enables its subsequent development and the retention of regulated and significant trees as far as is reasonably practicable.</p>	<p>DTS/DPF 3.1</p> <p>Land division where:</p> <p>(a) there are no regulated or significant trees located within or adjacent to the plan of division</p> <p>or</p> <p>(b) the application demonstrates that an area exists to accommodate subsequent development of proposed allotments after an allowance has been made for a tree protection zone around any regulated tree within and adjacent to the plan of division.</p>

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

Traffic Generating Development Overlay

Assessment Provisions (AP)

<p>Desired Outcome</p>	
DO 1	Safe and efficient operation of Urban Transport Routes and Major Urban Transport Routes for all road users.

DO 2	Provision of safe and efficient access to and from urban transport routes and major urban transport routes.
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Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Traffic Generating Development	
<p>PO 1.1</p> <p>Development designed to minimise its potential impact on the safety, efficiency and functional performance of the State Maintained Road network.</p>	<p>DTS/DPF 1.1</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.
<p>PO 1.2</p> <p>Access points sited and designed to accommodate the type and volume of traffic likely to be generated by development.</p>	<p>DTS/DPF 1.2</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.
<p>PO 1.3</p> <p>Sufficient accessible on-site queuing provided to meet the needs of the development so that queues do not impact on the State Maintained Road network.</p>	<p>DTS/DPF 1.3</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Except where all of the relevant deemed-to-satisfy criteria are met, any of the following classes of development that are proposed within 250m of a State Maintained Road:	Commissioner of Highways.	To provide expert technical assessment and direction to the Relevant Authority on the safe and	Development of a class to which

<ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more. 		<p>efficient operation and management of all roads relevant to the Commissioner of Highways as described in the Planning and Design Code.</p>	<p>Schedule 9 clause 3 item 7 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>
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Part 4 - General Development Policies

Advertisements

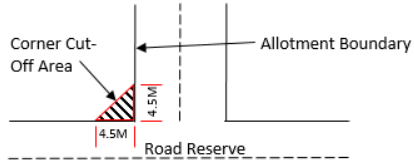
Assessment Provisions (AP)

Desired Outcome	
DO 1	Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Appearance	
<p>PO 1.1</p> <p>Advertisements are compatible and integrated with the design of the building and/or land they are located on.</p>	<p>DTS/DPF 1.1</p> <p>Advertisements attached to a building satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are not located in a Neighbourhood-type zone (b) where they are flush with a wall: <ul style="list-style-type: none"> (i) if located at canopy level, are in the form of a fascia sign (ii) if located above canopy level: <ul style="list-style-type: none"> A. do not have any part rising above parapet height B. are not attached to the roof of the building (c) where they are not flush with a wall: <ul style="list-style-type: none"> (i) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (ii) if attached to a two-storey building: <ul style="list-style-type: none"> A. has no part located above the finished floor level of the second storey of the building B. does not protrude beyond the outer limits of any verandah structure below C. does not have a sign face that exceeds 1m² per side. (d) if located below canopy level, are flush with a wall

	<ul style="list-style-type: none"> (e) if located at canopy level, are in the form of a fascia sign (f) if located above a canopy: <ul style="list-style-type: none"> (i) are flush with a wall (ii) do not have any part rising above parapet height (iii) are not attached to the roof of the building. (g) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (h) if attached to a two-storey building, have no part located above the finished floor level of the second storey of the building (i) where they are flush with a wall, do not, in combination with any other existing sign, cover more than 15% of the building facade to which they are attached.
<p>PO 1.2</p> <p>Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.</p>	<p>DTS/DPF 1.2</p> <p>Where development comprises an advertising hoarding, the supporting structure is:</p> <ul style="list-style-type: none"> (a) concealed by the associated advertisement and decorative detailing or (b) not visible from an adjacent public street or thoroughfare, other than a support structure in the form of a single or dual post design.
<p>PO 1.3</p> <p>Advertising does not encroach on public land or the land of an adjacent allotment.</p>	<p>DTS/DPF 1.3</p> <p>Advertisements and/or advertising hoardings are contained within the boundaries of the site.</p>
<p>PO 1.4</p> <p>Where possible, advertisements on public land are integrated with existing structures and infrastructure.</p>	<p>DTS/DPF 1.4</p> <p>Advertisements on public land that meet at least one of the following:</p> <ul style="list-style-type: none"> (a) achieves Advertisements DTS/DPF 1.1 (b) are integrated with a bus shelter.
<p>PO 1.5</p> <p>Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
Proliferation of Advertisements	
<p>PO 2.1</p> <p>Proliferation of advertisements is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.1</p> <p>No more than one freestanding advertisement is displayed per occupancy.</p>
<p>PO 2.2</p> <p>Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.2</p> <p>Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.</p>
<p>PO 2.3</p> <p>Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.3</p> <p>Advertisements satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are attached to a building (b) other than in a Neighbourhood-type zone, where they are flush with a wall, cover no more than 15% of the building facade to which they are attached (c) do not result in more than one sign per occupancy that is not flush with a wall.
Advertising Content	
<p>PO 3.1</p> <p>Advertisements are limited to information relating to the lawful use of land they are located on to assist in the ready identification of the activity or</p>	<p>DTS/DPF 3.1</p> <p>Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.</p>

<p>activities on the land and avoid unrelated content that contributes to visual clutter and untidiness.</p>	
<p>Amenity Impacts</p>	
<p>PO 4.1 Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.</p>	<p>DTS/DPF 4.1 Advertisements do not incorporate any illumination.</p>
<p>Safety</p>	
<p>PO 5.1 Advertisements and/or advertising hoardings erected on a verandah or projecting from a building wall are designed and located to allow for safe and convenient pedestrian access.</p>	<p>DTS/DPF 5.1 Advertisements have a minimum clearance of 2.5m between the top of the footpath and base of the underside of the sign.</p>
<p>PO 5.2 Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.</p>	<p>DTS/DPF 5.2 No advertisement illumination is proposed.</p>
<p>PO 5.3 Advertisements and/or advertising hoardings do not create a hazard to drivers by:</p> <ul style="list-style-type: none"> (a) being liable to interpretation by drivers as an official traffic sign or signal (b) obscuring or impairing drivers' view of official traffic signs or signals (c) obscuring or impairing drivers' view of features of a road that are potentially hazardous (such as junctions, bends, changes in width and traffic control devices) or other road or rail vehicles at/or approaching level crossings. 	<p>DTS/DPF 5.3 Advertisements satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are not located in a public road or rail reserve (b) are located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram 
<p>PO 5.4 Advertisements and/or advertising hoardings do not create a hazard by distracting drivers from the primary driving task at a location where the demands on driver concentration are high.</p>	<p>DTS/DPF 5.4 Advertisements and/or advertising hoardings are not located along or adjacent to a road having a speed limit of 80km/h or more.</p>
<p>PO 5.5 Advertisements and/or advertising hoardings provide sufficient clearance from the road carriageway to allow for safe and convenient movement by all road users.</p>	<p>DTS/DPF 5.5 Where the advertisement or advertising hoarding is:</p> <ul style="list-style-type: none"> (a) on a kerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 0.6m from the roadside edge of the kerb (b) on an unkerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 5.5m from the edge of the seal (c) on any other kerbed or unkerbed road, the advertisement or advertising hoarding is located a minimum of the following distance from the roadside edge of the kerb or the seal: <ul style="list-style-type: none"> (a) 110 km/h road - 14m (b) 100 km/h road - 13m (c) 90 km/h road - 10m (d) 70 or 80 km/h road - 8.5m.
<p>PO 5.6 Advertising near signalised intersections does not cause unreasonable distraction to road users through illumination, flashing lights, or moving or changing displays or messages.</p>	<p>DTS/DPF 5.6 Advertising:</p> <ul style="list-style-type: none"> (a) is not illuminated (b) does not incorporate a moving or changing display or message (c) does not incorporate a flashing light(s).

Animal Keeping and Horse Keeping

Assessment Provisions (AP)

Desired Outcome	
DO 1	Animals are kept at a density that is not beyond the carrying capacity of the land and in a manner that minimises their adverse effects on the environment, local amenity and surrounding development.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Animal keeping, horse keeping and associated activities do not create adverse impacts on the environment or the amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Animal keeping and horse keeping is located and managed to minimise the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
Horse Keeping	
PO 2.1 Water from stable wash-down areas is directed to appropriate absorption areas and/or drainage pits to minimise pollution of land and water.	DTS/DPF 2.1 None are applicable.
PO 2.2 Stables, horse shelters or associated yards are sited appropriate distances away from sensitive receivers and/or allotments in other ownership to avoid adverse impacts from dust, erosion and odour.	DTS/DPF 2.2 Stables, horse shelters and associated yards are sited in accordance with all of the following: (a) 30m or more from any sensitive receivers (existing or approved) on land in other ownership (b) where an adjacent allotment is vacant and in other ownership, 30m or more from the boundary of that allotment.
PO 2.3 All areas accessible to horses are separated from septic tank effluent disposal areas to protect the integrity of that system. Stable flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 2.3 Septic tank effluent disposal areas are enclosed with a horse-proof barrier such as a fence to exclude horses from this area.
PO 2.4 To minimise environmental harm and adverse impacts on water resources, stables, horse shelters and associated yards are appropriately set back from a watercourse.	DTS/DPF 2.4 Stables, horse shelters and associated yards are set back 50m or more from a watercourse.
PO 2.5 Stables, horse shelters and associated yards are located on slopes that are stable to minimise the risk of soil erosion and water runoff.	DTS/DPF 2.5 Stables, horse shelters and associated yards are not located on land with a slope greater than 10% (1-in-10).
Kennels	
PO 3.1	DTS/DPF 3.1

<p>Kennel flooring is constructed with an impervious material to facilitate regular cleaning.</p>	<p>The floors of kennels satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are constructed of impervious concrete (b) are designed to be self-draining when washed down.
<p>PO 3.2</p> <p>Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as:</p> <ul style="list-style-type: none"> (a) adopting appropriate separation distances (b) orientating openings away from sensitive receivers. 	<p>DTS/DPF 3.2</p> <p>Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.</p>
<p>PO 3.3</p> <p>Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.</p>	<p>DTS/DPF 3.3</p> <p>Kennels are sited in association with a permanent dwelling on the land.</p>
<p>Wastes</p>	
<p>PO 4.1</p> <p>Storage of manure, used litter and other wastes (other than wastewater lagoons) is designed, constructed and managed to minimise attracting and harbouring vermin.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p> <p>Facilities for the storage of manure, used litter and other wastes (other than wastewater lagoons) are located to minimise the potential for polluting water resources.</p>	<p>DTS/DPF 4.2</p> <p>Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.</p>

Aquaculture

Assessment Provisions (AP)

<h2 style="margin: 0;">Desired Outcome</h2>	
<p>DO 1</p>	<p>Aquaculture facilities are developed in an ecologically, economically and socially sustainable manner to support an equitable sharing of marine, coastal and inland resources and mitigate conflict with other water-based and land-based uses.</p>

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

<h2 style="margin: 0;">Performance Outcome</h2>	<h2 style="margin: 0;">Deemed-to-Satisfy Criteria / Designated Performance Feature</h2>
<p>Land-based Aquaculture</p>	
<p>PO 1.1</p> <p>Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.</p>	<p>DTS/DPF 1.1</p> <p>Land-based aquaculture and associated components are located to satisfy all of the following:</p> <ul style="list-style-type: none"> (a) 200m or more from a sensitive receiver in other ownership (b) 500m or more from the boundary of a zone primarily intended to accommodate sensitive receivers.
<p>PO 1.2</p> <p>Land-based aquaculture and associated components are sited and designed to prevent surface flows from entering ponds in a 1% AEP sea flood level event.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>

PO 1.3 Land-based aquaculture and associated components are sited and designed to prevent pond leakage that would pollute groundwater.	DTS/DPF 1.3 None are applicable.
PO 1.4 Land-based aquaculture and associated components are sited and designed to prevent farmed species escaping and entering into any waters.	DTS/DPF 1.4 None are applicable.
PO 1.5 Land-based aquaculture and associated components, including intake and discharge pipes, are designed to minimise the need to traverse sensitive areas to minimise impact on the natural environment.	DTS/DPF 1.5 None are applicable.
PO 1.6 Pipe inlets and outlets associated with land-based aquaculture are sited and designed to minimise the risk of disease transmission.	DTS/DPF 1.6 None are applicable.
PO 1.7 Storage areas associated with aquaculture activity are integrated with the use of the land and sited and designed to minimise their visual impact on the surrounding environment.	DTS/DPF 1.7 None are applicable.
Marine Based Aquaculture	
PO 2.1 Marine aquaculture is sited and designed to minimise its adverse impacts on sensitive ecological areas including: (a) creeks and estuaries (b) wetlands (c) significant seagrass and mangrove communities (d) marine habitats and ecosystems.	DTS/DPF 2.1 None are applicable.
PO 2.2 Marine aquaculture is sited in areas with adequate water current to disperse sediments and dissolve particulate wastes to prevent the build-up of waste that may cause environmental harm.	DTS/DPF 2.2 None are applicable.
PO 2.3 Marine aquaculture is designed to not involve discharge of human waste on the site, on any adjacent land or into nearby waters.	DTS/DPF 2.3 None are applicable.
PO 2.4 Marine aquaculture (other than inter-tidal aquaculture) is located an appropriate distance seaward of the high water mark.	DTS/DPF 2.4 Marine aquaculture development is located 100m or more seaward of the high water mark.
PO 2.5 Marine aquaculture is sited and designed to not obstruct or interfere with: (a) areas of high public use (b) areas, including beaches, used for recreational activities such as swimming, fishing, skiing, sailing and other water sports (c) areas of outstanding visual or environmental value (d) areas of high tourism value (e) areas of important regional or state economic activity, including commercial ports, wharfs and jetties (f) the operation of infrastructure facilities including inlet and outlet pipes associated with the desalination of sea water.	DTS/DPF 2.5 None are applicable.
PO 2.6	DTS/DPF 2.6

Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine environment.	None are applicable.
<p>PO 2.7</p> <p>Marine aquaculture is designed to be as unobtrusive as practicable by incorporating measures such as:</p> <ul style="list-style-type: none"> (a) using feed hoppers painted in subdued colours and suspending them as close as possible to the surface of the water (b) positioning structures to protrude the minimum distance practicable above the surface of the water (c) avoiding the use of shelters and structures above cages and platforms unless necessary to exclude predators and protected species from interacting with the farming structures and/or stock inside the cages, or for safety reasons (d) positioning racks, floats and other farm structures in unobtrusive locations landward from the shoreline. 	<p>DTS/DPF 2.7</p> <p>None are applicable.</p>
<p>PO 2.8</p> <p>Access, launching and maintenance facilities utilise existing established roads, tracks, ramps and paths to or from the sea where possible to minimise environmental and amenity impacts.</p>	<p>DTS/DPF 2.8</p> <p>None are applicable.</p>
<p>PO 2.9</p> <p>Access, launching and maintenance facilities are developed as common user facilities and are co-located where practicable to mitigate adverse impacts on coastal areas.</p>	<p>DTS/DPF 2.9</p> <p>None are applicable.</p>
<p>PO 2.10</p> <p>Marine aquaculture is sited to minimise potential impacts on, and to protect the integrity of, reserves under the <i>National Parks and Wildlife Act 1972</i>.</p>	<p>DTS/DPF 2.10</p> <p>Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the <i>National Parks and Wildlife Act 1972</i>.</p>
<p>PO 2.11</p> <p>Onshore storage, cooling and processing facilities do not impair the coastline and its visual amenity by:</p> <ul style="list-style-type: none"> (a) being sited, designed, landscaped and of a scale to reduce the overall bulk and appearance of buildings and complement the coastal landscape (b) making provision for appropriately sited and designed vehicular access arrangements, including using existing vehicular access arrangements as far as practicable (c) incorporating appropriate waste treatment and disposal. 	<p>DTS/DPF 2.11</p> <p>None are applicable.</p>
Navigation and Safety	
<p>PO 3.1</p> <p>Marine aquaculture sites are suitably marked to maintain navigational safety.</p>	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
<p>PO 3.2</p> <p>Marine aquaculture is sited to provide adequate separation between farms for safe navigation.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
Environmental Management	
<p>PO 4.1</p> <p>Marine aquaculture is maintained to prevent hazards to people and wildlife, including breeding grounds and habitats of native marine mammals and terrestrial fauna, especially migratory species.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p>	<p>DTS/DPF 4.2</p>

Marine aquaculture is designed to facilitate the relocation or removal of structures in the case of emergency such as oil spills, algal blooms and altered water flows.	None are applicable.
PO 4.3 Marine aquaculture provides for progressive or future reclamation of disturbed areas ahead of, or upon, decommissioning.	DTS/DPF 4.3 None are applicable.
PO 4.4 Aquaculture operations incorporate measures for the removal and disposal of litter, disused material, shells, debris, detritus, dead animals and animal waste to prevent pollution of waters, wetlands, or the nearby coastline.	DTS/DPF 4.4 None are applicable.

Beverage Production in Rural Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	Mitigation of potential amenity and environmental impacts of value-adding beverage production facilities such as wineries, distilleries, cideries and breweries.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Odour and Noise	
PO 1.1 Beverage production activities are designed and sited to minimise odour impacts on rural amenity.	DTS/DPF 1.1 None are applicable.
PO 1.2 Beverage production activities are designed and sited to minimise noise impacts on sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 Fermentation, distillation, manufacturing, storage, packaging and bottling activities occur within enclosed buildings to improve the visual appearance within a locality and manage noise associated with these activities.	DTS/DPF 1.3 None are applicable.
PO 1.4 Breweries are designed to minimise odours emitted during boiling and fermentation stages of production.	DTS/DPF 1.4 Brew kettles are fitted with a vapour condenser.
PO 1.5 Beverage production solid wastes are stored in a manner that minimises odour impacts on sensitive receivers in other ownership.	DTS/DPF 1.5 Solid waste from beverage production is collected and stored in sealed containers and removed from the site within 48 hours.
Water Quality	
PO 2.1	DTS/DPF 2.1

Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	Wastewater management systems are set back 50m or more from the banks of watercourses and bores.
PO 2.2 The storage or disposal of chemicals or hazardous substances is undertaken in a manner to prevent pollution of water resources.	DTS/DPF 2.2 None are applicable.
PO 2.3 Stormwater runoff from areas that may cause contamination due to beverage production activities (including vehicle movements and machinery operations) is drained to an onsite stormwater treatment system to manage potential environmental impacts.	DTS/DPF 2.3 None are applicable.
PO 2.4 Stormwater runoff from areas unlikely to cause contamination by beverage production and associated activities (such as roof catchments and clean hard-paved surfaces) is diverted away from beverage production areas and wastewater management systems.	DTS/DPF 2.4 None are applicable.
Wastewater Irrigation	
PO 3.1 Beverage production wastewater irrigation systems are designed and located to not contaminate soil and surface and ground water resources or damage crops.	DTS/DPF 3.1 None are applicable.
PO 3.2 Beverage production wastewater irrigation systems are designed and located to minimise impact on amenity and avoid spray drift onto adjoining land.	DTS/DPF 3.2 Beverage production wastewater is not irrigated within 50m of any dwelling in other ownership.
PO 3.3 Beverage production wastewater is not irrigated onto areas that pose an undue risk to the environment or amenity such as: (a) waterlogged areas (b) land within 50m of a creek, swamp or domestic or stock water bore (c) land subject to flooding (d) steeply sloping land (e) rocky or highly permeable soil overlaying an unconfined aquifer.	DTS/DPF 3.3 None are applicable.

Bulk Handling and Storage Facilities

Assessment Provisions (AP)

Desired Outcome	
DO 1	Facilities for the bulk handling and storage of agricultural, mineral, petroleum, rock, ore or other similar commodities are designed to minimise adverse impacts on transport networks, the landscape and surrounding land uses.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria /
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Designated Performance Feature	
Siting and Design	
PO 1.1 Bulk handling and storage facilities are sited and designed to minimise risks of adverse air quality and noise impacts on sensitive receivers.	DTS/DPF 1.1 Facilities for the handling, storage and dispatch of commodities in bulk (excluding processing) meet the following minimum separation distances from sensitive receivers: (a) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals), where the handling of these materials into or from vessels does not exceed 100 tonnes per day: 300m or more from residential premises not associated with the facility (b) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility: 300m or more from residential premises not associated with the facility (c) bulk petroleum storage involving individual containers with a capacity up to 200 litres and a total on-site storage capacity not exceeding 1,000 cubic metres: 500m or more (d) coal handling with: a. capacity up to 1 tonne per day or a storage capacity up to 50 tonnes: 500m or more b. capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes: 1000m or more.
Buffers and Landscaping	
PO 2.1 Bulk handling and storage facilities incorporate a buffer area for the establishment of dense landscaping adjacent road frontages to enhance the appearance of land and buildings from public thoroughfares.	DTS/DPF 2.1 None are applicable.
PO 2.2 Bulk handling and storage facilities incorporate landscaping to assist with screening and dust filtration.	DTS/DPF 2.2 None are applicable.
Access and Parking	
PO 3.1 Roadways and vehicle parking areas associated with bulk handling and storage facilities are designed and surfaced to control dust emissions and prevent drag out of material from the site.	DTS/DPF 3.1 Roadways and vehicle parking areas are sealed with an all-weather surface.
Slipways, Wharves and Pontoons	
PO 4.1 Slipways, wharves and pontoons used for the handling of bulk materials (such as fuel, oil, catch, bait and the like) incorporate catchment devices to avoid the release of materials into adjacent waters.	DTS/DPF 4.1 None are applicable.

Clearance from Overhead Powerlines

Assessment Provisions (AP)

Desired Outcome	
DO 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.	DTS/DPF 1.1 One of the following is satisfied: (a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the <i>Electricity Act 1996</i> (b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

Design

Assessment Provisions (AP)

Desired Outcome	
DO 1	<p>Development is:</p> <ul style="list-style-type: none"> (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All development	
External Appearance	
PO 1.1 Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	DTS/DPF 1.1 None are applicable.
PO 1.2 Where zero or minor setbacks are desirable, development provides shelter over footpaths (<u>in the form of verandahs, awnings, canopies and the like, with adequate lighting</u>) to positively contribute to the walkability, comfort and safety of the public realm.	DTS/DPF 1.2 None are applicable.
PO 1.3 Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Plant, exhaust and intake vents and other technical equipment is integrated into the building design to minimise visibility from the public	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.

<p>realm and negative impacts on residential amenity by:</p> <ul style="list-style-type: none"> (a) positioning plant and equipment in unobtrusive locations viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses. 	
<p>PO 1.5</p> <p>The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form) taking into account the form of development contemplated in the relevant zone.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
Safety	
<p>PO 2.1</p> <p>Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Development is designed to differentiate public, communal and private areas.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>PO 2.3</p> <p>Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.</p>	<p>DTS/DPF 2.3</p> <p>None are applicable.</p>
<p>PO 2.4</p> <p>Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.</p>	<p>DTS/DPF 2.4</p> <p>None are applicable.</p>
<p>PO 2.5</p> <p>Common areas and entry points of buildings (such as the foyer areas of residential buildings), and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.</p>	<p>DTS/DPF 2.5</p> <p>None are applicable.</p>
Landscaping	
<p>PO 3.1</p> <p>Soft landscaping and tree planting is incorporated to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes (e) contribute to biodiversity. 	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
<p>PO 3.2</p> <p>Soft landscaping and tree planting maximises the use of locally indigenous plant species, incorporates plant species best suited to current and future climate conditions and avoids pest plant and weed species.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
Environmental Performance	
<p>PO 4.1</p> <p>Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>

<p>PO 4.2</p> <p>Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>
<p>PO 4.3</p> <p>Buildings incorporate climate-responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.</p>	<p>DTS/DPF 4.3</p> <p>None are applicable.</p>
<p>Water Sensitive Design</p>	
<p>PO 5.1</p> <p>Development is sited and designed to maintain natural hydrological systems without negatively impacting:</p> <ul style="list-style-type: none"> (a) the quantity and quality of surface water and groundwater (b) the depth and directional flow of surface water and groundwater (c) the quality and function of natural springs. 	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>
<p>On-site Waste Treatment Systems</p>	
<p>PO 6.1</p> <p>Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.</p>	<p>DTS/DPF 6.1</p> <p>Effluent disposal drainage areas do not:</p> <ul style="list-style-type: none"> (a) encroach within an area used as private open space or result in less private open space than that specified in Design Table 1 - Private Open Space (b) use an area also used as a driveway (c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
<p>Carparking Appearance</p>	
<p>PO 7.1</p> <p>Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on the streetscapes through techniques such as:</p> <ul style="list-style-type: none"> (a) limiting protrusion above finished ground level (b) screening through appropriate planting, fencing and mounding (c) limiting the width of openings and integrating them into the building structure. 	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
<p>PO 7.2</p> <p>Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.</p>	<p>DTS/DPF 7.2</p> <p>None are applicable.</p>
<p>PO 7.3</p> <p>Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.</p>	<p>DTS/DPF 7.3</p> <p>None are applicable.</p>
<p>PO 7.4</p> <p>Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.</p>	<p>DTS/DPF 7.4</p> <p>None are applicable.</p>
<p>PO 7.5</p>	<p>DTS/DPF 7.5</p>

Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	None are applicable.
PO 7.6 Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.	DTS/DPF 7.6 None are applicable.
PO 7.7 Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.	DTS/DPF 7.7 None are applicable.
Earthworks and sloping land	
PO 8.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 8.1 Development does not involve any of the following: (a) excavation exceeding a vertical height of 1m (b) filling exceeding a vertical height of 1m (c) a total combined excavation and filling vertical height of 2m or more.
PO 8.2 Driveways and access tracks are designed and constructed to allow safe and convenient access on sloping land (with a gradient exceeding 1 in 8).	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b): (a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway (b) are constructed with an all-weather trafficable surface.
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8): (a) do not contribute to the instability of embankments and cuttings (b) provide level transition areas for the safe movement of people and goods to and from the development (c) are designed to integrate with the natural topography of the land.	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on-site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslide nor increases the potential for landslide or land surface instability.	DTS/DPF 8.5 None are applicable.
Fences and Walls	
PO 9.1 Fences, walls and retaining walls are of sufficient height to maintain privacy and security without unreasonably impacting the visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.
PO 9.2 Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts.	DTS/DPF 9.2 A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Privacy (in building 3 storeys or less)	

<p>PO 10.1</p> <p>Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.</p>	<p>DTS/DPF 10.1</p> <p>Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following:</p> <ul style="list-style-type: none"> (a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm (b) have sill heights greater than or equal to 1.5m above finished floor level (c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.
<p>PO 10.2</p> <p>Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.</p>	<p>DTS/DPF 10.2</p> <p>One of the following is satisfied:</p> <ul style="list-style-type: none"> (a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace or (b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of: <ul style="list-style-type: none"> (i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land or (ii) 1.7m above finished floor level in all other cases
<p>All Residential development</p>	
<p>Front elevations and passive surveillance</p>	
<p>PO 11.1</p> <p>Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 11.1</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street.
<p>PO 11.2</p> <p>Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.</p>	<p>DTS/DPF 11.2</p> <p>Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.</p>
<p>Outlook and amenity</p>	
<p>PO 12.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 12.1</p> <p>A living room of a dwelling incorporates a window with an outlook towards the street frontage or private open space, public open space, or waterfront areas.</p>
<p>PO 12.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 12.2</p> <p>None are applicable.</p>
<p>Ancillary Development</p>	
<p>PO 13.1</p>	<p>DTS/DPF 13.1</p>

Residential ancillary buildings and structures are sited and designed to not detract from the streetscape or appearance of buildings on the site or neighbouring properties.

Ancillary buildings:

- (a) are ancillary to a dwelling erected on the same site
- (b) have a floor area not exceeding 60m²
- (c) are not constructed, added to or altered so that any part is situated:
 - (i) in front of any part of the building line of the dwelling to which it is ancillary
 - or
 - (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)
- (d) in the case of a garage or carport, the garage or carport:
 - (i) is set back at least 5.5m from the boundary of the primary street
 - (ii) when facing a primary street or secondary street, has a total door / opening not exceeding:
 - A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser
 - B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width
- (e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:
 - (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and
 - (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent
- (f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary
- (g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure
- (h) have a wall height or post height not exceeding 3m above natural ground level
- (i) have a roof height where no part of the roof is more than 5m above the natural ground level
- (j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour
- (k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:
 - (i) a total area as determined by the following table:

Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site
<150	10%
150-200	15%
201-450	20%
>450	25%

- (ii) the amount of existing soft landscaping prior to the development occurring.

<p>PO 13.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision or car parking requirements and do not result in over-development of the site.</p>	<p>DTS/DPF 13.2</p> <p>Ancillary buildings and structures do not result in:</p> <ul style="list-style-type: none"> (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
<p>PO 13.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa is positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>	<p>DTS/DPF 13.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> (a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or (b) located at least 12m from the nearest habitable room located on an adjoining allotment.
<p>Garage appearance</p>	
<p>PO 14.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 14.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> (a) are situated so that no part of the garage or carport is in front of any part of the building line of the dwelling (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening not exceeding 7m in width (d) have a garage door /opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street.
<p>Massing</p>	
<p>PO 15.1</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 15.1</p> <p>None are applicable</p>
<p>Dwelling additions</p>	
<p>PO 16.1</p> <p>Dwelling additions are sited and designed to not detract from the streetscape or amenity of adjoining properties and do not impede on-site functional requirements.</p>	<p>DTS / DPF 16.1</p> <p>Dwelling additions:</p> <ul style="list-style-type: none"> (a) are not constructed, added to or altered so that any part is situated closer to a public street (b) do not result in: <ul style="list-style-type: none"> (i) excavation exceeding a vertical height of 1m (ii) filling exceeding a vertical height of 1m (iii) a total combined excavation and filling vertical height of 2m or more (iv) less Private Open Space than specified in Design Table 1 - Private Open Space (v) less on-site parking than specified in Transport Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas (vi) upper level windows facing side or rear boundaries unless: <ul style="list-style-type: none"> A. they are permanently obscured to a height of 1.5m above finished floor level that is fixed or not capable of being opened more than 200mm or B. have sill heights greater than or equal to 1.5m above finished floor level

	<p>or</p> <p>C. incorporate screening to a height of 1.5m above finished floor level</p> <p>(vii) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:</p> <p>A. 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</p> <p>B. 1.7m above finished floor level in all other cases.</p>
Private Open Space	
<p>PO 17.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 17.1</p> <p>Private open space is provided in accordance with Design Table 1 - Private Open Space.</p>
Water Sensitive Design	
<p>PO 18.1</p> <p>Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.</p>	<p>DTS/DPF 18.1</p> <p>Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes:</p> <p>(a) 80 per cent reduction in average annual total suspended solids</p> <p>(b) 60 per cent reduction in average annual total phosphorus</p> <p>(c) 45 per cent reduction in average annual total nitrogen.</p>
<p>PO 18.2</p> <p>Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.</p>	<p>DTS/DPF 18.2</p> <p>Development creating a common driveway / access that services 5 or more dwellings:</p> <p>(a) maintains the pre-development peak flow rate from the site based upon a 0.35 runoff coefficient for the 18.1% AEP 30-minute storm and the stormwater runoff time to peak is not increased or captures and retains the difference in pre-development runoff volume (based upon a 0.35 runoff coefficient) vs post development runoff volume from the site for an 18.1% AEP 30-minute storm; and</p> <p>(b) manages site generated stormwater runoff up to and including the 1% AEP flood event to avoid flooding of buildings.</p>
Car parking, access and manoeuvrability	
<p>PO 19.1</p> <p>Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 19.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <p>(a) single width car parking spaces:</p> <p>(i) a minimum length of 5.4m per space</p> <p>(ii) a minimum width of 3.0m</p> <p>(iii) a minimum garage door width of 2.4m</p> <p>(b) double width car parking spaces (side by side):</p> <p>(i) a minimum length of 5.4m</p> <p>(ii) a minimum width of 5.4m</p> <p>(iii) minimum garage door width of 2.4m per space.</p>
<p>PO 19.2</p>	<p>DTS/DPF 19.2</p>

<p>Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m
<p>PO 19.3 Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages, domestic waste collection and on-street parking.</p>	<p>DTS/DPF 19.3 Driveways and access points on sites with a frontage to a public road of 10m or less have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site.</p>
<p>PO 19.4 Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 19.4 Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed: <ul style="list-style-type: none"> (i) is set back 6m or more from the tangent point of an intersection of 2 or more roads (ii) is set back outside of the marked lines or infrastructure dedicating a pedestrian crossing (iii) does not involve the removal, relocation or damage to of mature street trees, street furniture or utility infrastructure services.
<p>PO 19.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 19.5 Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not steeper than 1:4 on average (b) they are aligned relative to the street boundary so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the street boundary (c) if located to provide access from an alley, lane or right of way - the alley, land or right or way is at least 6.2m wide along the boundary of the allotment / site
<p>PO 19.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 19.6 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>Waste storage</p>	
<p>PO 20.1 Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 20.1 None are applicable.</p>
<p>Design of Transportable Dwellings</p>	
<p>PO 21.1 The sub-floor space beneath transportable buildings is enclosed to give</p>	<p>DTS/DPF 21.1 Buildings satisfy (a) or (b):</p>

the appearance of a permanent structure.	<p>(a) are not transportable or (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.</p>
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Group dwelling, residential flat buildings and battle-axe development

Amenity

<p>PO 22.1</p> <p>Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.</p>	<p>DTS/DPF 22.1</p> <p>Dwellings have a minimum internal floor area in accordance with the following table:</p> <table border="1"> <thead> <tr> <th>Number of bedrooms</th> <th>Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>65m²</td> </tr> <tr> <td>3+ bedrooms</td> <td>80m² and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom</td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	65m ²	3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom
Number of bedrooms	Minimum internal floor area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	65m ²										
3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom										

<p>PO 22.2</p> <p>The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.</p>	<p>DTS/DPF 22.2</p> <p>None are applicable.</p>
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<p>PO 22.3</p> <p>Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.</p>	<p>DTS/DPF 22.3</p> <p>None are applicable.</p>
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<p>PO 22.4</p> <p>Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.</p>	<p>DTS/DPF 22.4</p> <p>Dwelling sites/allotments are not in the form of a battle-axe arrangement.</p>
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Communal Open Space

<p>PO 23.1</p> <p>Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.</p>	<p>DTS/DPF 23.1</p> <p>None are applicable.</p>
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<p>PO 23.2</p> <p>Communal open space is of sufficient size and dimensions to cater for group recreation.</p>	<p>DTS/DPF 23.2</p> <p>Communal open space incorporates a minimum dimension of 5 metres.</p>
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<p>PO 23.3</p> <p>Communal open space is designed and sited to:</p> <p>(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.</p>	<p>DTS/DPF 23.3</p> <p>None are applicable.</p>
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<p>PO 23.4</p> <p>Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.</p>	<p>DTS/DPF 23.4</p> <p>None are applicable.</p>
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<p>PO 23.5</p> <p>Communal open space is designed and sited to:</p> <ul style="list-style-type: none"> (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance. 	<p>DTS/DPF 23.5</p> <p>None are applicable.</p>
<p>Carparking, access and manoeuvrability</p>	
<p>PO 24.1</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 24.1</p> <p>Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street car parks per proposed dwellings (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>PO 24.2</p> <p>The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.</p>	<p>DTS/DPF 24.2</p> <p>Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.</p>
<p>PO 24.3</p> <p>Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.</p>	<p>DTS/DPF 24.3</p> <p>Driveways that service more than 1 dwelling or a dwelling on a battle-axe site:</p> <ul style="list-style-type: none"> (a) have a minimum width of 3m (b) for driveways servicing more than 3 dwellings: <ul style="list-style-type: none"> (i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street (ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.
<p>PO 24.4</p> <p>Residential driveways in a battle-axe configuration are designed to allow safe and convenient movement.</p>	<p>DTS/DPF 24.4</p> <p>Where in a battle-axe configuration, a driveway servicing one dwelling has a minimum width of 3m.</p>
<p>PO 24.5</p> <p>Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.</p>	<p>DTS/DPF 24.5</p> <p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.</p>
<p>PO 24.6</p> <p>Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 24.6</p> <p>Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
<p>Soft Landscaping</p>	
<p>PO 25.1</p> <p>Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.</p>	<p>DTS/DPF 25.1</p> <p>Other than where located directly in front of a garage or a building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.</p>
<p>PO 25.2</p>	<p>DTS/DPF 25.2</p>

Soft landscaping is provided that improves the appearance of common driveways.	Where a common driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Site Facilities / Waste Storage	
PO 26.1 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 26.1 None are applicable.
PO 26.2 Provision is made for suitable external clothes drying facilities.	DTS/DPF 26.2 None are applicable.
PO 26.3 Provision is made for suitable household waste and recyclable material storage facilities which are: (a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.	DTS/DPF 26.3 None are applicable.
PO 26.4 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 26.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 26.5 Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	DTS/DPF 26.5 None are applicable.
PO 26.6 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 26.6 None are applicable.
Supported accommodation and retirement facilities	
Siting and Configuration	
PO 27.1 Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	DTS/DPF 27.1 None are applicable.
Movement and Access	
PO 28.1 Development is designed to support safe and convenient access and movement for residents by providing: (a) ground-level access or lifted access to all units (b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places (c) car parks with gradients no steeper than 1-in-40 and of sufficient area to provide for wheelchair manoeuvrability (d) kerb ramps at pedestrian crossing points.	DTS/DPF 28.1 None are applicable.
Communal Open Space	
PO 29.1 Development is designed to provide attractive, convenient and	DTS/DPF 29.1 None are applicable.

comfortable indoor and outdoor communal areas to be used by residents and visitors.	
PO 29.2 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 29.2 None are applicable.
PO 29.3 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 29.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 29.4 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 29.4 None are applicable.
PO 29.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 29.5 None are applicable.
PO 29.6 Communal open space is designed and sited to: (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 29.6 None are applicable.
Site Facilities / Waste Storage	
PO 30.1 Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric powered vehicles.	DTS/DPF 30.1 None are applicable.
PO 30.2 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 30.2 None are applicable.
PO 30.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 28.3 None are applicable.
PO 30.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located and screened from public view.	DTS/DPF 30.4 None are applicable.
PO 30.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 30.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 30.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 30.6 None are applicable.
PO 30.7 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 30.7 None are applicable.

All non-residential development	
Water Sensitive Design	
<p>PO 31.1</p> <p>Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 31.1</p> <p>None are applicable.</p>
<p>PO 31.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 31.2</p> <p>None are applicable.</p>
Wash-down and Waste Loading and Unloading	
<p>PO 32.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, vessels, plant or equipment are:</p> <ul style="list-style-type: none"> (a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) designed to drain wastewater to either: <ul style="list-style-type: none"> (i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or (ii) a holding tank and its subsequent removal off-site on a regular basis. 	<p>DTS/DPF 32.1</p> <p>None are applicable.</p>

Table 1 - Private Open Space

Dwelling Type	Minimum Rate
Dwelling (at ground level)	<p>Total private open space area:</p> <ul style="list-style-type: none"> (a) Site area <301m²: 24m² located behind the building line. (b) Site area ≥ 301m²: 60m² located behind the building line. <p>Minimum directly accessible from a living room: 16m² / with a minimum dimension 3m.</p>
Dwelling (above ground level)	<p>Studio (no separate bedroom): 4m² with a minimum dimension 1.8m</p> <p>One bedroom: 8m² with a minimum dimension 2.1m</p> <p>Two bedroom dwelling: 11m² with a minimum dimension 2.4m</p> <p>Three + bedroom dwelling: 15m² with a minimum dimension 2.6m</p>
Cabin or caravan (permanently fixed to the ground) in a residential park or a caravan and tourist park	<p>Total area: 16m², which may be used as second car parking space, provided on each site intended for residential occupation.</p>

Design in Urban Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	<p>Development is:</p> <ul style="list-style-type: none"> (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributing to the character of the locality (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All Development	
External Appearance	
<p>PO 1.1</p> <p>Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.</p>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>
<p>PO 1.4</p> <p>Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:</p> <ul style="list-style-type: none"> (a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses. 	<p>DTS/DPF 1.4</p> <p>Development does not incorporate any structures that protrude beyond the roofline.</p>
<p>PO 1.5</p> <p>The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
Safety	

<p>PO 2.1</p> <p>Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Development is designed to differentiate public, communal and private areas.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>PO 2.3</p> <p>Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.</p>	<p>DTS/DPF 2.3</p> <p>None are applicable.</p>
<p>PO 2.4</p> <p>Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.</p>	<p>DTS/DPF 2.4</p> <p>None are applicable.</p>
<p>PO 2.5</p> <p>Common areas and entry points of buildings (such as the foyer areas of residential buildings) and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.</p>	<p>DTS/DPF 2.5</p> <p>None are applicable.</p>
Landscaping	
<p>PO 3.1</p> <p>Soft landscaping and tree planting are incorporated to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes. 	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
Environmental Performance	
<p>PO 4.1</p> <p>Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p> <p>Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>
<p>PO 4.3</p> <p>Buildings incorporate climate responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.</p>	<p>DTS/DPF 4.3</p> <p>None are applicable.</p>
Water Sensitive Design	
<p>PO 5.1</p> <p>Development is sited and designed to maintain natural hydrological systems without negatively impacting:</p> <ul style="list-style-type: none"> (a) the quantity and quality of surface water and groundwater (b) the depth and directional flow of surface water and groundwater (c) the quality and function of natural springs. 	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>
On-site Waste Treatment Systems	

<p>PO 6.1</p> <p>Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.</p>	<p>DTS/DPF 6.1</p> <p>Effluent disposal drainage areas do not:</p> <ul style="list-style-type: none"> (a) encroach within an area used as private open space or result in less private open space than that specified in Design in Urban Areas Table 1 - Private Open Space (b) use an area also used as a driveway (c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
<p>Car parking appearance</p>	
<p>PO 7.1</p> <p>Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on streetscapes through techniques such as:</p> <ul style="list-style-type: none"> (a) limiting protrusion above finished ground level (b) screening through appropriate planting, fencing and mounding (c) limiting the width of openings and integrating them into the building structure. 	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
<p>PO 7.2</p> <p>Vehicle parking areas appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.</p>	<p>DTS/DPF 7.2</p> <p>None are applicable.</p>
<p>PO 7.3</p> <p>Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.</p>	<p>DTS/DPF 7.3</p> <p>None are applicable.</p>
<p>PO 7.4</p> <p>Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.</p>	<p>DTS/DPF 7.4</p> <p>Vehicle parking areas that are open to the sky and comprise 10 or more car parking spaces include a shade tree with a mature canopy of 4m diameter spaced for each 10 car parking spaces provided and a landscaped strip on any road frontage of a minimum dimension of 1m.</p>
<p>PO 7.5</p> <p>Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.</p>	<p>DTS/DPF 7.5</p> <p>Vehicle parking areas comprising 10 or more car parking spaces include soft landscaping with a minimum dimension of:</p> <ul style="list-style-type: none"> (a) 1m along all public road frontages and allotment boundaries (b) 1m between double rows of car parking spaces.
<p>PO 7.6</p> <p>Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.</p>	<p>DTS/DPF 7.6</p> <p>None are applicable.</p>
<p>PO 7.7</p> <p>Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.</p>	<p>DTS/DPF 7.7</p> <p>None are applicable.</p>
<p>Earthworks and sloping land</p>	
<p>PO 8.1</p> <p>Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.</p>	<p>DTS/DPF 8.1</p> <p>Development does not involve any of the following:</p> <ul style="list-style-type: none"> (a) excavation exceeding a vertical height of 1m (b) filling exceeding a vertical height of 1m

	(c) a total combined excavation and filling vertical height of 2m or more.
PO 8.2 Driveways and access tracks designed and constructed to allow safe and convenient access on sloping land.	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b): (a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway (b) are constructed with an all-weather trafficable surface.
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8): (a) do not contribute to the instability of embankments and cuttings (b) provide level transition areas for the safe movement of people and goods to and from the development (c) are designed to integrate with the natural topography of the land.	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslip or increase the potential for landslip or land surface instability.	DTS/DPF 8.5 None are applicable.
Fences and walls	
PO 9.1 Fences, walls and retaining walls of sufficient height maintain privacy and security without unreasonably impacting visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.
PO 9.2 Landscaping is incorporated on the low side of retaining walls that are visible from public roads and public open space to minimise visual impacts.	DTS/DPF 9.2 A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Privacy (low rise buildings)	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential use in a neighbourhood-type zone: (a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 125mm (b) have sill heights greater than or equal to 1.5m above finished floor level (c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.
PO 10.2 Development mitigates direct overlooking from balconies to habitable rooms and private open space of adjoining residential uses in neighbourhood type zones.	DTS/DPF 10.2 One of the following is satisfied: (a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace or (b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25%

	<p>transparency/openings fixed to a minimum height of:</p> <ul style="list-style-type: none"> (i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land or (ii) 1.7m above finished floor level in all other cases
Site Facilities / Waste Storage (excluding low rise residential development)	
<p>PO 11.1 Development provides a dedicated area for on-site collection and sorting of recyclable materials and refuse, green organic waste and wash bay facilities for the ongoing maintenance of bins that is adequate in size considering the number and nature of the activities they will serve and the frequency of collection.</p>	<p>DTS/DPF 11.1 None are applicable.</p>
<p>PO 11.2 Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.</p>	<p>DTS/DPF 11.2 None are applicable.</p>
<p>PO 11.3 Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.</p>	<p>DTS/DPF 11.3 None are applicable.</p>
<p>PO 11.4 Communal waste storage and collection areas are designed to allow waste and recycling collection vehicles to enter and leave the site without reversing.</p>	<p>DTS/DPF 11.4 None are applicable.</p>
<p>PO 11.5 For mixed use developments, non-residential waste and recycling storage areas and access provide opportunities for on-site management of food waste through composting or other waste recovery as appropriate.</p>	<p>DTS/DPF 11.5 None are applicable.</p>
All Development - Medium and High Rise	
External Appearance	
<p>PO 12.1 Buildings positively contribute to the character of the local area by responding to local context.</p>	<p>DTS/DPF 12.1 None are applicable.</p>
<p>PO 12.2 Architectural detail at street level and a mixture of materials at lower building levels near the public interface are provided to reinforce a human scale.</p>	<p>DTS/DPF 12.2 None are applicable.</p>
<p>PO 12.3 Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.</p>	<p>DTS/DPF 12.3 None are applicable.</p>
<p>PO 12.4 Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.</p>	<p>DTS/DPF 12.4 None are applicable.</p>
<p>PO 12.5 External materials and finishes are durable and age well to minimise ongoing maintenance requirements.</p>	<p>DTS/DPF 12.5 Buildings utilise a combination of the following external materials and finishes:</p> <ul style="list-style-type: none"> (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.
<p>PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.</p>	<p>DTS/DPF 12.6 Building street frontages incorporate:</p> <ul style="list-style-type: none"> (a) active uses such as shops or offices

	<ul style="list-style-type: none"> (b) prominent entry areas for multi-storey buildings (where it is a common entry) (c) habitable rooms of dwellings (d) areas of communal public realm with public art or the like, where consistent with the zone and/or subzone provisions. 																								
<p>PO 12.7</p> <p>Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.</p>	<p>DTS/DPF 12.7</p> <p>Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> (a) oriented towards the street (b) clearly visible and easily identifiable from the street and vehicle parking areas (c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied ground floor uses (d) designed to provide shelter, a sense of personal address and transitional space around the entry (e) located as close as practicable to the lift and / or lobby access to minimise the need for long access corridors (f) designed to avoid the creation of potential areas of entrapment. 																								
<p>PO 12.8</p> <p>Building services, plant and mechanical equipment are screened from the public realm.</p>	<p>DTS/DPF 12.8</p> <p>None are applicable.</p>																								
Landscaping																									
<p>PO 13.1</p> <p>Development facing a street provides a well landscaped area that contains a deep soil space to accommodate a tree of a species and size adequate to provide shade, contribute to tree canopy targets and soften the appearance of buildings.</p>	<p>DTS/DPF 13.1</p> <p>Buildings provide a 4m by 4m deep soil space in front of the building that accommodates a medium to large tree, except where no building setback from front property boundaries is desired.</p>																								
<p>PO 13.2</p> <p>Deep soil zones are provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies to provide shade and soften the appearance of multi-storey buildings.</p>	<p>DTS/DPF 13.2</p> <p>Multi-storey development provides deep soil zones and incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.</p> <table border="1"> <thead> <tr style="background-color: #003366; color: white;"> <th>Site area</th> <th>Minimum deep soil area</th> <th>Minimum dimension</th> <th>Tree / deep soil zones</th> </tr> </thead> <tbody> <tr> <td><300 m²</td> <td>10 m²</td> <td>1.5m</td> <td>1 small tree / 10 m²</td> </tr> <tr> <td>300-1500 m²</td> <td>7% site area</td> <td>3m</td> <td>1 medium tree / 30 m²</td> </tr> <tr> <td>>1500 m²</td> <td>7% site area</td> <td>6m</td> <td>1 large or medium tree / 60 m²</td> </tr> </tbody> </table> <p>Tree size and site area definitions</p> <table border="1"> <tbody> <tr> <td>Small tree</td> <td>4-6m mature height and 2-4m canopy spread</td> </tr> <tr> <td>Medium tree</td> <td>6-12m mature height and 4-8m canopy spread</td> </tr> <tr> <td>Large tree</td> <td>12m mature height and >8m canopy spread</td> </tr> </tbody> </table> <table border="1"> <tbody> <tr> <td>Site area</td> <td>The total area for development site, not average area per dwelling</td> </tr> </tbody> </table>	Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones	<300 m ²	10 m ²	1.5m	1 small tree / 10 m ²	300-1500 m ²	7% site area	3m	1 medium tree / 30 m ²	>1500 m ²	7% site area	6m	1 large or medium tree / 60 m ²	Small tree	4-6m mature height and 2-4m canopy spread	Medium tree	6-12m mature height and 4-8m canopy spread	Large tree	12m mature height and >8m canopy spread	Site area	The total area for development site, not average area per dwelling
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<p>PO 13.3</p> <p>Deep soil zones with access to natural light are provided to assist in maintaining vegetation health.</p>	<p>DTS/DPF 13.3</p> <p>None are applicable.</p>
<p>PO 13.4</p> <p>Unless separated by a public road or reserve, development sites adjacent to any zone that has a primary purpose of accommodating low-rise residential development incorporate a deep soil zone along the common boundary to enable medium to large trees to be retained or established to assist in screening new buildings of 3 or more building levels in height.</p>	<p>DTS/DPF 13.4</p> <p>Building elements of 3 or more building levels in height are set back at least 6m from a zone boundary in which a deep soil zone area is incorporated.</p>
<p>Environmental</p>	
<p>PO 14.1</p> <p>Development minimises detrimental micro-climatic impacts on adjacent land and buildings.</p>	<p>DTS/DPF 14.1</p> <p>None are applicable.</p>
<p>PO 14.2</p> <p>Development incorporates sustainable design techniques and features such as window orientation, eaves and shading structures, water harvesting and use, green walls and roof designs that enable the provision of rain water tanks (where they are not provided elsewhere on site), green roofs and photovoltaic cells.</p>	<p>DTS/DPF 14.2</p> <p>None are applicable.</p>
<p>PO 14.3</p> <p>Development of 5 or more building levels, or 21m or more in height (as measured from natural ground level and excluding roof-mounted mechanical plant and equipment) is designed to minimise the impacts of wind through measures such as:</p> <ul style="list-style-type: none"> (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street (b) substantial verandahs around a building to deflect downward travelling wind flows over pedestrian areas (c) the placement of buildings and use of setbacks to deflect the wind at ground level (d) avoiding tall shear elevations that create windy conditions at street level. 	<p>DTS/DPF 14.3</p> <p>None are applicable.</p>
<p>Car Parking</p>	
<p>PO 15.1</p> <p>Multi-level vehicle parking structures are designed to contribute to active street frontages and complement neighbouring buildings.</p>	<p>DTS/DPF 15.1</p> <p>Multi-level vehicle parking structures within buildings:</p> <ul style="list-style-type: none"> (a) provide land uses such as commercial, retail or other non-car parking uses along ground floor street frontages (b) incorporate facade treatments in building elevations facing along major street frontages that are sufficiently enclosed and detailed to complement adjacent buildings.
<p>PO 15.2</p> <p>Multi-level vehicle parking structures within buildings complement the surrounding built form in terms of height, massing and scale.</p>	<p>DTS/DPF 15.2</p> <p>None are applicable.</p>
<p>Overlooking/Visual Privacy</p>	
<p>PO 16.1</p> <p>Development mitigates direct overlooking of habitable rooms and private open spaces of adjacent residential uses in neighbourhood-type zones through measures such as:</p> <ul style="list-style-type: none"> (a) appropriate site layout and building orientation (b) off-setting the location of balconies and windows of habitable 	<p>DTS/DPF 16.1</p> <p>None are applicable.</p>

<p>rooms or areas with those of other buildings so that views are oblique rather than direct to avoid direct line of sight</p> <p>(c) building setbacks from boundaries (including building boundary to boundary where appropriate) that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms</p> <p>(d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.</p>	
All residential development	
Front elevations and passive surveillance	
<p>PO 17.1</p> <p>Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 17.1</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street.
<p>PO 17.2</p> <p>Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.</p>	<p>DTS/DPF 17.2</p> <p>Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.</p>
Outlook and Amenity	
<p>PO 18.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 18.1</p> <p>A living room of a dwelling incorporates a window with an external outlook of the street frontage, private open space, public open space, or waterfront areas.</p>
<p>PO 18.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 18.2</p> <p>None are applicable.</p>
Ancillary Development	
<p>PO 19.1</p> <p>Residential ancillary buildings are sited and designed to not detract from the streetscape or appearance of primary residential buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 19.1</p> <p>Ancillary buildings:</p> <ul style="list-style-type: none"> (a) are ancillary to a dwelling erected on the same site (b) have a floor area not exceeding 60m² (c) are not constructed, added to or altered so that any part is situated: <ul style="list-style-type: none"> (i) in front of any part of the building line of the dwelling to which it is ancillary or (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads) (d) in the case of a garage or carport, the garage or carport: <ul style="list-style-type: none"> (i) is set back at least 5.5m from the boundary of the primary street (ii) when facing a primary street or secondary street, has a total door / opening not exceeding: <ul style="list-style-type: none"> A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width (e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m

	<p>unless:</p> <ul style="list-style-type: none"> (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent <ul style="list-style-type: none"> (f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary (g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure (h) have a wall height or post height not exceeding 3m above natural ground level (i) have a roof height where no part of the roof is more than 5m above the natural ground level (j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour (k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less: <ul style="list-style-type: none"> (i) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>201-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> (ii) the amount of existing soft landscaping prior to the development occurring. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	150-200	15%	201-450	20%	>450	25%
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<p>PO 19.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements or result in over-development of the site.</p>	<p>DTS/DPF 19.2</p> <p>Ancillary buildings and structures do not result in:</p> <ul style="list-style-type: none"> (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas. 										
<p>PO 19.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>	<p>DTS/DPF 19.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> (a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or (b) located at least 12m from the nearest habitable room located on an adjoining allotment. 										
Residential Development - Low Rise											
External appearance											

<p>PO 20.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 20.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> (a) are situated so that no part of the garage or carport will be in front of any part of the building line of the dwelling (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening width not exceeding 7m (d) have a garage door / opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street. 				
<p>PO 20.2</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.</p>	<p>DTS/DPF 20.2</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> (a) a minimum of 30% of the building wall is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building wall (c) a balcony projects from the building wall (d) a verandah projects at least 1m from the building wall (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm (g) a minimum of two different materials or finishes are incorporated on the walls of the front building elevation, with a maximum of 80% of the building elevation in a single material or finish. 				
<p>PO 20.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 20.3</p> <p>None are applicable</p>				
<p>Private Open Space</p>					
<p>PO 21.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 21.1</p> <p>Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.</p>				
<p>PO 21.2</p> <p>Private open space is positioned to provide convenient access from internal living areas.</p>	<p>DTS/DPF 21.2</p> <p>Private open space is directly accessible from a habitable room.</p>				
<p>Landscaping</p>					
<p>PO 22.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) contribute shade and shelter (c) provide for stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes. 	<p>DTS/DPF 22.1</p> <p>Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> (a) a total area as determined by the following table: <table border="1"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th style="background-color: #0056b3; color: white;">Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td style="background-color: #0056b3; color: white;"> </td> <td style="background-color: #0056b3; color: white;"> </td> </tr> </tbody> </table>	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site		
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>450	25%								
Car parking, access and manoeuvrability									
<p>PO 23.1</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <p>(a) single width car parking spaces:</p> <ul style="list-style-type: none"> (i) a minimum length of 5.4m per space (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m <p>(b) double width car parking spaces (side by side):</p> <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space. 								
<p>PO 23.2</p> <p>Uncovered car parking space are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.2</p> <p>Uncovered car parking spaces have:</p> <p>(a) a minimum length of 5.4m</p> <p>(b) a minimum width of 2.4m</p> <p>(c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m.</p>								
<p>PO 23.3</p> <p>Driveways and access points are located and designed to facilitate safe access and egress while maximising land available for street tree planting, domestic waste collection, landscaped street frontages and on-street parking.</p>	<p>DTS/DPF 23.3</p> <p>Driveways and access points satisfy (a) or (b):</p> <p>(a) sites with a frontage to a public road of 10m or less, have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site</p> <p>(b) sites with a frontage to a public road greater than 10m:</p> <ul style="list-style-type: none"> (i) have a maximum width of 5m measured at the property boundary and are the only access point provided on the site; (ii) have a width between 3.0 metres and 3.2 metres measured at the property boundary and no more than two access points are provided on site, separated by no less than 1m. 								
<p>PO 23.4</p> <p>Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 23.4</p> <p>Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <p>(a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land</p> <p>(b) where newly proposed, is set back:</p> <ul style="list-style-type: none"> (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree 								

	<p>unless consent is provided from the tree owner for a lesser distance</p> <ul style="list-style-type: none"> (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
<p>PO 23.5</p> <p>Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 23.5</p> <p>Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not steeper than 1-in-4 on average (b) they are aligned relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the road boundary. (c) if located so as to provide access from an alley, lane or right of way - the alley, lane or right of way is at least 6.2m wide along the boundary of the allotment / site
<p>PO 23.6</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 23.6</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>Waste storage</p>	
<p>PO 24.1</p> <p>Provision is made for the convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 24.1</p> <p>Where dwellings abut both side boundaries a waste bin storage area is provided behind the building line of each dwelling that:</p> <ul style="list-style-type: none"> (a) has a minimum area of 2m² with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space); and (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
<p>Design of Transportable Buildings</p>	
<p>PO 25.1</p> <p>The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.</p>	<p>DTS/DPF 25.1</p> <p>Buildings satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) are not transportable (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.
<p>Residential Development - Medium and High Rise (including serviced apartments)</p>	
<p>Outlook and Visual Privacy</p>	
<p>PO 26.1</p> <p>Ground level dwellings have a satisfactory short range visual outlook to public, communal or private open space.</p>	<p>DTS/DPF 26.1</p> <p>Buildings:</p> <ul style="list-style-type: none"> (a) provide a habitable room at ground or first level with a window facing toward the street (b) limit the height / extent of solid walls or fences facing the street to 1.2m high above the footpath level or, where higher, to 50% of

	the site frontage.
PO 26.2 The visual privacy of ground level dwellings within multi-level buildings is protected.	DTS/DPF 26.2 The finished floor level of ground level dwellings in multi-storey developments is raised by up to 1.2m.
Private Open Space	
PO 27.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 27.1 Private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
Residential amenity in multi-level buildings	
PO 28.1 Residential accommodation within multi-level buildings have habitable rooms, windows and balconies designed and positioned to be separated from those of other dwellings and accommodation to provide visual and acoustic privacy and allow for natural ventilation and the infiltration of daylight into interior and outdoor spaces.	DTS/DPF 28.1 Habitable rooms and balconies of independent dwellings and accommodation are separated by at least 6m from one another where there is a direct line of sight between them and 3m or more from a side or rear property boundary.
PO 28.2 Balconies are designed, positioned and integrated into the overall architectural form and detail of the development to: (a) respond to daylight, wind, and acoustic conditions to maximise comfort and provide visual privacy (b) allow views and casual surveillance of the street while providing for safety and visual privacy of nearby living spaces and private outdoor areas.	DTS/DPF 28.2 Balconies utilise one or a combination of the following design elements: (a) sun screens (b) pergolas (c) louvres (d) green facades (e) openable walls.
PO 28.3 Balconies are of sufficient size and depth to accommodate outdoor seating and promote indoor / outdoor living.	DTS/DPF 28.3 Balconies open directly from a habitable room and incorporate a minimum dimension of 2m.
PO 28.4 Dwellings are provided with sufficient space for storage to meet likely occupant needs.	DTS/DPF 28.4 Dwellings (not including student accommodation or serviced apartments) are provided with storage at the following rates with at least 50% or more of the storage volume to be provided within the dwelling: (a) studio: not less than 6m ³ (b) 1 bedroom dwelling / apartment: not less than 8m ³ (c) 2 bedroom dwelling / apartment: not less than 10m ³ (d) 3+ bedroom dwelling / apartment: not less than 12m ³ .
PO 28.5 Dwellings that use light wells for access to daylight, outlook and ventilation for habitable rooms, are designed to ensure a reasonable living amenity is provided.	DTS/DPF 28.5 Light wells: (a) are not used as the primary source of outlook for living rooms (b) up to 18m in height have a minimum horizontal dimension of 3m, or 6m if overlooked by bedrooms (c) above 18m in height have a minimum horizontal dimension of 6m, or 9m if overlooked by bedrooms.
PO 28.6 Attached or abutting dwellings are designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.	DTS/DPF 28.6 None are applicable.
PO 28.7 Dwellings are designed so that internal structural columns correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.	DTS/DPF 28.7 None are applicable.

Dwelling Configuration											
<p>PO 29.1</p> <p>Buildings containing in excess of 10 dwellings provide a variety of dwelling sizes and a range in the number of bedrooms per dwelling to contribute to housing diversity.</p>	<p>DTS/DPF 29.1</p> <p>Buildings containing in excess of 10 dwellings provide at least one of each of the following:</p> <ul style="list-style-type: none"> (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least 50m² (c) 2 bedroom dwelling / apartment with a floor area of at least 65m² (d) 3+ bedroom dwelling / apartment with a floor area of at least 80m², and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom. 										
<p>PO 29.2</p> <p>Dwellings located on the ground floor of multi-level buildings with 3 or more bedrooms have the windows of their habitable rooms overlooking internal courtyard space or other public space, where possible.</p>	<p>DTS/DPF 29.2</p> <p>None are applicable.</p>										
Common Areas											
<p>PO 30.1</p> <p>The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.</p>	<p>DTS/DPF 30.1</p> <p>Common corridor or circulation areas:</p> <ul style="list-style-type: none"> (a) have a minimum ceiling height of 2.7m (b) provide access to no more than 8 dwellings (c) incorporate a wider section at apartment entries where the corridors exceed 12m in length from a core. 										
Group Dwellings, Residential Flat Buildings and Battle axe Development											
Amenity											
<p>PO 31.1</p> <p>Dwellings are of a suitable size to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 31.1</p> <p>Dwellings have a minimum internal floor area in accordance with the following table:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Number of bedrooms</th> <th style="text-align: left;">Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>65m²</td> </tr> <tr> <td>3+ bedrooms</td> <td>80m² and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom</td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	65m ²	3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom
Number of bedrooms	Minimum internal floor area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	65m ²										
3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom										
<p>PO 31.2</p> <p>The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.</p>	<p>DTS/DPF 31.2</p> <p>None are applicable.</p>										
<p>PO 31.3</p> <p>Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.</p>	<p>DTS/DPF 31.3</p> <p>None are applicable.</p>										
<p>PO 31.4</p> <p>Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.</p>	<p>DTS/DPF 31.4</p> <p>Dwelling sites/allotments are not in the form of a battle-axe arrangement.</p>										

Communal Open Space	
PO 32.1 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 32.1 None are applicable.
PO 32.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 32.2 Communal open space incorporates a minimum dimension of 5 metres.
PO 32.3 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 32.3 None are applicable.
PO 32.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 32.4 None are applicable.
PO 32.5 Communal open space is designed and sited to: (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 32.5 None are applicable.
Car parking, access and manoeuvrability	
PO 33.1 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 33.1 Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements: (a) minimum 0.33 on-street car parks per proposed dwelling (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
PO 33.2 The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.	DTS/DPF 33.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 33.3 Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	DTS/DPF 33.3 Driveways that service more than 1 dwelling or a dwelling on a battle-axe site: (a) have a minimum width of 3m (b) for driveways servicing more than 3 dwellings: (i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street (ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.
PO 33.4	DTS/DPF 33.4

Residential driveways that service more than one dwelling or a dwelling on a battle-axe site are designed to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.	Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.
PO 33.5 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 33.5 Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.
Soft landscaping	
PO 34.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	DTS/DPF 34.1 Other than where located directly in front of a garage or building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.
PO 34.2 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	DTS/DPF 34.2 Battle-axe or common driveways satisfy (a) and (b): (a) are constructed of a minimum of 50% permeable or porous material (b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Site Facilities / Waste Storage	
PO 35.1 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 35.1 None are applicable.
PO 35.2 Provision is made for suitable external clothes drying facilities.	DTS/DPF 35.2 None are applicable.
PO 35.3 Provision is made for suitable household waste and recyclable material storage facilities which are: (a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.	DTS/DPF 35.3 None are applicable.
PO 35.4 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 35.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 35.5 Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	DTS/DPF 35.5 None are applicable.
PO 35.6 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 35.6 None are applicable.
Water sensitive urban design	
PO 36.1 Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of	DTS/DPF 36.1 None are applicable.

sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	
PO 36.2 Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 36.2 None are applicable.
Supported Accommodation and retirement facilities	
Siting, Configuration and Design	
PO 37.1 Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	DTS/DPF 37.1 None are applicable.
PO 37.2 Universal design features are incorporated to provide options for people living with disabilities or limited mobility and / or to facilitate ageing in place.	DTS/DPF 37.2 None are applicable.
Movement and Access	
PO 38.1 Development is designed to support safe and convenient access and movement for residents by providing: (a) ground-level access or lifted access to all units (b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places (c) car parks with gradients no steeper than 1-in-40, and of sufficient area to provide for wheelchair manoeuvrability (d) kerb ramps at pedestrian crossing points.	DTS/DPF 38.1 None are applicable.
Communal Open Space	
PO 39.1 Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 39.1 None are applicable.
PO 39.2 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 39.2 None are applicable.
PO 39.3 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 39.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 39.4 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 39.4 None are applicable.
PO 39.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 39.5 None are applicable.

<p>PO 39.6</p> <p>Communal open space is designed and sited to:</p> <p>(a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings</p> <p>(b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.</p>	<p>DTS/DPF 39.6</p> <p>None are applicable.</p>
<p>Site Facilities / Waste Storage</p>	
<p>PO 40.1</p> <p>Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric-powered vehicles.</p>	<p>DTS/DPF 40.1</p> <p>None are applicable.</p>
<p>PO 40.2</p> <p>Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.</p>	<p>DTS/DPF 40.2</p> <p>None are applicable.</p>
<p>PO 40.3</p> <p>Provision is made for suitable external clothes drying facilities.</p>	<p>DTS/DPF 40.3</p> <p>None are applicable.</p>
<p>PO 40.4</p> <p>Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.</p>	<p>DTS/DPF 40.4</p> <p>None are applicable.</p>
<p>PO 40.5</p> <p>Waste and recyclable material storage areas are located away from dwellings.</p>	<p>DTS/DPF 40.5</p> <p>Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.</p>
<p>PO 40.6</p> <p>Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.</p>	<p>DTS/DPF 40.6</p> <p>None are applicable.</p>
<p>PO 40.7</p> <p>Services, including gas and water meters, are conveniently located and screened from public view.</p>	<p>DTS/DPF 40.7</p> <p>None are applicable.</p>
<p>Student Accommodation</p>	
<p>PO 41.1</p> <p>Student accommodation is designed to provide safe, secure, attractive, convenient and comfortable living conditions for residents, including an internal layout and facilities that are designed to provide sufficient space and amenity for the requirements of student life and promote social interaction.</p>	<p>DTS/DPF 41.1</p> <p>Student accommodation provides:</p> <p>(a) a range of living options to meet a variety of accommodation needs, such as one-bedroom, two-bedroom and disability access units</p> <p>(b) common or shared facilities to enable a more efficient use of space, including:</p> <ul style="list-style-type: none"> (i) shared cooking, laundry and external drying facilities (ii) internal and external communal and private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space (iii) common storage facilities at the rate of 8m³ for every 2 dwellings or students (iv) common on-site parking in accordance with Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas (v) bicycle parking at the rate of one space for every 2 students.

<p>PO 41.2</p> <p>Student accommodation is designed to provide easy adaptation of the building to accommodate an alternative use of the building in the event it is no longer required for student housing.</p>	<p>DTS/DPF 41.2</p> <p>None are applicable.</p>
<p>All non-residential development</p>	
<p>Water Sensitive Design</p>	
<p>PO 42.1</p> <p>Development likely to result in risk of export of sediment, suspended solids, organic matter, nutrients, oil and grease include stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 42.1</p> <p>None are applicable.</p>
<p>PO 42.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 42.2</p> <p>None are applicable.</p>
<p>PO 42.3</p> <p>Development includes stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that development does not increase peak flows in downstream systems.</p>	<p>DTS/DPF 42.3</p> <p>None are applicable.</p>
<p>Wash-down and Waste Loading and Unloading</p>	
<p>PO 43.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, plant or equipment are:</p> <ul style="list-style-type: none"> (a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) are designed to drain wastewater to either: <ul style="list-style-type: none"> (i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or (ii) a holding tank and its subsequent removal off-site on a regular basis. 	<p>DTS/DPF 43.1</p> <p>None are applicable.</p>
<p>Laneway Development</p>	
<p>Infrastructure and Access</p>	
<p>PO 44.1</p> <p>Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where:</p> <ul style="list-style-type: none"> (a) existing utility infrastructure and services are capable of accommodating the development (b) the primary street can support access by emergency and regular service vehicles (such as waste collection) (c) it does not require the provision or upgrading of infrastructure on public land (such as footpaths and stormwater management systems) (d) safety of pedestrians or vehicle movement is maintained (e) any necessary grade transition is accommodated within the site of the development to support an appropriate development 	<p>DTS/DPF 44.1</p> <p>Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.</p>

intensity and orderly development of land fronting minor thoroughfares.	
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Table 1 - Private Open Space

Dwelling Type	Dwelling / Site Configuration	Minimum Rate
Dwelling (at ground level, other than a residential flat building that includes above ground dwellings)		Total private open space area: (a) Site area <301m ² : 24m ² located behind the building line. (b) Site area ≥ 301m ² : 60m ² located behind the building line. Minimum directly accessible from a living room: 16m ² / with a minimum dimension 3m.
Cabin or caravan (permanently fixed to the ground) in a residential park or caravan and tourist park		Total area: 16m ² , which may be uses as second car parking space, provided on each site intended for residential occupation.
Dwelling in a residential flat building or mixed use building which incorporate above ground level dwellings	Dwellings at ground level:	15m ² / minimum dimension 3m
	Dwellings above ground level:	
	Studio (no separate bedroom)	4m ² / minimum dimension 1.8m
	One bedroom dwelling	8m ² / minimum dimension 2.1m
	Two bedroom dwelling	11m ² / minimum dimension 2.4m
	Three + bedroom dwelling	15 m ² / minimum dimension 2.6m

Forestry

Assessment Provisions (AP)

Desired Outcome	
DO 1	Commercial forestry is designed and sited to maximise economic benefits whilst managing potential negative impacts on the environment, transport networks, surrounding land uses and landscapes.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Commercial forestry plantations are established where there is no detrimental effect on the physical environment or scenic quality of the	DTS/DPF 1.1 None are applicable.

rural landscape.	
PO 1.2 Commercial forestry plantations are established on slopes that are stable to minimise the risk of soil erosion.	DTS/DPF 1.2 Commercial forestry plantations are not located on land with a slope exceeding 20% (1-in-5).
PO 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are appropriately set back from any sensitive receiver to minimise fire risk and noise disturbance.	DTS/DPF 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from any sensitive receiver.
PO 1.4 Commercial forestry plantations are separated from reserves gazetted under the <i>National Parks and Wildlife Act 1972</i> and/or <i>Wilderness Protection Act 1992</i> to minimise fire risk and potential for weed infestation.	DTS/DPF 1.4 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from a reserve gazetted under the <i>National Parks and Wildlife Act 1972</i> and/or <i>Wilderness Protection Act 1992</i> .
Water Protection	
PO 2.1 Commercial forestry plantations incorporate artificial drainage lines (i.e. culverts, runoffs and constructed drains) integrated with natural drainage lines to minimise concentrated water flows onto or from plantation areas.	DTS/DPF 2.1 None are applicable.
PO 2.2 Appropriate siting, layout and design measures are adopted to minimise the impact of commercial forestry plantations on surface water resources.	DTS/DPF 2.2 Commercial forestry plantations: (a) do not involve cultivation (excluding spot cultivation) in drainage lines (b) are set back 20m or more from the banks of any major watercourse (a third order or higher watercourse), lake, reservoir, wetland or sinkhole (with direct connection to an aquifer) (c) are set back 10m or more from the banks of any first or second order watercourse or sinkhole (with no direct connection to an aquifer).
Fire Management	
PO 3.1 Commercial forestry plantations incorporate appropriate firebreaks and fire management design elements.	DTS/DPF 3.1 Commercial forestry plantations provide: (a) 7m or more wide external boundary firebreaks for plantations of 40ha or less (b) 10m or more wide external boundary firebreaks for plantations of between 40ha and 100ha (c) 20m or more wide external boundary firebreaks, or 10m with an additional 10m or more of fuel-reduced plantation, for plantations of 100ha or greater.
PO 3.2 Commercial forestry plantations incorporate appropriate fire management access tracks.	DTS/DPF 3.2 Commercial forestry plantation fire management access tracks: (a) are incorporated within all firebreaks (b) are 7m or more wide with a vertical clearance of 4m or more (c) are aligned to provide straight through access at junctions, or if they are a no through access track are appropriately signposted and provide suitable turnaround areas for fire-fighting vehicles (d) partition the plantation into units of 40ha or less in area.
Power-line Clearances	
PO 4.1 Commercial forestry plantations achieve and maintain appropriate clearances from aboveground powerlines.	DTS/DPF 4.1 Commercial forestry plantations incorporating trees with an expected mature height of greater than 6m meet the clearance requirements listed in the following table:

	Voltage of transmission line	Tower or Pole	Minimum horizontal clearance distance between plantings and transmission lines
	500 kV	Tower	38m
	275 kV	Tower	25m
	132 kV	Tower	30m
	132 kV	Pole	20m
	66 kV	Pole	20m
	Less than 66 kV	Pole	20m

Housing Renewal

Assessment Provisions (AP)

Desired Outcome	
DO 1	Renewed residential environments replace older social housing and provide new social housing infrastructure and other housing options and tenures to enhance the residential amenity of the local area.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Residential development provides a range of housing choices.	DTS/DPF 1.1 Development comprises one or more of the following: (a) detached dwellings (b) semi-detached dwellings (c) row dwellings (d) group dwellings (e) residential flat buildings.
PO 1.2 Medium-density housing options or higher are located in close proximity to public transit, open space and/or activity centres.	DTS/DPF 1.2 None are applicable.
Building Height	
PO 2.1 Buildings generally do not exceed 3 building levels unless in locations close to public transport, centres and/or open space.	DTS/DPF 2.1 Building height (excluding garages, carports and outbuildings) does not exceed 3 building levels and 12m and wall height does not exceed 9m (not including a gable end).

<p>PO 2.2</p> <p>Medium or high rise residential flat buildings located within or at the interface with zones which restrict heights to a maximum of 2 building levels transition down in scale and height towards the boundary of that zone, other than where it is a street boundary.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>Primary Street Setback</p>	
<p>PO 3.1</p> <p>Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.</p>	<p>DTS/DPF 3.1</p> <p>Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.</p>
<p>Secondary Street Setback</p>	
<p>PO 4.1</p> <p>Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.</p>	<p>DTS/DPF 4.1</p> <p>Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.</p>
<p>Boundary Walls</p>	
<p>PO 5.1</p> <p>Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.</p>	<p>DTS/DPF 5.1</p> <p>Except where the dwelling is located on a central site within a row dwelling or terrace arrangement, dwellings with side boundary walls are sited on only one side boundary and satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height (b) do not: <ul style="list-style-type: none"> (i) exceed 3.2m in height from the lower of the natural or finished ground level (ii) exceed 11.5m in length (iii) when combined with other walls on the boundary of the subject development site, a maximum 45% of the length of the boundary (iv) encroach within 3 metres of any other existing or proposed boundary walls on the subject land.
<p>PO 5.2</p> <p>Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.</p>	<p>DTS/DPF 5.2</p> <p>Dwellings in a semi-detached or row arrangement are set back 900mm or more from side boundaries shared with allotments outside the development site, except for a carport or garage.</p>
<p>Side Boundary Setback</p>	
<p>PO 6.1</p> <p>Buildings are set back from side boundaries to provide:</p> <ul style="list-style-type: none"> (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours. 	<p>DTS/DPF 6.1</p> <p>Other than walls located on a side boundary, buildings are set back from side boundaries:</p> <ul style="list-style-type: none"> (a) at least 900mm where the wall height is up to 3m (b) other than for a wall facing a southern side boundary, at least 900mm plus 1/3 of the wall height above 3m (c) at least 1.9m plus 1/3 of the wall height above 3m for walls facing a southern side boundary.
<p>Rear Boundary Setback</p>	
<p>PO 7.1</p> <p>Buildings are set back from rear boundaries to provide:</p> <ul style="list-style-type: none"> (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours (c) private open space 	<p>DTS/DPF 7.1</p> <p>Dwellings are set back from the rear boundary:</p> <ul style="list-style-type: none"> (a) 3m or more for the first building level (b) 5m or more for any subsequent building level.

(d) space for landscaping and vegetation.				
Buildings elevation design				
<p>PO 8.1</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.</p>	<p>DTS/DPF 8.1</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> (a) a minimum of 30% of the building elevation is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building elevation (c) a balcony projects from the building elevation (d) a verandah projects at least 1m from the building elevation (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm. (g) a minimum of two different materials or finishes are incorporated on the walls of the building elevation, with a maximum of 80% of the building elevation in a single material or finish. 			
<p>PO 8.2</p> <p>Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 8.2</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street 			
<p>PO 8.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>			
<p>PO 8.4</p> <p>Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.</p>	<p>DTS/DPF 8.4</p> <p>None are applicable.</p>			
<p>PO 8.5</p> <p>Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> (a) oriented towards the street (b) visible and easily identifiable from the street (c) designed to include a common mail box structure. 	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>			
Outlook and amenity				
<p>PO 9.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 9.1</p> <p>A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.</p>			
<p>PO 9.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 9.2</p> <p>None are applicable.</p>			
Private Open Space				
<p>PO 10.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 10.1</p> <p>Private open space is provided in accordance with the following table:</p> <table border="1" style="width: 100%; height: 20px; background-color: black; margin-top: 5px;"> <tr> <td></td> <td></td> <td></td> </tr> </table>			

	Dwelling Type	Dwelling / Site Configuration	Minimum Rate
	Dwelling (at ground level)		Total area: 24m ² located behind the building line Minimum adjacent to a living room: 16m ² with a minimum dimension 3m
	Dwelling (above ground level)	Studio	4m ² / minimum dimension 1.8m
One bedroom dwelling		8m ² / minimum dimension 2.1m	
Two bedroom dwelling		11m ² / minimum dimension 2.4m	
Three + bedroom dwelling		15 m ² / minimum dimension 2.6m	
<p>PO 10.2</p> <p>Private open space positioned to provide convenient access from internal living areas.</p>	<p>DTS/DPF 10.2</p> <p>At least 50% of the required area of private open space is accessible from a habitable room.</p>		
<p>PO 10.3</p> <p>Private open space is positioned and designed to:</p> <p>(a) provide useable outdoor space that suits the needs of occupants;</p> <p>(b) take advantage of desirable orientation and vistas; and</p> <p>(c) adequately define public and private space.</p>	<p>DTS/DPF 10.3</p> <p>None are applicable.</p>		
Visual privacy			
<p>PO 11.1</p> <p>Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.</p>	<p>DTS/DPF 11.1</p> <p>Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following:</p> <p>(a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm</p> <p>(b) have sill heights greater than or equal to 1.5m above finished floor level</p> <p>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5m above the finished floor.</p>		
<p>PO 11.2</p> <p>Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.</p>	<p>DTS/DPF 11.2</p> <p>One of the following is satisfied:</p> <p>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace</p> <p>or</p> <p>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:</p> <p>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</p> <p>or</p>		

	(ii) 1.7m above finished floor level in all other cases										
Landscaping											
<p>PO 12.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes. 	<p>DTS/DPF 12.1</p> <p>Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> (a) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td><200</td> <td>15%</td> </tr> <tr> <td>200-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> (b) at least 30% of land between the road boundary and the building line. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	<200	15%	200-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site										
<150	10%										
<200	15%										
200-450	20%										
>450	25%										
Water Sensitive Design											
<p>PO 13.1</p> <p>Residential development is designed to capture and use stormwater to:</p> <ul style="list-style-type: none"> (a) maximise efficient use of water resources (b) manage peak stormwater runoff flows and volume to ensure the carrying capacities of downstream systems are not overloaded (c) manage runoff quality to maintain, as close as practical, pre-development conditions. 	<p>DTS/DPF 13.1</p> <p>None are applicable.</p>										
Car Parking											
<p>PO 14.1</p> <p>On-site car parking is provided to meet the anticipated demand of residents, with less on-site parking in areas in close proximity to public transport.</p>	<p>DTS/DPF 14.1</p> <p>On-site car parking is provided at the following rates per dwelling:</p> <ul style="list-style-type: none"> (a) 2 or fewer bedrooms - 1 car parking space (b) 3 or more bedrooms - 2 car parking spaces. 										
<p>PO 14.2</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.2</p> <p>Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area):</p> <ul style="list-style-type: none"> (a) single parking spaces: <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m (b) double parking spaces (side by side): <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 5.5m (iii) minimum garage door width of 2.4m per space. 										
<p>PO 14.3</p> <p>Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.3</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m. 										

<p>PO 14.4</p> <p>Residential flat buildings and group dwelling developments provide sufficient on-site visitor car parking to cater for anticipated demand.</p>	<p>DTS/DPF 14.4</p> <p>Visitor car parking for group and residential flat buildings incorporating 4 or more dwellings is provided on-site at a minimum ratio of 0.25 car parking spaces per dwelling.</p>
<p>PO 14.5</p> <p>Residential flat buildings provide dedicated areas for bicycle parking.</p>	<p>DTS/DPF 14.5</p> <p>Residential flat buildings provide one bicycle parking space per dwelling.</p>
<p>Overshadowing</p>	
<p>PO 15.1</p> <p>Development minimises overshadowing of the private open spaces of adjoining land by ensuring that ground level open space associated with residential buildings receive direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June.</p>	<p>DTS/DPF 15.1</p> <p>None are applicable.</p>
<p>Waste</p>	
<p>PO 16.1</p> <p>Provision is made for the convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 16.1</p> <p>A waste bin storage area is provided behind the primary building line that:</p> <ul style="list-style-type: none"> (a) has a minimum area of 2m² with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space).; and (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
<p>PO 16.2</p> <p>Residential flat buildings provide a dedicated area for the on-site storage of waste which is:</p> <ul style="list-style-type: none"> (a) easily and safely accessible for residents and for collection vehicles (b) screened from adjoining land and public roads (c) of sufficient dimensions to be able to accommodate the waste storage needs of the development considering the intensity and nature of the development and the frequency of collection. 	<p>DTS/DPF 16.2</p> <p>None are applicable.</p>
<p>Vehicle Access</p>	
<p>PO 17.1</p> <p>Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages and on-street parking.</p>	<p>DTS/DPF 17.1</p> <p>None are applicable.</p>
<p>PO 17.2</p> <p>Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 17.2</p> <p>Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: <ul style="list-style-type: none"> (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.

<p>PO 17.3</p> <p>Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 17.3</p> <p>Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not more than 1-in-4 on average (b) they are aligned relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the road boundary. (c) if located so as to provide access from an alley, lane or right of way - the alley, lane or right of way is at least 6.2m wide along the boundary of the allotment / site.
<p>PO 17.4</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street parking.</p>	<p>DTS/DPF 17.4</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> 1. minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) 2. Minimum car park length of 5.4m where a vehicle can enter or exit a space directly 3. minimum car park length of 6m for an intermediate space located between two other parking spaces.
<p>PO 17.5</p> <p>Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.</p>	<p>DTS/DPF 17.5</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>PO 17.6</p> <p>Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.</p>	<p>DTS/DPF 17.6</p> <p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre</p>
<p>PO 17.7</p> <p>Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 17.7</p> <p>Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
Storage	
<p>PO 18.1</p> <p>Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.</p>	<p>DTS/DPF 18.1</p> <p>Dwellings are provided with storage at the following rates and 50% or more of the storage volume is provided within the dwelling:</p> <ul style="list-style-type: none"> (a) studio: not less than 6m³ (b) 1 bedroom dwelling / apartment: not less than 8m³ (c) 2 bedroom dwelling / apartment: not less than 10m³ (d) 3+ bedroom dwelling / apartment: not less than 12m³.
Earthworks	
<p>PO 19.1</p> <p>Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural</p>	<p>DTS/DPF 19.1</p> <p>The development does not involve:</p>

<p>topography.</p>	<ul style="list-style-type: none"> (a) excavation exceeding a vertical height of 1m or (b) filling exceeding a vertical height of 1m or (c) a total combined excavation and filling vertical height exceeding 2m.
<p>Service connections and infrastructure</p>	
<p>PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.</p>	<p>DTS/DPF 20.1 The site and building:</p> <ul style="list-style-type: none"> (a) have the ability to be connected to a permanent potable water supply (b) have the ability to be connected to a sewerage system, or a wastewater system approved under the <i>South Australian Public Health Act 2011</i> (c) have the ability to be connected to electricity supply (d) have the ability to be connected to an adequate water supply (and pressure) for fire-fighting purposes (e) would not be contrary to the Regulations prescribed for the purposes of Section 86 of the <i>Electricity Act 1996</i>.
<p>Site contamination</p>	
<p>PO 21.1 Land that is suitable for sensitive land uses to provide a safe environment.</p>	<p>DTS/DPF 21.1 Development satisfies (a), (b), (c) or (d):</p> <ul style="list-style-type: none"> (a) does not involve a change in the use of land (b) involves a change in the use of land that does not constitute a change to a <u>more sensitive use</u> (c) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> does not exist (as demonstrated in a <u>site contamination declaration form</u>) (d) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: <ul style="list-style-type: none"> (i) <u>a site contamination audit report</u> has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that <ul style="list-style-type: none"> A. <u>site contamination</u> does not exist (or no longer exists) at the land or B. the land is suitable for the proposed use or range of uses (without the need for any further <u>remediation</u>) or C. where <u>remediation</u> is, or remains, necessary for the proposed use (or range of uses), <u>remediation work</u> has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development) and (ii) no other <u>class 1 activity</u> or <u>class 2 activity</u> has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a <u>site contamination declaration form</u>).

Infrastructure and Renewable Energy Facilities

Desired Outcome

DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General	
PO 1.1 Development is located and designed to minimise hazard or nuisance to adjacent development and land uses.	DTS/DPF 1.1 None are applicable.
Visual Amenity	
PO 2.1 The visual impact of above-ground infrastructure networks and services (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development is minimised from townships, scenic routes and public roads by: (a) utilising features of the natural landscape to obscure views where practicable (b) siting development below ridgelines where practicable (c) avoiding visually sensitive and significant landscapes (d) using materials and finishes with low-reflectivity and colours that complement the surroundings (e) using existing vegetation to screen buildings (f) incorporating landscaping or landscaped mounding around the perimeter of a site and between adjacent allotments accommodating or zoned to primarily accommodate sensitive receivers.	DTS/DPF 2.1 None are applicable.
PO 2.2 Pumping stations, battery storage facilities, maintenance sheds and other ancillary structures incorporate vegetation buffers to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.2 None are applicable.
PO 2.3 Surfaces exposed by earthworks associated with the installation of storage facilities, pipework, penstock, substations and other ancillary plant are reinstated and revegetated to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.3 None are applicable.
Rehabilitation	
PO 3.1 Progressive rehabilitation (incorporating revegetation) of disturbed areas, ahead of or upon decommissioning of areas used for renewable energy facilities and transmission corridors.	DTS/DPF 3.1 None are applicable.
Hazard Management	
PO 4.1	DTS/DPF 4.1

<p>Infrastructure and renewable energy facilities and ancillary development located and operated to not adversely impact maritime or air transport safety, including the operation of ports, airfields and landing strips.</p>	<p>None are applicable.</p>
<p>PO 4.2 Facilities for energy generation, power storage and transmission are separated as far as practicable from dwellings, tourist accommodation and frequently visited public places (such as viewing platforms / lookouts) to reduce risks to public safety from fire or equipment malfunction.</p>	<p>DTS/DPF 4.2 None are applicable.</p>
<p>PO 4.3 Bushfire hazard risk is minimised for renewable energy facilities by providing appropriate access tracks, safety equipment and water tanks and establishing cleared areas around substations, battery storage and operations compounds.</p>	<p>DTS/DPF 4.3 None are applicable.</p>
<p>Electricity Infrastructure and Battery Storage Facilities</p>	
<p>PO 5.1 Electricity infrastructure is located to minimise visual impacts through techniques including: (a) siting utilities and services: (i) on areas already cleared of native vegetation (ii) where there is minimal interference or disturbance to existing native vegetation or biodiversity (b) grouping utility buildings and structures with non-residential development, where practicable.</p>	<p>DTS/DPF 5.1 None are applicable.</p>
<p>PO 5.2 Electricity supply (excluding transmission lines) serving new development in urban areas and townships installed underground, excluding lines having a capacity exceeding or equal to 33kV.</p>	<p>DTS/DPF 5.2 None are applicable.</p>
<p>PO 5.3 Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.</p>	<p>DTS/DPF 5.3 None are applicable.</p>
<p>Telecommunication Facilities</p>	
<p>PO 6.1 The proliferation of telecommunications facilities in the form of towers/monopoles in any one locality is managed, where technically feasible, by co-locating a facility with other communications facilities to mitigate impacts from clutter on visual amenity.</p>	<p>DTS/DPF 6.1 None are applicable.</p>
<p>PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.</p>	<p>DTS/DPF 6.2 None are applicable.</p>
<p>PO 6.3 Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods: (a) where technically feasible, incorporating the facility within an existing structure that may serve another purpose or all of the following: (b) using existing buildings and landscape features to obscure or</p>	<p>DTS/DPF 6.3 None are applicable.</p>

<p>interrupt views of a facility from nearby public roads, residential areas and places of high public amenity to the extent practical without unduly hindering the effective provision of telecommunications services</p> <p>(c) using materials and finishes that complement the environment</p> <p>(d) screening using landscaping and vegetation, particularly for equipment shelters and huts.</p>	
Renewable Energy Facilities	
<p>PO 7.1</p> <p>Renewable energy facilities are located as close as practicable to existing transmission infrastructure to facilitate connections and minimise environmental impacts as a result of extending transmission infrastructure.</p>	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
Renewable Energy Facilities (Wind Farm)	
<p>PO 8.1</p> <p>Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.</p>	<p>DTS/DPF 8.1</p> <p>Wind turbine generators are:</p> <p>(a) set back at least 2000m from the base of a turbine to any of the following zones:</p> <ul style="list-style-type: none"> (i) Rural Settlement Zone (ii) Township Zone (iii) Rural Living Zone (iv) Rural Neighbourhood Zone <p>with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine).</p> <p>(b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation</p>
<p>PO 8.2</p> <p>The visual impact of wind turbine generators on natural landscapes is managed by:</p> <p>(a) designing wind turbine generators to be uniform in colour, size and shape</p> <p>(b) coordinating blade rotation and direction</p> <p>(c) mounting wind turbine generators on tubular towers as opposed to lattice towers.</p>	<p>DTS/DPF 8.2</p> <p>None are applicable.</p>
<p>PO 8.3</p> <p>Wind turbine generators and ancillary development minimise potential for bird and bat strike.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>
<p>PO 8.4</p> <p>Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.</p>	<p>DTS/DPF 8.4</p> <p>No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.</p>
<p>PO 8.5</p> <p>Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.</p>	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>
Renewable Energy Facilities (Solar Power)	
<p>PO 9.1</p> <p>Ground mounted solar power facilities generating 5MW or more are not located on land requiring the clearance of areas of intact native vegetation or on land of high environmental, scenic or cultural value.</p>	<p>DTS/DPF 9.1</p> <p>None are applicable.</p>
<p>PO 9.2</p>	<p>DTS/DPF 9.2</p>

<p>Ground mounted solar power facilities allow for movement of wildlife by:</p> <ul style="list-style-type: none"> (a) incorporating wildlife corridors and habitat refuges (b) avoiding the use of extensive security or perimeter fencing or incorporating fencing that enables the passage of small animals without unreasonably compromising the security of the facility. 	<p>None are applicable.</p>																																			
<p>PO 9.3</p> <p>Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.</p>	<p>DTS/DPF 9.3</p> <p>Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria:</p> <table border="1"> <thead> <tr> <th>Generation Capacity</th> <th>Approximate size of array</th> <th>Setback from adjoining land boundary</th> <th>Setback from conservation areas</th> <th>Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones¹</th> </tr> </thead> <tbody> <tr> <td>50MW></td> <td>80ha+</td> <td>30m</td> <td>500m</td> <td>2km</td> </tr> <tr> <td>10MW<50MW</td> <td>16ha-<80ha</td> <td>25m</td> <td>500m</td> <td>1.5km</td> </tr> <tr> <td>5MW<10MW</td> <td>8ha to <16ha</td> <td>20m</td> <td>500m</td> <td>1km</td> </tr> <tr> <td>1MW<5MW</td> <td>1.6ha to <8ha</td> <td>15m</td> <td>500m</td> <td>500m</td> </tr> <tr> <td>100kW<1MW</td> <td>0.5ha<1.6ha</td> <td>10m</td> <td>500m</td> <td>100m</td> </tr> <tr> <td><100kW</td> <td><0.5ha</td> <td>5m</td> <td>500m</td> <td>25m</td> </tr> </tbody> </table> <p>Notes:</p> <p>1. Does not apply when the site of the proposed ground mounted solar power facility is located within one of these zones.</p>	Generation Capacity	Approximate size of array	Setback from adjoining land boundary	Setback from conservation areas	Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones ¹	50MW>	80ha+	30m	500m	2km	10MW<50MW	16ha-<80ha	25m	500m	1.5km	5MW<10MW	8ha to <16ha	20m	500m	1km	1MW<5MW	1.6ha to <8ha	15m	500m	500m	100kW<1MW	0.5ha<1.6ha	10m	500m	100m	<100kW	<0.5ha	5m	500m	25m
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<p>PO 9.4</p> <p>Ground mounted solar power facilities incorporate landscaping within setbacks from adjacent road frontages and boundaries of adjacent allotments accommodating non-host dwellings, where balanced with infrastructure access and bushfire safety considerations.</p>	<p>DTS/DPF 9.4</p> <p>None are applicable.</p>																																			
<p>Hydropower / Pumped Hydropower Facilities</p>																																				
<p>PO 10.1</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.</p>	<p>DTS/DPF 10.1</p> <p>None are applicable.</p>																																			
<p>PO 10.2</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise water loss through increased evaporation or system leakage, with the incorporation of appropriate liners, dam covers, operational measures or detection systems.</p>	<p>DTS/DPF 10.2</p> <p>None are applicable.</p>																																			
<p>PO 10.3</p> <p>Hydropower / pumped hydropower facilities on existing or former mine sites minimise environmental impacts from site contamination, including</p>	<p>DTS/DPF 10.3</p> <p>None are applicable.</p>																																			

from mine operations or water sources subject to such processes, now or in the future.	
Water Supply	
PO 11.1 Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.	DTS/DPF 11.1 Development is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the on-going requirements of the development.
PO 11.2 Dwellings are connected to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the intended use. Where this is not available an appropriate rainwater tank or storage system for domestic use is provided.	DTS/DPF 11.2 A dwelling is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the development. Where this is not available it is serviced by a rainwater tank or tanks capable of holding at least 50,000 litres of water which is: (a) exclusively for domestic use (b) connected to the roof drainage system of the dwelling.
Wastewater Services	
PO 12.1 Development is connected to an approved common wastewater disposal service with the capacity to meet the requirements of the intended use. Where this is not available an appropriate on-site service is provided to meet the ongoing requirements of the intended use in accordance with the following: (a) it is wholly located and contained within the allotment of the development it will service (b) in areas where there is a high risk of contamination of surface, ground, or marine water resources from on-site disposal of liquid wastes, disposal systems are included to minimise the risk of pollution to those water resources (c) septic tank effluent drainage fields and other wastewater disposal areas are located away from watercourses and flood prone, sloping, saline or poorly drained land to minimise environmental harm.	DTS/DPF 12.1 Development is connected, or will be connected, to an approved common wastewater disposal service with the capacity to meet the requirements of the development. Where this is not available it is instead capable of being serviced by an on-site waste water treatment system in accordance with the following: (a) the system is wholly located and contained within the allotment of development it will service; and (b) the system will comply with the requirements of the South Australian Public Health Act 2011.
PO 12.2 Effluent drainage fields and other wastewater disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 12.2 Development is not built on, or encroaches within, an area that is, or will be, required for a sewerage system or waste control system.
Temporary Facilities	
PO 13.1 In rural and remote locations, development that is likely to generate significant waste material during construction, including packaging waste, makes provision for a temporary on-site waste storage enclosure to minimise the incidence of wind-blown litter.	DTS/DPF 13.1 A waste collection and disposal service is used to dispose of the volume of waste at the rate it is generated.
PO 13.2 Temporary facilities to support the establishment of renewable energy facilities (including borrow pits, concrete batching plants, laydown, storage, access roads and worker amenity areas) are sited and operated to minimise environmental impact.	DTS/DPF 13.2 None are applicable.

Intensive Animal Husbandry and Dairies

Assessment Provisions (AP)

Desired Outcome

DO 1	Development of intensive animal husbandry and dairies in locations that are protected from encroachment by sensitive receivers and in a manner that minimises their adverse effects on amenity and the environment.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to not unreasonably impact on the environment or amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to prevent the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
PO 1.3 Intensive animal husbandry and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.3 None are applicable.
PO 1.4 Dairies and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.4 Dairies, associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities are located 500m or more from the nearest sensitive receiver in other ownership.
PO 1.5 Lagoons for the storage or treatment of milking shed effluent is adequately separated from roads to minimise impacts from odour on the general public.	DTS/DPF 1.5 Lagoons for the storage or treatment of milking shed effluent are set back 20m or more from public roads.
Waste	
PO 2.1 Storage of manure, used litter and other wastes (other than waste water lagoons) is sited, designed, constructed and managed to: (a) avoid attracting and harbouring vermin (b) avoid polluting water resources (c) be located outside 1% AEP flood event areas.	DTS/DPF 2.1 None are applicable.
Soil and Water Protection	
PO 3.1 To avoid environmental harm and adverse effects on water resources, intensive animal husbandry operations are appropriately set back from: (a) public water supply reservoirs (b) major watercourses (third order or higher stream) (c) any other watercourse, bore or well used for domestic or stock water supplies.	DTS/DPF 3.1 Intensive animal husbandry operations are set back: (a) 800m or more from a public water supply reservoir (b) 200m or more from a major watercourse (third order or higher stream) (c) 100m or more from any other watercourse, bore or well used for domestic or stock water supplies.

<p>PO 3.2</p> <p>Intensive animal husbandry operations and dairies incorporate appropriately designed effluent and run-off facilities that:</p> <ul style="list-style-type: none"> (a) have sufficient capacity to hold effluent and runoff from the operations on site (b) ensure effluent does not infiltrate and pollute groundwater, soil or other water resources. 	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
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Interface between Land Uses

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature											
General Land Use Compatibility												
<p>PO 1.1</p> <p>Sensitive receivers are designed and sited to protect residents and occupants from adverse impacts generated by lawfully existing land uses (or lawfully approved land uses) and land uses desired in the zone.</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>											
<p>PO 1.2</p> <p>Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>											
Hours of Operation												
<p>PO 2.1</p> <p>Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:</p> <ul style="list-style-type: none"> (a) the nature of the development (b) measures to mitigate off-site impacts (c) the extent to which the development is desired in the zone (d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land. 	<p>DTS/DPF 2.1</p> <p>Development operating within the following hours:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Class of Development</th> <th style="width: 50%;">Hours of operation</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Consulting room</td> <td>7am to 9pm, Monday to Friday</td> </tr> <tr> <td>8am to 5pm, Saturday</td> </tr> <tr> <td rowspan="2">Office</td> <td>7am to 9pm, Monday to Friday</td> </tr> <tr> <td>8am to 5pm, Saturday</td> </tr> <tr> <td rowspan="2">Shop, other than any one or combination of the following: (a) restaurant (b) cellar door in the</td> <td>7am to 9pm, Monday to Friday</td> </tr> <tr> <td>8am to 5pm, Saturday and Sunday</td> </tr> </tbody> </table>	Class of Development	Hours of operation	Consulting room	7am to 9pm, Monday to Friday	8am to 5pm, Saturday	Office	7am to 9pm, Monday to Friday	8am to 5pm, Saturday	Shop, other than any one or combination of the following: (a) restaurant (b) cellar door in the	7am to 9pm, Monday to Friday	8am to 5pm, Saturday and Sunday
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	8am to 5pm, Saturday and Sunday											

	Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	
Overshadowing		
<p>PO 3.1</p> <p>Overshadowing of habitable room windows of adjacent residential land uses in:</p> <p>a. a neighbourhood-type zone is minimised to maintain access to direct winter sunlight</p> <p>b. other zones is managed to enable access to direct winter sunlight.</p>	<p>DTS/DPF 3.1</p> <p>North-facing windows of habitable rooms of adjacent residential land uses in a neighbourhood-type zone receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.</p>	
<p>PO 3.2</p> <p>Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:</p> <p>a. a neighbourhood type zone is minimised to maintain access to direct winter sunlight</p> <p>b. other zones is managed to enable access to direct winter sunlight.</p>	<p>DTS/DPF 3.2</p> <p>Development maintains 2 hours of direct sunlight between 9.00 am and 3.00 pm on 21 June to adjacent residential land uses in a neighbourhood-type zone in accordance with the following:</p> <p>a. for ground level private open space, the smaller of the following:</p> <p>i. half the existing ground level open space</p> <p>or</p> <p>ii. 35m² of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)</p> <p>b. for ground level communal open space, at least half of the existing ground level open space.</p>	
<p>PO 3.3</p> <p>Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account:</p> <p>(a) the form of development contemplated in the zone</p> <p>(b) the orientation of the solar energy facilities</p> <p>(c) the extent to which the solar energy facilities are already overshadowed.</p>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>	
<p>PO 3.4</p> <p>Development that incorporates moving parts, including windmills and wind farms, are located and operated to not cause unreasonable nuisance to nearby dwellings and tourist accommodation caused by shadow flicker.</p>	<p>DTS/DPF 3.4</p> <p>None are applicable.</p>	
Activities Generating Noise or Vibration		
<p>PO 4.1</p> <p>Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.1</p> <p>Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.</p>	
<p>PO 4.2</p> <p>Areas for the on-site manoeuvring of service and delivery vehicles, plant and equipment, outdoor work spaces (and the like) are designed and sited to not unreasonably impact the amenity of adjacent sensitive receivers (or lawfully approved sensitive receivers) and zones primarily intended to accommodate sensitive receivers due to noise and vibration by adopting techniques including:</p> <p>(a) locating openings of buildings and associated services away from the interface with the adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers</p> <p>(b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>	

<p>(c) housing plant and equipment within an enclosed structure or acoustic enclosure</p> <p>(d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.</p>					
<p>PO 4.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa are positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.3</p> <p>The pump and/or filtration system ancillary to a dwelling erected on the same site is:</p> <p>(a) enclosed in a solid acoustic structure located at least 5m from the nearest habitable room located on an adjoining allotment or</p> <p>(b) located at least 12m from the nearest habitable room located on an adjoining allotment.</p>				
<p>PO 4.4</p> <p>External noise into bedrooms is minimised by separating or shielding these rooms from service equipment areas and fixed noise sources located on the same or an adjoining allotment.</p>	<p>DTS/DPF 4.4</p> <p>Adjacent land is used for residential purposes.</p>				
<p>PO 4.5</p> <p>Outdoor areas associated with licensed premises (such as beer gardens or dining areas) are designed and/or sited to not cause unreasonable noise impact on existing adjacent sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.5</p> <p>None are applicable.</p>				
<p>PO 4.6</p> <p>Development incorporating music achieves suitable acoustic amenity when measured at the boundary of an adjacent sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers.</p>	<p>DTS/DPF 4.6</p> <p>Development incorporating music includes noise attenuation measures that will achieve the following noise levels:</p> <table border="1"> <thead> <tr> <th>Assessment location</th> <th>Music noise level</th> </tr> </thead> <tbody> <tr> <td>Externally at the nearest existing or envisaged noise sensitive location</td> <td>Less than 8dB above the level of background noise (L_{90,15min}) in any octave band of the sound spectrum (LOCT_{10,15} < LOCT_{90,15} + 8dB)</td> </tr> </tbody> </table>	Assessment location	Music noise level	Externally at the nearest existing or envisaged noise sensitive location	Less than 8dB above the level of background noise (L _{90,15min}) in any octave band of the sound spectrum (LOCT _{10,15} < LOCT _{90,15} + 8dB)
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Air Quality					
<p>PO 5.1</p> <p>Development with the potential to emit harmful or nuisance-generating air pollution incorporates air pollution control measures to prevent harm to human health or unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) within the locality and zones primarily intended to accommodate sensitive receivers.</p>	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>				
<p>PO 5.2</p> <p>Development that includes chimneys or exhaust flues (including cafes, restaurants and fast food outlets) is designed to minimise nuisance or adverse health impacts to sensitive receivers (or lawfully approved sensitive receivers) by:</p> <p>(a) incorporating appropriate treatment technology before exhaust emissions are released</p> <p>(b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.</p>	<p>DTS/DPF 5.2</p> <p>None are applicable.</p>				
Light Spill					
<p>PO 6.1</p> <p>External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved</p>	<p>DTS/DPF 6.1</p> <p>None are applicable.</p>				

sensitive receivers).	
PO 6.2 External lighting is not hazardous to motorists and cyclists.	DTS/DPF 6.2 None are applicable.
Solar Reflectivity / Glare	
PO 7.1 Development is designed and comprised of materials and finishes that do not unreasonably cause a distraction to adjacent road users and pedestrian areas or unreasonably cause heat loading and micro-climatic impacts on adjacent buildings and land uses as a result of reflective solar glare.	DTS/DPF 7.1 None are applicable.
Electrical Interference	
PO 8.1 Development in rural and remote areas does not unreasonably diminish or result in the loss of existing communication services due to electrical interference.	DTS/DPF 8.1 The building or structure: (a) is no greater than 10m in height, measured from existing ground level or (b) is not within a line of sight between a fixed transmitter and fixed receiver (antenna) other than where an alternative service is available via a different fixed transmitter or cable.
Interface with Rural Activities	
PO 9.1 Sensitive receivers are located and designed to mitigate impacts from lawfully existing horticultural and farming activities (or lawfully approved horticultural and farming activities), including spray drift and noise and do not prejudice the continued operation of these activities.	DTS/DPF 9.1 None are applicable.
PO 9.2 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing intensive animal husbandry activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.2 None are applicable.
PO 9.3 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing land-based aquaculture activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.3 Sensitive receivers are located at least 200m from the boundary of a site used for land-based aquaculture and associated components in other ownership.
PO 9.4 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing dairies including associated wastewater lagoons and liquid/solid waste storage and disposal facilities and do not prejudice the continued operation of these activities.	DTS/DPF 9.4 Sensitive receivers are sited at least 500m from the boundary of a site used for a dairy and associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities in other ownership.
PO 9.5 Sensitive receivers are located and designed to mitigate the potential impacts from lawfully existing facilities used for the handling, transportation and storage of bulk commodities (recognising the potential for extended hours of operation) and do not prejudice the continued operation of these activities.	DTS/DPF 9.5 Sensitive receivers are located away from the boundary of a site used for the handling, transportation and/or storage of bulk commodities in other ownership in accordance with the following: (a) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility (b) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals) where the handling of these materials into or from vessels does not exceed 100 tonnes per day (c) 500m or more, where it involves the storage of bulk petroleum in individual containers with a capacity up to 200 litres and a total

	<p>on-site storage capacity not exceeding 1000 cubic metres</p> <p>(d) 500m or more, where it involves the handling of coal with a capacity up to 1 tonne per day or a storage capacity up to 50 tonnes</p> <p>(e) 1000m or more, where it involves the handling of coal with a capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes.</p>
<p>PO 9.6</p> <p>Setbacks and vegetation plantings along allotment boundaries should be incorporated to mitigate the potential impacts of spray drift and other impacts associated with agricultural and horticultural activities.</p>	<p>DTS/DPF 9.6</p> <p>None are applicable.</p>
<p>PO 9.7</p> <p>Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.</p>	<p>DTS/DPF 9.7</p> <p>None are applicable.</p>
Interface with Mines and Quarries (Rural and Remote Areas)	
<p>PO 10.1</p> <p>Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.</p>	<p>DTS/DPF 10.1</p> <p>Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the <i>Mining Act 1971</i>.</p>

Land Division

Assessment Provisions (AP)

Desired Outcome	
DO 1	<p>Land division:</p> <ul style="list-style-type: none"> (a) creates allotments with the appropriate dimensions and shape for their intended use (b) allows efficient provision of new infrastructure and the optimum use of underutilised infrastructure (c) integrates and allocates adequate and suitable land for the preservation of site features of value, including significant vegetation, watercourses, water bodies and other environmental features (d) facilitates solar access through allotment orientation (e) creates a compact urban form that supports active travel, walkability and the use of public transport (f) avoids areas of high natural hazard risk.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All land division	
Allotment configuration	
<p>PO 1.1</p> <p>Land division creates allotments suitable for their intended use.</p>	<p>DTS/DPF 1.1</p> <p>Division of land satisfies (a) or (b):</p> <ul style="list-style-type: none"> (a) reflects the site boundaries illustrated and approved in an operative or existing development authorisation for residential development under the <i>Development Act 1993</i> or <i>Planning, Development and Infrastructure Act 2016</i> where the allotments are used or are proposed to be used solely for residential purposes (b) is proposed as part of a combined land division application with deemed-to-satisfy dwellings on the proposed allotments.
<p>PO 1.2</p>	<p>DTS/DPF 1.2</p>

Land division considers the physical characteristics of the land, preservation of environmental and cultural features of value and the prevailing context of the locality.	None are applicable.
Design and Layout	
PO 2.1 Land division results in a pattern of development that minimises the likelihood of future earthworks and retaining walls.	DTS/DPF 2.1 None are applicable.
PO 2.2 Land division enables the appropriate management of interface impacts between potentially conflicting land uses and/or zones.	DTS/DPF 2.2 None are applicable.
PO 2.3 Land division maximises the number of allotments that face public open space and public streets.	DTS/DPF 2.3 None are applicable.
PO 2.4 Land division is integrated with site features, adjacent land uses, the existing transport network and available infrastructure.	DTS/DPF 2.4 None are applicable.
PO 2.5 Development and infrastructure is provided and staged in a manner that supports an orderly and economic provision of land, infrastructure and services.	DTS/DPF 2.5 None are applicable.
PO 2.6 Land division results in watercourses being retained within open space and development taking place on land not subject to flooding.	DTS/DPF 2.6 None are applicable.
PO 2.7 Land division results in legible street patterns connected to the surrounding street network.	DTS/DPF 2.7 None are applicable.
PO 2.8 Land division is designed to preserve existing vegetation of value including native vegetation and regulated and significant trees.	DTS/DPF 2.8 None are applicable.
Roads and Access	
PO 3.1 Land division provides allotments with access to an all-weather public road.	DTS/DPF 3.1 None are applicable.
PO 3.2 Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.2 None are applicable.
PO 3.3 Land division does not impede access to publicly owned open space and/or recreation facilities.	DTS/DPF 3.3 None are applicable.
PO 3.4 Road reserves provide for safe and convenient movement and parking of projected volumes of vehicles and allow for the efficient movement of service and emergency vehicles.	DTS/DPF 3.4 None are applicable.
PO 3.5 Road reserves are designed to accommodate pedestrian and cycling	DTS/DPF 3.5 None are applicable.

infrastructure, street tree planting, landscaping and street furniture.	
PO 3.6 Road reserves accommodate stormwater drainage and public utilities.	DTS/DPF 3.6 None are applicable.
PO 3.7 Road reserves provide unobstructed vehicular access and egress to and from individual allotments and sites.	DTS/DPF 3.7 None are applicable.
PO 3.8 Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.8 None are applicable.
PO 3.9 Roads, open space and thoroughfares provide safe and convenient linkages to the surrounding open space and transport network.	DTS/DPF 3.9 None are applicable.
PO 3.10 Public streets are designed to enable tree planting to provide shade and enhance the amenity of streetscapes.	DTS/DPF 3.10 None are applicable.
PO 3.11 Local streets are designed to create low-speed environments that are safe for cyclists and pedestrians.	DTS/DPF 3.11 None are applicable.
Infrastructure	
PO 4.1 Land division incorporates public utility services within road reserves or dedicated easements.	DTS/DPF 4.1 None are applicable.
PO 4.2 Waste water, sewage and other effluent is capable of being disposed of from each allotment without risk to public health or the environment.	DTS/DPF 4.2 Each allotment can be connected to: (a) a waste water treatment plant that has the hydraulic volume and pollutant load treatment and disposal capacity for the maximum predicted wastewater volume generated by subsequent development of the proposed allotment or (b) a form of on-site waste water treatment and disposal that meets relevant public health and environmental standards.
PO 4.3 Septic tank effluent drainage fields and other waste water disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 4.3 Development is not built on, or encroaches within, an area that is or will be, required for a sewerage system or waste control system.
PO 4.4 Constructed wetland systems, including associated detention and retention basins, are sited and designed to ensure public health and safety is protected, including by minimising potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 4.4 None are applicable.
PO 4.5 Constructed wetland systems, including associated detention and retention basins, are sited and designed to allow sediments to settle prior to discharge into watercourses or the marine environment.	DTS/DPF 4.5 None are applicable.
PO 4.6 Constructed wetland systems, including associated detention and retention basins, are sited and designed to function as a landscape	DTS/DPF 4.6 None are applicable.

feature.	
Minor Land Division (Under 20 Allotments)	
Open Space	
PO 5.1 Land division proposing an additional allotment under 1 hectare provides or supports the provision of open space.	DTS/DPF 5.1 None are applicable.
Solar Orientation	
PO 6.1 Land division for residential purposes facilitates solar access through allotment orientation.	DTS/DPF 6.1 None are applicable.
Water Sensitive Design	
PO 7.1 Land division creating a new road or common driveway includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 7.1 None are applicable.
PO 7.2 Land division designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 7.2 None are applicable.
Battle-Axe Development	
PO 8.1 Battle-axe development appropriately responds to the existing neighbourhood context.	DTS/DPF 8.1 Allotments are not in the form of a battle-axe arrangement.
PO 8.2 Battle-axe development designed to allow safe and convenient movement.	DTS/DPF 8.2 The handle of a battle-axe development: (a) has a minimum width of 4m or (b) where more than 3 allotments are proposed, a minimum width of 5.5m.
PO 8.3 Battle-axe allotments and/or common land are of a suitable size and dimension to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.	DTS/DPF 8.3 Battle-axe development allows a B85 passenger vehicle to enter and exit parking spaces in no more than a three-point turn manoeuvre.
PO 8.4 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	DTS/DPF 8.4 Battle-axe or common driveways satisfy (a) and (b): (a) are constructed of a minimum of 50% permeable or porous material (b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Major Land Division (20+ Allotments)	
Open Space	
PO 9.1 Land division allocates or retains evenly distributed, high quality areas of open space to improve residential amenity and provide urban heat amelioration.	DTS/DPF 9.1 None are applicable.
PO 9.2	DTS/DPF 9.2

Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	None are applicable.
PO 9.3 Land allocated for active recreation has dimensions capable of accommodating a range of active recreational activities.	DTS/DPF 9.3 None are applicable.
Water Sensitive Design	
PO 10.1 Land division creating 20 or more residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.1 None are applicable.
PO 10.2 Land division creating 20 or more non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.2 None are applicable.
PO 10.3 Land division creating 20 or more allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 10.3 None are applicable.
Solar Orientation	
PO 11.1 Land division creating 20 or more allotments for residential purposes facilitates solar access through allotment orientation and allotment dimensions.	DTS/DPF 11.1 None are applicable.

Marinas and On-Water Structures

Assessment Provisions (AP)

Desired Outcome	
DO 1	Marinas and on-water structures are located and designed to minimise the impairment of commercial, recreational and navigational activities and adverse impacts on the environment.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Navigation and Safety	
PO 1.1 Safe public access is provided or maintained to the waterfront, public infrastructure and recreation areas.	DTS/DPF 1.1 None are applicable.

PO 1.2 The operation of wharves is not impaired by marinas and on-water structures.	DTS/DPF 1.2 None are applicable.
PO 1.3 Navigation and access channels are not impaired by marinas and on-water structures.	DTS/DPF 1.3 None are applicable.
PO 1.4 Commercial shipping lanes are not impaired by marinas and on-water structures.	DTS/DPF 1.4 Marinas and on-water structures are set back 250m or more from commercial shipping lanes.
PO 1.5 Marinas and on-water structures are located to avoid interfering with the operation or function of a water supply pumping station.	DTS/DPF 1.5 On-water structures are set back: (a) 3km or more from upstream water supply pumping station take-off points (b) 500m or more from downstream water supply pumping station take-off points.
PO 1.6 Maintenance of on-water infrastructure, including revetment walls, is not impaired by marinas and on-water structures.	DTS/DPF 1.6 None are applicable.
Environmental Protection	
PO 2.1 Development is sited and designed to facilitate water circulation and exchange.	DTS/DPF 2.1 None are applicable.

Open Space and Recreation

Assessment Provisions (AP)

Desired Outcome	
DO 1	Pleasant, functional and accessible open space and recreation facilities are provided at State, regional, district, neighbourhood and local levels for active and passive recreation, biodiversity, community health, urban cooling, tree canopy cover, visual amenity, gathering spaces, wildlife and waterway corridors, and a range of other functions and at a range of sizes that reflect the purpose of that open space.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Recreation facilities are compatible with surrounding land uses and activities.	DTS/DPF 1.1 None are applicable.
PO 1.2 Open space areas include natural or landscaped areas using locally	DTS/DPF 1.2 None are applicable.

indigenous plant species and large trees.	
Design and Siting	
PO 2.1 Open space and recreation facilities address adjacent public roads to optimise pedestrian access and visibility.	DTS/DPF 2.1 None are applicable.
PO 2.2 Open space and recreation facilities incorporate park furniture, shaded areas and resting places.	DTS/DPF 2.2 None are applicable.
PO 2.3 Open space and recreation facilities link habitats, wildlife corridors and existing open spaces and recreation facilities.	DTS/DPF 2.3 None are applicable.
Pedestrians and Cyclists	
PO 3.1 Open space incorporates: (a) pedestrian and cycle linkages to other open spaces, centres, schools and public transport nodes; (b) safe crossing points where pedestrian routes intersect the road network; (c) easily identified access points.	DTS/DPF 3.1 None are applicable.
Usability	
PO 4.1 Land allocated for open space is suitable for its intended active and passive recreational use taking into consideration its gradient and potential for inundation.	DTS/DPF 4.1 None are applicable.
Safety and Security	
PO 5.1 Open space is overlooked by housing, commercial or other development to provide casual surveillance where possible.	DTS/DPF 5.1 None are applicable.
PO 5.2 Play equipment is located to maximise opportunities for passive surveillance.	DTS/DPF 5.2 None are applicable.
PO 5.3 Landscaping provided in open space and recreation facilities maximises opportunities for casual surveillance throughout the park.	DTS/DPF 5.3 None are applicable.
PO 5.4 Fenced parks and playgrounds have more than one entrance or exit to minimise potential entrapment.	DTS/DPF 5.4 None are applicable.
PO 5.5 Adequate lighting is provided around toilets, telephones, seating, litter bins, bicycle storage, car parks and other such facilities.	DTS/DPF 5.5 None are applicable.
PO 5.6 Pedestrian and bicycle movement after dark is focused along clearly defined, adequately lit routes with observable entries and exits.	DTS/DPF 5.6 None are applicable.
Signage	
PO 6.1 Signage is provided at entrances to and within the open space and	DTS/DPF 6.1 None are applicable.

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recreation facilities to provide clear orientation to major points of interest such as the location of public toilets, telephones, safe routes, park activities and the like.	
Buildings and Structures	
PO 7.1 Buildings and car parking areas in open space areas are designed, located and of a scale to be unobtrusive.	DTS/DPF 7.1 None are applicable.
PO 7.2 Buildings and structures in open space areas are clustered where practical to ensure that the majority of the site remains open.	DTS/DPF 7.2 None are applicable.
PO 7.3 Development in open space is constructed to minimise the extent of impervious surfaces.	DTS/DPF 7.3 None are applicable.
PO 7.4 Development that abuts or includes a coastal reserve or Crown land used for scenic, conservation or recreational purposes is located and designed to have regard to the purpose, management and amenity of the reserve.	Landscaping
PO 8.1 Open space and recreation facilities provide for the planting and retention of large trees and vegetation.	DTS/DPF 8.1 None are applicable.
PO 8.2 Landscaping in open space and recreation facilities provides shade and windbreaks: (a) along cyclist and pedestrian routes; (b) around picnic and barbecue areas; (c) in car parking areas.	DTS/DPF 8.2 None are applicable.
PO 8.3 Landscaping in open space facilitates habitat for local fauna and facilitates biodiversity.	DTS/DPF 8.3 None are applicable.
PO 8.4 Landscaping including trees and other vegetation passively watered with local rainfall run-off, where practicable.	DTS/DPF 8.4 None are applicable.
DTS/DPF 7.4 None are applicable.	

Out of Activity Centre Development

Assessment Provisions (AP)

Desired Outcome	
DO1	The role of Activity Centres in contributing to the form and pattern of development and enabling equitable and convenient access to a range of shopping, administrative, cultural, entertainment and other facilities in a single trip is maintained and reinforced.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Non-residential development outside Activity Centres of a scale and type	DTS/DPF 1.1 None are applicable.

<p>that does not diminish the role of Activity Centres:</p> <ul style="list-style-type: none"> (a) as primary locations for shopping, administrative, cultural, entertainment and community services (b) as a focus for regular social and business gatherings (c) in contributing to or maintaining a pattern of development that supports equitable community access to services and facilities. 	
<p>PO 1.2</p> <p>Out-of-activity centre non-residential development complements Activity Centres through the provision of services and facilities:</p> <ul style="list-style-type: none"> (a) that support the needs of local residents and workers, particularly in underserved locations (b) at the edge of Activities Centres where they cannot readily be accommodated within an existing Activity Centre to expand the range of services on offer and support the role of the Activity Centre. 	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>

Resource Extraction

Assessment Provisions (AP)

Desired Outcome	
DO 1	Resource extraction activities are developed in a manner that minimises human and environmental impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
<p>PO 1.1</p> <p>Resource extraction activities minimise landscape damage outside of those areas unavoidably disturbed to access and exploit a resource and provide for the progressive reclamation and betterment of disturbed areas.</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Resource extraction activities avoid damage to cultural sites or artefacts.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
Water Quality	
<p>PO 2.1</p> <p>Stormwater and/or wastewater from resource extraction activities is diverted into appropriately sized treatment and retention systems to enable reuse on site.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
Separation Treatments, Buffers and Landscaping	
<p>PO 3.1</p> <p>Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.</p>	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>

PO 3.2 Resource extraction activities are screened from view from adjacent land by perimeter landscaping and/or mounding.	DTS/DPF 3.2 None are applicable.
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Site Contamination

Assessment Provisions (AP)

Desired Outcome	
DO 1	Ensure land is suitable for the proposed use in circumstances where it is, or may have been, subject to site contamination.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Ensure land is suitable for use when land use changes to a more sensitive use.	DTS/DPF 1.1 Development satisfies (a), (b), (c) or (d): <ul style="list-style-type: none"> (a) does not involve a change in the use of land (b) involves a change in the use of land that does not constitute a change to a more sensitive use (c) involves a change in the use of land to a more sensitive use on land at which site contamination is unlikely to exist (as demonstrated in a site contamination declaration form) (d) involves a change in the use of land to a more sensitive use on land at which site contamination exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: <ul style="list-style-type: none"> (i) a site contamination audit report has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that- <ul style="list-style-type: none"> A. site contamination does not exist (or no longer exists) at the land or B. the land is suitable for the proposed use or range of uses (without the need for any further remediation) or C. where remediation is, or remains, necessary for the proposed use (or range of uses), remediation work has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development) and (ii) no other class 1 activity or class 2 activity has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a site contamination declaration form).

Tourism Development

Assessment Provisions (AP)

Desired Outcome

DO 1	Tourism development is built in locations that cater to the needs of visitors and positively contributes to South Australia's visitor economy.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General	
PO 1.1 Tourism development complements and contributes to local, natural, cultural or historical context where: <ul style="list-style-type: none"> (a) it supports immersive natural experiences (b) it showcases South Australia's landscapes and produce (c) its events and functions are connected to local food, wine and nature. 	DTS/DPF 1.1 None are applicable.
PO 1.2 Tourism development comprising multiple accommodation units (including any facilities and activities for use by guests and visitors) is clustered to minimise environmental and contextual impact.	DTS/DPF 1.2 None are applicable.
Caravan and Tourist Parks	
PO 2.1 Potential conflicts between long-term residents and short-term tourists are minimised through suitable siting and design measures.	DTS/DPF 2.1 None are applicable.
PO 2.2 Occupants are provided privacy and amenity through landscaping and fencing.	DTS/DPF 2.2 None are applicable.
PO 2.3 Communal open space and centrally located recreation facilities are provided for guests and visitors.	DTS/DPF 2.3 12.5% or more of a caravan park comprises clearly defined communal open space, landscaped areas and areas for recreation.
PO 2.4 Perimeter landscaping is used to enhance the amenity of the locality.	DTS/DPF 2.4 None are applicable.
PO 2.5 Amenity blocks (showers, toilets, laundry and kitchen facilities) are sufficient to serve the full occupancy of the development.	DTS/DPF 2.5 None are applicable.
PO 2.6 Long-term occupation does not displace tourist accommodation, particularly in important tourist destinations such as coastal and riverine locations.	DTS/DPF 2.6 None are applicable.
Tourist accommodation in areas constituted under the National Parks and Wildlife Act 1972	
PO 3.1 Tourist accommodation avoids delicate or environmentally sensitive areas such as sand dunes, cliff tops, estuaries, wetlands or substantially intact strata of native vegetation (including regenerated areas of native	DTS/DPF 3.1 None are applicable.

vegetation lost through bushfire).	
PO 3.2 Tourist accommodation is sited and designed in a manner that is subservient to the natural environment and where adverse impacts on natural features, landscapes, habitats and cultural assets are avoided.	DTS/DPF 3.2 None are applicable.
PO 3.3 Tourist accommodation and recreational facilities, including associated access ways and ancillary structures, are located on cleared (other than where cleared as a result of bushfire) or degraded areas or where environmental improvements can be achieved.	DTS/DPF 3.3 None are applicable.
PO 3.4 Tourist accommodation is designed to prevent conversion to private dwellings through: (a) comprising a minimum of 10 accommodation units (b) clustering separated individual accommodation units (c) being of a size unsuitable for a private dwelling (d) ensuring functional areas that are generally associated with a private dwelling such as kitchens and laundries are excluded from, or physically separated from individual accommodation units, or are of a size unsuitable for a private dwelling.	DTS/DPF 3.4 None are applicable.

Transport, Access and Parking

Assessment Provisions (AP)

Desired Outcome	
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Movement Systems	
PO 1.1 Development is integrated with the existing transport system and designed to minimise its potential impact on the functional performance of the transport system.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 Industrial, commercial and service vehicle movements, loading areas and designated parking spaces are separated from passenger vehicle car parking areas to ensure efficient and safe movement and minimise potential conflict.	DTS/DPF 1.3 None are applicable.

PO 1.4 Development is sited and designed so that loading, unloading and turning of all traffic avoids interrupting the operation of and queuing on public roads and pedestrian paths.	DTS/DPF 1.4 All vehicle manoeuvring occurs onsite.
Sightlines	
PO 2.1 Sightlines at intersections, pedestrian and cycle crossings, and crossovers to allotments for motorists, cyclists and pedestrians are maintained or enhanced to ensure safety for all road users and pedestrians.	DTS/DPF 2.1 None are applicable.
PO 2.2 Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.	DTS/DPF 2.2 None are applicable.
Vehicle Access	
PO 3.1 Safe and convenient access minimises impact or interruption on the operation of public roads.	DTS/DPF 3.1 The access is: (a) provided via a lawfully existing or authorised driveway or access point or an access point for which consent has been granted as part of an application for the division of land or (b) not located within 6m of an intersection of 2 or more roads or a pedestrian activated crossing.
PO 3.2 Development incorporating vehicular access ramps ensures vehicles can enter and exit a site safely and without creating a hazard to pedestrians and other vehicular traffic.	DTS/DPF 3.2 None are applicable.
PO 3.3 Access points are sited and designed to accommodate the type and volume of traffic likely to be generated by the development or land use.	DTS/DPF 3.3 None are applicable.
PO 3.4 Access points are sited and designed to minimise any adverse impacts on neighbouring properties.	DTS/DPF 3.4 None are applicable.
PO 3.5 Access points are located so as not to interfere with street trees, existing street furniture (including directional signs, lighting, seating and weather shelters) or infrastructure services to maintain the appearance of the streetscape, preserve local amenity and minimise disruption to utility infrastructure assets.	DTS/DPF 3.5 Vehicle access to designated car parking spaces satisfy (a) or (b): (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
PO 3.6 Driveways and access points are separated and minimised in number to optimise the provision of on-street visitor parking (where on-street	DTS/DPF 3.6 Driveways and access points:

<p>parking is appropriate).</p>	<ul style="list-style-type: none"> (a) for sites with a frontage to a public road of 20m or less, one access point no greater than 3.5m in width is provided (b) for sites with a frontage to a public road greater than 20m: <ul style="list-style-type: none"> (i) a single access point no greater than 6m in width is provided or (ii) not more than two access points with a width of 3.5m each are provided.
<p>PO 3.7 Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.</p>	<p>DTS/DPF 3.7 Development does not involve a new or modified access or cause an increase in traffic through an existing access that is located within the following distance from a railway crossing:</p> <ul style="list-style-type: none"> (a) 80 km/h road - 110m (b) 70 km/h road - 90m (c) 60 km/h road - 70m (d) 50km/h or less road - 50m.
<p>PO 3.8 Driveways, access points, access tracks and parking areas are designed and constructed to allow adequate movement and manoeuvrability having regard to the types of vehicles that are reasonably anticipated.</p>	<p>DTS/DPF 3.8 None are applicable.</p>
<p>PO 3.9 Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.</p>	<p>DTS/DPF 3.9 None are applicable.</p>
<p>Access for People with Disabilities</p>	
<p>PO 4.1 Development is sited and designed to provide safe, dignified and convenient access for people with a disability.</p>	<p>DTS/DPF 4.1 None are applicable.</p>
<p>Vehicle Parking Rates</p>	
<p>PO 5.1 Sufficient on-site vehicle parking and specifically marked accessible car parking places are provided to meet the needs of the development or land use having regard to factors that may support a reduced on-site rate such as:</p> <ul style="list-style-type: none"> (a) availability of on-street car parking (b) shared use of other parking areas (c) in relation to a mixed-use development, where the hours of operation of commercial activities complement the residential use of the site, the provision of vehicle parking may be shared (d) the adaptive reuse of a State or Local Heritage Place. 	<p>DTS/DPF 5.1 Development provides a number of car parking spaces on-site at a rate no less than the amount calculated using one of the following, whichever is relevant:</p> <ul style="list-style-type: none"> (a) Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements (b) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking Requirements in Designated Areas (c) if located in an area where a lawfully established carparking fund operates, the number of spaces calculated under (a) or (b) less the number of spaces offset by contribution to the fund.
<p>Vehicle Parking Areas</p>	
<p>PO 6.1 Vehicle parking areas are sited and designed to minimise impact on the operation of public roads by avoiding the use of public roads when moving from one part of a parking area to another.</p>	<p>DTS/DPF 6.1 Movement between vehicle parking areas within the site can occur without the need to use a public road.</p>
<p>PO 6.2 Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced, and the like.</p>	<p>DTS/DPF 6.2 None are applicable.</p>
<p>PO 6.3</p>	<p>DTS/DPF 6.3</p>

Vehicle parking areas are designed to provide opportunity for integration and shared-use of adjacent car parking areas to reduce the total extent of vehicle parking areas and access points.	None are applicable.
PO 6.4 Pedestrian linkages between parking areas and the development are provided and are safe and convenient.	DTS/DPF 6.4 None are applicable.
PO 6.5 Vehicle parking areas that are likely to be used during non-daylight hours are provided with sufficient lighting to entry and exit points to ensure clear visibility to users.	DTS/DPF 6.5 None are applicable.
PO 6.6 Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.	DTS/DPF 6.6 Loading areas and designated parking spaces are wholly located within the site.
PO 6.7 On-site visitor parking spaces are sited and designed to be accessible to all visitors at all times.	DTS/DPF 6.7 None are applicable.
Undercroft and Below Ground Garaging and Parking of Vehicles	
PO 7.1 Undercroft and below ground garaging of vehicles is designed to enable safe entry and exit from the site without compromising pedestrian or cyclist safety or causing conflict with other vehicles.	DTS/DPF 7.1 None are applicable.
Internal Roads and Parking Areas in Residential Parks and Caravan and Tourist Parks	
PO 8.1 Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.	DTS/DPF 8.1 None are applicable.
PO 8.2 Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.	DTS/DPF 8.2 None are applicable.
Bicycle Parking in Designated Areas	
PO 9.1 The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.	DTS/DPF 9.1 Areas and / or fixtures are provided for the parking and storage of bicycles at a rate not less than the amount calculated using Transport, Access and Parking Table 3 - Off Street Bicycle Parking Requirements.
PO 9.2 Bicycle parking facilities provide for the secure storage and tethering of bicycles in a place where casual surveillance is possible, is well lit and signed for the safety and convenience of cyclists and deters property theft.	DTS/DPF 9.2 None are applicable.
PO 9.3 Non-residential development incorporates end-of-journey facilities for employees such as showers, changing facilities and secure lockers, and signage indicating the location of the facilities to encourage cycling as a mode of journey-to-work transport.	DTS/DPF 9.3 None are applicable.
Corner Cut-Offs	
PO 10.1 Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	DTS/DPF 10.1 Development does not involve building work, or building work is located wholly outside the land shown as Corner Cut-Off Area in the following diagram:



Table 1 - General Off-Street Car Parking Requirements

The following parking rates apply and if located in an area where a lawfully established carparking fund operates, the number of spaces is reduced by an amount equal to the number of spaces offset by contribution to the fund.

Class of Development	Car Parking Rate (unless varied by Table 2 onwards) Where a development comprises more than one development type, then the overall car parking rate will be taken to be the sum of the car parking rates for each development type.
Residential Development	
Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Group Dwelling	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Residential Flat Building	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Row Dwelling where vehicle access is from the primary street	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Row Dwelling where vehicle access is not from the primary street (i.e. rear-loaded)	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Semi-Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Aged / Supported Accommodation	
Retirement village	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) -

	<p>2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Student accommodation	0.3 spaces per bed.
Workers' accommodation	0.5 spaces per bed plus 0.2 spaces per bed for visitor parking.
Tourist	
Caravan park / tourist park	<p>Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation.</p> <p>Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation.</p> <p>A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.</p>
Tourist accommodation	1 car parking space per accommodation unit / guest room.
Commercial Uses	
Auction room/ depot	1 space per 100m ² of building floor area plus an additional 2 spaces.
Automotive collision repair	3 spaces per service bay.
Call centre	8 spaces per 100m ² of gross leasable floor area.
Motor repair station	3 spaces per service bay.
Office	4 spaces per 100m ² of gross leasable floor area.
Retail fuel outlet	3 spaces per 100m ² gross leasable floor area.
Service trade premises	<p>2.5 spaces per 100m² of gross leasable floor area</p> <p>1 space per 100m² of outdoor area used for display purposes.</p>
Shop (no commercial kitchen)	<p>5.5 spaces per 100m² of gross leasable floor area where not located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of refuse are shared.</p> <p>5 spaces per 100m² of gross leasable floor area where located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where</p>

	facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of refuse are shared.
Shop (in the form of a bulky goods outlet)	2.5 spaces per 100m ² of gross leasable floor area.
Shop (in the form of a restaurant or involving a commercial kitchen)	<p>Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat.</p> <p>Premises with take-away service but with no seats - 12 spaces per 100m² of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point.</p> <p>Premises with a dine-in and drive-through take-away service - 0.3 spaces per seat plus a drive through queue capacity of 10 vehicles measured from the pick-up point.</p>
Community and Civic Uses	
Childcare centre	0.25 spaces per child
Library	4 spaces per 100m ² of total floor area.
Community facility	10 spaces per 100m ² of total floor area.
Hall / meeting hall	0.2 spaces per seat.
Place of worship	1 space for every 3 visitor seats.
Pre-school	1 per employee plus 0.25 per child (drop off/pick up bays)
Educational establishment	<p>For a primary school - 1.1 space per full time equivalent employee plus 0.25 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.</p> <p>For a secondary school - 1.1 per full time equivalent employee plus 0.1 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.</p> <p>For a tertiary institution - 0.4 per student based on the maximum number of students on the site at any time.</p>
Health Related Uses	
Hospital	<p>4.5 spaces per bed for a public hospital.</p> <p>1.5 spaces per bed for a private hospital.</p>
Consulting room	4 spaces per consulting room excluding ancillary facilities.
Recreational and Entertainment Uses	
Cinema complex	0.2 spaces per seat.
Concert hall / theatre	0.2 spaces per seat.
Hotel	1 space for every 2m ² of total floor area in a public bar plus 1 space for every 6m ² of total floor area available to the public in a lounge, beer garden plus 1 space per 2 gaming machines, plus 1 space per 3 seats in a restaurant.

Indoor recreation facility	6.5 spaces per 100m ² of total floor area for a Fitness Centre 4.5 spaces per 100m ² of total floor area for all other Indoor recreation facilities.
Industry/Employment Uses	
Fuel depot	1.5 spaces per 100m ² total floor area 1 spaces per 100m ² of outdoor area used for fuel depot activity purposes.
Industry	1.5 spaces per 100m ² of total floor area.
Store	0.5 spaces per 100m ² of total floor area.
Timber yard	1.5 spaces per 100m ² of total floor area 1 space per 100m ² of outdoor area used for display purposes.
Warehouse	0.5 spaces per 100m ² total floor area.
Other Uses	
Funeral Parlour	1 space per 5 seats in the chapel plus 1 space for each vehicle operated by the parlour.
Radio or Television Station	5 spaces per 100m ² of total building floor area.

Table 2 - Off-Street Car Parking Requirements in Designated Areas

The following parking rates apply in any zone, subzone or other area described in the 'Designated Areas' column subject to the following:

- (a) the location of the development is unable to satisfy the requirements of Table 2 – Criteria (other than where a location is exempted from the application of those criteria)
- or
- (b) the development satisfies Table 2 – Criteria (or is exempt from those criteria) and is located in an area where a lawfully established carparking fund operates, in which case the number of spaces are reduced by an amount equal to the number of spaces offset by contribution to the fund.

Class of Development	Car Parking Rate		Designated Areas
	Minimum number of spaces	Maximum number of spaces	
Development generally			
All classes of development	No minimum.	No maximum except in the Primary Pedestrian Area identified in the Primary Pedestrian Area Concept Plan, where the maximum is: 1 space for each dwelling with a total floor area less than 75 square metres 2 spaces for each dwelling with a total floor area between 75 square metres and 150 square metres	Capital City Zone City Main Street Zone City Riverbank Zone Adelaide Park Lands Zone Business Neighbourhood Zone (within the City of Adelaide) The St Andrews Hospital Precinct Subzone and Women's and Children's Hospital

		<p>3 spaces for each dwelling with a total floor area greater than 150 square metres.</p> <p>Residential flat building or Residential component of a multi-storey building: 1 visitor space for each 6 dwellings.</p>	Precinct Subzone of the Community Facilities Zone
Non-residential development			
Non-residential development excluding tourist accommodation	3 spaces per 100m ² of gross leasable floor area.	5 spaces per 100m ² of gross leasable floor area.	<p>City Living Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Non-residential development excluding tourist accommodation	3 spaces per 100m ² of gross leasable floor area.	6 spaces per 100m ² of gross leasable floor area.	<p>Strategic Innovation Zone</p> <p>Suburban Activity Centre Zone</p> <p>Suburban Business Zone</p> <p>Business Neighbourhood Zone</p> <p>Suburban Main Street Zone</p> <p>Urban Activity Centre Zone</p>
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 space for every 5 bedrooms over 100 bedrooms	1 space per 2 bedrooms up to 100 bedrooms and 1 space per 4 bedrooms over 100 bedrooms	<p>City Living Zone</p> <p>Urban Activity Centre Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Residential development			
Residential component of a multi-storey building	<p>Dwelling with no separate bedroom -0.25 spaces per dwelling</p> <p>1 bedroom dwelling - 0.75 spaces per dwelling</p> <p>2 bedroom dwelling - 1 space per dwelling</p> <p>3 or more bedroom dwelling - 1.25 spaces per dwelling</p> <p>0.25 spaces per dwelling for visitor parking.</p>	None specified.	<p>City Living Zone</p> <p>Strategic Innovation Zone</p> <p>Urban Activity Centre Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Residential flat building	Dwelling with no separate	None specified.	City Living Zone

bedroom -0.25 spaces per dwelling	Urban Activity Centre Zone
1 bedroom dwelling - 0.75 spaces per dwelling	Urban Corridor (Boulevard) Zone
2 bedroom dwelling - 1 space per dwelling	Urban Corridor (Business) Zone
3 or more bedroom dwelling - 1.25 spaces per dwelling	Urban Corridor (Living) Zone
0.25 spaces per dwelling for visitor parking.	Urban Corridor (Main Street) Zone
	Urban Neighbourhood Zone

Table 2 - Criteria:

The following criteria are used in conjunction with Table 2. The 'Exception' column identifies locations where the criteria do not apply and the car parking rates in Table 2 are applicable.

Criteria	Exceptions
<p>The designated area is wholly located within Metropolitan Adelaide and any part of the development site satisfies one or more of the following:</p> <p>(a) is within 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service⁽²⁾</p> <p>(b) is within 400 metres of a bus interchange⁽¹⁾</p> <p>(c) is within 400 metres of an O-Bahn interchange⁽¹⁾</p> <p>(d) is within 400 metres of a passenger rail station⁽¹⁾</p> <p>(e) is within 400 metres of a passenger tram station⁽¹⁾</p> <p>(f) is within 400 metres of the Adelaide Parklands.</p>	<p>(a) All zones in the City of Adelaide</p> <p>(b) Strategic Innovation Zone in the following locations:</p> <ul style="list-style-type: none"> (i) City of Burnside (ii) City of Marion (iii) City of Mitcham <p>(c) Urban Corridor (Boulevard) Zone</p> <p>(d) Urban Corridor (Business) Zone</p> <p>(e) Urban Corridor (Living) Zone</p> <p>(f) Urban Corridor (Main Street) Zone</p> <p>(g) Urban Neighbourhood Zone</p>

[NOTE(S): (1) Measured from an area that contains any platform(s), shelter(s) or stop(s) where people congregate for the purpose waiting to board a bus, tram or train, but does not include areas used for the parking of vehicles. (2) A high frequency public transit service is a route serviced every 15 minutes between 7.30am and 6.30pm Monday to Friday and every 30 minutes at night, Saturday, Sunday and public holidays until 10pm.]

Table 3 - Off-Street Bicycle Parking Requirements

The bicycle parking rates apply within designated areas located within parts of the State identified in the Schedule to Table 3.

Class of Development	Bicycle Parking Rate
	<p>Where a development comprises more than one development type, then the overall bicycle parking rate will be taken to be the sum of the bicycle parking rates for each development type.</p>
Consulting Room	1 space per 20 employees plus 1 space per 20 consulting rooms for customers.
Educational establishment	<p>For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for visitors.</p> <p>For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.</p>
Hospital	1 space per 15 beds plus 1 space per 30 beds for visitors.
Indoor recreation facility	1 space per 4 employees plus 1 space per 200m ² of gross leasable floor area for visitors.

Licensed Premises	1 per 20 employees, plus 1 per 60 square metres total floor area, plus 1 per 40 square metres of bar floor area, plus 1 per 120 square metres lounge and beer garden floor area, plus 1 per 60 square metres dining floor area, plus 1 per 40 square metres gaming room floor area.
Office	1 space for every 200m ² of gross leasable floor area plus 2 spaces plus 1 space per 1000m ² of gross leasable floor area for visitors.
Pre-school	1 space per 20 full time employees plus 1 space per 40 full time children.
Recreation area	1 per 1500 spectator seats for employees plus 1 per 250 visitor and customers.
Residential flat building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 for every 10 dwellings for visitors.
Residential component of a multi-storey building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 space for every 10 dwellings for visitors.
Shop	1 space for every 300m ² of gross leasable floor area plus 1 space for every 600m ² of gross leasable floor area for customers.
Tourist accommodation	1 space for every 20 employees plus 2 for the first 40 rooms and 1 for every additional 40 rooms for visitors.
Schedule to Table 3	
Designated Area	Relevant part of the State
	The bicycle parking rate applies to a designated area located in a relevant part of the State described below.
All zones	City of Adelaide
Business Neighbourhood Zone	Metropolitan Adelaide
Strategic Innovation Zone	
Suburban Activity Centre Zone	
Suburban Business Zone	
Suburban Main Street Zone	
Urban Activity Centre Zone	
Urban Corridor (Boulevard) Zone	
Urban Corridor (Business) Zone	
Urban Corridor (Living) Zone	
Urban Corridor (Main Street) Zone	
Urban Neighbourhood Zone	

Waste Treatment and Management Facilities

Assessment Provisions (AP)

Desired Outcome

DO 1	Mitigation of the potential environmental and amenity impacts of waste treatment and management facilities.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Waste treatment and management facilities incorporate separation distances and attenuation measures within the site between waste operations areas (including all closed, operating and future cells) and sensitive receivers and sensitive environmental features to mitigate off-site impacts from noise, air and dust emissions.	DTS/DPF 1.1 None are applicable.
Soil and Water Protection	
PO 2.1 Soil, groundwater and surface water are protected from contamination from waste treatment and management facilities through measures such as: <ul style="list-style-type: none"> (a) containing potential groundwater and surface water contaminants within waste operations areas (b) diverting clean stormwater away from waste operations areas and potentially contaminated areas (c) providing a leachate barrier between waste operations areas and underlying soil and groundwater. 	DTS/DPF 2.1 None are applicable.
PO 2.2 Wastewater lagoons are set back from watercourses to minimise environmental harm and adverse effects on water resources.	DTS/DPF 2.2 Wastewater lagoons are set back 50m or more from watercourse banks.
PO 2.3 Wastewater lagoons are designed and sited to: <ul style="list-style-type: none"> (a) avoid intersecting underground waters; (b) avoid inundation by flood waters; (c) ensure lagoon contents do not overflow; (d) include a liner designed to prevent leakage. 	DTS/DPF 2.3 None are applicable.
PO 2.4 Waste operations areas of landfills and organic waste processing facilities are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.4 Waste operations areas are set back 100m or more from watercourse banks.
Amenity	
PO 3.1 Waste treatment and management facilities are screened, located and designed to minimise adverse visual impacts on amenity.	DTS/DPF 3.1 None are applicable.
PO 3.2 Access routes to waste treatment and management facilities via residential streets is avoided.	DTS/DPF 3.2 None are applicable.

PO 3.3 Litter control measures minimise the incidence of windblown litter.	DTS/DPF 3.3 None are applicable.
PO 3.4 Waste treatment and management facilities are designed to minimise adverse impacts on both the site and surrounding areas from weed and vermin infestation.	DTS/DPF 3.4 None are applicable.
Access	
PO 4.1 Traffic circulation movements within any waste treatment or management site are designed to enable vehicles to enter and exit the site in a forward direction.	DTS/DPF 4.1 None are applicable.
PO 4.2 Suitable access for emergency vehicles is provided to and within waste treatment or management sites.	DTS/DPF 4.2 None are applicable.
Fencing and Security	
PO 5.1 Security fencing provided around waste treatment and management facilities prevents unauthorised access to operations and potential hazard to the public.	DTS/DPF 5.1 Chain wire mesh or pre-coated painted metal fencing 2m or more in height is erected along the perimeter of the waste treatment or waste management facility site.
Landfill	
PO 6.1 Landfill gas emissions are managed in an environmentally acceptable manner.	DTS/DPF 6.1 None are applicable.
PO 6.2 Landfill facilities are separated from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 6.2 Landfill facilities are set back 250m or more from a public open space reserve, forest reserve, national park or Conservation Zone.
PO 6.3 Landfill facilities are located on land that is not subject to land slip.	DTS/DPF 6.3 None are applicable.
PO 6.4 Landfill facilities are separated from areas subject to flooding.	DTS/DPF 6.4 Landfill facilities are set back 500m or more from land inundated in a 1% AEP flood event.
Organic Waste Processing Facilities	
PO 7.1 Organic waste processing facilities are separated from the coast to avoid potential environment harm.	DTS/DPF 7.1 Organic waste processing facilities are set back 500m or more from the coastal high water mark.
PO 7.2 Organic waste processing facilities are located on land where the engineered liner and underlying seasonal water table cannot intersect.	DTS/DPF 7.2 None are applicable.
PO 7.3 Organic waste processing facilities are sited away from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 7.3 Organic waste processing facilities are set back 250m or more from a public open space reserve, forest reserve, national park or a Conservation Zone.
PO 7.4 Organic waste processing facilities are located on land that is not subject to land slip.	DTS/DPF 7.4 None are applicable.

PO 7.5 Organic waste processing facilities separated from areas subject to flooding.	DTS/DPF 7.5 Organic waste processing facilities are set back 500m or more from land inundated in a 1% AEP flood event.
Major Wastewater Treatment Facilities	
PO 8.1 Major wastewater treatment and disposal systems, including lagoons, are designed to minimise potential adverse odour impacts on sensitive receivers, minimise public and environmental health risks and protect water quality.	DTS/DPF 8.1 None are applicable.
PO 8.2 Artificial wetland systems for the storage of treated wastewater are designed and sited to minimise potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 8.2 None are applicable.

Workers' accommodation and Settlements

Assessment Provisions (AP)

Desired Outcome	
DO 1	Appropriately designed and located accommodation for seasonal and short-term workers in rural areas that minimises environmental and social impacts.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Workers' accommodation and settlements are obscured from scenic routes, tourist destinations and areas of conservation significance or otherwise designed to complement the surrounding landscape.	DTS/DPF 1.1 None are applicable.
PO 1.2 Workers' accommodation and settlements are sited and designed to minimise nuisance impacts on the amenity of adjacent users of land.	DTS/DPF 1.2 None are applicable.
PO 1.3 Workers' accommodation and settlements are built with materials and colours that blend with the landscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Workers' accommodation and settlements are supplied with service infrastructure such as power, water and effluent disposal sufficient to satisfy the living requirements of workers.	DTS/DPF 1.4 None are applicable.

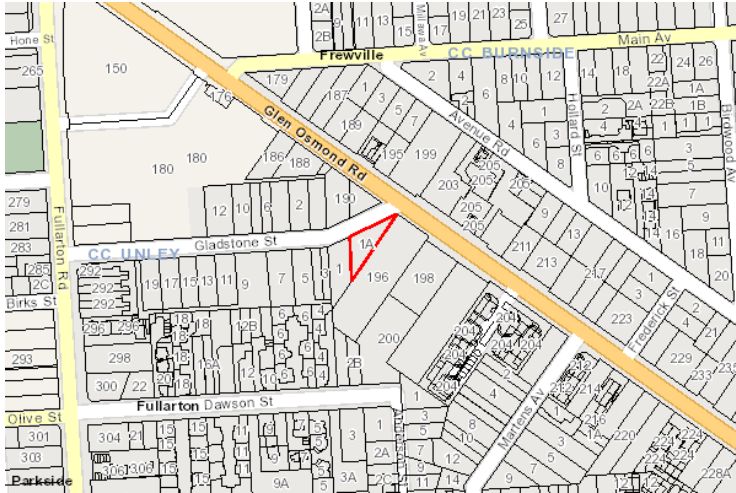
No criteria applies to this land use. Please check the definition of the land use for further detail.

1A GLADSTONE ST FULLARTON SA 5063

Address:

Click to view a detailed interactive [SAILIS](#) in SAILIS

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Property Zoning Details

Local Variation (TNV)

Maximum Building Height (Metres) *(Maximum building height is 9m)*

Maximum Building Height (Levels) *(Maximum building height is 2 levels)*

Overlay

Airport Building Heights (Regulated) *(All structures over 45 metres)*

Future Road Widening

Major Urban Transport Routes

Prescribed Wells Area

Regulated and Significant Tree

Traffic Generating Development

Zone

Business Neighbourhood

Development Pathways

[BLANK]

Property Policy Information for above selection

Part 2 - Zones and Sub Zones

Business Neighbourhood Zone

Assessment Provisions (AP)

Desired Outcome	
DO 1	A variety of housing and accommodation types and compatible employment-generating land uses in an environment characterised by primarily low-rise buildings
DO 2	Buildings of a scale and design that complements surrounding built form, streetscapes and local character and provide for landscaping and open space.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
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Land Use and Intensity	
<p>PO 1.1</p> <p>Housing and accommodation types appropriate to the locality complemented by shops, offices, consulting rooms and other non-residential uses that do not materially impact residential amenity.</p>	<p>DTS/DPF 1.1</p> <p>Development comprises one or more of the following:</p> <ul style="list-style-type: none"> (a) Community facility (b) Consulting room (c) Dwelling (d) Office (e) Residential flat building (f) Shop
<p>PO 1.2</p> <p>Business and commercial land uses complement and enhance the prevailing or emerging neighbourhood character.</p>	<p>DTS/DPF 1.2</p> <p>Shops, offices and consulting rooms (or any combination thereof) do not exceed 250m² in gross leasable floor area.</p>
<p>PO 1.3</p> <p>Changes in the use of land between similar businesses encourages the efficient reuse of commercial premises and supports continued local access to a range of services compatible to the locality.</p>	<p>DTS/DPF 1.3</p> <p>A change of use to a shop, office or consulting room or any combination of these uses where all of the following are achieved:</p> <ul style="list-style-type: none"> (a) the area to be occupied by the proposed development is in an existing building and is currently used as a shop, office, consulting room or any combination of these uses (b) if the proposed change of use is for a shop: <ul style="list-style-type: none"> (i) the total gross leasable floor area of the shop will not exceed 250m² (ii) if primarily involving the handling and sale of foodstuffs, areas used for the storage and collection of refuse are sited at least 10m from the site of a dwelling (other than a dwelling directly associated with the proposed shop) (iii) if primarily involving heating and cooking of foodstuffs in a commercial kitchen and is within 30m of any residential allotment within a neighbourhood-type zone or a dwelling (other than a dwelling directly associated with the proposed shop), an exhaust duct and stack (chimney) exists or is capable of being installed for discharging exhaust emissions (c) off-street vehicular parking exists in accordance with the rate(s) specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas to the nearest whole number, except where: <ul style="list-style-type: none"> (i) the required contribution will be made into a relevant car parking offset scheme (other than where a relevant contribution has previously been made) or (ii) the building is a local heritage place.
Built Form and Character	
<p>PO 2.1</p> <p>Buildings are of a scale and design that complements surrounding built form, streetscapes and local character.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Development provides attractive landscaping to the primary street frontage.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>PO 2.3</p> <p>Site coverage is limited to provide space for landscaping, open space and pervious areas.</p>	<p>DTS/DPF 2.3</p> <p>Development does not result in site coverage exceeding 60%.</p>
Building height and setbacks	

<p>PO 3.1</p> <p>Buildings are generally of low-rise construction, with taller buildings positioned towards the centre of the zone and away from any adjoining neighbourhood-type zone to positively contribute to the built form character of the locality.</p>	<p>DTS/DPF 3.1</p> <p>Except on a Catalyst site in the Melbourne Street West Subzone, Building height (excluding garages, carports and outbuildings) is no greater than:</p> <p>(a) the following:</p> <table border="1"> <tr> <td style="text-align: center;">Maximum Building Height (Metres)</td> </tr> <tr> <td>Maximum building height is 9m</td> </tr> <tr> <td style="text-align: center;">Maximum Building Height (Levels)</td> </tr> <tr> <td>Maximum building height is 2 levels</td> </tr> </table> <p>(b) in all other cases (ie there is a blank field for both values):</p> <ul style="list-style-type: none"> (i) 2 building levels or 9m where the development is located adjoining a different zone that primarily envisages residential development (ii) 3 building levels or 12m in all other cases. <p>In relation to DTS/DPF 3.1, in instances where:</p> <p>(c) more than one value is returned in the same field:</p> <ul style="list-style-type: none"> (i) for the purpose of DTS/DPF 3.1(a), refer to the Maximum Building Height (Metres) Technical and Numeric Variation layer or Maximum Building Height (Levels) Technical and Numeric Variation layer in the SA planning database to determine the applicable value relevant to the site of the proposed development (ii) only one value is returned for DTS/DPF 3.1(a), (i.e. there is one blank field), then the relevant height in metres or building levels applies with no criteria for the other. 	Maximum Building Height (Metres)	Maximum building height is 9m	Maximum Building Height (Levels)	Maximum building height is 2 levels
Maximum Building Height (Metres)					
Maximum building height is 9m					
Maximum Building Height (Levels)					
Maximum building height is 2 levels					
<p>PO 3.2</p> <p>Buildings are set back from primary street boundaries consistent with the existing streetscape.</p>	<p>DTS/DPF 3.2</p> <p>The building line of a building set back from the primary street boundary:</p> <ul style="list-style-type: none"> (a) at least the average setback to the building line of existing buildings on adjoining sites which face the same primary street (including those buildings that would adjoin the site if not separated by a public road or a vacant allotment) (b) where there is only one existing building on adjoining sites which face the same primary street (including those that would adjoin if not separated by a public road or a vacant allotment), not less than the setback to the building line of that building or (c) not less than 5m where no building exists on an adjoining site with the same primary street frontage. 				
<p>PO 3.3</p> <p>Buildings set back from secondary street boundaries (other than rear laneways) contribute to a consistent streetscape.</p>	<p>DTS/DPF 3.3</p> <p>Building walls are set back from the secondary street frontage:</p> <ul style="list-style-type: none"> (a) the average of any existing buildings on adjoining sites having frontage to the same street or (b) not less than 900mm where no building exists on an adjoining site. 				
<p>PO 3.4</p> <p>Dwelling boundary walls are limited in height and length to manage visual and overshadowing impacts on adjoining residential properties.</p>	<p>DTS/DPF 3.4</p> <p>Except where the dwelling is located on a central site within a row dwelling or terrace arrangement, side boundary walls occur only on one side boundary and satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) side boundary walls adjoin or abut a boundary wall of a building on adjoining land for the same or lesser length and height (b) side boundary walls do not: <ul style="list-style-type: none"> (i) exceed 3.2m in height from the lower of the natural or finished ground level (ii) exceed 11.5m in length (iii) when combined with other walls on the boundary of the subject development site, exceed a maximum 45% of the 				

	<p>length of the boundary</p> <p>(iv) encroach within 3m of any other existing or proposed boundary walls on the subject land.</p>
<p>PO 3.5</p> <p>Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.</p>	<p>DTS/DPF 3.5</p> <p>Dwelling walls of dwellings in a semi-detached or row arrangement are set back at least 900mm from side boundaries shared with allotments outside the development site.</p>
<p>PO 3.6</p> <p>Buildings are set back from side boundaries to provide:</p> <p>(a) separation between dwellings in a way that complements the established character of the locality</p> <p>(b) access to natural light and ventilation for neighbours.</p>	<p>DTS/DPF 3.6</p> <p>Other than walls located on a side boundary, building walls are set back at least 900mm from side boundaries.</p>
<p>PO 3.7</p> <p>Buildings are set back from rear boundaries to provide:</p> <p>(a) separation between dwellings in a way that complements the established character of the locality</p> <p>(b) access to natural light and ventilation for neighbours</p> <p>(c) open space recreational opportunities</p> <p>(d) space for landscaping and vegetation.</p>	<p>DTS/DPF 3.7</p> <p>Buildings walls are set back from the rear boundary at least:</p> <p>(a) 3m for the first building level</p> <p>(b) 5m for any second building level.</p>
Land Division	
<p>PO 4.1</p> <p>Land division and / or site amalgamation creates allotments that vary in size and are suitable for a variety of residential and commercial activities and improve the level of development integration.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
Advertisements	
<p>PO 5.1</p> <p>Advertisements complement the scale of buildings and are not visually dominant within the locality.</p>	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>
Concept Plans	
<p>PO 6.1</p> <p>Development is compatible with the outcomes sought by any relevant Concept Plan contained within Part 12 - Concept Plans of the Planning and Design Code to support the orderly development of land through staging of development and provision of infrastructure.</p>	<p>DTS/DPF 6.1</p> <p>The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant:</p> <p>In relation to DTS/DPF 6.1, in instances where:</p> <p>(a) one or more Concept Plan is returned, refer to Part 12 - Concept Plans in the Planning and Design Code to determine if a Concept Plan is relevant to the site of the proposed development. Note: multiple concept plans may be relevant.</p> <p>(b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 6.1 is met.</p>
Ancillary Buildings and Structures	
<p>PO 7.1</p> <p>Residential ancillary buildings are sited and designed to not detract from the streetscape or appearance of primary residential buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 7.1</p> <p>Ancillary buildings and structures:</p> <p>(a) are ancillary to a dwelling erected on the same site</p> <p>(b) have a floor area not exceeding 60m²</p> <p>(c) are not constructed, added to or altered so that any part is situated</p> <p>(i) in front of any part of the building line of the dwelling to which it is ancillary</p>

	<p>or</p> <ul style="list-style-type: none"> (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads) <p>(d) in the case of a garage or carport, the garage or carport:</p> <ul style="list-style-type: none"> (i) is set back at least 5.5m from the boundary of the primary street (ii) when facing a primary street or secondary street, has a total door / opening not exceeding: <ul style="list-style-type: none"> A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width <p>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:</p> <ul style="list-style-type: none"> (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent <p>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</p> <p>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</p> <p>(h) have a wall height or post height not exceeding 3m above natural ground level</p> <p>(i) have a roof height where no part of the roof is more than 5m above the natural ground level</p> <p>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour</p> <p>(k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:</p> <ul style="list-style-type: none"> (i) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>201-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> (ii) the amount of existing soft landscaping prior to the development occurring. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	150-200	15%	201-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site										
<150	10%										
150-200	15%										
201-450	20%										
>450	25%										

PO 7.2
 Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements or result in over-development of the site.

DTS/DPF 7.2
 Ancillary buildings and structures do not result in:

- (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space
- (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or

Table 5 - Procedural Matters (PM) - Notification

The following table identifies, pursuant to section 107(6) of the *Planning, Development and Infrastructure Act 2016*, classes of performance assessed development that are excluded from notification. The table also identifies any exemptions to the placement of notices when notification is required.

Interpretation

A class of development listed in Column A is excluded from notification provided that it does not fall within a corresponding exclusion prescribed in Column B. In instances where development falls within multiple classes within Column A, each clause is to be read independently such that if a development is excluded from notification by any clause, it is, for the purposes of notification excluded irrespective of any other clause.

Class of Development (Column A)	Exceptions (Column B)
1. A kind of development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.	None specified.
2. All development undertaken by: <ul style="list-style-type: none"> (a) the South Australian Housing Trust either individually or jointly with other persons or bodies or (b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust. 	Except development involving any of the following: <ul style="list-style-type: none"> 1. residential flat building(s) of 3 more more building levels 2. the demolition of a State or Local Heritage Place 3. the demolition of a building (except an ancillary building) in a Historic Area Overlay.
3. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> (a) advertisement (b) air handling unit, air conditioning system or exhaust fan (c) ancillary accommodation (d) building work on railway land (e) carport (f) community facility (g) deck (h) dwelling (i) dwelling addition (j) fence (k) outbuilding (l) pergola (m) private bushfire shelter (n) residential flat building (o) retaining wall (p) shade sail (q) solar photovoltaic panels (roof mounted) (r) student accommodation (s) swimming pool or spa pool (t) verandah (u) water tank. 	Except development that: <ul style="list-style-type: none"> 1. exceeds the maximum building height specified in Business Neighbourhood Zone DTS/DPF 3.1 or 2. is on a Catalyst Site that exceeds the maximum building height in Business Neighbourhood Zone DTS/DPF 3.1 that applies to development not on a Catalyst Site or 3. involves a building wall (or structure) that is proposed to be situated on a side boundary (not being a boundary with a primary street or secondary street) and: <ul style="list-style-type: none"> (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment) or (b) the height of the proposed wall (or post height) exceeds 3.2m measured from the lower of the natural or finished ground level (other than where the proposed wall abuts an existing wall or structure of greater height on the adjoining allotment).
4. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> (a) consulting room (b) office (c) shop. 	Except development that: <ul style="list-style-type: none"> 1. does not satisfy Business Neighbourhood Zone DTS/DPF 1.2 or 2. exceeds the maximum building height specified in Business Neighbourhood Zone DTS/DPF 3.1

	<p>or</p> <p>3. is on a Catalyst Site that exceeds the maximum building height in Business Neighbourhood Zone DTS/DPF 3.1 that applies to development not on a Catalyst Site</p> <p>or</p> <p>4. involves a building wall (or structure) that is proposed to be situated on a side boundary (not being a boundary with a primary street or secondary street) and:</p> <p>(a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment)</p> <p>or</p> <p>(b) the height of the proposed wall (or post height) exceeds 3.2m measured from the lower of the natural or finished ground level (other than where the proposed wall abuts an existing wall or structure of greater height on the adjoining allotment).</p>
<p>5. Any development involving any of the following (or of any combination of any of the following):</p> <p>(a) internal building work</p> <p>(b) land division</p> <p>(c) replacement building</p> <p>(d) temporary accommodation in an area affected by bushfire</p> <p>(e) tree damaging activity.</p>	<p>None specified.</p>
<p>6. Demolition.</p>	<p>Except any of the following:</p> <p>1. the demolition of a State or Local Heritage Place</p> <p>2. the demolition of a building (except an ancillary building) in a Historic Area Overlay.</p>

Placement of Notices - Exemptions for Performance Assessed Development

None specified.

Placement of Notices - Exemptions for Restricted Development

None specified.

Part 3 - Overlays

Airport Building Heights (Regulated) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Management of potential impacts of buildings and generated emissions to maintain operational and safety requirements of registered and certified commercial and military airfields, airports, airstrips and helicopter landing sites.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Built Form	
PO 1.1 Building height does not pose a hazard to the operation of a certified or registered aerodrome.	DTS/DPF 1.1 Buildings are located outside the area identified as 'All structures' (no height limit is prescribed) and do not exceed the height specified in the Airport Building Heights (Regulated) Overlay which applies to the subject site as shown on the SA Property and Planning Atlas. In instances where more than one value applies to the site, the lowest value relevant to the site of the proposed development is applicable.
PO 1.2 Exhaust stacks are designed and sited to minimise plume impacts on aircraft movements associated with a certified or registered aerodrome.	DTS/DPF 1.2 Development does not include exhaust stacks.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Any of the following classes of development: (a) building located in an area identified as 'All structures' (no height limit is prescribed) or will exceed the height specified in the <i>Airport Building Heights (Regulated) Overlay</i> (b) building comprising exhaust stacks that generates plumes, or may cause plumes to be generated, above a height specified in the <i>Airport Building Heights (Regulated) Overlay</i> .	The airport-operator company for the relevant airport within the meaning of the <i>Airports Act 1996</i> of the Commonwealth or, if there is no airport-operator company, the Secretary of the Minister responsible for the administration of the <i>Airports Act 1996</i> of the Commonwealth.	To provide expert assessment and direction to the relevant authority on potential impacts on the safety and operation of aviation activities.	Development of a class to which Schedule 9 clause 3 item 1 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Future Road Widening Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development which is consistent with and will not compromise efficient delivery of future road widening requirements.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Future Road Widening	
PO 1.1 Development does not compromise or is located and designed to minimise its impact on future road widening requirements.	DTS/DPF 1.1 Development does not involve building work, or building work is located wholly outside the land subject to the 6m Consent Area, the C Type Requirement or the Strip Requirement of the Metropolitan Adelaide Road

	Widening Plan.
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Procedural Matters (PM)

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Other than where all deemed-to-satisfy criteria for all policies relevant to this referral are met, development (including the division of land) that is within or may encroach within a Future Road Widening Area.	Commissioner of Highways.	To provide expert technical assessment and direction to the relevant authority on the safe and efficient operation and management of all roads relevant to the Commissioner of Highways as described in the Planning and Design Code.	Development of a class to which Schedule 9 clause 3 item 4 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Major Urban Transport Routes Overlay

Assessment Provisions (AP)

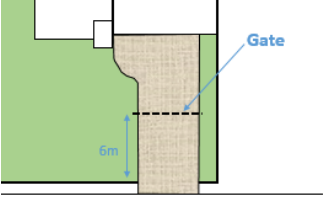
Desired Outcome	
DO 1	Safe and efficient operation of Major Urban Transport Routes for all road users.
DO 2	Provision of safe and efficient access to and from Major Urban Transport Routes.

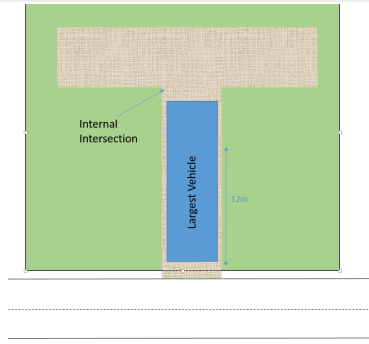
Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Access - Safe Entry and Exit (Traffic Flow)	
PO 1.1 Access is designed to allow safe entry and exit to and from a site to meet the needs of development and minimise traffic flow interference associated with access movements along adjacent State Maintained Roads.	<p>DTS/DPF 1.1</p> <p>An access point satisfies (a), (b) or (c):</p> <ul style="list-style-type: none"> (a) where servicing a single (1) residential dwelling / residential allotment: <ul style="list-style-type: none"> (i) it will not result in more than one access point (ii) vehicles can enter and exit the site in a forward direction (iii) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees (iv) passenger vehicles (with a length up to 5.2m) can enter and exit the site wholly within the kerbside lane of the road (v) have a width of between 3m and 4m (measured at the site boundary). (b) where the development will result in 2 and up to 6 dwellings: <ul style="list-style-type: none"> (i) it will not result in more than one access point servicing the development site (ii) entry and exit movements are left turn only (iii) vehicles can enter and exit the site in a forward direction

	<ul style="list-style-type: none"> (iv) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees; (v) passenger vehicles (with a length up to 5.2m) can enter and exit the site wholly within the kerbside lane of the road (vi) have a width of between 5.8m to 6m (measured at the site boundary) and an access depth of 6m (measured from the site boundary into the site). <p>(c) where the development will result in over 7 dwellings, or is a non-residential land use:</p> <ul style="list-style-type: none"> (i) it will not result in more than one access point servicing the development site (ii) vehicles can enter and exit the site using left turn only movements (iii) vehicles can enter and exit the site in a forward direction (iv) vehicles can cross the property boundary at an angle between 70 degrees and 90 degrees (v) have a width of between 6m and 7m (measured at the site boundary), where the development is expected to accommodate vehicles with a length of 6.4m or less (vi) have a width of between 6m and 9m (measured at the site boundary), where the development is expected to accommodate vehicles with a length from 6.4m to 8.8m (vii) have a width of between 9m and 12m (measured at the site boundary), where the development is expected to accommodate vehicles with a length from 8.8m to 12.5m (viii) provides for simultaneous two-way vehicle movements at the access; <ul style="list-style-type: none"> A. with entry and exit movements for vehicles with a length up to 5.2m vehicles being fully within the kerbside lane of the road <li style="padding-left: 20px;">and B. with entry movements of 8.8m vehicles (where relevant) being fully within the kerbside lane of the road and the exit movements of 8.8m vehicles do not cross the centreline of the road.
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Access - On-Site Queuing

<p>PO 2.1</p> <p>Sufficient accessible on-site queuing adjacent to access points is provided to meet the needs of development so that all vehicle queues can be contained fully within the boundaries of the development site, to minimise interruption of the functional performance of the road and maintain safe vehicle movements.</p>	<p>DTS/DPF 2.1</p> <p>An access point in accordance with one of the following:</p> <p>(a) will not service, or is not intended to service, more than 6 dwellings and there are no internal driveways, intersections, car parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site) as shown in the following diagram:</p> <div style="text-align: center;">  <p>The diagram illustrates a site boundary on the left and a road on the right. A gate is located at the boundary. A vertical double-headed arrow indicates a 6m distance from the site boundary into the site to the gate. The area between the site boundary and the gate is shaded green, representing the queuing area. Below the diagram are two horizontal dashed lines.</p> </div> <p>(b) will service, or is intended to service, development that will generate less than 60 vehicle movements per day and:</p> <ul style="list-style-type: none"> (i) is expected to be serviced by vehicles with a length no greater than 6.4m (ii) there are no internal driveways, intersections, parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site). <p>(c) will service, or is intended to service, development that will generate less than 60 vehicle movements per day and:</p> <ul style="list-style-type: none"> (i) is expected to be serviced by vehicles with a length greater than a 6.4m small rigid vehicle (ii) there are no internal driveways, intersections, parking spaces or gates within 6.0m of the access point (measured from the site boundary into the site) (iii) any termination of, or change in priority of movement within the main car park aisle is located far enough into the site so that the largest vehicle expected on-site can store fully within the site before being required to stop (iv) all parking or manoeuvring areas for commercial vehicles are located a minimum of 12m or the length of the largest vehicle expected on site from the access (measured from the site boundary into the site) as shown in the following diagram:
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Access – Location (Spacing) - Existing Access Points

PO 3.1

Existing access points designed to accommodate the type and volume of traffic likely to be generated by the development.

DTS/DPF 3.1

An existing access point satisfies (a), (b) or (c):

- (a) it will not service, or is not intended to service, more than 6 dwellings
- (b) it is not located on a Controlled Access Road and will not service development that will result in a larger class of vehicle expected to access the site using the existing access
- (c) it is not located on a Controlled Access Road and development constitutes:
 - (i) change of use between an office less than 500m² gross leasable floor area and a consulting room less than 500m² gross leasable floor area or vice versa
 - (ii) change in use from a shop to an office, consulting room or personal or domestic services establishment
 - (iii) change of use from a consulting room or office less than 250m² gross leasable floor area to shop less than 250m² gross leasable floor area
 - (iv) change of use from a shop less than 500m² gross leasable floor area to a warehouse less than 500m² gross leasable floor area
 - (v) an office or consulting room with a gross leasable floor area less than 500m².

Access – Location (Spacing) – New Access Points

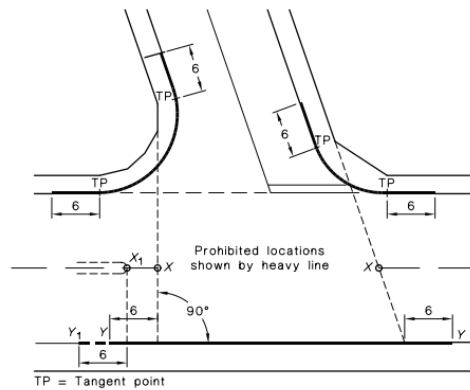
PO 4.1

New access points are spaced apart from any existing access point or public road junction to manage impediments to traffic flow and maintain safe and efficient operating conditions on the road.

DTS/DPF 4.1

A new access point satisfies (a), (b) or (c):

- (a) where a development site is intended to serve between 1 and 6 dwellings and has frontage to a local road (not being a Controlled Access Road) with a speed environment of 60km/h or less, the new access point is provided on the local road and located a minimum of 6.0m from the tangent point as shown in the following diagram:



NOTE:
The points marked X₁ and X are respectively at the median end on a divided road and at the intersection of the main road centre-line and the extensions of the side road property lines shown as dotted lines, on an undivided road. On a divided road, dimension Y-Y' extends to Point Y₁.

- (b) where the development site is intended to serve between 1 and 6 dwellings and access from a local road (being a road that is not a State Maintained Road) is not available, the new access:
 - (i) is not located on a Controlled Access Road
 - (ii) is not located on a section of road affected by double barrier lines
 - (iii) will be on a road with a speed environment of 70km/h or less
 - (iv) is located outside of the bold lines on the diagram shown in the diagram following part (a)
 - (v) located minimum of 6m from a median opening or pedestrian crossing.
- (c) where DTS/DPF 4.1 part (a) and (b) do not apply and access from an alternative local road at least 25m from the State Maintained Road is not available, and the access is not located on a Controlled Access Road, the new access

is separated in accordance with the following:

Speed Limit	Separation between access points	Separation from public road junctions and merging/terminating lanes
50 km/h or less	No spacing requirement	20m
60 km/h	40m	123m
70 km/h	55m	151m
80 km/h	70m	181m
90 km/h	90m	214m
100 km/h	110m	248m
110 km/h	135m	285m

Access - Location (Sight Lines)

PO 5.1

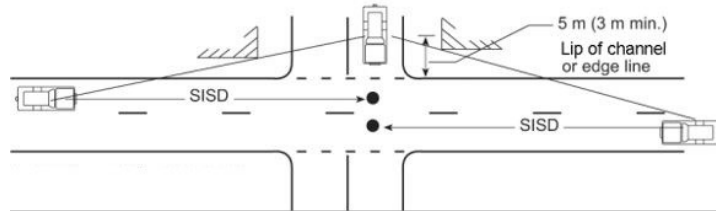
Access points are located and designed to accommodate sight lines that enable drivers and pedestrians to navigate potential conflict points with roads in a controlled and safe manner.

DTS/DPF 5.1

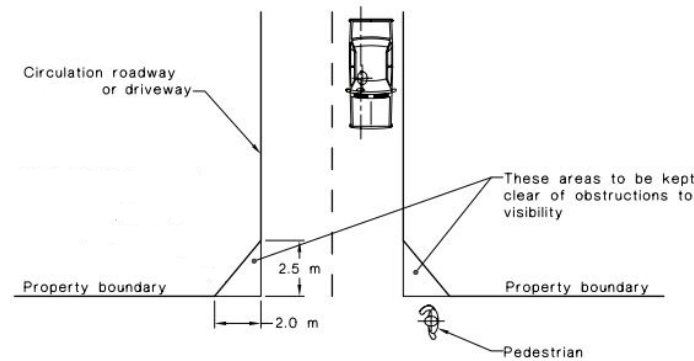
An access point satisfies (a) or (b):

- (a) drivers approaching or exiting an access point have an unobstructed line of sight in accordance with the following (measured at a height of 1.1m above the surface of the road):

Speed Limit	Access Point serving 1-6 dwellings	Access point serving all other development
40 km/h or less	40m	73m
50 km/h	55m	97m
60 km/h	73m	123m
70 km/h	92m	151m
80 km/h	114m	181m
90 km/h	139m	214m
100 km/h	165m	248m
110km/h	193m	285m



- (b) pedestrian sightlines in accordance with the following diagram:



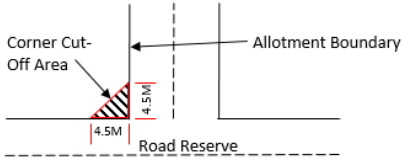
Access - Mud and Debris

PO 6.1

Access points constructed to minimise mud or other debris being carried or transferred onto the road to ensure

DTS/DPF 6.1

Where the road has an unsealed shoulder and the road is not kerbed the access way is sealed from the edge of seal on the road for a minimum of 10m or to the property boundary (whichever is closer)

safe road operating conditions.	
Access - Stormwater	
PO 7.1 Access points designed to minimise negative impact on roadside drainage of water.	DTS/DPF 7.1 Development does not: (a) decrease the capacity of an existing drainage point (b) restrict or prevent the flow of stormwater to an existing drainage point and system.
Building on Road Reserve	
PO 8.1 Buildings or structures that encroach onto, above or below road reserves designed and sited to minimise impact on safe movements by all road users.	DTS/DPF 8.1 No encroachment of buildings or structures onto, above or below the road reserve.
Public Road Junctions	
PO 9.1 New junctions with public roads (including the opening of unmade public road junctions) or modifications to existing road junctions located and designed to ensure safe and efficient road operating conditions are maintained on the State Maintained Road.	DTS/DPF 9.1 Development does not comprise any of the following: (a) creating a new junction with a public road (b) opening an unmade public road junction (c) modifying an existing public road junction.
Corner Cut-Offs	
PO 10.1 Development is located and designed to maintain sightlines for drivers turning into and out of public road junctions to contribute to driver safety.	DTS/DPF 10.1 Development does not involve building work, or building work is located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram: 

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Except where all of the relevant deemed-to-satisfy criteria are met, development (including the division of land) that involves any of the following to/on a State Maintained Road or within 25 metres of an intersection with any such road: (a) creation of a new access or junction	Commissioner of Highways.	To provide expert technical assessment and direction to the Relevant Authority on the safe and efficient operation and management of all roads relevant to the Commissioner of Highways as	Development of a class to which Schedule 9 clause 3 item 7 of the

<p>(b) alterations to an existing access or public road junction (except where deemed to be minor in the opinion of the relevant authority)</p> <p>(c) development that changes the nature of vehicular movements or increase the number or frequency of movements through an existing access (except where deemed to be minor in the opinion of the relevant authority).</p>		<p>described in the Planning and Design Code.</p>	<p>Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>
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Prescribed Wells Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in prescribed wells areas.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
<p>PO 1.1</p> <p>All development, but in particular involving any of the following:</p> <ul style="list-style-type: none"> (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry <p>has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed wells areas.</p>	<p>DTS/DPF 1.1</p> <p>Development satisfies either of the following:</p> <ul style="list-style-type: none"> (a) the applicant has a current water licence in which sufficient spare capacity exists to accommodate the water needs of the proposed use or (b) the proposal does not involve the taking of water for which a licence would be required under the <i>Landscape South Australia Act 2019</i>.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
<p>Any of the following classes of development that require or may require water to be taken in addition to any allocation that has already been granted under the <i>Landscape South Australia Act 2019</i>:</p> <ul style="list-style-type: none"> (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry. <p>Commercial forestry that requires a forest water licence under Part 8 Division 6 of the <i>Landscape South Australia Act 2019</i>.</p>	<p>The Chief Executive of the Department of the Minister responsible for the administration of the <i>Landscape South Australia Act 2019</i>.</p>	<p>To provide expert technical assessment and direction to the relevant authority on the taking of water to ensure development is undertaken sustainably.</p>	<p>Development of a class to which Schedule 9 clause 3 item 13 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>

Regulated and Significant Tree Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Tree Retention and Health	
<p>PO 1.1</p> <p>Regulated trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important visual contribution to local character and amenity (b) are indigenous to the local area and listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species and / or (c) provide an important habitat for native fauna. 	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Significant trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important contribution to the character or amenity of the local area (b) are indigenous to the local area and are listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species (c) represent an important habitat for native fauna (d) are part of a wildlife corridor of a remnant area of native vegetation (e) are important to the maintenance of biodiversity in the local environment and / or (f) form a notable visual element to the landscape of the local area. 	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>A tree damaging activity not in connection with other development satisfies (a) and (b):</p> <ul style="list-style-type: none"> (a) tree damaging activity is only undertaken to: <ul style="list-style-type: none"> (i) remove a diseased tree where its life expectancy is short (ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like (iii) rectify or prevent extensive damage to a building of value as comprising any of the following: <ul style="list-style-type: none"> A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value <p>and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity</p> (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from 	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>

<p>bushfire</p> <p>(v) treat disease or otherwise in the general interests of the health of the tree and / or</p> <p>(vi) maintain the aesthetic appearance and structural integrity of the tree</p> <p>(b) in relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.</p>	
<p>PO 1.4</p> <p>A tree-damaging activity in connection with other development satisfies all the following:</p> <p>(a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible</p> <p>(b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.</p>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>
<p>Ground work affecting trees</p>	
<p>PO 2.1</p> <p>Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>Land Division</p>	
<p>PO 3.1</p> <p>Land division results in an allotment configuration that enables its subsequent development and the retention of regulated and significant trees as far as is reasonably practicable.</p>	<p>DTS/DPF 3.1</p> <p>Land division where:</p> <p>(a) there are no regulated or significant trees located within or adjacent to the plan of division</p> <p>or</p> <p>(b) the application demonstrates that an area exists to accommodate subsequent development of proposed allotments after an allowance has been made for a tree protection zone around any regulated tree within and adjacent to the plan of division.</p>

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

Traffic Generating Development Overlay

Assessment Provisions (AP)

<p>Desired Outcome</p>	
DO 1	Safe and efficient operation of Urban Transport Routes and Major Urban Transport Routes for all road users.

DO 2	Provision of safe and efficient access to and from urban transport routes and major urban transport routes.
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Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Traffic Generating Development	
<p>PO 1.1</p> <p>Development designed to minimise its potential impact on the safety, efficiency and functional performance of the State Maintained Road network.</p>	<p>DTS/DPF 1.1</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.
<p>PO 1.2</p> <p>Access points sited and designed to accommodate the type and volume of traffic likely to be generated by development.</p>	<p>DTS/DPF 1.2</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.
<p>PO 1.3</p> <p>Sufficient accessible on-site queuing provided to meet the needs of the development so that queues do not impact on the State Maintained Road network.</p>	<p>DTS/DPF 1.3</p> <p>Access is obtained directly from a State Maintained Road where it involves any of the following types of development:</p> <ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more.

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Except where all of the relevant deemed-to-satisfy criteria are met, any of the following classes of development that are proposed within 250m of a State Maintained Road:	Commissioner of Highways.	To provide expert technical assessment and direction to the Relevant Authority on the safe and	Development of a class to which

<ul style="list-style-type: none"> (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m² or more (c) retail development with a gross floor area of 2,000m² or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m² or more (e) industry with a gross floor area of 20,000m² or more (f) educational facilities with a capacity of 250 students or more. 		<p>efficient operation and management of all roads relevant to the Commissioner of Highways as described in the Planning and Design Code.</p>	<p>Schedule 9 clause 3 item 7 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>
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Part 4 - General Development Policies

Advertisements

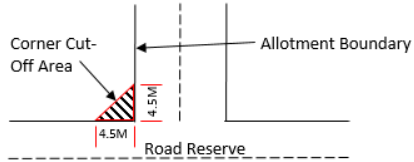
Assessment Provisions (AP)

Desired Outcome	
DO 1	Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Appearance	
<p>PO 1.1</p> <p>Advertisements are compatible and integrated with the design of the building and/or land they are located on.</p>	<p>DTS/DPF 1.1</p> <p>Advertisements attached to a building satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are not located in a Neighbourhood-type zone (b) where they are flush with a wall: <ul style="list-style-type: none"> (i) if located at canopy level, are in the form of a fascia sign (ii) if located above canopy level: <ul style="list-style-type: none"> A. do not have any part rising above parapet height B. are not attached to the roof of the building (c) where they are not flush with a wall: <ul style="list-style-type: none"> (i) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (ii) if attached to a two-storey building: <ul style="list-style-type: none"> A. has no part located above the finished floor level of the second storey of the building B. does not protrude beyond the outer limits of any verandah structure below C. does not have a sign face that exceeds 1m² per side. (d) if located below canopy level, are flush with a wall

	<ul style="list-style-type: none"> (e) if located at canopy level, are in the form of a fascia sign (f) if located above a canopy: <ul style="list-style-type: none"> (i) are flush with a wall (ii) do not have any part rising above parapet height (iii) are not attached to the roof of the building. (g) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (h) if attached to a two-storey building, have no part located above the finished floor level of the second storey of the building (i) where they are flush with a wall, do not, in combination with any other existing sign, cover more than 15% of the building facade to which they are attached.
<p>PO 1.2</p> <p>Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.</p>	<p>DTS/DPF 1.2</p> <p>Where development comprises an advertising hoarding, the supporting structure is:</p> <ul style="list-style-type: none"> (a) concealed by the associated advertisement and decorative detailing or (b) not visible from an adjacent public street or thoroughfare, other than a support structure in the form of a single or dual post design.
<p>PO 1.3</p> <p>Advertising does not encroach on public land or the land of an adjacent allotment.</p>	<p>DTS/DPF 1.3</p> <p>Advertisements and/or advertising hoardings are contained within the boundaries of the site.</p>
<p>PO 1.4</p> <p>Where possible, advertisements on public land are integrated with existing structures and infrastructure.</p>	<p>DTS/DPF 1.4</p> <p>Advertisements on public land that meet at least one of the following:</p> <ul style="list-style-type: none"> (a) achieves Advertisements DTS/DPF 1.1 (b) are integrated with a bus shelter.
<p>PO 1.5</p> <p>Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
Proliferation of Advertisements	
<p>PO 2.1</p> <p>Proliferation of advertisements is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.1</p> <p>No more than one freestanding advertisement is displayed per occupancy.</p>
<p>PO 2.2</p> <p>Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.2</p> <p>Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.</p>
<p>PO 2.3</p> <p>Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.3</p> <p>Advertisements satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are attached to a building (b) other than in a Neighbourhood-type zone, where they are flush with a wall, cover no more than 15% of the building facade to which they are attached (c) do not result in more than one sign per occupancy that is not flush with a wall.
Advertising Content	
<p>PO 3.1</p> <p>Advertisements are limited to information relating to the lawful use of land they are located on to assist in the ready identification of the activity or</p>	<p>DTS/DPF 3.1</p> <p>Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.</p>

<p>activities on the land and avoid unrelated content that contributes to visual clutter and untidiness.</p>	
<p>Amenity Impacts</p>	
<p>PO 4.1 Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.</p>	<p>DTS/DPF 4.1 Advertisements do not incorporate any illumination.</p>
<p>Safety</p>	
<p>PO 5.1 Advertisements and/or advertising hoardings erected on a verandah or projecting from a building wall are designed and located to allow for safe and convenient pedestrian access.</p>	<p>DTS/DPF 5.1 Advertisements have a minimum clearance of 2.5m between the top of the footpath and base of the underside of the sign.</p>
<p>PO 5.2 Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.</p>	<p>DTS/DPF 5.2 No advertisement illumination is proposed.</p>
<p>PO 5.3 Advertisements and/or advertising hoardings do not create a hazard to drivers by:</p> <ul style="list-style-type: none"> (a) being liable to interpretation by drivers as an official traffic sign or signal (b) obscuring or impairing drivers' view of official traffic signs or signals (c) obscuring or impairing drivers' view of features of a road that are potentially hazardous (such as junctions, bends, changes in width and traffic control devices) or other road or rail vehicles at/or approaching level crossings. 	<p>DTS/DPF 5.3 Advertisements satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are not located in a public road or rail reserve (b) are located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram 
<p>PO 5.4 Advertisements and/or advertising hoardings do not create a hazard by distracting drivers from the primary driving task at a location where the demands on driver concentration are high.</p>	<p>DTS/DPF 5.4 Advertisements and/or advertising hoardings are not located along or adjacent to a road having a speed limit of 80km/h or more.</p>
<p>PO 5.5 Advertisements and/or advertising hoardings provide sufficient clearance from the road carriageway to allow for safe and convenient movement by all road users.</p>	<p>DTS/DPF 5.5 Where the advertisement or advertising hoarding is:</p> <ul style="list-style-type: none"> (a) on a kerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 0.6m from the roadside edge of the kerb (b) on an unkerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 5.5m from the edge of the seal (c) on any other kerbed or unkerbed road, the advertisement or advertising hoarding is located a minimum of the following distance from the roadside edge of the kerb or the seal: <ul style="list-style-type: none"> (a) 110 km/h road - 14m (b) 100 km/h road - 13m (c) 90 km/h road - 10m (d) 70 or 80 km/h road - 8.5m.
<p>PO 5.6 Advertising near signalised intersections does not cause unreasonable distraction to road users through illumination, flashing lights, or moving or changing displays or messages.</p>	<p>DTS/DPF 5.6 Advertising:</p> <ul style="list-style-type: none"> (a) is not illuminated (b) does not incorporate a moving or changing display or message (c) does not incorporate a flashing light(s).

Animal Keeping and Horse Keeping

Assessment Provisions (AP)

Desired Outcome	
DO 1	Animals are kept at a density that is not beyond the carrying capacity of the land and in a manner that minimises their adverse effects on the environment, local amenity and surrounding development.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Animal keeping, horse keeping and associated activities do not create adverse impacts on the environment or the amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Animal keeping and horse keeping is located and managed to minimise the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
Horse Keeping	
PO 2.1 Water from stable wash-down areas is directed to appropriate absorption areas and/or drainage pits to minimise pollution of land and water.	DTS/DPF 2.1 None are applicable.
PO 2.2 Stables, horse shelters or associated yards are sited appropriate distances away from sensitive receivers and/or allotments in other ownership to avoid adverse impacts from dust, erosion and odour.	DTS/DPF 2.2 Stables, horse shelters and associated yards are sited in accordance with all of the following: (a) 30m or more from any sensitive receivers (existing or approved) on land in other ownership (b) where an adjacent allotment is vacant and in other ownership, 30m or more from the boundary of that allotment.
PO 2.3 All areas accessible to horses are separated from septic tank effluent disposal areas to protect the integrity of that system. Stable flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 2.3 Septic tank effluent disposal areas are enclosed with a horse-proof barrier such as a fence to exclude horses from this area.
PO 2.4 To minimise environmental harm and adverse impacts on water resources, stables, horse shelters and associated yards are appropriately set back from a watercourse.	DTS/DPF 2.4 Stables, horse shelters and associated yards are set back 50m or more from a watercourse.
PO 2.5 Stables, horse shelters and associated yards are located on slopes that are stable to minimise the risk of soil erosion and water runoff.	DTS/DPF 2.5 Stables, horse shelters and associated yards are not located on land with a slope greater than 10% (1-in-10).
Kennels	
PO 3.1	DTS/DPF 3.1

<p>Kennel flooring is constructed with an impervious material to facilitate regular cleaning.</p>	<p>The floors of kennels satisfy all of the following:</p> <ul style="list-style-type: none"> (a) are constructed of impervious concrete (b) are designed to be self-draining when washed down.
<p>PO 3.2</p> <p>Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as:</p> <ul style="list-style-type: none"> (a) adopting appropriate separation distances (b) orientating openings away from sensitive receivers. 	<p>DTS/DPF 3.2</p> <p>Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.</p>
<p>PO 3.3</p> <p>Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.</p>	<p>DTS/DPF 3.3</p> <p>Kennels are sited in association with a permanent dwelling on the land.</p>
<p>Wastes</p>	
<p>PO 4.1</p> <p>Storage of manure, used litter and other wastes (other than wastewater lagoons) is designed, constructed and managed to minimise attracting and harbouring vermin.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p> <p>Facilities for the storage of manure, used litter and other wastes (other than wastewater lagoons) are located to minimise the potential for polluting water resources.</p>	<p>DTS/DPF 4.2</p> <p>Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.</p>

Aquaculture

Assessment Provisions (AP)

<h2 style="margin: 0;">Desired Outcome</h2>	
<p>DO 1</p>	<p>Aquaculture facilities are developed in an ecologically, economically and socially sustainable manner to support an equitable sharing of marine, coastal and inland resources and mitigate conflict with other water-based and land-based uses.</p>

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

<h2 style="margin: 0;">Performance Outcome</h2>	<h2 style="margin: 0;">Deemed-to-Satisfy Criteria / Designated Performance Feature</h2>
<p>Land-based Aquaculture</p>	
<p>PO 1.1</p> <p>Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.</p>	<p>DTS/DPF 1.1</p> <p>Land-based aquaculture and associated components are located to satisfy all of the following:</p> <ul style="list-style-type: none"> (a) 200m or more from a sensitive receiver in other ownership (b) 500m or more from the boundary of a zone primarily intended to accommodate sensitive receivers.
<p>PO 1.2</p> <p>Land-based aquaculture and associated components are sited and designed to prevent surface flows from entering ponds in a 1% AEP sea flood level event.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>

PO 1.3 Land-based aquaculture and associated components are sited and designed to prevent pond leakage that would pollute groundwater.	DTS/DPF 1.3 None are applicable.
PO 1.4 Land-based aquaculture and associated components are sited and designed to prevent farmed species escaping and entering into any waters.	DTS/DPF 1.4 None are applicable.
PO 1.5 Land-based aquaculture and associated components, including intake and discharge pipes, are designed to minimise the need to traverse sensitive areas to minimise impact on the natural environment.	DTS/DPF 1.5 None are applicable.
PO 1.6 Pipe inlets and outlets associated with land-based aquaculture are sited and designed to minimise the risk of disease transmission.	DTS/DPF 1.6 None are applicable.
PO 1.7 Storage areas associated with aquaculture activity are integrated with the use of the land and sited and designed to minimise their visual impact on the surrounding environment.	DTS/DPF 1.7 None are applicable.
Marine Based Aquaculture	
PO 2.1 Marine aquaculture is sited and designed to minimise its adverse impacts on sensitive ecological areas including: (a) creeks and estuaries (b) wetlands (c) significant seagrass and mangrove communities (d) marine habitats and ecosystems.	DTS/DPF 2.1 None are applicable.
PO 2.2 Marine aquaculture is sited in areas with adequate water current to disperse sediments and dissolve particulate wastes to prevent the build-up of waste that may cause environmental harm.	DTS/DPF 2.2 None are applicable.
PO 2.3 Marine aquaculture is designed to not involve discharge of human waste on the site, on any adjacent land or into nearby waters.	DTS/DPF 2.3 None are applicable.
PO 2.4 Marine aquaculture (other than inter-tidal aquaculture) is located an appropriate distance seaward of the high water mark.	DTS/DPF 2.4 Marine aquaculture development is located 100m or more seaward of the high water mark.
PO 2.5 Marine aquaculture is sited and designed to not obstruct or interfere with: (a) areas of high public use (b) areas, including beaches, used for recreational activities such as swimming, fishing, skiing, sailing and other water sports (c) areas of outstanding visual or environmental value (d) areas of high tourism value (e) areas of important regional or state economic activity, including commercial ports, wharfs and jetties (f) the operation of infrastructure facilities including inlet and outlet pipes associated with the desalination of sea water.	DTS/DPF 2.5 None are applicable.
PO 2.6	DTS/DPF 2.6

Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine environment.	None are applicable.
PO 2.7 Marine aquaculture is designed to be as unobtrusive as practicable by incorporating measures such as: (a) using feed hoppers painted in subdued colours and suspending them as close as possible to the surface of the water (b) positioning structures to protrude the minimum distance practicable above the surface of the water (c) avoiding the use of shelters and structures above cages and platforms unless necessary to exclude predators and protected species from interacting with the farming structures and/or stock inside the cages, or for safety reasons (d) positioning racks, floats and other farm structures in unobtrusive locations landward from the shoreline.	DTS/DPF 2.7 None are applicable.
PO 2.8 Access, launching and maintenance facilities utilise existing established roads, tracks, ramps and paths to or from the sea where possible to minimise environmental and amenity impacts.	DTS/DPF 2.8 None are applicable.
PO 2.9 Access, launching and maintenance facilities are developed as common user facilities and are co-located where practicable to mitigate adverse impacts on coastal areas.	DTS/DPF 2.9 None are applicable.
PO 2.10 Marine aquaculture is sited to minimise potential impacts on, and to protect the integrity of, reserves under the <i>National Parks and Wildlife Act 1972</i> .	DTS/DPF 2.10 Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the <i>National Parks and Wildlife Act 1972</i> .
PO 2.11 Onshore storage, cooling and processing facilities do not impair the coastline and its visual amenity by: (a) being sited, designed, landscaped and of a scale to reduce the overall bulk and appearance of buildings and complement the coastal landscape (b) making provision for appropriately sited and designed vehicular access arrangements, including using existing vehicular access arrangements as far as practicable (c) incorporating appropriate waste treatment and disposal.	DTS/DPF 2.11 None are applicable.
Navigation and Safety	
PO 3.1 Marine aquaculture sites are suitably marked to maintain navigational safety.	DTS/DPF 3.1 None are applicable.
PO 3.2 Marine aquaculture is sited to provide adequate separation between farms for safe navigation.	DTS/DPF 3.2 None are applicable.
Environmental Management	
PO 4.1 Marine aquaculture is maintained to prevent hazards to people and wildlife, including breeding grounds and habitats of native marine mammals and terrestrial fauna, especially migratory species.	DTS/DPF 4.1 None are applicable.
PO 4.2	DTS/DPF 4.2

Marine aquaculture is designed to facilitate the relocation or removal of structures in the case of emergency such as oil spills, algal blooms and altered water flows.	None are applicable.
PO 4.3 Marine aquaculture provides for progressive or future reclamation of disturbed areas ahead of, or upon, decommissioning.	DTS/DPF 4.3 None are applicable.
PO 4.4 Aquaculture operations incorporate measures for the removal and disposal of litter, disused material, shells, debris, detritus, dead animals and animal waste to prevent pollution of waters, wetlands, or the nearby coastline.	DTS/DPF 4.4 None are applicable.

Beverage Production in Rural Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	Mitigation of potential amenity and environmental impacts of value-adding beverage production facilities such as wineries, distilleries, cideries and breweries.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Odour and Noise	
PO 1.1 Beverage production activities are designed and sited to minimise odour impacts on rural amenity.	DTS/DPF 1.1 None are applicable.
PO 1.2 Beverage production activities are designed and sited to minimise noise impacts on sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 Fermentation, distillation, manufacturing, storage, packaging and bottling activities occur within enclosed buildings to improve the visual appearance within a locality and manage noise associated with these activities.	DTS/DPF 1.3 None are applicable.
PO 1.4 Breweries are designed to minimise odours emitted during boiling and fermentation stages of production.	DTS/DPF 1.4 Brew kettles are fitted with a vapour condenser.
PO 1.5 Beverage production solid wastes are stored in a manner that minimises odour impacts on sensitive receivers in other ownership.	DTS/DPF 1.5 Solid waste from beverage production is collected and stored in sealed containers and removed from the site within 48 hours.
Water Quality	
PO 2.1	DTS/DPF 2.1

Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	Wastewater management systems are set back 50m or more from the banks of watercourses and bores.
PO 2.2 The storage or disposal of chemicals or hazardous substances is undertaken in a manner to prevent pollution of water resources.	DTS/DPF 2.2 None are applicable.
PO 2.3 Stormwater runoff from areas that may cause contamination due to beverage production activities (including vehicle movements and machinery operations) is drained to an onsite stormwater treatment system to manage potential environmental impacts.	DTS/DPF 2.3 None are applicable.
PO 2.4 Stormwater runoff from areas unlikely to cause contamination by beverage production and associated activities (such as roof catchments and clean hard-paved surfaces) is diverted away from beverage production areas and wastewater management systems.	DTS/DPF 2.4 None are applicable.
Wastewater Irrigation	
PO 3.1 Beverage production wastewater irrigation systems are designed and located to not contaminate soil and surface and ground water resources or damage crops.	DTS/DPF 3.1 None are applicable.
PO 3.2 Beverage production wastewater irrigation systems are designed and located to minimise impact on amenity and avoid spray drift onto adjoining land.	DTS/DPF 3.2 Beverage production wastewater is not irrigated within 50m of any dwelling in other ownership.
PO 3.3 Beverage production wastewater is not irrigated onto areas that pose an undue risk to the environment or amenity such as: (a) waterlogged areas (b) land within 50m of a creek, swamp or domestic or stock water bore (c) land subject to flooding (d) steeply sloping land (e) rocky or highly permeable soil overlaying an unconfined aquifer.	DTS/DPF 3.3 None are applicable.

Bulk Handling and Storage Facilities

Assessment Provisions (AP)

Desired Outcome	
DO 1	Facilities for the bulk handling and storage of agricultural, mineral, petroleum, rock, ore or other similar commodities are designed to minimise adverse impacts on transport networks, the landscape and surrounding land uses.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria /
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Designated Performance Feature	
Siting and Design	
PO 1.1 Bulk handling and storage facilities are sited and designed to minimise risks of adverse air quality and noise impacts on sensitive receivers.	DTS/DPF 1.1 Facilities for the handling, storage and dispatch of commodities in bulk (excluding processing) meet the following minimum separation distances from sensitive receivers: (a) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals), where the handling of these materials into or from vessels does not exceed 100 tonnes per day: 300m or more from residential premises not associated with the facility (b) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility: 300m or more from residential premises not associated with the facility (c) bulk petroleum storage involving individual containers with a capacity up to 200 litres and a total on-site storage capacity not exceeding 1,000 cubic metres: 500m or more (d) coal handling with: a. capacity up to 1 tonne per day or a storage capacity up to 50 tonnes: 500m or more b. capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes: 1000m or more.
Buffers and Landscaping	
PO 2.1 Bulk handling and storage facilities incorporate a buffer area for the establishment of dense landscaping adjacent road frontages to enhance the appearance of land and buildings from public thoroughfares.	DTS/DPF 2.1 None are applicable.
PO 2.2 Bulk handling and storage facilities incorporate landscaping to assist with screening and dust filtration.	DTS/DPF 2.2 None are applicable.
Access and Parking	
PO 3.1 Roadways and vehicle parking areas associated with bulk handling and storage facilities are designed and surfaced to control dust emissions and prevent drag out of material from the site.	DTS/DPF 3.1 Roadways and vehicle parking areas are sealed with an all-weather surface.
Slipways, Wharves and Pontoons	
PO 4.1 Slipways, wharves and pontoons used for the handling of bulk materials (such as fuel, oil, catch, bait and the like) incorporate catchment devices to avoid the release of materials into adjacent waters.	DTS/DPF 4.1 None are applicable.

Clearance from Overhead Powerlines

Assessment Provisions (AP)

Desired Outcome	
DO 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
<p>PO 1.1</p> <p>Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.</p>	<p>DTS/DPF 1.1</p> <p>One of the following is satisfied:</p> <ul style="list-style-type: none"> (a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the <i>Electricity Act 1996</i> (b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

Design

Assessment Provisions (AP)

Desired Outcome	
<p>DO 1</p>	<p>Development is:</p> <ul style="list-style-type: none"> (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All development	
External Appearance	
<p>PO 1.1</p> <p>Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Where zero or minor setbacks are desirable, development provides shelter over footpaths (<u>in the form of verandahs, awnings, canopies and the like, with adequate lighting</u>) to positively contribute to the walkability, comfort and safety of the public realm.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.</p>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>
<p>PO 1.4</p> <p>Plant, exhaust and intake vents and other technical equipment is integrated into the building design to minimise visibility from the public</p>	<p>DTS/DPF 1.4</p> <p>Development does not incorporate any structures that protrude beyond the roofline.</p>

<p>realm and negative impacts on residential amenity by:</p> <ul style="list-style-type: none"> (a) positioning plant and equipment in unobtrusive locations viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses. 	
<p>PO 1.5</p> <p>The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form) taking into account the form of development contemplated in the relevant zone.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
<p>Safety</p>	
<p>PO 2.1</p> <p>Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Development is designed to differentiate public, communal and private areas.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>PO 2.3</p> <p>Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.</p>	<p>DTS/DPF 2.3</p> <p>None are applicable.</p>
<p>PO 2.4</p> <p>Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.</p>	<p>DTS/DPF 2.4</p> <p>None are applicable.</p>
<p>PO 2.5</p> <p>Common areas and entry points of buildings (such as the foyer areas of residential buildings), and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.</p>	<p>DTS/DPF 2.5</p> <p>None are applicable.</p>
<p>Landscaping</p>	
<p>PO 3.1</p> <p>Soft landscaping and tree planting is incorporated to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes (e) contribute to biodiversity. 	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
<p>PO 3.2</p> <p>Soft landscaping and tree planting maximises the use of locally indigenous plant species, incorporates plant species best suited to current and future climate conditions and avoids pest plant and weed species.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
<p>Environmental Performance</p>	
<p>PO 4.1</p> <p>Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>

PO 4.2 Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.	DTS/DPF 4.2 None are applicable.
PO 4.3 Buildings incorporate climate-responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.	DTS/DPF 4.3 None are applicable.
Water Sensitive Design	
PO 5.1 Development is sited and designed to maintain natural hydrological systems without negatively impacting: (a) the quantity and quality of surface water and groundwater (b) the depth and directional flow of surface water and groundwater (c) the quality and function of natural springs.	DTS/DPF 5.1 None are applicable.
On-site Waste Treatment Systems	
PO 6.1 Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.	DTS/DPF 6.1 Effluent disposal drainage areas do not: (a) encroach within an area used as private open space or result in less private open space than that specified in Design Table 1 - Private Open Space (b) use an area also used as a driveway (c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
Carparking Appearance	
PO 7.1 Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on the streetscapes through techniques such as: (a) limiting protrusion above finished ground level (b) screening through appropriate planting, fencing and mounding (c) limiting the width of openings and integrating them into the building structure.	DTS/DPF 7.1 None are applicable.
PO 7.2 Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.	DTS/DPF 7.2 None are applicable.
PO 7.3 Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.	DTS/DPF 7.3 None are applicable.
PO 7.4 Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.	DTS/DPF 7.4 None are applicable.
PO 7.5	DTS/DPF 7.5

Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	None are applicable.
PO 7.6 Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.	DTS/DPF 7.6 None are applicable.
PO 7.7 Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.	DTS/DPF 7.7 None are applicable.
Earthworks and sloping land	
PO 8.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 8.1 Development does not involve any of the following: (a) excavation exceeding a vertical height of 1m (b) filling exceeding a vertical height of 1m (c) a total combined excavation and filling vertical height of 2m or more.
PO 8.2 Driveways and access tracks are designed and constructed to allow safe and convenient access on sloping land (with a gradient exceeding 1 in 8).	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b): (a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway (b) are constructed with an all-weather trafficable surface.
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8): (a) do not contribute to the instability of embankments and cuttings (b) provide level transition areas for the safe movement of people and goods to and from the development (c) are designed to integrate with the natural topography of the land.	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on-site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslide nor increases the potential for landslide or land surface instability.	DTS/DPF 8.5 None are applicable.
Fences and Walls	
PO 9.1 Fences, walls and retaining walls are of sufficient height to maintain privacy and security without unreasonably impacting the visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.
PO 9.2 Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts.	DTS/DPF 9.2 A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Privacy (in building 3 storeys or less)	

<p>PO 10.1</p> <p>Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.</p>	<p>DTS/DPF 10.1</p> <p>Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following:</p> <ul style="list-style-type: none"> (a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm (b) have sill heights greater than or equal to 1.5m above finished floor level (c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.
<p>PO 10.2</p> <p>Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.</p>	<p>DTS/DPF 10.2</p> <p>One of the following is satisfied:</p> <ul style="list-style-type: none"> (a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace or (b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of: <ul style="list-style-type: none"> (i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land or (ii) 1.7m above finished floor level in all other cases
<p>All Residential development</p>	
<p>Front elevations and passive surveillance</p>	
<p>PO 11.1</p> <p>Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 11.1</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street.
<p>PO 11.2</p> <p>Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.</p>	<p>DTS/DPF 11.2</p> <p>Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.</p>
<p>Outlook and amenity</p>	
<p>PO 12.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 12.1</p> <p>A living room of a dwelling incorporates a window with an outlook towards the street frontage or private open space, public open space, or waterfront areas.</p>
<p>PO 12.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 12.2</p> <p>None are applicable.</p>
<p>Ancillary Development</p>	
<p>PO 13.1</p>	<p>DTS/DPF 13.1</p>

Residential ancillary buildings and structures are sited and designed to not detract from the streetscape or appearance of buildings on the site or neighbouring properties.

Ancillary buildings:

- (a) are ancillary to a dwelling erected on the same site
- (b) have a floor area not exceeding 60m²
- (c) are not constructed, added to or altered so that any part is situated:
 - (i) in front of any part of the building line of the dwelling to which it is ancillary
 - or
 - (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)
- (d) in the case of a garage or carport, the garage or carport:
 - (i) is set back at least 5.5m from the boundary of the primary street
 - (ii) when facing a primary street or secondary street, has a total door / opening not exceeding:
 - A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser
 - B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width
- (e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:
 - (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and
 - (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent
- (f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary
- (g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure
- (h) have a wall height or post height not exceeding 3m above natural ground level
- (i) have a roof height where no part of the roof is more than 5m above the natural ground level
- (j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour
- (k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:
 - (i) a total area as determined by the following table:

Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site
<150	10%
150-200	15%
201-450	20%
>450	25%

- (ii) the amount of existing soft landscaping prior to the development occurring.

<p>PO 13.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision or car parking requirements and do not result in over-development of the site.</p>	<p>DTS/DPF 13.2</p> <p>Ancillary buildings and structures do not result in:</p> <ul style="list-style-type: none"> (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
<p>PO 13.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa is positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>	<p>DTS/DPF 13.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> (a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or (b) located at least 12m from the nearest habitable room located on an adjoining allotment.
<p>Garage appearance</p>	
<p>PO 14.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 14.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> (a) are situated so that no part of the garage or carport is in front of any part of the building line of the dwelling (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening not exceeding 7m in width (d) have a garage door /opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street.
<p>Massing</p>	
<p>PO 15.1</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 15.1</p> <p>None are applicable</p>
<p>Dwelling additions</p>	
<p>PO 16.1</p> <p>Dwelling additions are sited and designed to not detract from the streetscape or amenity of adjoining properties and do not impede on-site functional requirements.</p>	<p>DTS / DPF 16.1</p> <p>Dwelling additions:</p> <ul style="list-style-type: none"> (a) are not constructed, added to or altered so that any part is situated closer to a public street (b) do not result in: <ul style="list-style-type: none"> (i) excavation exceeding a vertical height of 1m (ii) filling exceeding a vertical height of 1m (iii) a total combined excavation and filling vertical height of 2m or more (iv) less Private Open Space than specified in Design Table 1 - Private Open Space (v) less on-site parking than specified in Transport Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas (vi) upper level windows facing side or rear boundaries unless: <ul style="list-style-type: none"> A. they are permanently obscured to a height of 1.5m above finished floor level that is fixed or not capable of being opened more than 200mm or B. have sill heights greater than or equal to 1.5m above finished floor level

	<p>or</p> <p>C. incorporate screening to a height of 1.5m above finished floor level</p> <p>(vii) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:</p> <p>A. 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</p> <p>B. 1.7m above finished floor level in all other cases.</p>
Private Open Space	
<p>PO 17.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 17.1</p> <p>Private open space is provided in accordance with Design Table 1 - Private Open Space.</p>
Water Sensitive Design	
<p>PO 18.1</p> <p>Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.</p>	<p>DTS/DPF 18.1</p> <p>Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes:</p> <p>(a) 80 per cent reduction in average annual total suspended solids</p> <p>(b) 60 per cent reduction in average annual total phosphorus</p> <p>(c) 45 per cent reduction in average annual total nitrogen.</p>
<p>PO 18.2</p> <p>Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.</p>	<p>DTS/DPF 18.2</p> <p>Development creating a common driveway / access that services 5 or more dwellings:</p> <p>(a) maintains the pre-development peak flow rate from the site based upon a 0.35 runoff coefficient for the 18.1% AEP 30-minute storm and the stormwater runoff time to peak is not increased or captures and retains the difference in pre-development runoff volume (based upon a 0.35 runoff coefficient) vs post development runoff volume from the site for an 18.1% AEP 30-minute storm; and</p> <p>(b) manages site generated stormwater runoff up to and including the 1% AEP flood event to avoid flooding of buildings.</p>
Car parking, access and manoeuvrability	
<p>PO 19.1</p> <p>Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 19.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <p>(a) single width car parking spaces:</p> <p>(i) a minimum length of 5.4m per space</p> <p>(ii) a minimum width of 3.0m</p> <p>(iii) a minimum garage door width of 2.4m</p> <p>(b) double width car parking spaces (side by side):</p> <p>(i) a minimum length of 5.4m</p> <p>(ii) a minimum width of 5.4m</p> <p>(iii) minimum garage door width of 2.4m per space.</p>
<p>PO 19.2</p>	<p>DTS/DPF 19.2</p>

<p>Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m
<p>PO 19.3 Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages, domestic waste collection and on-street parking.</p>	<p>DTS/DPF 19.3 Driveways and access points on sites with a frontage to a public road of 10m or less have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site.</p>
<p>PO 19.4 Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 19.4 Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed: <ul style="list-style-type: none"> (i) is set back 6m or more from the tangent point of an intersection of 2 or more roads (ii) is set back outside of the marked lines or infrastructure dedicating a pedestrian crossing (iii) does not involve the removal, relocation or damage to of mature street trees, street furniture or utility infrastructure services.
<p>PO 19.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 19.5 Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not steeper than 1:4 on average (b) they are aligned relative to the street boundary so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the street boundary (c) if located to provide access from an alley, lane or right of way - the alley, land or right or way is at least 6.2m wide along the boundary of the allotment / site
<p>PO 19.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 19.6 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>Waste storage</p>	
<p>PO 20.1 Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 20.1 None are applicable.</p>
<p>Design of Transportable Dwellings</p>	
<p>PO 21.1 The sub-floor space beneath transportable buildings is enclosed to give</p>	<p>DTS/DPF 21.1 Buildings satisfy (a) or (b):</p>

the appearance of a permanent structure.	<p>(a) are not transportable or (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.</p>
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Group dwelling, residential flat buildings and battle-axe development

Amenity

<p>PO 22.1</p> <p>Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.</p>	<p>DTS/DPF 22.1</p> <p>Dwellings have a minimum internal floor area in accordance with the following table:</p> <table border="1"> <thead> <tr> <th>Number of bedrooms</th> <th>Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>65m²</td> </tr> <tr> <td>3+ bedrooms</td> <td>80m² and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom</td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	65m ²	3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom
Number of bedrooms	Minimum internal floor area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	65m ²										
3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom										

<p>PO 22.2</p> <p>The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.</p>	<p>DTS/DPF 22.2</p> <p>None are applicable.</p>
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<p>PO 22.3</p> <p>Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.</p>	<p>DTS/DPF 22.3</p> <p>None are applicable.</p>
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<p>PO 22.4</p> <p>Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.</p>	<p>DTS/DPF 22.4</p> <p>Dwelling sites/allotments are not in the form of a battle-axe arrangement.</p>
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Communal Open Space

<p>PO 23.1</p> <p>Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.</p>	<p>DTS/DPF 23.1</p> <p>None are applicable.</p>
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<p>PO 23.2</p> <p>Communal open space is of sufficient size and dimensions to cater for group recreation.</p>	<p>DTS/DPF 23.2</p> <p>Communal open space incorporates a minimum dimension of 5 metres.</p>
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<p>PO 23.3</p> <p>Communal open space is designed and sited to:</p> <p>(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.</p>	<p>DTS/DPF 23.3</p> <p>None are applicable.</p>
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<p>PO 23.4</p> <p>Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.</p>	<p>DTS/DPF 23.4</p> <p>None are applicable.</p>
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<p>PO 23.5</p> <p>Communal open space is designed and sited to:</p> <ul style="list-style-type: none"> (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance. 	<p>DTS/DPF 23.5</p> <p>None are applicable.</p>
<p>Carparking, access and manoeuvrability</p>	
<p>PO 24.1</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 24.1</p> <p>Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street car parks per proposed dwellings (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>PO 24.2</p> <p>The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.</p>	<p>DTS/DPF 24.2</p> <p>Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.</p>
<p>PO 24.3</p> <p>Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.</p>	<p>DTS/DPF 24.3</p> <p>Driveways that service more than 1 dwelling or a dwelling on a battle-axe site:</p> <ul style="list-style-type: none"> (a) have a minimum width of 3m (b) for driveways servicing more than 3 dwellings: <ul style="list-style-type: none"> (i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street (ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.
<p>PO 24.4</p> <p>Residential driveways in a battle-axe configuration are designed to allow safe and convenient movement.</p>	<p>DTS/DPF 24.4</p> <p>Where in a battle-axe configuration, a driveway servicing one dwelling has a minimum width of 3m.</p>
<p>PO 24.5</p> <p>Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.</p>	<p>DTS/DPF 24.5</p> <p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.</p>
<p>PO 24.6</p> <p>Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 24.6</p> <p>Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
<p>Soft Landscaping</p>	
<p>PO 25.1</p> <p>Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.</p>	<p>DTS/DPF 25.1</p> <p>Other than where located directly in front of a garage or a building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.</p>
<p>PO 25.2</p>	<p>DTS/DPF 25.2</p>

Soft landscaping is provided that improves the appearance of common driveways.	Where a common driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Site Facilities / Waste Storage	
PO 26.1 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 26.1 None are applicable.
PO 26.2 Provision is made for suitable external clothes drying facilities.	DTS/DPF 26.2 None are applicable.
PO 26.3 Provision is made for suitable household waste and recyclable material storage facilities which are: (a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.	DTS/DPF 26.3 None are applicable.
PO 26.4 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 26.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 26.5 Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	DTS/DPF 26.5 None are applicable.
PO 26.6 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 26.6 None are applicable.
Supported accommodation and retirement facilities	
Siting and Configuration	
PO 27.1 Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	DTS/DPF 27.1 None are applicable.
Movement and Access	
PO 28.1 Development is designed to support safe and convenient access and movement for residents by providing: (a) ground-level access or lifted access to all units (b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places (c) car parks with gradients no steeper than 1-in-40 and of sufficient area to provide for wheelchair manoeuvrability (d) kerb ramps at pedestrian crossing points.	DTS/DPF 28.1 None are applicable.
Communal Open Space	
PO 29.1 Development is designed to provide attractive, convenient and	DTS/DPF 29.1 None are applicable.

comfortable indoor and outdoor communal areas to be used by residents and visitors.	
PO 29.2 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 29.2 None are applicable.
PO 29.3 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 29.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 29.4 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 29.4 None are applicable.
PO 29.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 29.5 None are applicable.
PO 29.6 Communal open space is designed and sited to: (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 29.6 None are applicable.
Site Facilities / Waste Storage	
PO 30.1 Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric powered vehicles.	DTS/DPF 30.1 None are applicable.
PO 30.2 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 30.2 None are applicable.
PO 30.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 28.3 None are applicable.
PO 30.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located and screened from public view.	DTS/DPF 30.4 None are applicable.
PO 30.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 30.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 30.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 30.6 None are applicable.
PO 30.7 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 30.7 None are applicable.

All non-residential development	
Water Sensitive Design	
<p>PO 31.1</p> <p>Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 31.1</p> <p>None are applicable.</p>
<p>PO 31.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 31.2</p> <p>None are applicable.</p>
Wash-down and Waste Loading and Unloading	
<p>PO 32.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, vessels, plant or equipment are:</p> <ul style="list-style-type: none"> (a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) designed to drain wastewater to either: <ul style="list-style-type: none"> (i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or (ii) a holding tank and its subsequent removal off-site on a regular basis. 	<p>DTS/DPF 32.1</p> <p>None are applicable.</p>

Table 1 - Private Open Space

Dwelling Type	Minimum Rate
Dwelling (at ground level)	<p>Total private open space area:</p> <ul style="list-style-type: none"> (a) Site area <301m²: 24m² located behind the building line. (b) Site area ≥ 301m²: 60m² located behind the building line. <p>Minimum directly accessible from a living room: 16m² / with a minimum dimension 3m.</p>
Dwelling (above ground level)	<p>Studio (no separate bedroom): 4m² with a minimum dimension 1.8m</p> <p>One bedroom: 8m² with a minimum dimension 2.1m</p> <p>Two bedroom dwelling: 11m² with a minimum dimension 2.4m</p> <p>Three + bedroom dwelling: 15m² with a minimum dimension 2.6m</p>
Cabin or caravan (permanently fixed to the ground) in a residential park or a caravan and tourist park	<p>Total area: 16m², which may be used as second car parking space, provided on each site intended for residential occupation.</p>

Design in Urban Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	<p>Development is:</p> <ul style="list-style-type: none"> (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributing to the character of the locality (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All Development	
External Appearance	
<p>PO 1.1</p> <p>Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.</p>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>
<p>PO 1.4</p> <p>Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:</p> <ul style="list-style-type: none"> (a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses. 	<p>DTS/DPF 1.4</p> <p>Development does not incorporate any structures that protrude beyond the roofline.</p>
<p>PO 1.5</p> <p>The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
Safety	

PO 2.1 Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.	DTS/DPF 2.1 None are applicable.
PO 2.2 Development is designed to differentiate public, communal and private areas.	DTS/DPF 2.2 None are applicable.
PO 2.3 Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	DTS/DPF 2.3 None are applicable.
PO 2.4 Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	DTS/DPF 2.4 None are applicable.
PO 2.5 Common areas and entry points of buildings (such as the foyer areas of residential buildings) and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.	DTS/DPF 2.5 None are applicable.
Landscaping	
PO 3.1 Soft landscaping and tree planting are incorporated to: (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes.	DTS/DPF 3.1 None are applicable.
Environmental Performance	
PO 4.1 Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.	DTS/DPF 4.1 None are applicable.
PO 4.2 Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.	DTS/DPF 4.2 None are applicable.
PO 4.3 Buildings incorporate climate responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.	DTS/DPF 4.3 None are applicable.
Water Sensitive Design	
PO 5.1 Development is sited and designed to maintain natural hydrological systems without negatively impacting: (a) the quantity and quality of surface water and groundwater (b) the depth and directional flow of surface water and groundwater (c) the quality and function of natural springs.	DTS/DPF 5.1 None are applicable.
On-site Waste Treatment Systems	

<p>PO 6.1</p> <p>Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.</p>	<p>DTS/DPF 6.1</p> <p>Effluent disposal drainage areas do not:</p> <ul style="list-style-type: none"> (a) encroach within an area used as private open space or result in less private open space than that specified in Design in Urban Areas Table 1 - Private Open Space (b) use an area also used as a driveway (c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
<p>Car parking appearance</p>	
<p>PO 7.1</p> <p>Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on streetscapes through techniques such as:</p> <ul style="list-style-type: none"> (a) limiting protrusion above finished ground level (b) screening through appropriate planting, fencing and mounding (c) limiting the width of openings and integrating them into the building structure. 	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
<p>PO 7.2</p> <p>Vehicle parking areas appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.</p>	<p>DTS/DPF 7.2</p> <p>None are applicable.</p>
<p>PO 7.3</p> <p>Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.</p>	<p>DTS/DPF 7.3</p> <p>None are applicable.</p>
<p>PO 7.4</p> <p>Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.</p>	<p>DTS/DPF 7.4</p> <p>Vehicle parking areas that are open to the sky and comprise 10 or more car parking spaces include a shade tree with a mature canopy of 4m diameter spaced for each 10 car parking spaces provided and a landscaped strip on any road frontage of a minimum dimension of 1m.</p>
<p>PO 7.5</p> <p>Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.</p>	<p>DTS/DPF 7.5</p> <p>Vehicle parking areas comprising 10 or more car parking spaces include soft landscaping with a minimum dimension of:</p> <ul style="list-style-type: none"> (a) 1m along all public road frontages and allotment boundaries (b) 1m between double rows of car parking spaces.
<p>PO 7.6</p> <p>Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.</p>	<p>DTS/DPF 7.6</p> <p>None are applicable.</p>
<p>PO 7.7</p> <p>Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.</p>	<p>DTS/DPF 7.7</p> <p>None are applicable.</p>
<p>Earthworks and sloping land</p>	
<p>PO 8.1</p> <p>Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.</p>	<p>DTS/DPF 8.1</p> <p>Development does not involve any of the following:</p> <ul style="list-style-type: none"> (a) excavation exceeding a vertical height of 1m (b) filling exceeding a vertical height of 1m

	(c) a total combined excavation and filling vertical height of 2m or more.
PO 8.2 Driveways and access tracks designed and constructed to allow safe and convenient access on sloping land.	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b): (a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway (b) are constructed with an all-weather trafficable surface.
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8): (a) do not contribute to the instability of embankments and cuttings (b) provide level transition areas for the safe movement of people and goods to and from the development (c) are designed to integrate with the natural topography of the land.	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslip or increase the potential for landslip or land surface instability.	DTS/DPF 8.5 None are applicable.
Fences and walls	
PO 9.1 Fences, walls and retaining walls of sufficient height maintain privacy and security without unreasonably impacting visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.
PO 9.2 Landscaping is incorporated on the low side of retaining walls that are visible from public roads and public open space to minimise visual impacts.	DTS/DPF 9.2 A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Privacy (low rise buildings)	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential use in a neighbourhood-type zone: (a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 125mm (b) have sill heights greater than or equal to 1.5m above finished floor level (c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.
PO 10.2 Development mitigates direct overlooking from balconies to habitable rooms and private open space of adjoining residential uses in neighbourhood type zones.	DTS/DPF 10.2 One of the following is satisfied: (a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace or (b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25%

	<p>transparency/openings fixed to a minimum height of:</p> <ul style="list-style-type: none"> (i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land or (ii) 1.7m above finished floor level in all other cases
Site Facilities / Waste Storage (excluding low rise residential development)	
<p>PO 11.1 Development provides a dedicated area for on-site collection and sorting of recyclable materials and refuse, green organic waste and wash bay facilities for the ongoing maintenance of bins that is adequate in size considering the number and nature of the activities they will serve and the frequency of collection.</p>	<p>DTS/DPF 11.1 None are applicable.</p>
<p>PO 11.2 Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.</p>	<p>DTS/DPF 11.2 None are applicable.</p>
<p>PO 11.3 Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.</p>	<p>DTS/DPF 11.3 None are applicable.</p>
<p>PO 11.4 Communal waste storage and collection areas are designed to allow waste and recycling collection vehicles to enter and leave the site without reversing.</p>	<p>DTS/DPF 11.4 None are applicable.</p>
<p>PO 11.5 For mixed use developments, non-residential waste and recycling storage areas and access provide opportunities for on-site management of food waste through composting or other waste recovery as appropriate.</p>	<p>DTS/DPF 11.5 None are applicable.</p>
All Development - Medium and High Rise	
External Appearance	
<p>PO 12.1 Buildings positively contribute to the character of the local area by responding to local context.</p>	<p>DTS/DPF 12.1 None are applicable.</p>
<p>PO 12.2 Architectural detail at street level and a mixture of materials at lower building levels near the public interface are provided to reinforce a human scale.</p>	<p>DTS/DPF 12.2 None are applicable.</p>
<p>PO 12.3 Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.</p>	<p>DTS/DPF 12.3 None are applicable.</p>
<p>PO 12.4 Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.</p>	<p>DTS/DPF 12.4 None are applicable.</p>
<p>PO 12.5 External materials and finishes are durable and age well to minimise ongoing maintenance requirements.</p>	<p>DTS/DPF 12.5 Buildings utilise a combination of the following external materials and finishes:</p> <ul style="list-style-type: none"> (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.
<p>PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.</p>	<p>DTS/DPF 12.6 Building street frontages incorporate:</p> <ul style="list-style-type: none"> (a) active uses such as shops or offices

	<ul style="list-style-type: none"> (b) prominent entry areas for multi-storey buildings (where it is a common entry) (c) habitable rooms of dwellings (d) areas of communal public realm with public art or the like, where consistent with the zone and/or subzone provisions. 																						
<p>PO 12.7</p> <p>Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.</p>	<p>DTS/DPF 12.7</p> <p>Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> (a) oriented towards the street (b) clearly visible and easily identifiable from the street and vehicle parking areas (c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied ground floor uses (d) designed to provide shelter, a sense of personal address and transitional space around the entry (e) located as close as practicable to the lift and / or lobby access to minimise the need for long access corridors (f) designed to avoid the creation of potential areas of entrapment. 																						
<p>PO 12.8</p> <p>Building services, plant and mechanical equipment are screened from the public realm.</p>	<p>DTS/DPF 12.8</p> <p>None are applicable.</p>																						
<p>Landscaping</p>																							
<p>PO 13.1</p> <p>Development facing a street provides a well landscaped area that contains a deep soil space to accommodate a tree of a species and size adequate to provide shade, contribute to tree canopy targets and soften the appearance of buildings.</p>	<p>DTS/DPF 13.1</p> <p>Buildings provide a 4m by 4m deep soil space in front of the building that accommodates a medium to large tree, except where no building setback from front property boundaries is desired.</p>																						
<p>PO 13.2</p> <p>Deep soil zones are provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies to provide shade and soften the appearance of multi-storey buildings.</p>	<p>DTS/DPF 13.2</p> <p>Multi-storey development provides deep soil zones and incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.</p> <table border="1"> <thead> <tr style="background-color: #003366; color: white;"> <th>Site area</th> <th>Minimum deep soil area</th> <th>Minimum dimension</th> <th>Tree / deep soil zones</th> </tr> </thead> <tbody> <tr> <td><300 m²</td> <td>10 m²</td> <td>1.5m</td> <td>1 small tree / 10 m²</td> </tr> <tr> <td>300-1500 m²</td> <td>7% site area</td> <td>3m</td> <td>1 medium tree / 30 m²</td> </tr> <tr> <td>>1500 m²</td> <td>7% site area</td> <td>6m</td> <td>1 large or medium tree / 60 m²</td> </tr> </tbody> </table> <p>Tree size and site area definitions</p> <table border="1"> <tbody> <tr> <td>Small tree</td> <td>4-6m mature height and 2-4m canopy spread</td> </tr> <tr> <td>Medium tree</td> <td>6-12m mature height and 4-8m canopy spread</td> </tr> <tr> <td>Large tree</td> <td>12m mature height and >8m canopy spread</td> </tr> </tbody> </table> <p>Site area</p> <p>The total area for development site, not average area per dwelling</p>	Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones	<300 m ²	10 m ²	1.5m	1 small tree / 10 m ²	300-1500 m ²	7% site area	3m	1 medium tree / 30 m ²	>1500 m ²	7% site area	6m	1 large or medium tree / 60 m ²	Small tree	4-6m mature height and 2-4m canopy spread	Medium tree	6-12m mature height and 4-8m canopy spread	Large tree	12m mature height and >8m canopy spread
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Large tree	12m mature height and >8m canopy spread																						

PO 13.3 Deep soil zones with access to natural light are provided to assist in maintaining vegetation health.	DTS/DPF 13.3 None are applicable.
PO 13.4 Unless separated by a public road or reserve, development sites adjacent to any zone that has a primary purpose of accommodating low-rise residential development incorporate a deep soil zone along the common boundary to enable medium to large trees to be retained or established to assist in screening new buildings of 3 or more building levels in height.	DTS/DPF 13.4 Building elements of 3 or more building levels in height are set back at least 6m from a zone boundary in which a deep soil zone area is incorporated.
Environmental	
PO 14.1 Development minimises detrimental micro-climatic impacts on adjacent land and buildings.	DTS/DPF 14.1 None are applicable.
PO 14.2 Development incorporates sustainable design techniques and features such as window orientation, eaves and shading structures, water harvesting and use, green walls and roof designs that enable the provision of rain water tanks (where they are not provided elsewhere on site), green roofs and photovoltaic cells.	DTS/DPF 14.2 None are applicable.
PO 14.3 Development of 5 or more building levels, or 21m or more in height (as measured from natural ground level and excluding roof-mounted mechanical plant and equipment) is designed to minimise the impacts of wind through measures such as: (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street (b) substantial verandahs around a building to deflect downward travelling wind flows over pedestrian areas (c) the placement of buildings and use of setbacks to deflect the wind at ground level (d) avoiding tall shear elevations that create windy conditions at street level.	DTS/DPF 14.3 None are applicable.
Car Parking	
PO 15.1 Multi-level vehicle parking structures are designed to contribute to active street frontages and complement neighbouring buildings.	DTS/DPF 15.1 Multi-level vehicle parking structures within buildings: (a) provide land uses such as commercial, retail or other non-car parking uses along ground floor street frontages (b) incorporate facade treatments in building elevations facing along major street frontages that are sufficiently enclosed and detailed to complement adjacent buildings.
PO 15.2 Multi-level vehicle parking structures within buildings complement the surrounding built form in terms of height, massing and scale.	DTS/DPF 15.2 None are applicable.
Overlooking/Visual Privacy	
PO 16.1 Development mitigates direct overlooking of habitable rooms and private open spaces of adjacent residential uses in neighbourhood-type zones through measures such as: (a) appropriate site layout and building orientation (b) off-setting the location of balconies and windows of habitable	DTS/DPF 16.1 None are applicable.

<p>rooms or areas with those of other buildings so that views are oblique rather than direct to avoid direct line of sight</p> <p>(c) building setbacks from boundaries (including building boundary to boundary where appropriate) that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms</p> <p>(d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.</p>	
All residential development	
Front elevations and passive surveillance	
<p>PO 17.1</p> <p>Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 17.1</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street.
<p>PO 17.2</p> <p>Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.</p>	<p>DTS/DPF 17.2</p> <p>Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.</p>
Outlook and Amenity	
<p>PO 18.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 18.1</p> <p>A living room of a dwelling incorporates a window with an external outlook of the street frontage, private open space, public open space, or waterfront areas.</p>
<p>PO 18.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 18.2</p> <p>None are applicable.</p>
Ancillary Development	
<p>PO 19.1</p> <p>Residential ancillary buildings are sited and designed to not detract from the streetscape or appearance of primary residential buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 19.1</p> <p>Ancillary buildings:</p> <ul style="list-style-type: none"> (a) are ancillary to a dwelling erected on the same site (b) have a floor area not exceeding 60m² (c) are not constructed, added to or altered so that any part is situated: <ul style="list-style-type: none"> (i) in front of any part of the building line of the dwelling to which it is ancillary or (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads) (d) in the case of a garage or carport, the garage or carport: <ul style="list-style-type: none"> (i) is set back at least 5.5m from the boundary of the primary street (ii) when facing a primary street or secondary street, has a total door / opening not exceeding: <ul style="list-style-type: none"> A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width (e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m

	<p>unless:</p> <ul style="list-style-type: none"> (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent <ul style="list-style-type: none"> (f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary (g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure (h) have a wall height or post height not exceeding 3m above natural ground level (i) have a roof height where no part of the roof is more than 5m above the natural ground level (j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour (k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less: <ul style="list-style-type: none"> (i) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>201-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> (ii) the amount of existing soft landscaping prior to the development occurring. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	150-200	15%	201-450	20%	>450	25%
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<p>PO 19.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements or result in over-development of the site.</p>	<p>DTS/DPF 19.2</p> <p>Ancillary buildings and structures do not result in:</p> <ul style="list-style-type: none"> (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space (b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas. 										
<p>PO 19.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>	<p>DTS/DPF 19.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> (a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or (b) located at least 12m from the nearest habitable room located on an adjoining allotment. 										
Residential Development - Low Rise											
External appearance											

<p>PO 20.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 20.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> (a) are situated so that no part of the garage or carport will be in front of any part of the building line of the dwelling (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening width not exceeding 7m (d) have a garage door / opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street. 				
<p>PO 20.2</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.</p>	<p>DTS/DPF 20.2</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> (a) a minimum of 30% of the building wall is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building wall (c) a balcony projects from the building wall (d) a verandah projects at least 1m from the building wall (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm (g) a minimum of two different materials or finishes are incorporated on the walls of the front building elevation, with a maximum of 80% of the building elevation in a single material or finish. 				
<p>PO 20.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 20.3</p> <p>None are applicable</p>				
<p>Private Open Space</p>					
<p>PO 21.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 21.1</p> <p>Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.</p>				
<p>PO 21.2</p> <p>Private open space is positioned to provide convenient access from internal living areas.</p>	<p>DTS/DPF 21.2</p> <p>Private open space is directly accessible from a habitable room.</p>				
<p>Landscaping</p>					
<p>PO 22.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) contribute shade and shelter (c) provide for stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes. 	<p>DTS/DPF 22.1</p> <p>Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> (a) a total area as determined by the following table: <table border="1"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th style="background-color: #0056b3; color: white;">Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td style="background-color: #0056b3; color: white;"> </td> <td style="background-color: #0056b3; color: white;"> </td> </tr> </tbody> </table>	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site		
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<150	10%								
150-200	15%								
>200-450	20%								
>450	25%								
Car parking, access and manoeuvrability									
<p>PO 23.1</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <p>(a) single width car parking spaces:</p> <ul style="list-style-type: none"> (i) a minimum length of 5.4m per space (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m <p>(b) double width car parking spaces (side by side):</p> <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space. 								
<p>PO 23.2</p> <p>Uncovered car parking space are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.2</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m. 								
<p>PO 23.3</p> <p>Driveways and access points are located and designed to facilitate safe access and egress while maximising land available for street tree planting, domestic waste collection, landscaped street frontages and on-street parking.</p>	<p>DTS/DPF 23.3</p> <p>Driveways and access points satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) sites with a frontage to a public road of 10m or less, have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site (b) sites with a frontage to a public road greater than 10m: <ul style="list-style-type: none"> (i) have a maximum width of 5m measured at the property boundary and are the only access point provided on the site; (ii) have a width between 3.0 metres and 3.2 metres measured at the property boundary and no more than two access points are provided on site, separated by no less than 1m. 								
<p>PO 23.4</p> <p>Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 23.4</p> <p>Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: <ul style="list-style-type: none"> (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree 								

	<p>unless consent is provided from the tree owner for a lesser distance</p> <ul style="list-style-type: none"> (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
<p>PO 23.5</p> <p>Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 23.5</p> <p>Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not steeper than 1-in-4 on average (b) they are aligned relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the road boundary. (c) if located so as to provide access from an alley, lane or right of way - the alley, lane or right of way is at least 6.2m wide along the boundary of the allotment / site
<p>PO 23.6</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 23.6</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>Waste storage</p>	
<p>PO 24.1</p> <p>Provision is made for the convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 24.1</p> <p>Where dwellings abut both side boundaries a waste bin storage area is provided behind the building line of each dwelling that:</p> <ul style="list-style-type: none"> (a) has a minimum area of 2m² with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space); and (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
<p>Design of Transportable Buildings</p>	
<p>PO 25.1</p> <p>The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.</p>	<p>DTS/DPF 25.1</p> <p>Buildings satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) are not transportable (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.
<p>Residential Development - Medium and High Rise (including serviced apartments)</p>	
<p>Outlook and Visual Privacy</p>	
<p>PO 26.1</p> <p>Ground level dwellings have a satisfactory short range visual outlook to public, communal or private open space.</p>	<p>DTS/DPF 26.1</p> <p>Buildings:</p> <ul style="list-style-type: none"> (a) provide a habitable room at ground or first level with a window facing toward the street (b) limit the height / extent of solid walls or fences facing the street to 1.2m high above the footpath level or, where higher, to 50% of

	the site frontage.
PO 26.2 The visual privacy of ground level dwellings within multi-level buildings is protected.	DTS/DPF 26.2 The finished floor level of ground level dwellings in multi-storey developments is raised by up to 1.2m.
Private Open Space	
PO 27.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 27.1 Private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
Residential amenity in multi-level buildings	
PO 28.1 Residential accommodation within multi-level buildings have habitable rooms, windows and balconies designed and positioned to be separated from those of other dwellings and accommodation to provide visual and acoustic privacy and allow for natural ventilation and the infiltration of daylight into interior and outdoor spaces.	DTS/DPF 28.1 Habitable rooms and balconies of independent dwellings and accommodation are separated by at least 6m from one another where there is a direct line of sight between them and 3m or more from a side or rear property boundary.
PO 28.2 Balconies are designed, positioned and integrated into the overall architectural form and detail of the development to: (a) respond to daylight, wind, and acoustic conditions to maximise comfort and provide visual privacy (b) allow views and casual surveillance of the street while providing for safety and visual privacy of nearby living spaces and private outdoor areas.	DTS/DPF 28.2 Balconies utilise one or a combination of the following design elements: (a) sun screens (b) pergolas (c) louvres (d) green facades (e) openable walls.
PO 28.3 Balconies are of sufficient size and depth to accommodate outdoor seating and promote indoor / outdoor living.	DTS/DPF 28.3 Balconies open directly from a habitable room and incorporate a minimum dimension of 2m.
PO 28.4 Dwellings are provided with sufficient space for storage to meet likely occupant needs.	DTS/DPF 28.4 Dwellings (not including student accommodation or serviced apartments) are provided with storage at the following rates with at least 50% or more of the storage volume to be provided within the dwelling: (a) studio: not less than 6m ³ (b) 1 bedroom dwelling / apartment: not less than 8m ³ (c) 2 bedroom dwelling / apartment: not less than 10m ³ (d) 3+ bedroom dwelling / apartment: not less than 12m ³ .
PO 28.5 Dwellings that use light wells for access to daylight, outlook and ventilation for habitable rooms, are designed to ensure a reasonable living amenity is provided.	DTS/DPF 28.5 Light wells: (a) are not used as the primary source of outlook for living rooms (b) up to 18m in height have a minimum horizontal dimension of 3m, or 6m if overlooked by bedrooms (c) above 18m in height have a minimum horizontal dimension of 6m, or 9m if overlooked by bedrooms.
PO 28.6 Attached or abutting dwellings are designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.	DTS/DPF 28.6 None are applicable.
PO 28.7 Dwellings are designed so that internal structural columns correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.	DTS/DPF 28.7 None are applicable.

Dwelling Configuration											
<p>PO 29.1</p> <p>Buildings containing in excess of 10 dwellings provide a variety of dwelling sizes and a range in the number of bedrooms per dwelling to contribute to housing diversity.</p>	<p>DTS/DPF 29.1</p> <p>Buildings containing in excess of 10 dwellings provide at least one of each of the following:</p> <ul style="list-style-type: none"> (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least 50m² (c) 2 bedroom dwelling / apartment with a floor area of at least 65m² (d) 3+ bedroom dwelling / apartment with a floor area of at least 80m², and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom. 										
<p>PO 29.2</p> <p>Dwellings located on the ground floor of multi-level buildings with 3 or more bedrooms have the windows of their habitable rooms overlooking internal courtyard space or other public space, where possible.</p>	<p>DTS/DPF 29.2</p> <p>None are applicable.</p>										
Common Areas											
<p>PO 30.1</p> <p>The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.</p>	<p>DTS/DPF 30.1</p> <p>Common corridor or circulation areas:</p> <ul style="list-style-type: none"> (a) have a minimum ceiling height of 2.7m (b) provide access to no more than 8 dwellings (c) incorporate a wider section at apartment entries where the corridors exceed 12m in length from a core. 										
Group Dwellings, Residential Flat Buildings and Battle axe Development											
Amenity											
<p>PO 31.1</p> <p>Dwellings are of a suitable size to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 31.1</p> <p>Dwellings have a minimum internal floor area in accordance with the following table:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Number of bedrooms</th> <th style="text-align: left;">Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>65m²</td> </tr> <tr> <td>3+ bedrooms</td> <td>80m² and any dwelling over 3 bedrooms provides an additional 15m² for every additional bedroom</td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	65m ²	3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom
Number of bedrooms	Minimum internal floor area										
Studio	35m ²										
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2 bedroom	65m ²										
3+ bedrooms	80m ² and any dwelling over 3 bedrooms provides an additional 15m ² for every additional bedroom										
<p>PO 31.2</p> <p>The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.</p>	<p>DTS/DPF 31.2</p> <p>None are applicable.</p>										
<p>PO 31.3</p> <p>Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.</p>	<p>DTS/DPF 31.3</p> <p>None are applicable.</p>										
<p>PO 31.4</p> <p>Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.</p>	<p>DTS/DPF 31.4</p> <p>Dwelling sites/allotments are not in the form of a battle-axe arrangement.</p>										

Communal Open Space	
PO 32.1 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 32.1 None are applicable.
PO 32.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 32.2 Communal open space incorporates a minimum dimension of 5 metres.
PO 32.3 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 32.3 None are applicable.
PO 32.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 32.4 None are applicable.
PO 32.5 Communal open space is designed and sited to: (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 32.5 None are applicable.
Car parking, access and manoeuvrability	
PO 33.1 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 33.1 Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements: (a) minimum 0.33 on-street car parks per proposed dwelling (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
PO 33.2 The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.	DTS/DPF 33.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 33.3 Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	DTS/DPF 33.3 Driveways that service more than 1 dwelling or a dwelling on a battle-axe site: (a) have a minimum width of 3m (b) for driveways servicing more than 3 dwellings: (i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street (ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.
PO 33.4	DTS/DPF 33.4

<p>Residential driveways that service more than one dwelling or a dwelling on a battle-axe site are designed to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.</p>	<p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.</p>
<p>PO 33.5 Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 33.5 Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
<p>Soft landscaping</p>	
<p>PO 34.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.</p>	<p>DTS/DPF 34.1 Other than where located directly in front of a garage or building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.</p>
<p>PO 34.2 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.</p>	<p>DTS/DPF 34.2 Battle-axe or common driveways satisfy (a) and (b): (a) are constructed of a minimum of 50% permeable or porous material (b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).</p>
<p>Site Facilities / Waste Storage</p>	
<p>PO 35.1 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.</p>	<p>DTS/DPF 35.1 None are applicable.</p>
<p>PO 35.2 Provision is made for suitable external clothes drying facilities.</p>	<p>DTS/DPF 35.2 None are applicable.</p>
<p>PO 35.3 Provision is made for suitable household waste and recyclable material storage facilities which are: (a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.</p>	<p>DTS/DPF 35.3 None are applicable.</p>
<p>PO 35.4 Waste and recyclable material storage areas are located away from dwellings.</p>	<p>DTS/DPF 35.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.</p>
<p>PO 35.5 Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.</p>	<p>DTS/DPF 35.5 None are applicable.</p>
<p>PO 35.6 Services including gas and water meters are conveniently located and screened from public view.</p>	<p>DTS/DPF 35.6 None are applicable.</p>
<p>Water sensitive urban design</p>	
<p>PO 36.1 Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of</p>	<p>DTS/DPF 36.1 None are applicable.</p>

sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	
PO 36.2 Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 36.2 None are applicable.
Supported Accommodation and retirement facilities	
Siting, Configuration and Design	
PO 37.1 Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	DTS/DPF 37.1 None are applicable.
PO 37.2 Universal design features are incorporated to provide options for people living with disabilities or limited mobility and / or to facilitate ageing in place.	DTS/DPF 37.2 None are applicable.
Movement and Access	
PO 38.1 Development is designed to support safe and convenient access and movement for residents by providing: (a) ground-level access or lifted access to all units (b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places (c) car parks with gradients no steeper than 1-in-40, and of sufficient area to provide for wheelchair manoeuvrability (d) kerb ramps at pedestrian crossing points.	DTS/DPF 38.1 None are applicable.
Communal Open Space	
PO 39.1 Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 39.1 None are applicable.
PO 39.2 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 39.2 None are applicable.
PO 39.3 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 39.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 39.4 Communal open space is designed and sited to: (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 39.4 None are applicable.
PO 39.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 39.5 None are applicable.

<p>PO 39.6</p> <p>Communal open space is designed and sited to:</p> <p>(a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings</p> <p>(b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.</p>	<p>DTS/DPF 39.6</p> <p>None are applicable.</p>
<p>Site Facilities / Waste Storage</p>	
<p>PO 40.1</p> <p>Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric-powered vehicles.</p>	<p>DTS/DPF 40.1</p> <p>None are applicable.</p>
<p>PO 40.2</p> <p>Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.</p>	<p>DTS/DPF 40.2</p> <p>None are applicable.</p>
<p>PO 40.3</p> <p>Provision is made for suitable external clothes drying facilities.</p>	<p>DTS/DPF 40.3</p> <p>None are applicable.</p>
<p>PO 40.4</p> <p>Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.</p>	<p>DTS/DPF 40.4</p> <p>None are applicable.</p>
<p>PO 40.5</p> <p>Waste and recyclable material storage areas are located away from dwellings.</p>	<p>DTS/DPF 40.5</p> <p>Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.</p>
<p>PO 40.6</p> <p>Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.</p>	<p>DTS/DPF 40.6</p> <p>None are applicable.</p>
<p>PO 40.7</p> <p>Services, including gas and water meters, are conveniently located and screened from public view.</p>	<p>DTS/DPF 40.7</p> <p>None are applicable.</p>
<p>Student Accommodation</p>	
<p>PO 41.1</p> <p>Student accommodation is designed to provide safe, secure, attractive, convenient and comfortable living conditions for residents, including an internal layout and facilities that are designed to provide sufficient space and amenity for the requirements of student life and promote social interaction.</p>	<p>DTS/DPF 41.1</p> <p>Student accommodation provides:</p> <p>(a) a range of living options to meet a variety of accommodation needs, such as one-bedroom, two-bedroom and disability access units</p> <p>(b) common or shared facilities to enable a more efficient use of space, including:</p> <ul style="list-style-type: none"> (i) shared cooking, laundry and external drying facilities (ii) internal and external communal and private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space (iii) common storage facilities at the rate of 8m³ for every 2 dwellings or students (iv) common on-site parking in accordance with Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas (v) bicycle parking at the rate of one space for every 2 students.

<p>PO 41.2</p> <p>Student accommodation is designed to provide easy adaptation of the building to accommodate an alternative use of the building in the event it is no longer required for student housing.</p>	<p>DTS/DPF 41.2</p> <p>None are applicable.</p>
<p>All non-residential development</p>	
<p>Water Sensitive Design</p>	
<p>PO 42.1</p> <p>Development likely to result in risk of export of sediment, suspended solids, organic matter, nutrients, oil and grease include stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 42.1</p> <p>None are applicable.</p>
<p>PO 42.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 42.2</p> <p>None are applicable.</p>
<p>PO 42.3</p> <p>Development includes stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that development does not increase peak flows in downstream systems.</p>	<p>DTS/DPF 42.3</p> <p>None are applicable.</p>
<p>Wash-down and Waste Loading and Unloading</p>	
<p>PO 43.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, plant or equipment are:</p> <ul style="list-style-type: none"> (a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) are designed to drain wastewater to either: <ul style="list-style-type: none"> (i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or (ii) a holding tank and its subsequent removal off-site on a regular basis. 	<p>DTS/DPF 43.1</p> <p>None are applicable.</p>
<p>Laneway Development</p>	
<p>Infrastructure and Access</p>	
<p>PO 44.1</p> <p>Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where:</p> <ul style="list-style-type: none"> (a) existing utility infrastructure and services are capable of accommodating the development (b) the primary street can support access by emergency and regular service vehicles (such as waste collection) (c) it does not require the provision or upgrading of infrastructure on public land (such as footpaths and stormwater management systems) (d) safety of pedestrians or vehicle movement is maintained (e) any necessary grade transition is accommodated within the site of the development to support an appropriate development 	<p>DTS/DPF 44.1</p> <p>Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.</p>

intensity and orderly development of land fronting minor thoroughfares.	
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Table 1 - Private Open Space

Dwelling Type	Dwelling / Site Configuration	Minimum Rate
Dwelling (at ground level, other than a residential flat building that includes above ground dwellings)		Total private open space area: (a) Site area <301m ² : 24m ² located behind the building line. (b) Site area ≥ 301m ² : 60m ² located behind the building line. Minimum directly accessible from a living room: 16m ² / with a minimum dimension 3m.
Cabin or caravan (permanently fixed to the ground) in a residential park or caravan and tourist park		Total area: 16m ² , which may be uses as second car parking space, provided on each site intended for residential occupation.
Dwelling in a residential flat building or mixed use building which incorporate above ground level dwellings	Dwellings at ground level:	15m ² / minimum dimension 3m
	Dwellings above ground level:	
	Studio (no separate bedroom)	4m ² / minimum dimension 1.8m
	One bedroom dwelling	8m ² / minimum dimension 2.1m
	Two bedroom dwelling	11m ² / minimum dimension 2.4m
	Three + bedroom dwelling	15 m ² / minimum dimension 2.6m

Forestry

Assessment Provisions (AP)

Desired Outcome	
DO 1	Commercial forestry is designed and sited to maximise economic benefits whilst managing potential negative impacts on the environment, transport networks, surrounding land uses and landscapes.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Commercial forestry plantations are established where there is no detrimental effect on the physical environment or scenic quality of the	DTS/DPF 1.1 None are applicable.

rural landscape.	
PO 1.2 Commercial forestry plantations are established on slopes that are stable to minimise the risk of soil erosion.	DTS/DPF 1.2 Commercial forestry plantations are not located on land with a slope exceeding 20% (1-in-5).
PO 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are appropriately set back from any sensitive receiver to minimise fire risk and noise disturbance.	DTS/DPF 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from any sensitive receiver.
PO 1.4 Commercial forestry plantations are separated from reserves gazetted under the <i>National Parks and Wildlife Act 1972</i> and/or <i>Wilderness Protection Act 1992</i> to minimise fire risk and potential for weed infestation.	DTS/DPF 1.4 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from a reserve gazetted under the <i>National Parks and Wildlife Act 1972</i> and/or <i>Wilderness Protection Act 1992</i> .
Water Protection	
PO 2.1 Commercial forestry plantations incorporate artificial drainage lines (i.e. culverts, runoffs and constructed drains) integrated with natural drainage lines to minimise concentrated water flows onto or from plantation areas.	DTS/DPF 2.1 None are applicable.
PO 2.2 Appropriate siting, layout and design measures are adopted to minimise the impact of commercial forestry plantations on surface water resources.	DTS/DPF 2.2 Commercial forestry plantations: (a) do not involve cultivation (excluding spot cultivation) in drainage lines (b) are set back 20m or more from the banks of any major watercourse (a third order or higher watercourse), lake, reservoir, wetland or sinkhole (with direct connection to an aquifer) (c) are set back 10m or more from the banks of any first or second order watercourse or sinkhole (with no direct connection to an aquifer).
Fire Management	
PO 3.1 Commercial forestry plantations incorporate appropriate firebreaks and fire management design elements.	DTS/DPF 3.1 Commercial forestry plantations provide: (a) 7m or more wide external boundary firebreaks for plantations of 40ha or less (b) 10m or more wide external boundary firebreaks for plantations of between 40ha and 100ha (c) 20m or more wide external boundary firebreaks, or 10m with an additional 10m or more of fuel-reduced plantation, for plantations of 100ha or greater.
PO 3.2 Commercial forestry plantations incorporate appropriate fire management access tracks.	DTS/DPF 3.2 Commercial forestry plantation fire management access tracks: (a) are incorporated within all firebreaks (b) are 7m or more wide with a vertical clearance of 4m or more (c) are aligned to provide straight through access at junctions, or if they are a no through access track are appropriately signposted and provide suitable turnaround areas for fire-fighting vehicles (d) partition the plantation into units of 40ha or less in area.
Power-line Clearances	
PO 4.1 Commercial forestry plantations achieve and maintain appropriate clearances from aboveground powerlines.	DTS/DPF 4.1 Commercial forestry plantations incorporating trees with an expected mature height of greater than 6m meet the clearance requirements listed in the following table:

	Voltage of transmission line	Tower or Pole	Minimum horizontal clearance distance between plantings and transmission lines
	500 kV	Tower	38m
	275 kV	Tower	25m
	132 kV	Tower	30m
	132 kV	Pole	20m
	66 kV	Pole	20m
	Less than 66 kV	Pole	20m

Housing Renewal

Assessment Provisions (AP)

Desired Outcome	
DO 1	Renewed residential environments replace older social housing and provide new social housing infrastructure and other housing options and tenures to enhance the residential amenity of the local area.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Residential development provides a range of housing choices.	DTS/DPF 1.1 Development comprises one or more of the following: (a) detached dwellings (b) semi-detached dwellings (c) row dwellings (d) group dwellings (e) residential flat buildings.
PO 1.2 Medium-density housing options or higher are located in close proximity to public transit, open space and/or activity centres.	DTS/DPF 1.2 None are applicable.
Building Height	
PO 2.1 Buildings generally do not exceed 3 building levels unless in locations close to public transport, centres and/or open space.	DTS/DPF 2.1 Building height (excluding garages, carports and outbuildings) does not exceed 3 building levels and 12m and wall height does not exceed 9m (not including a gable end).

<p>PO 2.2</p> <p>Medium or high rise residential flat buildings located within or at the interface with zones which restrict heights to a maximum of 2 building levels transition down in scale and height towards the boundary of that zone, other than where it is a street boundary.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
<p>Primary Street Setback</p>	
<p>PO 3.1</p> <p>Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.</p>	<p>DTS/DPF 3.1</p> <p>Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.</p>
<p>Secondary Street Setback</p>	
<p>PO 4.1</p> <p>Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.</p>	<p>DTS/DPF 4.1</p> <p>Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.</p>
<p>Boundary Walls</p>	
<p>PO 5.1</p> <p>Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.</p>	<p>DTS/DPF 5.1</p> <p>Except where the dwelling is located on a central site within a row dwelling or terrace arrangement, dwellings with side boundary walls are sited on only one side boundary and satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height (b) do not: <ul style="list-style-type: none"> (i) exceed 3.2m in height from the lower of the natural or finished ground level (ii) exceed 11.5m in length (iii) when combined with other walls on the boundary of the subject development site, a maximum 45% of the length of the boundary (iv) encroach within 3 metres of any other existing or proposed boundary walls on the subject land.
<p>PO 5.2</p> <p>Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.</p>	<p>DTS/DPF 5.2</p> <p>Dwellings in a semi-detached or row arrangement are set back 900mm or more from side boundaries shared with allotments outside the development site, except for a carport or garage.</p>
<p>Side Boundary Setback</p>	
<p>PO 6.1</p> <p>Buildings are set back from side boundaries to provide:</p> <ul style="list-style-type: none"> (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours. 	<p>DTS/DPF 6.1</p> <p>Other than walls located on a side boundary, buildings are set back from side boundaries:</p> <ul style="list-style-type: none"> (a) at least 900mm where the wall height is up to 3m (b) other than for a wall facing a southern side boundary, at least 900mm plus 1/3 of the wall height above 3m (c) at least 1.9m plus 1/3 of the wall height above 3m for walls facing a southern side boundary.
<p>Rear Boundary Setback</p>	
<p>PO 7.1</p> <p>Buildings are set back from rear boundaries to provide:</p> <ul style="list-style-type: none"> (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours (c) private open space 	<p>DTS/DPF 7.1</p> <p>Dwellings are set back from the rear boundary:</p> <ul style="list-style-type: none"> (a) 3m or more for the first building level (b) 5m or more for any subsequent building level.

(d) space for landscaping and vegetation.				
Buildings elevation design				
<p>PO 8.1</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.</p>	<p>DTS/DPF 8.1</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> (a) a minimum of 30% of the building elevation is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building elevation (c) a balcony projects from the building elevation (d) a verandah projects at least 1m from the building elevation (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm. (g) a minimum of two different materials or finishes are incorporated on the walls of the building elevation, with a maximum of 80% of the building elevation in a single material or finish. 			
<p>PO 8.2</p> <p>Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 8.2</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least 2m² facing the primary street 			
<p>PO 8.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>			
<p>PO 8.4</p> <p>Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.</p>	<p>DTS/DPF 8.4</p> <p>None are applicable.</p>			
<p>PO 8.5</p> <p>Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> (a) oriented towards the street (b) visible and easily identifiable from the street (c) designed to include a common mail box structure. 	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>			
Outlook and amenity				
<p>PO 9.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 9.1</p> <p>A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.</p>			
<p>PO 9.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 9.2</p> <p>None are applicable.</p>			
Private Open Space				
<p>PO 10.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 10.1</p> <p>Private open space is provided in accordance with the following table:</p> <table border="1" style="width: 100%; height: 20px; background-color: black; margin-top: 5px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			

	Dwelling Type	Dwelling / Site Configuration	Minimum Rate
	Dwelling (at ground level)		Total area: 24m ² located behind the building line Minimum adjacent to a living room: 16m ² with a minimum dimension 3m
	Dwelling (above ground level)	Studio	4m ² / minimum dimension 1.8m
One bedroom dwelling		8m ² / minimum dimension 2.1m	
Two bedroom dwelling		11m ² / minimum dimension 2.4m	
Three + bedroom dwelling		15 m ² / minimum dimension 2.6m	
<p>PO 10.2</p> <p>Private open space positioned to provide convenient access from internal living areas.</p>	<p>DTS/DPF 10.2</p> <p>At least 50% of the required area of private open space is accessible from a habitable room.</p>		
<p>PO 10.3</p> <p>Private open space is positioned and designed to:</p> <p>(a) provide useable outdoor space that suits the needs of occupants;</p> <p>(b) take advantage of desirable orientation and vistas; and</p> <p>(c) adequately define public and private space.</p>	<p>DTS/DPF 10.3</p> <p>None are applicable.</p>		
Visual privacy			
<p>PO 11.1</p> <p>Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.</p>	<p>DTS/DPF 11.1</p> <p>Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following:</p> <p>(a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm</p> <p>(b) have sill heights greater than or equal to 1.5m above finished floor level</p> <p>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5m above the finished floor.</p>		
<p>PO 11.2</p> <p>Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.</p>	<p>DTS/DPF 11.2</p> <p>One of the following is satisfied:</p> <p>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace</p> <p>or</p> <p>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:</p> <p>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</p> <p>or</p>		

	(ii) 1.7m above finished floor level in all other cases										
Landscaping											
<p>PO 12.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes. 	<p>DTS/DPF 12.1</p> <p>Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> (a) a total area as determined by the following table: <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m²)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td><150</td> <td>10%</td> </tr> <tr> <td><200</td> <td>15%</td> </tr> <tr> <td>200-450</td> <td>20%</td> </tr> <tr> <td>>450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> (b) at least 30% of land between the road boundary and the building line. 	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site	<150	10%	<200	15%	200-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m ²)	Minimum percentage of site										
<150	10%										
<200	15%										
200-450	20%										
>450	25%										
Water Sensitive Design											
<p>PO 13.1</p> <p>Residential development is designed to capture and use stormwater to:</p> <ul style="list-style-type: none"> (a) maximise efficient use of water resources (b) manage peak stormwater runoff flows and volume to ensure the carrying capacities of downstream systems are not overloaded (c) manage runoff quality to maintain, as close as practical, pre-development conditions. 	<p>DTS/DPF 13.1</p> <p>None are applicable.</p>										
Car Parking											
<p>PO 14.1</p> <p>On-site car parking is provided to meet the anticipated demand of residents, with less on-site parking in areas in close proximity to public transport.</p>	<p>DTS/DPF 14.1</p> <p>On-site car parking is provided at the following rates per dwelling:</p> <ul style="list-style-type: none"> (a) 2 or fewer bedrooms - 1 car parking space (b) 3 or more bedrooms - 2 car parking spaces. 										
<p>PO 14.2</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.2</p> <p>Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area):</p> <ul style="list-style-type: none"> (a) single parking spaces: <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m (b) double parking spaces (side by side): <ul style="list-style-type: none"> (i) a minimum length of 5.4m (ii) a minimum width of 5.5m (iii) minimum garage door width of 2.4m per space. 										
<p>PO 14.3</p> <p>Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.3</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m. 										

PO 14.4 Residential flat buildings and group dwelling developments provide sufficient on-site visitor car parking to cater for anticipated demand.	DTS/DPF 14.4 Visitor car parking for group and residential flat buildings incorporating 4 or more dwellings is provided on-site at a minimum ratio of 0.25 car parking spaces per dwelling.
PO 14.5 Residential flat buildings provide dedicated areas for bicycle parking.	DTS/DPF 14.5 Residential flat buildings provide one bicycle parking space per dwelling.
Overshadowing	
PO 15.1 Development minimises overshadowing of the private open spaces of adjoining land by ensuring that ground level open space associated with residential buildings receive direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June.	DTS/DPF 15.1 None are applicable.
Waste	
PO 16.1 Provision is made for the convenient storage of waste bins in a location screened from public view.	DTS/DPF 16.1 A waste bin storage area is provided behind the primary building line that: (a) has a minimum area of 2m ² with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space).; and (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
PO 16.2 Residential flat buildings provide a dedicated area for the on-site storage of waste which is: (a) easily and safely accessible for residents and for collection vehicles (b) screened from adjoining land and public roads (c) of sufficient dimensions to be able to accommodate the waste storage needs of the development considering the intensity and nature of the development and the frequency of collection.	DTS/DPF 16.2 None are applicable.
Vehicle Access	
PO 17.1 Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages and on-street parking.	DTS/DPF 17.1 None are applicable.
PO 17.2 Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.	DTS/DPF 17.2 Vehicle access to designated car parking spaces satisfy (a) or (b): (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.

<p>PO 17.3</p> <p>Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 17.3</p> <p>Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not more than 1-in-4 on average (b) they are aligned relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the road boundary. (c) if located so as to provide access from an alley, lane or right of way - the alley, lane or right of way is at least 6.2m wide along the boundary of the allotment / site.
<p>PO 17.4</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street parking.</p>	<p>DTS/DPF 17.4</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> 1. minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) 2. Minimum car park length of 5.4m where a vehicle can enter or exit a space directly 3. minimum car park length of 6m for an intermediate space located between two other parking spaces.
<p>PO 17.5</p> <p>Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.</p>	<p>DTS/DPF 17.5</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
<p>PO 17.6</p> <p>Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.</p>	<p>DTS/DPF 17.6</p> <p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre</p>
<p>PO 17.7</p> <p>Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 17.7</p> <p>Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
<p>Storage</p>	
<p>PO 18.1</p> <p>Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.</p>	<p>DTS/DPF 18.1</p> <p>Dwellings are provided with storage at the following rates and 50% or more of the storage volume is provided within the dwelling:</p> <ul style="list-style-type: none"> (a) studio: not less than 6m³ (b) 1 bedroom dwelling / apartment: not less than 8m³ (c) 2 bedroom dwelling / apartment: not less than 10m³ (d) 3+ bedroom dwelling / apartment: not less than 12m³.
<p>Earthworks</p>	
<p>PO 19.1</p> <p>Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural</p>	<p>DTS/DPF 19.1</p> <p>The development does not involve:</p>

<p>topography.</p>	<ul style="list-style-type: none"> (a) excavation exceeding a vertical height of 1m or (b) filling exceeding a vertical height of 1m or (c) a total combined excavation and filling vertical height exceeding 2m.
<p>Service connections and infrastructure</p>	
<p>PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.</p>	<p>DTS/DPF 20.1 The site and building:</p> <ul style="list-style-type: none"> (a) have the ability to be connected to a permanent potable water supply (b) have the ability to be connected to a sewerage system, or a wastewater system approved under the <i>South Australian Public Health Act 2011</i> (c) have the ability to be connected to electricity supply (d) have the ability to be connected to an adequate water supply (and pressure) for fire-fighting purposes (e) would not be contrary to the Regulations prescribed for the purposes of Section 86 of the <i>Electricity Act 1996</i>.
<p>Site contamination</p>	
<p>PO 21.1 Land that is suitable for sensitive land uses to provide a safe environment.</p>	<p>DTS/DPF 21.1 Development satisfies (a), (b), (c) or (d):</p> <ul style="list-style-type: none"> (a) does not involve a change in the use of land (b) involves a change in the use of land that does not constitute a change to a <u>more sensitive use</u> (c) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> does not exist (as demonstrated in a <u>site contamination declaration form</u>) (d) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: <ul style="list-style-type: none"> (i) <u>a site contamination audit report</u> has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that <ul style="list-style-type: none"> A. <u>site contamination</u> does not exist (or no longer exists) at the land or B. the land is suitable for the proposed use or range of uses (without the need for any further <u>remediation</u>) or C. where <u>remediation</u> is, or remains, necessary for the proposed use (or range of uses), <u>remediation work</u> has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development) and (ii) no other <u>class 1 activity</u> or <u>class 2 activity</u> has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a <u>site contamination declaration form</u>).

Infrastructure and Renewable Energy Facilities

Desired Outcome

DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General	
PO 1.1 Development is located and designed to minimise hazard or nuisance to adjacent development and land uses.	DTS/DPF 1.1 None are applicable.
Visual Amenity	
PO 2.1 The visual impact of above-ground infrastructure networks and services (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development is minimised from townships, scenic routes and public roads by: (a) utilising features of the natural landscape to obscure views where practicable (b) siting development below ridgelines where practicable (c) avoiding visually sensitive and significant landscapes (d) using materials and finishes with low-reflectivity and colours that complement the surroundings (e) using existing vegetation to screen buildings (f) incorporating landscaping or landscaped mounding around the perimeter of a site and between adjacent allotments accommodating or zoned to primarily accommodate sensitive receivers.	DTS/DPF 2.1 None are applicable.
PO 2.2 Pumping stations, battery storage facilities, maintenance sheds and other ancillary structures incorporate vegetation buffers to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.2 None are applicable.
PO 2.3 Surfaces exposed by earthworks associated with the installation of storage facilities, pipework, penstock, substations and other ancillary plant are reinstated and revegetated to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.3 None are applicable.
Rehabilitation	
PO 3.1 Progressive rehabilitation (incorporating revegetation) of disturbed areas, ahead of or upon decommissioning of areas used for renewable energy facilities and transmission corridors.	DTS/DPF 3.1 None are applicable.
Hazard Management	
PO 4.1	DTS/DPF 4.1

<p>Infrastructure and renewable energy facilities and ancillary development located and operated to not adversely impact maritime or air transport safety, including the operation of ports, airfields and landing strips.</p>	<p>None are applicable.</p>
<p>PO 4.2 Facilities for energy generation, power storage and transmission are separated as far as practicable from dwellings, tourist accommodation and frequently visited public places (such as viewing platforms / lookouts) to reduce risks to public safety from fire or equipment malfunction.</p>	<p>DTS/DPF 4.2 None are applicable.</p>
<p>PO 4.3 Bushfire hazard risk is minimised for renewable energy facilities by providing appropriate access tracks, safety equipment and water tanks and establishing cleared areas around substations, battery storage and operations compounds.</p>	<p>DTS/DPF 4.3 None are applicable.</p>
<p>Electricity Infrastructure and Battery Storage Facilities</p>	
<p>PO 5.1 Electricity infrastructure is located to minimise visual impacts through techniques including: (a) siting utilities and services: (i) on areas already cleared of native vegetation (ii) where there is minimal interference or disturbance to existing native vegetation or biodiversity (b) grouping utility buildings and structures with non-residential development, where practicable.</p>	<p>DTS/DPF 5.1 None are applicable.</p>
<p>PO 5.2 Electricity supply (excluding transmission lines) serving new development in urban areas and townships installed underground, excluding lines having a capacity exceeding or equal to 33kV.</p>	<p>DTS/DPF 5.2 None are applicable.</p>
<p>PO 5.3 Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.</p>	<p>DTS/DPF 5.3 None are applicable.</p>
<p>Telecommunication Facilities</p>	
<p>PO 6.1 The proliferation of telecommunications facilities in the form of towers/monopoles in any one locality is managed, where technically feasible, by co-locating a facility with other communications facilities to mitigate impacts from clutter on visual amenity.</p>	<p>DTS/DPF 6.1 None are applicable.</p>
<p>PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.</p>	<p>DTS/DPF 6.2 None are applicable.</p>
<p>PO 6.3 Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods: (a) where technically feasible, incorporating the facility within an existing structure that may serve another purpose or all of the following: (b) using existing buildings and landscape features to obscure or</p>	<p>DTS/DPF 6.3 None are applicable.</p>

<p>interrupt views of a facility from nearby public roads, residential areas and places of high public amenity to the extent practical without unduly hindering the effective provision of telecommunications services</p> <p>(c) using materials and finishes that complement the environment</p> <p>(d) screening using landscaping and vegetation, particularly for equipment shelters and huts.</p>	
Renewable Energy Facilities	
<p>PO 7.1</p> <p>Renewable energy facilities are located as close as practicable to existing transmission infrastructure to facilitate connections and minimise environmental impacts as a result of extending transmission infrastructure.</p>	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
Renewable Energy Facilities (Wind Farm)	
<p>PO 8.1</p> <p>Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.</p>	<p>DTS/DPF 8.1</p> <p>Wind turbine generators are:</p> <p>(a) set back at least 2000m from the base of a turbine to any of the following zones:</p> <ul style="list-style-type: none"> (i) Rural Settlement Zone (ii) Township Zone (iii) Rural Living Zone (iv) Rural Neighbourhood Zone <p>with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine).</p> <p>(b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation</p>
<p>PO 8.2</p> <p>The visual impact of wind turbine generators on natural landscapes is managed by:</p> <p>(a) designing wind turbine generators to be uniform in colour, size and shape</p> <p>(b) coordinating blade rotation and direction</p> <p>(c) mounting wind turbine generators on tubular towers as opposed to lattice towers.</p>	<p>DTS/DPF 8.2</p> <p>None are applicable.</p>
<p>PO 8.3</p> <p>Wind turbine generators and ancillary development minimise potential for bird and bat strike.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>
<p>PO 8.4</p> <p>Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.</p>	<p>DTS/DPF 8.4</p> <p>No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.</p>
<p>PO 8.5</p> <p>Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.</p>	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>
Renewable Energy Facilities (Solar Power)	
<p>PO 9.1</p> <p>Ground mounted solar power facilities generating 5MW or more are not located on land requiring the clearance of areas of intact native vegetation or on land of high environmental, scenic or cultural value.</p>	<p>DTS/DPF 9.1</p> <p>None are applicable.</p>
<p>PO 9.2</p>	<p>DTS/DPF 9.2</p>

<p>Ground mounted solar power facilities allow for movement of wildlife by:</p> <ul style="list-style-type: none"> (a) incorporating wildlife corridors and habitat refuges (b) avoiding the use of extensive security or perimeter fencing or incorporating fencing that enables the passage of small animals without unreasonably compromising the security of the facility. 	<p>None are applicable.</p>																																			
<p>PO 9.3</p> <p>Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.</p>	<p>DTS/DPF 9.3</p> <p>Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria:</p> <table border="1"> <thead> <tr> <th>Generation Capacity</th> <th>Approximate size of array</th> <th>Setback from adjoining land boundary</th> <th>Setback from conservation areas</th> <th>Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones¹</th> </tr> </thead> <tbody> <tr> <td>50MW></td> <td>80ha+</td> <td>30m</td> <td>500m</td> <td>2km</td> </tr> <tr> <td>10MW<50MW</td> <td>16ha-<80ha</td> <td>25m</td> <td>500m</td> <td>1.5km</td> </tr> <tr> <td>5MW<10MW</td> <td>8ha to <16ha</td> <td>20m</td> <td>500m</td> <td>1km</td> </tr> <tr> <td>1MW<5MW</td> <td>1.6ha to <8ha</td> <td>15m</td> <td>500m</td> <td>500m</td> </tr> <tr> <td>100kW<1MW</td> <td>0.5ha<1.6ha</td> <td>10m</td> <td>500m</td> <td>100m</td> </tr> <tr> <td><100kW</td> <td><0.5ha</td> <td>5m</td> <td>500m</td> <td>25m</td> </tr> </tbody> </table> <p>Notes:</p> <p>1. Does not apply when the site of the proposed ground mounted solar power facility is located within one of these zones.</p>	Generation Capacity	Approximate size of array	Setback from adjoining land boundary	Setback from conservation areas	Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones ¹	50MW>	80ha+	30m	500m	2km	10MW<50MW	16ha-<80ha	25m	500m	1.5km	5MW<10MW	8ha to <16ha	20m	500m	1km	1MW<5MW	1.6ha to <8ha	15m	500m	500m	100kW<1MW	0.5ha<1.6ha	10m	500m	100m	<100kW	<0.5ha	5m	500m	25m
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<p>PO 9.4</p> <p>Ground mounted solar power facilities incorporate landscaping within setbacks from adjacent road frontages and boundaries of adjacent allotments accommodating non-host dwellings, where balanced with infrastructure access and bushfire safety considerations.</p>	<p>DTS/DPF 9.4</p> <p>None are applicable.</p>																																			
<p>Hydropower / Pumped Hydropower Facilities</p>																																				
<p>PO 10.1</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.</p>	<p>DTS/DPF 10.1</p> <p>None are applicable.</p>																																			
<p>PO 10.2</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise water loss through increased evaporation or system leakage, with the incorporation of appropriate liners, dam covers, operational measures or detection systems.</p>	<p>DTS/DPF 10.2</p> <p>None are applicable.</p>																																			
<p>PO 10.3</p> <p>Hydropower / pumped hydropower facilities on existing or former mine sites minimise environmental impacts from site contamination, including</p>	<p>DTS/DPF 10.3</p> <p>None are applicable.</p>																																			

from mine operations or water sources subject to such processes, now or in the future.	
Water Supply	
PO 11.1 Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.	DTS/DPF 11.1 Development is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the on-going requirements of the development.
PO 11.2 Dwellings are connected to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the intended use. Where this is not available an appropriate rainwater tank or storage system for domestic use is provided.	DTS/DPF 11.2 A dwelling is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the development. Where this is not available it is serviced by a rainwater tank or tanks capable of holding at least 50,000 litres of water which is: (a) exclusively for domestic use (b) connected to the roof drainage system of the dwelling.
Wastewater Services	
PO 12.1 Development is connected to an approved common wastewater disposal service with the capacity to meet the requirements of the intended use. Where this is not available an appropriate on-site service is provided to meet the ongoing requirements of the intended use in accordance with the following: (a) it is wholly located and contained within the allotment of the development it will service (b) in areas where there is a high risk of contamination of surface, ground, or marine water resources from on-site disposal of liquid wastes, disposal systems are included to minimise the risk of pollution to those water resources (c) septic tank effluent drainage fields and other wastewater disposal areas are located away from watercourses and flood prone, sloping, saline or poorly drained land to minimise environmental harm.	DTS/DPF 12.1 Development is connected, or will be connected, to an approved common wastewater disposal service with the capacity to meet the requirements of the development. Where this is not available it is instead capable of being serviced by an on-site waste water treatment system in accordance with the following: (a) the system is wholly located and contained within the allotment of development it will service; and (b) the system will comply with the requirements of the South Australian Public Health Act 2011.
PO 12.2 Effluent drainage fields and other wastewater disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 12.2 Development is not built on, or encroaches within, an area that is, or will be, required for a sewerage system or waste control system.
Temporary Facilities	
PO 13.1 In rural and remote locations, development that is likely to generate significant waste material during construction, including packaging waste, makes provision for a temporary on-site waste storage enclosure to minimise the incidence of wind-blown litter.	DTS/DPF 13.1 A waste collection and disposal service is used to dispose of the volume of waste at the rate it is generated.
PO 13.2 Temporary facilities to support the establishment of renewable energy facilities (including borrow pits, concrete batching plants, laydown, storage, access roads and worker amenity areas) are sited and operated to minimise environmental impact.	DTS/DPF 13.2 None are applicable.

Intensive Animal Husbandry and Dairies

Assessment Provisions (AP)

Desired Outcome

DO 1	Development of intensive animal husbandry and dairies in locations that are protected from encroachment by sensitive receivers and in a manner that minimises their adverse effects on amenity and the environment.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to not unreasonably impact on the environment or amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to prevent the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
PO 1.3 Intensive animal husbandry and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.3 None are applicable.
PO 1.4 Dairies and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.4 Dairies, associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities are located 500m or more from the nearest sensitive receiver in other ownership.
PO 1.5 Lagoons for the storage or treatment of milking shed effluent is adequately separated from roads to minimise impacts from odour on the general public.	DTS/DPF 1.5 Lagoons for the storage or treatment of milking shed effluent are set back 20m or more from public roads.
Waste	
PO 2.1 Storage of manure, used litter and other wastes (other than waste water lagoons) is sited, designed, constructed and managed to: <ul style="list-style-type: none"> (a) avoid attracting and harbouring vermin (b) avoid polluting water resources (c) be located outside 1% AEP flood event areas. 	DTS/DPF 2.1 None are applicable.
Soil and Water Protection	
PO 3.1 To avoid environmental harm and adverse effects on water resources, intensive animal husbandry operations are appropriately set back from: <ul style="list-style-type: none"> (a) public water supply reservoirs (b) major watercourses (third order or higher stream) (c) any other watercourse, bore or well used for domestic or stock water supplies. 	DTS/DPF 3.1 Intensive animal husbandry operations are set back: <ul style="list-style-type: none"> (a) 800m or more from a public water supply reservoir (b) 200m or more from a major watercourse (third order or higher stream) (c) 100m or more from any other watercourse, bore or well used for domestic or stock water supplies.

<p>PO 3.2</p> <p>Intensive animal husbandry operations and dairies incorporate appropriately designed effluent and run-off facilities that:</p> <ul style="list-style-type: none"> (a) have sufficient capacity to hold effluent and runoff from the operations on site (b) ensure effluent does not infiltrate and pollute groundwater, soil or other water resources. 	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
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Interface between Land Uses

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature									
General Land Use Compatibility										
<p>PO 1.1</p> <p>Sensitive receivers are designed and sited to protect residents and occupants from adverse impacts generated by lawfully existing land uses (or lawfully approved land uses) and land uses desired in the zone.</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>									
<p>PO 1.2</p> <p>Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>									
Hours of Operation										
<p>PO 2.1</p> <p>Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:</p> <ul style="list-style-type: none"> (a) the nature of the development (b) measures to mitigate off-site impacts (c) the extent to which the development is desired in the zone (d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land. 	<p>DTS/DPF 2.1</p> <p>Development operating within the following hours:</p> <table border="1"> <thead> <tr> <th style="background-color: #2c3e50; color: white;">Class of Development</th> <th style="background-color: #2c3e50; color: white;">Hours of operation</th> </tr> </thead> <tbody> <tr> <td>Consulting room</td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday</td> </tr> <tr> <td>Office</td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday</td> </tr> <tr> <td>Shop, other than any one or combination of the following: <ul style="list-style-type: none"> (a) restaurant (b) cellar door in the </td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday</td> </tr> </tbody> </table>		Class of Development	Hours of operation	Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Shop, other than any one or combination of the following: <ul style="list-style-type: none"> (a) restaurant (b) cellar door in the 	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday
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Shop, other than any one or combination of the following: <ul style="list-style-type: none"> (a) restaurant (b) cellar door in the 	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday									

	Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	
Overshadowing		
<p>PO 3.1</p> <p>Overshadowing of habitable room windows of adjacent residential land uses in:</p> <p>a. a neighbourhood-type zone is minimised to maintain access to direct winter sunlight</p> <p>b. other zones is managed to enable access to direct winter sunlight.</p>	<p>DTS/DPF 3.1</p> <p>North-facing windows of habitable rooms of adjacent residential land uses in a neighbourhood-type zone receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.</p>	
<p>PO 3.2</p> <p>Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:</p> <p>a. a neighbourhood type zone is minimised to maintain access to direct winter sunlight</p> <p>b. other zones is managed to enable access to direct winter sunlight.</p>	<p>DTS/DPF 3.2</p> <p>Development maintains 2 hours of direct sunlight between 9.00 am and 3.00 pm on 21 June to adjacent residential land uses in a neighbourhood-type zone in accordance with the following:</p> <p>a. for ground level private open space, the smaller of the following:</p> <p>i. half the existing ground level open space</p> <p>or</p> <p>ii. 35m² of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)</p> <p>b. for ground level communal open space, at least half of the existing ground level open space.</p>	
<p>PO 3.3</p> <p>Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account:</p> <p>(a) the form of development contemplated in the zone</p> <p>(b) the orientation of the solar energy facilities</p> <p>(c) the extent to which the solar energy facilities are already overshadowed.</p>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>	
<p>PO 3.4</p> <p>Development that incorporates moving parts, including windmills and wind farms, are located and operated to not cause unreasonable nuisance to nearby dwellings and tourist accommodation caused by shadow flicker.</p>	<p>DTS/DPF 3.4</p> <p>None are applicable.</p>	
Activities Generating Noise or Vibration		
<p>PO 4.1</p> <p>Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.1</p> <p>Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.</p>	
<p>PO 4.2</p> <p>Areas for the on-site manoeuvring of service and delivery vehicles, plant and equipment, outdoor work spaces (and the like) are designed and sited to not unreasonably impact the amenity of adjacent sensitive receivers (or lawfully approved sensitive receivers) and zones primarily intended to accommodate sensitive receivers due to noise and vibration by adopting techniques including:</p> <p>(a) locating openings of buildings and associated services away from the interface with the adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers</p> <p>(b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>	

<p>(c) housing plant and equipment within an enclosed structure or acoustic enclosure</p> <p>(d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.</p>					
<p>PO 4.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa are positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.3</p> <p>The pump and/or filtration system ancillary to a dwelling erected on the same site is:</p> <p>(a) enclosed in a solid acoustic structure located at least 5m from the nearest habitable room located on an adjoining allotment or</p> <p>(b) located at least 12m from the nearest habitable room located on an adjoining allotment.</p>				
<p>PO 4.4</p> <p>External noise into bedrooms is minimised by separating or shielding these rooms from service equipment areas and fixed noise sources located on the same or an adjoining allotment.</p>	<p>DTS/DPF 4.4</p> <p>Adjacent land is used for residential purposes.</p>				
<p>PO 4.5</p> <p>Outdoor areas associated with licensed premises (such as beer gardens or dining areas) are designed and/or sited to not cause unreasonable noise impact on existing adjacent sensitive receivers (or lawfully approved sensitive receivers).</p>	<p>DTS/DPF 4.5</p> <p>None are applicable.</p>				
<p>PO 4.6</p> <p>Development incorporating music achieves suitable acoustic amenity when measured at the boundary of an adjacent sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers.</p>	<p>DTS/DPF 4.6</p> <p>Development incorporating music includes noise attenuation measures that will achieve the following noise levels:</p> <table border="1"> <thead> <tr> <th>Assessment location</th> <th>Music noise level</th> </tr> </thead> <tbody> <tr> <td>Externally at the nearest existing or envisaged noise sensitive location</td> <td>Less than 8dB above the level of background noise (L_{90,15min}) in any octave band of the sound spectrum (LOCT_{10,15} < LOCT_{90,15} + 8dB)</td> </tr> </tbody> </table>	Assessment location	Music noise level	Externally at the nearest existing or envisaged noise sensitive location	Less than 8dB above the level of background noise (L _{90,15min}) in any octave band of the sound spectrum (LOCT _{10,15} < LOCT _{90,15} + 8dB)
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Air Quality					
<p>PO 5.1</p> <p>Development with the potential to emit harmful or nuisance-generating air pollution incorporates air pollution control measures to prevent harm to human health or unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) within the locality and zones primarily intended to accommodate sensitive receivers.</p>	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>				
<p>PO 5.2</p> <p>Development that includes chimneys or exhaust flues (including cafes, restaurants and fast food outlets) is designed to minimise nuisance or adverse health impacts to sensitive receivers (or lawfully approved sensitive receivers) by:</p> <p>(a) incorporating appropriate treatment technology before exhaust emissions are released</p> <p>(b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.</p>	<p>DTS/DPF 5.2</p> <p>None are applicable.</p>				
Light Spill					
<p>PO 6.1</p> <p>External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved</p>	<p>DTS/DPF 6.1</p> <p>None are applicable.</p>				

sensitive receivers).	
PO 6.2 External lighting is not hazardous to motorists and cyclists.	DTS/DPF 6.2 None are applicable.
Solar Reflectivity / Glare	
PO 7.1 Development is designed and comprised of materials and finishes that do not unreasonably cause a distraction to adjacent road users and pedestrian areas or unreasonably cause heat loading and micro-climatic impacts on adjacent buildings and land uses as a result of reflective solar glare.	DTS/DPF 7.1 None are applicable.
Electrical Interference	
PO 8.1 Development in rural and remote areas does not unreasonably diminish or result in the loss of existing communication services due to electrical interference.	DTS/DPF 8.1 The building or structure: (a) is no greater than 10m in height, measured from existing ground level or (b) is not within a line of sight between a fixed transmitter and fixed receiver (antenna) other than where an alternative service is available via a different fixed transmitter or cable.
Interface with Rural Activities	
PO 9.1 Sensitive receivers are located and designed to mitigate impacts from lawfully existing horticultural and farming activities (or lawfully approved horticultural and farming activities), including spray drift and noise and do not prejudice the continued operation of these activities.	DTS/DPF 9.1 None are applicable.
PO 9.2 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing intensive animal husbandry activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.2 None are applicable.
PO 9.3 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing land-based aquaculture activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.3 Sensitive receivers are located at least 200m from the boundary of a site used for land-based aquaculture and associated components in other ownership.
PO 9.4 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing dairies including associated wastewater lagoons and liquid/solid waste storage and disposal facilities and do not prejudice the continued operation of these activities.	DTS/DPF 9.4 Sensitive receivers are sited at least 500m from the boundary of a site used for a dairy and associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities in other ownership.
PO 9.5 Sensitive receivers are located and designed to mitigate the potential impacts from lawfully existing facilities used for the handling, transportation and storage of bulk commodities (recognising the potential for extended hours of operation) and do not prejudice the continued operation of these activities.	DTS/DPF 9.5 Sensitive receivers are located away from the boundary of a site used for the handling, transportation and/or storage of bulk commodities in other ownership in accordance with the following: (a) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility (b) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals) where the handling of these materials into or from vessels does not exceed 100 tonnes per day (c) 500m or more, where it involves the storage of bulk petroleum in individual containers with a capacity up to 200 litres and a total

	<p>on-site storage capacity not exceeding 1000 cubic metres</p> <p>(d) 500m or more, where it involves the handling of coal with a capacity up to 1 tonne per day or a storage capacity up to 50 tonnes</p> <p>(e) 1000m or more, where it involves the handling of coal with a capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes.</p>
<p>PO 9.6</p> <p>Setbacks and vegetation plantings along allotment boundaries should be incorporated to mitigate the potential impacts of spray drift and other impacts associated with agricultural and horticultural activities.</p>	<p>DTS/DPF 9.6</p> <p>None are applicable.</p>
<p>PO 9.7</p> <p>Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.</p>	<p>DTS/DPF 9.7</p> <p>None are applicable.</p>
Interface with Mines and Quarries (Rural and Remote Areas)	
<p>PO 10.1</p> <p>Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.</p>	<p>DTS/DPF 10.1</p> <p>Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the <i>Mining Act 1971</i>.</p>

Land Division

Assessment Provisions (AP)

Desired Outcome	
DO 1	<p>Land division:</p> <ul style="list-style-type: none"> (a) creates allotments with the appropriate dimensions and shape for their intended use (b) allows efficient provision of new infrastructure and the optimum use of underutilised infrastructure (c) integrates and allocates adequate and suitable land for the preservation of site features of value, including significant vegetation, watercourses, water bodies and other environmental features (d) facilitates solar access through allotment orientation (e) creates a compact urban form that supports active travel, walkability and the use of public transport (f) avoids areas of high natural hazard risk.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All land division	
Allotment configuration	
<p>PO 1.1</p> <p>Land division creates allotments suitable for their intended use.</p>	<p>DTS/DPF 1.1</p> <p>Division of land satisfies (a) or (b):</p> <ul style="list-style-type: none"> (a) reflects the site boundaries illustrated and approved in an operative or existing development authorisation for residential development under the <i>Development Act 1993</i> or <i>Planning, Development and Infrastructure Act 2016</i> where the allotments are used or are proposed to be used solely for residential purposes (b) is proposed as part of a combined land division application with deemed-to-satisfy dwellings on the proposed allotments.
<p>PO 1.2</p>	<p>DTS/DPF 1.2</p>

Land division considers the physical characteristics of the land, preservation of environmental and cultural features of value and the prevailing context of the locality.	None are applicable.
Design and Layout	
PO 2.1 Land division results in a pattern of development that minimises the likelihood of future earthworks and retaining walls.	DTS/DPF 2.1 None are applicable.
PO 2.2 Land division enables the appropriate management of interface impacts between potentially conflicting land uses and/or zones.	DTS/DPF 2.2 None are applicable.
PO 2.3 Land division maximises the number of allotments that face public open space and public streets.	DTS/DPF 2.3 None are applicable.
PO 2.4 Land division is integrated with site features, adjacent land uses, the existing transport network and available infrastructure.	DTS/DPF 2.4 None are applicable.
PO 2.5 Development and infrastructure is provided and staged in a manner that supports an orderly and economic provision of land, infrastructure and services.	DTS/DPF 2.5 None are applicable.
PO 2.6 Land division results in watercourses being retained within open space and development taking place on land not subject to flooding.	DTS/DPF 2.6 None are applicable.
PO 2.7 Land division results in legible street patterns connected to the surrounding street network.	DTS/DPF 2.7 None are applicable.
PO 2.8 Land division is designed to preserve existing vegetation of value including native vegetation and regulated and significant trees.	DTS/DPF 2.8 None are applicable.
Roads and Access	
PO 3.1 Land division provides allotments with access to an all-weather public road.	DTS/DPF 3.1 None are applicable.
PO 3.2 Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.2 None are applicable.
PO 3.3 Land division does not impede access to publicly owned open space and/or recreation facilities.	DTS/DPF 3.3 None are applicable.
PO 3.4 Road reserves provide for safe and convenient movement and parking of projected volumes of vehicles and allow for the efficient movement of service and emergency vehicles.	DTS/DPF 3.4 None are applicable.
PO 3.5 Road reserves are designed to accommodate pedestrian and cycling	DTS/DPF 3.5 None are applicable.

infrastructure, street tree planting, landscaping and street furniture.	
PO 3.6 Road reserves accommodate stormwater drainage and public utilities.	DTS/DPF 3.6 None are applicable.
PO 3.7 Road reserves provide unobstructed vehicular access and egress to and from individual allotments and sites.	DTS/DPF 3.7 None are applicable.
PO 3.8 Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.8 None are applicable.
PO 3.9 Roads, open space and thoroughfares provide safe and convenient linkages to the surrounding open space and transport network.	DTS/DPF 3.9 None are applicable.
PO 3.10 Public streets are designed to enable tree planting to provide shade and enhance the amenity of streetscapes.	DTS/DPF 3.10 None are applicable.
PO 3.11 Local streets are designed to create low-speed environments that are safe for cyclists and pedestrians.	DTS/DPF 3.11 None are applicable.
Infrastructure	
PO 4.1 Land division incorporates public utility services within road reserves or dedicated easements.	DTS/DPF 4.1 None are applicable.
PO 4.2 Waste water, sewage and other effluent is capable of being disposed of from each allotment without risk to public health or the environment.	DTS/DPF 4.2 Each allotment can be connected to: (a) a waste water treatment plant that has the hydraulic volume and pollutant load treatment and disposal capacity for the maximum predicted wastewater volume generated by subsequent development of the proposed allotment or (b) a form of on-site waste water treatment and disposal that meets relevant public health and environmental standards.
PO 4.3 Septic tank effluent drainage fields and other waste water disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 4.3 Development is not built on, or encroaches within, an area that is or will be, required for a sewerage system or waste control system.
PO 4.4 Constructed wetland systems, including associated detention and retention basins, are sited and designed to ensure public health and safety is protected, including by minimising potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 4.4 None are applicable.
PO 4.5 Constructed wetland systems, including associated detention and retention basins, are sited and designed to allow sediments to settle prior to discharge into watercourses or the marine environment.	DTS/DPF 4.5 None are applicable.
PO 4.6 Constructed wetland systems, including associated detention and retention basins, are sited and designed to function as a landscape	DTS/DPF 4.6 None are applicable.

feature.	
Minor Land Division (Under 20 Allotments)	
Open Space	
PO 5.1 Land division proposing an additional allotment under 1 hectare provides or supports the provision of open space.	DTS/DPF 5.1 None are applicable.
Solar Orientation	
PO 6.1 Land division for residential purposes facilitates solar access through allotment orientation.	DTS/DPF 6.1 None are applicable.
Water Sensitive Design	
PO 7.1 Land division creating a new road or common driveway includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 7.1 None are applicable.
PO 7.2 Land division designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 7.2 None are applicable.
Battle-Axe Development	
PO 8.1 Battle-axe development appropriately responds to the existing neighbourhood context.	DTS/DPF 8.1 Allotments are not in the form of a battle-axe arrangement.
PO 8.2 Battle-axe development designed to allow safe and convenient movement.	DTS/DPF 8.2 The handle of a battle-axe development: (a) has a minimum width of 4m or (b) where more than 3 allotments are proposed, a minimum width of 5.5m.
PO 8.3 Battle-axe allotments and/or common land are of a suitable size and dimension to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.	DTS/DPF 8.3 Battle-axe development allows a B85 passenger vehicle to enter and exit parking spaces in no more than a three-point turn manoeuvre.
PO 8.4 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	DTS/DPF 8.4 Battle-axe or common driveways satisfy (a) and (b): (a) are constructed of a minimum of 50% permeable or porous material (b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Major Land Division (20+ Allotments)	
Open Space	
PO 9.1 Land division allocates or retains evenly distributed, high quality areas of open space to improve residential amenity and provide urban heat amelioration.	DTS/DPF 9.1 None are applicable.
PO 9.2	DTS/DPF 9.2

Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	None are applicable.
PO 9.3 Land allocated for active recreation has dimensions capable of accommodating a range of active recreational activities.	DTS/DPF 9.3 None are applicable.
Water Sensitive Design	
PO 10.1 Land division creating 20 or more residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.1 None are applicable.
PO 10.2 Land division creating 20 or more non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.2 None are applicable.
PO 10.3 Land division creating 20 or more allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 10.3 None are applicable.
Solar Orientation	
PO 11.1 Land division creating 20 or more allotments for residential purposes facilitates solar access through allotment orientation and allotment dimensions.	DTS/DPF 11.1 None are applicable.

Marinas and On-Water Structures

Assessment Provisions (AP)

Desired Outcome	
DO 1	Marinas and on-water structures are located and designed to minimise the impairment of commercial, recreational and navigational activities and adverse impacts on the environment.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Navigation and Safety	
PO 1.1 Safe public access is provided or maintained to the waterfront, public infrastructure and recreation areas.	DTS/DPF 1.1 None are applicable.

PO 1.2 The operation of wharves is not impaired by marinas and on-water structures.	DTS/DPF 1.2 None are applicable.
PO 1.3 Navigation and access channels are not impaired by marinas and on-water structures.	DTS/DPF 1.3 None are applicable.
PO 1.4 Commercial shipping lanes are not impaired by marinas and on-water structures.	DTS/DPF 1.4 Marinas and on-water structures are set back 250m or more from commercial shipping lanes.
PO 1.5 Marinas and on-water structures are located to avoid interfering with the operation or function of a water supply pumping station.	DTS/DPF 1.5 On-water structures are set back: (a) 3km or more from upstream water supply pumping station take-off points (b) 500m or more from downstream water supply pumping station take-off points.
PO 1.6 Maintenance of on-water infrastructure, including revetment walls, is not impaired by marinas and on-water structures.	DTS/DPF 1.6 None are applicable.
Environmental Protection	
PO 2.1 Development is sited and designed to facilitate water circulation and exchange.	DTS/DPF 2.1 None are applicable.

Open Space and Recreation

Assessment Provisions (AP)

Desired Outcome	
DO 1	Pleasant, functional and accessible open space and recreation facilities are provided at State, regional, district, neighbourhood and local levels for active and passive recreation, biodiversity, community health, urban cooling, tree canopy cover, visual amenity, gathering spaces, wildlife and waterway corridors, and a range of other functions and at a range of sizes that reflect the purpose of that open space.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Recreation facilities are compatible with surrounding land uses and activities.	DTS/DPF 1.1 None are applicable.
PO 1.2 Open space areas include natural or landscaped areas using locally	DTS/DPF 1.2 None are applicable.

indigenous plant species and large trees.	
Design and Siting	
PO 2.1 Open space and recreation facilities address adjacent public roads to optimise pedestrian access and visibility.	DTS/DPF 2.1 None are applicable.
PO 2.2 Open space and recreation facilities incorporate park furniture, shaded areas and resting places.	DTS/DPF 2.2 None are applicable.
PO 2.3 Open space and recreation facilities link habitats, wildlife corridors and existing open spaces and recreation facilities.	DTS/DPF 2.3 None are applicable.
Pedestrians and Cyclists	
PO 3.1 Open space incorporates: (a) pedestrian and cycle linkages to other open spaces, centres, schools and public transport nodes; (b) safe crossing points where pedestrian routes intersect the road network; (c) easily identified access points.	DTS/DPF 3.1 None are applicable.
Usability	
PO 4.1 Land allocated for open space is suitable for its intended active and passive recreational use taking into consideration its gradient and potential for inundation.	DTS/DPF 4.1 None are applicable.
Safety and Security	
PO 5.1 Open space is overlooked by housing, commercial or other development to provide casual surveillance where possible.	DTS/DPF 5.1 None are applicable.
PO 5.2 Play equipment is located to maximise opportunities for passive surveillance.	DTS/DPF 5.2 None are applicable.
PO 5.3 Landscaping provided in open space and recreation facilities maximises opportunities for casual surveillance throughout the park.	DTS/DPF 5.3 None are applicable.
PO 5.4 Fenced parks and playgrounds have more than one entrance or exit to minimise potential entrapment.	DTS/DPF 5.4 None are applicable.
PO 5.5 Adequate lighting is provided around toilets, telephones, seating, litter bins, bicycle storage, car parks and other such facilities.	DTS/DPF 5.5 None are applicable.
PO 5.6 Pedestrian and bicycle movement after dark is focused along clearly defined, adequately lit routes with observable entries and exits.	DTS/DPF 5.6 None are applicable.
Signage	
PO 6.1 Signage is provided at entrances to and within the open space and	DTS/DPF 6.1 None are applicable.

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recreation facilities to provide clear orientation to major points of interest such as the location of public toilets, telephones, safe routes, park activities and the like.	
Buildings and Structures	
PO 7.1 Buildings and car parking areas in open space areas are designed, located and of a scale to be unobtrusive.	DTS/DPF 7.1 None are applicable.
PO 7.2 Buildings and structures in open space areas are clustered where practical to ensure that the majority of the site remains open.	DTS/DPF 7.2 None are applicable.
PO 7.3 Development in open space is constructed to minimise the extent of impervious surfaces.	DTS/DPF 7.3 None are applicable.
PO 7.4 Development that abuts or includes a coastal reserve or Crown land used for scenic, conservation or recreational purposes is located and designed to have regard to the purpose, management and amenity of the reserve.	Landscaping
PO 8.1 Open space and recreation facilities provide for the planting and retention of large trees and vegetation.	DTS/DPF 8.1 None are applicable.
PO 8.2 Landscaping in open space and recreation facilities provides shade and windbreaks: (a) along cyclist and pedestrian routes; (b) around picnic and barbecue areas; (c) in car parking areas.	DTS/DPF 8.2 None are applicable.
PO 8.3 Landscaping in open space facilitates habitat for local fauna and facilitates biodiversity.	DTS/DPF 8.3 None are applicable.
PO 8.4 Landscaping including trees and other vegetation passively watered with local rainfall run-off, where practicable.	DTS/DPF 8.4 None are applicable.
DTS/DPF 7.4 None are applicable.	

Out of Activity Centre Development

Assessment Provisions (AP)

Desired Outcome	
DO1	The role of Activity Centres in contributing to the form and pattern of development and enabling equitable and convenient access to a range of shopping, administrative, cultural, entertainment and other facilities in a single trip is maintained and reinforced.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Non-residential development outside Activity Centres of a scale and type	DTS/DPF 1.1 None are applicable.

<p>that does not diminish the role of Activity Centres:</p> <ul style="list-style-type: none"> (a) as primary locations for shopping, administrative, cultural, entertainment and community services (b) as a focus for regular social and business gatherings (c) in contributing to or maintaining a pattern of development that supports equitable community access to services and facilities. 	
<p>PO 1.2 Out-of-activity centre non-residential development complements Activity Centres through the provision of services and facilities:</p> <ul style="list-style-type: none"> (a) that support the needs of local residents and workers, particularly in underserved locations (b) at the edge of Activities Centres where they cannot readily be accommodated within an existing Activity Centre to expand the range of services on offer and support the role of the Activity Centre. 	<p>DTS/DPF 1.2 None are applicable.</p>

Resource Extraction

Assessment Provisions (AP)

Desired Outcome	
DO 1	Resource extraction activities are developed in a manner that minimises human and environmental impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
<p>PO 1.1 Resource extraction activities minimise landscape damage outside of those areas unavoidably disturbed to access and exploit a resource and provide for the progressive reclamation and betterment of disturbed areas.</p>	<p>DTS/DPF 1.1 None are applicable.</p>
<p>PO 1.2 Resource extraction activities avoid damage to cultural sites or artefacts.</p>	<p>DTS/DPF 1.2 None are applicable.</p>
Water Quality	
<p>PO 2.1 Stormwater and/or wastewater from resource extraction activities is diverted into appropriately sized treatment and retention systems to enable reuse on site.</p>	<p>DTS/DPF 2.1 None are applicable.</p>
Separation Treatments, Buffers and Landscaping	
<p>PO 3.1 Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.</p>	<p>DTS/DPF 3.1 None are applicable.</p>

PO 3.2 Resource extraction activities are screened from view from adjacent land by perimeter landscaping and/or mounding.	DTS/DPF 3.2 None are applicable.
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Site Contamination

Assessment Provisions (AP)

Desired Outcome	
DO 1	Ensure land is suitable for the proposed use in circumstances where it is, or may have been, subject to site contamination.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Ensure land is suitable for use when land use changes to a more sensitive use.	<p>DTS/DPF 1.1</p> <p>Development satisfies (a), (b), (c) or (d):</p> <ul style="list-style-type: none"> (a) does not involve a change in the use of land (b) involves a change in the use of land that does not constitute a change to a more sensitive use (c) involves a change in the use of land to a more sensitive use on land at which site contamination is unlikely to exist (as demonstrated in a site contamination declaration form) (d) involves a change in the use of land to a more sensitive use on land at which site contamination exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: <ul style="list-style-type: none"> (i) a site contamination audit report has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that- <ul style="list-style-type: none"> A. site contamination does not exist (or no longer exists) at the land or B. the land is suitable for the proposed use or range of uses (without the need for any further remediation) or C. where remediation is, or remains, necessary for the proposed use (or range of uses), remediation work has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development) and (ii) no other class 1 activity or class 2 activity has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a site contamination declaration form).

Tourism Development

Assessment Provisions (AP)

Desired Outcome

DO 1	Tourism development is built in locations that cater to the needs of visitors and positively contributes to South Australia's visitor economy.
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Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General	
PO 1.1 Tourism development complements and contributes to local, natural, cultural or historical context where: <ul style="list-style-type: none"> (a) it supports immersive natural experiences (b) it showcases South Australia's landscapes and produce (c) its events and functions are connected to local food, wine and nature. 	DTS/DPF 1.1 None are applicable.
PO 1.2 Tourism development comprising multiple accommodation units (including any facilities and activities for use by guests and visitors) is clustered to minimise environmental and contextual impact.	DTS/DPF 1.2 None are applicable.
Caravan and Tourist Parks	
PO 2.1 Potential conflicts between long-term residents and short-term tourists are minimised through suitable siting and design measures.	DTS/DPF 2.1 None are applicable.
PO 2.2 Occupants are provided privacy and amenity through landscaping and fencing.	DTS/DPF 2.2 None are applicable.
PO 2.3 Communal open space and centrally located recreation facilities are provided for guests and visitors.	DTS/DPF 2.3 12.5% or more of a caravan park comprises clearly defined communal open space, landscaped areas and areas for recreation.
PO 2.4 Perimeter landscaping is used to enhance the amenity of the locality.	DTS/DPF 2.4 None are applicable.
PO 2.5 Amenity blocks (showers, toilets, laundry and kitchen facilities) are sufficient to serve the full occupancy of the development.	DTS/DPF 2.5 None are applicable.
PO 2.6 Long-term occupation does not displace tourist accommodation, particularly in important tourist destinations such as coastal and riverine locations.	DTS/DPF 2.6 None are applicable.
Tourist accommodation in areas constituted under the National Parks and Wildlife Act 1972	
PO 3.1 Tourist accommodation avoids delicate or environmentally sensitive areas such as sand dunes, cliff tops, estuaries, wetlands or substantially intact strata of native vegetation (including regenerated areas of native	DTS/DPF 3.1 None are applicable.

vegetation lost through bushfire).	
PO 3.2 Tourist accommodation is sited and designed in a manner that is subservient to the natural environment and where adverse impacts on natural features, landscapes, habitats and cultural assets are avoided.	DTS/DPF 3.2 None are applicable.
PO 3.3 Tourist accommodation and recreational facilities, including associated access ways and ancillary structures, are located on cleared (other than where cleared as a result of bushfire) or degraded areas or where environmental improvements can be achieved.	DTS/DPF 3.3 None are applicable.
PO 3.4 Tourist accommodation is designed to prevent conversion to private dwellings through: (a) comprising a minimum of 10 accommodation units (b) clustering separated individual accommodation units (c) being of a size unsuitable for a private dwelling (d) ensuring functional areas that are generally associated with a private dwelling such as kitchens and laundries are excluded from, or physically separated from individual accommodation units, or are of a size unsuitable for a private dwelling.	DTS/DPF 3.4 None are applicable.

Transport, Access and Parking

Assessment Provisions (AP)

Desired Outcome	
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Movement Systems	
PO 1.1 Development is integrated with the existing transport system and designed to minimise its potential impact on the functional performance of the transport system.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 Industrial, commercial and service vehicle movements, loading areas and designated parking spaces are separated from passenger vehicle car parking areas to ensure efficient and safe movement and minimise potential conflict.	DTS/DPF 1.3 None are applicable.

<p>PO 1.4</p> <p>Development is sited and designed so that loading, unloading and turning of all traffic avoids interrupting the operation of and queuing on public roads and pedestrian paths.</p>	<p>DTS/DPF 1.4</p> <p>All vehicle manoeuvring occurs onsite.</p>
Sightlines	
<p>PO 2.1</p> <p>Sightlines at intersections, pedestrian and cycle crossings, and crossovers to allotments for motorists, cyclists and pedestrians are maintained or enhanced to ensure safety for all road users and pedestrians.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
Vehicle Access	
<p>PO 3.1</p> <p>Safe and convenient access minimises impact or interruption on the operation of public roads.</p>	<p>DTS/DPF 3.1</p> <p>The access is:</p> <ul style="list-style-type: none"> (a) provided via a lawfully existing or authorised driveway or access point or an access point for which consent has been granted as part of an application for the division of land or (b) not located within 6m of an intersection of 2 or more roads or a pedestrian activated crossing.
<p>PO 3.2</p> <p>Development incorporating vehicular access ramps ensures vehicles can enter and exit a site safely and without creating a hazard to pedestrians and other vehicular traffic.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
<p>PO 3.3</p> <p>Access points are sited and designed to accommodate the type and volume of traffic likely to be generated by the development or land use.</p>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>
<p>PO 3.4</p> <p>Access points are sited and designed to minimise any adverse impacts on neighbouring properties.</p>	<p>DTS/DPF 3.4</p> <p>None are applicable.</p>
<p>PO 3.5</p> <p>Access points are located so as not to interfere with street trees, existing street furniture (including directional signs, lighting, seating and weather shelters) or infrastructure services to maintain the appearance of the streetscape, preserve local amenity and minimise disruption to utility infrastructure assets.</p>	<p>DTS/DPF 3.5</p> <p>Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: <ul style="list-style-type: none"> (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
<p>PO 3.6</p> <p>Driveways and access points are separated and minimised in number to optimise the provision of on-street visitor parking (where on-street</p>	<p>DTS/DPF 3.6</p> <p>Driveways and access points:</p>

<p>parking is appropriate).</p>	<ul style="list-style-type: none"> (a) for sites with a frontage to a public road of 20m or less, one access point no greater than 3.5m in width is provided (b) for sites with a frontage to a public road greater than 20m: <ul style="list-style-type: none"> (i) a single access point no greater than 6m in width is provided or (ii) not more than two access points with a width of 3.5m each are provided.
<p>PO 3.7</p> <p>Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.</p>	<p>DTS/DPF 3.7</p> <p>Development does not involve a new or modified access or cause an increase in traffic through an existing access that is located within the following distance from a railway crossing:</p> <ul style="list-style-type: none"> (a) 80 km/h road - 110m (b) 70 km/h road - 90m (c) 60 km/h road - 70m (d) 50km/h or less road - 50m.
<p>PO 3.8</p> <p>Driveways, access points, access tracks and parking areas are designed and constructed to allow adequate movement and manoeuvrability having regard to the types of vehicles that are reasonably anticipated.</p>	<p>DTS/DPF 3.8</p> <p>None are applicable.</p>
<p>PO 3.9</p> <p>Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.</p>	<p>DTS/DPF 3.9</p> <p>None are applicable.</p>
<p>Access for People with Disabilities</p>	
<p>PO 4.1</p> <p>Development is sited and designed to provide safe, dignified and convenient access for people with a disability.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>Vehicle Parking Rates</p>	
<p>PO 5.1</p> <p>Sufficient on-site vehicle parking and specifically marked accessible car parking places are provided to meet the needs of the development or land use having regard to factors that may support a reduced on-site rate such as:</p> <ul style="list-style-type: none"> (a) availability of on-street car parking (b) shared use of other parking areas (c) in relation to a mixed-use development, where the hours of operation of commercial activities complement the residential use of the site, the provision of vehicle parking may be shared (d) the adaptive reuse of a State or Local Heritage Place. 	<p>DTS/DPF 5.1</p> <p>Development provides a number of car parking spaces on-site at a rate no less than the amount calculated using one of the following, whichever is relevant:</p> <ul style="list-style-type: none"> (a) Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements (b) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking Requirements in Designated Areas (c) if located in an area where a lawfully established carparking fund operates, the number of spaces calculated under (a) or (b) less the number of spaces offset by contribution to the fund.
<p>Vehicle Parking Areas</p>	
<p>PO 6.1</p> <p>Vehicle parking areas are sited and designed to minimise impact on the operation of public roads by avoiding the use of public roads when moving from one part of a parking area to another.</p>	<p>DTS/DPF 6.1</p> <p>Movement between vehicle parking areas within the site can occur without the need to use a public road.</p>
<p>PO 6.2</p> <p>Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced, and the like.</p>	<p>DTS/DPF 6.2</p> <p>None are applicable.</p>
<p>PO 6.3</p>	<p>DTS/DPF 6.3</p>

Vehicle parking areas are designed to provide opportunity for integration and shared-use of adjacent car parking areas to reduce the total extent of vehicle parking areas and access points.	None are applicable.
PO 6.4 Pedestrian linkages between parking areas and the development are provided and are safe and convenient.	DTS/DPF 6.4 None are applicable.
PO 6.5 Vehicle parking areas that are likely to be used during non-daylight hours are provided with sufficient lighting to entry and exit points to ensure clear visibility to users.	DTS/DPF 6.5 None are applicable.
PO 6.6 Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.	DTS/DPF 6.6 Loading areas and designated parking spaces are wholly located within the site.
PO 6.7 On-site visitor parking spaces are sited and designed to be accessible to all visitors at all times.	DTS/DPF 6.7 None are applicable.
Undercroft and Below Ground Garaging and Parking of Vehicles	
PO 7.1 Undercroft and below ground garaging of vehicles is designed to enable safe entry and exit from the site without compromising pedestrian or cyclist safety or causing conflict with other vehicles.	DTS/DPF 7.1 None are applicable.
Internal Roads and Parking Areas in Residential Parks and Caravan and Tourist Parks	
PO 8.1 Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.	DTS/DPF 8.1 None are applicable.
PO 8.2 Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.	DTS/DPF 8.2 None are applicable.
Bicycle Parking in Designated Areas	
PO 9.1 The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.	DTS/DPF 9.1 Areas and / or fixtures are provided for the parking and storage of bicycles at a rate not less than the amount calculated using Transport, Access and Parking Table 3 - Off Street Bicycle Parking Requirements.
PO 9.2 Bicycle parking facilities provide for the secure storage and tethering of bicycles in a place where casual surveillance is possible, is well lit and signed for the safety and convenience of cyclists and deters property theft.	DTS/DPF 9.2 None are applicable.
PO 9.3 Non-residential development incorporates end-of-journey facilities for employees such as showers, changing facilities and secure lockers, and signage indicating the location of the facilities to encourage cycling as a mode of journey-to-work transport.	DTS/DPF 9.3 None are applicable.
Corner Cut-Offs	
PO 10.1 Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	DTS/DPF 10.1 Development does not involve building work, or building work is located wholly outside the land shown as Corner Cut-Off Area in the following diagram:



Table 1 - General Off-Street Car Parking Requirements

The following parking rates apply and if located in an area where a lawfully established carparking fund operates, the number of spaces is reduced by an amount equal to the number of spaces offset by contribution to the fund.

Class of Development	Car Parking Rate (unless varied by Table 2 onwards) Where a development comprises more than one development type, then the overall car parking rate will be taken to be the sum of the car parking rates for each development type.
Residential Development	
Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Group Dwelling	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Residential Flat Building	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Row Dwelling where vehicle access is from the primary street	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Row Dwelling where vehicle access is not from the primary street (i.e. rear-loaded)	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Semi-Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.
Aged / Supported Accommodation	
Retirement village	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) -

	<p>2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Student accommodation	0.3 spaces per bed.
Workers' accommodation	0.5 spaces per bed plus 0.2 spaces per bed for visitor parking.
Tourist	
Caravan park / tourist park	<p>Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation.</p> <p>Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation.</p> <p>A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.</p>
Tourist accommodation	1 car parking space per accommodation unit / guest room.
Commercial Uses	
Auction room/ depot	1 space per 100m ² of building floor area plus an additional 2 spaces.
Automotive collision repair	3 spaces per service bay.
Call centre	8 spaces per 100m ² of gross leasable floor area.
Motor repair station	3 spaces per service bay.
Office	4 spaces per 100m ² of gross leasable floor area.
Retail fuel outlet	3 spaces per 100m ² gross leasable floor area.
Service trade premises	<p>2.5 spaces per 100m² of gross leasable floor area</p> <p>1 space per 100m² of outdoor area used for display purposes.</p>
Shop (no commercial kitchen)	<p>5.5 spaces per 100m² of gross leasable floor area where not located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of refuse are shared.</p> <p>5 spaces per 100m² of gross leasable floor area where located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where</p>

	facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of refuse are shared.
Shop (in the form of a bulky goods outlet)	2.5 spaces per 100m ² of gross leasable floor area.
Shop (in the form of a restaurant or involving a commercial kitchen)	<p>Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat.</p> <p>Premises with take-away service but with no seats - 12 spaces per 100m² of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point.</p> <p>Premises with a dine-in and drive-through take-away service - 0.3 spaces per seat plus a drive through queue capacity of 10 vehicles measured from the pick-up point.</p>
Community and Civic Uses	
Childcare centre	0.25 spaces per child
Library	4 spaces per 100m ² of total floor area.
Community facility	10 spaces per 100m ² of total floor area.
Hall / meeting hall	0.2 spaces per seat.
Place of worship	1 space for every 3 visitor seats.
Pre-school	1 per employee plus 0.25 per child (drop off/pick up bays)
Educational establishment	<p>For a primary school - 1.1 space per full time equivalent employee plus 0.25 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.</p> <p>For a secondary school - 1.1 per full time equivalent employee plus 0.1 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.</p> <p>For a tertiary institution - 0.4 per student based on the maximum number of students on the site at any time.</p>
Health Related Uses	
Hospital	<p>4.5 spaces per bed for a public hospital.</p> <p>1.5 spaces per bed for a private hospital.</p>
Consulting room	4 spaces per consulting room excluding ancillary facilities.
Recreational and Entertainment Uses	
Cinema complex	0.2 spaces per seat.
Concert hall / theatre	0.2 spaces per seat.
Hotel	1 space for every 2m ² of total floor area in a public bar plus 1 space for every 6m ² of total floor area available to the public in a lounge, beer garden plus 1 space per 2 gaming machines, plus 1 space per 3 seats in a restaurant.

Indoor recreation facility	6.5 spaces per 100m ² of total floor area for a Fitness Centre 4.5 spaces per 100m ² of total floor area for all other Indoor recreation facilities.
Industry/Employment Uses	
Fuel depot	1.5 spaces per 100m ² total floor area 1 spaces per 100m ² of outdoor area used for fuel depot activity purposes.
Industry	1.5 spaces per 100m ² of total floor area.
Store	0.5 spaces per 100m ² of total floor area.
Timber yard	1.5 spaces per 100m ² of total floor area 1 space per 100m ² of outdoor area used for display purposes.
Warehouse	0.5 spaces per 100m ² total floor area.
Other Uses	
Funeral Parlour	1 space per 5 seats in the chapel plus 1 space for each vehicle operated by the parlour.
Radio or Television Station	5 spaces per 100m ² of total building floor area.

Table 2 - Off-Street Car Parking Requirements in Designated Areas

The following parking rates apply in any zone, subzone or other area described in the 'Designated Areas' column subject to the following:

- (a) the location of the development is unable to satisfy the requirements of Table 2 – Criteria (other than where a location is exempted from the application of those criteria)
- or
- (b) the development satisfies Table 2 – Criteria (or is exempt from those criteria) and is located in an area where a lawfully established carparking fund operates, in which case the number of spaces are reduced by an amount equal to the number of spaces offset by contribution to the fund.

Class of Development	Car Parking Rate		Designated Areas
	Minimum number of spaces	Maximum number of spaces	
Development generally			
All classes of development	No minimum.	No maximum except in the Primary Pedestrian Area identified in the Primary Pedestrian Area Concept Plan, where the maximum is: 1 space for each dwelling with a total floor area less than 75 square metres 2 spaces for each dwelling with a total floor area between 75 square metres and 150 square metres	Capital City Zone City Main Street Zone City Riverbank Zone Adelaide Park Lands Zone Business Neighbourhood Zone (within the City of Adelaide) The St Andrews Hospital Precinct Subzone and Women's and Children's Hospital

		<p>3 spaces for each dwelling with a total floor area greater than 150 square metres.</p> <p>Residential flat building or Residential component of a multi-storey building: 1 visitor space for each 6 dwellings.</p>	Precinct Subzone of the Community Facilities Zone
Non-residential development			
Non-residential development excluding tourist accommodation	3 spaces per 100m ² of gross leasable floor area.	5 spaces per 100m ² of gross leasable floor area.	<p>City Living Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Non-residential development excluding tourist accommodation	3 spaces per 100m ² of gross leasable floor area.	6 spaces per 100m ² of gross leasable floor area.	<p>Strategic Innovation Zone</p> <p>Suburban Activity Centre Zone</p> <p>Suburban Business Zone</p> <p>Business Neighbourhood Zone</p> <p>Suburban Main Street Zone</p> <p>Urban Activity Centre Zone</p>
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 space for every 5 bedrooms over 100 bedrooms	1 space per 2 bedrooms up to 100 bedrooms and 1 space per 4 bedrooms over 100 bedrooms	<p>City Living Zone</p> <p>Urban Activity Centre Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Residential development			
Residential component of a multi-storey building	<p>Dwelling with no separate bedroom -0.25 spaces per dwelling</p> <p>1 bedroom dwelling - 0.75 spaces per dwelling</p> <p>2 bedroom dwelling - 1 space per dwelling</p> <p>3 or more bedroom dwelling - 1.25 spaces per dwelling</p> <p>0.25 spaces per dwelling for visitor parking.</p>	None specified.	<p>City Living Zone</p> <p>Strategic Innovation Zone</p> <p>Urban Activity Centre Zone</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone</p>
Residential flat building	Dwelling with no separate	None specified.	City Living Zone

bedroom -0.25 spaces per dwelling	Urban Activity Centre Zone
1 bedroom dwelling - 0.75 spaces per dwelling	Urban Corridor (Boulevard) Zone
2 bedroom dwelling - 1 space per dwelling	Urban Corridor (Business) Zone
3 or more bedroom dwelling - 1.25 spaces per dwelling	Urban Corridor (Living) Zone
0.25 spaces per dwelling for visitor parking.	Urban Corridor (Main Street) Zone
	Urban Neighbourhood Zone

Table 2 - Criteria:

The following criteria are used in conjunction with Table 2. The 'Exception' column identifies locations where the criteria do not apply and the car parking rates in Table 2 are applicable.

Criteria	Exceptions
<p>The designated area is wholly located within Metropolitan Adelaide and any part of the development site satisfies one or more of the following:</p> <p>(a) is within 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service⁽²⁾</p> <p>(b) is within 400 metres of a bus interchange⁽¹⁾</p> <p>(c) is within 400 metres of an O-Bahn interchange⁽¹⁾</p> <p>(d) is within 400 metres of a passenger rail station⁽¹⁾</p> <p>(e) is within 400 metres of a passenger tram station⁽¹⁾</p> <p>(f) is within 400 metres of the Adelaide Parklands.</p>	<p>(a) All zones in the City of Adelaide</p> <p>(b) Strategic Innovation Zone in the following locations:</p> <ul style="list-style-type: none"> (i) City of Burnside (ii) City of Marion (iii) City of Mitcham <p>(c) Urban Corridor (Boulevard) Zone</p> <p>(d) Urban Corridor (Business) Zone</p> <p>(e) Urban Corridor (Living) Zone</p> <p>(f) Urban Corridor (Main Street) Zone</p> <p>(g) Urban Neighbourhood Zone</p>

[NOTE(S): (1) Measured from an area that contains any platform(s), shelter(s) or stop(s) where people congregate for the purpose waiting to board a bus, tram or train, but does not include areas used for the parking of vehicles. (2) A high frequency public transit service is a route serviced every 15 minutes between 7.30am and 6.30pm Monday to Friday and every 30 minutes at night, Saturday, Sunday and public holidays until 10pm.]

Table 3 - Off-Street Bicycle Parking Requirements

The bicycle parking rates apply within designated areas located within parts of the State identified in the Schedule to Table 3.

Class of Development	Bicycle Parking Rate
Consulting Room	<p>Where a development comprises more than one development type, then the overall bicycle parking rate will be taken to be the sum of the bicycle parking rates for each development type.</p> <p>1 space per 20 employees plus 1 space per 20 consulting rooms for customers.</p>
Educational establishment	<p>For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for visitors.</p> <p>For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.</p>
Hospital	1 space per 15 beds plus 1 space per 30 beds for visitors.
Indoor recreation facility	1 space per 4 employees plus 1 space per 200m ² of gross leasable floor area for visitors.

Licensed Premises	1 per 20 employees, plus 1 per 60 square metres total floor area, plus 1 per 40 square metres of bar floor area, plus 1 per 120 square metres lounge and beer garden floor area, plus 1 per 60 square metres dining floor area, plus 1 per 40 square metres gaming room floor area.
Office	1 space for every 200m ² of gross leasable floor area plus 2 spaces plus 1 space per 1000m ² of gross leasable floor area for visitors.
Pre-school	1 space per 20 full time employees plus 1 space per 40 full time children.
Recreation area	1 per 1500 spectator seats for employees plus 1 per 250 visitor and customers.
Residential flat building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 for every 10 dwellings for visitors.
Residential component of a multi-storey building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 space for every 10 dwellings for visitors.
Shop	1 space for every 300m ² of gross leasable floor area plus 1 space for every 600m ² of gross leasable floor area for customers.
Tourist accommodation	1 space for every 20 employees plus 2 for the first 40 rooms and 1 for every additional 40 rooms for visitors.
Schedule to Table 3	
Designated Area	Relevant part of the State
	The bicycle parking rate applies to a designated area located in a relevant part of the State described below.
All zones	City of Adelaide
Business Neighbourhood Zone	Metropolitan Adelaide
Strategic Innovation Zone	
Suburban Activity Centre Zone	
Suburban Business Zone	
Suburban Main Street Zone	
Urban Activity Centre Zone	
Urban Corridor (Boulevard) Zone	
Urban Corridor (Business) Zone	
Urban Corridor (Living) Zone	
Urban Corridor (Main Street) Zone	
Urban Neighbourhood Zone	

Waste Treatment and Management Facilities

Assessment Provisions (AP)

Desired Outcome

DO 1	Mitigation of the potential environmental and amenity impacts of waste treatment and management facilities.
------	---

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Waste treatment and management facilities incorporate separation distances and attenuation measures within the site between waste operations areas (including all closed, operating and future cells) and sensitive receivers and sensitive environmental features to mitigate off-site impacts from noise, air and dust emissions.	DTS/DPF 1.1 None are applicable.
Soil and Water Protection	
PO 2.1 Soil, groundwater and surface water are protected from contamination from waste treatment and management facilities through measures such as: <ul style="list-style-type: none"> (a) containing potential groundwater and surface water contaminants within waste operations areas (b) diverting clean stormwater away from waste operations areas and potentially contaminated areas (c) providing a leachate barrier between waste operations areas and underlying soil and groundwater. 	DTS/DPF 2.1 None are applicable.
PO 2.2 Wastewater lagoons are set back from watercourses to minimise environmental harm and adverse effects on water resources.	DTS/DPF 2.2 Wastewater lagoons are set back 50m or more from watercourse banks.
PO 2.3 Wastewater lagoons are designed and sited to: <ul style="list-style-type: none"> (a) avoid intersecting underground waters; (b) avoid inundation by flood waters; (c) ensure lagoon contents do not overflow; (d) include a liner designed to prevent leakage. 	DTS/DPF 2.3 None are applicable.
PO 2.4 Waste operations areas of landfills and organic waste processing facilities are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.4 Waste operations areas are set back 100m or more from watercourse banks.
Amenity	
PO 3.1 Waste treatment and management facilities are screened, located and designed to minimise adverse visual impacts on amenity.	DTS/DPF 3.1 None are applicable.
PO 3.2 Access routes to waste treatment and management facilities via residential streets is avoided.	DTS/DPF 3.2 None are applicable.

PO 3.3 Litter control measures minimise the incidence of windblown litter.	DTS/DPF 3.3 None are applicable.
PO 3.4 Waste treatment and management facilities are designed to minimise adverse impacts on both the site and surrounding areas from weed and vermin infestation.	DTS/DPF 3.4 None are applicable.
Access	
PO 4.1 Traffic circulation movements within any waste treatment or management site are designed to enable vehicles to enter and exit the site in a forward direction.	DTS/DPF 4.1 None are applicable.
PO 4.2 Suitable access for emergency vehicles is provided to and within waste treatment or management sites.	DTS/DPF 4.2 None are applicable.
Fencing and Security	
PO 5.1 Security fencing provided around waste treatment and management facilities prevents unauthorised access to operations and potential hazard to the public.	DTS/DPF 5.1 Chain wire mesh or pre-coated painted metal fencing 2m or more in height is erected along the perimeter of the waste treatment or waste management facility site.
Landfill	
PO 6.1 Landfill gas emissions are managed in an environmentally acceptable manner.	DTS/DPF 6.1 None are applicable.
PO 6.2 Landfill facilities are separated from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 6.2 Landfill facilities are set back 250m or more from a public open space reserve, forest reserve, national park or Conservation Zone.
PO 6.3 Landfill facilities are located on land that is not subject to land slip.	DTS/DPF 6.3 None are applicable.
PO 6.4 Landfill facilities are separated from areas subject to flooding.	DTS/DPF 6.4 Landfill facilities are set back 500m or more from land inundated in a 1% AEP flood event.
Organic Waste Processing Facilities	
PO 7.1 Organic waste processing facilities are separated from the coast to avoid potential environment harm.	DTS/DPF 7.1 Organic waste processing facilities are set back 500m or more from the coastal high water mark.
PO 7.2 Organic waste processing facilities are located on land where the engineered liner and underlying seasonal water table cannot intersect.	DTS/DPF 7.2 None are applicable.
PO 7.3 Organic waste processing facilities are sited away from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 7.3 Organic waste processing facilities are set back 250m or more from a public open space reserve, forest reserve, national park or a Conservation Zone.
PO 7.4 Organic waste processing facilities are located on land that is not subject to land slip.	DTS/DPF 7.4 None are applicable.

PO 7.5 Organic waste processing facilities separated from areas subject to flooding.	DTS/DPF 7.5 Organic waste processing facilities are set back 500m or more from land inundated in a 1% AEP flood event.
Major Wastewater Treatment Facilities	
PO 8.1 Major wastewater treatment and disposal systems, including lagoons, are designed to minimise potential adverse odour impacts on sensitive receivers, minimise public and environmental health risks and protect water quality.	DTS/DPF 8.1 None are applicable.
PO 8.2 Artificial wetland systems for the storage of treated wastewater are designed and sited to minimise potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 8.2 None are applicable.

Workers' accommodation and Settlements

Assessment Provisions (AP)

Desired Outcome	
DO 1	Appropriately designed and located accommodation for seasonal and short-term workers in rural areas that minimises environmental and social impacts.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Workers' accommodation and settlements are obscured from scenic routes, tourist destinations and areas of conservation significance or otherwise designed to complement the surrounding landscape.	DTS/DPF 1.1 None are applicable.
PO 1.2 Workers' accommodation and settlements are sited and designed to minimise nuisance impacts on the amenity of adjacent users of land.	DTS/DPF 1.2 None are applicable.
PO 1.3 Workers' accommodation and settlements are built with materials and colours that blend with the landscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Workers' accommodation and settlements are supplied with service infrastructure such as power, water and effluent disposal sufficient to satisfy the living requirements of workers.	DTS/DPF 1.4 None are applicable.

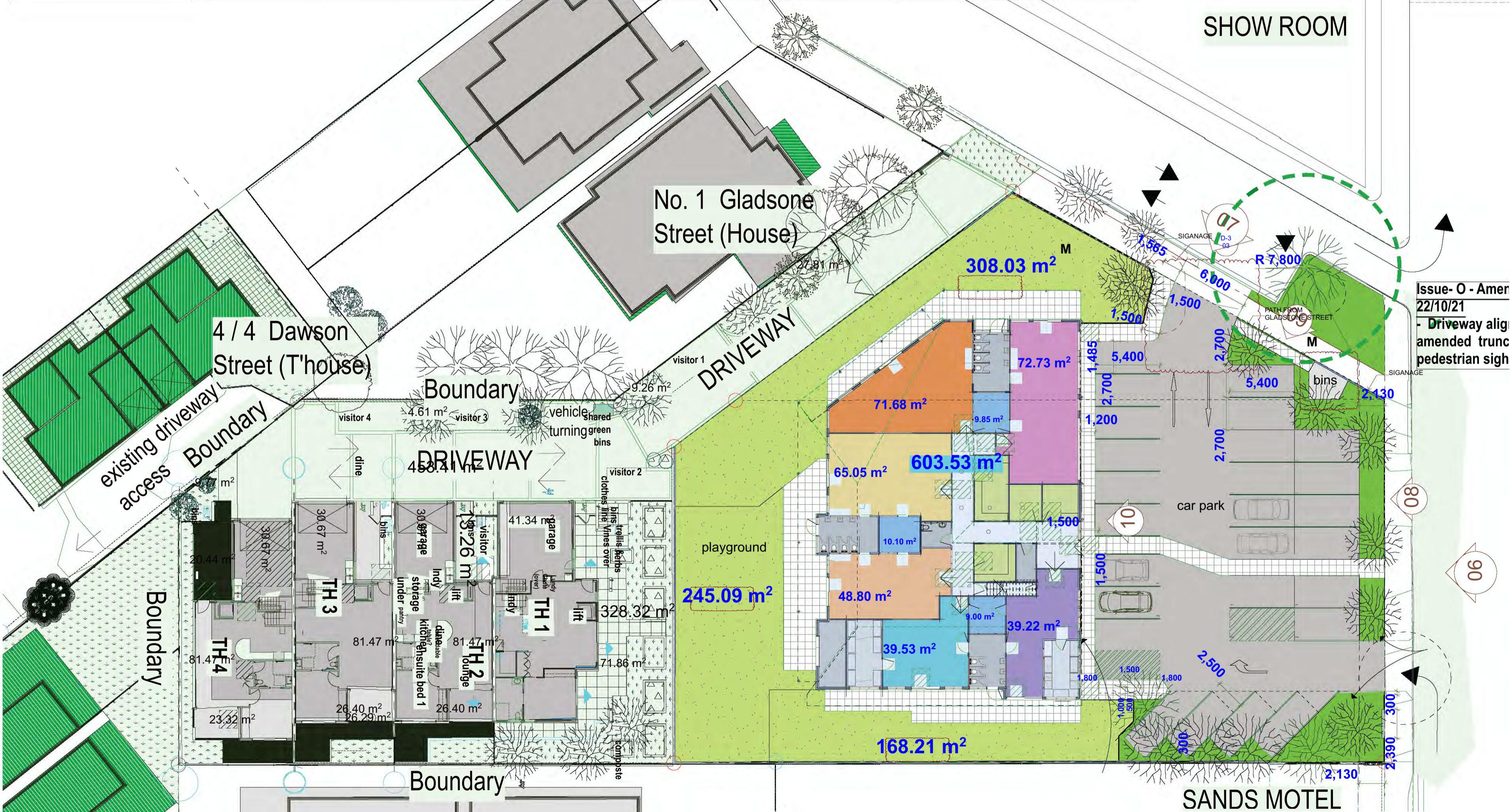
No criteria applies to this land use. Please check the definition of the land use for further detail.

ATTACHMENT 2

**AMENDED PLAN / DOCUMENT
DATE: 28/10/2021**



SAPPA Aerial 15May21
1:1

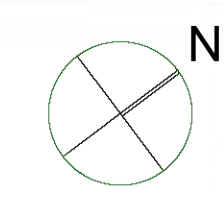


SITE AREA	2,246 m²
BUILDING AREA	603.53 m²
NUMBER OF PLACES	103
OUTDOOR PLAY AREA	721.33 m²
NUMBER OF CARPARKS	26 (INCL 1 X DISABLED)

ROOM 1	22 PLACES
ROOM 2	22 PLACES
ROOM 3	20 PLACES
ROOM 4	15 PLACES
ROOM 5	12 PLACES
ROOM 6	12 PLACES

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Note:
Confirm all dimensions on site prior to construction. DO NOT SCALE FROM DRAWING - figured dimensions take precedence over scaled. Refer any discrepancies to Architect for clarification.



ISSUE	AMENDMENT	DATE
J	Various amendments Car Park & Elevs	25.08.21
K	Boundary adjment / d'way exit width	27.08.21
L	DEVELOPMENT APPROVAL ISSUE	30.08.21
M	Amendments UCC RFls (29/09/21)	30.09.21
N	Amdmts UCC RFls (29/09/21) - car park	04.10.21
O	Amdmts UCC RFls (13/10/21) - driveway	22.10.21

CLIENT: ACCORD PROPERTY	DRAWING TITLE:
PROJECT: Fullarton Child Care Centre	SCALE: 1:1
196 Glen Osmond Road FULLARTON South Australia 5063	DATE: 01/06/21
	PROJECT NO: DRWG NO: DA

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG

MELBOURNE BRISBANE ADELAIDE
level 2/16 45 Greville Street
marie street PRAHRAN vic 3181
MILTON qld 4069
+61 416254745

Member
Australian
Institute of
Architects

Fences Type Legend

FN-01	Colorbond Fence	2.7m High
FN-02	Colorbond Fence	2.4m High
FN-03	Palisade Fence	1.8 m High
FN-04	Brick Fence	1.5 ~ 1.8 m High

D-3 View Truncation #LayID

Existing protruberance to be PLAYGROUND

extended by developer

one way

existing tree

existing tree

DRIVEWAY

PEDESTRIAN PATH

2.500

1.500

2.000

1.565

Issue - O - Amendments 22/10/21

- Driveway alignment

- amended truncation

- pedestrian sight lines

GLEN OSMOND ROAD

"NO ENTRY" sign

Sign code : R2-4

street tree to be removed dotted

(See Arborist report)

Accommodation

1. Ground Floor Plan

1:100

AMENDED PLAN / DOCUMENT

DATE: 28/10/2021

existing Motel

boundary

RS-10-Disabled Parking Only

Sign code:



Redshed Architects

Level 2/16 45 Greville Street
MILTON QLD 4059
Phone: 416224745

CLIENT: ACCORD PROPERTY

PROJECT: 11

DATE: 01/06/21

SCALE: 1:1

DRAWING NO: DA

AMENDMENT

DATE

CLIENT

PROJECT

SCALE

DATE

DRAWING NO

PROJECT

SCALE

DATE

CLIENT

PROJECT

SCALE

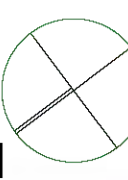
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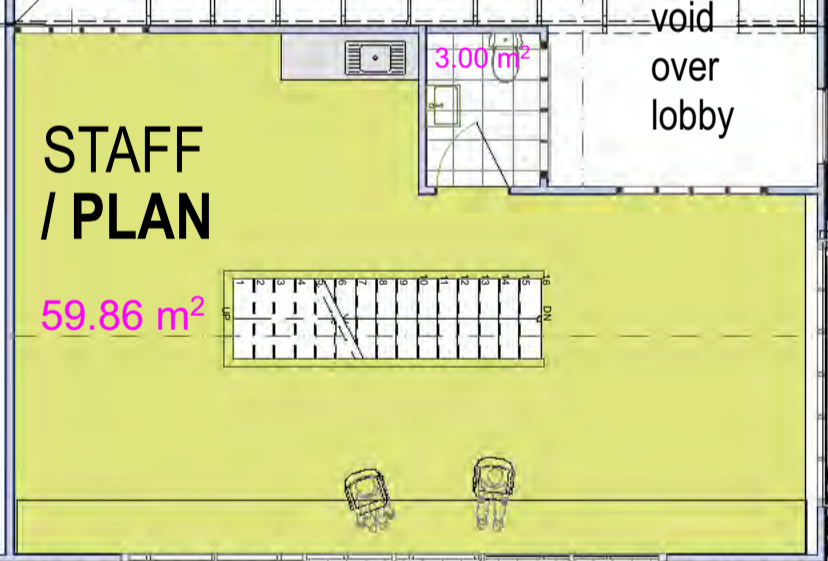
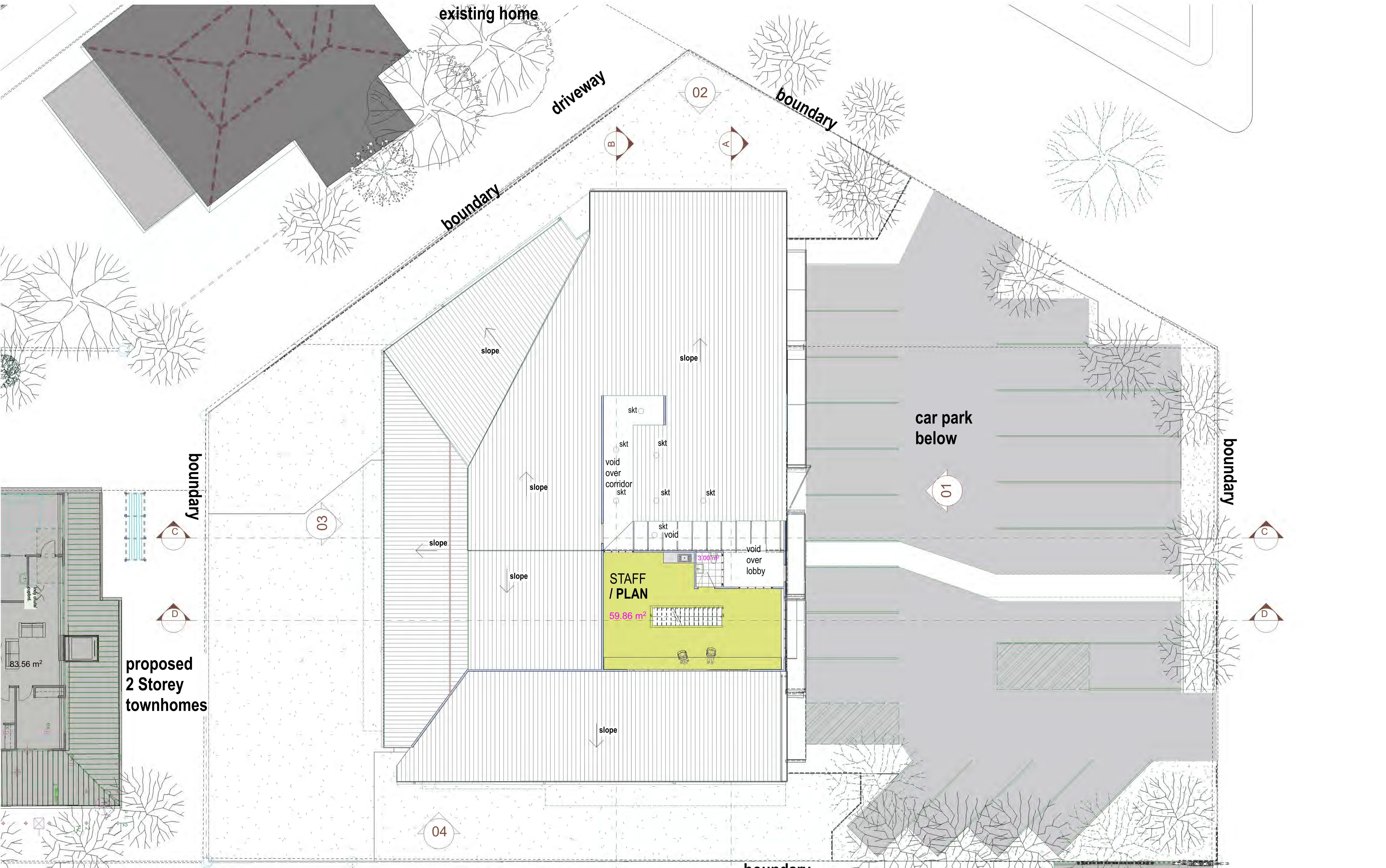


NOTE: Confirm all dimensions on site

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Aged Care Accomodation

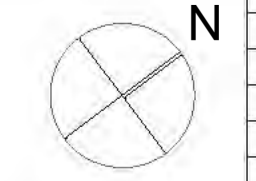
existing Motel

existing Motel

2. first floor
1:100

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ISSUE	AMENDMENT	DATE
G	Amended Car Park	20.07.21
H	Car Park Revised / Elevations	23.07.21
I	Elevations	06.07.21
J	Various amendments Car Park & Elevs	25.08.21
K	Boundary adjment / d'way exit width	27.08.21
L	DEVELOPMENT APPROVAL ISSUE	30.08.21

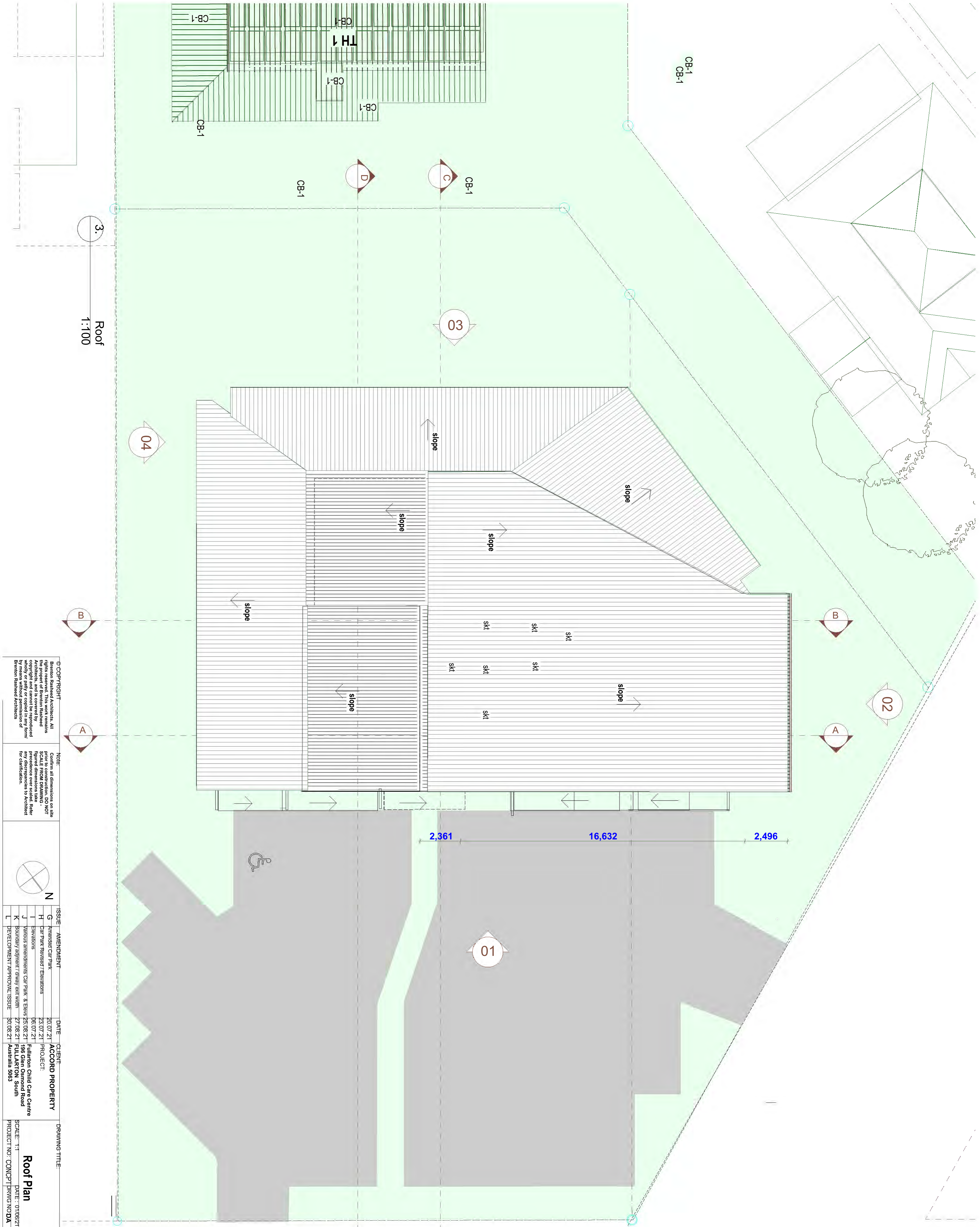
CLIENT:
ACCORD PROPERTY
PROJECT:
Fullarton Child Care Centre
196 Glen Osmond Road
FULLARTON South
Australia 5063

DRAWING TITLE:
First Floor
SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCPTRWNG NO: DA 04

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG

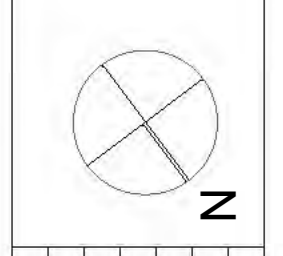
MELBOURNE BRISBANE ADELAIDE
level 2/16 45 Greville Street
marie street PRAHRAN vic 3181
MILTON qld 4069
+61 416254745

Symbol	Description
(Green outline)	Approved building footprint
(Red outline)	Approved building footprint
(Blue outline)	Approved building footprint
(Yellow outline)	Approved building footprint
(Green outline)	Approved building footprint
(Red outline)	Approved building footprint
(Blue outline)	Approved building footprint
(Yellow outline)	Approved building footprint
(Green outline)	Approved building footprint
(Red outline)	Approved building footprint
(Blue outline)	Approved building footprint
(Yellow outline)	Approved building footprint



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ISSUE / AMENDMENT	DATE	CLIENT
G - Proposed Car Park	20.07.21	ACCORD PROPERTY
H - Car Park Revised / Elevations	23.07.21	
I - Elevations	06.07.21	Fullarton Child Care Centre
J - Various amendments Car Park & Eaves	23.08.21	196 Glen Diamond Road
K - Boundary adjacent / away exit width	27.08.21	FULLARTON South
L - DEVELOPMENT APPROVAL / ISSUE	30.08.21	Australia 5063

ALL LEVELS (R.L.S) TO AHD. REF TO SURVEYORS DWG

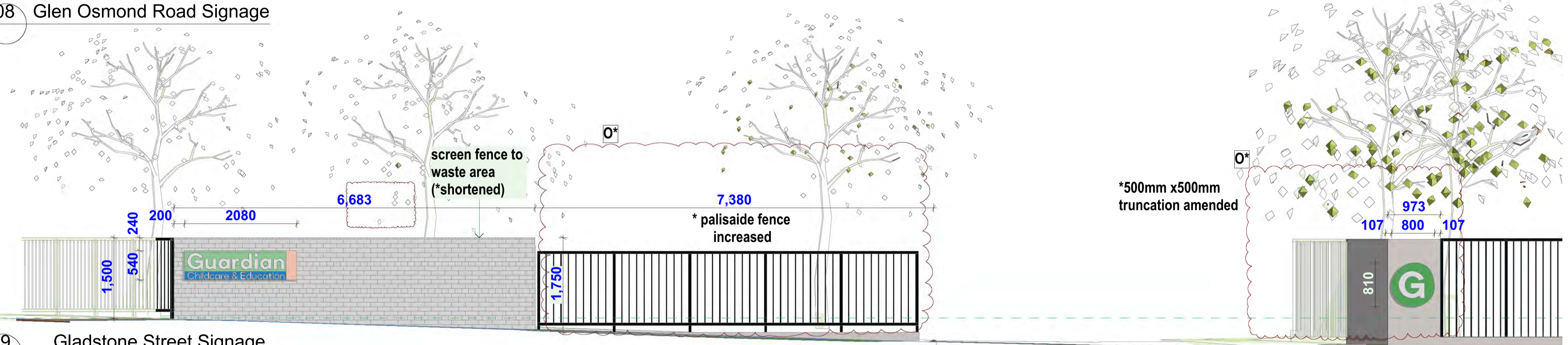
MEASURE: BRISBANE - ADELADE
 level 2/16
 middle street 4049
 MILDON QLD 4049
 +61 8 92529142

redefined architects



+67,790
2nd Floor Plan

08 Glen Osmond Road Signage



+67,790
1 Ground Floor Plan

09 Gladstone Street Signage

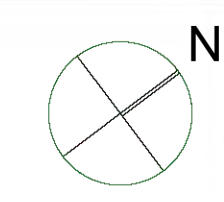


10 Building Entry Signage

AMENDED PLAN / DOCUMENT
DATE: 28/10/2021

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ISSUE	AMENDMENT	DATE
J	Various amendments Car Park & Elevs	25.08.21
K	Boundary adjment / d'way exit width	27.08.21
L	DEVELOPMENT APPROVAL ISSUE	30.08.21
M	Amndmts UCC RFIs (29/09/21)	30.09.21
N	Amndmts UCC RFIs (29/09/21) -car park	04.10.21
O	Amndmts UCC RFIs (13/10/21) -driveway	22.10.21

CLIENT: ACCORD PROPERTY	DRAWING TITLE:
PROJECT: Fullarton Child Care Centre	SCALE: 1:1
196 Glen Osmond Road FULLARTON South Australia 5063	DATE: 01/06/21
	PROJECT NO:
	DRWG NO: DA

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG

MELBOURNE BRISBANE ADELAIDE
level 2/16 45 Greville Street
marie street PRAHRAN vic 3181
MILTON qld 4069
+61 416254745



06 Glen Osmond Road Street Scape
1:100



07 Gladstone St Street Scape
1:100

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K	Boundary adjment / d'way exit width	27.08.21
L	DEVELOPMENT APPROVAL ISSUE	30.08.21

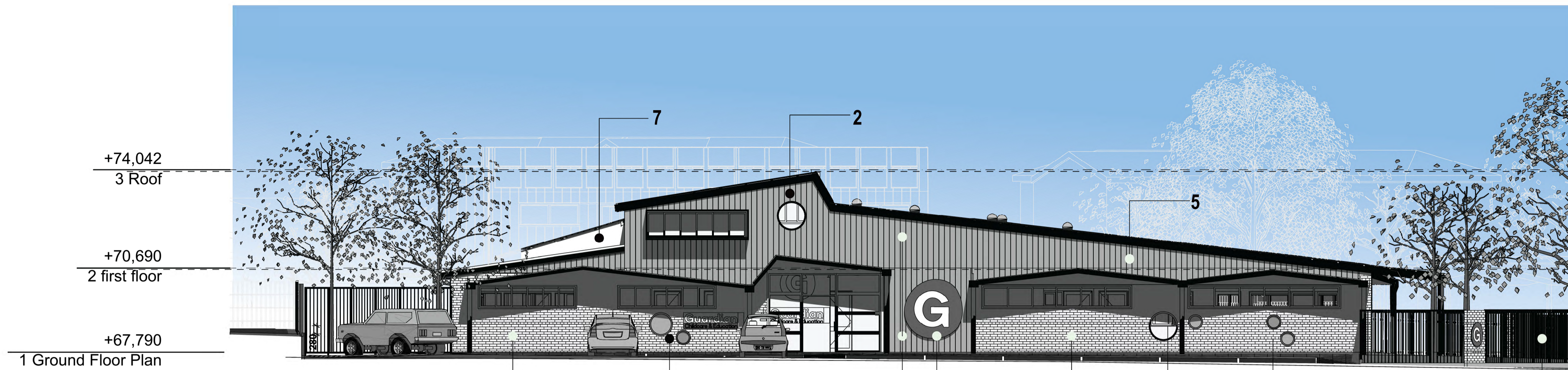
CLIENT:
ACCORD PROPERTY
PROJECT:
Fullarton Child Care Centre
196 Glen Osmond Road
FULLARTON South
Australia 5063

DRAWING TITLE:
Street Scape Elevations
SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCEPT DRWG NO: DA 06

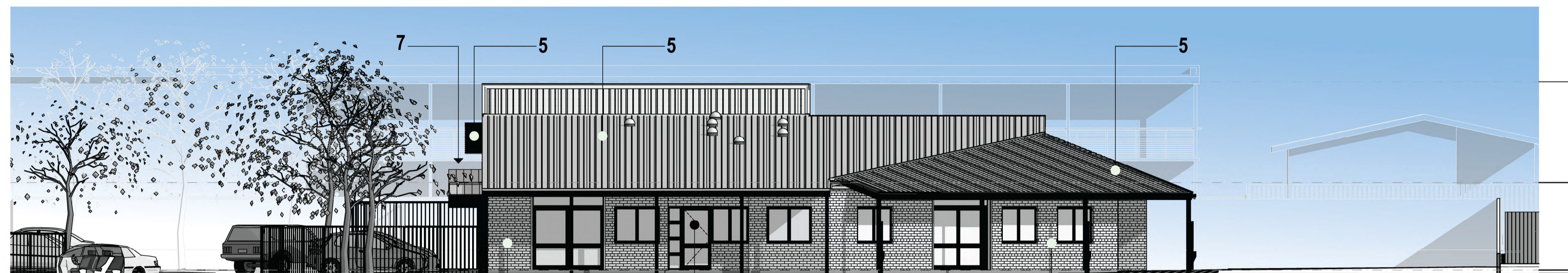
ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG

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+61 416254745

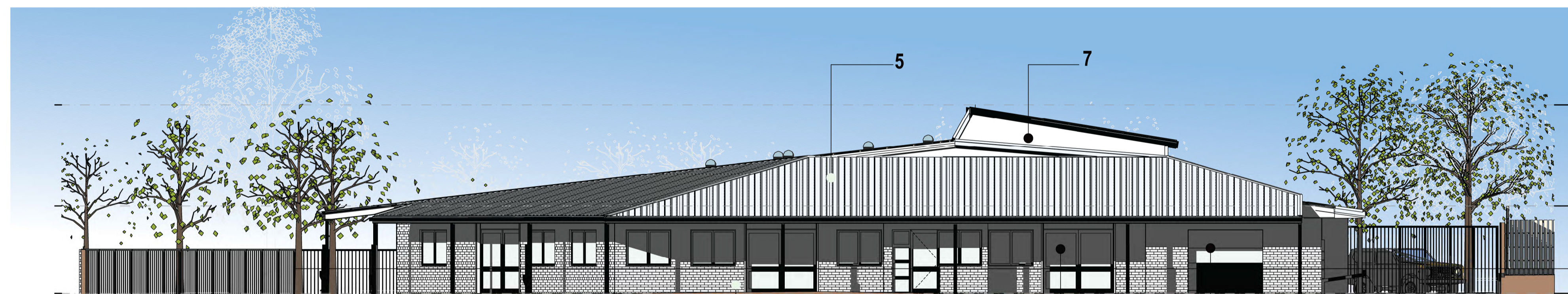




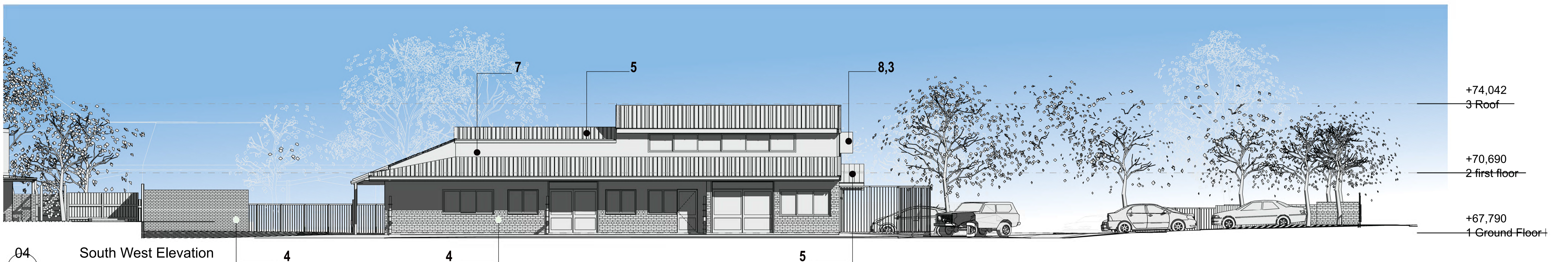
01 Glen Osmond Road North East Elevation
1:100



02 Gladstone Street North West Elevation
1:100



03 Rear South East Elevation
1:100



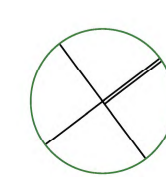
04 South West Elevation
1:100



1. **SIGNAGE, BOLLARDS** - Match Guardian logo
2. **FEATURE (round) WINDOWS / GLASS FILM**
Match Guardian logo colours
3. **POWDERCOAT (DOOR/WINDOW/SHADES) FRAMES** colour "Anodic Slate Grey"
4. **BRICKWORK** - "whisper white austral"
5. **'STANDING SEAM' CLADDING**, "Windspray" colorbond
FASCIAS, GUTTERS AND DOWNPIPES FENCE - STEEL SHEET, MINI ORB SHEETING (Colorbond) / ROLLERDOOR / PALLISADE
("Windspray" c/bond/ p coat- match wall sheeting)
6. **ROOF SHEETING** - "Surfmist" - Colorbond (BlueScope = Australian steel)
7. **WALL SHEETING** - "Windspray" - Colorbond Mini Orb - (BlueScope = Australian steel)
8. **HEKA HOODS / SHADES** - "Windspray" - (match wall sheeting)
9. **PEDESTRIAN PATHS** - Boral 'Longo' honed
10. **CARPARK** - Boral interlocking charcoal - pattern suits 'light commercial' confirm re rubbish trucks etc.

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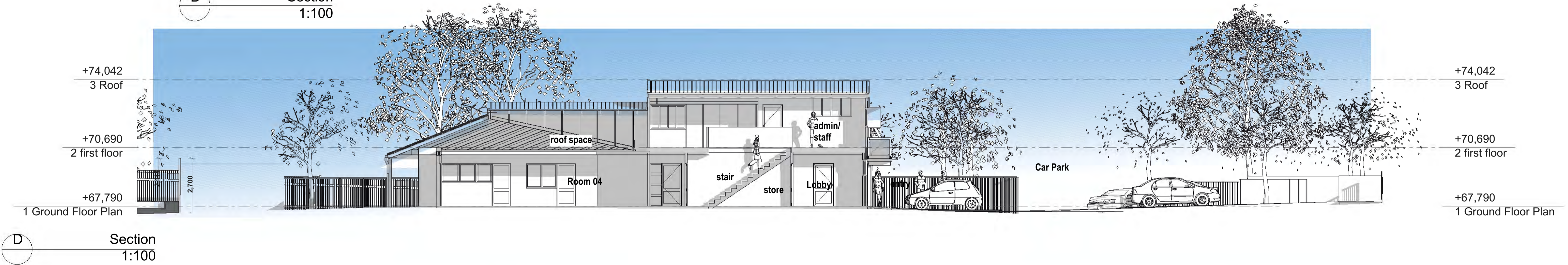
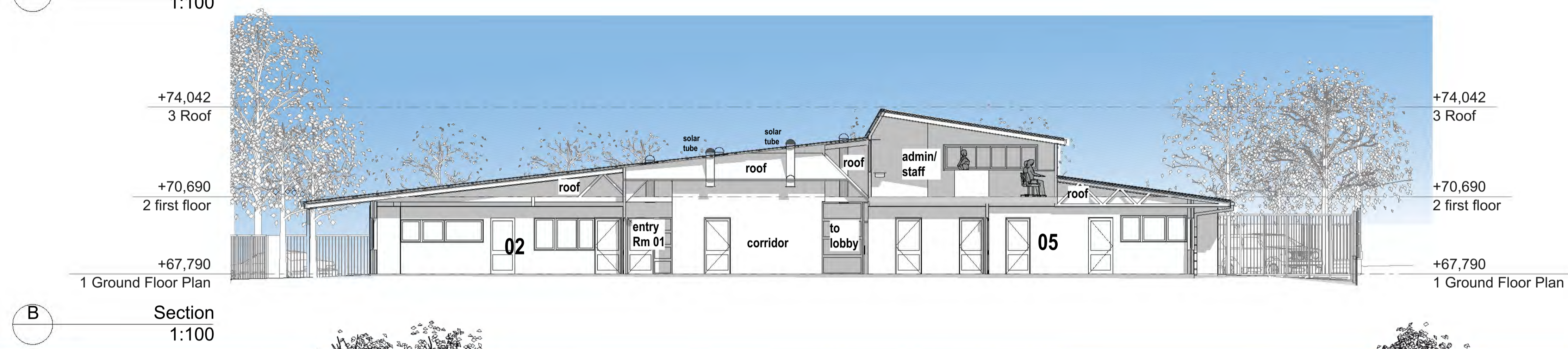
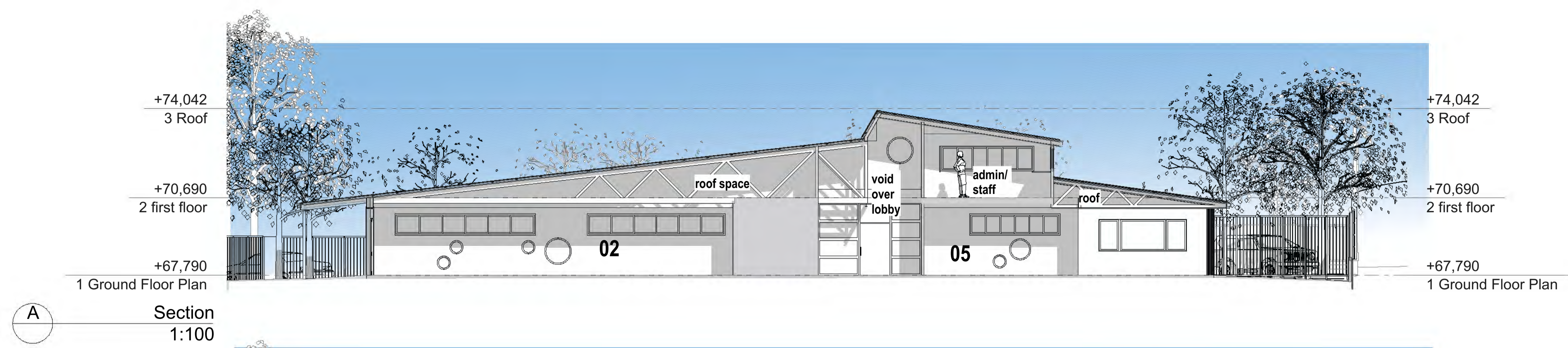


ISSUE	AMENDMENT	DATE
G	Amended Car Park	20.07.21
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I	Elevations	26.07.21
J	Various amendments Car Park & Elevations	25.08.21
K	Boundary adjment / d/way exit width	27.08.21
L	DEVELOPMENT APPROVAL ISSUE	30.08.21

CLIENT:
ACCORD PROPERTY
PROJECT:
Fullarton Child Care Centre
196 Glen Osmond Road
FULLARTON South
Australia 5063

DRAWING TITLE:
Elevations
SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCEPT DRWG NO: DA 07

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG
MELBOURNE BRISBANE ADELAIDE
level 2/16 45 Greville Street
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+61 416254745
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ISSUE | AMENDMENT | DATE | CLIENT: ACCORD PROPERTY

G	Amended Car Park	20.07.21	PROJECT: Fullarton Child Care Centre
H	Car Park Revised 7 Elevations	23.07.21	196 Glen Osmond Road
J	Elevations	06.07.21	FULLARTON South
J	Various amendments Car Park & Elev	25.08.21	Australia 5063
K	Boundary adjment / d'way exit width	27.08.21	
L	DEVELOPMENT APPROVAL ISSUE	30.08.21	

CLIENT: ACCORD PROPERTY
PROJECT: Fullarton Child Care Centre
196 Glen Osmond Road
FULLARTON South
Australia 5063

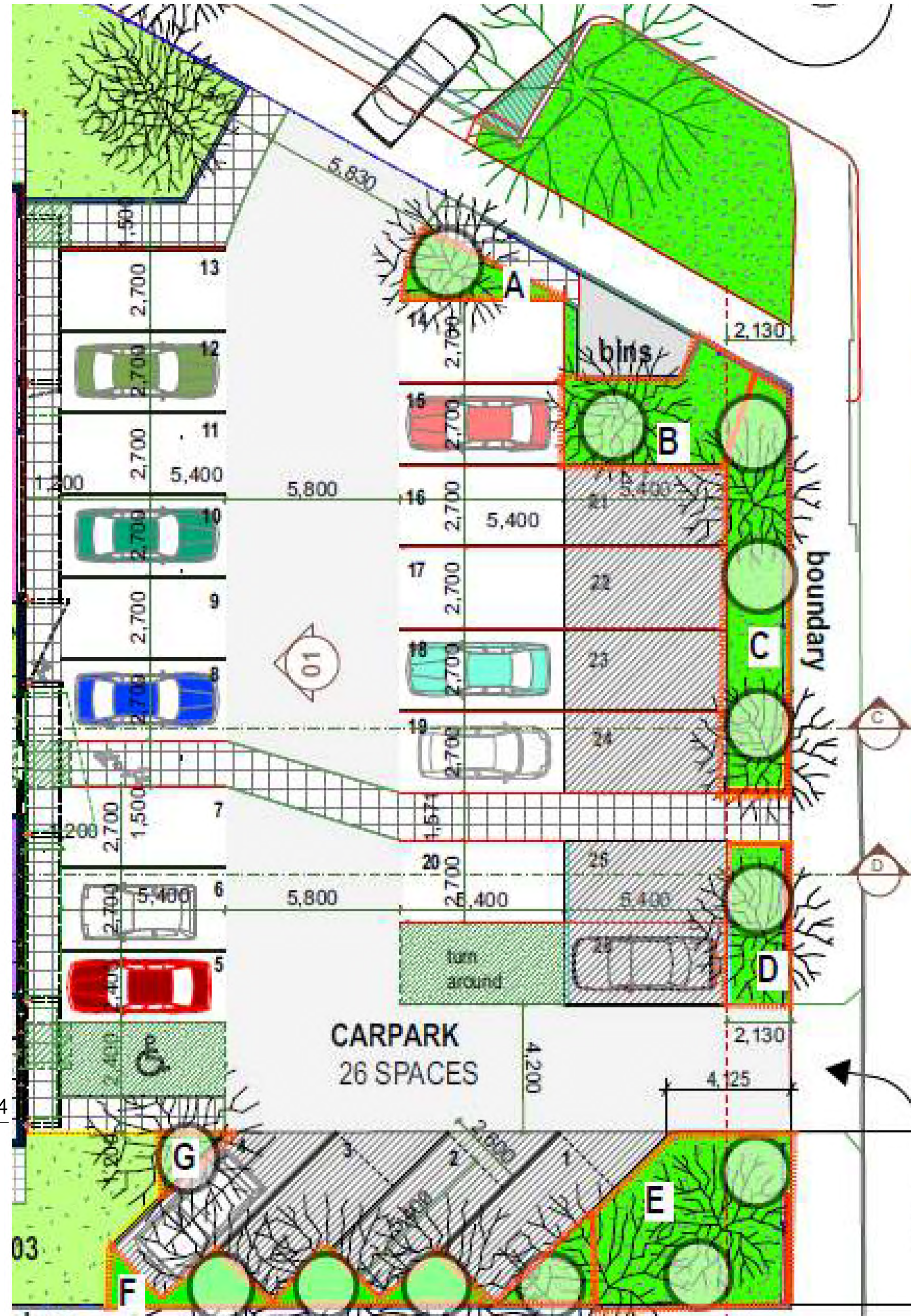
DRAWING TITLE: Sections
SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCEPT DRWG NO: DA 08

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG

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level 2/16 45 Greville Street
marie street PRAHRAN vic 3181
MILTON qld 4069
+61 416254745

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PLANTER A		
TREES	EL	Eucalyptus Euky Dwarf
	HL	Pincushion Hakea
SHRUBS	WG	Westringia 'Grey Box'
GROUNDCOVERS	YB	Yellow Buttons
PLANTER B		
TREES	EL	Eucalyptus Euky Dwarf
SHRUBS	WB	Albany Wooly Bush
GROUNDCOVERS	YB	Yellow Buttons
	NP	Native Pigface
PLANTER C		
TREES	CM	(Pink) Crepe myrtle
SHRUBS	WG	Westringia 'Grey Box'
GROUNDCOVERS	MPf	Myoporum Parvifolium (fine leaf)
PLANTER D		
TREES	CM	(Pink) Crepe myrtle
SHRUBS	WG	Westringia 'Grey Box'
GROUNDCOVERS	MPf	Myoporum Parvifolium (fine leaf)
PLANTER E		
TREES	CM	(Pink) Crepe myrtle
	EL	Eucalyptus Euky Dwarf
SHRUBS	WG	Westringia 'Grey Box'
	WB	Albany Wooly Bush
GROUNDCOVERS	MPf	Myoporum Parvifolium (fine leaf)
PLANTER F		
TREES	EL	Eucalyptus Euky Dwarf
GROUNDCOVERS	NP	Native Pigface
PLANTER G		
TREES	CM	(Pink) Crepe myrtle
GROUNDCOVERS	YB	Yellow Buttons



TREES			
	EL	Eucalyptus Leucoxydon 'Euky Dwarf'	
	LS	Lagerstroemia 'Sioux' or 'Biloxi' (Pink) Crepe myrtle	
	HL	Hakea Laurina Pincushion Hakea	
SHRUBS			
	WB	Adenanthos Sericeus Albany Wooly Bush	
	WF	Westringia fruticosa 'Grey Box' Coastal Rosemary	
GROUNDCOVERS			
		Myoporum Parvifolium Fine Leaf form	
		Chrysocephalum apiculatum Yellow Buttons Prostrate everlasting	
		Pale Fanflower Scaevola albidia	
		Native Pigface Carpobrotus rossii	

PLANT SCHEDULE FULLARTON CHILD CARE CENTRE 210904

PLANT SCHEDULE FULLARTON CHILD CARE CENTRE 210904

PLANT SELECTIONS FULLARTON CHILD CARE CENTRE 210904

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ISSUE	AMENDMENT	DATE	CLIENT	DRAWING TITLE:
G	Amended Car Park	20.07.21	ACCORD PROPERTY	Landscape
H	Car Park Revised Elevations	23.07.21	PROJECT:	
I	Elevations	06.07.21	Fullarton Child Care Centre	
J	Various amendments Car Park & Elevations	25.08.21	196 Glen Osmond Road	
K	Boundary adjustment & way exit width	27.08.21	FULLARTON South	
L	DEVELOPMENT APPROVAL ISSUE	30.08.21	Australia 5063	

SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCEPT DRAWING NO: DA-08

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MILTON qld 4069
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View to Entry from Car Park



View to Entry from Car Park



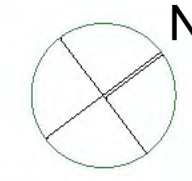
View to Entry from Car Park



Play Ground View form SW corner

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L	DEVELOPMENT APPROVAL ISSUE	30.08.21

CLIENT:
ACCORD PROPERTY
PROJECT:
Fullarton Child Care Centre
196 Glen Osmond Road
FULLARTON South
Australia 5063

DRAWING TITLE:
3D Images - Various views
SCALE: 1:1 DATE: 01/06/21
PROJECT NO: CONCEPT DRWG NO: DA 10

ALL LEVELS (RL'S) TO AHD. REF TO SURVEYOR'S DWG
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28 October 2021

REF No.: 01071-003

City of Unley
PO Box 1
UNLEY SA 5061

Attention: Chelsea Spangler – Planning Officer

By Plan SA Portal and Email: cspangler@unley.sa.gov.au

Dear Chelsea,

**RE: RESPONSE TO COUNCIL REQUEST FOR FURTHER INFORMATION –
CHILDCARE CENTRE – 1A GLADSTONE STREET AND 196 GLEN OSMOND ROAD,
FULLARTON (APPLICATION ID 21027177)**

We refer to your correspondence dated 28 September 2021 in relation to the proposed childcare centre at 1A Gladstone Street and 196 Glen Osmond Road, Fullarton which sought further details on the following:

- **Street Trees**
 - » Confirmation in writing that the applicant accepts the cost of removal of the two (2) street trees;
- **Regulated Trees**
 - » Recommend that the property boundary along the Gladstone Street frontage is delineated without a fence or only a light weight fence with minimal footings to ensure the longevity of the Regulated Lemon Scented Gum;
 - » Relocate the bin pad outside of the Tree Protection Zone; and
 - » The northern wing of the proposed Gladstone Street cross-over is shifted at least 2m west of the existing traffic protuberance.
- **Waste**
 - » Detail how waste is to be collected outside of the proposed centre’s operating hours and within Council’s guidelines of 7am to 7pm Monday to Saturday.
- **Stormwater**
 - » Provision of background stormwater calculations be provided to ascertain how the proposed stormwater infrastructure has been determined, including pre-development and post-development calculations/discharge rates and filtration system details;

Def: E-KIS-TICS [noun] : The Science of Human Settlements ...

Level 1/16 Vardon Ave, Adelaide SA 5000 p 08 7231 0286 e contact@ekistics.com.au w ekistics.com.au ABN 39 167 228 944

- **Traffic**
 - » Request plan be amended to include appropriate signage/line marking details;
 - » Update plans to provide for full pedestrian site triangles particularly at the Gladstone crossover;
 - » Updated traffic report be provided that includes:
 - Traffic generation rates including updated SIDRA assessment;
 - Assessment of the potential for no right turns into or out of Gladstone Street at Fullarton Road;
 - Information on traffic generation split between Glen Osmond Road and Gladstone Street.

- **Landscaping**
 - » Request further details on the surface of outdoor play spaces, particularly the amount of soft landscaping be provided in each area.

Pursuant to Part 7, Division 4 clause 119(9) of the *Planning, Development and Infrastructure Act 2016* (PDI Act) and on behalf of the Applicant, this letter provides a formal response to those matters raised above.

This letter should be read in conjunction with our original Planning Statement (July 2021).

In further support of our collated response, the following documents are provided as appendices to this letter:

- **Appendix 1:** Amended site plan prepared by Redshed Architects
- **Appendix 2:** Addendum to Arborist report prepared by Project Green
- **Appendix 3:** Revised Civil Plans and calculations prepared by Sagero
- **Appendix 4:** Revised traffic report prepared by CIRQA

The content of these plans and advice will be discussed within the body of this letter under relevant topic headings.

1. Street Trees

The applicant confirms that it will pay the cost associated with the two (2) street tree removal, loss of amenity and tree replacement to Council at a total value of \$5,921.05 + GST and does not object to a condition imposed on any Planning Consent to this effect.

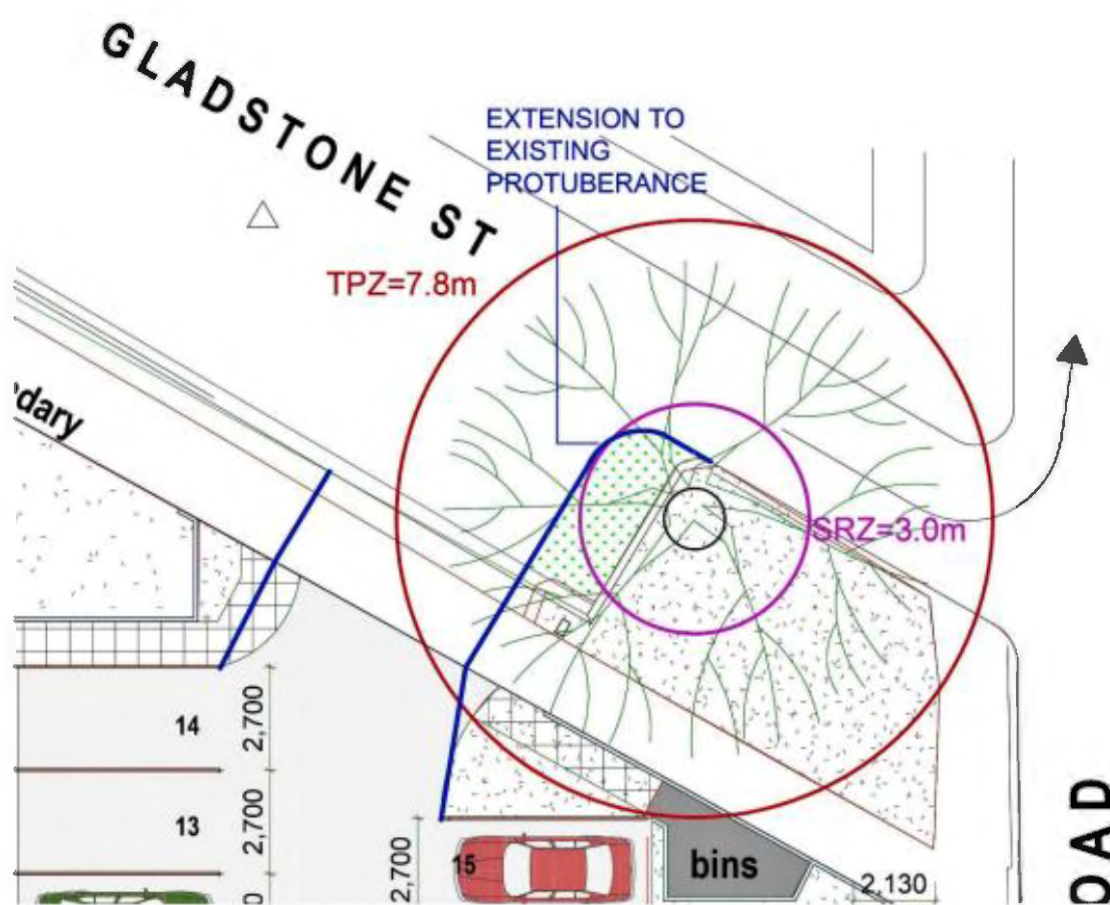
2. Regulated Trees

Fencing along the Gladstone Street frontage within the Tree Protection Zone (TPZ) has been amended to a 1.8 palisade fence (with minimal footings) (Refer to **Appendix 1**). Similarly, the bin storage pad has been located further towards the Glen Osmond Road frontage, outside of the TPZ.

Project Green have reviewed the Gladstone Street cross-over in relation to its location from the Regulated Lemon Scented Gum (refer to **Appendix 2**) and have advised extension of the existing protuberance is considered be the most effective way to protect the main body of exposed tree roots from further damage by increased vehicle movements. Project Green have provided a design option depicted in **Figure 2.1** below, which involves:

- Extending the existing protuberance approx. 2m to the west;
- Incorporating a new mulched garden bed in the extension; and
- Incorporating the structural root zone (SRZ) of the tree and the 'zone of rapid taper' where larger diameter roots are disrupting the existing pavement.

Figure 2.1 Project Green Design Option to extent Protuberance



The proposal, as amended, is therefore considered to satisfy Planning and Design Code ('the Code') Regulated and Significant Tree Overlay PO 2.1 that seeks "Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health."

3. Waste

The proposed hours of operation of the childcare centre are between 6.30am to 6.30pm Monday to Friday. Noting that Council guidelines for commercial waste collection are between 7am to 7pm Monday to Saturday we confirm that waste will be collected outside of the childcare opening hours and within Council’s guideline hours, most likely to be undertaken on a Saturday. A condition of approval to this effect is anticipated by the applicant.

4. Stormwater

A revised civil plan and associated calculations have been provided by Sagero within **Appendix 3**. These details include:

- Inclusion of a 3,000 litre rain water tank connected to the inside toilets to be located adjoining the eastern façade within outdoor play area 3. Overflow from the rainwater tank is to be directed into a graded inlet pit then into the site’s overall stormwater system; and
- Inclusion of a 23m³ stormwater detention system with a discharge rate of 20 litres per second to the street water table;

5. Traffic

The site plan has been updated (contained with **Appendix 1**) to include:

- Pedestrian sight triangles noted at the Gladstone access point as per requirements of AS/NZS 2890.1:2004;
- Signage/markings for:
 - » Staff carparking located along the Glen Osmond Road frontage and eastern (side) angled parking bays;
 - » ‘no entry’ signage for vehicle egress to Glen Osmond Road; and
 - » ‘Disabled parking only’ signage on the building wall where fronting the disabled parking space;

CIRQA has reviewed Council’s traffic officer’s comments in relation to the proposal and has provided a response (refer to **Appendix 4**). In relation to the traffic generation and access, CIRQA advise:

- The childcare centre has been designed based upon the requirements of ‘user class three (3)’ for which AS/NZS 2890.1:2004 lists example land uses in this category of “short-term city and town centre parking, parking stations, hospital and medical centres”. The dimensional requirements for 90-degree User Class 3 spaces identified by AS/NZS 2890.1:2004 (2.6 m wide, 5.4 m long with an adjacent 5.8 m wide aisle) are therefore satisfied;
- The proposed development will provide 2.7 m parking spaces (akin to User Class 3A) in order to provide additional space for door opening associated with children entering and exiting vehicles. The

additional parking space width would also improve accessibility for vehicles entering/exiting the parking spaces, similar to how a widened aisle (above the 5.8 m minimum identified by AS/NZS 2890.1:2004) would improve manoeuvrability for a 2.6 m wide parking space. On this basis, the proposed dimensions of the parking area are considered more than adequate to provide appropriate manoeuvrability and accessibility for visitors to the site;

- The Department for Infrastructure and Transport (DIT) have advised that a 2.13 m wide MARWP requirement is applicable to the Glen Osmond Road frontage, as well as a 4.5 m by 4.5 m corner cut-off adjacent the Glen Osmond Road/Gladstone Street intersection. Widening the aisle would therefore result in parking spaces encroaching into the MARWP requirement;
- The RTA Guide identifies the peak periods as from 7:00 am to 9:00 am, and from 4:00 pm to 6:00 pm. As the traffic generation specified by the RTA Guide occurs over a two-hour period, CIRQA's report has been assumed that 60% of the peak period movements would occur during the peak hour. The traffic generation rates identified in CIRQA's report are therefore considered appropriate for assessment of the peak hour traffic generation associated with a child care centre (50 am and 42 pm peak hour trips are forecast to be associated with the proposed development);
- Council previously advised that due to the upgrade of the Fullarton Road/Glen Osmond Road intersection, existing right turn movements may redistribute vehicles to Glen Osmond Road via Gladstone Street (as right turns onto Glen Osmond Road (east) from Fullarton Road (south) will be banned). The traffic assessment undertaken was prepared on the basis of Council's advice;
- CIRQA's traffic assessment did not distribute egress movements associated with the proposal onto Fullarton Road via a right turn from Gladstone Street due to the difficulty of the movement during peak periods. The prohibition of such movements would therefore not impact upon egress movements associated with the proposed development; and
- With regard to ingress, should right turn movements from Fullarton Road into Gladstone Street be prohibited, vehicle movements would likely be redistributed via Florence Street, Martens Avenue and Glen Osmond Road in order to access the subject site. The seven (7) am and six (6) pm peak hour movements would be readily accommodated on Florence Street, Martens Avenue, Glen Osmond Road, their associated intersections, and at the site's access point with negligible impact (noting the very low number of peak hour movements forecast to utilise this route).

6. Landscaping

At this stage, outdoor play areas have not been fully designed and will typically occur in consultation the operator during the detailed design phase prior to Building Consent. The outdoor play spaces will typically incorporate a range of landscaping, soft and hard surfaces and play equipment. The applicant acknowledges Council's desire to enhance an urban tree canopy and reduce heat loads and recommends that a detailed plan for the three (3) outdoor play spaces be provided as part of a reserved matter to the satisfaction of Council prior to Development Approval.

7. Conclusion

This letter seeks to provide a response to the issues raised and further information requested by Council.

The key issues raised including traffic movements, on-site carparking, health of the Regulated Street Tree, fencing, stormwater details and landscaping have been addressed.

Thank you for the opportunity to respond and we trust this submission offers a constructive response to the matters raised.

Please contact me on (08) 7231 0286 should you have any queries in relation to this development application.

Yours Sincerely,



Zoë Garnaut
Associate

ekistics

PLANNING STATEMENT

196 Glen Osmond Road &
1A Gladstone Street,
Fullarton

Childcare Centre

Prepared for:
Development Holdings Pty Ltd

Date:
7 September 2021

ekistics
247

Proprietary Information Statement

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Document Control

Revision	Description	Author	Date
V1	Draft Planning Statement	ZG	13 July 2021
V2	Draft Planning Statement	CKP	4 August 2021

Approved by: CKP

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1. Executive Summary

Category	Details						
PROJECT	Childcare centre						
ADDRESS OF SITE	196 Glen Osmond Road and 1A Gladstone Street, Fullarton						
CERTIFICATES OF TITLE	<ul style="list-style-type: none"> • Certificate of Title Volume 5220 Folio 650 (Allotment 268 in Filed Plan 15150); and • Certificate of Title Volume 5494 Folio 46 (Allotment 269 in Filed Plan 15150). 						
ALLOTMENT AREA	<ul style="list-style-type: none"> • Approx. 2,263m² 						
ALLOTMENT FRONTAGE	<ul style="list-style-type: none"> • Approx. 30m along Glen Osmond Road • Approx. 35m along Gladstone Street 						
LOCAL GOVERNMENT	City of Unley						
RELEVANT AUTHORITY	City of Unley Council Assessment Panel						
PLANNING & DESIGN CODE	Version 2021.12 (26 August 2021)						
ZONE	Business Neighbourhood Zone						
SUBZONE	N/A						
OVERLAYS	<ul style="list-style-type: none"> • Airport Building Heights (Regulated) – All structures over 45 metres Overlay • Future Road Widening Overlay • Major Urban Transport Routes Overlay • Prescribed Wells Area Overlay • Regulated and Significant Tree Overlay • Traffic Generating Development Overlay 						
TECHNICAL & NUMERIC VARIATIONS (TNVs)	<ul style="list-style-type: none"> • Maximum Building Height (Metres) – 9 metres • Maximum Building Height (Levels) – 2 levels 						
EXISTING USE	Single storey detached dwellings with ancillary outbuildings						
PROPOSAL DESCRIPTION	Construction of a two storey childcare centre (pre-school), and ancillary car parking, landscaping, fencing, retaining walls and six (6) signage displays.						
CLASSIFICATION OF DEVELOPMENT	<table border="0"> <tr> <td><i>Pre-school</i></td> <td>Performance Assessed</td> </tr> <tr> <td><i>Advertising signage</i></td> <td>Performance Assessed</td> </tr> <tr> <td><i>Retaining walls and fencing</i></td> <td>Performance Assessed</td> </tr> </table>	<i>Pre-school</i>	Performance Assessed	<i>Advertising signage</i>	Performance Assessed	<i>Retaining walls and fencing</i>	Performance Assessed
<i>Pre-school</i>	Performance Assessed						
<i>Advertising signage</i>	Performance Assessed						
<i>Retaining walls and fencing</i>	Performance Assessed						
PUBLIC NOTIFICATION	Pre-School Requires notice						

	Advertising displays (signs) Retaining wall and Fence, Outbuilding (storage sheds) and Verandahs	<i>Exempt</i> from notice under table 5 clause 3 of the Business Neighbourhood Zone
APPLICANT	Development Holdings Pty Ltd	
CONTACT PERSON	Zoë Garnaut – Ekistics Planning and Design – (08) 7231 0286	
OUR REFERENCE	01071-002	

2. Introduction

This planning statement has been prepared in support of an application by Development Holdings Pty Ltd to construct a two (2) storey childcare centre (pre-school) with associated car parking, landscaping, fencing, civil works (including retaining walls), and six (6) signage displays. The address of the subject site is 196 Glen Osmond Road and 1A Gladstone Street, Fullarton.

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 the Planning & Design Code (Version 2021.12 – dated 26 August 2021).

This planning statement has been prepared on the basis of the plans, elevations and supporting documentation summarised below:

- **Appendix 1:** Certificates of Titles
- **Appendix 2:** Site plans, floor plans, elevations, landscaping and section plans – Red Shed Architects
- **Appendix 3:** Stormwater Management Plan and Report - Sagero
- **Appendix 4:** Traffic and Parking Report - CIRQA Consulting
- **Appendix 5:** Environmental Noise Assessment - SONUS Consulting
- **Appendix 6:** Preliminary Site Investigation – Land & Water Consulting
- **Appendix 7:** Arboricultural Assessment – Project Green

It should be noted that Development Approval has been granted by the City of Unley on 7 August 2020 for the division of the southern (rear) portion of 196 Glen Osmond Road and 1A Gladstone Street to create three (3) allotments from two (2) (DA 090/115/2020/DIV – 090/D003/20). This approval is still current however the plan of division has not yet been deposited.

Development Plan consent has also been granted for the construction of four (4) two storey dwellings at the rear (southern portion of above land division application) of 196 Glen Osmond Road, with access to be gained to the dwellings via a common driveway located to the south of 1A Gladstone Street (DA 775/2019/C2). This planning consent is still current.

3. The Site and Locality

3.1 The Site

The subject site is illustrated in Figure 3.1, whilst images of the site and its street frontages to Glen Osmond Road and Gladstone Street are displayed in Figures 3.2 and 3.3 respectively.

The subject land is located at 196 Glen Osmond Road and 1A Gladstone Street Fullarton and is more particularly described as Certificate of Title Volume 5220 Folio 650 and Certificate of Title Volume 5494 Folio 46 (refer to **Appendix 1**). There are no easements or encumbrances affecting the subject allotments.

The subject land for the childcare centre is 2,246m² with a primary street frontage to Glen Osmond Road in the order of 30m and a secondary street frontage to Gladstone Street of approx. 35m.

The subject site comprises a regular and an irregular shaped allotment, together containing two (2) single storey detached dwellings with ancillary outbuildings. The site has an existing crossover located on Glen Osmond Road close to the intersection of Gladstone Street, with a second cross-over located on Gladstone Street adjoining the boundary of 1 Gladstone Street to the south-west. There is 'no entry' from Fullarton Road to Gladstone Street. The verge adjoining the site along Gladstone Street is signalled as 'exit only' from Gladstone Street.

Whilst there are seven (7) trees located within the subject site, all of the trees are located within 10 meters of an existing dwelling and are not *Agonis flexuosa* (Willow Myrtle) or *Eucalyptus* species. These trees are therefore neither Regulated or Significant pursuant to regulation 3F(4)(a) of the *Planning Development and Infrastructure (General) Regulations 2017*.

There are currently eight (8) trees located within the road reserves bordering the site, with one (1) Regulated *Corymbia maculata* (Spotted Gum) located within the verge adjoining the site on Gladstone Street. The north-eastern most tree on Glen Osmond Road is proposed to be removed in order to accommodate a new dual width access point into the site. Similarly, a small tree is proposed to be removed on Gladstone Street to accommodate an access point from the site (refer to **Appendix 7** for Project Green Tree Assessment).

The site is relatively flat with a slight slope of 500mm to 1.3m from the east to the south-west towards Gladstone Street. There is an existing concrete block retaining wall along the eastern boundary approx..200mm-600mm in height.

Figure 3.1 Subject site



Figure 3.2 Images of the subject site



View to the subject site along Glen Osmond Rad; facing south-east



View facing south-east within subject site to rear of dwellings



View of the existing dwelling at 196 Glen Osmond Road facing south-east from Glen Osmond Road.



View to subject site; facing north-east from Gladstone Street.



View facing east within subject site to rear of dwellings



View facing south-east within subject site to rear of dwellings



View facing south- west within subject site to rear of dwellings



View of existing dwelling at 1A Gladstone Street facing east on Gladstone Street



View of existing dwelling at 1A Gladstone Street facing south- east on Gladstone Street

3.2 The Locality and Surrounding Development

The immediate locality fronting Glen Osmond Road, within the Business Neighbourhood Zone, predominantly comprises a mix of commercial land uses. Immediately adjoining the site to the east at 198 Glen Osmond Road is a two (2) storey motel. The motel has its car parking area, including drive-through check-in carport area and fencing, located along the boundary of the subject site. The two-storey built form containing the accommodation portion of the motel is located along the motel's eastern (side) boundary. An outdoor swimming pool and reception area for the motel are located along the Glen Osmond Road frontage.

Adjoining the site to the west, on the opposite side of Gladstone Street, is Bressington Prestige Motors, a second hand car dealership. The car dealership includes an open car lot on the north-western corner of Gladstone Street and Glen Osmond Road. A two-storey display room, offices and workshop are located on the Glen Osmond Road frontage and extent to the rear of the car dealership site along its south-western boundary and the Gladstone Street frontage.

Other commercial properties in the immediate locality include:

- McDonalds fast food restaurant (217 Glen Osmond Road);
- Frewville Motor Inn (205 Glen Osmond Road);
- Scouts SA office headquarters (213 Glen Osmond Road);
- Coccobello Italian restaurant (211 Glen Osmond Road);
- Hispanic Mechanic Latin American restaurant (207-209 Glen Osmond Road);
- Singapore House Asian restaurant (203 Glen Osmond Road);
- Two storey multi-tenancy office and consulting centre with under-croft car parking, being The Fullarton Centre (202-208 Glen Osmond Road);
- Cancer Care Centre (195 Glen Osmond Road);
- Laundromat and security systems shop (193 Glen Osmond Road); and
- Pagoda Chinese restaurant (189 Glen Osmond Road).

Further to the west along Glen Osmond Road, within the Suburban Activity Centre, on the corner of Glen Osmond Road and Fullarton Road is located the Foodland Shopping Centre (on the northern side) and the Arkaba Shopping Centre and Hotel (on the southern side). Both shopping centres include supermarkets and numerous speciality shops. The Arkaba Shopping Centre carpark extends to the Gladstone Street frontage, approx. 120m west of the subject site.

A clearway exists on Glen Osmond Road adjoining the subject site from 7am to 10am Monday to Friday. A 'no standing' area exists from the crossover for 196 Glen Osmond Road to the Gladstone Street intersection. On-street parking on Glen Osmond Road is available east of the 'no-standing' area and outside of clearway times.

Residential properties are predominantly contained within the General Neighbourhood Zone to the south and west of the site along Gladstone Street. A three (3) storey residential flat building is located to the south-west of the site at 2-4 Gladstone Street. The remainder of dwellings within Gladstone Street are generally low-density detached or semi-detached dwellings with single storey street frontages and second storey elements setback from the main façade. Dwellings on the southern side of Gladstone Street are generally comprised of hipped or gabled Colorbond® roof forms with a front verandah element (predominately bullnosed). Their construction is predominantly of stone and brick and appear to be circa 1920's era with neutral colour palettes. Gladstone Street dwellings have a range of fencing styles and heights, including low- open style traditional fencing and taller brush-fencing. Fencing forward of the residential flat building comprises approx. 1.8m high rendered brick fencing painted in a cream colour.

There are no State or Local Heritage Places nor Representative Buildings within the immediate locality.

The residential character of Gladstone Street is considered to be of a high amenity value enhanced by well-maintained landscaped front yards and verge plantings.

There are a number of parking controls currently in place along Gladstone Street, as follows:

- 'no standing' yellow line opposite the site on the north-western side of Gladstone Street, between the Glen Osmond Road intersection past the access for the residential flat building;
- ¼ hour parking at all times adjoining subject site on the south-eastern side of Gladstone Street, between the Glen Osmond Road intersection to 11 Gladstone Street;
- ¼ hour parking at all times on the north-western side of Gladstone Street, between the residential flat building to 12 Gladstone Street;
- 2 hour parking limit from 9am to 5pm Monday to Friday on the south-eastern side of Gladstone Street, between 11 Gladstone Street to Fullarton Road; and
- 4 hour parking limited from 9am to 5pm Monday to Friday on the north-western side of Gladstone Street, between 12 Gladstone Street to Fullarton Road.

Images of the locality as well as a map showing surrounding land uses are provided in **Figure 3.3** and **Figure 3.4** on the following pages.

Figure 3.3 Images of the locality



Adjoining residential flat building looking east on Glen Osmond Road



Adjoining 'Bressington Prestige' motor car sales yard and motor repair station looking north-west on the corner of Gladstone Street and Glen Osmond Road



Residential flat building check-in drive through canopy and wall on boundary with carparking adjoining subject site



Commercial sites within locality along Glen Osmond Road looking east



'Frewville Motor Inn' located on the northern side of Glen Osmond Road opposite the subject site.



'Elm Tree Lodge' three storey residential flat building looking north-west along Gladstone Street



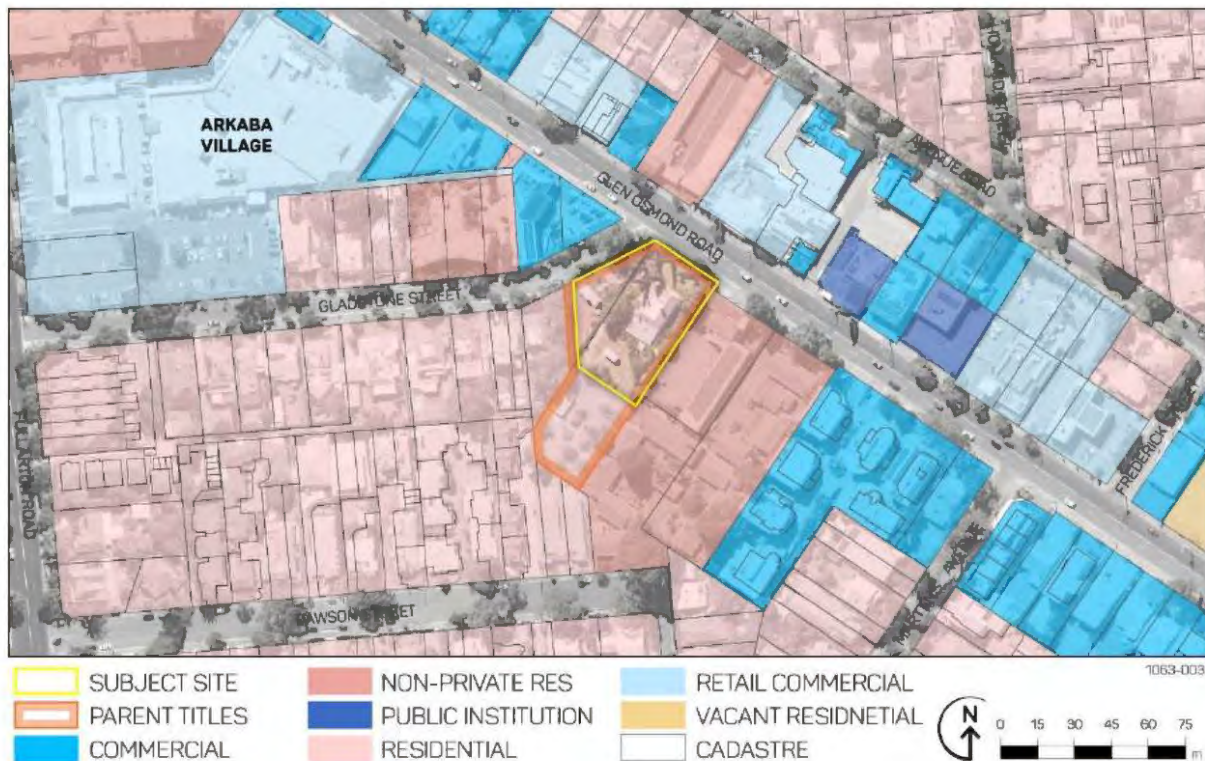
Residential properties looking south-east on Gladstone Street



Residential dwellings on the south-eastern side of Gladstone looking north towards subject site.

(Source Google Street view: August 2020)

Figure 3.4 Land Uses within the locality



4. Proposed Development

4.1 Land Use

The proposed development involves construction of a two-storey childcare centre with associated car parking on a 2,246m² site. A childcare centre fits within the definition of a ‘Pre-school’, as defined in Part 7 Land Use Definitions of the Planning & Design Code:

***Pre-school** means a place primarily for the care or instruction of children of less than primary school age not resident on the site. Including the following land uses:*

- » Childcare centre
- » Early learning centre
- » Kindergarten
- » Nursery.

[Our emphasis]

The proposed childcare centre comprises a total floor area of 602m², an outdoor play area of 729m², landscaping and ancillary car parking area with 26 car parking spaces. These components are all considered to fall under the ‘pre-school’ element.

Other key elements of the proposal include boundary fencing (including acoustic treatment), retaining walls and six (6) signage displays.

4.1.1 Operational Aspects

The proposed childcare centre will operate as follows:

- The childcare centre will operate from 6.30am until 6.30pm Monday to Friday (excluding public holidays);
- The childcare centre will have a maximum of 103 children on site at one time; and
- The childcare centre will have children aged 0-5 along with a range of internal spaces which support the functioning of the centre including a kitchen, offices, amenities and staffrooms.

4.2 Built Form

Red Shed Architects have prepared all plans and drawings for the proposal, including site plans, elevations and perspectives (refer to **Appendix 2**).

The proposed childcare centre has been designed as a two-storey building with the second storey largely contained within the roof space. There are three (3) separate outdoor play spaces proposed (one to the eastern side of the building, one to the rear of the building and the other to the western side of the building adjoining Gladstone Street).

The proposed building will have a maximum height of 6.2m, measured from ground level to the highest point, located close to the centre of the site. The building will have a floor to ceiling height of 2.9m. The site falls from the east to the-west by approx. 500mm to 1300mm.

The childcare centre building will include the following minimum setbacks from the boundaries:

- Front (Glen Osmond Road) boundary approx. 25m;
- Rear (south-western) boundary – 11m;
- Side (eastern) boundary – 5m; and
- Side (north-western) boundary - 5m from adjoining driveway and 6.4m from Gladstone Street at the closest point.

The proposed childcare centre will be primarily constructed of the following materials and colours:

- Brickwork in ‘whisper white austral’;
- Standing seam cladding in ‘windspray’ Colorbond®;
- Wall sheeting in ‘windspray’ Colorbond® Mini Orb;
- Roof sheeting in ‘surfmist’ Colorbond®;
- Feature round windows and glass film to match Guardian colours; and
- Powder coated aluminium doors and windows in ‘Anodic Slate Grey’.

The waste area is to be enclosed within a secure, 1.8m brickwork fence in ‘whisper white austral’ colour. It is proposed within the north-western corner of the car parking area and landscaping is proposed to screen it from the Glen Osmond Road frontage.

Both the architectural form, scale and siting respect the existing low density residential character of the residential and commercial properties in the immediate locality.

4.3 Transport, Parking and Access

CIRQA have undertaken a detailed traffic and parking assessment to confirm that the proposed access/egress, vehicle manoeuvring, parking arrangements and waste management are feasible, safe and achieve the relevant Australian Standards (refer to **Appendix 4**). This 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;
- Transport impact of the development proposal on the surrounding road network; and
- Proposed waste management.

4.3.1 Access/Egress

Primary vehicle ingress to the childcare centre is proposed closer to the eastern side boundary on Glen Osmond Road. This crossover has a width of 4.2m and will incorporate appropriate signage and line marking to provide advice to drivers that egress to Glen Osmond Road from this access point is not accommodated.

A secondary two-way access to the childcare centre is proposed on the Gladstone Street frontage. Simultaneous turning movements will be accommodated at this access.

CIRQA has confirmed that the location of the access point is in accordance with 'Australian/New Zealand Standards for Off-Street Parking Facilities' 2004.

4.3.2 Parking

A total of 26 at-grade car parking spaces are proposed, together with landscaping around the perimeter. Parking for people with disabilities has been provided at the eastern end of the car parking bay fronting the childcare centre. There are nine (9) dedicated staff car parking spaces located adjoining the Glen Osmond Road frontage and within the angled parking bays adjoining the eastern side boundary of the site.

The parking layout has been reviewed by CIRQA who have confirmed that it has been designed in accordance with the relevant Australian Standard Australian/New Zealand Standards, being *Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)* and *Parking Facilities Part 6: Off-street parking for people with disabilities (AS/NZS 2890.6:2009)*.

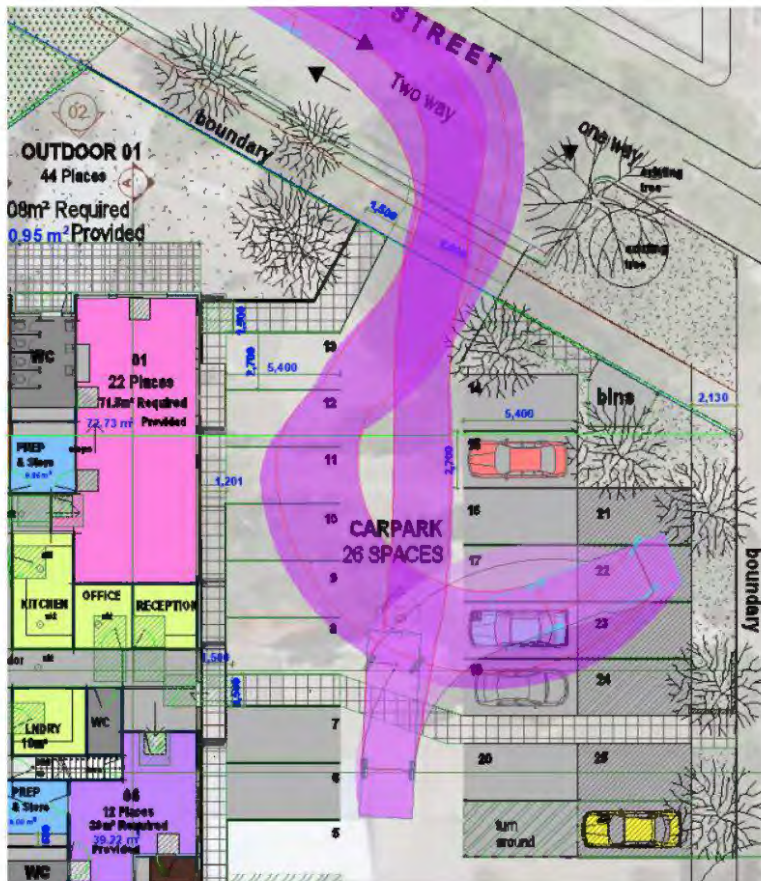
4.3.3 Waste Management

Refuse contractors will park on site, with waste contractors removing the bins from the designated refuse area located at the north-western corner of the car park. Collection would occur on an as needs basis (typically twice

per week), outside of peak traffic and operating times. The collection process typically takes 5 minutes. CIRQA have confirmed the car parking layout is suitable for an 8.8m long medium rigid vehicle.

Figure 4.1 demonstrates the turning movements of the waste truck and the location of the proposed on-street loading zone.

Figure 4.1 Refuse collection vehicle turn path and proposed part-time loading zone (c/- Cirqa)



4.3.4 Pedestrian and Cycling Accessibility

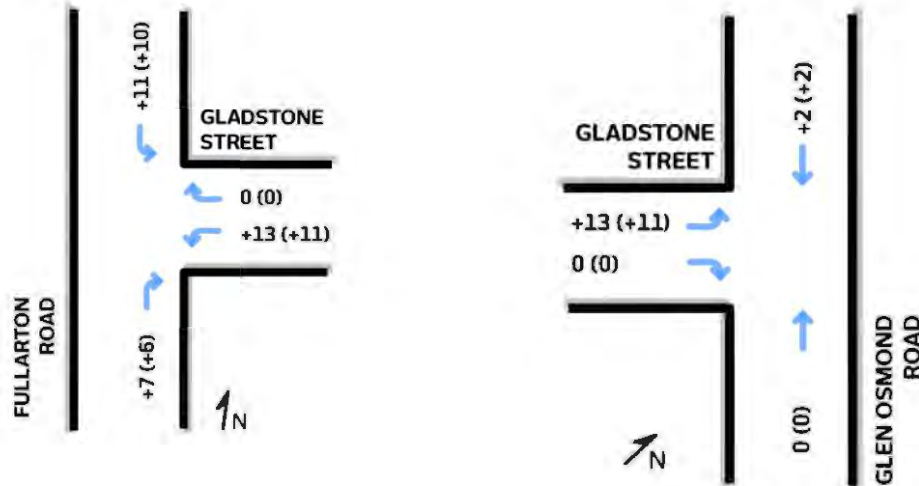
Sealed footpaths are provided on both sides of Glen Osmond Road and on both sides of Gladstone Street. A signalised pedestrian crossing is located within 200m of the site to the west near the Arkaba Shopping Centre and Hotel and the Frewville Shopping Centre. The proposal has been designed to accommodate the safe movement of pedestrians. Pathway will provide access from both the Glen Osmond Road and Gladstone Street frontages for families and staff that are walking or using public transport. Cyclists are able to share footpaths with pedestrians or ride on-street sharing the road with motorists.

4.3.5 Traffic Generation

CIRQA have undertaken an analysis of likely peak period trip generation for the childcare centre. It is anticipated that the centre will generate in the order of 50 am and 44pm peak hour trips. Figure 4.2 below indicates the predicted vehicle movements likely to be generated by the centre. This has also taken into consideration the

current upgrades to the Fullarton/Glen Osmond Road intersection which will restrict right hand turn movements from Fullarton Road to Glen Osmond Road.

Figure 4.2 CIRQA Anticipated additional movements generated by childcare centre and surrounding intersection modifications.



CIRQA has undertaken SIDRA modelling of the movements in the surrounding street networks and advises that all movements will operate within the existing capacity of the street network, with no modifications or upgrades required.

4.4 Site Works & Stormwater Management

Sagero have been engaged to prepare a stormwater management plan and report for the proposed development (refer to **Appendix 3**).

The existing site falls approx. 500mm to 1.3m from the east to the west towards Gladstone Street. The proposal has been designed to minimise earthworks where possible. The maximum height of retaining walls will be 1.4m (retaining excavation) decreasing down to a modest height of 0.3m (retaining fill). The retaining walls are all located internal to the site.

The FFL of the building (67.79) is higher than the street water table levels in both Gladstone Street and Glen Osmond Road. All surface and roof water will be collected and directed either towards a grated inlet pit or a junction pit and then detained within a detention tank with a capacity of 23m³. The detained water will then be discharged to the street water table on Glen Osmond Road at a discharge rate of 20L per second.

Post development flow rates will comply with Council detention requirements.

4.5 Fencing

The proposed new fencing has been informed by the childcare centre’s operational needs (including secured play spaces), acoustic performance and management of noise transfer and streetscape appearance.

Sonus acoustic engineers have reviewed the site and surrounding locality and provide advice contained within **Appendix 5**. The Sonus report outlines that in order to achieve the *Environment Protection (Noise) Policy 2007*, fencing treatments are proposed as follows:

- Fencing height of 1.8m adjoining the car park along a portion of the eastern side boundary and to the western end of the parking area adjoining ‘Outdoor Play Area 01;’
- Combined retaining wall and fencing to a height of 2.4m for a portion of the eastern side and southern rear boundaries;
- Combined retaining wall and fencing to a height of 2.7m for a portion of the eastern side boundary and north-western boundary (abutting the four, two-storey dwellings to be constructed as part of development application DA 775/2019/C2);
- Fencing is to be constructed from a material such as 0.42BMT sheet steel (such as Colorbond® or a material with equivalent or greater density) and ensure all junctions, including between panels and the ground, are sealed airtight.

These forms of acoustic fencing are not uncommon in childcare centres and successfully serves to reduce noise transfer. The acoustic fencing and interface impacts will be discussed further in **Section 6.9** of this report.

Fencing internal to the site around the perimeter of the front outdoor play area will constitute a palisade open style fencing.

4.6 Signage

The application includes business identification fascia signage on either side of the building entry, together with an ‘Guardian Childcare & Education’ signs and ‘G’ logo attached to the masonry brickwork fencing on both the Glen Osmond Road and Gladstone Street frontages. No free standing signs are proposed.

Specific details of each proposed sign is outlined in the Red Shed Architectural drawings located in **Appendix 2**.

5. Procedural Requirements

For the remainder of this statement, the *Planning, Development and Infrastructure Act 2016* will be referred to as the ‘PDI Act’, the *Planning, Development and Infrastructure (General) Regulations 2017* will be referred to as the ‘PDI Regulations’ and the Planning and Design Code will be referred to as the ‘Code’.

5.1 Relevant Authority

The relevant authority to determine the development application is the **City of Unley Council Assessment Panel** pursuant to section 93(1)(a) of the PDI Act.

5.2 Zoning

The subject site is located within the **Business Neighbourhood Zone**. There are no relevant subzones.

5.3 Development Classification

As outlined, the proposal is best described as:

“Construction of a two (2) storey childcare centre (pre-school), with ancillary car parking, landscaping, fencing, retaining walls and six (6) signage displays (advertisements)”

The ‘childcare centre,’ ‘retaining walls,’ ‘fencing’ and ‘advertising’ constitute **‘Performance Assessed’** forms of development and will be assessed on their merits against all Zone and General Development Policies and any relevant Overlay Policies of the Code. The ancillary parking, outdoor play areas and landscaping are considered part of the childcare centre element given that it is required for the land use to function. Therefore, the planning assessment in **Section 6** has assessed these elements against all relevant Code provisions.

Table 3 of the Zone identifies the specific **Performance Outcome** policies (POs) from the Zone, General Development Policies and any relevant Overlays that are to be used to assess ‘advertisements,’ ‘fencing’ and ‘retaining’.

5.4 Overlays

The Overlays listed below are applicable to the subject site and have informed our assessment.

- Affordable Building Heights (Regulated) (*All structures over 45 metres*) Overlay
- Future Road Widening Overlay
- Major Urban Transport Routes Overlay
- Prescribed Wells Area Overlay
- Regulated and Significant Trees Overlay
- Traffic Generating Development Overlay

We are of the opinion that the Prescribed Wells Area Overlay is not relevant to the subject site given the proposal does not proposal any new wells.

5.5 Technical Numeric Variations (TNV’s)

The Technical Numeric Variations (TNV’s) listed below are applicable to the subject site and have informed our assessment.

- Maximum Building Height (Metres) – 9 metres; and
- Maximum Building Height (Levels) – 2 levels.

5.6 General Development Policy

The following five (5) General Development Policy headings were considered most relevant for the proposed development and have been referred to throughout the assessment in **Section 6**.

- Advertising
- Design in Urban Areas
- Interface between Land Uses

- Out of Activity Centre Development
- Transport, Access and Parking

5.7 Public Notification

The pre-school requires **Public Notification**, as it is not listed as ‘excluded’ within Table 5 (Procedural Matters, Notification) of the Business Neighbourhood Zone.

5.8 Agency Referrals

Part 9 of the Code prescribes that a referral to the Environment Protection Authority is required in the following instances:

“Change in the use of land to a more sensitive use on land at which site contamination exists or may exist as a result of one of the following:

- (a) class 1 activity (including where a class 1 activity exists or previously existed on adjacent land)*
- (b) class 2 activity and the proposed use is a sensitive use”*

A Preliminary Site Investigation (PSI) has been undertaken by Land and Water Consulting (LWC) (refer to **Appendix 6**) and has found that:

“The Site has been a sensitive site since records began. No on site PCA nor Class 1, 2 nor 3 were identified. There will be no change in land use sensitivity (residential to Educational premises class 1).

In summary, nine offsite PCAs were identified, however, only motor vehicle repair or maintenance was considered to be low to moderate risk of causing or potentially causing site contamination (via groundwater related vapour movement).

With respect to the definition of site contamination in Section 5B of the Environment Protection Act 1993, there is no indication to suggest that site contamination may be evident with respect to a continued proposed sensitive land use.

With respect to Schedule 2 of Practise Direction 14.... site contamination is unlikely..”

[our emphasis]

The Preliminary Site Investigation performed by LWC, and the accompanying Site Contamination Declaration Form contained within **Appendix 6** confirms that no Potentially Contaminating Activities (PCA’s) nor Class 1,2 or 3 activities have occurred on the subject site. Whilst PCAs were identified within adjacent land, the PSI concludes that these were to be low to moderate risk and no indication to suggest that site contamination may be evident with respect to a proposed sensitive land use. Therefore, the proposed development does not trigger a referral to the Environment Protection Authority.

It is acknowledged that the subject site is located within the Future Road Widening, Traffic Generating Development and Major Urban Transport Route Overlays. **Referral to the Commissioner of Highways** via the

Department for Infrastructure and Transport (DIT) is required under the Major Transport Routes and Future Road Widening Overlay as the proposal:

- creates a new access to and within 25m of the intersection of a State Maintained Road (Glen Osmond Road); and
- is located within a Future Road Widening Area.

6. Code Assessed Development

6.1 Overview

The subject land is located within the **Business Neighbourhood Zone** of the Planning and Design Code Version 2021.12 (26 August 2021). **Figure 6.1** on the following page illustrates the relevant zoning for the site and the surrounding land.

Figure 6.1 Code Zoning



6.2 Zone, Overlays and General Development Policies

The following section provides an assessment of the proposal against the relevant Code Desired Outcomes (DO), Performance Outcomes (PO) and Designated Performance Features (DPF). This assessment is grouped under a series of headings which address specific aspects of the proposed development.

DOs are policies designed to aid the interpretation of a PO by setting a general policy agenda for a zone, subzone, overlay or general development policies module.

POs are policies designed to facilitate assessment according to specified factors, including land use, site dimensions and land division, built form, character and hazard risk minimisation. A DPF provides a guide to a relevant authority as to what is generally considered to satisfy the corresponding performance outcome but does not need to necessarily be satisfied to meet the PO as all development should be assessed on its merits against all relevant policies.

6.3 Land Use

The following DOs and POs within the **Business Neighbourhood Zone** references the zone's anticipated land use goals:

DO 1 *A variety of housing and accommodation types and compatible employment-generating land uses in an environment characterised by primarily low-rise buildings.*

DO 2 *Buildings of a scale and design that complements surrounding built form, streetscapes and local character and provide for landscaping and open space.*

PO 1.3 *Changes in the use of land between similar businesses encourages the efficient reuse of commercial premises and supports continued local access to a range of services compatible to the locality.*

[our emphasis]

The General Development Policies – Out of Activity Centre Development provide guidance in relation to the appropriate of non-residential development located out of a designated 'activity centre' as follows:

PO 1.1 (Out of Activity Centre Development) *Non-residential development outside Activity Centres of a scale and type that does not diminish the role of Activity Centres:*

- (a) as primary locations for shopping, administrative, cultural, entertainment and community services*
- (b) as a focus for regular social and business gatherings*
- (c) in contributing to or maintaining a pattern of development that supports equitable community access to services and facilities.*

PO 1.2 (Out of Activity Centre Development) *Out-of-activity centre non-residential development complements Activity Centres through the provision of services and facilities:*

- (a) that support the needs of local residents and workers, particularly in underserved locations*

(b) at the edge of Activities Centres where they cannot readily be accommodated within an existing Activity Centre to expand the range of services on offer and support the role of the Activity Centre.

The subject site is, in our view, highly suited for a childcare facility for the following reasons:

- The proposed facility will, provide a new long day care option to assist local families and is therefore considered to align with DO 1 and PO 1.3 of the Business Neighbourhood Zone and PO 1.2 of the General Development Policies - Out of Activity Centre Development;
- The proposed facility will complement the surrounding commercial development fronting Glen Osmond Road;
- The site is within close proximity to the Suburban Activity Zone on the intersection of Glen Osmond Road and Fullarton Road, with the childcare centre considered to complement the desired land uses within the Activity Centre of shopping, cultural and entertainment without diminishing its role in the centres hierarchy;
- The site is easily accessible with its primary vehicle access and frontage situated on Glen Osmond Road which includes 'Go Zone Bus Stop 6' Glen Osmond Road, located approx. 115m to the south of the site, which provides the option for public transport for staff and families;
- The subject site is in close proximity to a number of Primary Schools as follows:
 - » Parkside Primary School (within 1.4 kilometers of subject site);
 - » Sunrise Christian School, Fullarton (within 1.5 kilometers of subject site);
 - » Glen Osmond Primary School (within 1.7 kilometers of subject site);
 - » Seymour College (within 2.5 kilometers of subject site); and
 - » Gilles Street Primary School (within 3.3 kilometers of subject site).

This proximity facilitates efficient and convenient child transport to local educational institutions reducing trip times for parents and carers thereby reducing fuel consumption.

In our view, the proposed childcare centre is a suitable land use within the Business Neighbourhood Zone and aligns with the broader intent of land use distribution within the City of Unley. Importantly, the use of this particular site for a childcare centre will support Zone DO 1, DO 2 and PO 1.3.

6.4 Built Form and Character

The following Zone and General Development Policies are relevant to the design, built form and character of buildings:

DO 1 (Business Neighbourhood Zone) *A variety of housing and accommodation types and compatible employment-generating land uses in an environment characterised by primarily low-rise buildings*

DO 2 (Business Neighbourhood Zone) *Buildings of a scale and design that complements surrounding built form, streetscapes and local character and provide for landscaping and open space.*

PO 2.1 (Business Neighbourhood Zone) *Buildings are of a scale and design that complements surrounding built form, streetscapes and local character*

DO 1 (Design in Urban Areas) Development is:

- (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributing to the character of the locality
- (b) durable - fit for purpose, adaptable and long lasting
- (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors
- (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

6.4.1 Siting

The following Zone provisions are relevant to the assessment of the proposed siting and setbacks of the childcare centre and associated structures:

PO 3.2 (Business Neighbourhood Zone) Buildings are set back from primary street boundaries consistent with the existing streetscape

PO 3.3 (Business Neighbourhood Zone) Buildings set back from secondary street boundaries (other than rear laneways) contribute to a consistent streetscape.

DTS/DPF 3.3 (Business Neighbourhood Zone) Building walls are set back from the secondary street frontage:

- (a) the average of any existing buildings on adjoining sites having frontage to the same street
- or
- (b) not less than 900mm where no building exists on an adjoining site.

PO 3.6 (Business Neighbourhood Zone) Buildings are set back from side boundaries to provide:

- (a) separation between dwellings in a way that complements the established character of the locality
- (b) access to natural light and ventilation for neighbours.

DTS/DPF 3.6 (Business Neighbourhood Zone) Other than walls located on a side boundary, building walls are set back at least 900mm from side boundaries.

PO 3.7 (Business Neighbourhood Zone) Buildings are set back from rear boundaries to provide:

- (a) *separation between dwellings in a way that complements the established character of the locality*
- (b) *access to natural light and ventilation for neighbours*
- (c) *open space recreational opportunities*
- (d) *space for landscaping and vegetation.*

DTS/DPF 3.7 (Business Neighbourhood Zone) *Buildings walls are set back from the rear boundary at least:*

- (a) *3m for the first building level*
- (b) *5m for any second building level*

[our emphasis]

Front Setbacks

Existing setbacks on the southern side of Glen Osmond Road vary greatly, with the adjoining residential flat building set back approx. 3m. Similarly, the two storey Bressington Prestige Motors is setback approx. 1m from the Glen Osmond Road frontage. Commercial development along the southern side of Glen Osmond Road to the east is setback in the order of 8m with many properties setback behind their respective car parking areas. To the west, along Glen Osmond Road, properties are set closer to the Glen Osmond Road frontage as they approach the intersection with Fullarton Road. The existing dwellings on the subject site are setback from 14m to 18m.

The proposed childcare centre is to be setback approx. 24.5m behind the associated car parking area. Whilst this is setback further than the immediately adjoining commercial properties, it is not dissimilar to the existing dwellings located on the site and other commercial development in the immediate locality which are located behind their associated car parking areas. The proposal is therefore considered to satisfy the requirements of Zone PO 3.2. Further, we note that the proposed front setback is entirely consistent with the varied setbacks which characterises this stretch of Glen Osmond Road.

Secondary Street Setback

Existing setbacks along the Gladstone Street frontage vary considerably as they approach the Glen Osmond Road intersection. The existing dwelling located at 1A Gladstone Street is setback approx. 1m at its closest point from Gladstone Street. Similarly, Bressington Prestige Motors located directly opposite the subject site on Gladstone Street, has its two-storey built form located approx. 1m from the Gladstone Street frontage.

The three-storey residential flat building is setback in the order of 4m from Gladstone Street at its closest point. Given the height of this structure in the streetscape, its setback forms a dominant feature in this section of Gladstone Street.

The adjoining residential built form at 1, 3, 3A and 5 Gladstone Street are setback in the range of 4m to 6m respectively.

The proposed childcare centre has a setback of 6.5m at its closest point from Gladstone Street, satisfying Zone PO 3.3. The proposed setback of the centre, being further than existing built form on the Gladstone Street frontage, is considered to create a more cohesive transition from the Business Neighbourhood Zone to the General Neighbourhood Zone than presently exists.

Side and Rear Setbacks

The proposed childcare centre has a side setback of 5m from the eastern and north-western side boundaries, clearly satisfying the setback sought by Zone PO 3.6. Similarly, the childcare centre is setback 11m from the south-eastern rear boundary on the lower level; and the upper level is setback over 21m from the rear boundary satisfying Zone PO3.7. The childcare centre is therefore well separated from the adjoining properties and is consistent with the established pattern of development in the adjoining General Neighbourhood Zone.

These generous setbacks ensure adequate amenity (including access to sunlight) is maintained for adjoining residential properties and the future residences to be established on proposed adjoining sites.

It is therefore considered the proposed childcare centre has a building footprint that provides for adequate separation between the adjoining residential properties and is considered to be reflective of the existing setback pattern within the locality.

6.4.2 Scale

The Business Neighbourhood Zone provides the following guidance for the scale of non-residential built form:

Technical Numerical Variation (TNVs)

- » Maximum Building Height (metres) 9 metres; and
- » Maximum Building Height (levels) 2 levels

PO 3.1 *Buildings are generally of low-rise construction, with taller buildings positioned towards the centre of the zone and away from any adjoining neighbourhood-type zone to positively contribute to the built form character of the locality.*

The proposed childcare centre is of a two storey built form with interesting roof and an overall height of 6.2m. The second storey component is a more modest size of 16m² and is contained central to the site. The proposal is therefore consistent with the Technical Numerical Variations as well as being in keeping with similar two-storey built form at 3 and 3A Gladstone Street.

As outlined earlier in this report, the surrounding built form is a mix of one and two storey built form. The proposed low-rise two storey childcare centre with small, central second storey element is consistent with the scale and form of development envisaged for the Business Neighbourhood Zone.

6.4.3 Design

The General Development Policies provides the following guidance on the design of development:

PO 1.1 (Design in Urban Areas) Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).

PO 1.3 (Design in Urban Areas) Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.

PO 1.4 (Design in Urban Areas) Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:

- (a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces
- (b) screening rooftop plant and equipment from view
- (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.

PO 1.5 (Design in Urban Areas) The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.

PO 4.1 (Design in Urban Areas) Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.

PO 4.2 (Design in Urban Areas) Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.

PO 4.3 (Design in Urban Areas) Buildings incorporate climate responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.

PO 11.1 (Design in Urban Areas) Development provides a dedicated area for on-site collection and sorting of recyclable materials and refuse, green organic waste and wash bay facilities for the ongoing maintenance of bins that is adequate in size considering the number and nature of the activities they will serve and the frequency of collection.

PO 11.2 (Design in Urban Areas) Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.

PO 11.3 (Design in Urban Areas) Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.

Prospective images of the development are provided in **Figure 6.2** on the following page.

The proposal uses a neutral colour palette with feature ‘whisper white austral’ brickwork, and Colorbond® Mini Orb wall sheeting in ‘windspray’. The finishes and materials are considered to contribute to what will be a high-quality design outcome. An interesting angled roof form have been used to minimise the upper level to be largely contained within the roof form and to provide visual interest.. The proposal has incorporated window proportions that are in keeping with residential flavour of the design, with feature circle windows fronting the car parking area to provide visual interest and also provide for an interesting outlook for children attending the centre.

Figure 6.2 Perspectives of proposal



An angular canopy design is located over the entry on the primary façade that articulates the building entry, which connects to a pathway that provides safe refuge for pedestrians accessing the site from the carpark and form Fullarton Road.

The bin storage area is located in an inconspicuous and landscaped location to the car parking area adjoining the Gladstone Street frontage. The bin storage area is to be located behind a 1.8m high brick fence in a ‘whisper whit austral’ colour. This structure is located at the end of the landscaping bed adjoining the western car parking area and provides soft landscaping opportunities around it as viewed from both street frontages.

With regard to the site works required to accommodate the built form, the following provision is relevant:

PO 8.1 (Design in Urban Areas) *Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.*

The childcare centre has been cut into the site in line with the natural contours of the land. All retaining walls proposed to contain the excavation are predominantly internal to the site and will not impact adjoining land owners/occupiers. Refer to **Figure 6.3** below.

Figure 6.3 Red Shed Architects Perspective of cut and fill with associated retaining and fencing



The maximum height of retaining walls will be 1.3m decreasing down to a modest height of 0.3m. We acknowledge that the proposed retaining walls exceed the recommended maximum height of 1m. We are of the opinion that this the optimal design given that the retaining walls are generally located internal to the site and will have limited visibility from outside the subject site.

The proposed contemporary building form, scale, siting and varied building heights, together with the selection of materials, finishes and colours will be complementary to and improve the streetscape appearance of the site. On balance, the built form is considered to satisfy the intent of the relevant Code policies relating to built-form and character.

6.5 Crime Prevention Through Environmental Design

The childcare centre has been orientated to front Glen Osmond Road with the primary entrance and administration functions addressing the street and associated car parking area. The layout of the childcare centre provides for clear lines of site to the entrance of the centre and maximises opportunities for passive surveillance of the public realm.

Although the specific location and nature of lighting is yet to be determined, we confirm that 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.

Landscaping selected for the development will include a mix of Eucalyptus and Crepe Myrtle trees along with native low lying ground covers and small shrubs selectively placed to provide unobstructed sightlines into/from the site.

The proposal is therefore considered to satisfy the following policies of the Code:

PO 2.1 (Design in Urban Areas) *Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.*

PO 2.3 (Design in Urban Areas) *Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.*

PO 2.4 (Design in Urban Areas) *Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm*

PO 2.5 (Design in Urban Areas) *Common areas and entry points of buildings (such as the foyer areas of residential buildings) and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night*

6.6 Landscaping and Fencing

A landscape plan and schedule has been prepared by Red Shed Architects and is contained within **Appendix 2**. An area of 729m² (or 32% of the total site) will be allocated to landscaping.

The siting and setbacks allow for generous landscaping forward of the built form towards both Glen Osmond Road and Gladstone Street. A 2.1m wide landscape bed is provided between the Glen Osmond Road frontage and the central car parking area. A larger landscaping 'triangle' is provided adjoining the Glen Osmond Road frontage and the eastern car parking area. These landscaped areas contain space for deep soil plantings and also allow for future road widening provisions to be satisfied.

Landscaping areas of at least 2m in width are provided around the perimeters of the car parking area allowing space planted trees to provide shade over vehicles, satisfying Design in Urban Areas PO 7.4.

The landscape plan indicates a variety of landscape species to be planted, including *Eucalyptus Leucoxydon* (Euku Dwarf), *Lagerstroemia 'Sioux'* or *'Biloxi'* (Pink Crepe Myrtle), *Hakea Laurina* (Pincushion Hakea trees), and a range of shrubs including *Adenanthos Sericeus* (Albany Woolly Bush), *Westringa fruticosa* (Grey Box Coastal Rosemary) and ground covers *Myoporum Parvifolium* (Fine Leaf form), *Chrysocephalum apiculatum* (Yellow Buttons Prostrate everlasting), *Scaevola albida* (Pale Fanflower) and *Carpobrotus rossii* (Native Pigface).

The landscaping proposed will be effective in softening the visual impact of the proposal when viewed from the public realm in line with Zone PO 2.2. The low lying nature of the plantings will accommodate sightlines for vehicles entering/exiting the site, and will also provide opportunities for passive surveillance.

Fencing proposed along the sides of the car parking are to be 1.8m high Colorbond®, similar to typical residential fencing. Fencing elements that constitute ‘development’ (as they exceed 2.1m in height) are located along the eastern side boundary, southern rear boundary and south-western side boundary.

Retaining and fencing along the eastern side boundary will adjoin the car parking area for the residential flat building (refer to **Figure 6.4** below). The proposed retaining and fencing will range in height between 2.4m and 2.7m along this boundary, however will be ‘cut’ into the site and therefore will appear as a standard fence height from the adjoining land.

Figure 6.4 Existing Motel car parking area and fencing



Residential flat building looking south-west from Glen Osmond Road



Existing fencing and outbuildings along the eastern boundary adjoining the residential flat building

Similarly, the 2.7m high retaining wall and fence along the south-western side boundary will be ‘cut’ into the site so that from the adjoining land it will appear as a standard fence height. This retaining wall and fence structure will adjoin the common driveway of the future dwelling development (approved as part of related development land division application 090/115/2020/DIV – 090/D003/20 and dwellings development application DA 775/2019/C2).

The 2.4m high retaining and fence located along the southern rear boundary is only 300mm higher than what is permitted without constituting a form of ‘development’ under the PDI Act. This fence and retaining structure will also be ‘cut’ into the site, therefore appearing as a standard fence height from the adjoining land.

The proposal is therefore considered to satisfy the following policies of the Code:

PO 2.2 (Business Neighbourhood Zone) *Development provides attractive landscaping to the primary street frontage.*

PO 2.3 (Business Neighbourhood Zone) *Site coverage is limited to provide space for landscaping, open space and pervious areas*

PO 3.1 (Design in Urban Areas) *Soft landscaping and tree planting are incorporated to:*

- (a) *minimise heat absorption and reflection*
- (b) *maximise shade and shelter*
- (c) *maximise stormwater infiltration*
- (d) *enhance the appearance of land and streetscapes*

PO 7.2 (Design in Urban Areas) *Vehicle parking areas appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.*

PO 7.4 (Design in Urban Areas) *Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.*

DTS/DPF 7.4 (Design in Urban Areas) *Vehicle parking areas that are open to the sky and comprise 10 or more car parking spaces include a shade tree with a mature canopy of 4m diameter spaced for each 10 car parking spaces provided and a landscaped strip on any road frontage of a minimum dimension of 1m.*

PO 7.5 (Design in Urban Areas) *Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.*

DTS/DPF 7.5 (Design in Urban Areas) *Vehicle parking areas comprising 10 or more car parking spaces include soft landscaping with a minimum dimension of:*

- (a) *1m along all public road frontages and allotment boundaries*
- (b) *1m between double rows of car parking spaces*

PO 9.1 *Fences, walls and retaining walls of sufficient height maintain privacy and security without unreasonably impacting visual amenity and adjoining land's access to sunlight or the amenity of public places.*

PO 9.2 (Design in Urban Areas) *Landscaping is incorporated on the low side of retaining walls that are visible from public roads and public open space to minimise visual impacts.*

[our emphasis]

6.7 Regulated and Significant Trees

Project Green has undertaken a review of existing trees on the subject site and adjoining the site (refer to **Appendix 7**). This assessment has revealed that the seven (7) trees located within the subject site are all located within 10m of an existing dwelling and are not *Agonis flexuosa* (Willow Myrtle) or *Eucalyptus* species. These trees are therefore neither Regulated nor Significant pursuant to regulation 3F(4)(a) of the PDI Regulations.

There are currently eight (8) trees located within the Council verge bordering the site, with one (1) Regulated *Corymbia maculata* (Spotted Gum) located within the verge area adjoining the site on Gladstone Street. Project

Green is in the process of undertaking a review of the proposal on the overall health of this tree and will be provided in due course under a separate cover.

6.8 Access, Parking and Waste Collection

The following DOs and POs within the Design in Urban Areas and Transport, Access and Parking General Development policies of the Code are applicable to the access, parking and waste management arrangements for the proposal:

DO 1 (Future Road Widening Overlay) *Development which is consistent with and will not compromise efficient delivery of future road widening requirements*

PO 1.1 (Future Road Widening Overlay) *Development does not compromise or is located and designed to minimise its impact on future road widening requirements*

DTS/DPF 1.1 (Future Road Widening Overlay) *Development does not involve building work, or building work is located wholly outside the land subject to the 6m Consent Area, the C Type Requirement or the Strip Requirement of the Metropolitan Adelaide Road Widening Plan.*

DO 1 (Major Urban Transport Routes Overlay) *Safe and efficient operation of Major Urban Transport Routes for all road users.*

DO 2 (Major Urban Transport Routes Overlay) *Provision of safe and efficient access to and from Major Urban Transport Routes.*

PO 1.1 (Major Urban Transport Routes Overlay) *Access is designed to allow safe entry and exit to and from a site to meet the needs of development and minimise traffic flow interference associated with access movements along adjacent State Maintained Roads.*

PO 2.1 (Major Urban Transport Routes Overlay) *Sufficient accessible on-site queuing adjacent to access points is provided to meet the needs of development so that all vehicle queues can be contained fully within the boundaries of the development site, to minimise interruption of the functional performance of the road and maintain safe vehicle movements.*

PO 4.1 (Major Urban Transport Routes Overlay) *New access points are spaced apart from any existing access point or public road junction to manage impediments to traffic flow and maintain safe and efficient operating conditions on the road*

PO 5.1 (Major Urban Transport Routes Overlay) *Access points are located and designed to accommodate sight lines that enable drivers and pedestrians to navigate potential conflict points with roads in a controlled and safe manner.*

DO 1 (Traffic Generating Development Overlay) *Safe and efficient operation of Urban Transport Routes and Major Urban Transport Routes for all road users.*

DO 2 (Traffic Generating Development Overlay) *Provision of safe and efficient access to and from urban transport routes and major urban transport routes.*

PO 1.1 (Traffic Generating Development Overlay) *Development designed to minimise its potential impact on the safety, efficiency and functional performance of the State Maintained Road network.*

PO 1.2 (Traffic Generating Development Overlay) *Access points sited and designed to accommodate the type and volume of traffic likely to be generated by development.*

PO 1.3 (Traffic Generating Development Overlay) *Sufficient accessible on-site queuing provided to meet the needs of the development so that queues do not impact on the State Maintained Road network.*

PO 7.3 (Design in Urban Areas) *Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.*

DO 1 (Transport, Access and Parking) *A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.*

PO 1.4 (Transport, Access and Parking) *Development is sited and designed so that loading, unloading and turning of all traffic avoids interrupting the operation of and queuing on public roads and pedestrian paths.*

PO 2.1 (Transport, Access and Parking) *Sightlines at intersections, pedestrian and cycle crossings, and crossovers to allotments for motorists, cyclists and pedestrians are maintained or enhanced to ensure safety for all road users and pedestrians.*

PO 2.2 (Transport, Access and Parking) *Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.*

PO 3.1 (Transport, Access and Parking) *Safe and convenient access minimises impact or interruption on the operation of public roads.*

PO 3.3 (Transport, Access and Parking) *Access points are sited and designed to accommodate the type and volume of traffic likely to be generated by the development or land use.*

PO 3.4 (Transport, Access and Parking) *Access points are sited and designed to minimise any adverse impacts on neighbouring properties.*

PO 3.5 (Transport, Access and Parking) *Access points are located so as not to interfere with street trees, existing street furniture (including directional signs, lighting, seating and weather shelters) or infrastructure services to maintain the appearance of the streetscape, preserve local amenity and minimise disruption to utility infrastructure assets.*

PO 3.6 (Transport, Access and Parking) *Driveways and access points are separated and minimised in number to optimise the provision of on-street visitor parking (where on-street parking is appropriate).*

PO 3.8 (Transport, Access and Parking) Driveways, access points, access tracks and parking areas are designed and constructed to allow adequate movement and manoeuvrability having regard to the types of vehicles that are reasonably anticipated.

PO 4.1 (Transport, Access and Parking) Development is sited and designed to provide safe, dignified and convenient access for people with a disability.

PO 5.1 (Transport, Access and Parking) Sufficient on-site vehicle parking and specifically marked accessible car parking places are provided to meet the needs of the development or land use having regard to factors that may support a reduced on-site rate such as:

(a) availability of on-street car parking

(b) shared use of other parking areas...

DTS/DPF 5.1 (Transport, Access and Parking) Development provides a number of car parking spaces on-site at a rate no less than the amount calculated using one of the following, whichever is relevant:

(a) Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements

(b) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking Requirements in Designated Areas....

PO 6.2 (Transport, Access and Parking) Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced, and the like.

PO 6.4 (Transport, Access and Parking) Pedestrian linkages between parking areas and the development are provided and are safe and convenient

PO 6.6 (Transport, Access and Parking) Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.

PO 9.1 (Transport, Access and Parking) The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.

DTS/DPF 9.1 (Transport, Access and Parking) Areas and / or fixtures are provided for the parking and storage of bicycles at a rate not less than the amount calculated using Transport, Access and Parking Table 3 - Off Street Bicycle Parking Requirements.

PO 9.2 (Transport, Access and Parking) Bicycle parking facilities provide for the secure storage and tethering of bicycles in a place where casual surveillance is possible, is well lit and signed for the safety and convenience of cyclists and deters property theft.

Table 2 –Off-Street Car Parking Requirements in Designated Areas –Non-residential development excluding tourist accommodation- Minimum number of spaces 3 spaces per 100m² of gross leasable floor area- Maximum number of spaces 5 spaces per 100m² of gross leasable floor area.

Table 3 – Off-Street Bicycle Parking Requirements – Pre-School - 1 space per 20 full time employees plus 1 space per 40 full time children.

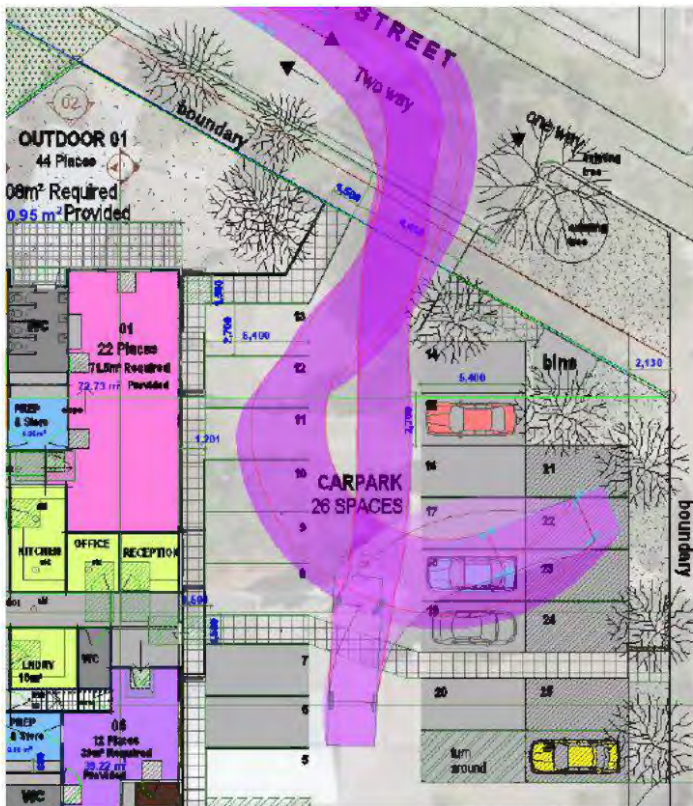
The Traffic and Parking assessment conducted by CIRQA is contained within **Appendix 4**, which includes the following key findings:

- The proposed 103 place childcare centre will be serviced by 26 onsite parking spaces. The quantum of onsite parking satisfies the parking rate of 1 space per 4 children as prescribed within the Code (Table 1- General Off-Street parking requirements);
- The site is located within a ‘designated area’ and therefore the Code requires a minimum rate of 3 spaces per 100m² of gross leasable floor area which equates to a minimum requirement of 19 on-site spaces (rounded up). The proposal provides for 26 on-site parking spaces which exceeds the minimum by seven (7) spaces;
- The design of the on-site car parking conforms to the requirements set out in the Australian/New Zealand Standards for Off Street Car Parking (*AS/NZS2890.1:2004 and AS/NZS2890.6:2009*);
- Safe and convenient vehicle access has been incorporated into the proposal including a dedicated footpaths from both Glen Osmond Road and Gladstone Street to the building entry;
- Traffic movements generated by the development, which are estimated to be in the order of 50 trips in the AM peak hour and 44 trips in the PM peak period, will:
 - » be readily accommodated by the proposed Glen Osmond Road ingress and Gladstone Street access point; and
 - » have a minimal impact on traffic flows on the adjacent road network.

The DOs outline the key expectations with respect to traffic, parking and access and on balance, the development achieves these through the provision of safe and convenient access for vehicle and pedestrians, minimising traffic hazards, not creating unreasonable queuing and providing sufficient and appropriately designed off street parking to support safe and convenient vehicle movements.

The Code seeks for all developments to provide adequate provision for onsite refuse vehicle movements including space for loading, unloading and manoeuvring of vehicles with minimal conflict between customer and service vehicles (PO 6.6 Transport, Access and Parking). To address these policies, it is proposed to use a private waste contractor to collect refuse on an as-needs basis (typically once or twice a week) collected outside the operating hours of the childcare centre. CIRQA has provided swept vehicle paths for the maximum size vehicle expected on site (a 8.8m long Medium Rigid Vehicle (MRV)) (refer to Figure 6.5 below).

Figure 6.5 CIRQA Medium Rigid Vehicle tuning movements



The refuse storage area is to be screened by a 1.8m high brick fence. Collection times will be in accordance with the *Environmental Protection (Noise) Policy 2007*, and is proposed between 6.30pm to 7pm Mondays to Saturdays and between 9am and 7pm on Sundays and Public Holidays. Waste will be collected outside of operating hours of the childcare centre, but within timeframes prescribed by the Noise Policy.

The proposal has been designed to minimise on-site queuing and impacts on the flow of traffic along both Glen Osmond Road and Gladstone Street. The proposed 5.8m wide driveway to Glen Osmond Road will accommodate two way vehicle movements to support the safe and efficient movement of vehicles to and from the site within minimal impact on the operation of Glen Osmond Road (a State Maintained Road).

The access point onto Gladstone Street has a width of 6m which will enable two-way vehicle movement. The access point on Gladstone Street has been angled in such a manner to encourage vehicles existing the centre back towards Glen Osmond Road, however, does not preclude a left turn out of the centre onto Gladstone Street.

The adequate provision of onsite parking reduces the likelihood vehicle overflow onto Gladstone Street Road for parking purposes.

The car parking area has been setback behind any future road widening requirements.

Based on these conclusions, the proposed childcare centre satisfies the relevant access, parking and waste management policies of the Code.

6.9 Interface Considerations

The following DOs and POs are relevant the management of interface and amenity impacts on sensitive land uses:

PO 1.1 (Business Neighbourhood Zone) *Housing and accommodation types appropriate to the locality complemented by shops, offices, consulting rooms and other non-residential uses that do not materially impact residential amenity.*

DO 1 (Interface between Land Uses) *Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.*

PO 1.2 (Interface between Land Uses) *Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.*

[our emphasis]

6.9.1 Hours of Operation

The following hours of operation are proposed:

- 6.30am to 6.30pm Monday to Friday
- Closed Saturdays, Sundays and public holidays.

The hours of operation are considered to be appropriate adjoining a residential locality and are generally aligned with standard business hours contemplated for the Business Neighbourhood Zone. The proposed hours of operation will assist with the appropriate management of interface impacts and the preservation of residential amenity, in accordance with the following Interface between Land Uses PO 2.1:

PO 2.1 (Interface between Land Uses) *Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:*

- (a) *the nature of the development*
- (b) *measures to mitigate off-site impacts*
- (c) *the extent to which the development is desired in the zone*
- (d) *measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land.*

6.9.2 Overshadowing

The two-storey childcare centre is centrally positioned on the site, with generous setbacks from all side and rear boundaries. Noting the north-south orientation of the childcare centre together with the low-rise built form

proposed, the development will not result in unreasonable levels of overshadowing to adjoining residential properties (including the future dwellings proposed) to the east, south or south- west.

The development will be 'cut' into the site and therefore sit lower than adjoining land to the east, south and west. The resultant retaining walls will be internal to the site with adjoining land being presented with a standard fence height on their boundary. There are no overshadowing impacts therefore associated with the retaining walls and fences.

The proposal is therefore considered to satisfy the following relevant policies of the Code:

PO 3.1 (Interface between Land Uses) *Overshadowing of habitable room windows of adjacent residential land uses in:*

- (a) *a neighbourhood-type zone is minimised to maintain access to direct winter sunlight*
- (b) *other zones is managed to enable access to direct winter sunlight.*

DTS/DPF 3.1 (Interface between Land Uses) *North-facing windows of habitable rooms of adjacent residential land uses in a neighbourhood-type zone receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.*

PO 3.2 (Interface between Land Uses) *Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:*

- (a) *a neighbourhood type zone is minimised to maintain access to direct winter sunlight*
- (b) *other zones is managed to enable access to direct winter sunlight.*

DTS/DPF 3.2 (Interface between Land Uses) *Development maintains 2 hours of direct sunlight between 9.00 am and 3.00 pm on 21 June to adjacent residential land uses in a neighbourhood-type zone in accordance with the following:*

- (a) *for ground level private open space, the smaller of the following:*
 - i. *half the existing ground level open space*

or

 - ii. *35m² of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)*
- (b) *for ground level communal open space, at least half of the existing ground level open space.*

PO 3.3 (Interface between Land Uses) *Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account:*

- (a) *the form of development contemplated in the zone*
- (b) *the orientation of the solar energy facilities*

(c) *the extent to which the solar energy facilities are already overshadowed.*

6.9.3 Overlooking

The childcare centre includes an upper level that has windows along the eastern elevation. The windows are located 11 metres from the eastern side boundary and approximately 32 metres from the upper-level external access walkway of the adjoining motel building. These windows are not proposed to be frosted or have high level sills for the following reasons:

- The windows enable childcare staff views into the ground level outdoor play space beneath thereby providing additional surveillance over the area; and
- The separation distance of the upper-level windows to the motel is in the order of 32 metres, therefore not resulting in any ‘direct’ overlooking;

The proposal is therefore considered to satisfy the following relevant policies of the Code:

PO 10.1 (Design in Urban Areas) *Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.*

[our emphasis]

6.9.4 Noise

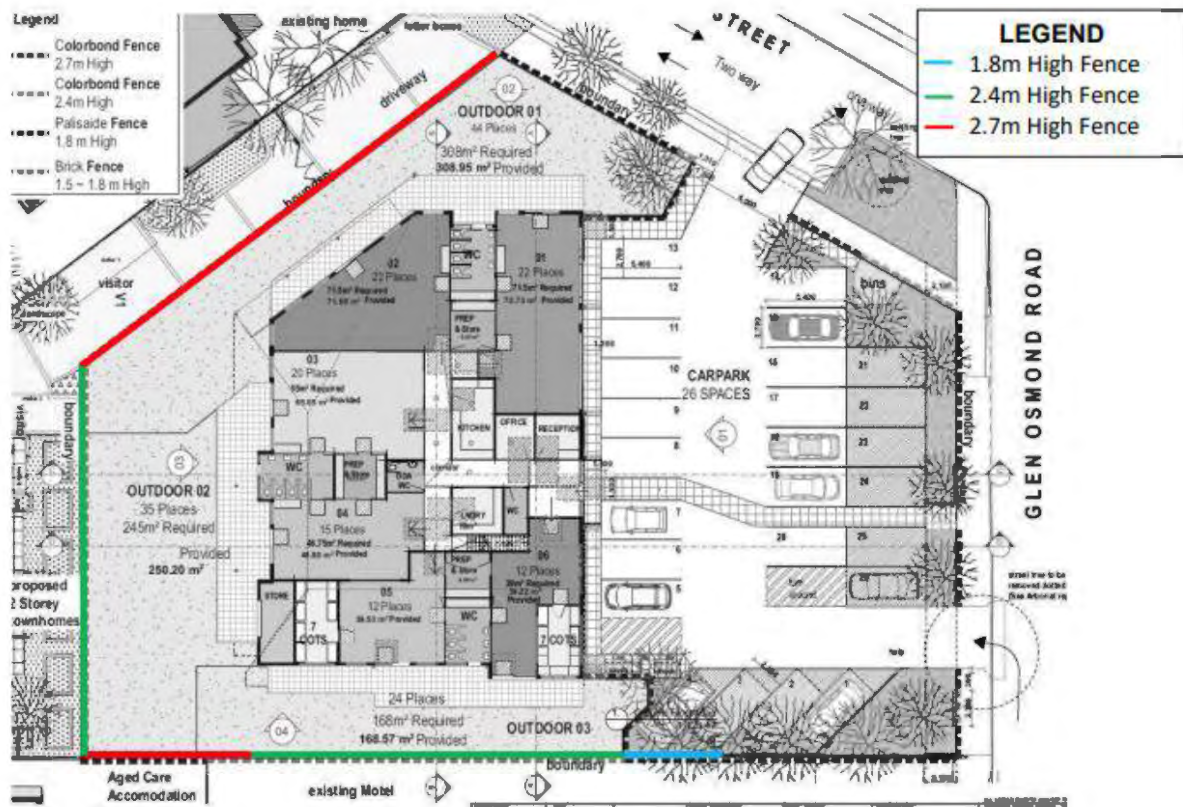
Sonus have undertaken a comprehensive noise assessment of the proposed development (**Appendix 5**).

Sonus notes that the *Environment Protection (Noise) Policy 2007* (the policy) does not provide guidance on the management of noise generated by children playing within outdoor areas. Predicted noise levels from children playing have therefore been assessed against the recommendations of the Guidelines for Community Noise published by the World Health Organisation (WHO) with regard to annoyance during the day (7am and 10pm). To comply with the WHO guidelines, Sonus suggest that the average noise levels during daytime hours from children playing at the centre be no greater than 50 dB(A) at surrounding noise sensitive locations.

Sonus have made the following recommendations with respect to the management of noise transfer (assuming a full capacity centre):

- Construct a fence to a height of 1.8m along the western and eastern (side) boundaries adjoining the car parking area;
- Construct a fence to a height of 2.4m along portions of the eastern (side) and southern (rear) boundaries;
- Construct a fence to a height of 2.7m along portions of the eastern (side) and south-western (side) boundaries; and
- Ensure that fences are sealed airtight at all junctions, including between panels and at the ground.

Figure 6.6 *Sonus recommended acoustic treatments*



Sonus advise that with the above recommendations in place, predictions indicate that the equivalent noise level from children playing at the centre and from car park noise achieve the recommended daytime noise level of the WHO guidelines.

Subject to the recommendations of Sonus being implemented (to which to Applicant has no objection), the proposal will not result in unreasonable noise related impacts and the development has been designed to satisfy the following provisions of the Code:

PO 4.1 (Interface between Land Uses) *Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).*

DTS/DPF4.1 (Interface between Land Uses) *Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.*

PO 4.2 (Interface between Land Uses) *Areas for the on-site manoeuvring of service and delivery vehicles, plant and equipment, outdoor work spaces (and the like) are designed and sited to not unreasonably impact the amenity of adjacent sensitive receivers (or lawfully approved sensitive receivers) and zones primarily intended to accommodate sensitive receivers due to noise and vibration by adopting techniques including:*

- (a) *locating openings of buildings and associated services away from the interface with the adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers*

- (b) *when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers*
- (c) *housing plant and equipment within an enclosed structure or acoustic enclosure*
- (d) *providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.*

[our emphasis]

6.9.5 Lighting

The car park may be illuminated to accommodate evening use of the facility. However, noting that the facility will only operate between the hours of 6:30am and 6:30pm on any given day, evening use will be limited and lighting will only be used for short periods.

Whilst the specific nature and design of the lighting is subject to detailed design, the lighting will be designed to with Australian Standards (in particular AS4282 – *Control of Obtrusive Effects of Outdoor Lighting*) to ensure light spill impacts are managed in accordance with PO 6.1 (Interface between Land Uses):

PO 6.1 (Interface between Land Uses) *External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).*

In relation to other potential interface impacts, children only spend allocated periods of time outside. The outdoor play times of the different age groups are staggered throughout the day so that not all children in the childcare centre would be playing outside at the same time.

In considering the various interface considerations, we are of the opinion that the proposal will not create unreasonable interface implications for adjoining properties.

6.10 Signage

The Code outlines the following DOs for the Zone and for the Advertisement General Development Policies:

PO 5.1 (Business Neighbourhood Zone) *Advertisements complement the scale of buildings and are not visually dominant within the locality*

DO 1 (Advertisements) *Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.*

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

In terms of the proposal's consistency with the relevant signage policies within the Code, it is noted that:

- Two (2) signs are proposed which are to be attached to the front façade of the childcare centre adjoining the carparking area;
- Four (4) signs are located on the proposed masonry brick fence (two (2) on each street frontage);
- No free standing signage is proposed;
- The signage is modest in size with neutral colour tones;
- 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 (childcare centre);
- 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; and
- The advertising displays are designated to clearly identify the childcare centre to passing traffic without any flashing or animations.

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

6.11 Stormwater Management

The following Code POs are relevant for the development with regards to stormwater management:

PO 7.7 (Design in Urban Areas) *Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.*

PO 42.2 (Design in Urban Areas) *Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.*

PO 42.3 (Design in Urban Areas) *Development includes stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that development does not increase peak flows in downstream systems.*

The proposed finished floor level (FFL) of the building has been designed to be higher than the street water table level on both Gladstone Street and Glen Osmond Road. The centre has been ‘cut’ into the site such that the adjoining land to the east, south and west will sit higher than the childcare site.

A stormwater management plan and grading plan has been prepared by Sagero (refer **Appendix 3**). All roof and surface water will be collected and diverted to a junction pit located within the parking area, that will then flow through a 23m³ detention tank/pumping station. Stormwater within the detention tanks will be pumped to the street water table on Glen Osmond Road at a rate of 20 L/s. The proposed development has therefore incorporate stormwater design techniques to manage peak flows and the rate of discharge, as per PO 42.3 (Design in Urban Areas).

The proposal adequately achieves the relevant Code policies related to stormwater and the specific site requirements of the Council's engineers.

7. Conclusion

This development application seeks to establish a two storey childcare centre within the Business Neighbourhood Zone. 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 Code, we have formed the opinion that the proposed development represents appropriate and orderly development that deserves favourable consideration for approval. More specifically:

- The proposed use is aligned with the relevant land use provisions of the Code which contemplates the establishment of employment-generating land uses that supports continued local access to a range of services compatible to the locality;
- The site is well suited to its intended use due to its close proximity to a number of local Primary Schools;
- The proposed built form is of a scale and composition that reflects the residential scale of adjoining properties within the General Neighbourhood Zone to the south and south-west of the site;
- The proposal offers a contemporary childcare centre which will serve the needs of the local community;
- The building is of a high-quality design which, combined with the proposed materials and finishes is consistent and complementary with the established built form in the locality;
- The proposed site layout and fencing will significantly improve the aesthetics of the site and provide an attractive environment around the site;
- Projected traffic generation and distribution will not adversely impact on the intended function and/or capacity of the adjacent road networks;
- The proposal will not impact on any future road widening of Glen Osmond Road;
- The site has been designed to accommodate safe and convenient vehicle access, egress and circulation;
- The supply of car parking spaces achieves the industry adopted rate of 0.25 spaces per child and the anticipated demand generated by the proposed childcare centre; and
- The proposed development has been designed to have minimal amenity impact on adjoining properties;

Based on the above, the proposed development aligns with the most relevant policies of the Code and warrants Planning Consent, subject to reasonable and relevant conditions.

28 October 2021

REF No.: 01071-003

City of Unley
PO Box 1
UNLEY SA 5061

Attention: Chelsea Spangler – Planning Officer

By Plan SA Portal and Email: cspangler@unley.sa.gov.au

Dear Chelsea,

**RE: RESPONSE TO COUNCIL REQUEST FOR FURTHER INFORMATION –
CHILDCARE CENTRE – 1A GLADSTONE STREET AND 196 GLEN OSMOND ROAD,
FULLARTON (APPLICATION ID 21027177)**

We refer to your correspondence dated 28 September 2021 in relation to the proposed childcare centre at 1A Gladstone Street and 196 Glen Osmond Road, Fullarton which sought further details on the following:

- **Street Trees**
 - » Confirmation in writing that the applicant accepts the cost of removal of the two (2) street trees;
- **Regulated Trees**
 - » Recommend that the property boundary along the Gladstone Street frontage is delineated without a fence or only a light weight fence with minimal footings to ensure the longevity of the Regulated Lemon Scented Gum;
 - » Relocate the bin pad outside of the Tree Protection Zone; and
 - » The northern wing of the proposed Gladstone Street cross-over is shifted at least 2m west of the existing traffic protuberance.
- **Waste**
 - » Detail how waste is to be collected outside of the proposed centre’s operating hours and within Council’s guidelines of 7am to 7pm Monday to Saturday.
- **Stormwater**
 - » Provision of background stormwater calculations be provided to ascertain how the proposed stormwater infrastructure has been determined, including pre-development and post-development calculations/discharge rates and filtration system details;

Def: E-KIS-TICS [noun] : The Science of Human Settlements ...

- **Traffic**
 - » Request plan be amended to include appropriate signage/line marking details;
 - » Update plans to provide for full pedestrian site triangles particularly at the Gladstone crossover;
 - » Updated traffic report be provided that includes:
 - Traffic generation rates including updated SIDRA assessment;
 - Assessment of the potential for no right turns into or out of Gladstone Street at Fullarton Road;
 - Information on traffic generation split between Glen Osmond Road and Gladstone Street.

- **Landscaping**
 - » Request further details on the surface of outdoor play spaces, particularly the amount of soft landscaping be provided in each area.

Pursuant to Part 7, Division 4 clause 119(9) of the *Planning, Development and Infrastructure Act 2016* (PDI Act) and on behalf of the Applicant, this letter provides a formal response to those matters raised above.

This letter should be read in conjunction with our original Planning Statement (July 2021).

In further support of our collated response, the following documents are provided as appendices to this letter:

- **Appendix 1:** Amended site plan prepared by Redshed Architects
- **Appendix 2:** Addendum to Arborist report prepared by Project Green
- **Appendix 3:** Revised Civil Plans and calculations prepared by Sagero
- **Appendix 4:** Revised traffic report prepared by CIRQA

The content of these plans and advice will be discussed within the body of this letter under relevant topic headings.

1. Street Trees

The applicant confirms that it will pay the cost associated with the two (2) street tree removal, loss of amenity and tree replacement to Council at a total value of \$5,921.05 + GST and does not object to a condition imposed on any Planning Consent to this effect.

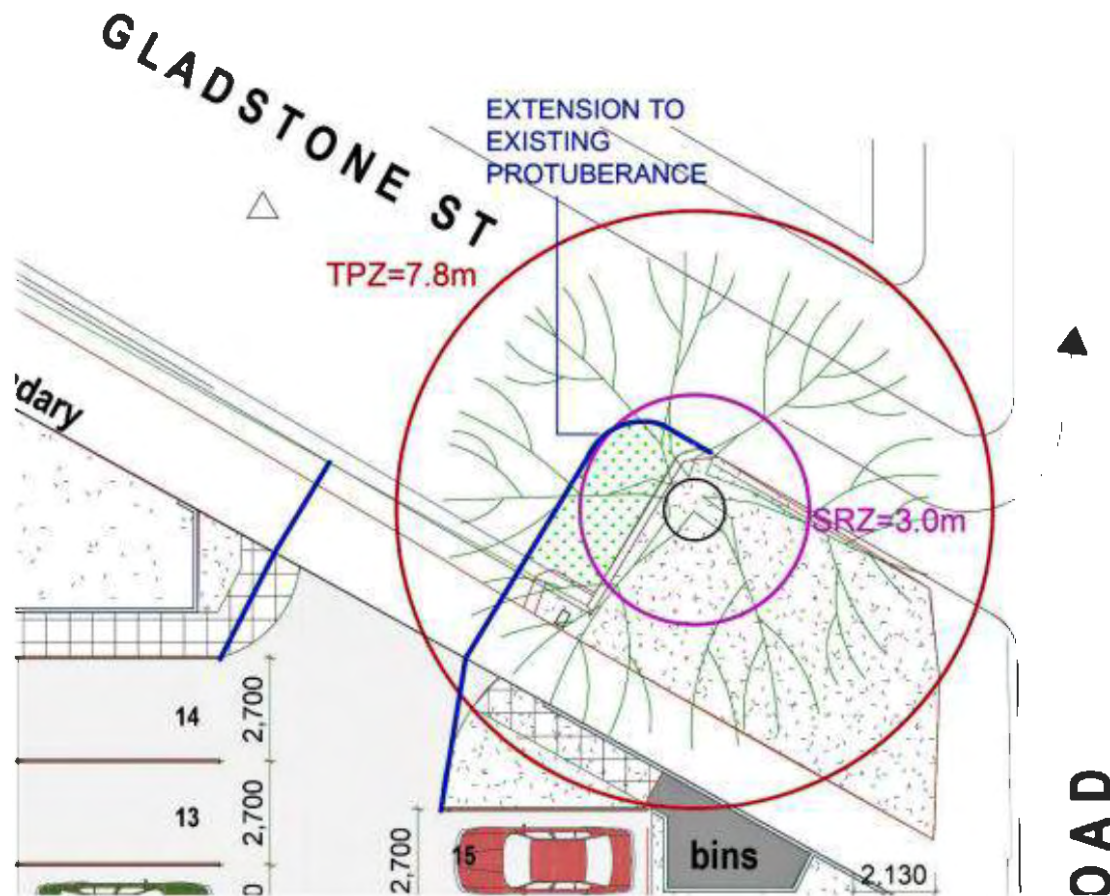
2. Regulated Trees

Fencing along the Gladstone Street frontage within the Tree Protection Zone (TPZ) has been amended to a 1.8 palisade fence (with minimal footings) (Refer to **Appendix 1**). Similarly, the bin storage pad has been located further towards the Glen Osmond Road frontage, outside of the TPZ.

Project Green have reviewed the Gladstone Street cross-over in relation to its location from the Regulated Lemon Scented Gum (refer to **Appendix 2**) and have advised extension of the existing protuberance is considered be the most effective way to protect the main body of exposed tree roots from further damage by increased vehicle movements. Project Green have provided a design option depicted in **Figure 2.1** below, which involves:

- Extending the existing protuberance approx. 2m to the west;
- Incorporating a new mulched garden bed in the extension; and
- Incorporating the structural root zone (SRZ) of the tree and the 'zone of rapid taper' where larger diameter roots are disrupting the existing pavement.

Figure 2.1 Project Green Design Option to extent Protuberance



The proposal, as amended, is therefore considered to satisfy Planning and Design Code ('the Code') Regulated and Significant Tree Overlay PO 2.1 that seeks "Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health."

3. Waste

The proposed hours of operation of the childcare centre are between 6.30am to 6.30pm Monday to Friday. Noting that Council guidelines for commercial waste collection are between 7am to 7pm Monday to Saturday we confirm that waste will be collected outside of the childcare opening hours and within Council’s guideline hours, most likely to be undertaken on a Saturday. A condition of approval to this effect is anticipated by the applicant.

4. Stormwater

A revised civil plan and associated calculations have been provided by Sagero within **Appendix 3**. These details include:

- Inclusion of a 3,000 litre rain water tank connected to the inside toilets to be located adjoining the eastern façade within outdoor play area 3. Overflow from the rainwater tank is to be directed into a graded inlet pit then into the site’s overall stormwater system; and
- Inclusion of a 23m³ stormwater detention system with a discharge rate of 20 litres per second to the street water table;

5. Traffic

The site plan has been updated (contained with **Appendix 1**) to include:

- Pedestrian sight triangles noted at the Gladstone access point as per requirements of AS/NZS 2890.1:2004;
- Signage/markings for:
 - » Staff carparking located along the Glen Osmond Road frontage and eastern (side) angled parking bays;
 - » ‘no entry’ signage for vehicle egress to Glen Osmond Road; and
 - » ‘Disabled parking only’ signage on the building wall where fronting the disabled parking space;

CIRQA has reviewed Council’s traffic officer’s comments in relation to the proposal and has provided a response (refer to **Appendix 4**). In relation to the traffic generation and access, CIRQA advise:

- The childcare centre has been designed based upon the requirements of ‘user class three (3)’ for which AS/NZS 2890.1:2004 lists example land uses in this category of “short-term city and town centre parking, parking stations, hospital and medical centres”. The dimensional requirements for 90-degree User Class 3 spaces identified by AS/NZS 2890.1:2004 (2.6 m wide, 5.4 m long with an adjacent 5.8 m wide aisle) are therefore satisfied;
- The proposed development will provide 2.7 m parking spaces (akin to User Class 3A) in order to provide additional space for door opening associated with children entering and exiting vehicles. The

additional parking space width would also improve accessibility for vehicles entering/exiting the parking spaces, similar to how a widened aisle (above the 5.8 m minimum identified by AS/NZS 2890.1:2004) would improve manoeuvrability for a 2.6 m wide parking space. On this basis, the proposed dimensions of the parking area are considered more than adequate to provide appropriate manoeuvrability and accessibility for visitors to the site;

- The Department for Infrastructure and Transport (DIT) have advised that a 2.13 m wide MARWP requirement is applicable to the Glen Osmond Road frontage, as well as a 4.5 m by 4.5 m corner cut-off adjacent the Glen Osmond Road/Gladstone Street intersection. Widening the aisle would therefore result in parking spaces encroaching into the MARWP requirement;
- The RTA Guide identifies the peak periods as from 7:00 am to 9:00 am, and from 4:00 pm to 6:00 pm. As the traffic generation specified by the RTA Guide occurs over a two-hour period, CIRQA's report has been assumed that 60% of the peak period movements would occur during the peak hour. The traffic generation rates identified in CIRQA's report are therefore considered appropriate for assessment of the peak hour traffic generation associated with a child care centre (50 am and 42 pm peak hour trips are forecast to be associated with the proposed development);
- Council previously advised that due to the upgrade of the Fullarton Road/Glen Osmond Road intersection, existing right turn movements may redistribute vehicles to Glen Osmond Road via Gladstone Street (as right turns onto Glen Osmond Road (east) from Fullarton Road (south) will be banned). The traffic assessment undertaken was prepared on the basis of Council's advice;
- CIRQA's traffic assessment did not distribute egress movements associated with the proposal onto Fullarton Road via a right turn from Gladstone Street due to the difficulty of the movement during peak periods. The prohibition of such movements would therefore not impact upon egress movements associated with the proposed development; and
- With regard to ingress, should right turn movements from Fullarton Road into Gladstone Street be prohibited, vehicle movements would likely be redistributed via Florence Street, Martens Avenue and Glen Osmond Road in order to access the subject site. The seven (7) am and six (6) pm peak hour movements would be readily accommodated on Florence Street, Martens Avenue, Glen Osmond Road, their associated intersections, and at the site's access point with negligible impact (noting the very low number of peak hour movements forecast to utilise this route).

6. Landscaping

At this stage, outdoor play areas have not been fully designed and will typically occur in consultation the operator during the detailed design phase prior to Building Consent. The outdoor play spaces will typically incorporate a range of landscaping, soft and hard surfaces and play equipment. The applicant acknowledges Council's desire to enhance an urban tree canopy and reduce heat loads and recommends that a detailed plan for the three (3) outdoor play spaces be provided as part of a reserved matter to the satisfaction of Council prior to Development Approval.

7. Conclusion

This letter seeks to provide a response to the issues raised and further information requested by Council.

The key issues raised including traffic movements, on-site carparking, health of the Regulated Street Tree, fencing, stormwater details and landscaping have been addressed.

Thank you for the opportunity to respond and we trust this submission offers a constructive response to the matters raised.

Please contact me on (08) 7231 0286 should you have any queries in relation to this development application.

Yours Sincerely,



Zoë Garnaut
Associate

project GREEN



Pre-development Arboricultural Impact Assessment

15 September 2021

S30381

Prepared for:

Accord Property

Site Details:

Development site

Corner Glen Osmond Road and Gladstone Road
Fullarton

Prepared by:

Project Green Pty Ltd

25-27 Ceafield Road
Para Hills West SA 5096

ABN: 78 088 402 706

ACN: 088 402 706

Tel: (08) 8283 1300

Fax: (08) 8258 1933

admin@projectgreen.net.au

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Dr. Martin Ely PhD

Registered Landscape Architect
Dip.Hort (Arb)

1 INTRODUCTION

Project Green was engaged by Accord Property to prepare a tree development report in relation to an application to demolish an existing dwelling and construct a new Child Care Centre on a site at the corner of Glen Osmond Road and Gladstone Road Fullarton (comprising 196 Glen Osmond Road and 1A Gladstone Road). A large street tree is located in the Gladstone Road verge and Council requires a report on the potential impacts of the proposed development on the tree.



Subject tree viewed from Gladstone Road.

1.1 Site Description

The site comprises an irregularly shaped parcel of land currently occupied by two detached dwellings (**Refer Figure 1**). The subject tree is located in a protuberance in Gladstone Road near the corner with Glen Osmond Road. There is an existing crossover near the western site boundary on the Gladstone Road frontage.



Figure 1: Aerial view showing development site and subject tree.

2 BACKGROUND INFORMATION

2.1 Documents and Information Provided

The following documents and information were referred to in preparation of this report:

- *Tree Assessment Report* by Project Green dated 3 June 2021.
- *Ground floor plan* by Red Shed Architects dated 17/07/21.
- *Sketch plans* by Red Shed Architects Issue L dated 30.08.21.
- *Landscape plan* by Red Shed Architects Issue L dated 30.08.21.

2.2 Legislation and Standards

Regard was given to the following legislation and standard for the purpose of conducting the assessment and advising on measures to limit developmental impacts.

- *Planning, Development and Infrastructure Act 2016.*
- *Planning, Development and Infrastructure (General) Regulations 2017.*
- *Planning and Design Code*
- *Australian Standard 4970-2009 Protection of trees on development sites*

3 METHOD

The following actions were undertaken to produce this report:

- Site inspection on 19 July 2021.
- Visual tree assessment of the subject tree.
- Identification of the status of the tree under the regulated tree provisions of the *South Australian Planning, Development and Infrastructure Act 2016.*
- Identification of a Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) for the tree in accordance with *AS4970-2009 (Protection of trees on development sites).*
- Calculation of TPZ encroachments and potential development impacts.
- Recommendations regarding tree protection measures to be adopted to mitigate any development impacts.

3.1 Limitations

- The tree was inspected visually from the ground only. No aerial, subsurface or invasive inspections were performed, and no soil or plant samples were laboratory tested.
- Information contained in this report is based on observations taken on the day of inspection only. It is possible that changes in environmental conditions or subsequent information may affect these findings.
- This report has been prepared on behalf of and for the exclusive use of the Project Green client.

4 RESULTS

4.1 Tree details

The subject tree is a specimen of *Corymbia citriodora* (Lemon Scented Gum). It is located in the street verge as follows:

- Approx. 0.9m from the street kerb.
- Approx. 4.5m from an open jointed paved footpath and stobie pole.
- Approx. 6m from the site boundary.
- Approx. 11.5m from the existing dwelling on the allotment.

The tree is located in a somewhat constrained growing environment in an open garden bed in the protuberance, but in close proximity to the kerb and water table on the northern and western sides of the tree trunk. Growth of the tree trunk and buttressing roots were observed to have disrupted the adjacent kerb, with a section of kerb missing. Tree roots close to the surface were also observed to be disrupting the bitumen road surface in the parking bays to the west of the tree. This disruption was estimated to extend at least 1.5m from the kerb. In this area the existing bitumen surface appears to be relatively old and degraded (conditions conducive to root growth).



Photo1: showing kerb disruption at tree base.



Photo2: showing kerb disruption at tree base.



Photo 3: showing disruption of bitumen surface by tree roots.

The tree has a trunk circumference of 2.16m measured 1m above ground level and qualifies as a regulated tree under the *Planning, Development and Infrastructure Act 2016*. The tree is also a Council owned asset.

The tree has good health with a healthy trunk and crown. The tree has good structure with single trunk with good taper, and with irregular branches supporting an elevated crown. Branch unions appear to be sound without any obvious major defects.



Photo 4: showing tree structure.

4.2 Proposed Development

Based on the drawings provided, the proposed development includes the following.

- Demolition of existing building located approx. 11.5m from the tree.
- New building located approx. 20m from the tree.
- Areas of landscaping as per landscape plan provided.
- New car park located approx. 8.4m from the tree. It was advised that new carpark would be bitumen construction.
- New footpath crossover located approx. 4.9m from the tree.
- Crossover construction details were not available at the time of the assessment. The existing footpath is of open joined brick construction.
- Detailed information was not available on the treatment of the area of public roadway adjacent to the existing protuberance. It was advised that a triangular section of the roadway adjacent to the existing protuberance was to be planed as a landscaped garden bed (shown green on the drawing provided).

Information was not available at this stage on any changes in site levels such as excavation or filling, any trenching for the installation of underground services, and the installation of site fencing.



Figure 2: Site plan provided.

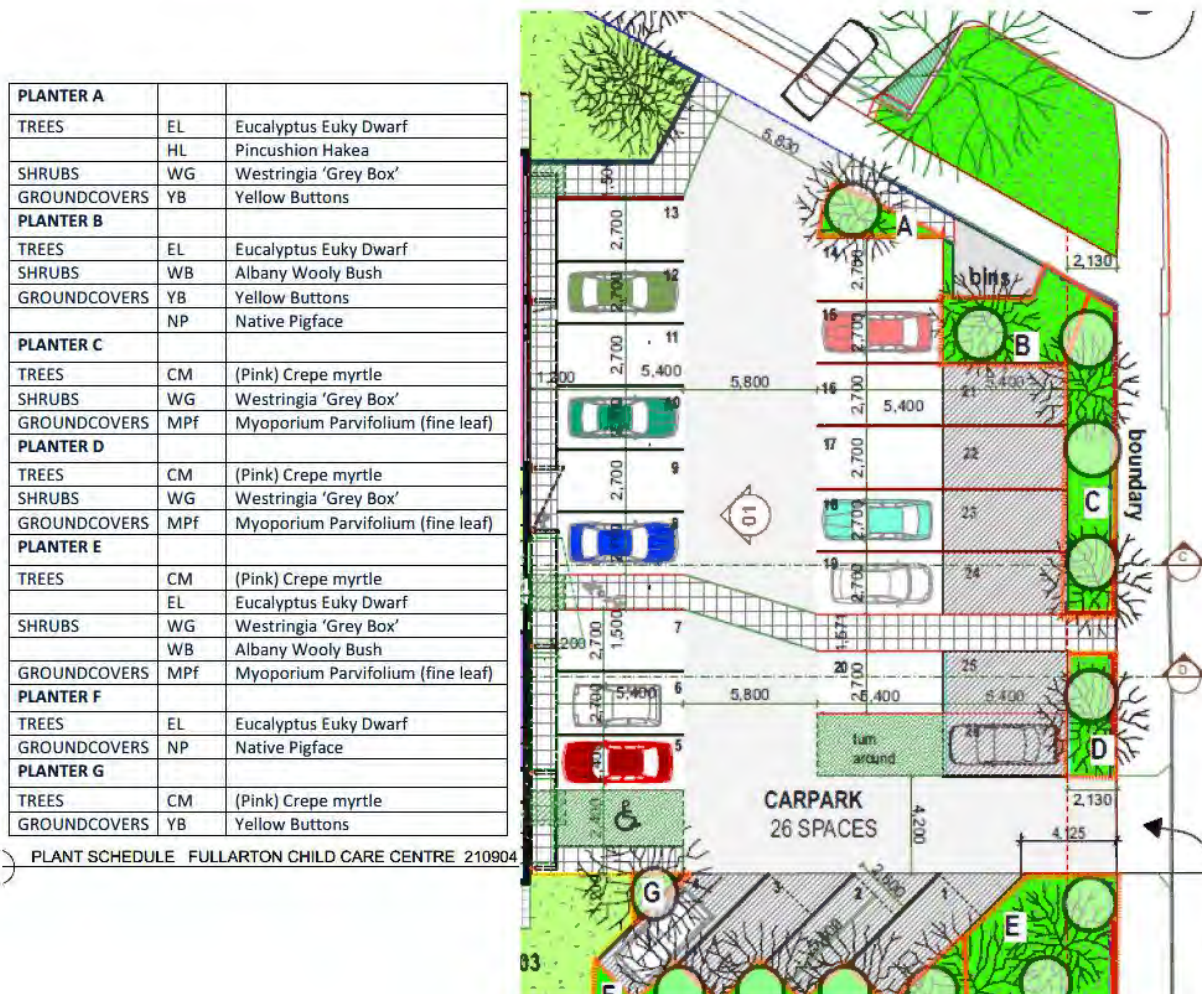


Figure 3: Landscape plan provided.

4.3 Development Impacts

All parts of the tree, including its root system, trunk and crown, may be damaged by development and construction activities if tree protection measures are not implemented. Damage to any one part of the tree may affect its functioning as a whole.

Under AS4970-2009 the Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance so that the tree remains viable. The radius of a tree's TPZ is calculated by multiplying its DBH (Diameter at Breast Height) by 12. The TPZ is to be observed in a symmetrical manner with the tree being in a central position.

The TPZ also incorporates the Structural Root Zone (SRZ) which comprises the area around the base of a tree required for the tree's stability and viability.

Table 1 describes the TPZ and SRZ for the subject tree as.

Table 1: Tree Protection Zones

Tree species	<i>Corymbia citriodora</i>
DBH (mm)	650
TPZ (radius m)	7.8
TPZ (area m ²)	191
Diam. at base (m)	800
SRZ (radius m)	3.0

AS4970-2009 allows for a level of encroachment into the TPZ. Encroachments can be by earthworks, paving and trenching for services, as well as building works. The following assessment was made of the encroachments by the existing and proposed development on the tree (**refer to the following TPZ Plans**).

4.3.1 Existing TPZ occupancy

Consideration has also been given to the presence of any pre-existing structures within the TPZ.

The existing roadway occupies approx. **80m² (42%)** of the TPZ. This has been established for a long period of time and the tree will have adapted to its presence. Shallow tree rots were observed to be growing beneath the old, degraded bitumen surface.

The remainder of the TPZ is occupied by areas of garden bed on the development site and areas of landscaping and open jointed paving in the street verge.

4.3.2 New encroachments

The proposed development activities at the site encroach into the TPZ of the tree as follows:

Table 2: TPZ encroachments

TPZ Encroachment	Area (m ²)	%	SRZ Encroachment
Building	-	-	-
Car park pavement	2	1.1	No
Other site paving	6	3.1	No
New crossover	9	4.7	No
Total	17	8.9	

It is considered that an encroachment of approx. **17m² (8.9%)** for the proposed site paving and footpath crossover would comprise a minor encroachment under AS4970. Which suggests impacts on the tree from the development are unlikely.

Any other site works not shown on the sketch drawing provided could also comprise potential TPZ encroachments. This includes any changes in site levels such as excavation or filling, trenching for the installation of underground services, and installation of site fencing.

It is also noted that the new footpath crossover will increase vehicle movements in the area adjacent to the tree (and within the SRZ) in what is now a parallel car parking space. The existing bitumen surface in this area was observed to be degraded with shallow tree roots present which are disrupting the bitumen surface. Future treatment of this area requires further consideration to minimize any damage to tree roots within the SRZ. The root sketch drawing below indicates the approximate location of surface roots observed around the tree.

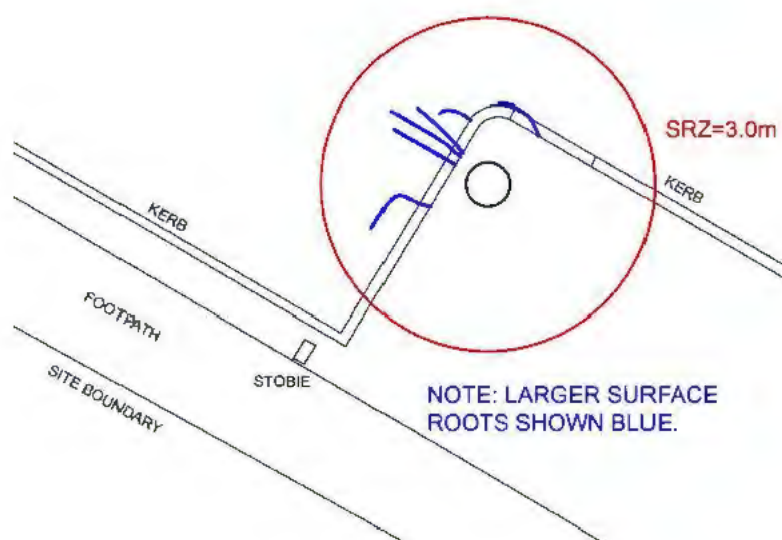


Figure 4: Depiction of larger surface roots

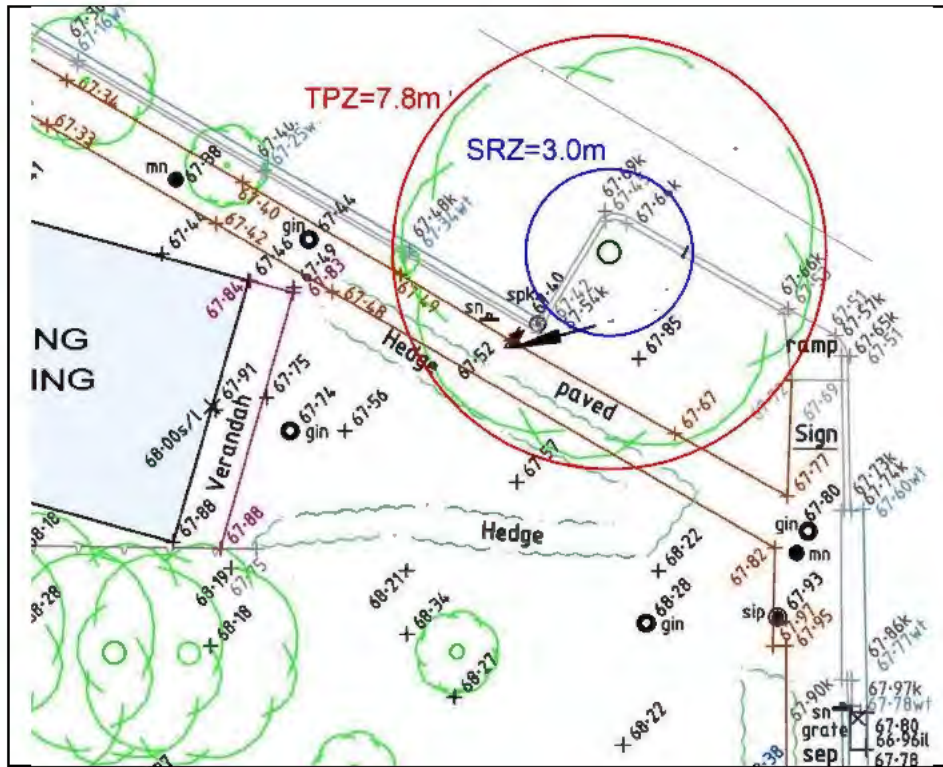


Figure 5: TPZ Plan - Existing site

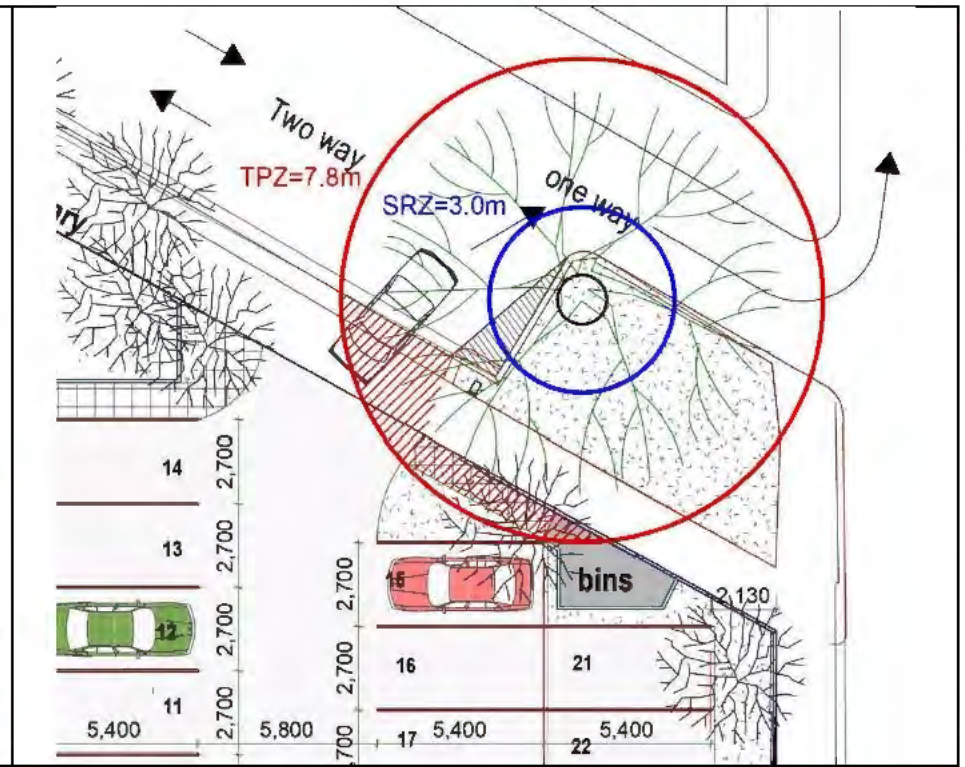


Figure 6: TPZ Plan - Proposed site

5 DISCUSSION AND CONCLUSIONS

The subject tree is a specimen of *Corymbia citriodora*, or Lemon Scented Gum, which is a large growing tall tree from temperate and tropical eastern Australia. It is seen growing as an ornamental tree in all states of Australia, exhibiting tolerances of a wide range of soils, rainfalls, and climates. The form of this tree is often wide-spreading and can develop long, end weighted branches that can be prone to limb failure, with very little internal growth which can make crown reduction problematic. The species is often seen planted in positions with limited space for development, which it then outgrows. The species is considered to have a moderate to high tolerance of development activities.

Development can impact on tree health and stability, including damage to the root system, trunk and crown. Australian Standard 4970-2009 (Protection of trees on development sites) provides guidance on principles and best practices for protecting trees on land subject to development.

The total encroachment for the proposed site paving and footpath crossover is **17m² (8.9%)** which would comprise a 'minor encroachment' under AS4970 (<than 10% of the TPZ and not within SRZ).

In assessing potential impacts on the tree, consideration has been given to the relevant factors listed in Clause 3.3.4. This includes:

Tree species and tolerance to root disturbance.

The tree species *Corymbia citriodora* is considered to have a moderate to high tolerance of development activities.

Age, vigour and health of the tree.

This is a relatively young tree which exhibits good health and vigour.

The presence of existing or past structures or obstacles affecting root growth.

The existing roadway occupies approx. **42%** of the TPZ. This has been established for a long period of time and the tree will have adapted to its presence.

Shallow tree roots were observed to be growing beneath the old, degraded bitumen surface adjacent to the tree. Future treatment of this area requires further consideration to minimize any vehicle damage to tree roots within the SRZ.

Tree sensitive construction measures.

The impacts of the proposed development can be offset through the adoption of 'tree sensitive' construction materials and methods. In this instance the following measures could be adopted to minimize development impacts on the tree.

- Installation of paving within a TPZ can impact on tree health by the installation of impervious surfaces, and by excavation works. The new footpath crossover should comprise open jointed pavers to maintain water infiltration into the soil.
- Further civil works may also be required within the road reserve to protect exposed roots. These would need to be discussed and agreed with Council.
 - Possible re-surfacing of roadway at new site exit. This should be undertaken in a 'tree sensitive' fashion to minimize root damage within the SRZ.
 - Possible extension of the existing protuberance to the west to better incorporate and protect roots in the 'zone of rapid taper' around the tree base. Any new kerbing (if required) would need to be installed without cutting significant tree roots.
- Continuous trenching for underground services within a TPZ can sever tree roots. Underground services are to be routed outside of the TPZ if possible. If underground services cannot be routed outside of the TPZ, install using 'soft dig' methods such as hydro-excavation or direction boring under guidance of the Project Arborist.
- Any fencing within the TPZ should be installed using fence panels on bored pier footings without continuous trenching.

The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.

- The new encroachment can be offset to some extent by the existing verge if retained in a permeable state.

The tree should also be protected at all stages of the development process as outlined in Appendix A **(Tree Protection Zone)**.

6 RECOMMENDATIONS

Based on this assessment the following recommendations are made with respect to the proposed development:

1. Works in existing roadway

- 1.1. The need for other works in the existing roadway to protect exposed tree roots to be discussed with Council. This would include.
- 1.2. Possible re-surfacing of the existing roadway at new site exit. To be undertaken in a 'tree sensitive' fashion to minimize root damage within the SRZ.
- 1.3. Possible extension of the existing protuberance to the west to better incorporate and protect roots in the 'zone of rapid taper' around the tree base.

2. Tree root damage prevention

- 2.1. Paving within the TPZ (including footpath crossover) to comprise open jointed pavers to maintain water infiltration into the soil. Paving to be installed to minimize the need for excavation within the TPZ.
- 2.2. Underground services are to be routed outside of the TPZ if possible.
- 2.3. If underground services cannot be routed outside of the TPZ, installed using 'soft dig' methods such as hydro-excavation or direction boring under guidance of the Project Arborist.
- 2.4. Any new fencing is to be installed using fence panels on bored pier footings without continuous trenching.

3. Protective fencing

- 3.1. Temporary protective fencing is to be installed around the tree prior to any work commencing and is to be maintained in place until all work is finalized. Bunting may be erected in the verge around the tree if required by Council.
- 3.2. The fenced areas shall not be used for storage of machinery or construction materials or for parking or vehicle access. Areas for parking, storage, waste disposal, mixing and wash out areas must be clearly defined, well away from the tree protection zone.
- 3.3. Apply mulch to a depth of 50-75mm within the protective fencing on the site.

- 3.4. Supplementary watering of the TPZ areas is to be undertaken during dry periods or as deemed necessary by the project Arborist.
 - 3.5. The TPZ fence may be reduced in extent in the final stages of construction to enable site works to be completed.
 - 3.6. All works within the designated TPZ should be carried out under the supervision of the project Arborist.
4. **Mechanical damage prevention to trunk & crown**
- 4.1. During construction site access is to take place from the existing crossover away from the tree trunk.
 - 4.2. Protective fencing is to be maintained around all sides of the tree throughout the construction process.
5. **General protection measures**
- 5.1. General tree protection measures are to be adopted as outlined in **Appendix A (Tree Protection Zone)**.

7 GLOSSARY

Crown Density	The estimated percentage of density of foliage present in the crown compared to that idealised for the genus and species when in good condition of normal vigour and expressed as a percentage, considering vigour, predation, environmental condition, epicormic shoots and dormancy (Draper & Richards, 2009).
Crown Lifting	The removal of the lower branches (AS4373:2007).
Live Crown Ratio	An estimate of the ratio of the length of live crown to the height of the tree, expressed as a percentage (Draper & Richards, 2009 p 90)
Structural Root Zone (SRZ)	Is the area required for tree stability and is incorporated in the Tree Protection Zone. (AS4970:2009).
Tree Protection Zone (TPZ)	Is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable (AS4970:2009).
Visual Tree Assessment	A visual inspection of a tree from the ground undertaken by a trained arborist competent in determining tree type, structural integrity, health, growing environment and environmental benefits or impacts the tree may present, and determining suitable methods for managing the tree and impact it may have on its immediate surrounds. The inspection is limited to those attributes observe on the day of inspection. No other investigation techniques are used unless stated otherwise.

8 BIBLIOGRAPHY

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Draper, D.B & Richards P.A (2009) Dictionary for Managing Trees in Urban Environments, CSIRO Australia.

Matheny, N.P: & Clark, J.R (1994) Evaluation of Hazard Trees in Urban Areas. ISA Publications.

Shigo, A.L. (1999) A New Tree Biology (9th edition) Sherwin Dodge Printers, Littleton, New Hampshire.

APPENDIX A- Tree Protection Zone (TPZ)

Definition of TPZ

Tree Protection Zone (TPZ) has been identified for the subject tree. The TPZ is a restricted area usually delineated by protective fencing, which is installed prior to site establishment and retained intact until completion of the works. The intent of the TPZ is to protect the tree and to ensure that its health and stability are maintained.

Implementation

To protect trees during development *Australian Standard 4970-2009 Protection of Trees on Development Sites* (AS4970-2009) prescribes activities within the TPZ and Structural Root Zone (SRZ) as described in more detail below. Contractors and staff must be informed by the site supervisor to take precautions when working within the designated TPZs, to prevent tree damaging activity occurring. Any authorized works and activities within the TPZ must be supervised by the Project Arborist.

The project specifications must acknowledge the need to protect the subject tree and the role of the Project Arborist. Additional arboricultural assessment may be required if the design changes from that originally approved.

Activities restricted within the TPZ

Activities generally excluded from the TPZ include but are not limited to:

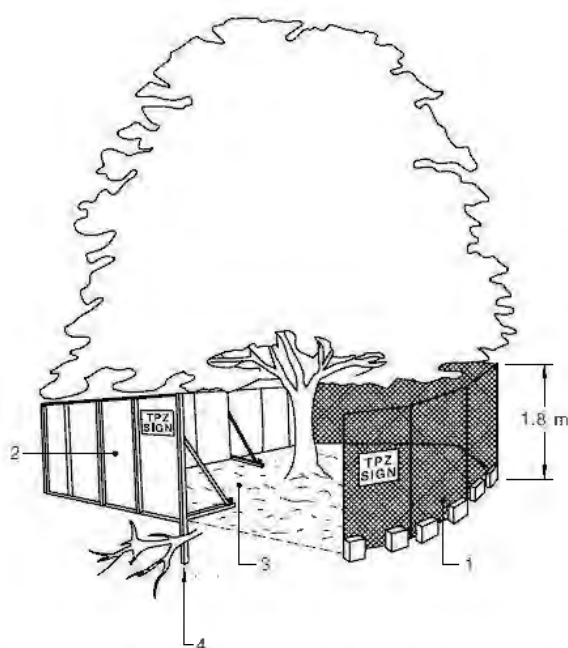
- | | |
|---|---|
| a) machine excavation including trenching; | h) dumping of waste; |
| b) excavation for silt fencing; | i) wash down and cleaning of equipment; |
| c) cultivation; | placement of fill; |
| d) storage; | j) lighting of fires; |
| e) preparation of chemicals, including
preparation of cement products; | k) soil level changes; |
| f) parking of vehicles and plant; | l) temporary or permanent installation of
utilities and signs, and |
| g) refuelling; | m) physical damage to the tree. |

Tree protection zone fencing

Fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works including demolition. Once erected, protective fencing must not be removed or altered without approval by the Project Arborist. The TPZ should be secured to restrict access.

AS 4687-2007 (Temporary fencing and hoardings) specifies applicable fencing requirements.

- Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids into the protected area.
- Fence posts and supports should have a diameter greater than 20 mm and be located clear of roots.
- Existing perimeter fencing and other structures may be suitable as part of the protective fencing.
- Figures 1 & 2 indicate an example of protective fencing.
- Signs identifying the TPZ should be placed around the edge of the TPZ and be visible from within the development site. The lettering on the sign should comply with AS 1319-1994 (Safety signs for the occupational environment). Figure 3 gives an example of TPZ signage.



LEGEND:

- 1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
- 2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
- 3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
- 4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

Figure 1: Example of protective fencing



Figure 2: Typical TPZ fencing



Figure 3: Example of TPZ signage

Other tree protection measures

When tree protection fencing cannot be installed or requires temporary removal, other tree protection measures should be used, including those listed below.

Trunk and branch protection

Where necessary, install protection to the trunk and branches of trees as shown on Figure 4.

The materials and positioning of protection are to be specified by the Project Arborist. A minimum height of 2 m is recommended.

Do not attach temporary power lines, stays, guys and the like to the tree. Do not drive nails into the trunks or branches.

Ground protection

- If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Measures may include a permeable membrane such as geotextile fabric beneath a layer of mulch or crushed rock below rumble boards as illustrated in Figure 4.
- These measures may be applied to root zones beyond the TPZ.

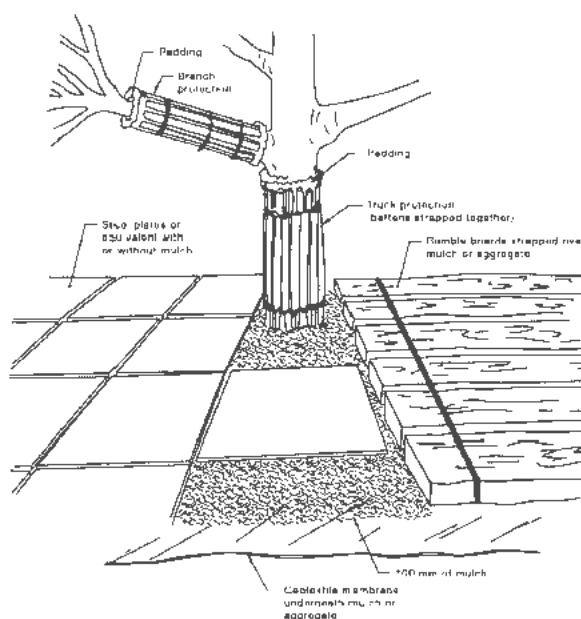


Figure 4: Examples of trunk, branch and ground protection.

Root protection during works within the TPZ

Some approved works within the TPZ, such as regrading, installation of piers or landscaping may have the potential to damage roots.

If the grade is to be raised the material should be coarser or more porous than the underlying material. Depth and compaction should be minimised.

Manual excavation should be carried out under the supervision of the Project Arborist to identify roots critical to tree stability. Relocation or redesign of works may be required.

Where the Project Arborist identifies roots to be pruned within or at the outer edge of the TPZ, they should be pruned with a final cut to undamaged wood. Pruning cuts should be made with sharp tools such as secateurs, pruners, handsaws or chainsaws. Pruning wounds should not be treated with dressings or paints. It is not acceptable for roots within the TPZ to be 'pruned' with machinery such as backhoes or excavators.

Where roots within the TPZ are exposed by excavation, temporary root protection should be installed to prevent them drying out. This may include jute mesh or hessian sheeting as multiple layers over exposed roots and excavated soil profile, extending to the full depth of the root zone. Root protection sheeting should be pegged in place and kept moist during the period that the root zone is exposed.

Other excavation works in proximity to trees, including landscape works such as paving, irrigation and planting can adversely affect root systems. Seek advice from the Project Arborist.

Installing underground services within TPZ

All services should be routed outside the TPZ. If underground services must be routed within the TPZ, they should be installed by directional drilling or in manually excavated trenches.

The directional drilling bore should be at least 600 mm deep. The Project Arborist should assess the likely impacts of boring and bore pits on retained trees.

For manual excavation of trenches the Project Arborist should advise on roots to be retained and should monitor the works. Manual excavation may include the use of pneumatic and hydraulic tools.

Scaffolding

Where scaffolding is required it should be erected outside the TPZ. Where it is essential for scaffolding to be erected within the TPZ, branch removal should be minimized. This can be achieved by designing scaffolding to avoid branches or tying back branches. Where pruning is unavoidable it must be specified by the Project Arborist in accordance with AS 4373-2007.

NOTE: Pruning works may require approval by the determining authority.

The ground below the scaffolding should be protected by boarding (e.g. scaffold board or plywood sheeting) as shown in Figure 5. Where access is required, a board walk or other surface material should be installed to minimize soil compaction. Boarding should be placed over a layer of mulch and impervious sheeting to prevent soil contamination. The boarding should be left in place until the scaffolding is removed.

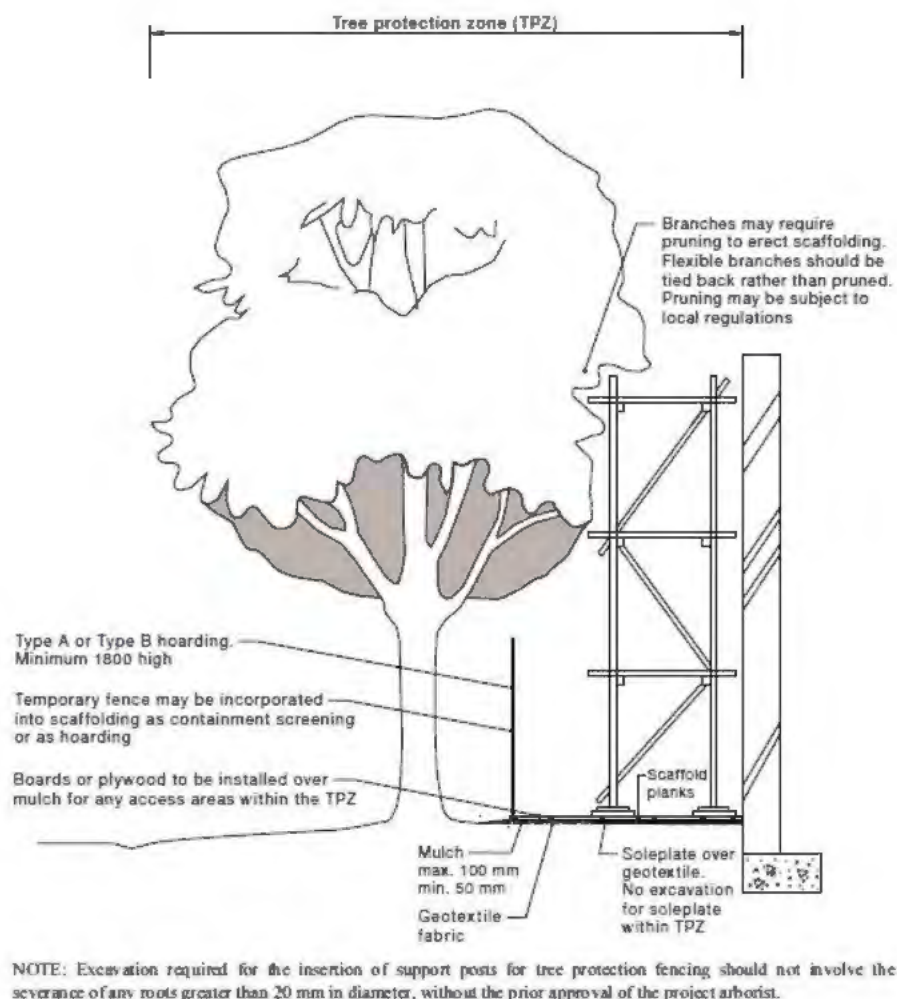


Figure 5: Indicative scaffolding within a TPZ

Maintaining the TPZ

Mulching

The area within the TPZ should be mulched. The mulch must be maintained to a depth of 50–100 mm using material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.

Watering

Soil moisture levels should be regularly monitored by the Project Arborist. Temporary irrigation or watering may be required within the TPZ. An above-ground irrigation system should be installed and maintained by competent person.

Weed removal

All weeds should be removed by hand without soil disturbance or should be controlled with appropriate use of herbicide.

Monitoring and certification

There are many stages in the development process from site acquisition to completion where the Project Arborist is required to monitor or certify tree protection. Table 1 summarizes the process and indicates the stages that normally require certification (a written statement of compliance).

Table 3: Stages in Development and the Tree Management Process

Stage in development	Tree management process	
	Matters for consideration	Actions and certification
Pre-construction		
Initial site preparation	State based OHS requirements for tree work	Compliance with conditions of consent
	Approved retention/removal	Tree removal/tree retention/transplanting
	Refer to AS 4373 for the requirements on the pruning of amenity trees	Tree pruning Certification of tree removal and pruning
	Specifications for tree protection measures	Establish/delineate TPZ Install protective measures Certification of tree protection measures
Construction		
Site establishment	Temporary infrastructure Demolition, bulk earthworks, hydrology	Locate temporary infrastructure to minimize impact on retained trees Maintain protective measures Certification of tree protection measures
Construction work	Liaison with site manager, compliance Deviation from approved plan	Maintain or amend protective measures Supervision and monitoring
Implement hard and soft landscape works	Installation of irrigation services Control of compaction work Installation of pavement and retaining walls	Remove selected protective measures as necessary Remedial tree works Supervision and monitoring
Practical completion	Tree vigour and structure	Remove all remaining tree protection measures Certification of tree protection
Post construction		
Defects liability/maintenance period	Tree vigour and structure	Maintenance and monitoring Final remedial tree works Final certification of tree condition

Tree Protection Plan

The approved tree protection plan must be available onsite prior to the commencement of and during works. The tree protection plan will identify key stages where monitoring and certification will be required.

A pre-construction meeting should be attended by the site manager, the Project Arborist and contractors to introduce the tree protection plan and its requirements.

PRE-CONSTRUCTION

Tree removal and pruning

Trees for removal or transplanting should be marked onsite as per the approved tree protection plan. Before removal, the Project Arborist should confirm that all marked trees correspond with those shown on the schedule or plan. Other tree work may be specified in the tree protection plan.

Tree removal should be carried out prior to erection of protection fencing. Contractors should be instructed to avoid damage to trees within protection areas when removing or pruning trees. This may include restrictions of vehicle movements.

Any approved pruning required to allow for works should be done at this stage. AS 4373-2007 specifies requirements for pruning.

Stumps to be removed from within a TPZ must be removed in a manner that avoids damaging or disturbing roots of trees to be retained.

The Project Arborist should supervise tree removal, transplanting and pruning and certify the works on completion.

Installing tree protection fencing and other protection measures

Fencing and other protection measures are to be installed in compliance with Section 4 and as detailed in the tree protection plan.

Protection measures are to be certified by the Project Arborist.

CONSTRUCTION STAGE

General

In order to ensure that protection measures are being adhered to during the pre-construction and construction stages, there should be a predetermined number of site inspections carried out by the Project Arborist. Matters to be monitored and reported should include tree condition, tree protection measures and impact of site works which may arise from changes to the approved plans.

If there is non-compliance with tree protection measures or if trees have been damaged, a time frame for compliance and remedial works should be specified by the Project Arborist.

The determining authority may need to be notified of non-compliance issues. Monitoring, reporting and certification should be carried out at the following critical stages of construction.

Site establishment

The Project Arborist will monitor the impacts of demolition, bulk earth works, installation of temporary infrastructure including bunting, sediment control works, and drainage works.

The construction management plan (site establishment plan) should be checked for compliance with the tree protection plan. The construction management plan normally includes location of site sheds, stockpile areas, temporary access roads and sediment control devices.

At completion of site establishment, the Project Arborist should certify that tree protection measures comply with the tree protection plan.

Construction work

The Project Arborist will monitor the impacts of general construction works on retained trees. Monitoring should be done at regular intervals or in consultation with the site manager. Monitoring is to be recorded for inclusion in certification at practical completion.

Critical stages typically include installation of services, footings and slabs, scaffolding, works within the TPZ and at completion of building works.

Landscape works

The landscape plan should be checked for compliance with the tree protection plan. The Project Arborist may need to approve the staged removal of protection measures required to allow for landscape works.

The Project Arborist should supervise any works within TPZs, including retaining walls, irrigation and lighting installation, topdressing, planting and paving.

The Project Arborist should specify any remedial works above and below ground.

Monitoring is to be recorded for inclusion in certification at practical completion.

Practical completion

Practical completion assumes that all construction and landscaping works are finished. At practical completion all remaining tree protection measures should be removed. The Project Arborist should assess tree condition and provide certification of tree protection.

POST-CONSTRUCTION

Defects liability period

Completion of outstanding building or landscaping works following the construction period must not injure trees.

Final certification

The Project Arborist should assess the condition of trees and their growing environment and make recommendations for any necessary remedial actions.

Following the final inspection and the completion of any remedial works, the Project Arborist should certify (as appropriate) that the completed works have been carried out in compliance with the approved plans and specifications for tree protection. Certification should include a statement on the condition of the retained trees, details of any deviations from the approved tree protection measures and their impacts on trees. Copies of monitoring documentation may be required.

project GREEN



Pre-development Arboricultural Impact Assessment (*Addendum*)

7 October 2021

S30381

Prepared for:

Michael Harvey
Accord Property

Site Details:

Development Site

Corner of: Glen Osmond and Gladstone Roads
Fullarton SA 5063

Prepared by:

Project Green Pty Ltd

25-27 Ceafield Road
Para Hills West SA 5096

ABN: 78 088 402 706

ACN: 088 402 706

Tel: (08) 8283 1300

Fax: (08) 8258 1933

admin@projectgreen.net.au

AMENDED PLAN / DOCUMENT
DATE: 28/10/2021

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Report prepared by:

Dr. Martin Ely PhD

Registered Landscape Architect
Dip.Hort (Arb)

1 INTRODUCTION

Based on revised information provided since the previous Pre-development Arboricultural Impact Assessment (S30381) by Project Green, the following information has been considered:

Project Green undertook an assessment of a regulated street tree in relation to a development at the corner of Glen Osmond Road and Gladstone Road Fullarton and prepared a Pre-development Arboricultural Impact Assessment Report dated 15/09/2021.

The tree was observed to be located in a landscaped protuberance and in close proximity to the kerb and water table on the northern and western sides of the tree trunk. Growth of the tree trunk and buttressing roots were observed to have disrupted the adjacent kerb, with a section of kerb missing. Tree roots close to the surface were also observed to be disrupting the bitumen road surface in the parking bays to the west of the tree. This disruption was estimated to extend at least 1.5m from the kerb. In this area the existing bitumen surface appears to be relatively old and degraded (conditions conducive to root growth).

The tree report recommended the following in relation to works in the existing roadway:

- The need for other works in the existing roadway to protect exposed tree roots to be discussed with Council. This would include.
- Possible re-surfacing of the existing roadway at new site exit. To be undertaken in a 'tree sensitive' fashion to minimize root damage within the SRZ.
- Possible extension of the existing protuberance to the west to better incorporate and protect roots in the 'zone of rapid taper' around the tree base.

Council has reviewed the proposed design and made a Request for Information dated 28/09/2021.

With respect to the 'regulated' Lemon Scented Gum tree growing within the dilapidated traffic protuberance on Gladstone Street, I note that the subject tree presents in good condition with attributes that deem it worthy of its legislative status. The tree shall be afforded a 7.80 metre radius Tree Protection Zone (TPZ) and I note the distance between the tree and the mentioned allotment is 6.20 metres at the closest point, thus the development impacts will be minimal. To this end, I support the tree protection measures outlined within the 'Pre-development Arboricultural Impact Assessment' by Project Green dated 15 September 2021.

However, I further recommend that the property boundary is delineated without a fence or only a lightweight fence with minimal footings, the proposed 'bin pad' is moved outside of the TPZ; and the most northern wing of the proposed crossover is shifted at least 2.00 metres west of the existing traffic protuberance. This may either decrease the crossover width or shuffle the proposed 6.00 metres crossover west entirely.

2 BACKGROUND INFORMATION

2.1 Documents and Information Provided

The following documents and information were referred to in preparation of this report:

- *Council Comments* dated 28/09/2021.
- *Detail TPZ Plans*.
- *Pre-development Arboricultural Impact Assessment report (S30381) by Project Green*.

2.2 Legislation and Standards

Regard was given to the following legislation and standard for the purpose of conducting the assessment and advising on measures to limit developmental impacts.

- *Planning, Development and Infrastructure Act 2016*.
- *Planning, Development and Infrastructure (General) Regulations 2017*.
- *Planning and Design Code*.
- *Australian Standard 4970-2009 Protection of trees on development sites*.

The development proposal includes a new approx. 5.7m wide footpath crossover located approx. 4.9m from the tree.

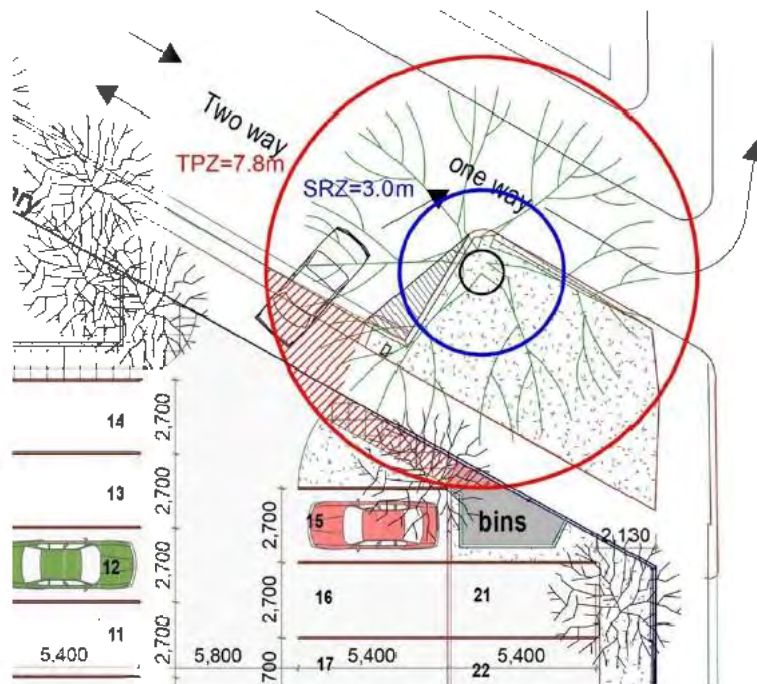


Figure 1: TPZ Plan showing the proposed crossover in relation to the tree.

It was noted that the new footpath crossover will increase vehicle movements in the area adjacent to the tree (and within the SRZ) in what is now a parallel car parking space. The existing bitumen surface in this area was observed to be degraded with shallow tree roots present which are disrupting the bitumen surface. It was advised that future treatment of this area requires further consideration to minimize any damage to tree roots within the SRZ. The root sketch drawing below indicates the approximate location of surface roots observed around the tree.



Photo 1: showing disruption of bitumen surface by tree roots.

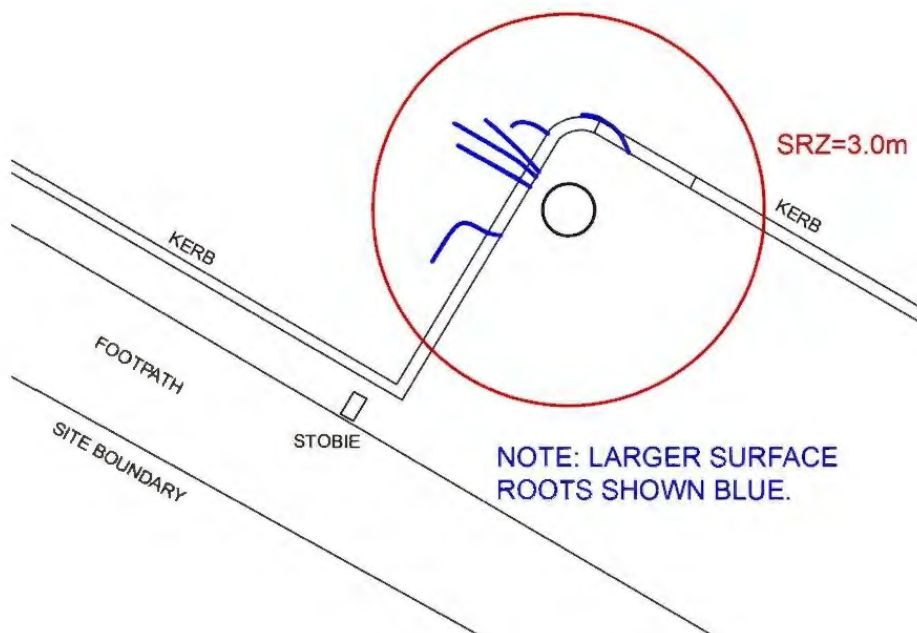


Figure 2: Depiction of larger surface roots.

3 DISCUSSION AND CONCLUSION

Extension of the existing protuberance is considered be the most effective way to protect the main body of exposed tree roots from further damage by increased vehicle movements. A design option is presented below for consideration by Council. This involves:

- Extending the existing protuberance approx. 2m to the west.
- Incorporating a new mulched garden bed in the extension.
- This would incorporate the SRZ of the tree and the 'zone of rapid taper' where larger diameter roots are disrupting the existing pavement.
- A meeting on-site with Councils arborist is advised to further discuss this option.

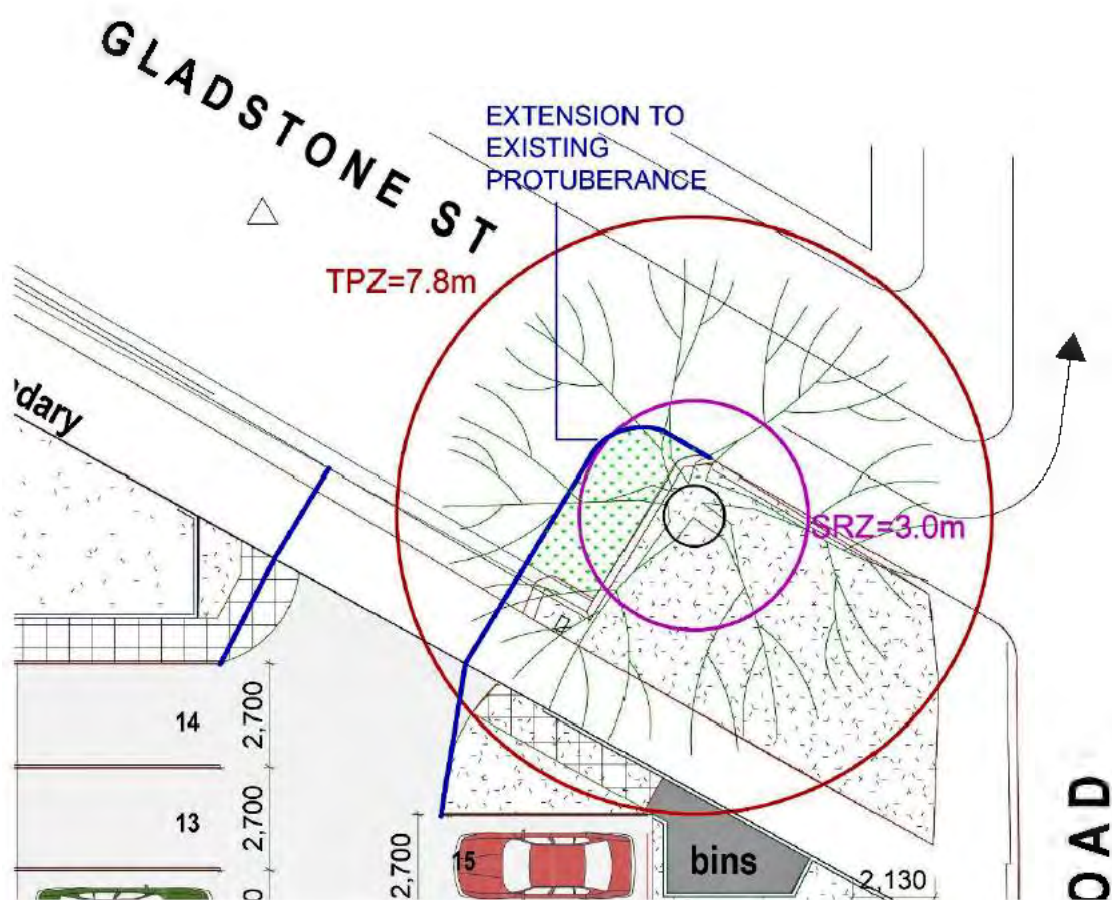


Figure 3: TPZ Plan showing protuberance extension option.

4 GLOSSARY

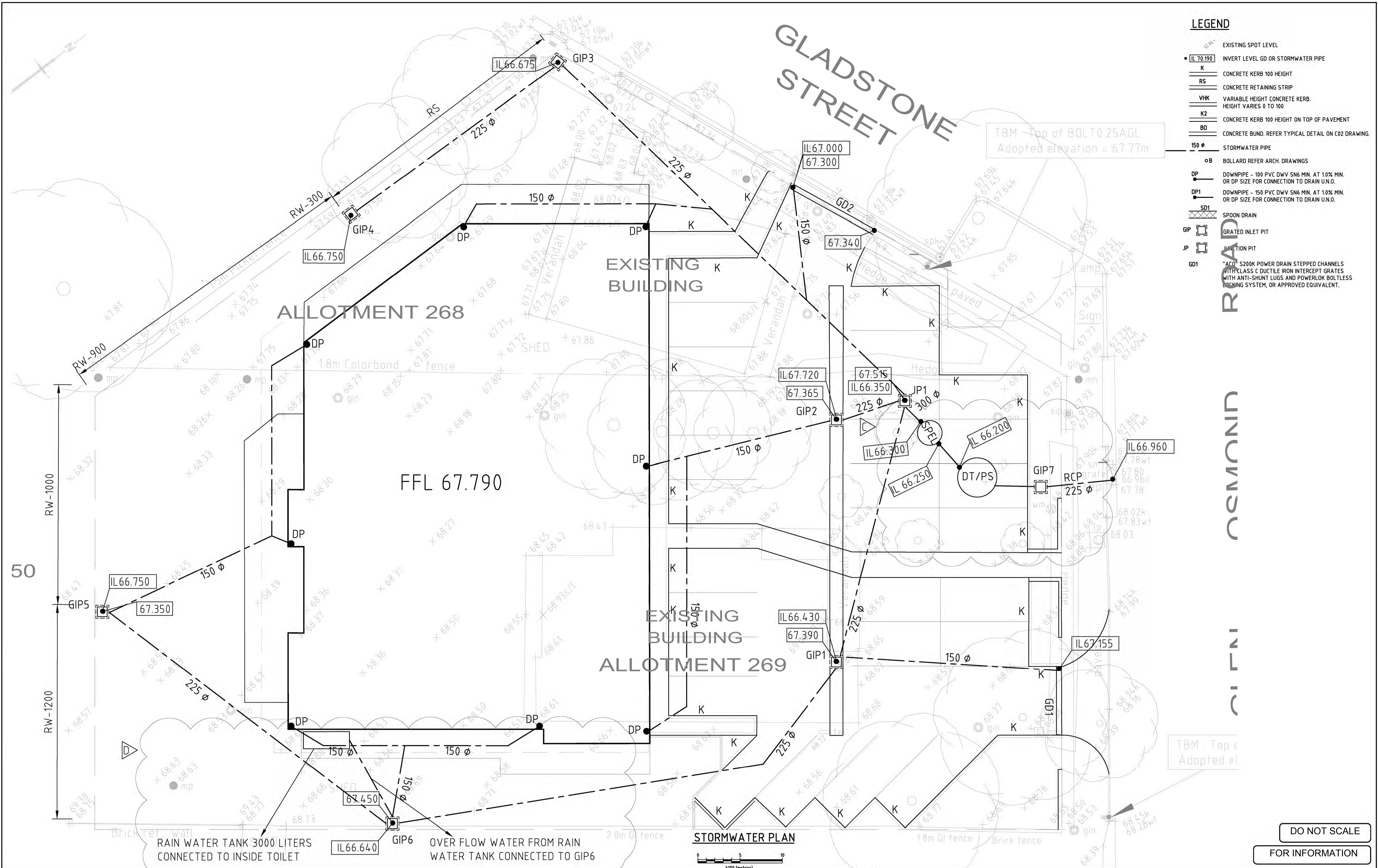
Fill	Material such as soil, rock and builder's waste introduced to a location to raise the height of levels, e.g. to above existing grade or to deposit sufficient material to a natural or artificial depression to restore it to a level consistent with or above the surrounding landscape. (Draper & Richards, 2009).
Cut	Removing of material to lower existing grade. (Draper & Richards, 2009).
Live Crown Ratio	An estimate of the ratio of the length of live crown to the height of the tree, expressed as a percentage (Draper & Richards, 2009 p 90)
Structural Root Zone (SRZ)	Is the area required for tree stability and is incorporated in the Tree Protection Zone. (AS4970:2009).
Tree Protection Zone (TPZ)	Is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable (AS4970:2009).
Visual Tree Assessment	A visual inspection of a tree from the ground undertaken by a trained arborist competent in determining tree type, structural integrity, health, growing environment and environmental benefits or impacts the tree may present, and determining suitable methods for managing the tree and impact it may have on its immediate surrounds. The inspection is limited to those attributes observe on the day of inspection. No other investigation techniques are used unless stated otherwise.

5 BIBLIOGRAPHY

Draper, D.B & Richards P.A (2009) Dictionary for Managing Trees in Urban Environments, CSIRO Australia.

Matheny, N.P: & Clark, J.R (1994) Evaluation of Hazard Trees in Urban Areas. ISA Publications.

Shigo, A.L. (1999) A New Tree Biology (9th edition) Sherwin Dodge Printers, Littleton, New Hampshire.



- LEGEND**
- 62.9L* EXISTING SPOT LEVEL
 - IL 70.190 INVERT LEVEL GD OR STORMWATER PIPE
 - K CONCRETE KERB 100 HEIGHT
 - RS CONCRETE RETAINING STRIP
 - VHK VARIABLE HEIGHT CONCRETE KERB. HEIGHT VARIES 0 TO 100
 - K2 CONCRETE KERB 100 HEIGHT ON TOP OF PAVEMENT
 - BD CONCRETE BUND. REFER TYPICAL DETAIL ON C02 DRAWING.
 - 150 φ STORMWATER PIPE
 - 225 φ STORMWATER PIPE
 - B BOLLARD REFER ARCH. DRAWINGS
 - DP DOWNPIPE - 100 PVC DWV S/N6 MIN. AT 1.0% MIN. OR DP SIZE FOR CONNECTION TO DRAIN U.N.O.
 - DP1 DOWNPIPE - 150 PVC DWV S/N6 MIN. AT 1.0% MIN. OR DP SIZE FOR CONNECTION TO DRAIN U.N.O.
 - SD1 SPOON DRAIN
 - GIP GRATED INLET PIT
 - JP JUNCTION PIT
 - GD1 "ACO" S200K POWER DRAIN STEPPED CHANNELS WITH CLASS C DUCTILE IRON INTERCEPT GRATES WITH ANTI-SHUNT LUGS AND POWERLOK BOLTSLESS LOCKING SYSTEM, OR APPROVED EQUIVALENT.

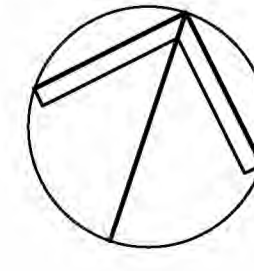
GLEN OSMOND ROAD

DO NOT SCALE
FOR INFORMATION

Issue	Description	Date	Drawn	Chkd
E	REVISED AS PER LATEST MARKUP	19.11.21	RG	RGS
D	ADDED RAINWATER TANK	07.10.21	JK	RGS
C	REVISED AS PER THE LATEST MARKUP	02.09.21	JK	RGS
B	REVISED INVERT LEVELS	02.09.21	JK	RGS
A	ISSUED FOR INFORMATION	30.08.21	JK	RGS

Client: ACCORD PROPERTY

Architect: REDSHED



SAGERO

CIVIL STRUCTURAL

253 FLINDERS STREET
Adelaide SA 5000
PO Box 1644
PH +61 08 8100 5000
fax +61 08 8232 8743
A.C.N. 162 095 847

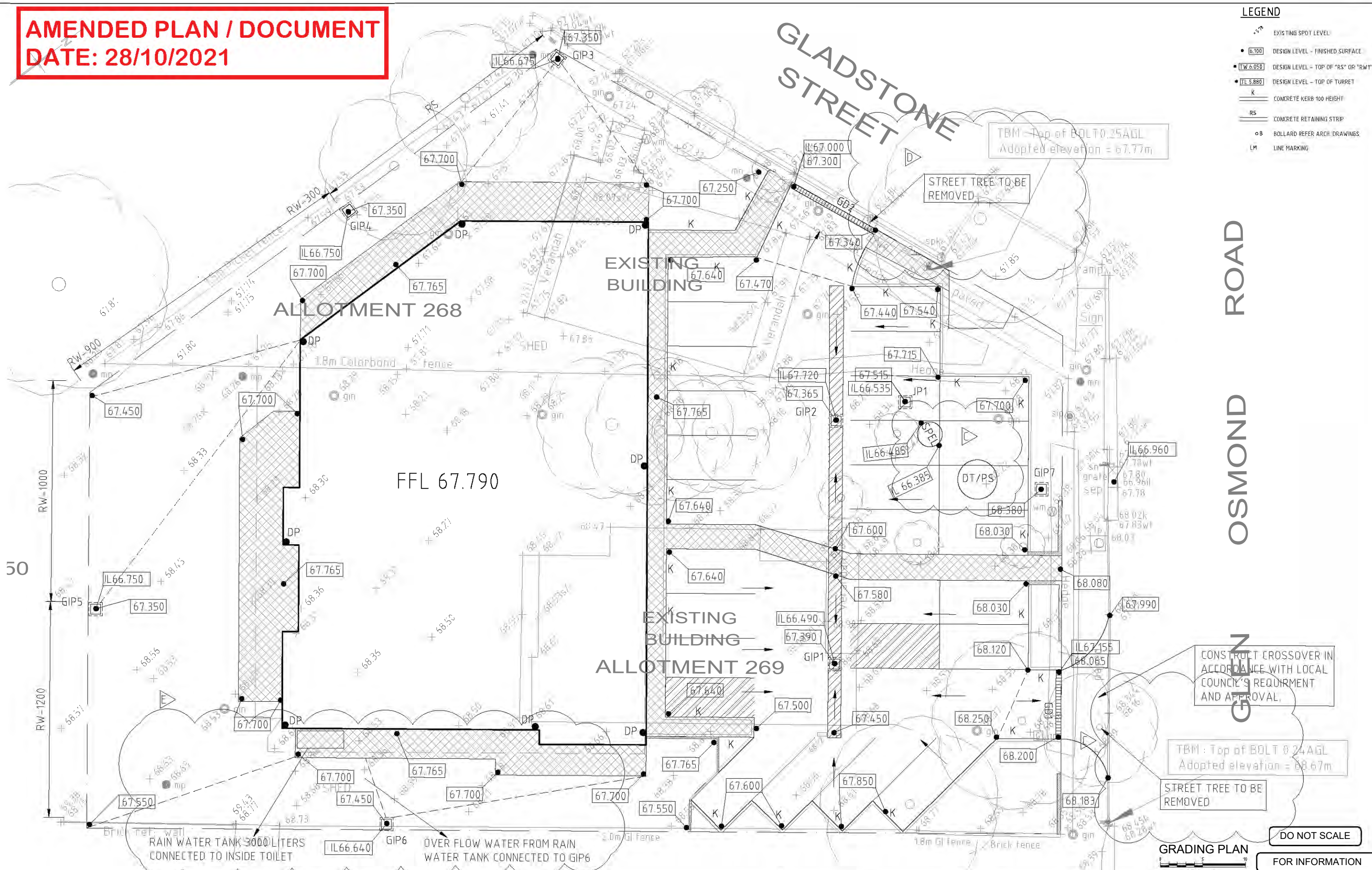
Project: CHILD CARE CENTER
196 GLEN OSMOND ROAD
FULLARTON
SA 5063

Drawing Title: STORMWATER PLAN
NOTES, LEGEND AND
SCHEDULE SHEET 1

Drawn: RGS	Date: AUG 2021	Scale: 1:100 AND AS NOTED	C/A: CHECK	Date:
Project No: SA200127	Drawn: RGS	Issue: C01	Issue: E	

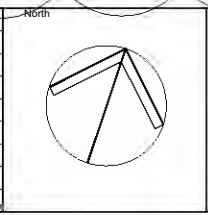
AMENDED PLAN / DOCUMENT
DATE: 28/10/2021

- LEGEND**
- 67.000 EXISTING SPOT LEVEL
 - 67.000 DESIGN LEVEL - FINISHED SURFACE
 - TW 6.050 DESIGN LEVEL - TOP OF "RS" OR "RW"
 - TL 5.880 DESIGN LEVEL - TOP OF TURRET
 - K CONCRETE KERB 100 HEIGHT
 - RS CONCRETE RETAINING STRIP
 - oB BOLLARD REFER ARCH. DRAWINGS
 - LM LINE MARKING



GRADING PLAN
 1:100 (As Shown)
DO NOT SCALE
FOR INFORMATION

Issue	Description	Date	Drawn	Chkd
E	ADDED RAINWATER TANK	07.10.21	JK	RGS
D	REVISED AS PER THE MARKUP	03.09.21	JK	RGS
C	REVISED AS PER THE MARKUP	02.09.21	JK	RGS
B	REVISED INVERT LEVELS	02.09.21	JK	RGS
A	ISSUED FOR INFORMATION	30.08.21	JK	RGS



ACCORD PROPERTY

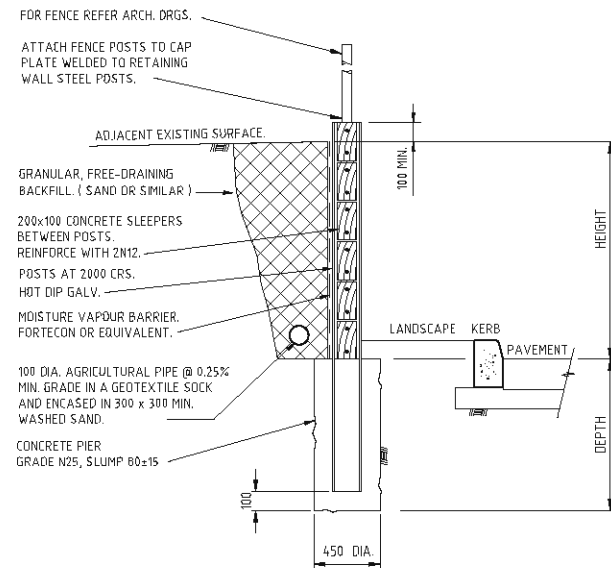
REDSHED

SAGERO
 CIVIL STRUCTURAL
 253 FLINDERS STREET
 Adelaide SA 5000
 PO Box 1644
 PH +61 08 8100 5000
 fax +61 08 8232 8743
 A.C.N. 162 095 847

Project
CHILD CARE CENTER
196 GLEN OSMOND ROAD
FULLARTON
SA 5063

GRADING PLAN AND DETAILS
SHEET 1

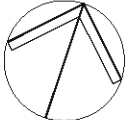
Drawn	Date	Scale	A1	Q.A. Check	Date
JK	AUG 2021	1:200 AND AS NOTED			
Designed	Project No.	Drawn No.	Issue		
RGS	SA200127	338	C03	E	



RETAINING WALL DETAIL - RW1

RETAINING WALL SCHEDULE				
	HEIGHT	DEPTH	POST	PIER DIA.
RW1	400	800	150 UB 18	450
RW2	600	1000	150 UB 18	450
RW3	800	1200	150 UB 18	450
RW4	1200	1700	150 UB 18	450
RW5	1400	2000	150 UB 18	450

**AMENDED PLAN / DOCUMENT
DATE: 28/10/2021**

	North 	Client ACCORD PROPERTY	Architect REDSHED	SAGERO CIVIL STRUCTURAL 253 FLINDERS STREET Adelaide SA 5000 PO Box 1644 PH +61 08 8100 5000 fax +61 08 8232 8743 A.C.N. 162 095 847	Project CHILD CARE CENTER 196 GLEN OSMOND ROAD FULLARTON SA 5063	Drawing Title RETAINING WALL AND FENCE DETAILS																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Issue</th> <th>Description</th> <th>Date</th> <th>Drawn</th> <th>Chkd</th> </tr> <tr> <td>A</td> <td>ISSUED FOR INFORMATION</td> <td>30.08.21</td> <td>JK</td> <td>RGS</td> </tr> </table>	Issue	Description	Date	Drawn	Chkd	A	ISSUED FOR INFORMATION	30.08.21	JK	RGS				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Drawn</th> <th>Date</th> <th>Scale</th> <th>A1</th> <th>Q.A. Check</th> <th>Date</th> </tr> <tr> <td>JK</td> <td>AUG 2021</td> <td>1:200 AND AS NOTED</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Designed</th> <th>Project No.</th> <th>Dwg. No.</th> <th>Issue</th> <td colspan="2"></td> </tr> <tr> <td>RGS</td> <td>SA200127</td> <td>339</td> <td>C05</td> <td>A</td> <td></td> </tr> </table>	Drawn	Date	Scale	A1	Q.A. Check	Date	JK	AUG 2021	1:200 AND AS NOTED				Designed	Project No.	Dwg. No.	Issue			RGS	SA200127	339	C05	A	
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A	ISSUED FOR INFORMATION	30.08.21	JK	RGS																																		
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JK	AUG 2021	1:200 AND AS NOTED																																				
Designed	Project No.	Dwg. No.	Issue																																			
RGS	SA200127	339	C05	A																																		

BULK EXCAVATION AND PAVEMENT NOTES

- B1. AFTER BULK EXCAVATION HAS BEEN COMPLETED THE FORMED SURFACE SHALL BE PROOF ROLLED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION. AFTER TOPSOIL STRIP IN FILL ZONES HAS BEEN COMPLETED THE SURFACE SHALL BE PROOF ROLLED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION.
- B2. ANY SOFT, WET OR UNSUITABLE SUBGRADE MATERIALS, AS DEFINED IN THE SPECIFICATION, SHALL BE REMOVED AND REPLACED WITH AN APPROVED MATERIAL.
- B3. ALL SURPLUS EXCAVATED MATERIALS (EXCLUDING TOPSOIL) SHALL BE REMOVED FROM THE SITE AT THE BUILDER'S EXPENSE TO A PLACE OF LEGAL DISPOSAL UNLESS DIRECTED OTHERWISE BY THE PROJECT MANAGER.
- B4. EXCAVATED MATERIAL WHICH CONFORMS WITH THE SPECIFICATION REQUIREMENTS FOR CLAY FILL MAY BE USED AS FILL REFER SPECIFICATION.
- B5. APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM LAYERS, COMPACTED, TESTED AND PROOF ROLLED IN ACCORDANCE WITH THE SPECIFICATION. THE FINISHED EARTHWORKS LEVEL SHALL BE PROOF ROLLED AND TESTED AS SPECIFIED PRIOR TO PAVEMENT CONSTRUCTION.
- B6. DURING CONSTRUCTION THE BUILDER SHALL BE RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING A TEMPORARY SITE DRAINAGE SYSTEM AND TO MAINTAIN THE SITE IN A DRY AND STABLE CONDITION. DETAILS OF THE DRAINAGE SYSTEM SHALL BE TO THE APPROVAL OF THE PROJECT MANAGER.
- B7. AT A SLOPE OF 1 IN 4 (CUT AND FILL), TEMPORARY CONSTRUCTION BATTERS SHALL BE LIMITED TO 1 IN 2. STEEPER SLOPES SHALL NOT BE CONSTRUCTED UNLESS APPROVED BY THE PROJECT MANAGER. STABILISATION AND EROSION PROTECTION SHALL BE PROVIDED AS DIRECTED BY THE PROJECT MANAGER, AT THE BUILDER'S EXPENSE. THE BUILDER SHALL BE RESPONSIBLE FOR THE STABILITY OF HIS TEMPORARY WORKS.
- B8. ALL UNDERGROUND SERVICES SHALL BE LAID PRIOR TO FINAL SEALING OF PAVEMENTS.
- B9. REFER ARCHITECT'S DRAWING FOR PAVEMENT LINEMARKING AND KERB SETOUT.
NOTE:
BEFORE STARTING ANY PAVEMENT AND BUILDING WORKS, ENSURE THE SUB-GRADE COMPACTION IS AS REQUIRED IN THE STRUCTURAL AND CIVIL SPECIFICATIONS. PROOF ROLLING AND OR COMPACTION TESTS SHALL BE CARRIED OUT.

LEGEND

- EXISTING SPOT LEVEL
- INVERT LEVEL GO OR STORMWATER PIPE
- CONCRETE KERB 100 HEIGHT
- CONCRETE RETAINING STRIP
- VARIABLE HEIGHT CONCRETE KERB. HEIGHT VARIES 0 TO 100
- CONCRETE KERB 100 HEIGHT ON TOP OF PAVEMENT
- CONCRETE BUND. REFER TYPICAL DETAIL ON C02 DRAWING.
- STORMWATER PIPE ARE ALL RCP'S
- BOLLARD REFER ARCH. DRAWINGS
- DOWNPIPE - 100 PVC DWV S/N6 MIN. AT 1.0% MIN. OR DP SIZE FOR CONNECTION TO DRAIN U.N.D.
- DOWNPIPE - 150 PVC DWV S/N6 MIN. AT 1.0% MIN. OR DP SIZE FOR CONNECTION TO DRAIN U.N.D.
- SPDON DRAIN
- GRADED INLET PIT
- JUNCTION PIT
- "ACO" S200K POWER DRAIN STEPPED CHANNELS WITH CLASS C DUCTILE IRON INTERCEPT GRATES WITH ANTI-SHUNT LUGS AND POWERLOK BOLTLESS LOCKING SYSTEM, OR APPROVED EQUIVALENT.

NOTES

STORMWATER DRAINAGE

1. ALL PIPEWORK TO BE RCP

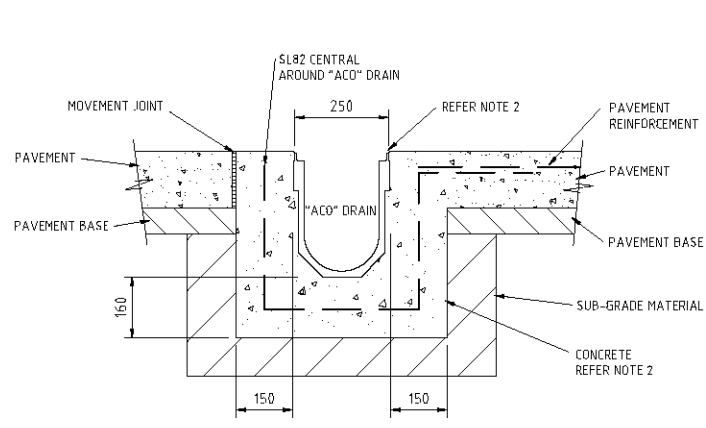
2. GIP - REINFORCED CONCRETE PIT WITH CAST IRON GRATE AND FRAME. REFER TO PIT SCHEDULE.
NOTE - ALL GIP'S TO HAVE A SPELL STORM SACK APPLIED
JP = REINFORCED CONCRETE PIT WITH CAST IRON GRATE AND COVER. REFER TO PIT SCHEDULE.

FOR PAVEMENT NOTES REFER DRG. C02

SPEL - ECCEPTOR
ECCEPTOR 150 30
INLET 66.485
OUTLET 66.385
DT/PS = STORMWATER DETENTION TANK/PUMPING STATION
23 M³ EFFECTIVE DETENTION FROM THE INVERT LEVEL OF THE INLET PIPE.
PUMPING DESIGN BASED ON 2 No. PUMPS WITH DISCHARGE = 20.00 L/S EACH.
USE 2 No. PUMPS IN CASE OF A PUMP FAILURE.
NOTE: DISCHARGE IS A SPLIT SYSTEM.

RCP
REINFORCED CONCRETE PIPE Ø225

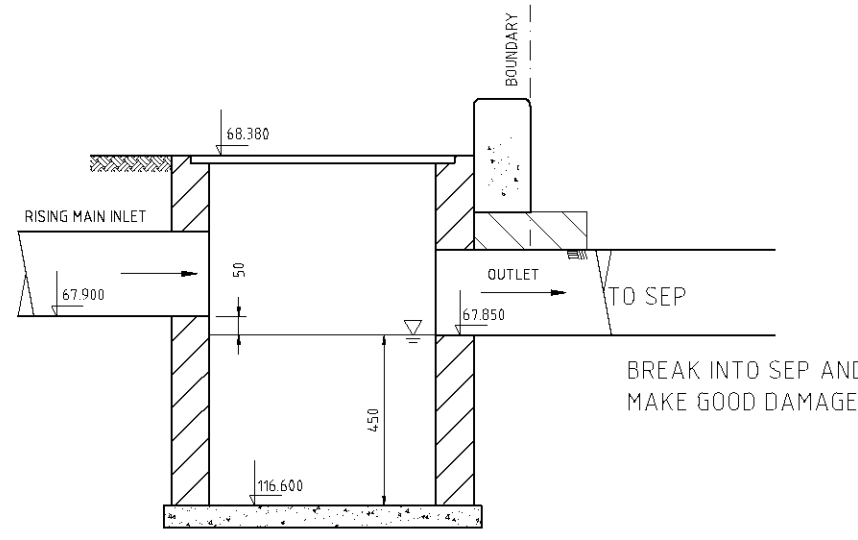
**AMENDED PLAN / DOCUMENT
DATE: 28/10/2021**



"ACO" S200K DRAIN INSTALLATION DETAIL

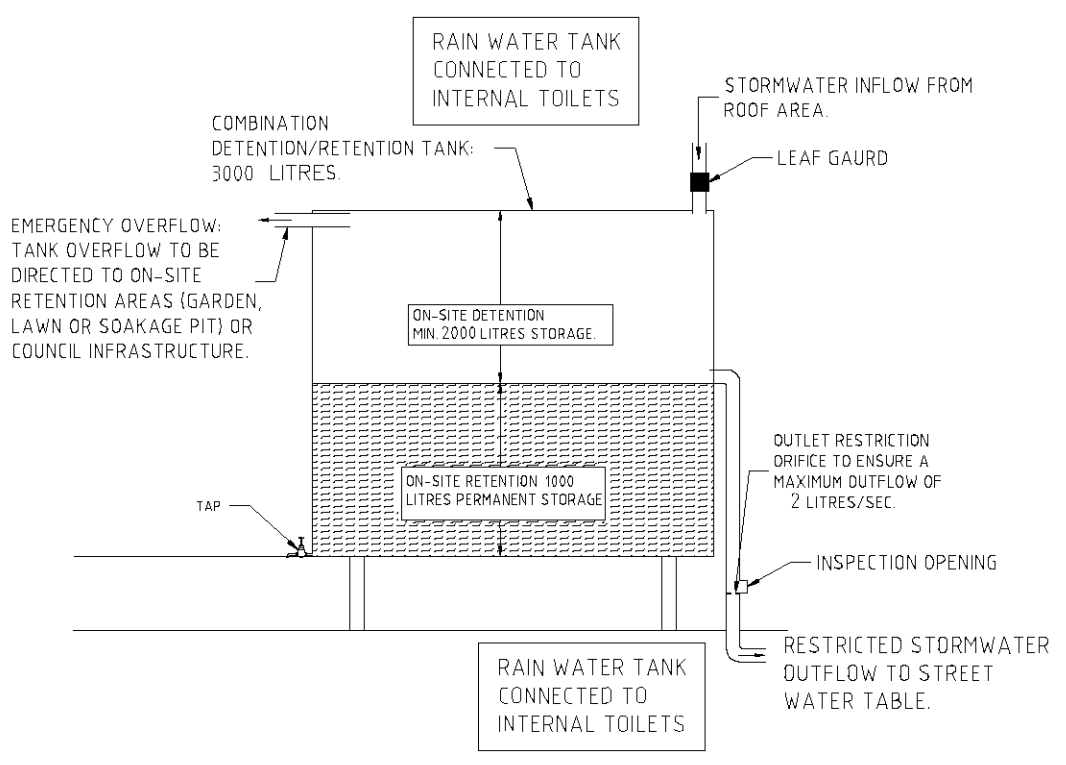
NOTES:

1. CONCRETE STRENGTH N32. VIBRATE CONCRETE TO ELIMINATE AIR POCKETS.
2. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROXIMATELY 3mm ABOVE THE TOP OF THE CHANNEL EDGE.
3. ALL MATERIALS AND COMPONENTS WITHIN THE SCOPE OF THIS SYSTEM SHALL BE OBTAINED FROM "ACO" AND THE WORK CARRIED OUT AS DETAILED ON THE DRAWING.
4. INSTALL DRAIN IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.



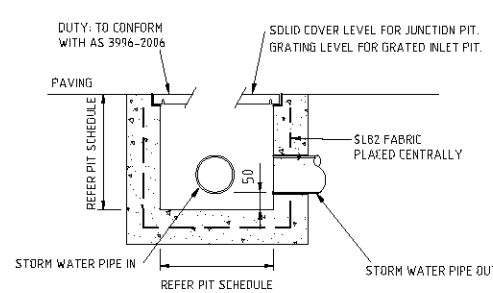
STORMWATER GRATED INLET PIT GIP7

BREAK INTO SEP AND MAKE GOOD DAMAGE



RAIN WATER TANK (RWT)

SCALE NTS



NOTES (FOR PRECAST UNITS)

1. PENETRATION FOR PIPES SHALL BE APPROX. 50 GREATER THAN THE D/O OF PIPE.
2. PIPES SHALL BE FINISHED FLUSH WITH THE INTERNAL FACE OF THE SUMP.
3. A STIFF MORTAR MIX SHALL BE PACKED INTO THE SPACE FROM BOTH SIDES OF STRUCTURE.
4. THE INTERNAL FACE SHALL BE FINISHED SMOOTH AND A 150 THICK BAND OF CONCRETE SHALL BE POURED OUTSIDE THE SUMP TO SEAL THE PENETRATION.

STORMWATER GRATED INLET PIT - GIP

STORMWATER JUNCTION PIT - JP

STORMWATER PIT SCHEDULE				
PIT No.	SIZE (INTERNAL)	TOP R.L.	INVERT R.L.	COVER TYPE
GIP1	600 x 600	67.390	IL66.490	CLASS D CAST IRON FRAME AND GRATE
GIP2	600 x 600	67.365	IL66.720	CLASS D CAST IRON FRAME AND GRATE
GIP3	600 x 600	67.350	IL66.675	CLASS D CAST IRON FRAME AND COVER
GIP4	600 x 600	67.350	IL66.750	CLASS D CAST IRON FRAME AND COVER
GIP5	600 x 600	67.350	IL66.750	CLASS D CAST IRON FRAME AND COVER
GIP6	600 x 600	67.450	IL66.640	CLASS D CAST IRON FRAME AND GRATE
GIP7	600 x 600			CLASS D CAST IRON FRAME AND GRATE
JP1	600 x 600	67.515	IL66.535	CLASS D CAST IRON FRAME AND GRATE

NOTE : ALL GIP'S TO HAVE A SPELL STORM SACK APPLIED

X APPROXIMATE R.L. - MATCH TO ADJACENT LEVELS.

X X ENSURE TOP OF GRATE IS A MIN. 50 ABOVE ADJACENT SURFACE.

DO NOT SCALE FOR INFORMATION

Issue	Description	Date	Drawn	Chkd
D	ADDED RAINWATER TANK	07.10.21	JK	RGS
C	REVISED AS PER THE MARKUP	02.09.21	JK	RGS
B	REVISED INVERT LEVELS	02.09.21	JK	RGS
A	ISSUED FOR INFORMATION	30.08.21	JK	RGS

Client: ACCORD PROPERTY

Architect: REDSHED

SAGERO

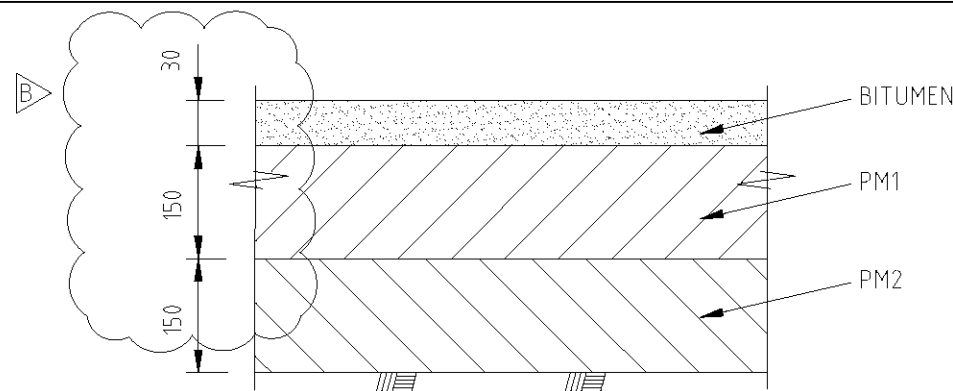
CIVIL STRUCTURAL

253 FLINDERS STREET
Adelaide SA 5000
PO Box 1644
PH +61 08 8100 5000
fax +61 08 8232 8743
A.C.N. 162 095 847

Project: CHILD CARE CENTER
196 GLEN OSMOND ROAD
FULLARTON
SA 5063

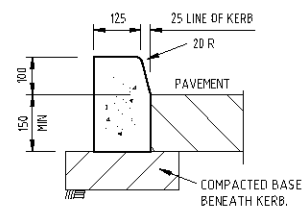
Drawing Title: STORMWATER PLAN NOTES, LEGEND AND SCHEDULE SHEET 5

Drawn: JK	Date: AUG 2021	Scale: 1:100 AND AS NOTED	A1	Q.A. Check	Date
Designed: RGS	Project No: SA200127	Drawg. No: 340	C02	Issue	D



DETAILS OF BITUMEN PAVEMENT (TYPICAL)

SCALE 1:5



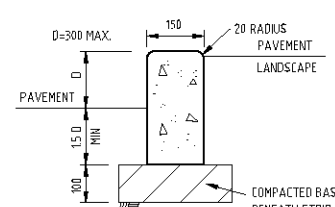
100 mm KERB (K)

SCALE 1:10

FORM JOINTS AT MAX. 2.4m CTS.
SEE AS 2876

SHRINKAGE CONTROL JOINTS: (EVERY 2.4M)
50% OF THE AREA OF THE SECTION SHALL BE CUT. THE RESULTANT SLOT IN THE SECTION SHALL BE TOOLED TO A DEPTH OF NOT LESS THAN 20MM, TO PRODUCE A NEAT GROOVE OF NOT LESS THAN 5MM IN WIDTH.

EXPANSION JOINTS: (EVERY 24.0M)
SHALL BE 15MM WIDE AND FILLED WITH AN APPROVED PRESHAPED FILLER, WHICH SHALL EXTEND FOR THE FULL WIDTH AND DEPTH OF THE EDGING.



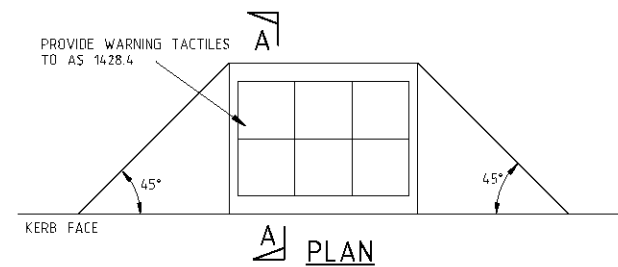
RETAINING STRIP

SCALE 1:10

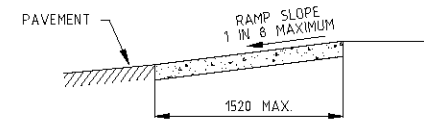
FORM JOINTS AT MAX. 2.4m CTS.
SEE AS 2876

SHRINKAGE CONTROL JOINTS: (EVERY 2.4M)
50% OF THE AREA OF THE SECTION SHALL BE CUT. THE RESULTANT SLOT IN THE SECTION SHALL BE TOOLED TO A DEPTH OF NOT LESS THAN 20MM, TO PRODUCE A NEAT GROOVE OF NOT LESS THAN 5MM IN WIDTH.

EXPANSION JOINTS: (EVERY 24.0M)
SHALL BE 15MM WIDE AND FILLED WITH AN APPROVED PRESHAPED FILLER, WHICH SHALL EXTEND FOR THE FULL WIDTH AND DEPTH OF THE EDGING.



PLAN



SECTION A-A

NOTES

1. SURFACE TEXTURE OF RAMP TO BE NON-SLIP TYPE.
2. ORIENTATION OF RAMP IS TO GENERALLY BE PERPENDICULAR TO KERB ALIGNMENT.

RAMP DETAIL

CONCRETE PAVEMENT NOTES

- R1. ALL WORKMANSHIP AND MATERIALS SHALL BE GENERALLY IN ACCORDANCE WITH THE SPECIFICATION.
- R2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- R3. ALL FABRIC LAPS SHALL BE FULL STRENGTH TO AS3600.
- R4. WELDING OF REINFORCEMENT IS NOT PERMITTED WITHOUT THE APPROVAL OF THE PROJECT MANAGER.
- R5. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR-CHAIR, SPACERS OR SUPPORT BARS.
- R6. REINFORCEMENT FABRIC SHALL BE IN ACCORDANCE WITH AS1384.
- R7. CONCRETE STRENGTH SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE AND SHALL BE SUPPLIED IN ACCORDANCE WITH AS1379 (READY MIXED CONCRETE)
- CONCRETE VEHICULAR PAVEMENTS: 32 MPa (28 DAY COMPRESSIVE STRENGTH)
- ELSEWHERE: 25 MPa (28 DAY COMPRESSIVE STRENGTH)
- R8. DETAILS OF CONCRETE MIX, AGGREGATE SIZE AND COLOUR, METHOD OF CURING AND FINISH ARE TO BE SUBMITTED TO THE PROJECT MANAGER FOR APPROVAL BEFORE.
- R9. PROVIDE ISOLATION JOINTS TO THE PERIMETER OF ALL PIT LIDS AND VALVE COVERS COMMENCING CONCRETE WORKS.

LEGEND

- EXISTING SPOT LEVEL
- [6.100] DESIGN LEVEL - FINISHED SURFACE
- [TW 6.050] DESIGN LEVEL - TOP OF "RS" OR "RW1"
- [TL 5.860] DESIGN LEVEL - TOP OF TURRET
- K CONCRETE KERB 100 HEIGHT
- RS CONCRETE RETAINING STRIP
- o B BOLLARD REFER ARCH. DRAWINGS
- LM LINE MARKING

NOTES

SET-OUT AND GRADING

1. REFER TO ARCHITECT'S DRAWINGS FOR SETOUT.
2. GRADE EVENLY BETWEEN DESIGN SPOT LEVELS.

PAVEMENT LEGEND

- CONCRETE PEDESTRIAN PAVING
100mm THICK SLAB WITH
5L72T (40 TOP COVER)
GRADE N20 CONCRETE
50mm THICK SAND BASE
COMPACTED SUB-GRADE
TOOLED JOINTS AT 1200mm MAX. CENTRES
EXPANSION JOINTS AT 4800mm MAX. CENTRES

- BITUMEN PAVING
REFER TO DETAIL
(HARDSTAND DESIGNED FOR 8.5 TONNE FORKLIFT)

FOR BULK EXCAVATION NOTES REFER DRG. C07

FOR SIGNS REFER OTHER CIVIL DRAWINGS

AMENDED PLAN / DOCUMENT
DATE: 28/10/2021

DO NOT SCALE

FOR INFORMATION

Issue	Description	Date	Drawn	Chkd
B	REVISED AS PER THE MARKUP	02.02.21	JK	RGS
A	ISSUED FOR INFORMATION	30.08.21	JK	RGS

North

Client
ACCORD PROPERTY

Architect
REDSHED

SAGERO
CIVIL STRUCTURAL
253 FLINDERS STREET
Adelaide SA 5000
PO Box 1644
PH +61 08 8100 5000
fax +61 08 8232 8743
A.C.N. 162 095 847

Project
**CHILD CARE CENTER
196 GLEN OSMOND ROAD
FULLARTON
SA 5063**

Drawing Title				
GRADING PLAN AND DETAILS SHEET				
Drawn	Date	Scale	A1	Q.A. Check
JK	AUG 2021	1:200 AND AS NOTED		
Designed	Project No.	Dwg. No.	Issue	
RGS	SA200127	341	C04	B

CIVIL STORMWATER CALCULATIONS

REFERENCE NO	SA200127
ISSUE DATE	October 2021
AGENT	ACCORD DEVELOPMENT
SITE LOCATION	CCC FULLARTON 196 GLEN OSMOND ROAD FULLARTON SA 5063

Note:

1. These calculations are to be read in conjunction with relevant Construction Reports, Structural Drawings and Architectural Drawings
2. All work to comply with the Building Code of Australia and relevant Australian and Australian and New Zealand Standards,

AS 1012 - Ready Mixed Concrete
AS 1254 - PVC Pipes and fittings for Storm/Surface Water Applications
AS 1260 - Unplasticised PVC (UPVC) Pipes and Fittings for Sewerage Applications
AS 1289 - Method of Testing Soils for Engineering Purposes
AS 1342 - Precast Concrete Drainage Pipes
AS 1379 - Specification and Supply of Concrete
AS 1415 - Unplasticised PVC Pipes and Fittings for Soil, Waste and Vent Applications
AS 1428.1 - Design for access and mobility
AS 1478 - Chemical Admixtures for use in Concrete
AS 4049.1 - Paints and Related Materials
AS 1646 - Rubber Joint Rings for Water Supply, Sewerage and Drainage Purposes
AS 1742 - Manual of Uniform Traffic Control Devices
AS 2008 - Residual Bitumen for Pavements
AS 2302 - Code of Practice for Installation of UPVC Pipe Systems
AS 2566 - Plastics Pipe Laying Design
AS 2758 - Concrete Aggregates
AS 3500 - National Plumbing and Drainage
AS 3600 - Concrete Structures
AS 3610 - SAA Formwork for Concrete
AS 3725 - Loads on Buried Concrete Pipes
AS 3792 - Portland and Blended Cements
AS/NZS 2890 1 - Parking Facilities - Off-street car parking
AS/NZS 2890 6 - Off-street parking for people with disabilities

Pre developed site

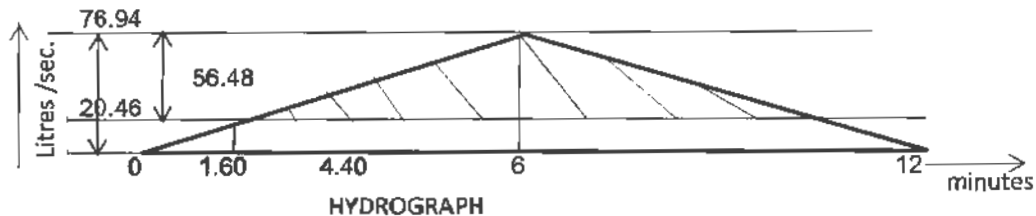
Existing details:

Total area=	2227 m ²		
Existing roof area =	501 m ²	C' roof=	0.9
Exist. pavement area=	292 m ²	C' pave=	0.75
Existing land area =	1434 m ²	C' land=	0.12
ARI (in years) 'y' =	10 Years		
t _c (in minutes) 'm' =	6 minutes		
Intensity of rainfall 'I _m ' =	87.5 mm/Hour		
Discharge 'Q'			
=CIA/3600	=	20.46	Litres/Sec
Allowable discharge =		20.46	Litres/Sec

Post developed site

Proposed details:

Roof area=	757 m ²	C'roof=	0.9	1.2xC'roof≤1.0=	1.08	1
Pavement area=	856 m ²	C' pave.=	0.75	1.2xC'pave≤1.0=	0.9	0.9
Land area=	614 m ²	C' land=	0.1	1.2xC'land≤1.0=	0.12	0.12
ARI (in years) 'y' =	100 Years					
t _c (in minutes) 'm' =	6 minutes					
Intensity of rainfall 'I _m ' =	173 mm/Hour					
Discharge 'Q'						
=CIA/3600	=	76.94	Litres/Sec			



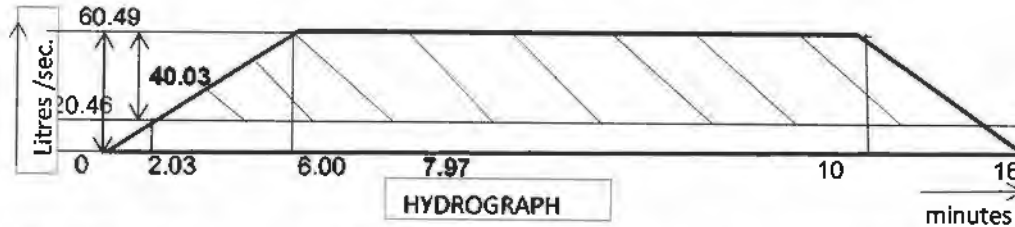
Detention volume = 56.48 X 4.40 X 60/1000 = 14.93 m³

Check for critical storm

Try duration: 10 minutes

Intensity of rainfall ' y_m ' = 136 mm/Hour

Discharge 'Q'
 =CIA/3600 = **60.49** Litres/Sec



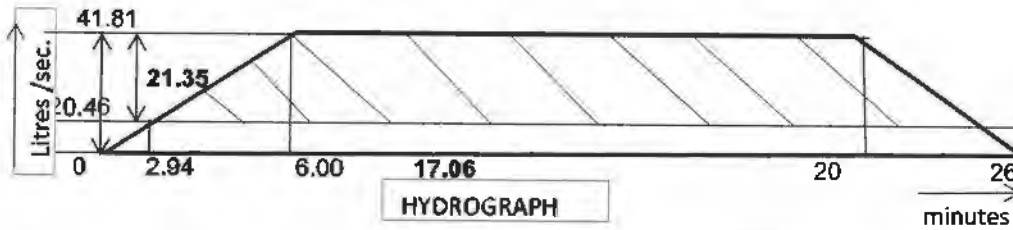
Detention volume : 40.03 X 7.97 X 60/1000 = **19.14** m³

Check for critical storm

Try duration: 20 minutes

Intensity of rainfall ' y_m ' = 94 mm/Hour

Discharge 'Q'
 =CIA/3600 = **41.81** Litres/Sec

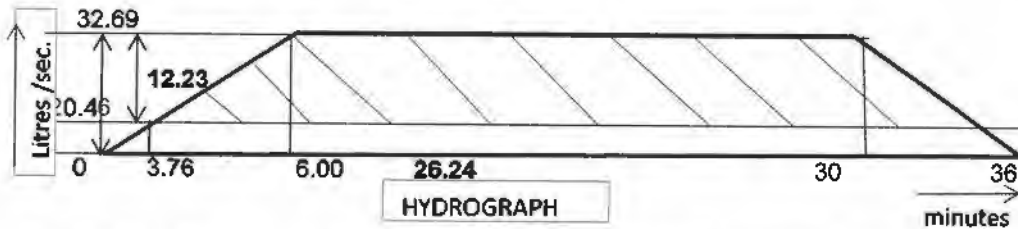


Detention volume : 21.35 X 17.06 X 60/1000 = **21.85** m³

Try duration: 30 minutes

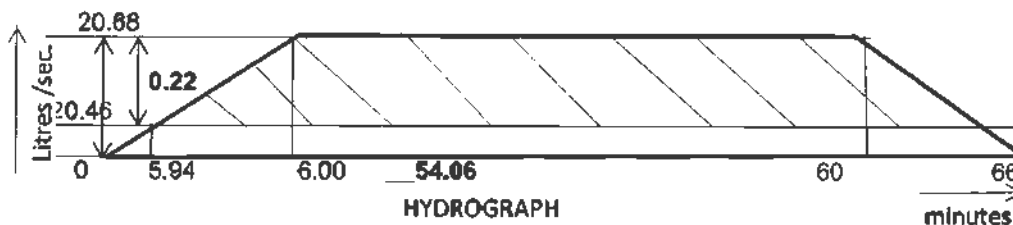
Intensity of rainfall ' y_m ' = 73.5 mm/Hour

Discharge 'Q'
 =CIA/3600 = **32.69** Litres/Sec



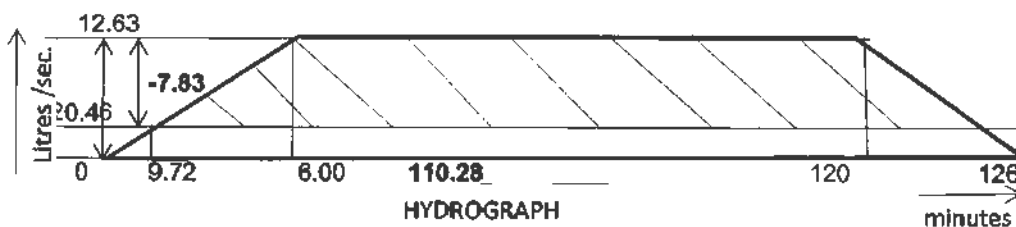
Detention volume : 12.23 X 26.24 X 60/1000 = **19.26** m³

Try duration: 60 minutes
 Intensity of rainfall ' i'_m ' = 46.5 mm/Hour
 Discharge 'Q' = CIA/3600 = **20.68** Litres/Sec



Detention volume : 0.22 X 54.06 X 60/1000 = **0.72** m³

Try duration: 120 minutes
 Intensity of rainfall ' i'_m ' = 28.4 mm/Hour
 Discharge 'Q' = **12.63** Litres/Sec

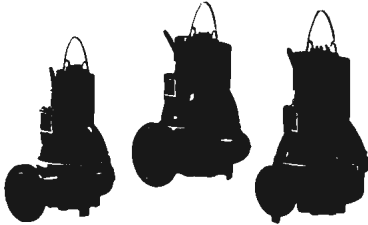


Detention volume : -7.83 X 110.28 X 60/1000 = **-51.81** m³

1 x 23 m³ . Underground Detention Tank



Company name: All Pumps
Created by: Doug Garton
Phone: 0288381012
Email: doug.garton@allpumps.com.au
Date: 11/19/2021

Count	Description
1	<p>SL1.80.100.55.4.50B.C</p> <div></div> <p style="text-align: center;">Product photo could vary from the actual product</p> <p>Product No.: 98626062</p> <p>Non-self-priming, single-stage, centrifugal pump designed for handling wastewater, process water and unscreened raw sewage.</p> <p>The pump is designed for intermittent and continuous operations in submerged installation. The revolutionary S-tube® impeller provides free spherical passage of solids up to 80 mm and is suitable for wastewater with a dry matter content of up to 3 %. A unique stainless-steel clamp assembling system enables quick and easy disassembly of the pump from the motor unit for service and inspection. No special tools are required. Pipework connection is via a DIN flange.</p> <p>Further product details</p> <p>The pump is suitable for both temporary and permanent installation either as free-standing on ring stand or on an auto-coupling system.</p> <p>Pump</p> <p>The pump housing, motor top and impeller are made of cast iron (EN-GJL-250).</p> <p>All surfaces of the cast iron parts are protected with cathodolysis coating.</p> <p>The surface of the cast iron pump parts is afterwards painted with environmental friendly powder coating (type NCS 9000N (black), gloss code 30, thickness 100 µm) which ensures high impact and corrosion protection.</p> <p>The final pump is assembled from already painted parts which ensures that no rust or scale can be formed in grooves between parts, etc.</p> <p>The S-tube® impeller is providing free spherical passage through the impeller and pump housing and creates a natural extension of the pipework connected to the pump.</p> <p>The S-tube® impeller is a wet-balanced and tube-shaped channel impeller placed in a pump housing that matches the smooth tube shape leaving no obstructions or dead zones.</p> <p>The key to the S-tube® design is simplicity, with no cutting or moving functions that can get worn over time, thereby ensuring constant, superior efficiency. The simple design means lower life cycle costs because abrasive wear is reduced and there are fewer clogging incidents.</p>



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The shaft seal consists of two mechanical seals that ensure a reliable sealing between the pumped liquid and motor. The shaft seals are incorporated in a single-unit cartridge shaft seal system that is easy to replace in the field without use of special tools.

The combination of the primary and secondary seals in a cartridge shaft seal system results in a shorter assembly length compared to conventional shaft seals.

- Primary seal: Silicon carbide/silicon carbide (SiC/SiC)
- Secondary seal: Carbon/Ceramics

The shaft seal is bidirectional, meaning it operates correctly in case of backflow through the pump.



The pump is approved according to CE EN12050-1.

Motor

The motor is a watertight, totally encapsulated motor supplied with a 10 m power cable. The stainless steel plug is fastened with a union nut. This nut and the O-rings provide sealing against ingress of the liquid.

The plug is polyurethane-embedded, ensuring a watertight and durable seal around the leads of the cable. This prevents the ingress of water into the motor through the cable in case of cable breakage or adverse handling in connection with installation or service.

A compact motor construction with a short shaft reduces vibrations, resulting in an increased efficiency and lifetime of the shaft seal and ball bearings.

The motor features built-in thermal protection to protect the motor against overheating and ensure the reliability.

The pump is equipped with the following sensor(s):

- A digital moisture switch that is fitted in the motor chamber monitors whether water enters the motor chamber. If moisture is detected in the motor chamber, the switch will trip and send a warning to the sensor module.

The pump is designed for speed-controlled operation to keep the energy consumption at a minimum.

To avoid the risk of sedimentation in the pipes, we recommend that you operate the speed-controlled pump within a speed range of 30 % to 100 % and at a flow rate above 1 m/s.

Controls:

Water-in-oil sensor: without water-in-oil sensor

Liquid:

Liquid max temp: 40 °C



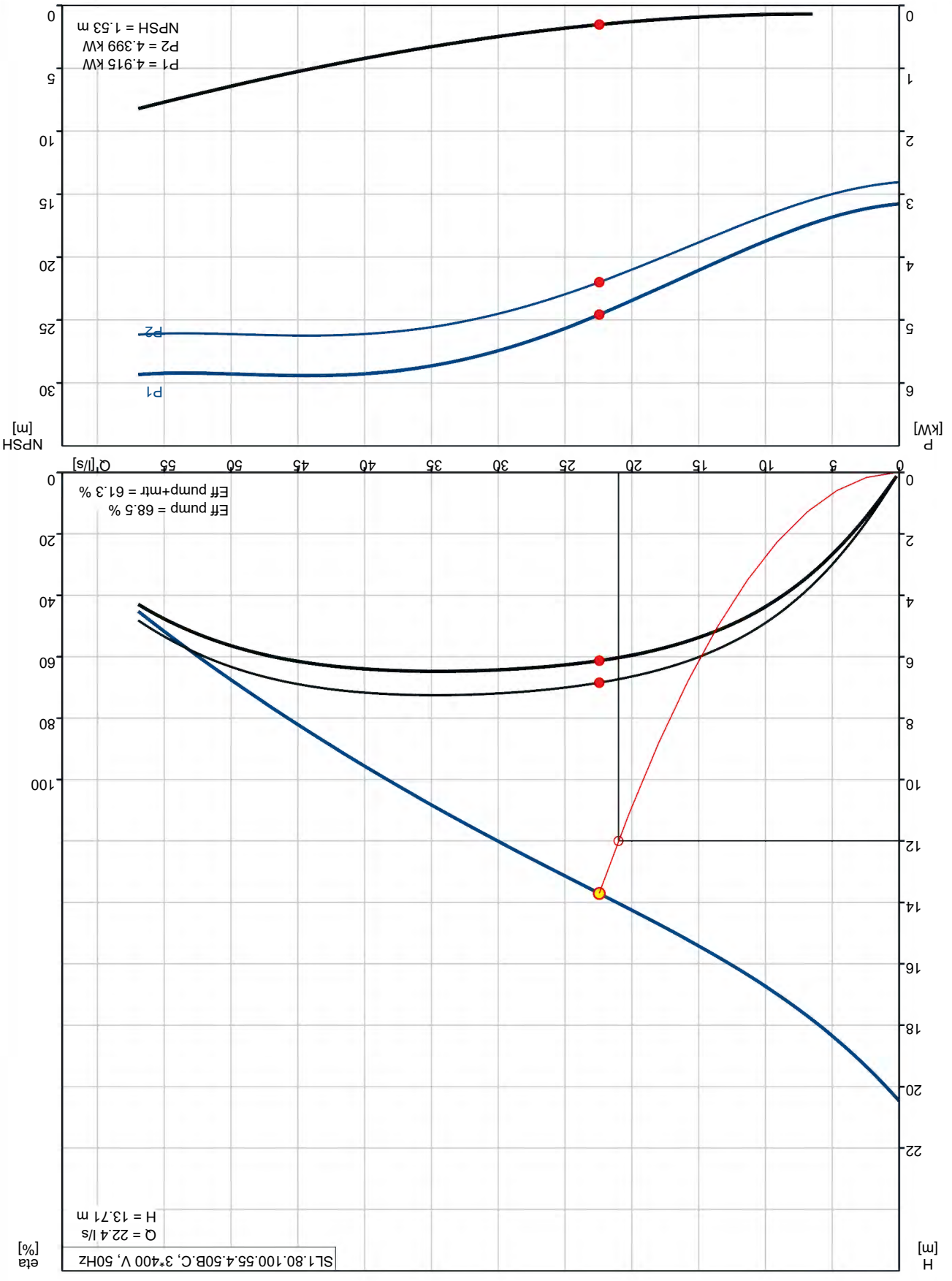
Company name: All Pumps
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Email: doug.garton@allpumps.com.au
Date: 11/19/2021

Count	Description
	<p>Technical:</p> <p>Materials:</p> <p>Installation: t max amb: 40 °C</p> <p>Electrical data: Voltage tolerance: +10/-10 % Starting current: 81 A Cos phi - power factor: 0.85 Cos phi - p.f. at 3/4 load: 0.80 Cos phi - p.f. at 1/2 load: 0.70</p> <p>Others: Country of origin: HU Custom tariff no.: 8413709019182742</p>



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Date: 11/19/2021

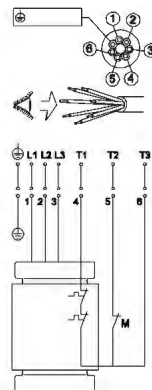
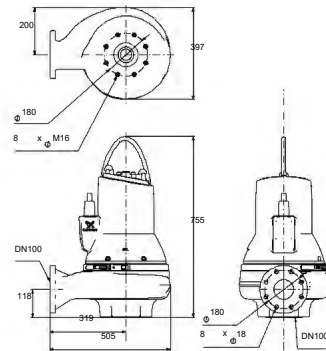
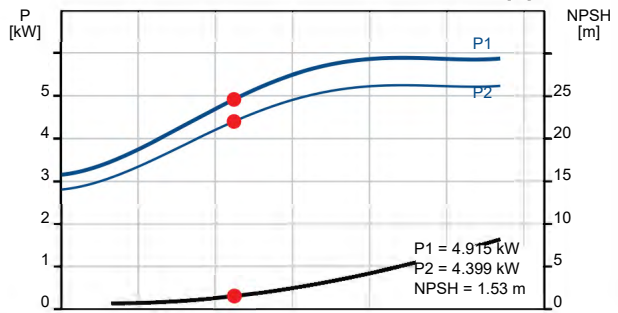
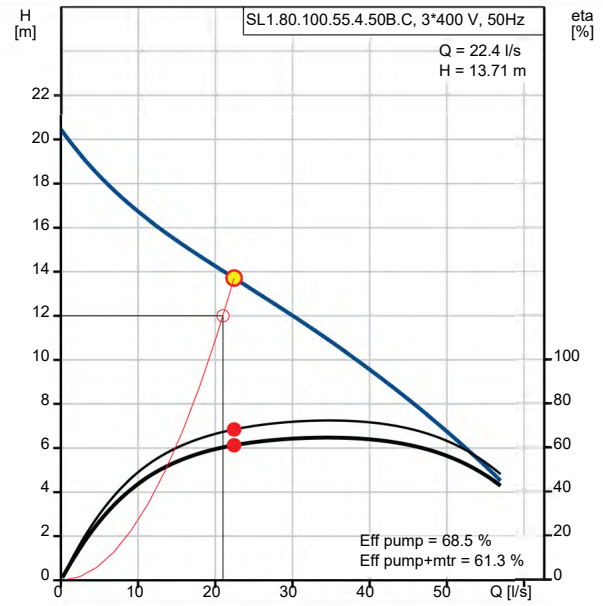
98626062 SL1.80.100.55.4.50B.C 50 Hz





Company name: All Pumps
Created by: Doug Garton
Phone: 0288381012
Email: doug.garton@allpumps.com.au
Date: 11/19/2021

Description	Value
General information:	
Product name:	SL1.80.100.55.4.50B.C
Product No.:	98626062
EAN:	5711498465534
Technical:	
Actual calculated flow:	22.4 l/s
Max flow:	56.9 l/s
Max flow:	56.9 l/s
Resulting head of the pump:	13.71 m
Head max:	20.4 m
Type of impeller:	S-TUBE
Maximum particle size:	80 mm
Primary shaft seal:	SIC/SIC
Approvals on nameplate:	CE EN12050-1
Curve tolerance:	ISO9906:2012 3B2
Cooling jacket:	without cooling jacket
Materials:	
Pump housing:	Cast iron
Pump housing:	EN 5.1301 EN-GJL-250
Impeller:	Cast iron
Impeller:	EN 5.1301 EN-GJL-250
Motor:	EN-GJL-250
Installation:	
t max amb:	40 °C
Flange standard:	DIN
Pump inlet:	100
Pump outlet:	100
Pressure stage:	PN 10
Maximum installation depth:	20 m
Inst dry/wet:	SUBMERGED
Installation:	Vertical
Auto-coupling:	96090994
Liquid:	
Pumped liquid:	any viscous fluid
Liquid max temp:	40 °C
Density:	998.2 kg/m ³
Electrical data:	
Power input - P1:	6.3 kW
Rated power - P2:	5.5 kW
Main frequency:	50 Hz
Rated voltage:	3 x 400-415 V
Voltage tolerance:	+10/-10 %
Max starts per. hour:	20
Rated current:	12.8-11.2 A
Starting current:	81 A
Cos phi - power factor:	0.85
Cos phi - p.f. at 3/4 load:	0.80
Cos phi - p.f. at 1/2 load:	0.70
Rated speed:	1463 rpm
Motor efficiency at full load:	89.1 %
Motor efficiency at 3/4 load:	89.6 %
Motor efficiency at 1/2 load:	89.0 %
Number of poles:	4
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	H
Explosion proof:	no
Built-in motor protection:	THERMAL SWITCH





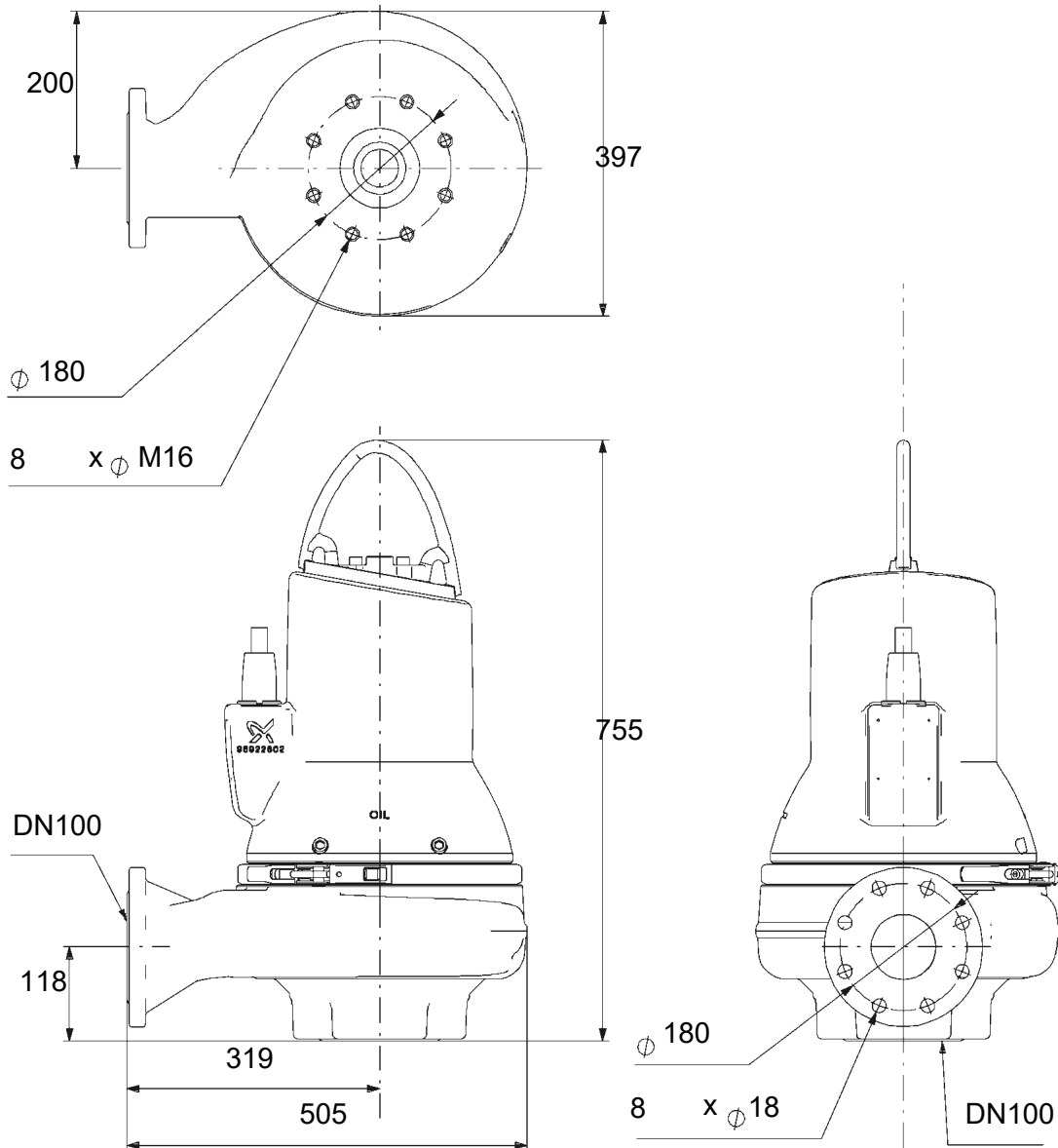
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Email: doug.garton@allpumps.com.au
Date: 11/19/2021

Description	Value
Length of cable:	10 m
Cable type:	LYNIFLEX
Controls:	
Control box:	not included
Moisture sensor:	with moisture sensors
Water-in-oil sensor:	without water-in-oil sensor
Others:	
Net weight:	159 kg
Country of origin:	HU
Custom tariff no.:	8413709019182742



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Email: doug.garton@allpumps.com.au
Date: 11/19/2021

98626062 SL1.80.100.55.4.50B.C 50 Hz

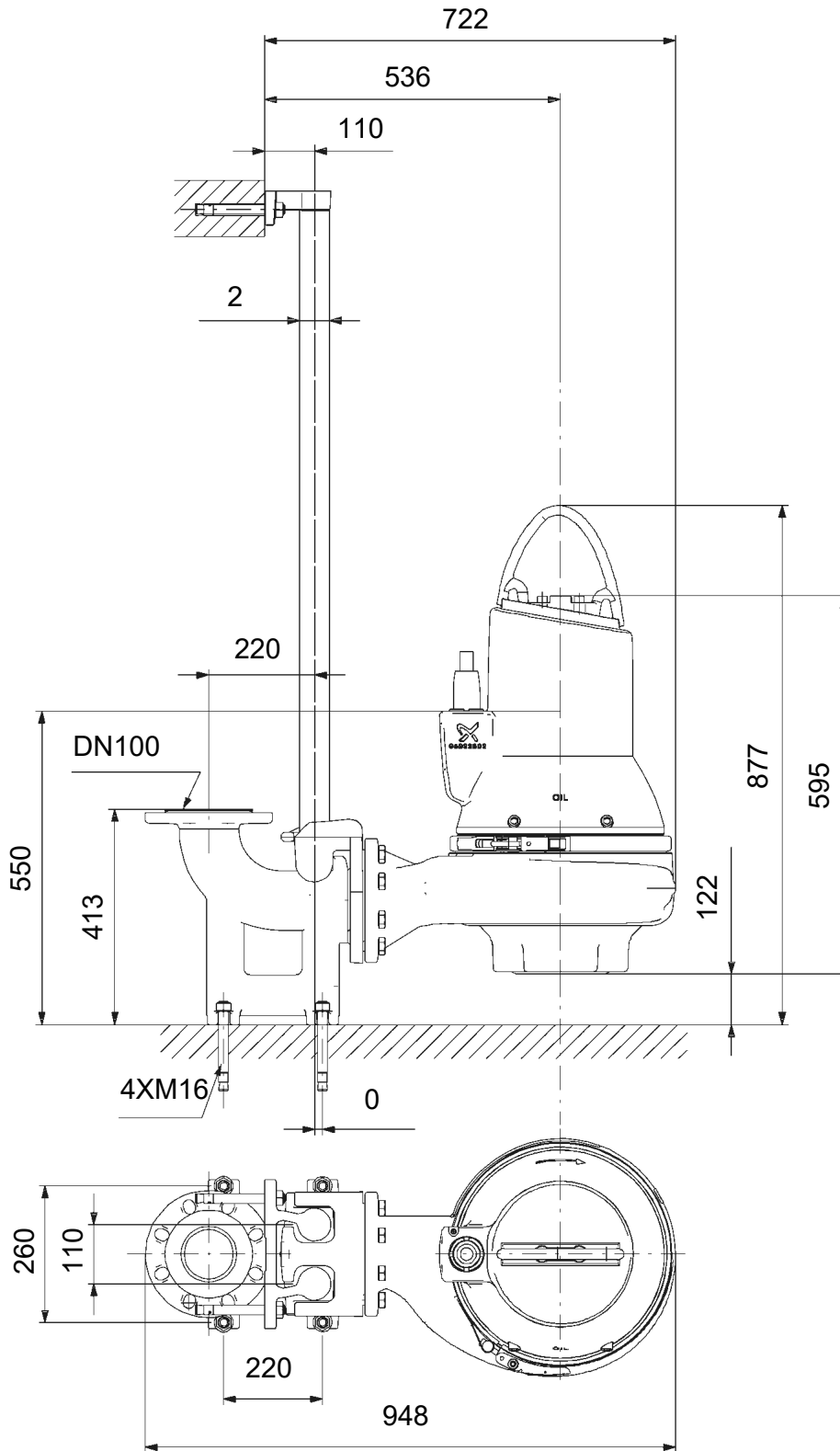


Note! All units are in [mm] unless otherwise stated.
Disclaimer: This simplified dimensional drawing does not show all details.



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98626062 SL1.80.100.55.4.50B.C 50 Hz

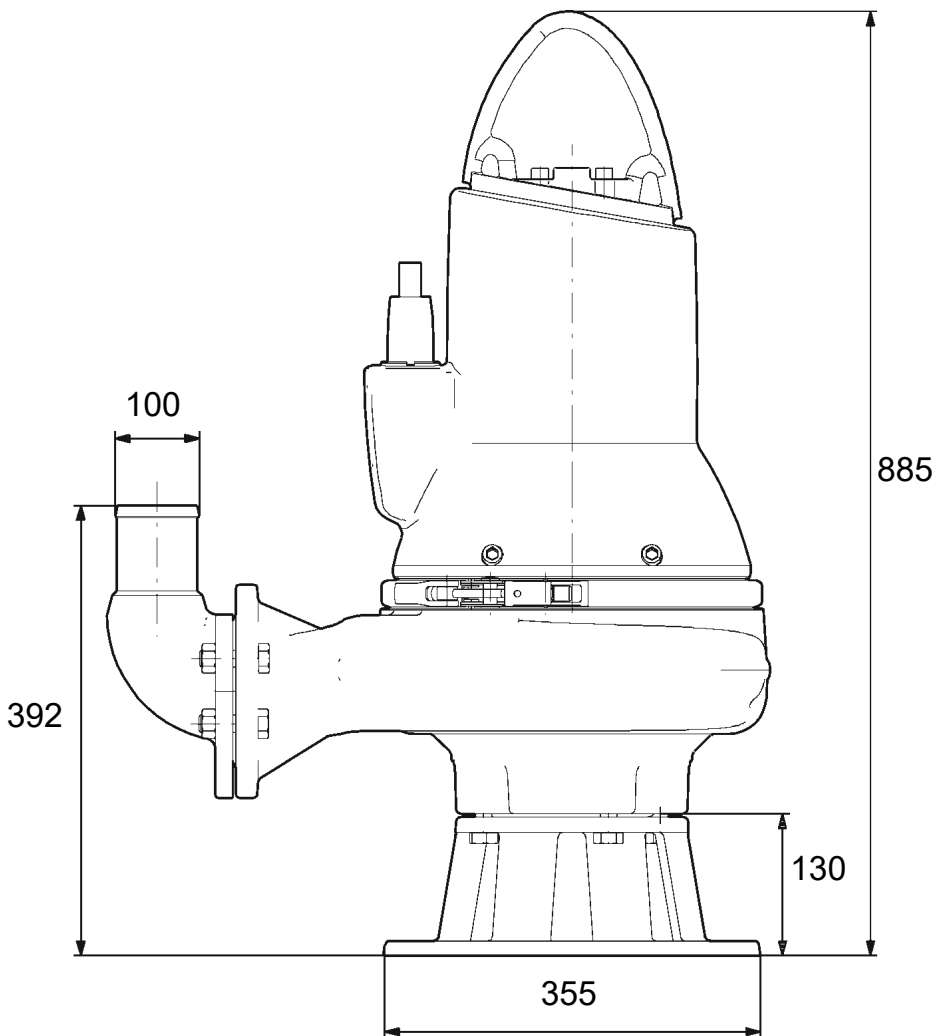
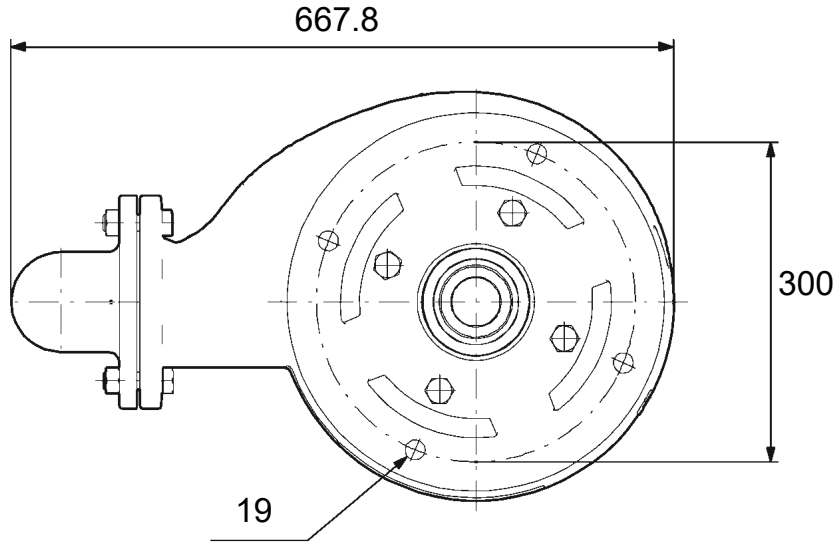


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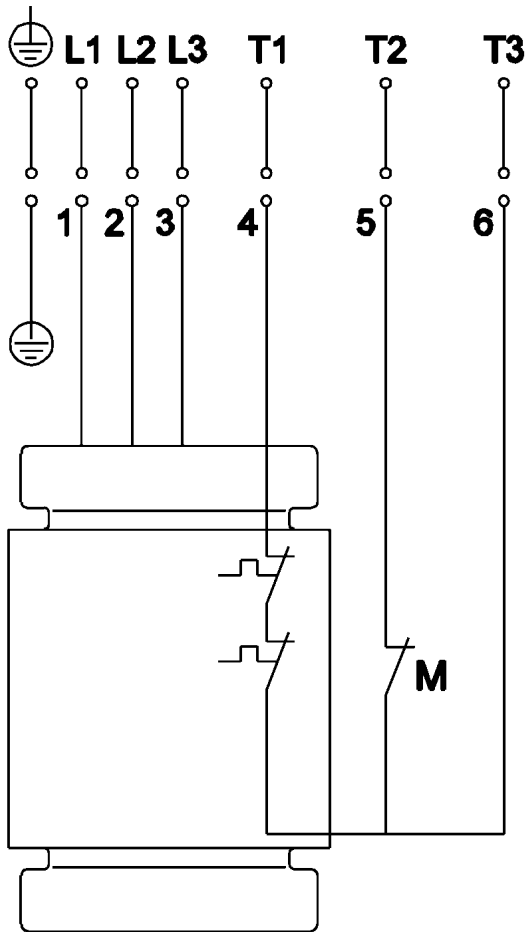
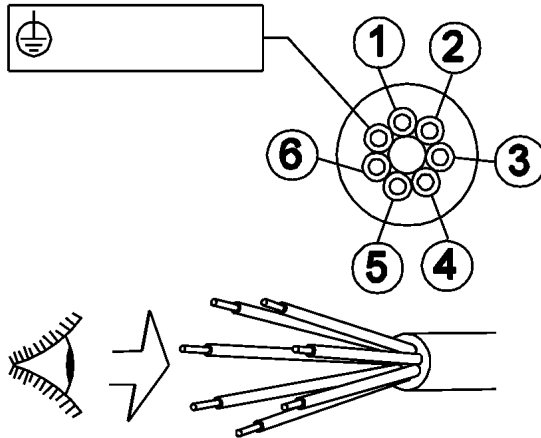


Note! All units are in [mm] unless otherwise stated.
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Date: 11/19/2021

98626062 SL1.80.100.55.4.50B.C 50 Hz



All units are [mm] unless otherwise presented.



Company name: All Pumps
Created by: Doug Garton
Phone: 0288381012
Email: doug.garton@allpumps.com.au
Date: 11/19/2021

Order Data:

Product name: SL1.80.100.55.4.50B.C
Amount: 1
Product No.: 98626062

Total: Price on request

SPEL ECOCEPTOR™: Technical Profile

Executive Summary

The technical profile details the water quality performance, function mechanics, and maintenance criteria of the SPEL Ecoceptor™, and is to be read in conjunction with submissions containing the Ecoceptor™ including quotations and proposals that have been designed by consulting engineers for specific catchment treatment designs, and for when the MUSIC node is employed.

The SPEL Ecoceptor™ is a secondary treatment stormwater treatment device or is more commonly referred to as a Stormwater Quality Improvement Device (SQID).

It is fibreglass, self-contained, one-piece construction and is suitable for impervious catchments for the reduction of sediment, total suspended solids (TSS), nutrients, Total Petroleum Hydrocarbons (TPH), oil & grease for surface water runoff from impervious catchments.

SPEL Ecoceptor™ Treatment Dynamics

The SPEL Ecoceptor™ is a hydrodynamic stormwater quality improvement device (SQID) that has a unique treatment action producing low velocity conditions producing discharge water quality outcomes complying with statutory guidelines across Australia.

It has been independently tested in Australia and is suitable for all types of conditions and soil-type loadings.

Low velocity flow produces quiescent conditions enabling separation of pollutants in all flow events. Contaminated water cannot flow directly across the surface before effective separation has taken place.

Treatment Flow (TFR)

It separates and captures sediments, silt, total suspended solids, nutrients, total petroleum hydrocarbons (TPH) and oil & grease. TPH and oil & grease rise to the `oil-capture` zone of the treatment chamber and are contained in all flow events. Captured pollutants cannot resuspend or scour from the treatment chamber in all flow events.

Bypass Flow

In high flow conditions (storm event) flow passes through the internal pipe weir bypassing the treatment separation chamber.

Continual & Optimal Treatment Performance

The bypass flow action ensures that quiescent conditions are maintained in the treatment separation chamber, (no turbulence or agitation) ensuring optimal treatment performance especially whilst the device is in `bypass mode`.

No Scouring or Re-suspension

The SPEL Ecoceptor™ treatment function ensures there is no scouring or re-suspension of separated pollutants, in all flow events.



Performance Analysis

University of South Australia flow test analysis

SPEL Ecoceptor™ devices have undergone rigorous and comprehensive testing for total suspended solids, total phosphorus. The reduction values listed within are from flow tests conducted by the University of South Australia Hydraulics Research Laboratory (UNISA)

Total Suspended Solids: Particle Size Distribution (PSD)

The make-up of particulate size was weighted fine fraction <125um which makes up 90% of the load reflecting MUSIC load characteristics. The test was conducted at the UNISA research facility with the device in flow mode. This is stressed as the most accurate method in determining reduction as opposed to accumulative loads analysis.

In summary the reduction of **Total Suspended Solids: particle size distribution (PSD)**

- >97% >75um.
- >35% <75um.

SPEL ECOCEPTOR™: Technical Profile

TSS UNISA Test Methodology

The sediment added to the inlet of the SPEL Ecoceptor™ consisted of 10 kg of dry material. Half of this material (by weight) was a sand material sourced from a brick sand quarrying operation in Noarlunga, SA which was pre-sieved to remove particles finer than 600 µm. The second half (by weight) was a commercially sourced silica product (Unimin Silica 60G). The particle size distribution (PSD) of the sediment produced was determined to 75 µm by sieving in accordance with AS 1289.3.6.1 – 2009 prior to adding the material to the concentrated pollutant mixture. The PSD of material less than 75 µm was determined using laser diffraction.

At the completion of the test the suspended solids retained by treatment separation chamber of the SPEL Ecoceptor™ device were collected. The collected sediment was harvested by draining all water from the tank at the completion of the test through a geo-fabric filter to manually collect retained sediment. Retained sediment was then dried in the oven at 105°C and sieved to 75 µm in accordance with AS 1289.3.6.1 – 2009. The sediment fraction which was not collected was assumed to pass through the tank in normal running conditions.

Although the loss of retained sediment during the retained sediment collection method is considered possible, it was considered appropriate because this method represents a conservative approach to determining the total mass of retained sediment as losses are considered to pass through the SPEL Ecoceptor™. Furthermore, as sediment that is lost through the cloth filter is most likely to be in the smaller particle size range, this added a further degree of conservatism as it leads to an under-estimation of the amount of retained low diameter particles.

TSS Results

Overall, 10 kg of sediment was added to the SPEL Ecoceptor™ device, and 8.486 kg of sediment was retained.

Analysis of the PSD of sediment indicated that the retained sediment was predominantly larger particle sizes. The SPEL Ecoceptor™ removed more than 97% of sediment larger than 75 µm, and more than 35% of the particles less than 75 µm.

Figure 1 compares the inlet PSD of sediment used in this test with the assumed PSD of sediment in the MUSIC model. The comparison indicates that there was generally a broader PSD distribution than that assumed by the MUSIC software.

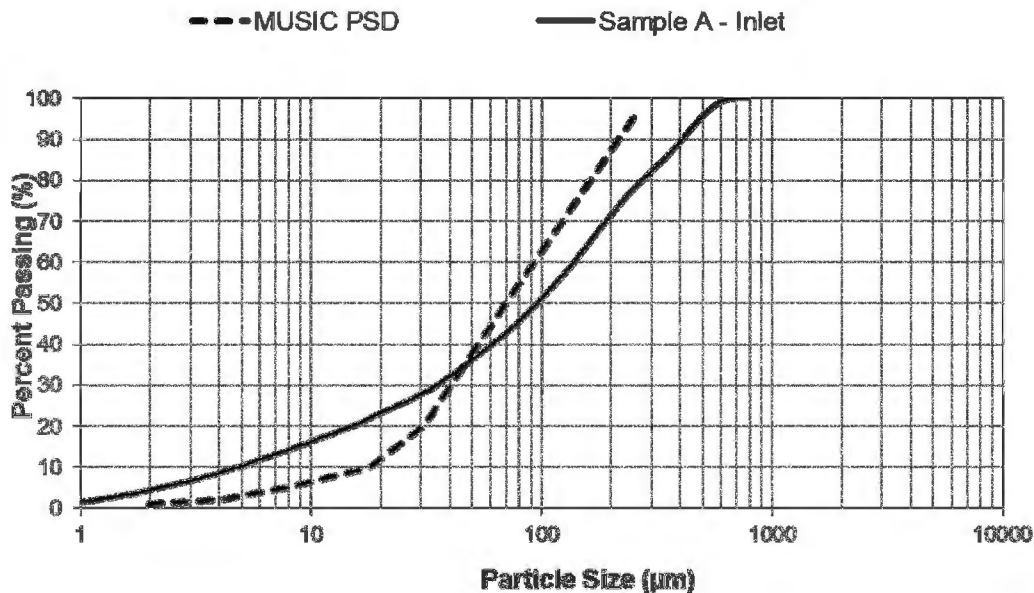


Figure 1 - Test: PSD of sediment at the inlet of the SPEL Ecoceptor™ compared to that assumed in the MUSIC model (by laser diffraction)

SPEL ECOCEPTOR™: Technical Profile

Total Phosphorus

Tests were performed in flow mode at the UNISA Research facility and in-situ capture tests of units treating a commercial/mixed subdivision with removal particulate-bound.

Reduction of **Total Phosphorus (TP)**

- >30% (Annexure are available for validation)

Site Tests: TSS, TP, TN.

SPEL engages site tests for water quality of the Ecoceptor™ devices continually across a wide spectrum of catchments on Australia's east coast. Annexures are available to demonstrate independently analysed data for TSS, TP & TN.

TSS

The catchments for these sites tests are typically a mixed commercial/industrial subdivision with a typical suburban streetscape. The TSS inflow concentration is >500mg/l (upper Fletcher et al [2004]). This is due to the catchments being flat with a gradient of <0.5% and the presence of gravel streets, excavated allotments and some construction activity within the catchment at the time of testing periods.

The data reveals a consistent reduction of >95% of TSS.

Total Nitrogen

Site tests show removal rates (particulate) are achievable to 30% from inflow concentration levels of `typical-type` levels in the region of 2mg/l. (Fletcher et al [2004]).

Gross Pollutants

- SPEL Class 1™ retains >90% of gross pollutants >3mm size in treatable flow conditions.

Installation

The SPEL Ecoceptor™ given its lightweight yet robust design is significantly easier to install than other concrete constructed SQID's. Typical empty masses range from 300-800 kgs. This means that no heavy cranes are required.

Furthermore, the one-piece construction means that no onsite assembly is required therefore pipe connection & backfilling of unit can commence immediately.

More detailed instructions can be found in the "installation" section of the O & M manual.



Maintenance Operation

Maintenance is performed at minimum every twelve months depending on site conditions.

The cylindrical shape of the SPEL Ecoceptor™ with its sloped cone-configured base ensures sediment accretes at the centre of the SQID's base affording easy and simple cleaning.

The fibreglass gel coat ensures that oil & grease are removed without sticking to the sides of the internal walls.

Sediment is removed by a vacuum loading truck from the base of the primary chamber. The cylindrical shape ensures sediment collects at the base of the chamber.

Operation & Maintenance Manual: The Maintenance Programme will be kept on the premises at all times, with a ledger recording all maintenance and inspection activities. This will provide a useful and efficient record for Council Inspection officers to facilitate random verification.



Life Span

SPEL Ecoceptor™ has a life span in excess of 50 years



CHILD CARE CENTRE
196 GLEN OSMOND ROAD, FULLARTON
TRAFFIC AND PARKING REPORT



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DOCUMENT CONTROL

Report title: Proposed Child Care Centre, 196 Glen Osmond Road, Fullarton
Traffic and Parking report

Project number: 21151

Client: Development Holdings

Client contact: Michael Harvey

Version	Date	Details/status	Prepared by	Approved by
Draft	13 Aug 21	For review	JJB	BNW
V1	27 Aug 21	For submission	JJB	BNW

CIRQA Pty Ltd

ABN 12 681 029 983

PO Box 144, Glenside SA 5065

150 Halifax Street, Adelaide SA 5000

(08) 7078 1801

www.cirqa.com.au

1. INTRODUCTION

CIRQA has been engaged to provide design and assessment advice for a proposed Child Care Centre at 196 Glen Osmond Road, Fullarton. Specifically, CIRQA has been engaged to provide advice in respect to traffic and parking aspects of the proposal.

This report provides a review of the subject site, the proposed development, its access and parking provisions and the associated traffic impact on the adjacent road network. The traffic and parking assessments have been based upon plans prepared by Red Shed Architects (drawing no. 02 and 03 rev J, dated 25/08/2021, refer Appendix A).

2. BACKGROUND

2.1 SUBJECT SITE

The site is located adjacent the southern side of the intersection of Glen Osmond Road and Gladstone Street. The site is bound by Glen Osmond Road to the north-east, Gladstone Street to the north-west, commercial development to the east and residential development to the remaining sides. The site comprises three allotments, namely 196 Glen Osmond Road, 1 and 1A Gladstone Street. However, the subject site only spans a portion the allotments.

The Planning and Design Code identifies that the subject site is located within a Business Neighbourhood Zone. The following overlays apply to the subject site:

- Airport Building Heights (Regulated) (All structures over 45 metres);
- Future Road Widening;
- Major Urban Transport Routes;
- Prescribed Wells Area;
- Regulated and Significant Tree; and
- Traffic Generating Development.

Figure 1 illustrates the location of the subject site and the adjacent road network.



Figure 1 – Location of the site, subject site and adjacent road network

The Department for Infrastructure and Transport (DIT) has advised that there is a possible widening requirement for Metropolitan Adelaide Road Widening Plan (MARWP). The site's frontage on Glen Osmond Road is subject to a possible road widening requirement of 2.13 m. There is also a possible requirement for a 4.5 m by 4.5 m cut-off at the Glen Osmond Road/Gladstone Street corner for future road purposes.

2.2 ADJACENT ROAD NETWORK

Glen Osmond Road is an arterial road under the care and control of the Department for Infrastructure and Transport (DIT). Adjacent the site, Glen Osmond Road comprises a 14 m wide carriageway with dual lanes in each direction. Traffic data obtained from DIT indicates that this section of Glen Osmond Road has an Annual Average Daily Traffic (AADT) volume in the order of 28,300 vehicles per day (vpd), of which approximately 4% are commercial vehicles. Adjacent the site, a 60 km/h speed limit applies on Glen Osmond Road.

Fullarton Road is an arterial road under the care and control of the Department for Infrastructure and Transport (DIT). Adjacent the site, Fullarton Road comprises a 14.7 m wide carriageway with dual lanes in each direction. Traffic data obtained from DIT indicates that this section of Glen Osmond Road has an Annual Average Daily Traffic (AADT) volume in the order of 26,600 vehicles per

day (vpd), of which approximately 2.5% are commercial vehicles. Adjacent the site, a 60 km/h speed limit applies on Fullarton Road.

Gladstone Street is a local road under the care and control of the City of Unley. Gladstone Street comprises an 8 m wide carriageway (approximate) with a single unmarked traffic lane in each direction. Parking is generally restricted by 'no stopping' signage and linemarking on the northern side and 15-minute parking restrictions on the southern side. Traffic data recorded at the adjacent intersection of Glen Osmond Road and Gladstone Street indicate that daily traffic volumes are in the order of 160 vpd (directly adjacent the site) on Gladstone Street. However, there is potential for these volumes to increase as a result of DIT's upgrade of Fullarton Road/Glen Osmond Road as right turns from the southern Fullarton Road approach into Glen Osmond Road will be banned and some movements may be redistributed to Gladstone Street. A speed limit of 40 km/h applies on Gladstone Street.

Gladstone Street intersects Glen Osmond Road to the East and Fullarton Road to the West. At both intersections, Gladstone Street forms the minor approach at the priority controlled T-intersections. Movements at the Glen Osmond Road/Gladstone Street intersection are restricted to left-out and right-out of Gladstone Street (no entry to Gladstone Street from Glen Osmond Road). All movements are permitted at the Fullarton Road/Gladstone Street intersection.

2.3 WALKING AND CYCLING

Adjacent the site, sealed footpaths are provided on both sides of Glen Osmond Road and Gladstone Street. A signalised pedestrian crossing is located approximately 200 m north of the subject site on Glen Osmond Road.

Cyclists are able to share footpaths with pedestrian or ride on-street sharing the road with motorists. It is noted that Glen Osmond Road forms part of the BikeDirect Network and is classified as a 'Main Road'.

2.4 PUBLIC TRANSPORT

Bus services operate along Glen Osmond Road with bus stops (in both directions) located within 250 m of the subject site. These bus stops are serviced by the following bus routes:

- 830F – Lobethal to City;
- 841F – Nairne to City;
- 860F – Mt Barker to City;
- 861 – Glen Osmond to City;
- 863 – Aldgate to City;

- 863F – Aldgate to City;
- 864 – Mt Barker to City;
- 864F – Mt Barker to City;
- 865 – Aldgate to City;
- 889 – Waldorf School to City;
- N864 – After Midnight Saturday PM – Sunday AM Mt Barker to City;
- T840 – Mt Barker to City;
- T842 – Nairne to City;
- T843 – Mt Barker to City; and
- T863 – Aldgate to City.

3. PROPOSED DEVELOPMENT

3.1 LAND USE AND YIELD

The proposal comprises the construction of a new 691 m² child care centre on the site. The centre will have the capacity for 103 children. The development will be serviced by a 26-space parking area including one space for use by persons with disabilities.

3.2 ACCESS AND PARKING DESIGN

The site will be serviced by a 26-space parking area, of which 1 space will be reserved exclusively for use by people with disabilities. The parking area shall comply with the requirements of Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking* (AS/NZS 2890.1:2004) and Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities* (AS/NZS 2890.6:2009) in that:

- Regular 90-degree parking spaces will be 2.7 m wide and 5.4 m long;
- the disabled parking space/s will be 2.4 m wide and 5.4 m long (with an adjacent shared space of the same dimension);
- the parking aisle adjacent 90-degree parking spaces will be at least 5.8 m wide;
- 45 -degree parking spaces will be 2.5 m wide and 5.4 m long;
- the parking aisle adjacent 45-degree parking spaces will be at least 4.2 m wide; and
- a turn-around bay will be provided at the end of the parking aisle.

Vehicle access to the site will be provided via a 4.2 m wide ingress on Glen Osmond Road (signage and linemarking will be provided to advise drivers that egress to Glen Osmond Road is not accommodated). A second 6 m wide two-way access point will be provided on Gladstone Street. Simultaneous turning movements will be accommodated at the access. All vehicles will be able to enter and exit the site in a forward direction.

Ten of the parking spaces will be designated as staff only parking (albeit staff can also share other spaces with parents/visitors). These spaces will include six 'stacked' parking spaces adjacent Glen Osmond Road and the four 45-degree parking spaces. The designation of the spaces to staff will minimise the movements adjacent the Glen Osmond Road access point and to/from the stacked parking spaces.

3.3 REFUSE COLLECTION

Refuse collection will be undertaken via private contractor with the associated manoeuvres accommodated on-site (forward-in/forward-out). The site will be able to accommodate access for an 8.8 m long Medium Rigid Vehicle (MRV). It is anticipated that such movements would be undertaken outside of opening hours. Figure 2 illustrates the turn path for an MRV to enter and exit the site in a forward direction.

In comparison, demands of one space per four children (or less) are typically observed at child care centres (this includes allowance for staff and parent parking). On this basis, the proposal would be anticipated to generate peak demands of 26 parking spaces (or less). The proposed provision of 26 parking spaces will therefore meet both the Planning and Design Code requirements and accommodate peak demands associated with the use.

4.2 BICYCLE PARKING

In respect to bicycle parking, the Code does not identify a bicycle parking requirement for land uses classified as child care centres. However, two bicycle parking spaces have been included in the proposal. Such a provision would be more than adequate to accommodate likely demands associated with the proposal.

5. TRAFFIC ASSESSMENT

5.1 TRAFFIC GENERATION AND DISTRIBUTION

The RTA's *"Guide to Traffic Generating Developments"* (the RTA Guide), and its subsequent updates, is a document commonly used by traffic engineers in order to determine the forecast traffic generation of a variety of land uses. The RTA Guide identifies peak (2-hour) period trip generation rates for child care centres of 0.8 trips per child in the am peak period (7:00 am to 9:00 am) and 0.7 trips per child in the pm peak period (4:00 pm to 6:00 pm). Such rates have previously been accepted by DIT as appropriate for assessment of trip generation for such uses.

It should be noted that the above traffic generation rates are based upon peak periods of two hours. In order to determine the peak hour traffic generation of the proposal, it has been assumed that 60% of the child care peak period will occur during the peak hour (i.e. 0.48 am and 0.42 pm peak hour trips per child). Based upon these rates, the proposed development is forecast to generate in the order of 50 am and 44 pm peak hour trips.

Vehicle movements will be distributed via the site's two access point. Assuming a 50% ingress and 50% egress split, in the order of 25 ingress and 25 egress trips are forecast during the am peak, and 22 ingress and 22 egress trips during the pm peak. If it were also assumed that ingress movements were split 32.5%/67.5% between the Glen Osmond Road access and the Gladstone Street access point, respectively, the following movements are forecast to occur at the access points:

- Glen Osmond Road (ingress only)
 - am peak hour – 8 ingress movements
 - pm peak hour – 7 ingress movements
- Gladstone Street (two-way access)

- am peak hour – 17 ingress movements/25 egress movements
- pm peak hour – 15 ingress movements/22 egress movements

As noted above, the future upgrade of the Glen Osmond Road and Fullarton Road intersection will result in right-turn movements from Fullarton Road on to Glen Osmond Road being restricted. As a result, it is anticipated that portion of the existing right-turn movements will be redistributed to Gladstone Street (turning right from Fullarton Road onto Gladstone Street to access Glen Osmond Road).

For the purposes of this assessment, it has been assumed that all existing right-turns from Fullarton Road to Glen Osmond Road will be redistributed to Gladstone Street (47 right-turns during the am peak hour and 41 during the pm peak hour). It has been assumed that all redistributed movements turn right on to Gladstone Street (from Fullarton Road) and left on to Glen Osmond Road (from Gladstone Street). The redistributed movements are illustrated in Figures 3 and 4. In reality, not all of the right-turn movements will be redistributed to Glen Osmond Road with drivers finding alternative routes to their destinations. The forecasts below are therefore considered conservative.

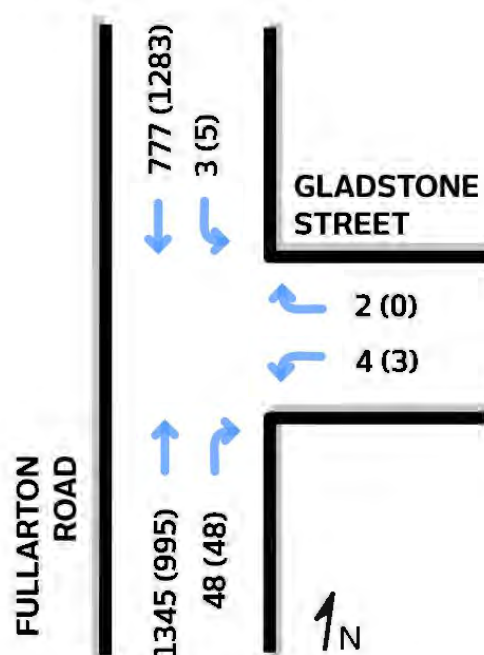


Figure 3 – Redistribution of existing movements to the Fullarton Road/Gladstone Street intersection

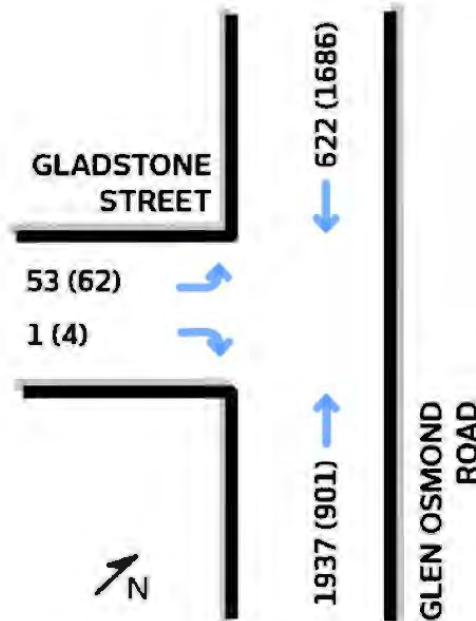


Figure 4 – Redistribution of existing movements to the Glen Osmond Road/Gladstone Street intersection

The forecast additional movements generated by the proposed child care centre are illustrated in Figures 5 and 6. It is noted that volumes may slightly differ to the total traffic generation due to the rounding up of volumes in the assessment.

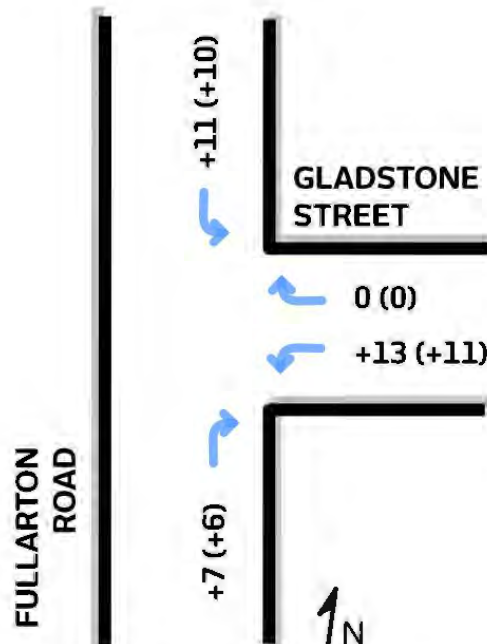


Figure 5 – Additional movements generated by the proposed child care centre at the Fullarton Road/Gladstone Street intersection

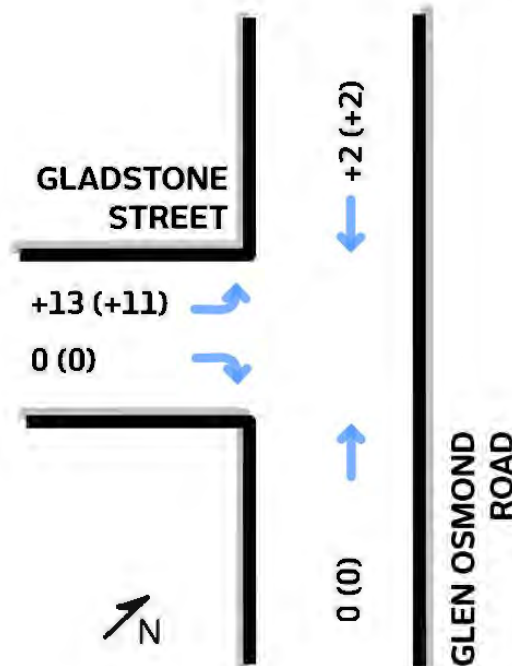


Figure 6 – Additional movements generated by the proposed child care centre at the Fullarton Road/Gladstone Street intersection

Right-turns from Gladstone Street on to the adjacent arterial roads will generally be undertaken in an opportunistic manner (i.e. when gaps are presented to drivers). During peak periods, delays for right-turn movements will generally be high. If right-turn opportunities do not readily present, drivers will turn left out of Gladstone Street and find alternate routes to their destinations.

It is noted that the Fullarton Road/Gladstone Street intersection will be upgraded as part of the Fullarton Road/Glen Osmond Road intersection upgrade. Future modelling of the intersection has been based on DIT's concept plans (Appendix B).

5.2 TRAFFIC IMPACT

The low number of movements generated by the site will be readily accommodated at the site's proposed access points. Forecast volumes are well within the capacities of typical access points.

To assess the future impact of the proposal and the redistribution of right-turn movements (from the Fullarton Road/Glen Osmond Road intersection upgrade), a SIDRA analysis was undertaken for the intersections of Glen Osmond Road/Gladstone Street and Fullarton Road/Gladstone Street.

5.2.1 FULLARTON ROAD/GLADSTONE STREET INTERSECTION

The SIDRA modelling has indicated that the existing intersection of Fullarton Road/Gladstone Street operates with a low Degree of Saturation (DoS). During

the am and pm peak hours all movements operate with a DoS of 0.37 or less. It is noted that the Gladstone Street approach operates with a Level of Service (LoS) of 'F' during the am peak hour and 'E' during the pm peak hour. This is due to the right-turn movements from Gladstone Street. Although, the number of movements are very low, SIDRA reports a high average delay and a low LoS. In reality, the right turn movements would often be undertaken opportunistically by drivers when gaps are presented and, if excessive delays are experienced by drivers, they would likely divert to left-turn movement and utilise an alternative route to head to their destination. The Level of Service for movements out of Gladstone Street is therefore likely better than suggested by the theoretical analysis. Similarly, drivers exiting the child care centre would be more likely to turn left on to Glen Osmond Road rather than right on to Fullarton Road if presented with excessive delays (particularly noting that staff and parents will be regular attendees of the site and will become familiar with conditions on the surrounding road network).

The SIDRA modelling of the future scenario at the Fullarton Road/Gladstone Street intersection have indicated that all movements will operate within capacity. All movements during the am and pm peak hours operate with a DoS of 0.514 or less. It is noted that there will not be a reduction in the Level of Service at the Gladstone Street approach due to the proposal.

5.2.2 GLEN OSMOND ROAD/GLADSTONE STREET INTERSECTION

The SIDRA modelling has indicated that the existing intersection of Glen Osmond Road and Gladstone Street operates with a maximum DoS of 0.750 for all movements during the am and pm peak hours. Similar to the Fullarton Road/Gladstone Street intersection, the Gladstone Street approach operates with an 'F' Level of Service during the am and pm peak hours. This is primarily due to the high theoretical delay for right-turn movements. It is noted that the number of vehicles undertaking this movement is very low.

The modelling has indicated that in the future scenario, all movements will operate with a DoS of 0.826 or less during the am and pm peak hours. The analysis suggests that the Gladstone Street approach will continue to operate with an 'F' Level of Service during the am and pm peak hours. It is noted that the LoS does not change between the existing and future scenarios.

However, as with the Fullarton Road intersection, in reality, right turns out of Gladstone Street during peak periods on to Glen Osmond Road are generally undertaken in an opportunistic manner (i.e. when gaps are presented to drivers). If delays are too high for the movement, drivers would be likely to turn left and find an alternate route to their destination. Therefore, in reality, conditions associated with the Gladstone Street approach to Glen Osmond Road would be

better than suggested by the theoretical analysis and the additional movements would be easily accommodated with minimal impact.

Furthermore, it is also noted that the assessment is considered conservative due to the full redistribution of all right turn movements (from Fullarton Road to Glen Osmond Road) to Gladstone Street. In reality, it is likely that there would be a broader distribution of these movements and conditions again better than suggested by the analysis.

6. SUMMARY

The proposal comprises the construction of a 103-place child care centre with associated access and parking provisions. Vehicle access to the site will be provided via a two-way access point on Gladstone Street at which all movements will be permitted. An additional ingress only access will be provided on Glen Osmond Road.

A total of 26 parking spaces will be provided on-site. Such a provision will readily satisfy the Planning and Design Code parking requirements. The parking area will be provided in accordance with the requirements of the relevant Australian Standard.

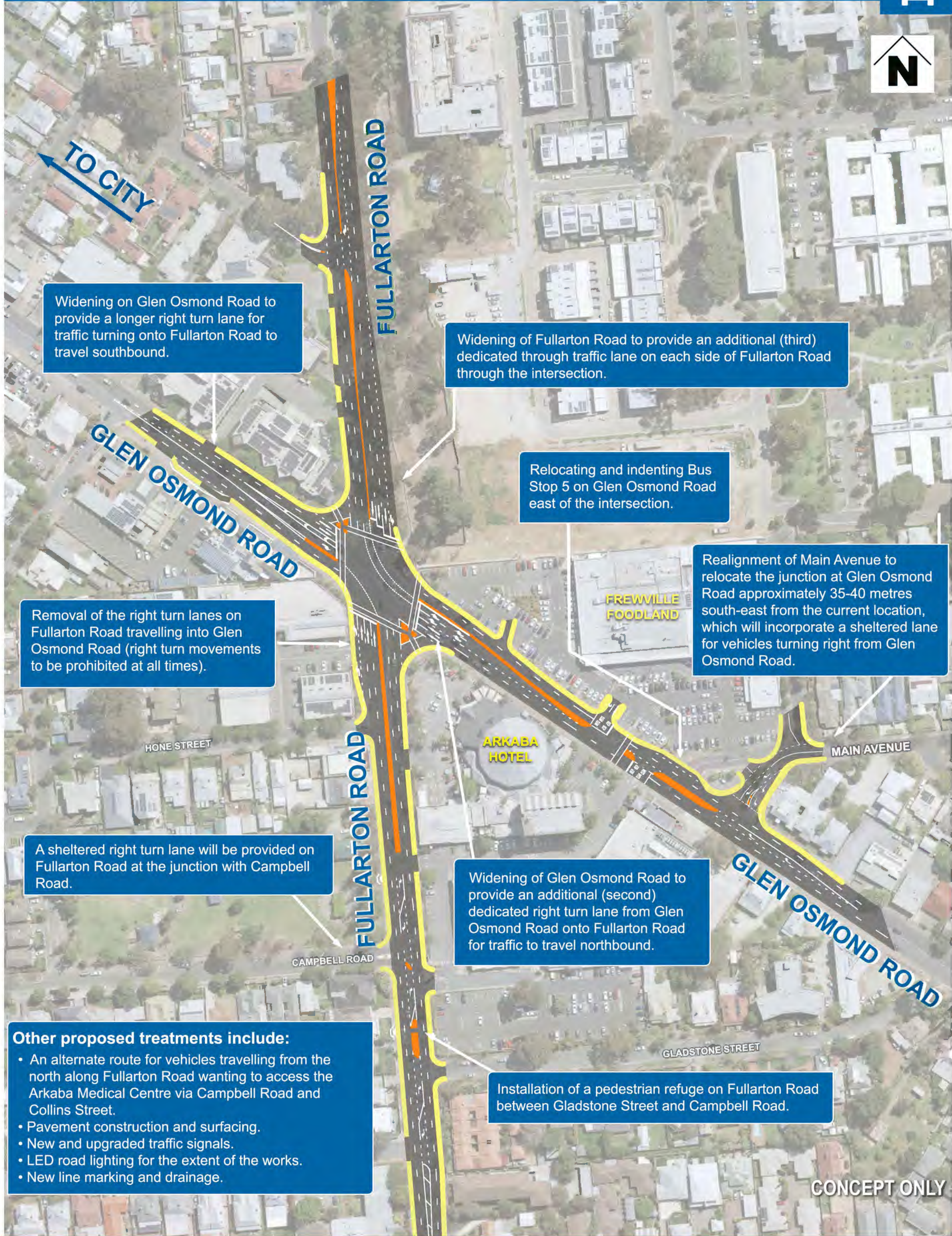
It is forecast that the proposal will generate in the order of 50 trips in the am and 44 trips in the pm peak hours. Such movements will be readily accommodated at the proposed access points and the adjacent road network. SIDRA modelling has indicated that the Fullarton Road/Gladstone Street intersection and the Glen Osmond Road/Gladstone Street intersection will operate within capacity and the existing Level of Service at the Gladstone Street approaches will be retained.

APPENDIX A

RED SHED ARCHITECT PLANS

APPENDIX B

CONCEPT OF THE PROPOSED UPGRADES



Widening on Glen Osmond Road to provide a longer right turn lane for traffic turning onto Fullarton Road to travel southbound.

Widening of Fullarton Road to provide an additional (third) dedicated through traffic lane on each side of Fullarton Road through the intersection.

Relocating and indenting Bus Stop 5 on Glen Osmond Road east of the intersection.

Realignment of Main Avenue to relocate the junction at Glen Osmond Road approximately 35-40 metres south-east from the current location, which will incorporate a sheltered lane for vehicles turning right from Glen Osmond Road.

Removal of the right turn lanes on Fullarton Road travelling into Glen Osmond Road (right turn movements to be prohibited at all times).

A sheltered right turn lane will be provided on Fullarton Road at the junction with Campbell Road.

Widening of Glen Osmond Road to provide an additional (second) dedicated right turn lane from Glen Osmond Road onto Fullarton Road for traffic to travel northbound.

- Other proposed treatments include:**
- An alternate route for vehicles travelling from the north along Fullarton Road wanting to access the Arkaba Medical Centre via Campbell Road and Collins Street.
 - Pavement construction and surfacing.
 - New and upgraded traffic signals.
 - LED road lighting for the extent of the works.
 - New line marking and drainage.

Installation of a pedestrian refuge on Fullarton Road between Gladstone Street and Campbell Road.

CONCEPT ONLY

APPENDIX C

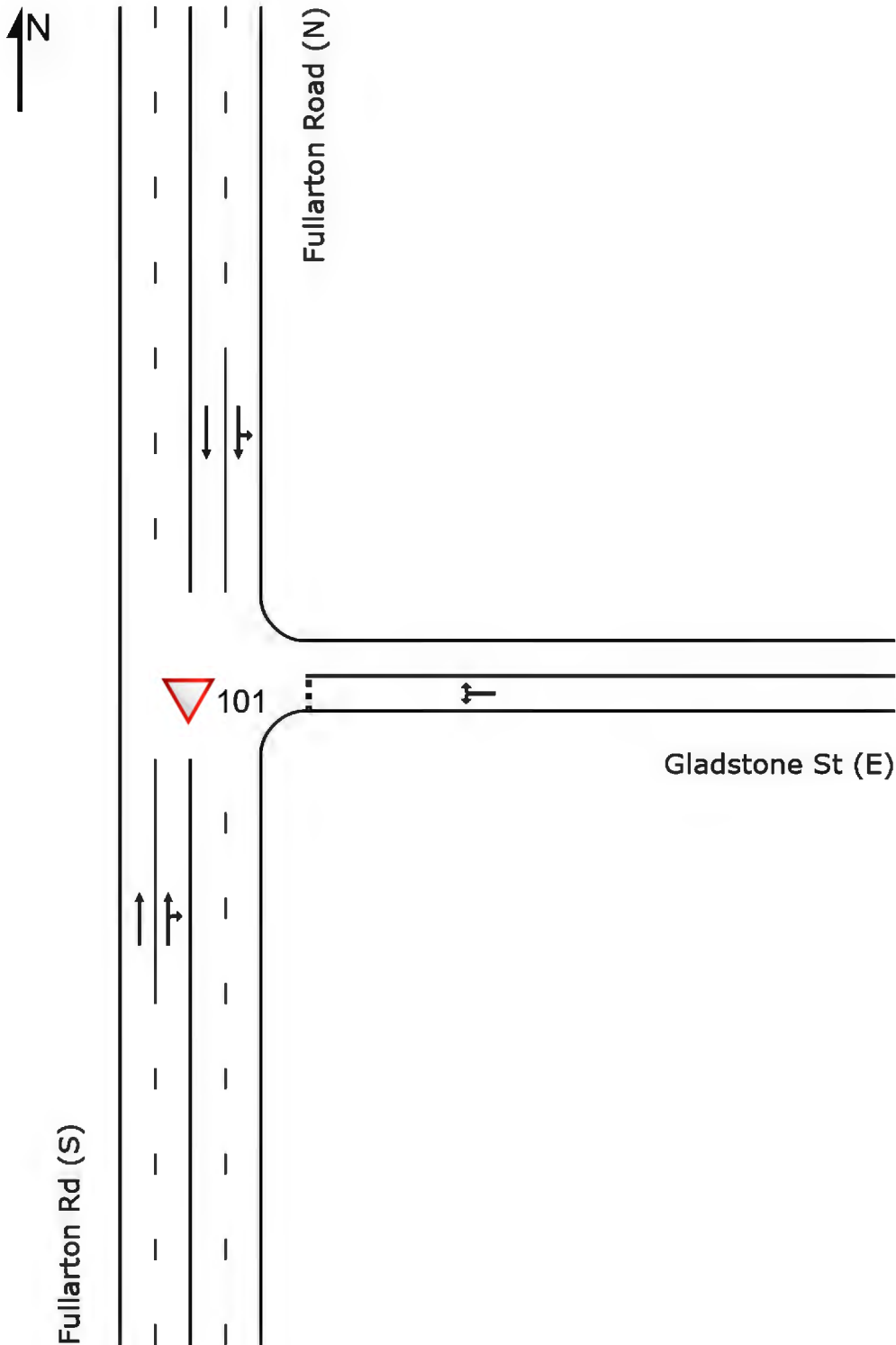
SIDRA OUTPUTS

SITE LAYOUT

▽ Site: 101 [Fullarton Rd/Gladstone St - AM existing (Site Folder: Fullarton Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

▽ Site: 101 [Fullarton Rd/Gladstone St - AM existing (Site Folder: Fullarton Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Fullarton Rd (S)														
2	T1	1345	26	1416	1.9	0.370	0.1	LOS A	0.1	0.8	0.00	0.00	0.01	59.8
3	R2	1	1	1	100.0	0.370	25.1	LOS D	0.1	0.8	0.01	0.00	0.01	47.4
Approach		1346	27	1417	2.0	0.370	0.1	NA	0.1	0.8	0.00	0.00	0.01	59.8
East: Gladstone St (E)														
4	L2	4	0	4	0.0	0.239	24.9	LOS C	0.6	4.9	0.94	0.85	0.97	16.5
6	R2	2	1	2	50.0	0.239	379.8	LOS F	0.6	4.9	0.94	0.85	0.97	12.5
Approach		6	1	6	16.7	0.239	143.2	LOS F	0.6	4.9	0.94	0.85	0.97	15.2
North: Fullarton Road (N)														
7	L2	3	0	3	0.0	0.215	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.6
8	T1	777	27	818	3.5	0.215	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		780	27	821	3.5	0.215	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicles		2132	55	2244	2.6	0.370	0.5	NA	0.6	4.9	0.01	0.00	0.01	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2021\21151 Child Care Centre 196 Glen Osmond Road Fullarton \SIDRA\21151_20Aug21.sip9

MOVEMENT SUMMARY

Site: 101 [Fullarton Rd/Gladstone St - PM existing (Site Folder: Fullarton Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Fullarton Rd (S)														
2	T1	995	21	1047	2.1	0.286	0.6	LOS A	0.6	4.4	0.04	0.00	0.05	58.9
3	R2	7	1	7	14.3	0.286	24.2	LOS C	0.6	4.4	0.08	0.01	0.10	47.0
Approach		1002	22	1055	2.2	0.286	0.8	NA	0.6	4.4	0.04	0.00	0.05	58.8
East: Gladstone St (E)														
4	L2	3	0	3	0.0	0.047	7.0	LOS A	0.1	0.9	0.87	0.83	0.87	31.1
6	R2	1	0	1	0.0	0.047	136.3	LOS F	0.1	0.9	0.87	0.83	0.87	26.1
Approach		4	0	4	0.0	0.047	39.3	LOS E	0.1	0.9	0.87	0.83	0.87	30.0
North: Fullarton Road (N)														
7	L2	5	0	5	0.0	0.352	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.5
8	T1	1283	22	1351	1.7	0.352	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		1288	22	1356	1.7	0.352	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles		2294	44	2415	1.9	0.352	0.5	NA	0.6	4.4	0.02	0.00	0.02	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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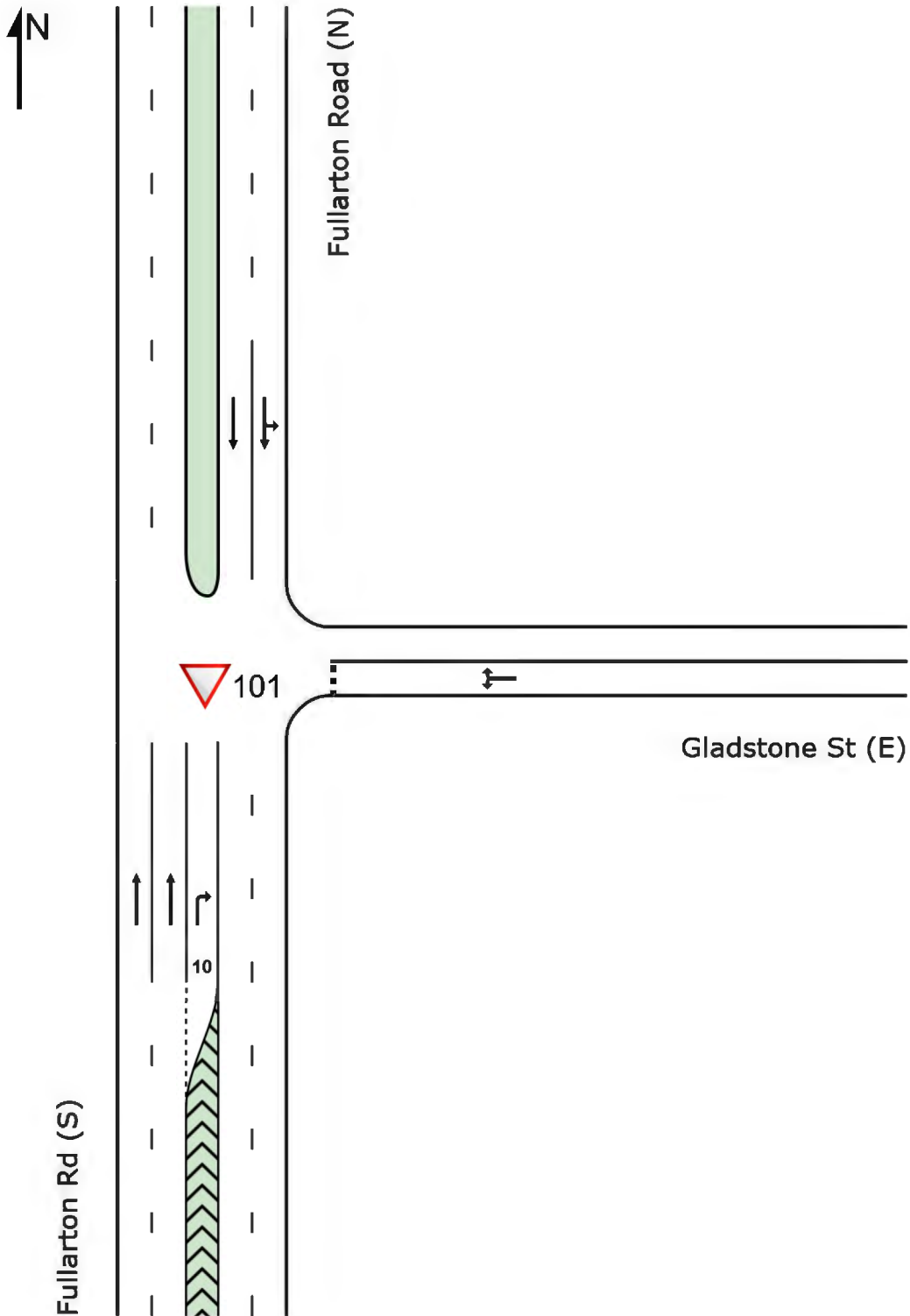
Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2021\21151 Child Care Centre 196 Glen Osmond Road Fullarton \SIDRA\21151_20Aug21.sip9

SITE LAYOUT

▽ Site: 101 [Fullarton Rd/Gladstone St - AM future (proposed layout) (Site Folder: Fullarton Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

▽ Site: 101 [Fullarton Rd/Gladstone St - AM future (proposed layout) (Site Folder: Fullarton Rd/Gladstone St)]

New Site

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Fullarton Rd (S)														
2	T1	1345	26	1416	1.9	0.370	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	55	1	58	1.8	0.091	9.9	LOS A	0.3	2.3	0.58	0.79	0.58	42.5
Approach		1400	27	1474	1.9	0.370	0.5	NA	0.3	2.3	0.02	0.03	0.02	58.5
East: Gladstone St (E)														
4	L2	17	0	18	0.0	0.514	116.8	LOS F	1.7	12.4	1.00	1.09	1.37	13.5
6	R2	2	1	2	50.0	0.514	846.6	LOS F	1.7	12.4	1.00	1.09	1.37	10.1
Approach		19	1	20	5.3	0.514	193.6	LOS F	1.7	12.4	1.00	1.09	1.37	13.1
North: Fullarton Road (N)														
7	L2	14	0	15	0.0	0.218	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.4
8	T1	777	27	818	3.5	0.218	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach		791	27	833	3.4	0.218	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles		2210	55	2326	2.5	0.514	2.0	NA	1.7	12.4	0.02	0.03	0.03	56.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Fullarton Rd/Gladstone St - PM future (proposed layout) (Site Folder: Fullarton Rd/Gladstone St)]

New Site

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Fullarton Rd (S)														
2	T1	995	21	1047	2.1	0.274	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	54	0	57	0.0	0.175	16.7	LOS C	0.6	4.0	0.81	0.92	0.81	39.4
Approach		1049	21	1104	2.0	0.274	0.9	NA	0.6	4.0	0.04	0.05	0.04	57.7
East: Gladstone St (E)														
4	L2	14	0	15	0.0	0.099	7.1	LOS A	0.3	1.9	0.79	0.82	0.79	36.2
6	R2	1	0	1	0.0	0.099	244.2	LOS F	0.3	1.9	0.79	0.82	0.79	31.2
Approach		15	0	16	0.0	0.099	22.9	LOS C	0.3	1.9	0.79	0.82	0.79	35.9
North: Fullarton Road (N)														
7	L2	15	0	16	0.0	0.354	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
8	T1	1283	22	1351	1.7	0.354	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach		1298	22	1366	1.7	0.354	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles		2362	43	2486	1.8	0.354	0.6	NA	0.6	4.0	0.02	0.03	0.02	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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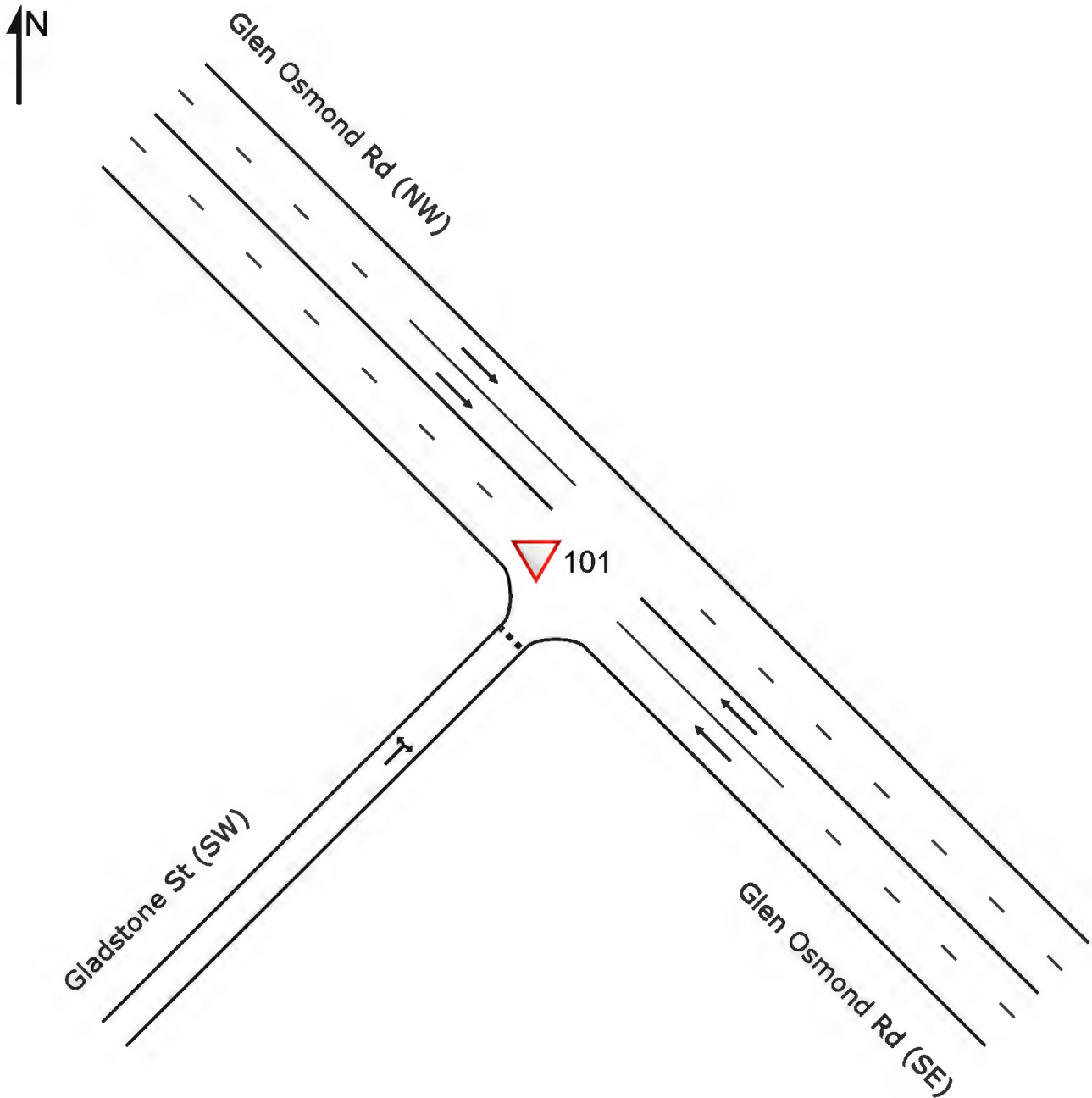
Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2021\21151 Child Care Centre 196 Glen Osmond Road Fullarton \SIDRA\21151_20Aug21.sip9

SITE LAYOUT

▽ Site: 101 [Glen Osmond Rd/Gladstone St - AM existing (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [Glen Osmond Rd/Gladstone St - AM existing (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
SouthEast: Glen Osmond Rd (SE)														
2	T1	1937	53	2039	2.7	0.523	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
Approach		1937	53	2039	2.7	0.523	0.2	NA	0.0	0.0	0.00	0.00	0.00	59.6
NorthWest: Glen Osmond Rd (NW)														
8	T1	622	51	655	8.2	0.175	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		622	51	655	8.2	0.175	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Gladstone St (SW)														
10	L2	6	0	6	0.0	0.396	96.8	LOS F	1.0	6.7	0.98	1.02	1.08	9.9
12	R2	1	0	1	0.0	0.396	1136.9	LOS F	1.0	6.7	0.98	1.02	1.08	11.6
Approach		7	0	7	0.0	0.396	245.4	LOS F	1.0	6.7	0.98	1.02	1.08	10.1
All Vehicles		2566	104	2701	4.1	0.523	0.8	NA	1.0	6.7	0.00	0.00	0.00	58.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Glen Osmond Rd/Gladstone St - PM existing (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
SouthEast: Glen Osmond Rd (SE)														
2	T1	901	42	948	4.7	0.246	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		901	42	948	4.7	0.246	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
NorthWest: Glen Osmond Rd (NW)														
8	T1	1686	34	1775	2.0	0.456	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		1686	34	1775	2.0	0.456	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.7
SouthWest: Gladstone St (SW)														
10	L2	21	0	22	0.0	0.750	194.8	LOS F	2.8	19.7	0.95	1.24	1.64	8.8
12	R2	4	0	4	0.0	0.750	745.3	LOS F	2.8	19.7	0.95	1.24	1.64	10.4
Approach		25	0	26	0.0	0.750	282.9	LOS F	2.8	19.7	0.95	1.24	1.64	9.0
All Vehicles		2612	76	2749	2.9	0.750	2.8	NA	2.8	19.7	0.01	0.01	0.02	56.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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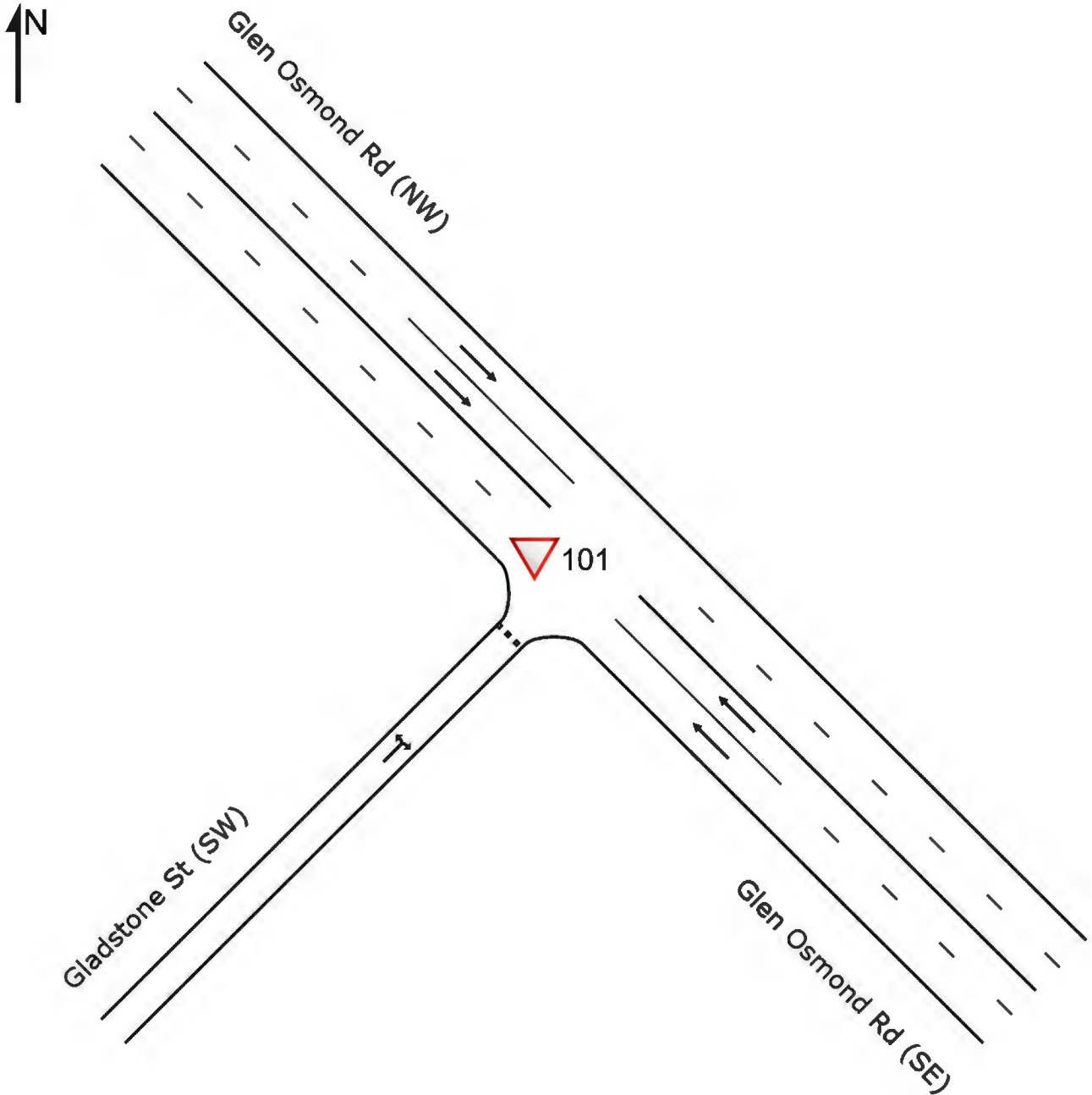
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SITE LAYOUT

▽ Site: 101 [Glen Osmond Rd/Gladstone St - AM future (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [Glen Osmond Rd/Gladstone St - AM future (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
SouthEast: Glen Osmond Rd (SE)														
2	T1	1937	53	2039	2.7	0.523	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
Approach		1937	53	2039	2.7	0.523	0.2	NA	0.0	0.0	0.00	0.00	0.00	59.6
NorthWest: Glen Osmond Rd (NW)														
8	T1	624	51	657	8.2	0.176	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		624	51	657	8.2	0.176	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Gladstone St (SW)														
10	L2	66	0	69	0.0	0.630	38.1	LOS E	2.1	14.8	0.94	1.11	1.43	26.4
12	R2	1	0	1	0.0	0.630	1195.9	LOS F	2.1	14.8	0.94	1.11	1.43	29.4
Approach		67	0	71	0.0	0.630	55.3	LOS F	2.1	14.8	0.94	1.11	1.43	26.5
All Vehicles		2628	104	2766	4.0	0.630	1.6	NA	2.1	14.8	0.02	0.03	0.04	57.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Glen Osmond Rd/Gladstone St - PM future (Site Folder: Glen Osmond Rd/Gladstone St)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
SouthEast: Glen Osmond Rd (SE)														
2	T1	901	42	948	4.7	0.246	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		901	42	948	4.7	0.246	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
NorthWest: Glen Osmond Rd (NW)														
8	T1	1688	34	1777	2.0	0.457	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		1688	34	1777	2.0	0.457	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.7
SouthWest: Gladstone St (SW)														
10	L2	73	0	77	0.0	0.826	105.2	LOS F	5.2	36.5	0.91	1.59	2.52	15.4
12	R2	4	0	4	0.0	0.826	700.9	LOS F	5.2	36.5	0.91	1.59	2.52	17.8
Approach		77	0	81	0.0	0.826	136.2	LOS F	5.2	36.5	0.91	1.59	2.52	15.5
All Vehicles		2666	76	2806	2.9	0.826	4.0	NA	5.2	36.5	0.03	0.05	0.07	55.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Ref: 21151|JJB

7 October 2021

**AMENDED PLAN / DOCUMENT
DATE: 28/10/2021**

Zoe Garnaut
Ekistics
Level 1, 16 Vardon Avenue
Adelaide, SA 5000

Dear Zoe,

**PROPOSED CHILD CARE CENTRE
196 GLEN OSMOND ROAD, FULLARTON**

I refer to the proposed child care centre at 196 Glen Osmond Road, Fullarton. As requested, I have reviewed the comments received from the City of Unley's in relation to traffic, parking and/or access aspects of the proposal. Accordingly, this letter summarises the responses received from Council followed by my response.

"The proposed vehicle access to Glen Osmond Road will result in the loss of an existing street tree..."

The street tree is proposed to be removed in order to maximise on-site parking provisions, whilst retaining appropriate vehicle manoeuvring areas within the site. Furthermore, an arborist report has also been prepared, which has not deemed the loss of the tree to be of a detriment to the surrounding locale.

"... pedestrian sight triangles have not been provided in accordance with AS2890.1..."

The proposal plans have been updated to accommodate pedestrian sightlines as per the requirements of AS/NZS 2890.1:2004.

"The traffic report ... indicated that the proposed ingress only crossover on Glen Osmond will have signage and line marking to advise drivers that egress to Glen Osmond is not accommodated. Plans provided by the applicant have not indicated any traffic signage or line marking..."

The proposal plans have been updated to illustrate associated linemarking and signage to prohibit egress directly onto Glen Osmond Road.

"The traffic report indicates that all 90-degree parking spaces will be provided with a width of 2.7m, length of 5.4m and accessed from an aisle at least 5.8m wide. Therefore, the width and length has been provided in accordance with the Australian Standards, however the access aisle has not."

AS/NZS 2890.1:2004 provides land use examples each parking facility 'user class' (none of the user classes identify child care centres as an example land use). The proposed child care centre has been designed based upon the requirements of 'user class' three (3), for which AS/NZS 2890.1:2004 provides an example of "short-term city and town centre parking, parking stations, hospital and medical centres". The dimensional requirements for 90-degree User Class 3 spaces identified by AS/NZS 2890.1:2004 (2.6 m wide, 5.4 m long with an adjacent 5.8 m wide aisle) are therefore satisfied.

It should be noted that User Class 2 comprises the minimum dimensional aisle (5.8 m) and parking space (2.5 m) width requirements in order to facilitate single entry and exit movements to and from parking spaces. The proposed development will provide 2.7 m parking spaces (akin to User Class 3A) in order to provide additional space for door opening associated with children entering and exiting vehicles. The additional parking space width would also improve accessibility for vehicles entering/exiting the parking spaces, similar to how a widened aisle (above the 5.8 m minimum identified by AS/NZS 2890.1:2004) would improve manoeuvrability for a 2.6 m wide parking space. On this basis, the proposed dimensions of the parking area are considered more than adequate to provide appropriate manoeuvrability and accessibility for visitors to the site.

Furthermore, the above dimensional provisions have been proposed and accepted for a number of child care centre developments throughout metropolitan Adelaide, by a variety of Councils as well as the Department for Infrastructure and Transport (DIT). The proposed dimensions are therefore considered contemporary and appropriate.

In addition to the above, DIT (Department for Infrastructure and Transport) have advised that a 2.13 m wide MARWP requirement is applicable to the Glen Osmond Road frontage, as well as a 4.5 m by 4.5 m corner cut-off adjacent the Glen Osmond Road/Gladstone Street intersection. Widening the aisle would therefore result in parking spaces encroaching into the MARWP requirement.

"... ten (10) dedicated staff parking spaces will be provided, with six (6) tandem spaces and four (4) 45-degree spaces. ... all staff parking spaces must be clearly identified with use of line marking and/or signage..."

The proposal plans have been updated to include 'staff only' linemarking for staff parking spaces.

"The swept path provided indicates that an 8.8m MRV will be required to utilize the entire parking area, including staff and visitor parking spaces, with the traffic report indicating that waste collection is to occur outside of opening hours. This is considered acceptable ..." (my emphasis)

"It is also recommended that the applicant provide a swept path assessment showing an 8.8m MRV accessing the site via Glen Osmond Road and exiting via Gladstone Street with minimal impact to parking spaces, should any waste collection ever be required during opening hours."

The refuse collection turn path illustrated in CIRQA's Traffic and Parking report illustrates a refuse collection utilising a portion of the site's proposed parking area (rather than the entire area). Noting Council's comments, this is considered to be acceptable by Council regardless.

The report also identifies refuse collection will occur outside of opening hours. On this basis, MRV access via Glen Osmond Road will not be required, with the provision of additional (non-required) turn paths redundant.

"The revised traffic rates are considered inappropriate for the site, noting that no reduction should be applied to the RTA's rates. Based on the appropriate traffic generation rates, the site is expected to generate 82 vehicle movements in the AM peak and 72 vehicle movements in the PM peak.."

The RTA Guide states that for child care centres, *"The vehicle generation rates ... are the mean peak generation rates ... in the periods specified"* (my emphasis). The RTA Guide identifies the peak periods as from 7:00 am to 9:00 am, and from 4:00 pm to 6:00 pm. As the traffic generation specified by the RTA Guide occurs over a two-hour period, CIRQA's report has been assumed that 60% of the peak period movements would occur during the peak hour. The traffic generation rates identified in CIRQA's report are therefore considered appropriate for assessment of the peak hour traffic generation associated with a child care centre (50 am and 42 pm peak hour trips are forecast to be associated with the proposed development).

In addition, it should be noted that the traffic generation rates adopted have been used for the traffic assessment of numerous child care centre developments throughout metropolitan Adelaide, and have been accepted by DIT and various Council's. The traffic generation rates are considered contemporary and appropriate for application to the proposal.

"The traffic report has assumed that all traffic travelling to the site will be split 32.5% via Glen Osmond Road and 67.5% via Gladstone Street, however given the site is located closer to Glen Osmond Road than Fullarton Road, it would be expected the majority of visitors would arrive via Glen Osmond Road."

The distribution of traffic (travelling to the site) between the Glen Osmond Road and Gladstone Street access points has been based on potential access routes to the subject site, taking into consideration accessibility (turn restrictions, potential delays etc.) and convenience (route lengths, ease of turning movements etc.). For example, it will be easier for a driver to access the site via a left-turn into Gladstone Street and then right-turn into the site, rather than a right-turn across the opposing traffic flow on Glen Osmond Road. As such, the forecast traffic distribution is considered appropriate for assessment of the site's potential traffic impacts, noting the site's locale and unique area characteristics.

"The traffic report has assumed that given the upcoming upgrade of Fullarton Rd / Glen Osmond Rd intersection, all existing right turns [from Fullarton Road south onto Glen Osmond Road east] will be directed to Gladstone Street. Council is currently in discussions with DIT in regard to reducing the potential of rat-running through Gladstone Street by permanently removing right turns into and out of Gladstone Street at Fullarton Road.."

Council previously advised that due to the upgrade of the Fullarton Road/Glen Osmond Road intersection, existing right turn movements may redistribute to Glen Osmond Road via Gladstone Street (as right turns onto Glen Osmond Road east from Fullarton Road south will be banned). The traffic assessment undertaken was prepared on the basis of Council's advice.

Furthermore, CIRQA's traffic assessment did not distribute egress movements associated with the proposal onto Fullarton Road via a right turn from Gladstone Street due to the difficulty of the movement during peak periods. The prohibition of such movements would therefore not impact upon egress movements associated with the proposed development.

With regard to ingress, should right turn movements into Gladstone Street be prohibited, vehicle movements would likely be redistributed via Florence Street, Martens Avenue and Glen Osmond Road in order to access the subject site. The seven (7) am and six (6) pm peak hour movements would be readily accommodated on Florence Street, Martens Avenue, Glen Osmond Road, their associated intersections and at the site's access point with negligible impact (noting the very low number of peak hour movements forecast to utilise this route.

Please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,



JEREMY BAYLY

Technical Officer | CIRQA Pty Ltd

Fullarton Child Care Centre

Environmental Noise Assessment

September 2021

S6959C3

sonus.

Chris Turnbull

Principal

Phone: +61 (0) 417 845 720

Email: ct@sonus.com.au

www.sonus.com.au

Document Title : Fullarton Child Care Centre
Environmental Noise Assessment

Document Reference : S6959C3

Date : September 2021

Author : Chris Turnbull, MAAS

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INTRODUCTION

An environmental noise assessment has been made of the proposed child care centre to be located at the corner of Glen Osmond Road and Gladstone Street, Fullarton.

The proposed child care centre will comprise three outdoor play areas which will accommodate children of various ages, indoor areas, and a carpark which is accessed via Glen Osmond Road. Residences are located adjacent to the subject site to the south and west as well as to the north-west across Gladstone Street. A Motel is located to the east. Appendix A shows the location of the site and its surroundings.

The assessment considers noise levels at the surrounding residences and the Motel from children playing in outdoor areas, car park activity and mechanical plant operation.

The assessment has been based on the following:

- *Redshed architects* drawing for the Proposed Child Care Centre with the *Drawing No: DA 03, Dated 01 June 2021.*
- Previous noise measurements and procurement of data from similar sites for mechanical plant, and car parking activity;
- The understanding that the total number and age of children at the centre will be:
 - 24 x 0–2-year-olds;
 - 35 x 2–3-year-olds; and
 - 44 x 3–5-year-olds.
- The understanding that the children will be outside for an average of no more than 6 hours per day.

CRITERIA

Planning and Design Code

The subject site is located within the City of Unley. Development within City of Unley is subject to the provisions of the *Planning and Design Code* (the Code).

In accordance with the Code, the proposed facility is located within the “Business Neighbourhood” zone and the nearby noise sensitive locations are located within the “Business Neighbourhood” zone and “General Neighbourhood” zone.

The Code has been reviewed and particular regard has been given to the following provisions:

Part 4 – General Development Policies

Interface between Land Uses

DESIRED OUTCOME

DO 1: Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General Land Use Compatibility	
PO 1.2 Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.	DTS/DPF 1.2 None are applicable

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature									
Hours of Operation										
<p>PO 2.1 Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:</p> <ul style="list-style-type: none"> a) the nature of the development b) measures to mitigate off-site impacts c) the extent to which the development is desired in the zone d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land. 	<p>DTS/DPF 2.1 Development operating within the following hours:</p> <table border="1"> <thead> <tr> <th>Class of Development</th> <th>Hours of operation</th> </tr> </thead> <tbody> <tr> <td>Consulting room</td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday</td> </tr> <tr> <td>Office</td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday</td> </tr> <tr> <td>Shop, other than any one or combination of the following: (a) restaurant (b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday</td> </tr> </tbody> </table>	Class of Development	Hours of operation	Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Shop, other than any one or combination of the following: (a) restaurant (b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday	
Class of Development	Hours of operation									
Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday									
Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday									
Shop, other than any one or combination of the following: (a) restaurant (b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday									

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Activities Generating Noise or Vibration	
PO 4.1 Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.1 Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.
PO 4.2 Areas for the on-site manoeuvring of service and delivery vehicles, plant and equipment, outdoor work spaces (and the like) are designed and sited to not unreasonably impact the amenity of adjacent sensitive receivers (or lawfully approved sensitive receivers) and zones primarily intended to accommodate sensitive receivers due to noise and vibration by adopting techniques including: <ul style="list-style-type: none"> a) locating openings of buildings and associated services away from the interface with the adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers c) housing plant and equipment within an enclosed structure or acoustic enclosure d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone. 	DTS/DPF 4.2 None are applicable

OUTDOOR PLAY AREAS

Preschools, schools, child care centres and playgrounds are often located immediately adjacent to residences and the sound of children playing during the day is rarely of concern. However, in some situations, where adjacent residents are sensitive to the sound of children's voices, the noise can be annoying. For the purposes of this assessment, it has been assumed that the residents and motel guests in the vicinity of the proposed development are sensitive to the sound of children's voices.

Criteria

Deemed-to-Satisfy Criteria / Designated Performance Feature 4.1 references the *Environment Protection (Noise) Policy*. The current version is the *Environment Protection (Noise) Policy 2007* (the Policy). However, the noise from children playing is specifically excluded from assessment under the Policy. In these circumstances, reference is made to the recommendations of the *Guidelines for Community Noise* (the Guidelines) published by the *World Health Organisation (the WHO)* with regard to annoyance during the day.

The WHO guidelines include:

“To protect the majority of people from being seriously annoyed during the daytime, the sound pressure level on balconies, terraces and outdoor living areas should not exceed 55 dB L_{Aeq} for a steady continuous noise. To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound pressure level should not exceed 50 dB L_{Aeq} .”

Based on the above, it is proposed that noise reduction measures be designed for the proposal such that the average (L_{Aeq}) sound levels during daytime hours from children playing are no greater than 50 dB(A) at the existing noise sensitive locations and no greater than 55 dB(A) at locations of potential future noise sensitive locations (to the south west).

Assessment

The noise from children in outdoor areas has previously been measured at similar child care facilities. Based on these measurements, the noise from the proposed facility has been predicted for the centre operating at full capacity in all age groups, totalling 103 children.

The noise levels generated from children playing in outdoor areas, which have been used as the basis of this assessment, are provided in Appendix B (provided as *sound power levels* for children of various ages).

In order to achieve the assessment criterion, the following treatments are recommended:

- Ensure the fences marked-up in Figure 1 are constructed as follows:
 - A minimum of 1.8m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **BLUE**;
 - A minimum of 2.4m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **GREEN**;
 - A minimum of 2.7m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **RED**; and
- Ensure fences are sealed airtight at all junctions, including between panels and at the ground.

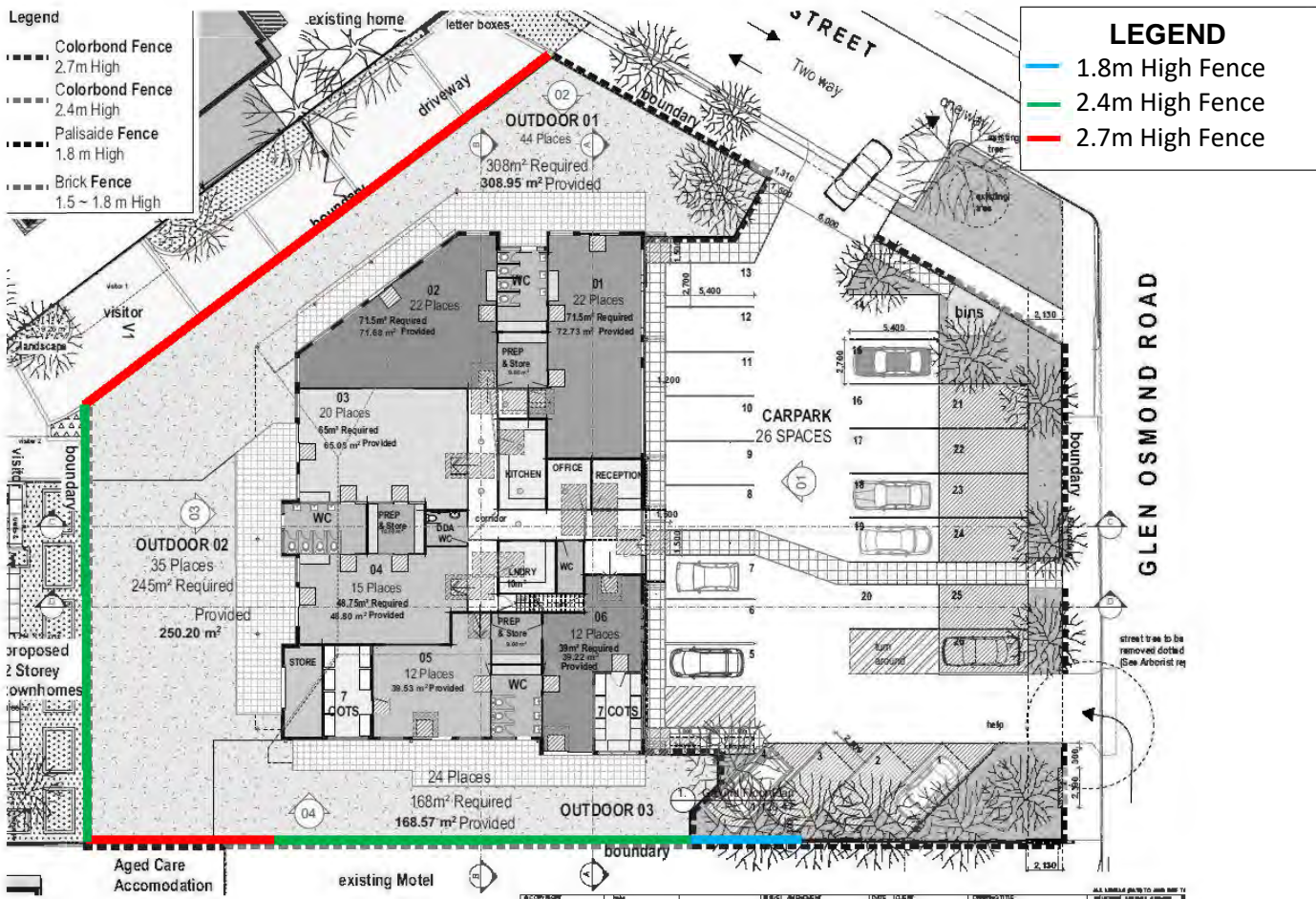


Figure 1: Site plan and recommended acoustic treatments.

With the acoustic treatment described above incorporated, the highest noise level predicted, at any existing noise sensitive location in the vicinity, from children playing is 50 dB(A) and at any potential future noise sensitive location is 55 dB(A), therefore achieving the WHO recommendation to protect against annoyance.

MECHANICAL PLANT & CAR PARK ACTIVITY

Criteria

Deemed-to-Satisfy Criteria / Designated Performance Feature 4.1 references the *Environment Protection (Noise) Policy*. The Policy is based on preventing adverse impacts on the amenity of a locality and it is therefore considered that where the noise from car park activity and mechanical plant at the facility achieve the Policy, other Performance Outcomes are also achieved.

The Policy provides goal noise levels to be achieved at residences, based on the principally promoted land uses of the Planning and Design Code zones in which the noise source (child care centre) and the noise receivers (residences) are located. In this instance, the Policy provides the following goal noise levels:

- an average (L_{eq}) noise level of 47 dB(A) during the day (7:00am to 10:00pm);
- an average (L_{eq}) noise level of 40 dB(A) during the night (10:00pm to 7:00am); and
- an instantaneous maximum (L_{max}) noise level of 60 dB(A) during the night (10:00pm to 7:00am).

It is noted that the levels presented in the Policy may be exceeded where it can be shown that higher noise levels are already present within the environment.

When measuring or predicting noise levels for comparison with the Policy, penalties may be applied to the average goal noise levels for each characteristic of tone, impulse, low frequency and modulation of the noise source. To apply a penalty, the characteristic must be considered dominant in the existing acoustic environment. The application of penalties is discussed further in the Assessment section of this report.

Car Park Assessment

The location of the carpark is well designed from a noise perspective, being adjacent to Glen Osmond Road. In this location, any noise from the carpark is unlikely to be noticeable.

For reference, at a location equivalent to the closest sensitive receptor (the Motel), a background (L_{90}) noise level of 64 dB(A), an average (L_{eq}) noise level of 70 dB(A) and a maximum (L_{max}) level of 85 dB(A) were recorded during the day (noise measurement location shown in Appendix A).

The noise levels at residences from the proposed site activity have been predicted based on a range of previous noise measurements and observations at similar facilities. These include:

- general 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,
- vehicle movements on site.

General Activity

The predictions have been based on the fences in Figure 1 being installed and the following assumed activity levels within any 15-minute period¹;

- Day Time (7am to 10pm)
 - 10 vehicle movements into and out of the car park and corresponding general car park activity at the available car parks
- Night Time (6am to 7am)
 - 5 vehicle movements into and out of the car park and corresponding general car park activity at the available car parks

Based on the above, the predicted noise level at the Motel is no more than 43 dB(A) during the day time and 40 dB(A) prior to 7:00am. Given that the levels are so far below existing noise levels (even allowing for some variation during the day), no penalty is warranted. Therefore, the Policy goal noise levels will be easily achieved at all sensitive receptors.

¹ Default assessment period of the Policy

Maximum Noise Level

The instantaneous maximum noise levels at residences have been predicted. Predicted maximum noise levels have been based on measurements at a variety of similar sites and include noise sources such as closing of car doors and vehicles accelerating away from a parked location.

The highest predicted maximum noise level at a residence (the Motel) from a vehicle using the car park is 67 dB(A). The noise monitoring indicates that the Motel is already exposed to a maximum (L_{max}) levels in order of 85 dB(A).

Therefore, vehicle activity on the site will be lower than what is already experienced during the operational hours of the child care centre. The activity therefore cannot cause an unreasonable interference and is considered to achieve the Policy.

Mechanical Plant Assessment

The noise levels at residences from the proposed mechanical plant serving the building have been predicted based on a range of previous noise measurements and observations at similar facilities.

As is typical at the Development Application stage, the proposed mechanical plant units have not yet been designed or selected. Therefore, the assessment of the mechanical plant has been based on a typical selection, consisting of two outdoor air conditioning units as per the drawings.

The predictions have been based on the fences in Figure 1 being installed and the continuous operation of the mechanical plant within any 15-minute period²;

Based on the predictions, in order to achieve the assessment criteria, the mechanical plant may be located within the **YELLOW** area designated in Figure 2.

² Default assessment period of the Policy

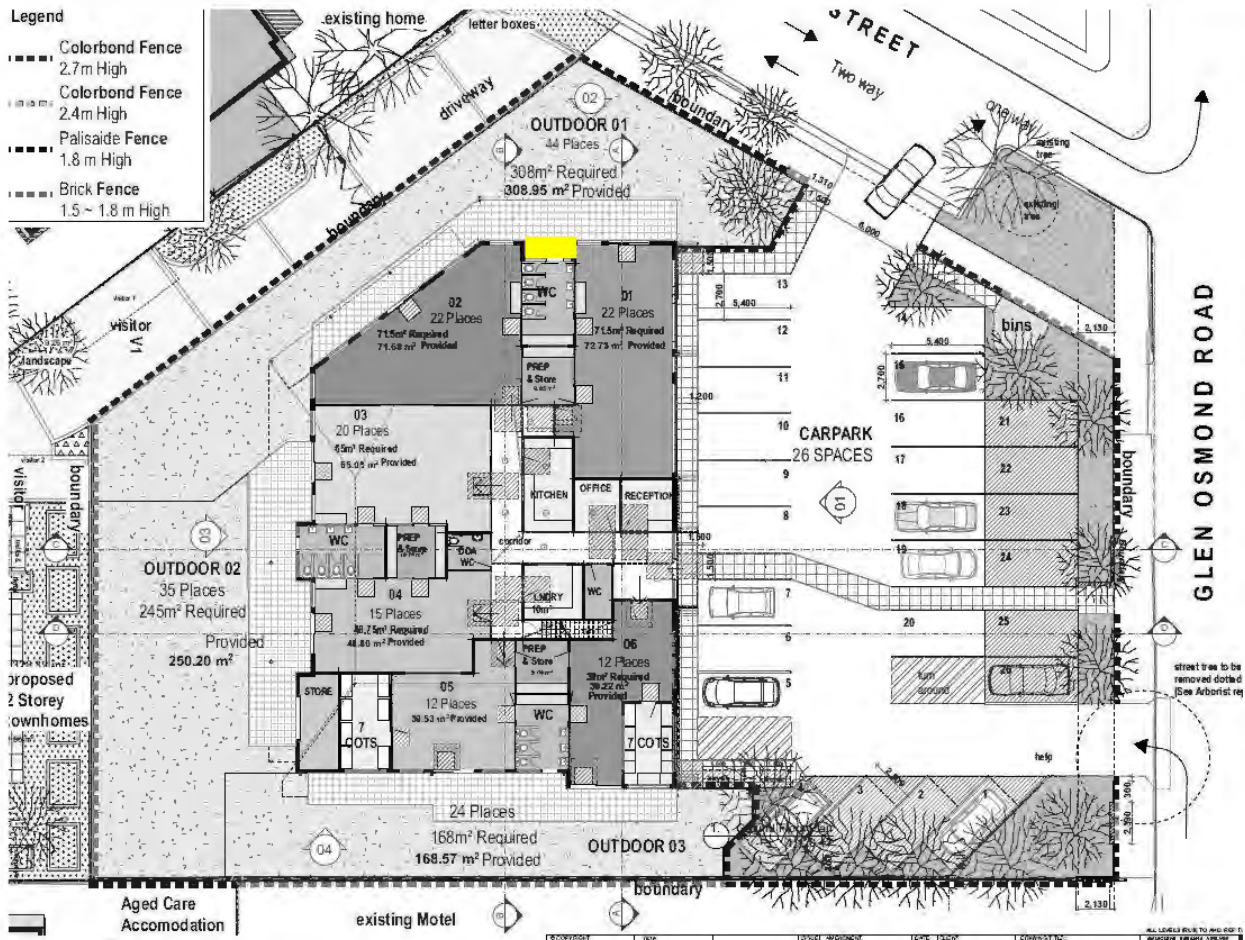


Figure 2: Site plan and recommended acoustic treatments

Based on the above, the predicted noise levels at residences in the vicinity due to the mechanical plant is no more than 34 dB(A). Therefore, the Policy goal noise levels will be achieved at all residences.

CONCLUSION

An environmental noise assessment has been made of the proposed child care centre to be located at corner of Glen Osmond Road and Gladstone Street. The assessment has considered noise at noise sensitive locations in the vicinity, from children playing in outdoor areas, car park activity and mechanical plant operation.

Relevant assessment criteria have been established based on the *Planning and Design Code* (the Code), *Environment Protection (Noise) Policy 2007* and the World Health Organisation recommendations to protect against annoyance. Specific fence constructions and mechanical plant locations have been recommended in order to achieve the noise criteria.

Based on the above, it is considered that the development has been designed to mitigate adverse impacts on neighbouring and proximate land uses, thereby achieving all relevant provisions of the Planning and Design Code.

APPENDIX A: Site locality and its surroundings.



APPENDIX B: Noise level data

Equipment/Activity		Sound Power Level
Children	0-2 year old (per child)	74 dB(A)
	2-3 year old (per child)	78 dB(A)
	3-5 year old (per child)	80 dB(A)
General Car Park Activity	General activity	83 dB(A)
	Moving vehicle	82 dB(A)
Mechanical Plant	AC condenser unit	73 dB(A)

ATTACHMENT 3

Details of Representations

Application Summary

Application ID	21027177
Proposal	Construction of a two storey childcare centre (pre-school), and ancillary car parking, landscaping, fencing, retaining walls and six (6) signage displays.
Location	1A GLADSTONE ST FULLARTON SA 5063, 196 GLEN OSMOND RD FULLARTON SA 5063

Representations

Representor 1 - [REDACTED]

Name	[REDACTED]
Address	7 Gladstone St FULLARTON SA, 5063 Australia
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	13/11/2021 09:35 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons	<p>I believe this development will inconvenience current residents and increase traffic flow, litter and congestion in a quiet residential street. All efforts should be made by council to avoid inconveniencing current residents during the construction and operation of any proposed developments and it is not clear how this would be done. There should be no vehicular access off Gladstone Street to any proposed developments. All access for any developments on the site in question should be via Glen Osmond Road. Vehicular access to proposed developments off Gladstone Street would cause excessive traffic congestion in the street and would be a danger and a great inconvenience to current residents. Parking on Gladstone Street would increase if it went ahead and there would be a potential for traffic jams and general congestion on the street. There is a potential for increased litter on Gladstone Street due to the development. Current access to and from Gladstone street would be diminished for local residents due to traffic flow and congestion. Foot traffic on Gladstone Street would increase and this would increase noise, wear and tear and congestion in the street.</p>

Representations

Representor 2 - [REDACTED]

Name	[REDACTED]
Address	1 GLADSTONE STREET FULLARTON SA, 5063 Australia
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	17/11/2021 11:45 AM
Submission Source	Over Counter
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons	Traffic concerns

Attached Documents

ScivicGrou21111711150-1657647.pdf

REPRESENTATION ON APPLICATION –
PERFORMANCE ASSESSED DEVELOPMENT

Planning, Development and Infrastructure Act 2016

Applicant:

Development Building Holding Pty. Ltd
Click here to enter text. [applicant name]

Development Number:

210 27 177
Click here to enter text. [development application number]

Nature of Development:

Child Care Centre
Click here to enter text. [development description of performance assessed elements]

Zone/Sub-zone/Overlay:

Click here to enter text. [zone/sub-zone/overlay of subject land]

Subject Land:

Click here to enter text. [street number, street name, suburb, postcode]
[lot number, plan number, certificate of title number, volume & folio]

Contact Officer:

Click here to enter text. [relevant authority name]

Phone Number:

Click here to enter text. [authority phone]

Close Date:

02/12/21
Click here to enter text. [closing date for submissions]

My name*: Click here to enter text.

My phone number: Click here to enter text.

My postal address*: Click here to enter text.

1 Gladstone Fullarton

* Indicates mandatory information

My position is:

I support the development

I support the development with some concerns (detail below)

I oppose the development

City of Unley

17 NOV 2021

Received

The specific reasons I believe that planning consent should be granted/refused are:

I, along with many residents in Gladstone Street oppose the entry to the car park being in Gladstone Street. This will lead to a large number of cars using the street adding to an already significant traffic problem. The upgrade of the Glen Osmond Fullarton will also add to the traffic congestion in the street. All the residents want to see the entrance to be off Glen Osmond Road.

[attach additional pages as needed]



Government of South Australia
Attorney-General's Department

Note: In order for this submission to be valid, it must:

- be in writing; and
- include the name and address of the person (or persons) who are making the representation; and
- set out the particular reasons why planning consent should be granted or refused; and
- comment only on the performance-based elements of the proposal, which does not include the:
 - Click here to enter text. *[list any accepted or deemed-to-satisfy elements of the development]*.

I: wish to be heard in support of my submission*
 do not wish to be heard in support of my submission

By: appearing personally
 being represented by the following person: Click here to enter text.

**You may be contacted if you indicate that you wish to be heard by the relevant authority in support of your submission:*



Return Address: Click here to enter text. *[relevant authority postal address]* or

Email: Click here to enter text. *[relevant authority email address]* or

Complete online submission: planninganddesigncode.plan.sa.gov.au/haveyoursay/

Representations

Representor 3 - [REDACTED]

Name	[REDACTED]
Address	[REDACTED] Street
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	17/11/2021 02:54 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons	The reasons that the development should be refused is the traffic and parkin and noise intrusion into a quiet residential street. Local residential streets are not meant to accommodate high volumes of traffic and parking saturation. Residential streets are not meant to support commercial traffic and commercial development. Access to the site cannot be gained via Gladstone Street.

Attached Documents

Representations

Representor 4 [REDACTED]

Name	[REDACTED]
Address	15 Gladstone Street FULLARTON SA, 5063 Australia
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	18/11/2021 11:15 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I support the development with some concerns
Reasons	<p>A resident in the street for almost 15yrs, the development and traffic increase has become almost unbearable, from staff at both Woolworths & Foodland over the years being advised to park in Gladstone street. The parking restrictions have achieved nothing since implemented. To see that the only entrance into the carpark for the childcare facility is via Gladstone Street is very concerning, with up to 26 carpark spots and vehicles doing drop off's & pickups, again the traffic in the street becomes increasingly dangerous for what was once a very quiet street. To not involve all residents in our street from the start, shows a lack of community engagement from the developers and council and with no regards to the future restrictions being put in place by the State Government for the Fullarton Road / Glen Osmond Road intersection changes, which again will increase traffic flow into our street to access Glen Osmond Road. While not opposed to the development at the end of the street, I am opposed to the carpark entrance being on Gladstone Street, therefore would like to see a new proposal submitted. Has anyone from the council attempted to turn right from Gladstone Street onto Fullarton Road from 7.00am - 9.30am? sometimes this can be up to two or three traffic cycles with the lights (at the major intersection), now with more vehicles entering & exiting, this will cause more traffic congestion and potentially a major accident down the track. I have voiced my concern to the Unley Council dozens of times over the last 10 years and this has always fallen on deaf ears, yet private developers and private businesses have their own way with the council with no respect for the local residents. If it was not for one of the residents living in Gladstone Street, then this</p>

proposal would go ahead without and greater consultation other than the properties bordering the development, something that does not sit well with us. Happy to discuss further. Kind Regards, [REDACTED]

Attached Documents

Representations

Representor 5 [REDACTED]

Name	[REDACTED]
Address	6 FULLARTON SA, 5063 Australia
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	23/11/2021 11:11 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
Reasons	Gladstone St is very short street with no entry at the eastern end. Residents already experience traffic issues on the street. Numerous vehicles constantly disobey the no entry sign. During the day when vehicles are parked on the street, not more than one vehicle can travel through at a time, particularly at the bottleneck at the western end. Having an entry to any business on Gladstone Street will intensify existing problems and cause numerous safety concerns. There is an existing driveway on Glen Osmond Road. This is the practical entry point for any business attracting numerous vehicles. There are serious safety concerns if Gladstone St is the entry/exit point.

Attached Documents

Representations

Representor 6 [REDACTED]

Name	[REDACTED]
Address	[REDACTED]
Phone Number	[REDACTED]
Email Address	[REDACTED]
Submission Date	02/12/2021 10:32 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
Reasons	Adelaide is fast losing one of its greatest assets: its historic domestic architecture. These buildings are a fine example of that, and should be incorporated into the development.

Attached Documents

Representations

Representor 7 - [REDACTED]

Name	[REDACTED]
Address	[REDACTED]
Phone Number	
Email Address	[REDACTED]
Submission Date	02/12/2021 09:08 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons	-The design is out of place for the neighbourhood.

Attached Documents

ATTACHMENT 4

21 December 2021

REF No.: 01071-004

City of Unley
PO Box 1
UNLEY SA 5061

Attention: Chelsea Spangler

By Plan SA and email: cspangler@unley.sa.gov.au

Dear Chelsea,

RE: RESPONSE TO REPRESENTATIONS – CHILDCARE CENTRE – 196 GLEN OSMOND ROAD AND 1A GLADSTONE STREET, FULLARTON – APPLICATION ID 21027177

We refer to the City of Unley’s correspondence dated 3 December 2021 advising that seven (7) representations were received as part of the public notification process for the development application for the construction of a two storey childcare centre (pre-school) and ancillary car parking, landscaping, fencing, retaining walls and six (6) signage displays at 196 Glen Osmond Road and 1A Gladstone Street, Fullarton (DA 21027177).

Pursuant to Sections 107(3)(c) and 110(2) of the *Planning, Development and Infrastructure Act 2016* (PDI Act) and on behalf of the Applicant, this letter provides a formal response to the relevant planning matters raised within the valid representations.

This letter should be read in conjunction with our original Planning Statement (July 2021).

1. Summary of Representations

We note that the development application was subject to public notification and seven (7) representations were received. Five (5) of the representations expressed a desire to be heard by the Council Assessment Panel (CAP).

Table 1.1 on the following page provides a summary of representations received in relation to the proposed development. While **0** display the location/affected addresses of the represents, relative to the subject site.

Table 1.1 Summary of Representations

Representor Identifier	Name	Address	Oppose/Support	Wish to be Heard	Submitted By	Reason
1	[REDACTED]	7 Gladstone St, Fullarton	Oppose	Yes	Self	<ul style="list-style-type: none"> • Traffic and Parking <ul style="list-style-type: none"> » Concern increased about traffic flow onto Gladstone Street will cause congestion; » Opposes the cross-over on Gladstone Street and would prefer all access via Glen Osmond Road » Concern that proposal will result in increased on-street parking on Gladstone Street; • Amenity <ul style="list-style-type: none"> » Concern that proposal will result in increased litter on Gladstone Street. • Interface <ul style="list-style-type: none"> » Concern foot traffic along Gladstone Street would increase and this will increase noise;
2	[REDACTED]	1 Gladstone Street, Fullarton	Oppose	Yes	Self	<ul style="list-style-type: none"> • Traffic and Parking <ul style="list-style-type: none"> » Do not support access point onto Gladstone Street and should be wholly via Glen Osmond Road; and » Concern that proposal will add significant traffic flow and congestion in Gladstone Street.
3	[REDACTED]	[REDACTED]	Oppose	Yes	Self	<ul style="list-style-type: none"> • Traffic and Parking <ul style="list-style-type: none"> » Do not support access via Gladstone Street; » Concern that proposal will result in high volume of traffic in residential street;

Representor Identifier	Name	Address	Oppose/Support	Wish to be Heard	Submitted By	Reason
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» Concern that residential street will be impacted by commercial traffic and commercial development

- **Interface**

» Concern traffic and parking will result in noise intrusion into the surrounding residential properties

4	[Redacted]	15 Gladstone Street, Fullarton	Support with Concerns	No	Self	<ul style="list-style-type: none"> • Traffic and Parking <ul style="list-style-type: none"> » Concern that staff from Woolworths & Foodland already park on Gladstone Street and that existing congested on-street parking will be further impacted by childcare proposal; » Safety concerns for drop-off and pick up access via Gladstone Street; » Concern queuing turning right from Gladstone Street to Fullarton Road can be up to two or three traffic cycles with the lights, with the proposed Childcare centre likely to exacerbate this congestion; • Notification/Engagement <ul style="list-style-type: none"> » Consider extent of letter distribution shows lack of community engagement from developer and Council. Should have been wider than the properties bordering the development.
5	[Redacted]	6 Gladstone Street, Fullarton	Oppose	No	Self	<ul style="list-style-type: none"> • Traffic and Parking <ul style="list-style-type: none"> » Concern that residents already experience traffic issues on the street, with vehicles constantly disobeying the 'no entry' sign at the eastern end; » Currently during the day when vehicles are parked on the street, not more than one vehicle can travel through at a time. Consider proposed access onto Gladstone street will intensify existing problems and cause safety concerns; » Would prefer all access be via Glen Osmond Road
6	[Redacted]	[Redacted]	Oppose	No	Self	<ul style="list-style-type: none"> • Architectural Character <ul style="list-style-type: none"> » Consider that the existing dwellings on the site are a fine example of historic domestic architecture and should be incorporated into the development.

7



Oppose

Yes

Self

- **Design and Appearance**

- » Consider that the design is out of place for the neighbourhood

Figure 1.2 Location of Representors



Having regard to the content of the valid representations, the relevant planning matters of concern have been addressed in **Section 2** below.

2. Response to Planning Matters

2.1 Procedural Matters

One of the representors, [REDACTED] raised concerns about the extent of community engagement undertaken by both the applicant and the Council. Pursuant to clause 107(3)(a) of the *Planning, Development and Infrastructure Act 2016* ('the Act'), notice of the application for planning consent must be given, in accordance with the regulations, to—

- (i) an owner or occupier of each piece of adjacent land; and
- (ii) members of the public by notice placed on the relevant land.

Under the Act, 'adjacent land' means "land that is no more than 60 metres from the other land."

Notice in writing of the application was given by Council to adjacent land owners/occupiers as well as a notice erected on the subject land. As such, public notice for this application is considered to have been undertaken in accordance with the Act, Regulations and *Practice Direction 3- Notification of Performance Assessed Development Applications*.

2.2 Traffic and Parking

Five (5) of the representors raised concerns regarding traffic and parking aspects of the proposal. Their concerns and analysis have been divided into various sub headings below.

2.2.1 Access and Volume of Traffic to Gladstone Street

As outlined in the CIRQA Traffic and Parking report dated 27 August 2021, and within their response to representations (refer to **Appendix 1**), Gladstone Street is a local road under the care and control of the City of Unley. Gladstone Street comprises an 8 m wide carriageway (approximate) with a single unmarked traffic lane in each direction. Traffic data recorded at the adjacent intersection of Glen Osmond Road and Gladstone Street indicates that daily traffic volumes are in the order of 160 vpd (directly adjacent the site) on Gladstone Street. However, there is potential for these volumes to increase as a result of DIT's upgrade of Fullarton Road/Glen Osmond Road as right turns from the southern Fullarton Road approach into Glen Osmond Road will be banned and some movements may be redistributed to Gladstone Street.

Prior to the submission of the application, CIRQA held discussions with Department for Infrastructure and Transport (DIT) who advised that all movement access on Glen Osmond Road was not desired, and its preference was that access via Gladstone Street also be provided. As such access has been designed taking into consideration DIT's comments, providing an ingress only access point on Glen Osmond Road and two-way access on Gladstone Street.

The proposed Childcare centre will create a 6 m wide two-way access point will be provided on Gladstone Street. Simultaneous turning movements will be accommodated at the access, in addition to the in-only access point on Glen Osmond Road. A number of representors have raised concerns that the Gladstone Street access point will result in a large volume of traffic entering Gladstone Street, which, in their opinion, is already congested.

CIRQA have forecast anticipated traffic volumes at peak periods based on the RTA's "Guide to Traffic Generating Developments" (the RTA Guide). This forecasting anticipates the following movements in Gladstone Street from the proposed development:

- Am peak hour – 17 ingress movements/25 egress movements
- Pm peak hour – 15 ingress movements/22 egress movements

The August 2021 CIRQA report concluded that the low number of movements generated by the activity will be readily accommodated by the site's proposed access points. Forecast volumes are well within the capacities of typical access points.

Their report also considered via SIDRA modelling the future upgrade of the Fullarton Road/Glen Osmond Road being undertaken by the Department of Infrastructure and Transport (DIT). This modelling indicated that all movements will operate within capacity. All movements during the am and pm peak hours operate with a Degree of Saturation (DoS) of 0.514 or less. It is noted that there will not be a reduction in the level of service at the Gladstone Street approach due to the proposal.

Based on the CIRQA advice, it is considered that the proposed access to Gladstone Street will not change the classification of Gladstone Street from a ‘Local Road,’ nor will it exacerbate queuing during peak periods at either Fullarton Road or Glen Osmond Road intersections. As such the Gladstone Street access point is considered entirely appropriate for the proposed development.

2.2.2 Street Parking

Two (2) of the representors raised concerns that on-street parking within Gladstone Street is already congested, with one (1) citing that existing parking controls do not adequately address on-street parking congestion. The proposed childcare centre will be serviced by a 26-space parking area, of which 1 space will be reserved exclusively for use by people with disabilities. There are nine (9) dedicated staff car parking spaces located adjoining the Glen Osmond Road frontage and within the angled parking bays adjoining the eastern side boundary of the site.

The site is located within a ‘designated area’ with Table 2 of the Transport, Access and Parking provisions of the Code requiring a minimum rate of 3 spaces per 100m² of gross leasable floor area which equates to a minimum requirement of 19 on-site spaces (rounded up). The proposal provides for 26 on-site parking spaces which exceeds the minimum by seven (7) spaces.

Given the amount of on-site parking provided, the dedicated staff parking spaces and the sites proximity to high frequency public transport the proposal provides sufficient parking to satisfy the proposed use onsite without the need to utilise on-street parking spaces.

Whilst there is nothing prohibiting staff, parents or visitors to the centre parking in the surrounding street network, ample parking has been provided within the site to cater for the capacity of the centre. Further, evidence of similar, existing centres run by the operator has indicated that parents dropping off and picking up children via car typically park as close to the front entrance and internal walkways as possible.

2.3 Interface Amenity

2.3.1 Waste Collection and Litter

Concern was raised by representor [REDACTED] that the childcare centre would result in increased litter on Gladstone Street. Unlike primary and secondary schools, meals within the childcare centre are provided by an on-site kitchen with an on-site cook, with all waste being collected by staff. All waste from the centre will be moved by staff into the dedicate bin storage area located in the front carparking area for collection. As such the likelihood of ‘litter’ along Gladstone Street arising from the proposed centre is considered to be low.

2.3.2 Noise

Two (2) of the representors raised concerns in relation to traffic and pedestrian noise impacts from the centre impacting adjoining residential amenity.

The Sonus acoustic report dated September 2021 provided as part of the original application documents considered noise arising from a number of sources within the centre including car parking areas, outdoor play

areas, mechanical ventilation and people talking as they vacate or approach their vehicles, as well as vehicles moving and accelerating away from their park position.

The Sonus report found that:

“The predicted noise level at the closest noise sensitive source is no more than 43 dB(A) during the day time and 40 dB(A) prior to 7:00am. Given that the levels are so far below existing noise levels (even allowing for some variation during the day), no penalty is warranted. Therefore, the Policy goal noise levels will be easily achieved at all sensitive receptors.”

The proposal therefore satisfies Code **Interface between land use DTS/DPF4.1** which seeks that *“noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.”*

[our emphasis]

2.4 Design and Appearance

Two (2) of the representors, [REDACTED] raised concerns with the design and appearance of the built form. [REDACTED] considered that the existing buildings on the site *“are a fine example of historic domestic architecture and should be incorporated into the development.”* [REDACTED] considered that *“the design is out of place for the neighbourhood.”*

The existing dwellings at 196 Glen Osmond Road and 1A Gladstone Street are not listed as either State or Local Heritage Places nor Representative Buildings. It should be noted that the surrounding dwellings within the General Neighbourhood Zone also are not identified within the Code as having characteristics worthy of preserving. Pursuant to Schedule 4, clause 10, of the *Planning, Development and Infrastructure (General) Regulations 2017* (‘the Regulations’) the demolition of a whole building, other than in respect of a Local Heritage Place or within an Historic Area Overlay is exempt from constituting ‘development’. As such, the existing single storey detached dwellings located on the site could be demolished without requiring approval.

The proposed child care centre has been designed as a low-rise, two-storey building with the second storey largely contained within the roof space. The proposed building will have a maximum height of 6.2m, measured from ground level to the highest point, located close to the centre of the site which is of a similar bulk and scale to surrounding residential development located within the adjoining General Neighbourhood Zone.

The proposed built form includes a range of materials and finishes which have been considered to provide an interesting built form that is sympathetic to adjoining residential development along Gladstone Street:

- Brickwork in ‘whisper white austral’;
- Standing seam cladding in ‘windspray’ Colorbond®;
- Wall sheeting in ‘windspray’ Colorbond® Mini Orb;
- Roof sheeting in ‘surfmist’ Colorbond®;
- Feature round windows and glass film to match Guardian colours; and
- Powder coated aluminium doors and windows in ‘Anodic Slate Grey’.

Desired Outcome (DO 2) of the Business Neighbourhood Zone (in which the site is situated) seeks that:

“DO2 Buildings of a scale and design that complements surrounding built form, streetscapes and local character and provide for landscaping and open space.”

[our emphasis]

Similarly, the **Design in Urban Areas DO1** of the Code seeks that development is *“contextual, durable, inclusive and sustainable.”*

The proposal uses a neutral colour palette with feature ‘whisper white austral’ brickwork, and Colorbond® Mini Orb wall sheeting in ‘windspray’. The finishes and materials are considered to contribute to what will be a high-quality design outcome. An interesting, angled roof form has been used to minimise the upper level to be largely contained within the roof form and to provide visual interest. The proposal has incorporated window proportions that are in keeping with residential flavour of the design, with feature circle windows fronting the car parking area to provide visual interest and also provide for an interesting outlook for children attending the centre. The proposed design is therefore considered to be wholly appropriate for the locality and the Zone.

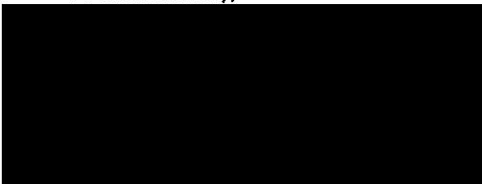
3. Conclusion

This letter seeks to provide a response to the issues raised by the representors during public notification. The key issues raised including traffic distribution and access, on-site carparking, amenity interface (waste and noise) and the visual appearance of built form have been addressed.

Thank you for the opportunity to respond and we trust this submission offers a constructive response to the matters raised. We welcome the opportunity to attend and present at the Council Assessment Panel meeting in due course.

Please contact me on (08) 7231 0286 should you have any further queries in relation to this development application.

Yours Sincerely,



Zoe Garnaut
Associate

Appendix 1. CIRQA Response

Ref: 21151 |BNW

10 December 2021

Zoe Garnaut
Ekistics
Level 1, 16 Vardon Avenue
Adelaide SA 5000

Dear Zoe,

PROPOSED CHILD CARE CENTRE 196 GLEN OSMOND ROAD, FULLARTON

I refer to the proposal to develop a child care centre at 196 Glen Osmond Road, Fullarton. Specifically, this letter provides supplementary information in response to comments provided in the representations received during the community notification period.

The three primary concerns identified in the representations related to:

- access via Gladstone Street (representors seeking all access directly via Glen Osmond Road);
- the impacts of additional traffic on Gladstone Street; and
- on-site parking provisions.

ACCESS LOCATION

Discussions were undertaken with DIT (Department for Infrastructure and Transport) regarding access to/from Glen Osmond Road. DIT had advised that all movement access on Glen Osmond Road was not desired, and its preference was that access via Gladstone Street also be provided. As such access has been designed taking into consideration DIT's comments, providing an ingress only access point on Glen Osmond Road and two-way access on Gladstone Street.

Ingress via Glen Osmond Road and two-way access via Gladstone Street will allow ample opportunities for visitors and reduce reliance on right-turn movements to/from the adjacent arterial roads when accessing the site (i.e. minimising delays associated with right turn movements).

In addition to DIT support for the proposed access arrangements, it is noted that Council's traffic engineer has raised no objection to the Gladstone Street access point.

TRAFFIC IMPACTS

The primary comments made by representors in respect to the traffic impact was the increase in traffic volumes on Gladstone Street. As detailed in the CIRQA report, a traffic assessment had been undertaken assessing the forecast movements at the Glen Osmond Road/Gladstone Street intersection and the Fullarton Road/Gladstone Street intersection. The conservative assessment has indicated that the intersections will operate within capacity. Taking into account the existing volumes surveyed on Gladstone Street, the additional movements generated by the proposal would be well within the capacity associated with a 'local road' (i.e. the proposal would not alter the nature or function of Gladstone Street). It is also noted that Council's traffic engineer has raised no concern or objection to the accommodation of the additional movements on Gladstone Street.

ON-SITE PARKING PROVISION

As detailed in the CIRQA report, the 26 proposed on-site parking spaces will meet both the Designated Area parking requirement (which applies to the site) and as well as accommodate forecast peak parking demands typically observed at the child care centres. As such, the parking demands associated with the proposal can be accommodated on-site with no reliance on on-street parking.

SUMMARY

As detailed above, the concerns raised by representors in relation to traffic and parking impacts of the proposed child care centre have been considered.

In respect to access for the site, the arrangements were discussed with DIT during the design process. The proposed access arrangements have been designed with consideration to DIT's comments as well as consideration of the overall distribution of movements associated with the site. In addition, it is noted that Council's traffic engineer has raised no objection to the access arrangements.

In respect to traffic and access impacts, the additional movements associated with the proposed child care centre will be within the capacity of Gladstone Street. The proposal would not alter the nature or function of Gladstone Street as a 'local road'.

In respect to parking provisions, as per the original CIRQA report, the proposed child care centre will include sufficient on-site parking to meet (and exceed) the requirements of the Planning and Design Code. Peak demands associated with the site will be able to be accommodated within the site and there will be no reliance on on-street parking.

Please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,



BEN WILSON

Director | CIRQA Pty Ltd

ATTACHMENT 5

Referral Snapshot

Development Application number:

21027177

Consent:

Planning Consent

Relevant authority:

City of Unley

Consent type for distribution:

Referral body:

Commissioner of Highways

Response type:

Schedule 9 (3)(7) Development Affecting Transport Routes and Corridors

Referral type:

Direction

Response date:

11 Oct 2021

Advice:

With comments, conditions and/or notes

Condition 1

Vehicular access and configuration to serve the site shall be in accordance with the Site Plan by Redshed Architects (Drawing No. 02, Rev K, dated 1 June 2021) and the Traffic Report by CIRQA (Project Number 21151, dated 27 August 2021).

Condition 2

All vehicles shall enter and exit the site in a forward direction.

Condition 3

The access and all on-site vehicle manoeuvring areas shall remain clear of any impediments.

Condition 4

Signage and/or line marking shall be installed as required, to reinforce the desired flow of traffic to, from and through the site.

Condition 5

The redundant crossover on Glen Osmond Road shall be closed and reinstated to Council's kerb and gutter standards at the applicant's expense.

Condition 6

Stormwater run-off shall be collected on-site and discharged without impacting the adjacent road network. Any alterations to the road drainage infrastructure required to facilitate this shall be at the applicant's cost.

Advisory Note 1

It is recommended that any proposed signage is consistent with DIT's publication *'Advertising Signs: Assessment Guidelines for Road Safety'*.

Advisory Note 2

The car park spaces numbered 1-4 and 21-26 on the plan should be a staff car parks (or for longer duration use) to mitigate potential internal queueing which may affect the functional performance of Glen Osmond Road.

Advisory Note 3

The Metropolitan Adelaide Road Widening Plan currently shows a possible requirement for a strip of land up to 2.13 metres in width from the Glen Osmond Road frontage of this site for future road purposes. The consent of the Commissioner of Highways under the Metropolitan Adelaide Road Widening Plan Act 1972 is required to all building works on or within 6 metres of the possible requirement.

ATTACHMENT 6

Subject: Internal Referral Response Received | Application ID: 21027177 | Council Area: City Of Unley;
City Of Unley... | Address: 1A GLADSTONE ST FULLARTON SA 5063...
To: cspangler@unley.sa.gov.au
CC:
Date/Time Sent: 21/12/2021 09:22 GMT+10:30



Internal Referral Response Received | Application ID: 21027177 |
Council Area: City Of Unley; City Of Unley...
Applicant: Development Holdings Pty Ltd
Address: 1A GLADSTONE ST FULLARTON SA 5063...



An internal referral response has been received from Russell King for the Planning Consent for application with ID 21027177

Details of Response: I do not believe the following issue has been addressed in regard to how the proposed underground system will operate hydraulically (i.e. running full under pressure). 1) The email states that the system is designed for a 1% AEP to ensure no overflows – are the roof gutters and downpipes proposed to be 1% AEP capacity? Are there calculations or model (for example DRAINS) to verify that the 225mm pipes have capacity? This links in with issue (2) below: 2) The response the issue regarding hydraulic operation of the system has only looked at invert levels, not answered the issue regarding HGL Verify the hydraulic operation of the 225mm pipe given the low surface levels/top of pit of the rear of allotment at GIP5 (67.35) compared to the front carpark GIP 2 (67.365) and the losses due to the length of pipe/pits. The HGL of water to the rear pit should have adequate freeboard to the surface level for the minor storm event. Response "IL in Pit GIP 2 was lowered to achieve this." This response covers pipe gradient, but not hydraulic gradient. Based on the response to (1) that the pipes have 1% AEP capacity, the clarification required could be re-stated: What is the HGL level in Pit GIP5 in a 1% AEP storm?

View the [Development Application](#).

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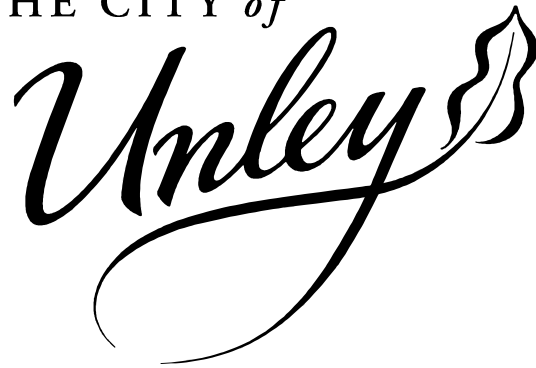
[Terms and Conditions](#)

We acknowledge and respect Aboriginal peoples as South Australia's first peoples and nations, we recognise Aboriginal peoples as traditional owners and occupants of land and waters in South Australia and that their spiritual, social, cultural and economic practices come from their traditional lands and waters; and they maintain their cultural and heritage beliefs, languages and laws which are of ongoing importance; We pay our respects to their ancestors and to their Elders.

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MEMORANDUM

THE CITY of



To PLANNING AND DEVELOPMENT

FROM TRANSPORT AND TRAFFIC TECHNICAL OFFICER

DATE 3 NOVEMBER 2021

FILE

SUBJECT **Traffic comments on development application 21027177 – Proposed Child Care Centre - 196 Glen Osmond Road, Fullarton**

Proposal:

- Demolition of the existing residential dwellings at 1A Gladstone Street and 196 Glen Osmond Road and construct a double-story child-care center for up to 103 children.
- Parking for up to 26 vehicles (including 1 DDA space) located in ground level carpark, comprising:
 - 10 Staff parking spaces; and
 - 16 pick-up/drop-off spaces.
- Vehicle access to the carpark is via a new two-way crossover to Gladstone Street and an entry only crossover to Glen Osmond Road.
- A total of two (2) bicycle spaces.

Car Park Layout:

Vehicle Access:

- Vehicle access is proposed via a new 6m wide two-way crossover to Gladstone Street and a new 4.2m wide entry only crossover to Glen Osmond Road. Access way dimensions have been provided in accordance with the Planning and Design Code.
- The proposed vehicle access to Glen Osmond Road will result in the loss of an existing street tree, the planning and design code PO 3.5 states access points are located so as not to interfere with street trees or are to be set back at least 2m or more from the base of the trunk. However, Councils Natural Asset Lead supports removal of the street tree subject to all costs being borne by the applicant, this is considered acceptable.
- Updated plans provided by the applicant indicate that pedestrian sight triangles have been provided in accordance with AS2890.1, being at least 2m x 2.5m. This is considered acceptable, noting please ensure all landscaping within the sight triangle is kept below 900mm.
- Updated plans provided by the applicant indicate appropriate signage and line marking will be installed adjacent the ingress only crossover on Glen Osmond Road, this is considered acceptable.

Car parking spaces:

- Given the proposed use, the site will have a combination of long-term staff parking (User Class 1 – AS2890.4) and short-term high turnover visitor parking (User Class 3A – AS2890.4). The Australian Standards for 90-degree parking spaces requires:
 - User Class 1 – 2.4m width, 5.4m length and 6.2m aisle
 - User Class 3A – 2.7m width, 5.4m length and 6.2m aisle
- The updated plans indicate that all 90-degree parking spaces will be provided with a width of 2.7m, length of 5.4m and accessed from an aisle at least 5.8m wide. Therefore, the width and length has been provided in accordance with the Australian Standards, however the access aisle has not.

- The updated traffic report provided by Cirqa has indicated that given the Australian Standards doesn't specify a user class for childcare centers, then User Class 3 would be more appropriate, which requires a width of 2.6m, length of 5.4m and 5.8m aisle. Given the proposed width of 2.7m exceeds the minimum width for both User Class 1 and 3, a reduced access aisle of 5.8m is considered appropriate in this case. Therefore, the proposed 90-degree parking spaces are considered acceptable.
- The Australian Standards for 45-degree parking spaces requires:
 - User Class 1 – 2.4m width, 4.8m length and 3.9m aisle
- The traffic report indicates that all 45-degree parking spaces will be provided with a width of 2.5m, length of 5.4m and accessed from an aisle at least 4.2m wide. This exceeds the Australian Standards and is considered acceptable.
- The plans provided by the applicant, and confirmed in the traffic report, indicate that ten (10) dedicated staff parking spaces will be provided, with six (6) tandem spaces and four (4) 45-degree spaces. Given the use of tandem style parking spaces, all staff parking spaces must be clearly identified with use of line marking and/or signage, noting that Tandem style parking is not suitable for pick-up or drop-off parking spaces. The updated plans provided by the applicant have included appropriate staff only line marking for all staff parking spaces, this is considered acceptable.

Headroom and gradient of ramps:

- Not applicable

Parking provisions:

- The Planning and Design Code Table 1 – General Off-street car parking requirements indicates a parking generation for childcare center's are 0.25 spaces per child. Based on this rate, the proposed 103 children site would generate a requirement for 26 off-street parking spaces.
- The Planning and Design Code Table 2 –Off-street car parking requirements in designated areas indicates that non-residential developments located within a Business Neighborhood Zone generate a minimum parking rate of 3 spaces per 100sqm of gross leasable floor area and a maximum parking rate of 6 spaces per 100sqm of gross leasable floor area. Based on these rates, the 691sqm childcare center would generate a minimum of 21 parking spaces and a maximum of 41 parking spaces.
- Given the applicant proposes to provide 26 off-street parking, this is in accordance with both Table 1 and table 2 of the Planning and Design Code and is considered acceptable.

On Street Parking:

- The existing on-street parking in Gladstone Street is a mixture of No Standing, 1/4P (24hrs/7days), 2P (9am-5pm Mon-Fri), 4P (9am-5pm Mon-Fri) and unrestricted. The eastern end of Gladstone Street is heavily restricted, with either No Standing or 1/4P (24hrs/7days) restrictions on both sides of the road.
- Staff/visitors of the development will not be eligible for parking permits and will need to abide by on-street parking restrictions.
- Council officers will not change any existing on-street parking restrictions along Gladstone Street or Glen Osmond Road to cater for either pick-up/drop-off parking or long-term staff parking, noting the traffic report indicates that all parking generated by the development will be contained within the site.

Bicycles:

- Bicycle parking is not required under the planning and design code.
- It is proposed to provide 2 bicycle spaces on-site, this is considered satisfactory.

Loading and Waste Collection:

- The Planning and Design Code – PO 1.3 states Industrial, commercial and service vehicle movements, loading areas and designated parking spaces are separated from passenger vehicle car parking areas to ensure efficient and safe movement and minimize potential conflict.
- Plans provided by the applicant indicate that no dedicated waste collection area has been provided on site. The traffic report indicates that refuse collection will be undertaken via a private contractor,

with all associated movements contained within the site via a forward in/forward out from Gladstone Street.

- The swept path provided indicates that an 8.8m MRV will be required to utilize the entire parking area, including staff and visitor parking spaces, with the traffic report indicating that waste collection is to occur outside of opening hours. **This is considered acceptable, however will need to be included as part of a planning condition noting an unacceptable safety risk should waste collection occur during opening hours.**
- Waste Management plan to be referred to Council's Waste Officer for assessment.

Traffic Generation and Impact:

- Traffic Generation rates adopted in the traffic report are from the RTA's Guide to traffic generating developments, which indicates the following peak hour rates:
 - 0.8 trips per child during the AM Peak (7am-9am)
 - 0.7 trips per child during the PM Peak (4pm-6pm)
- However, the traffic report has incorrectly interpreted the peak hour rates over two (2) hours and has reduced the rates by 40% to the following:
 - 0.48 trips per child during the AM Peak
 - 0.42 trips per child during the PM Peak
- The revised traffic rates are considered inappropriate for the site, noting that no reduction should be applied to the RTA's rates. **The updated traffic report has again incorrectly interpreted that the RTA traffic generation rate is for a 2-hour period, when the rate specified is a per child rate that can occur between either 7am-9am or 4pm-6pm (i.e. any 1 hour period between the hours listed).**
- Based on the appropriate traffic generation rates, the site is expected to generate 82 vehicle movements in the AM peak and 72 vehicle movements in the PM peak. **Can the traffic report please be updated to reflect the appropriate traffic generation rates, including updating the SIDRA assessment.**
- The traffic report has assumed that all traffic generated by the site will be split 50% between ingress and egress movements, this is considered acceptable given the use of the site and typical drop off and pick up activities.
- The original traffic report has assumed that all traffic travelling to the site will be split 32.5% via Glen Osmond Road and 67.5% via Gladstone Street, however given the site is located closer to Glen Osmond Road than Fullarton Road, it would be expected the majority of visitors would arrive via Glen Osmond Road. The updated traffic report has indicated that the distribution of traffic via Glen Osmond Road and Gladstone Street has been based on the site's locale and unique area characteristic, in this case this is considered acceptable noting that typically traffic data / evidence is required to support proposed traffic distributions rather than general assumptions.
- The traffic report has assumed that given the upcoming upgrade of Fullarton Rd / Glen Osmond Rd intersection, all existing right turns will be directed to Gladstone Street. Council is currently in discussions with DIT in regard to reducing the potential of rat-running through Gladstone Street by permanently removing right turns into and out of Gladstone Street at Fullarton Road.
- The updated traffic report has indicated that any future no right-turns into or out of Gladstone Street at Fullarton Road would not impact on egress movements from the development (given the traffic assessment did not distribute egress movements associated with the proposal onto Fullarton Road via a right turn from Gladstone Street due to the difficulty of the movement during peak periods), and any impacted ingress movements would be redistributed via nearby local streets with negligible impact.

Other:

- All redundant crossovers must be reinstated to Council satisfaction.
- All proposed crossovers must be installed to Council satisfaction.
- Any costs associated with changes to on-street parking signage and/or line marking is to be covered wholly by the applicant.

Jacob Avery
Transport Engineer

Subject: Internal Referral Response Received | Application ID: 21027177 | Council Area: City of Unley | Relevant Authority: City of Unley
To: cspangler@unley.sa.gov.au
CC:
Date/Time Sent: 22/09/2021 18:02 GMT+09:30



Internal Referral Response Received | Application ID: 21027177 |
Council Area: City of Unley | Relevant Authority: City of Unley



An internal referral response has been received from Joel Ashforth for the Planning Consent for application with ID 21027177

Details of Response: Dear Chelsea I have considered the proposed plans, the relevant arboricultural reports and visited the site in relation to the Council street trees. Firstly, two (2) street trees are proposed for removal. One (1) to facilitate an entrance vehicle crossover on Glen Osmond Road and the other one (1) to support the egress vehicle crossover via Gladstone Street. I support the removal of the two (2) mentioned trees providing no alternative design solutions, retaining the trees, are reasonably practical. Furthermore, the applicant will be required to cover the costs associated with tree removal, loss of amenity, and tree replacement. The costs will total \$5,921.05 + GST and the applicant should be made aware of these costs up front, as this may influence their design. With respect to the 'regulated' Lemon Scented Gum tree growing within the dilapidated traffic protuberance on Gladstone Street, I note that the subject tree presents in good condition with attributes that deem it worthy of its legislative status. The tree shall be afforded a 7.80 metre radius Tree Protection Zone (TPZ) and I note the distance between the tree and the mentioned allotment is 6.20 metres at the closest point, thus the development impacts will be minimal. To this end, I support the tree protection measures outlined within the 'Pre-development Arboricultural Impact Assessment' by Project Green dated 15 September 2021. However, I further recommend that the property boundary is delineated without a fence or only a light weight fence with minimal footings, the proposed 'bin pad' is moved outside of the TPZ; and the most northern wing of the proposed crossover is shifted at least 2.00 metres west of the existing traffic protuberance. This may either decrease the crossover width or shuffle the proposed 6.00 metres crossover west entirely. Finally, I must highlight the extensive amount of mature vegetation that currently exists within the two (2) allotments and the contrast the proposed site offers in the canopy cover realm. I'm not sure how much we can influence this space, however, whatever powers we are afforded should be used on this development. I trust this information is useful. Joel Ashforth NATURAL ASSETS LEAD

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