MOUNT BARKER
DISTRICT COUNCIL

NOTICE OF MEETING

Notice is hereby given that the following meeting will be held in the Council Chambers of the Local Government Centre, 6 Dutton Road, Mount Barker on Wednesday 21 December 2022.

9.30am Council Assessment Panel

A. Humphries
ASSESSMENT MANAGER

14 December 2022

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MOUNT BARKER DISTRICT COUNCIL

COUNCIL ASSESSMENT PANEL

Wednesday 21 December 2022, 9.30 am

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(HPE CM DOC/22/151550)
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33 Mawson Road MEADOWS SA 5201
Construction of a shop (supermarket) and car parking, including removal of two (2) significant trees (1 x manna gum, 1 x Tasmanian blue gum) and seven (7) regulated trees (2 x flooded gums, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure

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(HPE CM DOC/22/158276)
55-59 Adelaide Road, MOUNT BARKER SA 5251,
2 Hawthorn Road MOUNT BARKER SA 5251 and
2 Cherington Street MOUNT BARKER SA 5251

Alterations and additions to existing service trade premises (car dealership) and automotive collision repair - new building comprising of a paint shop and ancillary offices, addition to carwash bay, alterations to existing vehicle service building and alteration to carparking and vehicular access areas

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1. APOLOGIES

2. CONFLICT OF INTEREST DECLARATION

3. CONFIRMATION OF MINUTES

3.1. That the minutes of the meeting held on 9 November 2022 as circulated to members be confirmed as a true and accurate record of proceedings.

4. BUSINESS DEFERRED

Nil.

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5. REPORTS BY OFFICERS

5.1. DEVELOPMENT ACT APPLICATIONS

5.1.1. NON-COMPLYING APPLICATIONS

5.1.1.1 580/514/21 – KEVJOHN PTY LTD

Development Number	580/514/21
Applicant	Kevjohn Pty Ltd
Subject Land	5 Battunga Road & 33 Mawson Road, Meadows
Ward	South Ward
Nature of Development	Construction of a shop (supermarket) and car parking, including removal of two (2) significant trees (1 x manna gum, 1 x Tasmanian blue gum) and seven (7) regulated trees (2 x flooded gums, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure
Lodgement Date	18 March 2021
Development Plan	Consolidated 20 August 2020
Zone	Mixed Use
Relevant Authority	Council Assessment Panel
Categorisation	Non-Complying
Notification	Category 3
Representations	16
Persons to be heard	6
Referrals - Statutory	• Commissioner of Highways • Department of Environment and Water
Referrals – Non-Statutory	• Council's Development Engineer • Council's Arborist • Council's Heritage Advisor • Council's Wastewater Engineer • Council's Strategic Projects and Community Planner
Responsible Officer	Michael Dickson – Senior Planner
Recommendation	Refuse Planning Consent

ATTACHMENT 1: Application Documents
ATTACHMENT 2: Site Photos
ATTACHMENT 3: Representations
ATTACHMENT 4: Response to Representations
ATTACHMENT 5: Statutory Referral Responses

1. PROPOSAL

The proposal is best described as follows;

"Construction of a shop (supermarket) and car parking, including removal of two (2) significant trees (1 x manna gum, 1 x Tasmanian blue gum) and seven (7) regulated trees (2 x flooded gums, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure".

The proposal comprises the following attributes;

- the construction of the proposed supermarket building with a floor area of 1,553m^2 including loading dock and verandah as well as attached toilets and pump room with a floor area of 39m^2. The building is approximately 49.36 metres long x 30.0 metres wide and has a wall height of 5.3 metres. The roof is pitched, with a gable end presenting at the southern frontages, and a maximum height of 7.05 metres. The building is proposed to be constructed predominantly of "tilt-up" concrete walls ("Evening Haze" in colour) and "Colorbond" roof cladding ("Surf Mist" in colour);
- car parking area comprising 66 car parking spaces, with two-way access form both Mawson Road and Battunga Road;
- removal of two (2) significant trees and seven (7) regulated trees;
- fencing to the site boundaries comprising a mix of acoustic fencing ("Slim Wall" or similar product) up to 2.4 metres in height as well as 2.1 metre high Colorbond fencing;
- two (2) illuminated pylon signs (5.35 metres in height and 1.5 metres wide), one at the Mawson Road access and one at the Battunga Road access;
- signage fixed to the building façade;
- eight (8) water storage tanks for potable water and firefighting purposes; and
- landscaping generally throughout the site.

The hours of operation for the supermarket are proposed to be between 7.00 am to 9.00pm, seven (7) days a week. Deliveries and rubbish collection will be between 7.00am and 10.00pm, Monday to Friday; and 7.00am to 5.00pm Saturday and Sunday.

The existing shop which fronts Mawson Road is a Local Heritage Place and is proposed to be retained in its entirety, although a part of the associated rear yard area is incorporated within the proposed on-site car parking area.

Refer to **Attachment One (1)** for plans and details of the proposed development.

2. SUBJECT LAND

The subject land comprises two allotments, as follows:

- Lot 537 in Filed Plan 18522 held in Certificate of Title Volume 5067 Folio 654, or otherwise known as 5 Battunga Road, Meadows; and
- Lot 529 in Filed Plan 5444 held in Certificate of Title Volume 5222 Folio 619, or otherwise known as 33 Mawson Road, Meadows.

The land is irregular in shape with road frontages of 46.53 metres to Mawson Road and 27.26 metres to Battunga Road and a total area of 7,428m^2. Both Mawson Road and Battunga Roads are secondary arterial roads under the control of the Department for Infrastructure and Transport.

Lot 529 contains an existing shop ("Meadows Mini Mart") and residence, which is a single-storey building listed as a Local Heritage Place and has had a number of additions to it over the years. The allotment has an existing driveway from Mawson Road, but there is currently no formalised on-site car parking associated with the shop.

The allotment is scattered with a mix of mature trees, some of which may be classed as remnant native vegetation.

Lot 537 was used for residential purposes with a dwelling on the land which was demolished in circa 2017. The land has remained vacant.

The topography of the land generally slopes towards the north-western corner, but only has a slight and gentle fall from both road frontages.

A drainage easement to Council runs along the southern boundary of 5 Battunga Road and has a 90 degree bend to the north to provide connection to 7 Battunga Road.

Refer to **Attachment Two (2)** for site photos.

3. THE LOCALITY

The subject land is wholly located within the Mixed Use Zone. The adjoining land to the west and north is located within the same zone as well as the Deferred Urban Zone, and adjacent land to the east and south is within the Local Centre Zone.

The locality contains a mix of land uses. To the west and north of the land, within the Mixed Use Zone, the land use is predominantly residential with no form of business activity occurring. The built form comprises single-storey detached dwellings on generous allotments on average of approximately 2,000m^2.

The adjoining land to the east, within the Mixed Use Zone, contains a motor repair station and petrol filling station.

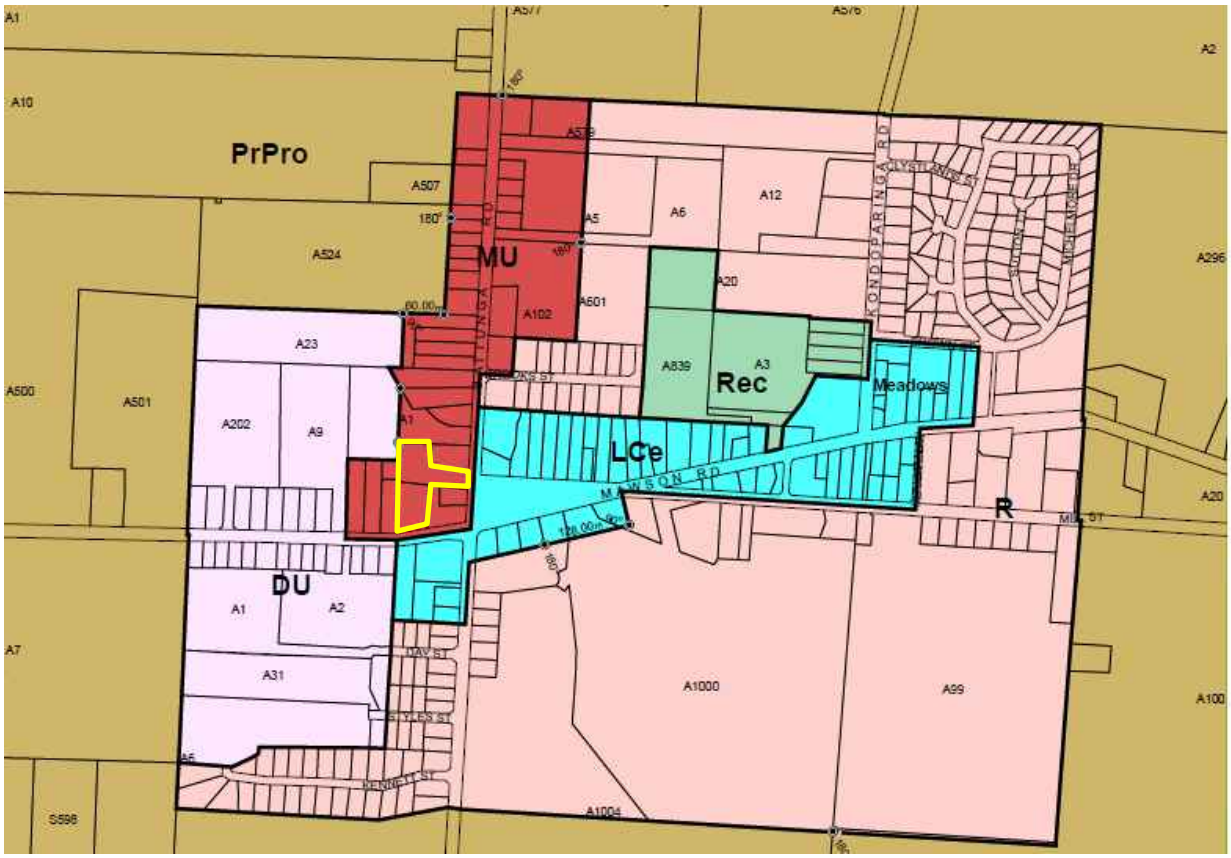
The land on the eastern side of Battunga Road and on the southern side of Mawson Road is within the Local Centre Zone. This zone comprises a mix of standalone residential land uses, as well as commercial land uses such as a shop, hotel and a hardware and fodder store.

The character of the locality is mixed, typical of a historic township, with buildings having varying setbacks to the road frontage and scatterings of mature vegetation along boundaries.

3.1. Locality Plan

3.2 Zone Map

DU Deferred Urban Zone | **LCe** Local Centre Zone | **MU** Mixed Use Zone | **Rec** Recreation Zone | **R** Residential Zone | **PrPro** Primary Production Zone



4. PROCEDURAL MATTERS

4.1. Categorisation

The land is located within the Mixed Use Zone (**Zone**), refer to Maps MtB/34 of the Mount Barker District Council Development Plan. The application lodgement fees were paid on 18 March 2021, and therefore the relevant version of the Development Plan is that consolidated 20 August 2020.

The Zone's Non-complying list suggests that "Development (including building work, a change in the use of land…) for the following is Non-complying". A shop or group of shops is then listed as a Non-complying kind of development within the Zone except where:

> *"the gross leasable area is less than 250 square metres and it achieves one of the following:*
> *(a) it is in the form of retailing which is ancillary to manufacturing or warehousing uses and no more than 25 per cent of the total floor area of all buildings on the allotment is used for the purposes of sale or display to customers*
> *(b) it is for the sale of specialty products directly associated with primary production or animal husbandry".*

The proposed shop has total floor area of 1,553m^2 and is not in the form of retailing which is ancillary to manufacturing or warehousing uses, nor is it for the sale of specialty products directly associated with primary production or animal husbandry. The application is therefore determined to be a Non-complying kind of development.

Pursuant to Regulation 17(1) of the *Development Regulations 2008* (**Regulations**), the applicant provided a "Statement of Support" of the application. Under delegated authority, Council resolved to proceed with an assessment of the application pursuant to Regulation 17(3)(b) of the Regulations.

It is noted that the concurrence of the State Commission Assessment Panel (**SCAP**) is not required, should the Assessment Panel resolve to grant a planning consent, due to legislative changes to the Regulations on 15 May 2020 which removed the clauses requiring the concurrence from SCAP.

4.2. Public Notification

The development application has been processed as a Category 3 development pursuant to Section 38(2)(c) of the *Development Act 1993* (**Act**).

The application was advertised in accordance with Section 38(5) of the Act, with adjacent land owners notified in writing and a notice placed in The Courier newspaper on 15 June 2022 inviting the public to comment on the application within the required 10 business days.

4.2.1. Representations

During the public notification period seventeen (17) representations were received.

Of the representations received, six (6) support the proposal, ten (10) oppose the proposal and one (1) is neither in support or opposition of the proposal.

Six (6) representors have indicated they would like to speak to their representation.

The representations are summarised below:

	Representor/ Address	Summary of Issues	Request to be heard
1	Chris Zanker 13 Dadliffe Road, Meadows	<u>Oppose the proposal</u> • Removal of trees • Economic impact to existing shops • Insufficient parking for larger vehicles • Exit and entry not compatible with traffic	Yes
2	Tammelaine & Sean Ebert 497 Dashwood Gully Road, Meadows	<u>Support the proposal</u> • Beneficial for local community and employment • Car parking off the main road is safer	No
3	Samantha Jackson 5 Day Street, Meadows	<u>Support the proposal</u> • Supermarket is needed for the size of the town • Employment opportunities	No
4	Susan & Peter Jackson 497 Dashwood Gully Road, Meadows	<u>Support the proposal</u> • Provides an additional service to the increased population • Employment opportunities • Car parking	No
5	Meadows Investment Trust Lot 1003 Mawson Road, Meadows	<u>Oppose the proposal</u> • Lack of retail argument or justification of a medium-scale supermarket in this location • Local Centre Zone more suitable for the land use (but with maximum floor area of 450m^2) • Removal of trees • Traffic impacts • Hours of operation	Yes
6	Melanie Roney 6 Nottage Road, Meadows	<u>Support the proposal</u> • Recommend that the disabled car parking spaces be moved closer to the supermarket entrance	No
7	Joanna	<u>Neither support nor oppose the proposal</u> • Developer should design around the viable trees • Removal of trees results in urban heat island	Yes
8	James & Mandy Mettam 3 Mawson Road, Meadows	<u>Oppose the proposal</u> • Supermarket in Meadows is not required • Traffic impacts	No
9	Jennifer Hodgson 38 Mawson Road, Meadows	<u>Oppose the proposal</u> • Traffic impacts • Tree removal and replanting • Impacts to neighbouring residences	No

10	Mt Barker & Districts Residents' Association Inc. PO Box 19, Mount Barker	<u>Oppose the proposal</u> • Non-complying development not envisaged or encouraged • Clarification of tree removal/retention and how retained trees will be maintained • Surplus of car parks proposed	Not Stated
11	Keith Molyneux 3 Battunga Road, Meadows	<u>Conditionally support the proposal</u> • Request Colorbond fencing to be 'Monument' coloured • Installation of CCTV cameras • Request exit to be one-way (no right turn) • Roundabout should be installed	Yes
12	Yrena Mountford 103 Mawson Road, Meadows	<u>Oppose the proposal</u> • Traffic impacts and safety • Accept a supermarket, but not on this site • Tree removal needs reviewing	No
13	Kathryn & Colin Moritz 9 Battunga Road, Meadows	<u>Oppose the proposal</u> • Traffic impact and proximity to intersection • Pedestrian safety • Noise impact (hours of operation, insufficient fencing) • Siting and appearance of the building • Tree removal • Lighting impact • Stormwater and flooding impact	Yes
14	Natasha Young & Michelle Crowden 33 Mawson Road, Meadows	<u>Oppose the proposal</u> • Economic impact to Mini Mart • Water provision of Mini Mart	Yes
15	Gary Whaite and Leigh Burrows 31 Mawson Road, Meadows	<u>Oppose the proposal</u> • Supermarket too large for the Zone • Tree removal • Proximity of access points to intersection • Heritage impact • Height and siting of the building and signage	Not Stated
16	Lorraine Rogers 560 Brookman Road, Meadows	<u>Oppose the proposal</u> • Proximity of access points to intersection • Noise and light spill impacts • Tree removal and habitat loss • Not in the commercial area of Meadows	Not Stated
17	Daniel Adams 109 Mawson Road, Meadows	<u>Support the proposal</u> • Beneficial to Meadows and surrounding community	No

Refer to **Attachment three (3)** for a copy of the representations received.

4.2.2. Map of Representors

Refer below aerial photo of the subject land and surrounds. The site of the development is outlined yellow. Representor's land is identified by numbers (reflecting the representor numbers in Section 4.2.1). Representors 1, 2, 4, 7, 10, 12, 16 and 17 are not indicated as no fixed address was supplied with the representation or are located outside of the scope of the photo.

4.2.3. Response to Representations

The Applicant has provided a written response to the representations received.

Refer to **Attachment four (4)** for a copy of the applicant's response to the representations.

5. REFERRALS – STATUTORY

5.1 Department for Infrastructure and Transport (DIT) for the Commissioner of Highways

As the proposed development alters an existing driveway access and or creates a new access to a secondary arterial road (both Mawson Road and Battunga Road), a referral to DIT was undertaken pursuant to Schedule 8, Part 2, Item 3 of the *Development Regulations 2008*. Council must have regard to the response.

A response was received advising that DIT support the proposed development and have recommended several conditions be attached if the development is granted planning consent.

5.2 Department for Environment and Water (DEW)

As the proposed development includes the removal of native vegetation within the River Murray Tributaries Area, a referral to DEW was undertaken pursuant to Schedule 8, Part 2, Item 20(h) of the *Development Regulations 2008*.
A response was received advising that DEW support the proposed development and have directed one condition and several notes be attached if the development is granted planning consent.

Refer to **Attachment five (5)** for a copy of the statutory referral responses.

6. REFERRALS – NON-STATUTORY

6.1. Council's Development Engineer

Council's Development Engineer reviewed the applicant's traffic report, civil plans and stormwater management plan, and have provided the following comments with respect to stormwater management, access and parking:

Stormwater Management
A detention system has been provided to reduce post-development flows back to the pre-development flow rate from the site with the combination of above ground retention/detention tanks and a below ground detention tank. Given the site naturally falls to the east, it is currently not understood how the underground detention system discharges to the creek via gravity and whether a pump may be required to achieve this.

Water Sensitive Urban Design has been incorporated into the proposed development to treat stormwater before it leaves the site with multiple bio-retention basins combined with an end of line Gross Pollutant Trap (GPT).

Slotted upright kerbing has been shown around the bio-retention areas allowing for stormwater to be directed towards them. Car parking grades are still required to be shown on the plans which show the functionality of this and ensure grades are in accordance with AS2890.1. Further detail for the proposed bio-retention basins is still required within the Civil Plans to understand their construction and functionality.

The discharge location is proposed to the creek, north of the site along Battunga Road. More detail is required in regards to the stormwater pipe infrastructure, its alignment (noting infrastructure is to remain outside of private land) and discharge location within the creek. A precast headwall and scour protection is required at the outlet to reduce erosion of the creek embankment, which has now been shown within the Civil Plans. There is currently a note on the Civil Plan stating that the stormwater pipe connection to the creek and invert level is to be confirmed by Council/DIT. This not Council's responsibility to provide this information and is up to the applicant to determine.

Access & Parking
The car park dimensions have been appropriately sized to meet user class 3A from AS2890.1. Access to the proposed site is facilitated via both Battunga Road and Mawson Road. Both arterial roads are under the care, control and management of the Commissioner of Highways. These access points have been shown to accommodate the largest vehicle expected accessing the site being a 12.5m HRV. The swept paths provided show the HRV entering the site from both directions via Mawson

Road, reversing into the loading dock, then exiting in a forward direction onto Battunga Road. An additional turnaround area adjacent the loading dock has been provided to allow a MRV to manoeuvre closer to the loading dock. These swept paths have also demonstrated simultaneous movements with a B99 vehicle at these access points. Swept paths will also be required demonstrating simultaneous movements for two B99 vehicles passing each other around all bends/intersections within the carpark.

DIT have reviewed the Traffic and Car Parking Assessment by Frank Siow & Associates and considered that the report has satisfactorily addressed the traffic related matters associated with the proposed accesses layout and is acceptable. DIT have also acknowledged there is desire to ensure consistency between the proposed development and Council upgrade to the Mawson/Battunga/Notage intersection works. DIT have also mentioned the proposed painted median design at 2.2m wide does not provide sufficient on-road storage space to accommodate right turns into the proposed development, however the width of this painted median could be modified to accommodate vehicles turning right into the proposed development to improve flow of traffic. The two closest car parking spaces to the Mawson Road access point shall be dedicated to staff parking only with suitable signage and line marking to be installed to achieve this outcome.

Summary

After assessment of the proposed development, it is anticipated that the development would operate satisfactory and safely from an Engineering perspective. There are a number of matters outstanding that need to be resolved (e.g. car parking grades, simultaneous movements of B99 vehicles around bends and further details regarding stormwater discharge), however it is considered that there are appropriate solutions to these matters which can be addressed through recommended conditions should the application be granted planning consent.

6.2. Council's Heritage Advisor

As the existing building at 33 Mawson Road is listed as a Local Heritage Place, and the entire subject land is located within the Historic Conservation Area, the application was referred to Council's Heritage Advisor.

It was advised that the Local Heritage Place is listed as follows:

Address:	33 Mawson Road, Meadows
Accuracy:	H - high level confidence
Details:	Store & pug-holes fr bakery, Ernest Wright,builder Alexander Caldwell)
Extent of listing:	[Partly-rendered] walls constructed of local stone with red-brick dressings, hipped cgi roof with front-facing gable, timber-framed openings with timber doors & timber-framed windows, red-brick chimneys with coursing to top, and cgi bull-nose verandah with timber posts. Also surviving pug holes to rear of shop and residence

The land is adjacent to the bootmakers house at 3 Battunga Road (Contributory Item) and a Settlers Cottage (LHP) at 31 Mawson Road Meadows.

The supermarket building will be 55 metres by 30 metres with a wall height of approximately 5.5 metres.

Following a number of amendments to the proposal, the Councils Heritage Advisor made the following comments:

- Amendments made include:
  - Gable roof in Surfmist (profile not provided: should be corrugated);
  - Integrated Signage element
  - Freestanding pylon sign
  - Painted walls: Evening Haze
  - Aluminium windows
  - Blank rear and side walls

- The large footprint has been better articulated in walls and roof form design. The more contextual approach to the design is supported.

- The proposal conserves the setting and will not have a material impact on the LHP as the proposed building and driveway are sufficiently separated from the LHP.

- The pylon sign seems reasonably separated and the sign on the supermarket building seems better integrated.

- It appears that some trees will be retained to contribute to the historic or visual setting of the LHP.

There were no fundamental concerns highlighted in the response, noting that the proposal is contextually responsive to the historic character. It was recommended that further investigation of the Pug Holes be made a condition should planning consent be granted. Archaeological investigations will be required, triggered by Section 26, 27 and 28 of Heritage Places Act, due to the pug holes, which cannot be excavated without this Permit.

The Heritage Advisor considers the proposal achieves the relevant heritage provisions of the Development Plan.

6.3. Council's Urban Forest Officer

Council's Urban Forest Officer has reviewed the report of the applicant's Arborist and visited the site, and generally concurs with the assessment and health rating of the trees.

Tree 1 is the highest value tree on the site and should inform the overall design outcome.

- The access road must be designed and installed as tree sensitive. The tree sensitive road must be installed above grade and no excavation to box it down can occur, the lower sub-base layer must be installed on the existing grade.
- The pedestrian path must be constructed with a tree sensitive sub-base without excavation, it is ok to put the path over the SRZ as shown.
- The entire TPZ area outside of tree sensitive road and path foot print shall be mulched and planted with shrubs and small trees, as indicated on plans.

Tree 4 is easily retained in current desired plan. Likely to require some pruning for vehicle clearance.

Tree 7 would be a preference to retain but concur with Arborist report, that it has a major structural defect which is not suitable to retain in context of the proposed development. It is noted however that the applicant is seeking to retain this tree.

Tree 8 is worth keeping and monitoring its future progress. The same tree sensitive conditions as Tree 1 must be applied.

Tree 9 could be retained with adjustment/deletion of carparks. The design leads to retaining Tree 9 in the design shadow of Tree 1, if the civils are removed as stated and it would be worth this effort.

Tree 11 is proposed to be retained, however the Manna Gum species is too sensitive for extent of encroachment currently proposed, and the proposal as-is will likely see the decline in health of this tree. The impact to this tree could be minimised by deleting car parks 22-24 and it would be worth doing so, however it is noted that this tree is not a controlled tree and can be removed without approval.

Tree 12 is proposed to be removed. This tree could be retained by deleting parks 22-24 and it would be recommended to do so.

Tree 16 is a resilient species and could be retained with if carparks 23 and 24 are above grade and tree sensitive or if carparks are relocated or deleted. With the proposal as-is, there is too much encroachment for this tree to be retained and therefore it is proposed to be removed.

Tree 18 is impacted by too much encroachment in the proposal to be able to retain this tree. This tree is considered suitable for removal given that it is not a high value tree and it is not a controlled tree.

Tree 19 is not suitable for retention with the current civils proposed.

Tree 20 is highly sensitive to earthworks and the TPZ must be a full tree-sensitive TPZ only. The carparks/driveway within the TPZ must be above grade and tree sensitive, otherwise the tree can't be retained.

Tree 21 is a Tasmanian blue gum and is not suitable for retention on any development site. It is in poor health and structure.

Tree 22 will not be impacted with the proposed tree sensitive sub base under tanks similar to the tree sensitive road and path sub base.

6.4. Council's Environmental Health Officer

The application was referred to Council's Environmental Health department to provide comments on connection to Council's wastewater system. The following was advised:

- There is a direct sewer connection option for this site with grease arrestor(s) required to manage trade waste from food operations. They would need to specify the installation location, volume/capacity of the grease arrestors in accordance with the SA Water sizing requirements for commercial food preparation.
- According to the register, both 5 Battunga Road and 33 Mawson Road have existing 1620L septic tanks currently in situ and appropriate prescribed conditions for decommission would be required.

- Standard application for onsite wastewater works approval, food business notifications and application for approval to discharge trade waste into CWMS are required.

6.5. Council's Wastewater Engineer

The application was referred to Council's Wastewater department to provide comments on the broader wastewater connection requirements or specifications. The following was advised:

- The developer is required to re-align the existing wastewater pipes within the property as a part of the development.
- Sewer service is preferred and the developer is required to carry out the engineering design to identify the nearest sewer connection.
- In any event, the development could be serviced via CWMS (i.e via Septic tank) but direct sewer connection is encouraged as the initial capital cost would be more economical in the long run and direct sewer connections where possible is promoted.

6.6. Council's Strategic and Community Planning department

Strategic and Community Planning have been involved with the preliminary discussions and relating to this development application, including a site and locality inspection, and have provided the following comments:

The Meadows Township Plan (endorsed October 2019) outlines the potential for the Meadows township to support a development of supermarket. Specially, Action 46 states that we should look to '*promote the feasibility of an anchor retail tenant within the township in the short to medium term by creating the policy conditions which support the development of a supermarket'*.

In 2018 Council engaged the services of URPS Planning Consultants (as assisted by Property & Advisory) to undertake a review of the employment lands within Meadows. The study was completed, but was not endorsed by Council. While the findings/recommendations are not the endorsed position of Council they do however provide some context, noting that a more updated study may be required. Some of the findings included:

- The Local Centre Zone and the township could support a 500m^2 anchor supermarket in the medium-long term.
- The Mixed Use Zone at the corner of Battunga/Mawson Road should be converted/included in the Local Centre Zone (now the Local Activity Centre).
- The list of non-complying development within the Local Centre Zone could be amended to be more flexible to enable improved development opportunities noting that such a change would require a Code amendment.
- Within the Local Centre Zone and Mixed Use Zone it is important that opportunities for retail/commercial development continue to be provided in both zones.

As outlined within the study, Meadows could support a supermarket development of 500m^2 however any increase may have a level of impact to the function of the Local Centre Zone within the township. Given this, it is recommended that development assessment obtain further clarification from the applicant to determine if this level of impact is unreasonable via an appropriate retail study.

The retail analysis also identified a number of sites within the township that could support a supermarket with a preference for the Local Centre Zone (Local Activity Centre) however given that the analysis recommended the inclusion of the subject site within the 'centre' for Meadows the subject land could be considered to be acceptable in this case.

Whilst the application was lodged prior to the implementation of the Planning and Design Code and is therefore to be assessed against the Councils previous Development Plan, the Code now identifies that the subject land is located within the Suburban Business Zone. This Zone lists shops, consulting rooms and offices as being land uses that are deemed to satisfy where achieving relevant criteria. The nature of the land uses envisaged within the zone are akin to that of the Mount Barker Development Plans previous Local Centre Zone with the scale of the proposed land use rather than the land use itself to be considered further.

During preliminary discussions and from a design perspective we have previously commented on the potential benefits of moving the built form of the supermarket towards Mawson Road to better address the road. It is recommended that this should be further considered by assessment staff.

7. KEY ISSUES

The following matters are considered pertinent in reaching a recommendation for the proposal:

- Land use
- Design, appearance and siting
- Heritage
- Regulated and Significant trees
- Transport, access and car parking
- Interface between Land Uses
- Advertising
- Earthworks and retaining walls
- Infrastructure
- Seriously at Variance

8. ASSESSMENT

8.1. Land Use

The following objectives and principles of development control (**PDC**) of the Zone and the Centres and Retail Development (**CRD**) section are considered most relevant in assessing the suitability of the proposal being sited within the zone:

Objective 1 *A functional and diverse zone accommodating a mix of commercial, community, light industrial, residential, office and small-scale shop land uses.*

Objective 2 *Development that minimises any adverse impacts upon the amenity of the locality within the zone.*

Desired Character

The zone will establish a wide range of light and service industrial activities, compatible with one another, thereby creating an attractive and active locality. It will be important that the zone will provide ongoing opportunities for local employment, home-based industry and commercial ventures, catering for local needs and passing traffic. Retailing in the zone will be limited to that which is ancillary to the activity on site, and will not displace retailing in the traditional main streets of Nairne and Meadows.

Enterprises which service the needs of the rural hinterland are envisaged.
…

The zone will provide for low impacting light industrial uses with associated detached dwellings. It is expected that non-residential development will be of a moderate scale and intensity resulting in a visually unobtrusive built form. It is essential that development does not result in uses that undermine the traditional role of Mawson Road as the main street.

PDC 1 *The following forms of development are envisaged in the zone:*

- *community facility*
- *community centre*
- *light industry*
- *service industry*
- *service trade premises*
- *store*
- *warehouse.*

PDC 2 *Shop or retail development should not hinder the function of Main Road (or Old Princes Highway), Nairne or Mawson Road, Meadows and should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry.*

CRD PDC 12 *A shop or group of shops located outside of zones that allow for retail development should:*

(a) be of a size and type that will not hinder the development, function or viability of any centre zone
(b) not demonstrably lead to the physical deterioration of any designated centre
(c) be developed taking into consideration its effect on adjacent development.

Objective 1 of the Zone envisages a mix of commercial and shop land uses to which the proposal achieves, albeit this envisages such shops to be small-scale.

A hierarchy of centres envisaged is detailed in General Section – Centres and Retail Development Objective 6, as Regional Town Centre, Neighbourhood Centre and Local Centre. The Development Plan however is relatively silent in elaborating on the scale of such centres and lacks clarity in defining what is considered to be "small-scale".

In comparison to the built form in the locality, the proposed supermarket floor area of 1,553m^2 is substantially larger than the floor area of the adjacent non-residential land uses, including the existing shop (590m^2), motor repair station (280m^2), petrol filling station (530m^2) and hotel (800m^2). Noting that the hotel is located within the Local Centre Zone, the proposed supermarket is in some cases three times larger in floor area than other non-residential uses within the Mixed Use Zone. If the existing non-residential land uses are regarded as being small scale, with floor areas of up to and around 500m^2, then the proposed supermarket is not regarded as being small-scale.

The applicant has provided commentary within the "Statement of Effect", referencing the "*Meadows Township Plan* which anticipates sufficient future population growth to sustain a small-scale supermarket (i.e. approximately 500m^2)". This was based on a retail analysis undertaken by Council in 2018, which is relatively recent, and no further re-zoning for additional residential development within the Meadows township has occurred since. In consideration of this, and the existing non-residential land uses in the Zone, it could be argued that a 500m^2 floor area provides a guide as to what "small-scale" is, to which the proposal is almost three times this size with a proposed floor area of 1,553m^2.

The applicant has also sought to justify the floor area based upon the Suburban Business Zone of the Planning and Design Code which now applies to the land and came into effect on 19 March 2021 after the lodgement of this application. This however cannot be regarded as a relevant consideration, and the Assessment Panel is required to assess the proposal against the policies that apply at the date of lodgement, being the Development Plan.

The term "small-scale" was considered by the ERD Court in *Willcocks v City of Whyalla [2009] SAERDC 79,* where the Court held the view that:

> *"Where the provisions of a development plan are silent on what tests might be applied to decide whether a proposed use of land use is properly characterised as "small-scale", measures such as floor space, number of people employed, the type of vehicles used, the number of vehicle movements generated, the demand on public utilities and external impacts become considerations."*

The building has a floor area of 1,553m^2 and the "Statement of Effect" states that the proposed development will provide approximately fifty (50) on-going employment opportunities. The applicant's traffic engineer estimates that the supermarket will generate approximately 200 vehicles per hour (i.e. 100 vph in and 100 vph out), split across the two access points, based on the conservative rates being applied. Based on these operational details and comparison of built form in the locality, the proposed development is considered to be beyond what would ordinarily be regarded as small-scale.

PDC 1 of the Zone seeks a range of land uses and a shop is not listed. This appears to be at odds with Objective 1 which envisages land uses such as residential, offices and small-scale shops which too are all not listed in PDC 1. This however does not seem to be an omission given that PDC 2 envisages shops and retail development that do not hinder the function of Mawson Road (which is predominantly located in the Local Centre Zone), and generally contemplates shops only where they are for the sale of specialty products directly associated with light and service industry, primary production and animal husbandry. Where land uses are generally envisaged to be subordinate only, they do not seem to be referenced in PDC 1. For example, a dwelling is not listed in PDC 1 and it is envisaged in PDC 3 that a dwelling only be established when it is ancillary to a non-residential land use. It is considered that the intent of the Zone policies are much the same for shops, that is, a shop may be envisaged where it is subordinate to an envisaged use however a standalone shop land use is not. This interpretation is further supported by the Desired Character of the Zone which states "retailing in the zone will be limited to that which is ancillary to the activity on site" (emphasis added).

Irrespective of this, the subject land itself currently contains a standalone shop and is adjacent to a motor repair station and petrol filling station both in the Mixed Use Zone, and a hotel and shops both in the Local Centre Zone. The Desired Character (**the DC**) of the Zone seeks to create an active locality, and the proposal will result in activation of this land parcel that is grouped with adjacent commercial land uses such as the existing shop on the land, and adjacent petrol filling station and hotel. Given the existing use of the land, and the clustering with other non-residential uses on the edge of the Local Centre Zone, it is conceivable to support a standalone shop on the subject land. There is a somewhat limited opportunity to site a shop (and associated car parking) of this size within the Local Centre Zone given the size of allotments within the Local Centre Zone.

The DC also states "*Retailing in the zone will be limited to that which is ancillary to the activity on site, and will not displace retailing in the traditional main streets of Nairne and Meadows".* This primarily seeks to minimise fragmentation and protection of retailing within the Local Centre Zone. The very nature of a supermarket, which has elements of standalone retail such as a butcher and a bakery, could have the potential to displace such retail uses from the Local Centre Zone. In a broader sense however, there is no supermarket currently located within the Local Centre Zone.

In its favour, the subject land is appropriately positioned for the development of a supermarket given limited opportunity exists within the Local Centre Zone, it has dual frontages to secondary arterial roads, is located in a Mixed Use Zone (not an exclusive residential-type zone), is sited on the edge of the Local Centre Zone boundary and is clustered with existing non-residential land uses on adjacent land.

It is however considered that the proposal does not fall within the envisaged types of development within the Zone given that it is for a standalone retail land use that is not ancillary to an envisaged land use. It is also regarded that the scale of the proposed supermarket is at odds with what could be considered as small-scale. In the absence of an alternate retail study, it is difficult to conclude whether or not the locating of a supermarket with such floor area on the subject land would hinder the function of the Local Centre Zone. For these reasons, it is considered that the proposed development does not align with the intent of the Zone.

8.2. Design, appearance and siting

The following objectives and principles of development control (**PDC**) of the Zone and the Design and Appearance (**D&A**) general section are considered relevant in assessing the design, appearance and siting of the proposed development:

Zone Objective 3 *The maintenance of an attractive northern entrance to the Meadows town centre.*

Desired Character

Development will reinforce the linear pattern of growth along Battunga Road and the scenic and northern gateway entrance. Built form will be generally small scale with well-vegetated curtilage, including maintaining the predominance of dwellings as part of the streetscape. It is important that the existing character of the northern entrance is maintained through discrete placement in the outdoor storage of materials and limited advertising.

Zone PDC 9 *Non-residential development that is visually prominent from Battunga Road should:*

(a) on an allotment where a dwelling already exists, maintain the existing dwelling's facade or incorporate alterations or additions that have a dwelling-like appearance in their shape, form, scale and materials

(b) in the case of new built form, adopt a setback from Battunga Road at least equal to that of existing dwellings in the immediate locality and be designed to complement adjacent dwellings in terms of bulk, scale and external materials

(c) incorporate attractive landscaping adjacent to the edge of the Battunga Road reserve (except for the positioning of ingress/egress points) with the landscaping bed being at least 3 metres wide

(d) screen car parking areas visible from Battunga Road with an appropriate combination of landscaping and fencing.

Zone PDC 10 *The bulk and scale of development should be compatible with adjoining land uses.*

Zone PDC 12 *Non-residential buildings and domestic structures should:*
(a) not be situated within 600 millimetres of the allotment boundary
(b) be no more than 5 metres in height
(c) be sited outside the 1-in-100-year average return flood event area
(d) have external cladding of low reflective materials.

Zone PDC 16 *Car parking areas should be provided at the rear or side of premises.*

D&A PDC 1 *The design of a building may be of a contemporary nature and exhibit an innovative style provided the overall form is sympathetic to the scale of development in the locality and with the context of its setting with regard to shape, size, materials and colour.*

D&A PDC 3 *Buildings should be designed to reduce their visual bulk and provide visual interest through design elements such as:*
(a) articulation
(b) colour and detailing
(c) small vertical and horizontal components
(d) design and placing of windows
(e) variations to facades.

D&A PDC 4 *Where a building is sited on or close to a side boundary, the side boundary wall should be sited and limited in length and height to minimise:*
(a) the visual impact of the building as viewed from adjoining properties
(b) overshadowing of adjoining properties and allow adequate sun light to neighbouring buildings.

D&A PDC 7 *The external walls and roofs of buildings should not incorporate highly reflective materials which will result in glare.*

The proposed supermarket building is set back from both road frontages in the north-western rear corner of the site, and will have a minimal visual impact from the Battunga Road or Mawson Road streetscapes. The building is appropriately designed with a mix of materials, colours and finishes, including glazing and articulation, which assist in reducing the overall visual bulk of the building as viewed from the car park and public realm/streetscape. These finishes somewhat complement adjacent dwellings, as envisaged by Zone PDC 9(b). The external finishes with walls in 'evening haze' and 'mangrove' and roof in 'surfmist' are not considered to be highly reflective (D&A PDC 7).

Whilst the facades facing the car park are articulated to minimise the bulk and scale of the building, this is not the case with the western and northern elevations being predominantly tilt-up concrete panels, adjacent to existing residential land uses (D&A PDC 3). There is some existing vegetation adjacent the western boundary that will provide a degree of screening, however the visual impact from the adjoining land to the north will be considerable (D&A PDC 4(a)).

The proposed supermarket building has a general wall height of 5.3 metres and an overall height of 7 metres to the roof pitch, which does not accord with Zone PDC 12(b), which envisages a maximum building height of 5 metres. The applicant has provided overshadowing diagrams that demonstrate adjoining residences will receive sufficient access to sunlight, and given the siting of the building at the rear of the site, its scale will have a minimal impact on the streetscape.

The building has a floor area of 1,553m^2, which is substantially larger than the floor area of adjacent dwellings as well as the adjacent non-residential land uses, including the existing shop (590m^2), motor repair station (280m^2), petrol filling station (530m^2) and hotel (800m^2). The wall height of 5.3 metres is also much higher than adjacent dwellings (2.4-2.7 metres), and it is therefore considered that the overall form and scale of the proposed building is not sympathetic to the scale of development in the locality and does not complement the adjacent dwellings (D&A PDC 1 and Zone PDC 9(b)).

The proposal includes 2.4 metre high "Slim Wall" fencing to some of the side and rear boundaries of the land, which is a recommendation by the applicant's acoustic engineer in order to maintain appropriate noise levels to nearby sensitive receivers. This height tapers down to 900mm in height, over a distance of 15 metres, to the Battunga Road front boundary to better align with Zone Objective 3 which seeks to maintain an attractive northern entrance to the Meadows town centre. Notwithstanding, the solid fencing to the front boundary will somewhat disrupt the otherwise open streetscape.

The car parking is also proposed at the Battunga Road frontage which is at odds with Zone PDC 16 which seeks car parking to be located to the rear or side of premises. The proposal includes landscaping within a garden bed along this frontage that is 3 metres wide as envisaged by Zone PDC 9(c). This will provide some visual relief of the development and extent of hard surfaces as well as contributing to an attractive northern entrance to the Meadows town centre (Zone Objective 3 and Zone PDC 9(d)).

8.3. Heritage

The existing building at 33 Mawson Road is listed as a Local Heritage Place, and the entirety of the land is within the Historic Conservation Area (Meadows Area 11). The following Heritage Places (**HP**) and Historic Conservation Area (**HCA**) provisions are considered relevant:

HP Objective 3 *Conservation of the setting of State and Local Heritage Places.*

HP PDC 7 *Development that materially affects the context within which the heritage place is situated should be compatible with the heritage place. It is not necessary to replicate historic detailing, however design elements that should be compatible include, but are not limited to:*

(a) scale and bulk
(b) width of frontage
(c) boundary setback patterns
(d) proportion and composition of design elements such as rooflines, openings, fenestration, fencing and landscaping
(e) colour and texture of external materials.

HP PDC 8 *The introduction of advertisements and signage to a State or local heritage place should:*

(a) be placed on discrete elements of its architecture such as parapets and wall panels, below the canopy, or within fascias and infill end panels and windows
(b) not conceal or obstruct historical detailing of the heritage place
(c) not project beyond the silhouette or skyline of the heritage place
(d) not form a dominant element of the place.

HP PDC 11 *Trees or groups of trees that contribute to the historic and visual setting of a state or local heritage place should be preserved and protected against disfigurement. If it is necessary to fell these trees, replanting should proceed.*

HCA Objective 1 *The conservation of areas of historical significance.*

HCA Objective 3 *Development that complements the historic significance of the area.*

HCA Objective 4 *The retention and conservation of places such as land, buildings, structures and landscape elements that contribute positively to the historic character of the area.*

HCA PDC 1 *Development should not be undertaken unless it is consistent with the desired character for the Historic Conservation Areas.*

HCA PDC 2 *Development within the Historic Conservation Areas should be carried out, where applicable, in accordance with the design guidelines contained in Table MtB/5 - Heritage Design Guidelines.*

HCA PDC 3 *Places such as land, buildings, structures and landscape elements that contribute to the historic character of the area identified on the Overlay Maps - Heritage and more specifically identified in the respective Table MtB/7 - Contributory Items, should be retained and conserved.*

The proposal does not include any building works to the Local Heritage Place, so the assessment against the provisions generally relates to the impact of the development on the setting of the Local Heritage Place, and the impact to the Historic Conservation Area. These impacts were assessed by Council's Heritage Advisor.

Whilst the building is of a large bulk and scale, it is generally accepted that the separation distance between the building and the Local Heritage Place (**LHP**) will not diminish the setting of the LHP. In addition to this, a degree of vegetation is proposed to be retained which sits between the LHP and the supermarket building, which further conserves the setting of the LHP.

From a Historic Conservation Area perspective, the key provisions relate to the appearance of development form the streetscape. As the supermarket building is sited towards the rear of the land, Council's Heritage Advisor considers that the design is contextual in its approach and generally compatible with the streetscape character.

The design and siting of the proposed advertising signs are also considered to be of an appropriate size to not dominate or detract from the prominence of the LHP or HCA.

Overall, Council's Heritage Advisor is satisfied that the proposal is sufficiently designed and sited to not diminish the setting of the LHP or HCA.

8.4. Regulated and significant trees

The proposal includes the removal of trees, as identified in Table 1.

Table 1: Trees proposed to be removed, data consolidated from the applicant's Arborist report

Tree	Species	Circ @ 1m (cm)	Legislative control	Health, Structure, Form	Useful Life Expectancy
2	Flooded Gum	239	Exempt (proximity to dwelling in bushfire area)	Fair, Poor, Poor	1-5 years
3	Southern Mahogany	89	No planning controls	Fair, Poor, Poor	1-5 years
5	English Oak	143	No planning controls	Good, Good, Good	>20 years
6	Flooded Gum	232	Regulated Tree	Poor, Poor, Fair	1-5 years
9	Manna Gum	213	Regulated Tree and Native Vegetation	Good, Good, Good	>20 years
10	Rough-barked Manna Gum	330	Significant Tree and Native Vegetation	Poor, Fair, Fair	1-5 years
12	River Red Gum	245	Regulated Tree and Native Vegetation	Fair, Fair, Fair	10-20 years
13	Manna Gum	217	Regulated Tree and Native Vegetation	Poor, Fair, Fair	5-10 years
14	Rough-barked Manna Gum	291	Regulated Tree and Native Vegetation	Good, Poor, Good	10-20 years
15	Manna Gum	180	No planning controls and Native Vegetation	Poor, Fair, Fair	1-5 years
16	River Red Gum	286	Regulated Tree and Native Vegetation	Good, Fair, Fair	10-20 years
17	Pink Gum	85	No planning controls	Good, Fair, Fair	>20 years
18	Pink Gum	179	No planning controls	Good, Fair, Fair	>20 years
19	Flooded Gum	244	Regulated Tree	Good, Good, Good	10-20 years
21	Tasmanian Blue Gum	474	Significant Tree	Poor, Fair, Fair	1-5 years

The proposal includes the retention of trees, as identified in Table 2.

Table 2: Trees proposed to be retained, data consolidated from the applicant's Arborist report

Tree	Species	Circ @ 1m (cm)	Legislative control	Health, Structure, Form	Useful Life Expectancy
1	Rough-barked Manna Gum	652	Significant Tree and Native Vegetation	Fair, Fair, Fair	>20 years
4	Desert Ash	138	No planning controls	Good, Fair, Fair	>20 years
7	Flooded Gum	393	Significant Tree	Fair, Poor, Fair	5-10 years
8	Southern Mahogany	250	Regulated Tree	Fair, Fair, Fair	10-20 years
11	Manna Gum	176	No planning controls and Native Vegetation	Good, Good, Good	>20 years
20	Flooded Gum	358	Significant Tree	Fair, Good, Fair	10-20 years

The following objectives and principles of development control (**PDC**) from the Significant Trees and Regulated Trees modules of the Development Plan are considered relevant in assessing the proposed removal of trees.

Regulated Trees

Objective 1 *The conservation of regulated trees that provide important aesthetic and/or environmental benefit.*

Objective 2 *Development in balance with preserving regulated trees that demonstrate one or more of the following attributes:*
(a) significantly contributes to the character or visual amenity of the locality
(b) indigenous to the locality
(c) a rare or endangered species
(d) an important habitat for native fauna.

PDC 1 *Development should have minimum adverse effects on regulated trees.*

PDC 2 *A regulated tree should not be removed or damaged other than where it can be demonstrated that one or more of the following apply:*
(a) the tree is diseased and its life expectancy is short
(b) the tree represents an material risk to public or private safety
(c) the tree is causing damage to a building
(d) development that is reasonable and expected would not otherwise be possible
(e) the work is required for the removal of dead wood, treatment of disease, or is in the general interests of the health of the tree.

The proposal includes the removal of seven (7) regulated trees, identified as Trees 6, 9, 12, 13, 14, 16 and 19 in the applicant's Arborist report (and on Table 1 of this report). Trees 6 and 13 are both in poor health and have relatively short life expectancy of 1-5 years and 5-10 years respectively. Trees 12 and 14 are in better condition with fair and good health and structure for both trees respectively, however Tree 14 has poor structure. Trees 9 and 19 however are both in overall good health, form

and structure with life expectancy of >20 years and 10-20 years respectively. Many of these trees do not provide important aesthetic and/or environmental benefit and the poorer quality trees may represent a material risk to public or private safety. Trees 9, 12 and 19 however are in good health, with long life expectancy.

Significant Trees

Objective 1 *The conservation of significant trees, in Metropolitan Adelaide, that provide important aesthetic and environmental benefit.*

Objective 2 *The conservation of significant trees should occur in balance with achieving appropriate development, while avoiding the indiscriminate and inappropriate removal of significant trees.*

PDC 1 *Development should preserve the following attributes where a significant tree demonstrates at least one of the following attributes:*

(a) it makes an important contribution to the character or amenity of the local area
(b) it is indigenous to the local area
(c) its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species
(d) it represents an important habitat for native fauna
(e) it is part of a wildlife corridor of a remnant area of native vegetation
(f) it is important to the maintenance of biodiversity in the local environment
(g) it forms a notable visual element to the landscape of the local area.

PDC 2 *Development should be undertaken so that it has a minimum adverse effect on the health of a significant tree.*

PDC 3 *Development should be designed and undertaken to retain and protect significant trees.*

PDC 4 *Significant trees should be preserved, and tree-damaging activity should not be undertaken, unless:*

(a) in the case of tree removal, where at least one of the following apply:
(i) the tree is diseased and its life expectancy is short
(ii) the tree represents an unacceptable risk to public or private safety
(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area
(b) the tree is shown to be causing or threatening to cause substantial damage to a substantial building or structure of value
(c) all other reasonable remedial treatments and measures have been determined to be ineffective
(d) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.
(e) in any other case, any of the following circumstances apply:
(i) the work is required for the removal of dead wood, treatment of disease, or is in the general interests of the health of the tree
(ii) the work is required due to unacceptable risk to public or private safety
(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area

(iv) the tree is shown to be causing or threatening to cause damage to a substantial building or structure of value
(v) the aesthetic appearance and structural integrity of the tree is maintained
(vi) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.

The proposal includes the removal of two (2) significant trees, identified as Trees 10 and 21 in the applicant's Arborist report (and on Table 1 of this report). These trees are both in poor health and have signs of decay and major die-back with a short life expectancy of 1-5 years. Tree 21 is not indigenous to the local area and both trees do not provide important aesthetic and or environmental benefit. The removal of these two trees is warranted given their short life expectancy and poor health.

Conversely, the proposal seeks to retain three (3) significant trees and one (1) regulated tree, as well as a further two (2) trees that are not controlled. These have been incorporated into the proposal and the construction of the car parking area can be undertaken in a tree-sensitive manner, where required, in order to maintain the health of the trees in the long term. The retention of Tree 7 however is questionable given its relatively short life expectancy, when other trees in better health with longer life expectancy are proposed for removal.

Looking at numbers specifically, the proposal seeks to remove nine (9) controlled trees and retain four (4) controlled trees. Of the controlled trees proposed to be removed, some are of good health with a relatively long life expectancy of 10-20 years and longer, specifically Trees 9, 12 and 19. These trees do not 'pass the test' for removal when assessed against Regulated Trees PDC 2.

Development and tree removal generally go hand in hand, hence Regulated Tree PDC 2 which allows for the removal of a regulated tree where development that is reasonable and expected would not otherwise be possible. Similarly, Significant Tree Objective 2 envisages the conservation of significant trees in balance with achieving appropriate development. In this case, the removal of these trees must be considered in the context of whether the proposed development of a supermarket in the Mixed Use Zone is 'reasonable and expected'. As discussed in Section 8.1 of this report, this is not considered to be the case. Notwithstanding that many of the trees proposed to be removed do not make an important contribution to the character or amenity of the local area, the proposed land use is not envisaged within the Zone, and its scale results in an over-development of the site leading to the removal of a high number of trees. It is therefore considered that the extent of removal of regulated trees does not satisfy the relevant provisions of the Regulated Trees provisions.

8.5. Transport, Access and Car Parking

The following objectives and principles of development control (**PDC**) from the Transportation and Access module of the Development Plan are considered relevant in assessing the access and car parking aspects of the proposal.

Objective 2 *Development that:*
(a) provides safe and efficient movement for all transport modes
(b) ensures access for vehicles including emergency services, public infrastructure maintenance and commercial vehicles
(c) provides off-street parking

(d) is appropriately located so that it supports and makes best use of existing transport facilities and networks
(e) provides convenient and safe access to public transport stops.

PDC 2 *Development should be integrated with existing transport networks, particularly major rail, road and public transport corridors as shown on Location Maps and Overlay Maps - Transport, and designed to minimise its potential impact on the functional performance of the transport network.*

PDC 5 *Land uses that generate large numbers of visitors such as shopping centres, places of employment, schools, hospitals and medium to high density residential uses should be located so that they can be serviced by the public transport network and encourage walking and cycling.*

PDC 8 *Development should provide safe and convenient access for all anticipated modes of transport.*

PDC 17 *Industrial/commercial vehicle movements should be separated from passenger vehicle car parking areas.*

PDC 18 *Development should provide for the on-site loading, unloading and turning of all traffic likely to be generated.*

PDC 19 *Development should make provision on site for locating loading and storage areas at the rear or side of the site to contribute to attractive streetscapes.*

PDC 20 *Development should ensure that a permeable street and path network is established that encourages walking and cycling through the provision of safe, convenient and attractive routes with connections to adjoining streets, paths, open spaces, schools, pedestrian crossing points on arterial roads, public and community transport stops and activity centres.*

PDC 39 *Development should provide off-street vehicle parking and specifically marked accessible car parking places to meet anticipated demand in accordance with Table MtB/2 - Off Street Vehicle Parking Requirements.*

PDC 42 *Vehicle parking areas should be sited and designed to:*
(a) facilitate safe and convenient pedestrian linkages to the development and areas of significant activity or interest in the vicinity of the development
(b) include safe pedestrian and bicycle linkages that complement the overall pedestrian and cycling network
(c) not inhibit safe and convenient traffic circulation
(d) result in minimal conflict between customer and service vehicles
(e) avoid the necessity to use public roads when moving from one part of a parking area to another
(f) minimise the number of vehicle access points onto public roads
(g) avoid the need for vehicles to reverse onto public roads
(h) where practical, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points

(i) not dominate the character and appearance of a site when viewed from public roads and spaces

(j) provide landscaping that will shade and enhance the appearance of the vehicle parking areas

(k) include infrastructure such as underground cabling and connections to power infrastructure that will enable the recharging of electric vehicles

(l) *where appropriate, provide for trolley collection areas.*

The proposal provides two access points – one from Battunga Road and one from Mawson Road. The applicant's traffic engineer confirms that the access points and roads can accommodate the forecasted traffic volumes and vehicle turning manoeuvres.

The Battunga Road and Mawson Road intersection is earmarked for an upgrade and concept designs have been produced. In their referral response, the Commissioner of Highways have advised that the proposal would require some modification to the current concept design to be able to accommodate the appropriate turning lanes into the proposed development. This has not currently been incorporated in the concept as the proposed development is somewhat hypothetical until such a time as an approval is granted. Should Planning Consent be granted, the concept would be revised accordingly to accommodate the proposed development.

Turn path diagrams have been prepared in support of all anticipated vehicle movements including passenger vehicles and service vehicles (including up to 12.5m long HRV truck). A turnaround area has been included adjacent the loading bays so that service vehicles up to and including a 8.8m MRV can drive into the loading bay in a forward direction and use the turnaround area to exit in a forward direction. The 12.5m HRV service vehicles however will conflict with customer vehicles, with access to the loading dock for this size vehicle requiring a reverse manoeuvre that utilises the aisle that is adjacent to the car parks closest to the entrance of the supermarket building. The access by a 12.5m HRV is relatively infrequent, anticipated to occur approximately 10 times per week (or less than 2 times per day), and could be scheduled to occur outside of the peak periods of the supermarket to limit conflict or disruption to the flow of traffic within the car park.

The car park design includes a clear and safe route for pedestrians from both Battunga Road and Mawson Road. The low speed environment within the car park is also acknowledged. Given the impending upgrade to the Mawson Road and Battunga Road intersection which includes footpaths adjacent the subject land, this will provide further connectivity to the site and adjacent Local Centre Zone.

Table MtB/2 – Off-street Vehicle Parking Requirements seek 5.5 car parking spaces per 100m^2 of gross leasable floor area for a shop. With a gross leasable floor area of 1,553m^2, this would therefore equate to a requirement of 85 car parking spaces. The proposal includes 66 car parking spaces, which evidently would result in a shortfall of 19 car parking spaces. The applicant's traffic engineer has however noted that the envisaged Development Plan rate is conservatively high and based on parking surveys at other non-Metropolitan shops, identified that the peak parking demand was typically under 4 parking spaces per 100m^2. On this basis, there would be an assumed demand for 62 car parking spaces, therefore a surplus of 4 parking spaces proposed. Notwithstanding that there is a shortfall of 19 car parking spaces with the envisaged rates of the Development Plan, it is considered that there is sufficient car parking proposed to meet the anticipated demand.

Council's Development Engineers have reviewed the proposed car parking and advise that the design, layout and line marking of the car park can meet relevant standards.

8.6. Interface Between Land Uses

The following objectives and principles of development control (**PDC**) from the Interface between Land Uses module of the Development Plan are considered relevant in assessing the impact of the proposed development to adjoining land uses.

Objective 1	*Development located and designed to minimise adverse impact and conflict between land uses.*
Objective 2	*Protect community health and amenity from adverse impacts of development.*
Objective 3	*Protect desired land uses from the encroachment of incompatible development.*
PDC 1	*Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:* *(a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants* *(b) noise* *(c) vibration* *(d) electrical interference* *(e) light spill* *(f) glare* *(g) hours of operation* *(h) traffic impacts.*
PDC 2	*Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.*
PDC 7	*Outdoor lighting should be designed and installed so that it does not overspill or intrude on sensitive land uses (e.g. residential) or detrimentally impact on road safety in the locality, so that it complies with relevant Australian Standards AS 4282-1997: Control of the obtrusive effects of outdoor lighting.*
PDC 8	*Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises.*
Zone PDC 15	*The operation of non-residential uses, including the freight loading and deliveries should be restricted to the hours between 8.00 am to 6.00 pm during Monday to Saturday and should be restricted to the hours between 10.00 am to 6.00 pm on Sunday.*

The key potential impacts of the proposal are considered to be noise, light spill, hours of operation, traffic impacts and visual and overshadowing.

The land is wholly located within the Mixed Use Zone, with adjoining and adjacent allotments also within the Mixed Use Zone as well as the Local Centre Zone and Deferred Urban Zone. Whilst there are standalone dwellings sited on allotments within the Mixed Use and Local Centre Zones, it is important to note that this is not the primary intent of these zones, where a degree of nuisance and a lower residential amenity is to be expected.

Noise

The applicant supplied an Environmental Noise Assessment (**ENA**) report. It suggested the principal noise sources are:

- Delivery truck movements, including the movement, idle, and refrigeration components (for various
- truck and van sizes);
- Unloading activity, such as the unloading of pallets from a truck;
- Vehicle movements and general activity associated with car parking; and,
- Mechanical plant serving the building.

The ENA made the following recommendations to ensure that noise levels from the site will achieve the relevant criteria of the *Environment Protection (Noise) Policy 2007* at all residences in the vicinity:

- ensure that deliveries to the site occur during the daytime hours only (7am to 10pm) and that the truck is not idling during unloading or waiting for unloading;
- ensure rubbish collection to only occur between the hours of 9am and 7pm on Sundays or public holidays, and between 7am and 7pm on any other day;
- construction of boundary fences, including:
    - 2.1 metre high Colorbond fence to the eastern side boundary (adjoining 35 Mawson Road); and
    - 2.4 metre high Slimwall fence to all other side and rear boundaries
- construct an acoustic barrier with absorption material on the southern side of the loading dock;
- construct a canopy with acoustic absorption material over the loading dock; and
- locate the rooftop mechanical plant in the specified area.

Following this report, some design changes were made to the proposed loading dock area as well as the fence height along the northern and southern boundaries to taper the fence height down to 900mm high over a distance of 15 metres to the Battunga Road frontage. Additional correspondence was provided by Sonus which advised that the updated layout would achieve the applicable criteria of the *Environment Protection (Noise) Policy 2007.*

Light spill

The impact of light spill can be appropriately managed with the design of lighting that is shielded to prevent spilling to adjoining residential land. This could be appropriately managed via a condition of consent.

Traffic

The site's location along Mawson Road and Battunga Road, both being secondary arterial roads under the control of the Department of Infrastructure and Transport, provides a number of benefits. Vehicles will not be required to travel through residential side streets to reach the site and traffic noise from these roads will also further mask noise caused by this development.

Hours of operation

The hours of operation are proposed to be between 7.00 am to 9.00pm, seven (7) days a week. Deliveries and rubbish collection will be restricted within the hours of operation, as recommended in the ENA. Whilst the proposed hours of operation are longer than those anticipated in Zone PDC

15, they are considered acceptable given the context of the site in regards to traffic and that the off-site impacts such as noise and light spill can be appropriately managed.

Overshadowing

The proposed building will generally cause minimal overshadowing of other allotments, given that minimal siteworks (fill) is required and the size of the adjoining allotments. Overall, the design is considered to minimise overshadowing to reasonable levels and sufficient sunlight to living windows and private open space of adjoining land will be afforded.

8.7. Advertising

The following provisions of the Zone and the Advertisements section are considered the most relevant to the assessment:

Zone PDC 17 *Advertisements and advertising hoardings should not include any of the following:*
- *(a) flashing or animated signs*
- *(b) bunting, streamers, flags, or wind vanes*
- *(c) roof-mounted advertisements projected above the roofline*
- *(d) parapet-mounted advertisements projecting above the top of the parapet.*

Zone PDC 18 *Advertisements should be designed in accordance with Table MtB/4 - Design Guidelines for Advertisements.*

PDC 2 *The location, siting, design, materials, size, and shape of advertisements and/or advertising hoardings should be:*
- *(a) consistent with the predominant character of the urban or rural landscape*
- *(b) in harmony with any buildings or sites of historic significance or heritage value in the area*
- *(c) co-ordinated with and complement the architectural form and design of the building they are to be located on.*

PDC 3 *The number of advertisements and/or advertising hoardings associated with a development should be minimised to avoid:*
- *(a) clutter*
- *(b) disorder*
- *(c) untidiness of buildings and their surrounds.*

PDC 4 *Buildings occupied by a number of tenants should exhibit co-ordinated and complementary advertisements and/or advertising hoardings to identify the tenants and their type of business.*

PDC 5 *The content of advertisements should be limited to information relating to the legitimate use of the associated land.*

PDC 17 *Freestanding advertisements and/or advertising hoardings should be:*
- *(a) limited to only one primary advertisement per site or complex*
- *(b) of a scale and size in keeping with the desired character of the locality and compatible with the development on the site.*

The proposal includes two freestanding pylon advertising signs, one at the Battunga Road access and one at the Mawson Road access. Both signs are 1.5 metres wide and 5.35 metres high, with basic lettering 'Mawson Central' that is proposed to be internally illuminated.
Zone PDC 18 refers to advertisements being designed in accordance with Table MtB/4 of the Development Plan, however there is no criteria specifically within this table for advertisements within the Mixed Use Zone.

Whilst there are two freestanding signs proposed, which is at odds with Advertisements PDC 17(a), this is considered reasonable given that the site has two road frontages to secondary arterial roads.

The signs are simple in form and message, do not result in clutter or disorder of the site and will not have a detrimental impact on the streetscape or character of the locality.

Likewise, the building signage is integrated into the design of the building, set well back from the public roads and provides a co-ordinated appearance with the building design.

Overall, the proposed signage is considered to be appropriate in the context of the locality.

8.8. Earthworks and Retaining Walls

The following Sloping Land provisions of the Development Plan are considered relevant to the assessment of earthworks and retaining walls:

PDC 2 *Development and associated driveways and access tracks, including related earthworks, should be sited, designed and undertaken in a manner that:*

(a) minimises their visual impact
(b) reduces the bulk of the buildings and structures
(c) minimises the extent of cut and/or fill
(d) minimises the need for, and the height of, retaining walls
(e) does not cause or contribute to instability of any embankment or cutting
(f) avoids the silting of watercourses
(g) protects development and its surrounds from erosion caused by water run-off.

PDC 7 *The cutting and/or filling of land should:*

(a) only be undertaken in order to reduce the visual impact of buildings, including structures, or in order to construct water storage facilities for use on the allotment
(b) only be undertaken if the resultant slope can be stabilised to prevent erosion
(c) result in stable batter slopes which are covered with top soil and landscaped so as to preserve and enhance the natural character or assist in the re-establishment of the natural character of the area
(d) be kept to a minimum and be limited to a maximum depth or height no greater than 1.5 metres at any point relative to the natural ground level so as to preserve the natural form of the land and the native vegetation

The land, given its size, is relatively flat with a gentle slope towards the north-western corner of the site. The proposal includes levelling of the site to provide a level bench pad for the building, with up to 750mm of fill in the north-west corner. This level of earthworks are considered entirely reasonable and in accordance with Sloping Land PDC 7(d).

8.9. Infrastructure

The proposal is serviced well with relevant infrastructure for the management of stormwater, waste and wastewater.

Stormwater is to be collected on site and detained in underground detention tanks, with appropriate discharge to direct to the watercourse via underground pipe in Battunga Road. Stormwater runoff from the car parking areas is treated via a bio-retention basin within the car park to improve water quality. Council's Development Engineer has reviewed the proposed stormwater management, including calculations, and advise that an appropriate stormwater solution can be achieved.

All waste will be contained within bins within the loading dock. The waste will be collected by a private contractor and the applicant's traffic engineer has demonstrated that the site can accommodate the appropriate swept path of the vehicle required for waste collection.

Wastewater can be appropriately managed via connect to CWMS via septic tank or direct connection to sewer. Whilst this is yet to be determined, there is a solution available and can be resolved through detailed design and separate wastewater works application to Council's Environmental Health and Wastewater departments.

8.10. Seriously at Variance

Representors and the applicant provided differing legal opinions on whether the proposed development is "seriously at variance" with the Development Plan. A development which is seriously at variance must not be granted consent under Section 35(2) of the *Development Act 1993*.

The Supreme Court provides the following guidance in Mar Mina (SA) Pty Ltd v City of Marion & Anor [2008] SASC 120 (2 May 2008):

> *… the expression "seriously at variance with the Development Plan" refers to that which is an important or grave departure in either quantity or degree from the Development Plan. It denotes something which is plainly not slight or trifling. … It is not enough that the proposal might conflict with the Development Plan; it must be seriously at variance with it.*

This proposal conflicts with the Development Plan, however it is not considered to be seriously at variance with the Development Plan, inclusive of the following reasons:

- While the proposed development is not considered small in scale, retail activities are contemplated within the Zone when they are ancillary to development envisaged in the Zone.
- Other planning considerations are considered to be satisfactorily resolved, to various degrees, as detailed in the sections above (e.g. design and appearance, access and car parking, interface between land uses, impact to the Local Heritage Place and the Historic Conservation Area).

9. CONCLUSION

The most relevant planning matters considered in the assessment of this application extend to the suitability and scale of the land use within the zone, the design and siting of the building, removal

of regulated and significant trees, traffic and car parking, and interface between land uses. Of particular importance is land use and scale.

In its favour:

- The proposal contributes to an active locality, as envisaged in the Desired Character of the Zone, and is grouped with other non-residential land uses on the edge of the Local Centre Zone.
- The general design, appearance and siting of the building will have a minimal impact on the streetscape.
- Key interface impacts such as noise, light spill, traffic, hours of operation and overshadowing have been sufficiently minimised.
- Vehicle access and on-site manoeuvring of expected vehicles are appropriate and accord with relevant Australian Standards.
- The provision of on-site car parking is adequate.
- The proposal is considered to have a minimal impact on the context and setting of the LHP or HCA.

Against the proposal:

- The proposed supermarket is not considered small-scale and may hinder the function of the Local Centre Zone.
- The proposed supermarket is not ancillary to development that is envisaged in the Mixed Use Zone.
- The proposed building has a large bulk and scale when viewed from adjoining land.
- The form and scale of the proposed building is not sympathetic to the scale of development in the locality and does not complement the adjacent dwellings in this regard.
- The proposal requires a total of nine (9) controlled trees to be removed, some of which are in fair-good health.

There is a considerable argument that the land use of a standalone shop may be appropriate on the land, given the existing land use, it is grouped with other non-residential uses and is on the edge of the Local Centre Zone with good access from two secondary arterial roads. The proposal is however generally at odds with the intent of the Zone with respect to scale. When reviewing the scale of development in the locality and the Court's interpretation of "small-scale", the proposed development is at odds with what is envisaged for the Zone.

There are undeniably some positive aspects of the proposal with respect to the design, siting and appearance of the development in one sense. Other core issues are unresolved including the bulk and scale of the development compared to the scale of development in the locality.

Quite clearly the proposal is finely balanced given the clear departures from several provisions within the Mixed Use Zone. Notwithstanding that the development generally satisfies the provisions relating to interface, traffic and parking for it to appropriately operate, the proposed development is at significant odds with satisfying the intent of the Zone. To this end, the proposal is considered, on balance, to not warrant consent.

10. RECOMMENDATION

It is recommended that the Council Assessment Panel:

RESOLVE that the proposed development is not seriously at variance with the policies in the Mount Barker (DC) Development Plan.

RESOLVE to REFUSE Planning Consent to the application by Kevjohn Pty Ltd for the construction of a shop (supermarket) and car parking, including removal of two (2) significant trees (1 x manna gum, 1 x Tasmanian blue gum) and seven (7) regulated trees (2 x flooded gums, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure at 5 Battunga Road and 33 Mawson Road, Meadows, in Development Application 580/514/21 for the following reasons:

REFUSAL REASONS

1. The proposed development is not considered to achieve Objectives 1, 2 & 4 of the Mixed Use Zone.

   Objective 1: A functional and diverse zone accommodating a mix of commercial, community, light industrial, residential, office and small-scale shop land uses.

   Objective 2: Development that minimises any adverse impacts upon the amenity of the locality within the zone.

   Objective 4: Development that contributes to the desired character of the zone.

2. The proposed development is not considered to achieve Principle of Development Control 2 of the Mixed Use Zone.

   PDC 2: Shop or retail development should not hinder the function of Main Road (or Old Princes Highway), Nairne or Mawson Road, Meadows and should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry.

3. The proposed development is not considered to achieve Principle of Development Control 6 of the Mixed Use Zone.

   PDC 6: Development should not be undertaken unless it is consistent with the desired character for the zone.

4. The proposed development is not considered to achieve Principle of Development Control 10 of the Mixed Use Zone.

   PDC 10: The bulk and scale of development should be compatible with adjoining land uses.

5. The proposed development is not considered to achieve Principle of Development Control 16 of the Mixed Use Zone.

   PDC 16: Car parking areas should be provided at the rear or side of premises.

MOUNT BARKER
DISTRICT COUNCIL

Development application form

Development Act 1993

PO BOX 54 OR 6 Dutton Road
MOUNT BARKER SA 5251 MOUNT BARKER
TELEPHONE: (08) 8391 7200 FAX: (08) 8391 7299
www.mountbarker.sa.gov.au

Office use only
DEVELOPMENT NUMBER:
580 / /

Please use BLOCK LETTERS and Black or Blue ink so that photocopies can be made of your application

PLEASE TICK AS REQUIRED

Development Plan Consent ☒ ***Building Rules Consent*** ☐ ***Development Approval (both)*** ☐

APPLICANT'S CONTACT DETAILS:
Name: KEVJOHN PTY LTD c/- JELFS BUILDING DESIGN Email: PAUL@JBDESIGN.NET.AU
Postal Address: PO BOX 644 VICTOR HARBOR SA Phone: 0408 110 735

OWNER'S CONTACT DETAILS:
Name: KEVJOHN PTY LTD Email: bruce@stanlon.com.au
Postal Address: _____ Phone: _____

BUILDER'S CONTACT DETAILS:
Name: T.B.A Email: _____
Postal Address: _____ Phone: _____

CONTACT PERSON:
Name: PAUL JELFS Email: PAUL@JBDESIGN.NET.AU

DESCRIPTION OF DEVELOPMENT:
Proposed Development (e.g. Dwelling, Shop, Garage): SHOP
Existing Use (e.g. Vacant, Dwelling, Grazing): RESIDENTIAL/SHOP

LOCATION OF PROPOSED DEVELOPMENT:
Assessment No: _____ **Parcel No:** _____
House No: 5 **Lot / Section No:** _____ **Street:** BATTUNGA RD
Town: MEADOWS **Volume:** 5067 **Folio:** 654

BUILDING RULES CLASSIFICATION SOUGHT: _____ Present classification: _____

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

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

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

Does either Schedule 21 (Activities of Environmental significance) or 22 (Activities of Major Environmental significance (EPA)) of the Development Regulations, 2008 apply? ☐Yes ☐No

DEVELOPMENT COST (do not include shop fitout costs):$ 1,375,000

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

SIGNATURE: _____ **DATE:** 18/3/21
Applicant / Owner / Agent

RELEVANT FEES, COPIES OF PLANS & COPIES OF ANY OTHER RELEVANT SUPPORTING DOCUMENTATION ARE DUE ON SUBMISSION OF THIS APPLICATION

LAND SERVICES SA

Product	Register Search (CT 5067/654)
Date/Time	19/03/2021 12:55PM
Customer Reference	580/514/21
Order ID	20210319004650

REAL PROPERTY ACT, 1886
South Australia

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

REGISTRAR-GENERAL SOUTH AUSTRALIA

Certificate of Title - Volume 5067 Folio 654

Parent Title(s) CT 4214/825

Creating Dealing(s) CONVERTED TITLE

Title Issued 02/04/1992 **Edition** 6 **Edition Issued** 05/06/2017

Estate Type

FEE SIMPLE

Mount Barker District Council
Received
19 Mar 2021

Registered Proprietor

KEVJOHN PTY. LTD. (ACN: 618 643 575)
OF PO BOX 121 VICTOR HARBOR SA 5211

Description of Land

ALLOTMENT 537 FILED PLAN 18522
IN THE AREA NAMED MEADOWS
HUNDRED OF KUITPO

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED B TO THE COUNCIL FOR THE AREA (T 5055040)

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

Schedule of Dealings

NIL

Notations

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

AMENDMENT TO DIAGRAM VIDE 249/95

Administrative Interests NIL

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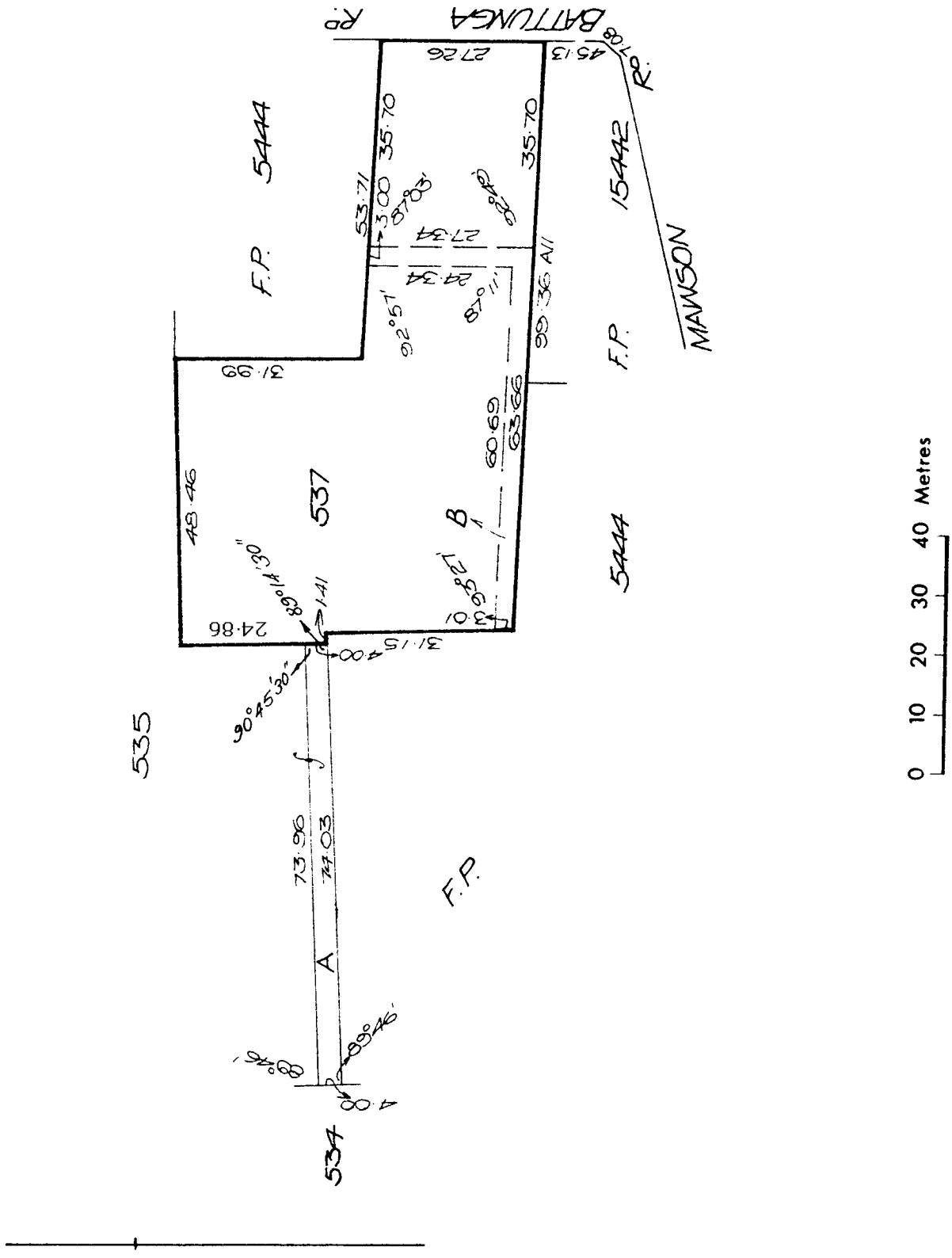
Product	Register Search (CT 5067/654)
Date/Time	19/03/2021 12:55PM
Customer Reference	580/514/21
Order ID	20210319004650



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Product	Historical Search
Date/Time	19/03/2021 12:55PM
Customer Reference	580/514/21
Order ID	20210319004650

Certificate of Title

Title Reference: CT 5067/654

Status: CURRENT

Parent Title(s): CT 4214/825

Dealing(s) Creating Title: CONVERTED TITLE

Title Issued: 02/04/1992

Edition: 6

Dealings

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
19/05/2017	05/06/2017	12730924	TRANSFER	REGISTERED	KEVJOHN PTY. LTD. (ACN: 618 643 575)
19/05/2017	05/06/2017	12730923	DISCHARGE OF MORTGAGE	REGISTERED	9740570
04/12/2003	16/12/2003	9740570	MORTGAGE	REGISTERED	NATIONAL AUSTRALIA BANK LTD.
04/12/2003	16/12/2003	9740569	CHANGE OF NAME	REGISTERED	BRITT EMMA LONG
04/12/2003	16/12/2003	9740568	DISCHARGE OF MORTGAGE	REGISTERED	9206043
30/10/2001	21/11/2001	9206043	MORTGAGE	REGISTERED	ING BANK (AUSTRALIA) LTD.
30/10/2001	21/11/2001	9206042	TRANSFER	REGISTERED	FRASER BRUCE LONG, BRITT EMMA DIER
30/10/2001	21/11/2001	9206041	DISCHARGE OF MORTGAGE	REGISTERED	7260375 8685686
21/05/1999	04/06/1999	8685686	MORTGAGE	REGISTERED	NATIONAL AUSTRALIA BANK LTD.
11/03/1992	16/04/1992	7260375	MORTGAGE	REGISTERED	NATIONAL AUSTRALIA BANK LTD.
11/03/1992	16/04/1992	7260374	DISCHARGE OF MORTGAGE	REGISTERED	6679849
03/02/1989	20/03/1989	6679849	MORTGAGE	REGISTERED	

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JELFS BUILDING DESIGN
Victor Harbor & Whyalla
PO Box 644 Victor Harbor SA 5211
08 8552 5933 0408 110 735
info@jbdesign.net.au
www.jbdesign.net.au

PLANNING DRAWINGS

PROPOSED SHOPS

KEVJOHN PTY.LTD
5 BUTTUNGA RD 33 MAWSON RD
MEADOWS

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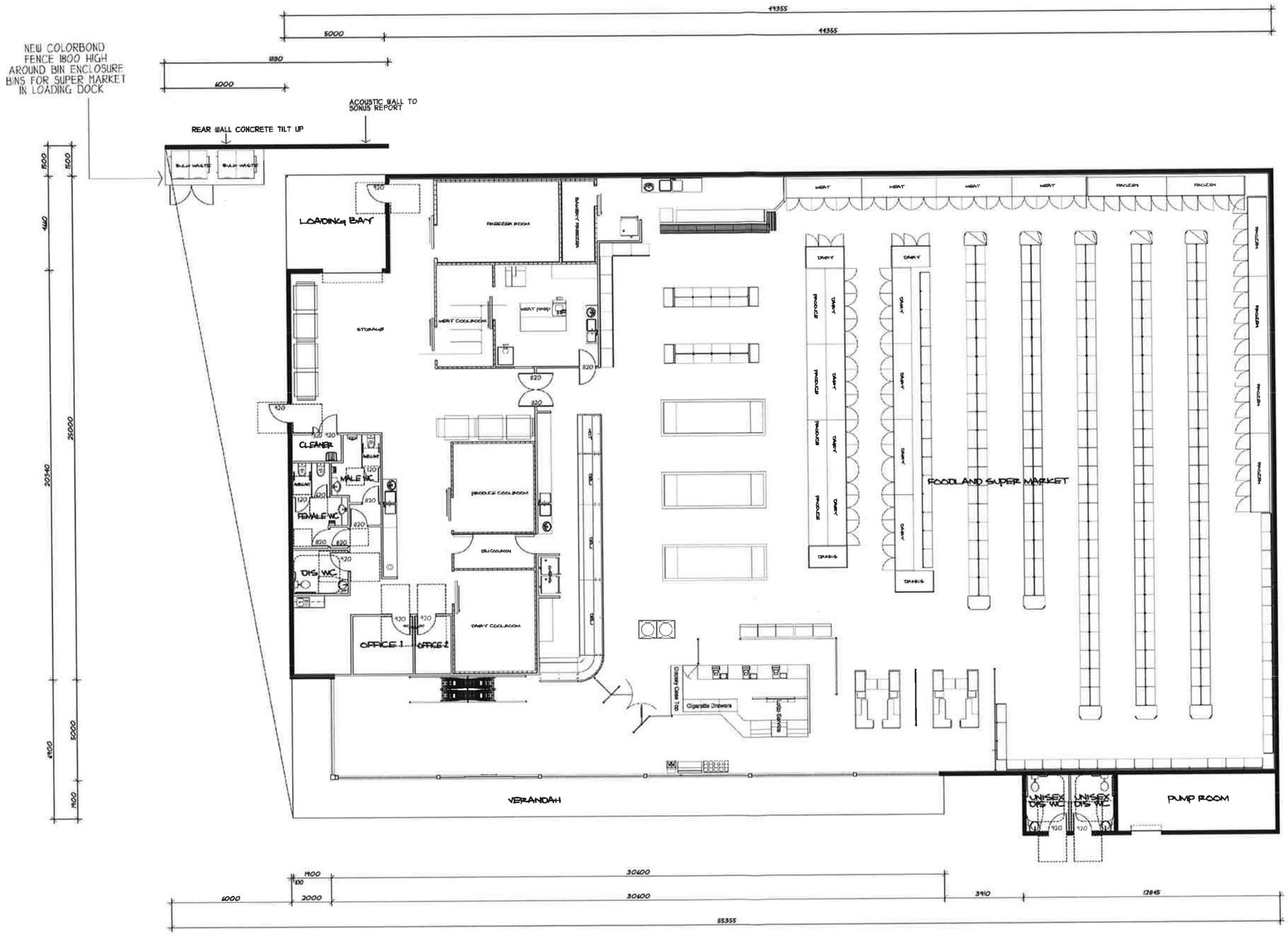
APPROVED PLAN

SHEET:
1 OF 9
DATE :
20th NOV '22

Z:\BACKUP\jbdesign_2021\Brujoh Pty Ltd Meadows Central\Brujoh Pty Ltd Meadows

NOTE :
TO BE BUILT IN STRICT ACCORDANCE WITH BCA
SMOKE ALARMS TO AS 3786 INTERCONNECTED TO BCA PART 3.7.2.2
CONTROL JOINTS TO ENGINEERS DETAIL
TIE DOWN TO TRUSS MANUFACTURERS SPECS.
GLAZING TO BE SELECTED AND INSTALLED IN ACCORDANCE WITH AS 1288
LIFT OFF HINGES TO WC TO COMPLY WITH BCA
BUSHFIRE REGS TO AS3959 EXCLUDED
ALL EXTERNAL FIXTURES IN ACCORDANCE WITH BCA CORROSION PROTECTION
ARTICULATED LAYOUT IN STRICT ACCORDANCE WITH ENGINEERS BRICKWORK ARTICULATION LAYOUT
ALL BI-FOLD'S LINTEL SIZE TO BE CONFIRMED AFTER BI-FOLD SELECTION
ALL BUILDING FABRIC THERMAL INSULATION TO SATISFY BCA 3.12.1.1
BUILDING SEALING TO SATISFY BCA 3.12.3
BUILDING SERVICES INCLUDING HWS, INSULATION OF SERVICES AND LIGHTING TO SATISFY BCA 3.12.5
A RESTRICTIVE DEVICE FOR OPENABLE WINDOWS WHERE THE FLOOR BELOW THE WINDOW IS MORE THAN 2m ABOVE THE SURFACE BENEATH AND THE LOWEST LEVEL OF THE WINDOW OPENING IS LESS THAN 1.7m ABOVE FLOOR TO BCA-P2.5.2
DISABLE AND AMBULANT DETAILS
SOLAR PANELS ON ROOF STRUCTURE



AREAS:

SHOP	1447.37 m²
VERANDAH	71.25 m²
LOADING DOCK	23.29 m²
PLANT ROOM/WC	38.53 m²
TOTAL	1580.44 m²

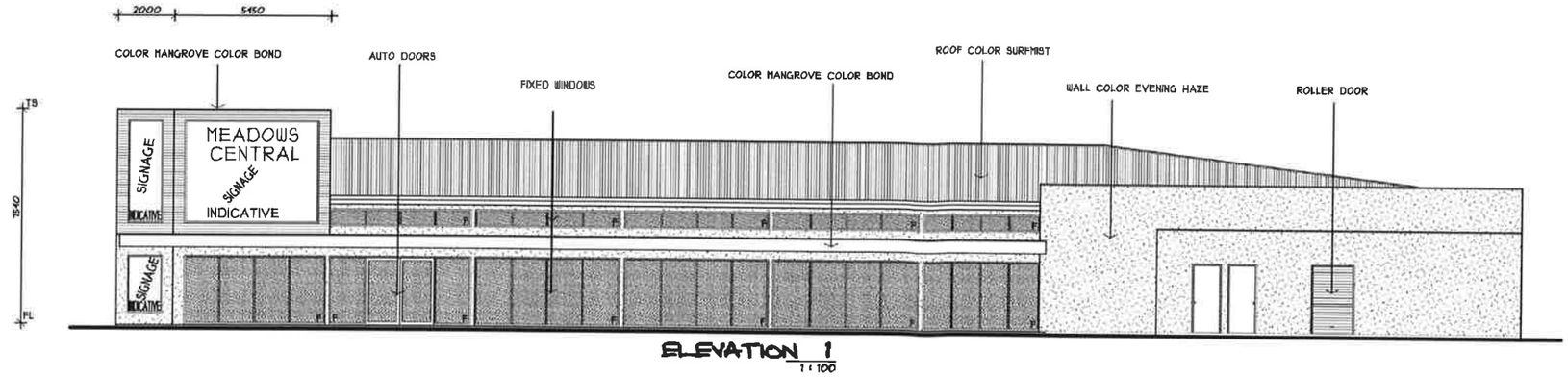
FLOOR PLAN
A1 PAPER 1 : 100

APPROVED PLAN

PROPOSED SHOPS
for KEVJOHN PTY.LTD
at 5 BUTLANDA RD 22 HAWSON RD
MEADOWS

SHEET: 2 OF 9
DATE: 20th NOV '22

JBA



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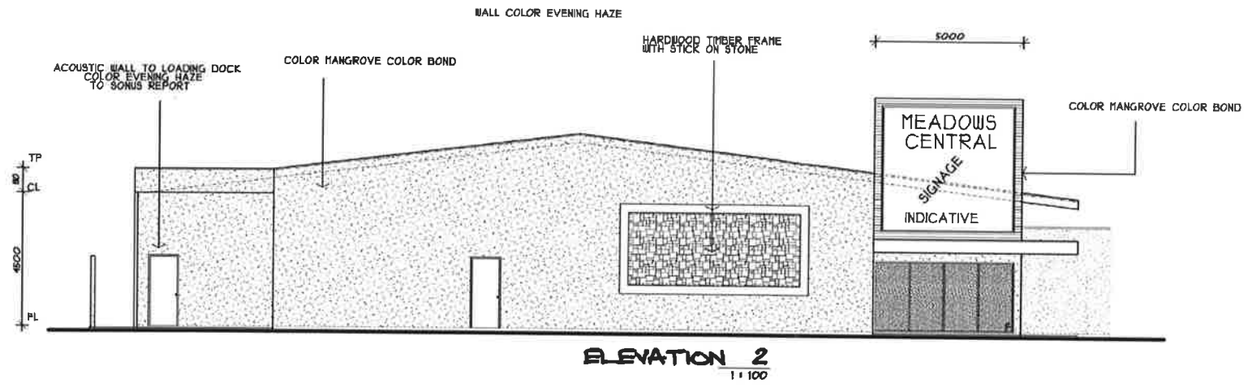

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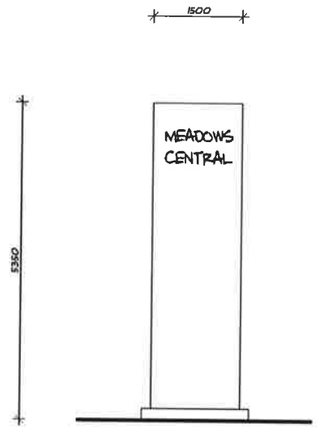


SIGN DETAIL
1 : 50

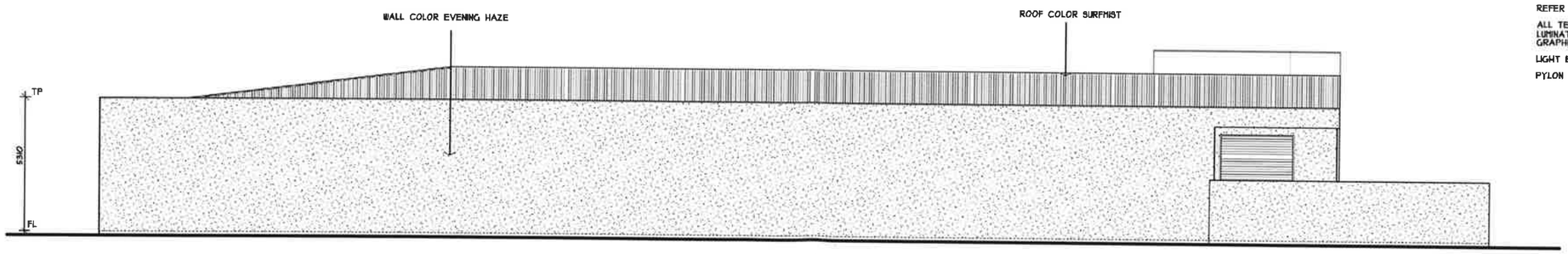
REFER TO ENGINEERS DETAIL FOR PYLON STRUCTURAL DETAILS

ALL TENANCY SIGNS TO BE DOUBLE SIDED INTERNALLY LUMINATED WITH LED LIGHT BOX WITH OPAL ACRYLIC FACES GRAPHICS BY TENANTS

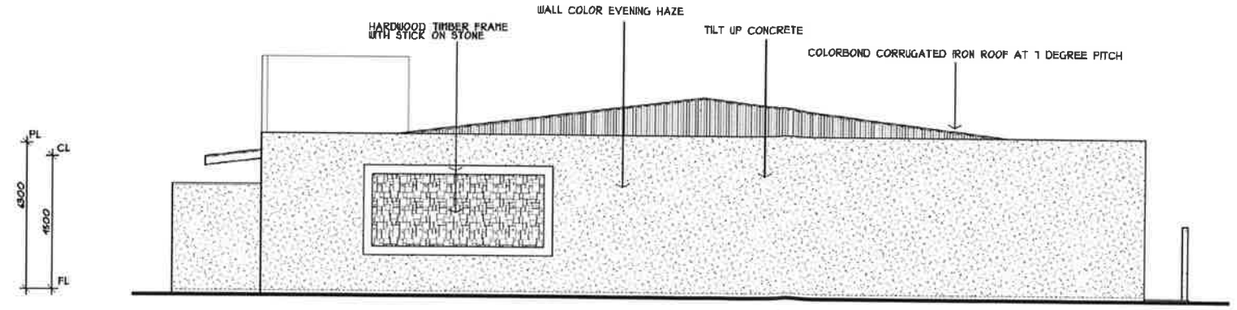
LIGHT BOXES TO COLORBOND

PYLON TO BE PAINTED IN 2 PACK EPOXY

INDICATIVE



ELEVATION 3
1 : 100



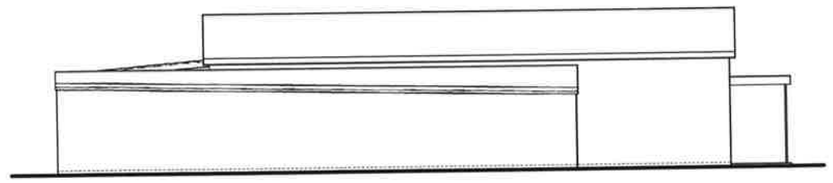
ELEVATION 4
1 : 100

A1 PAPER

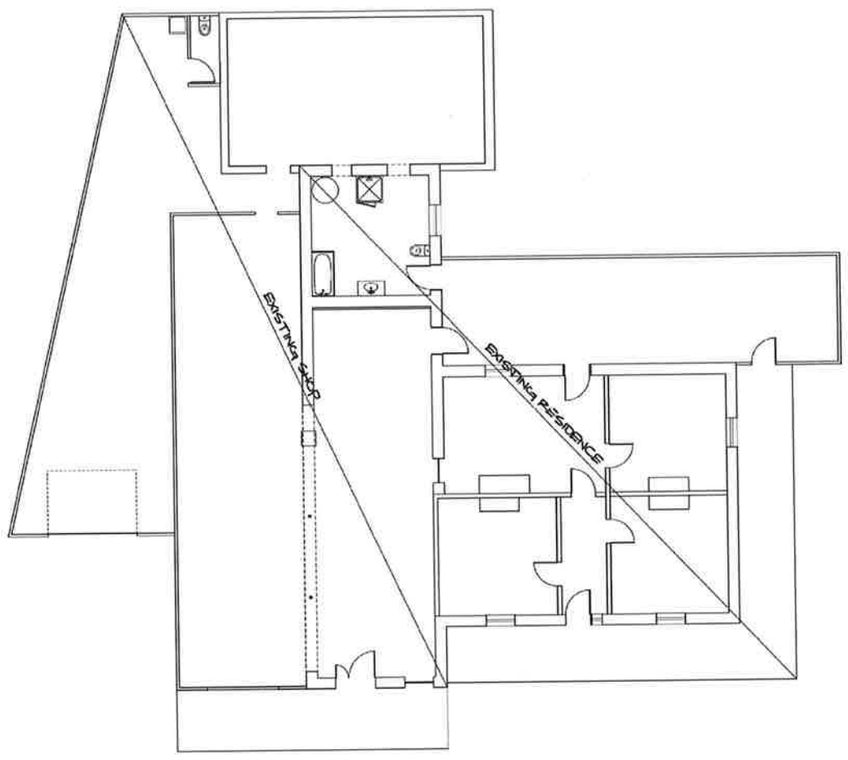
APPROVED PLAN	PROPOSED SHOPS for KEVJOHN PTY LTD at 5 BUTTUNGA RD BEAUMONT SA	SHEET: 3 OF 9 DATE: 20th NOV '22
	MLA20VB	

NOTE: ALL COLORS ON THE EXISTING BUILDING TO REMAIN THE SAME

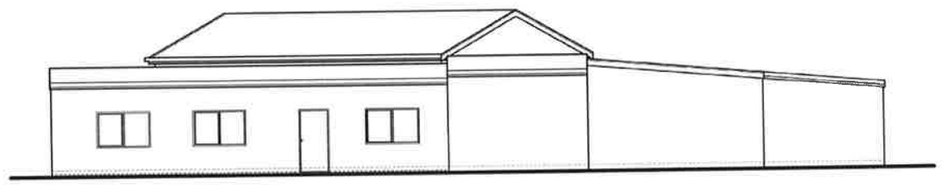
ELEVATION 1
1 : 100



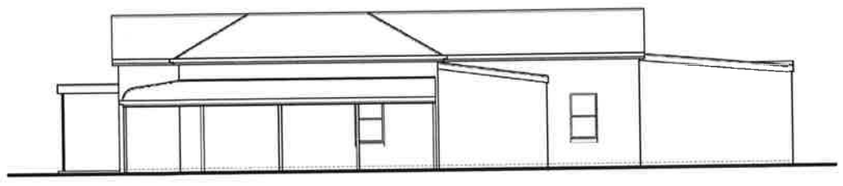
ELEVATION 2
1 : 100



EXISTING FLOOR PLAN
1 : 100



ELEVATION 3
1 : 100



ELEVATION 4
1 : 100

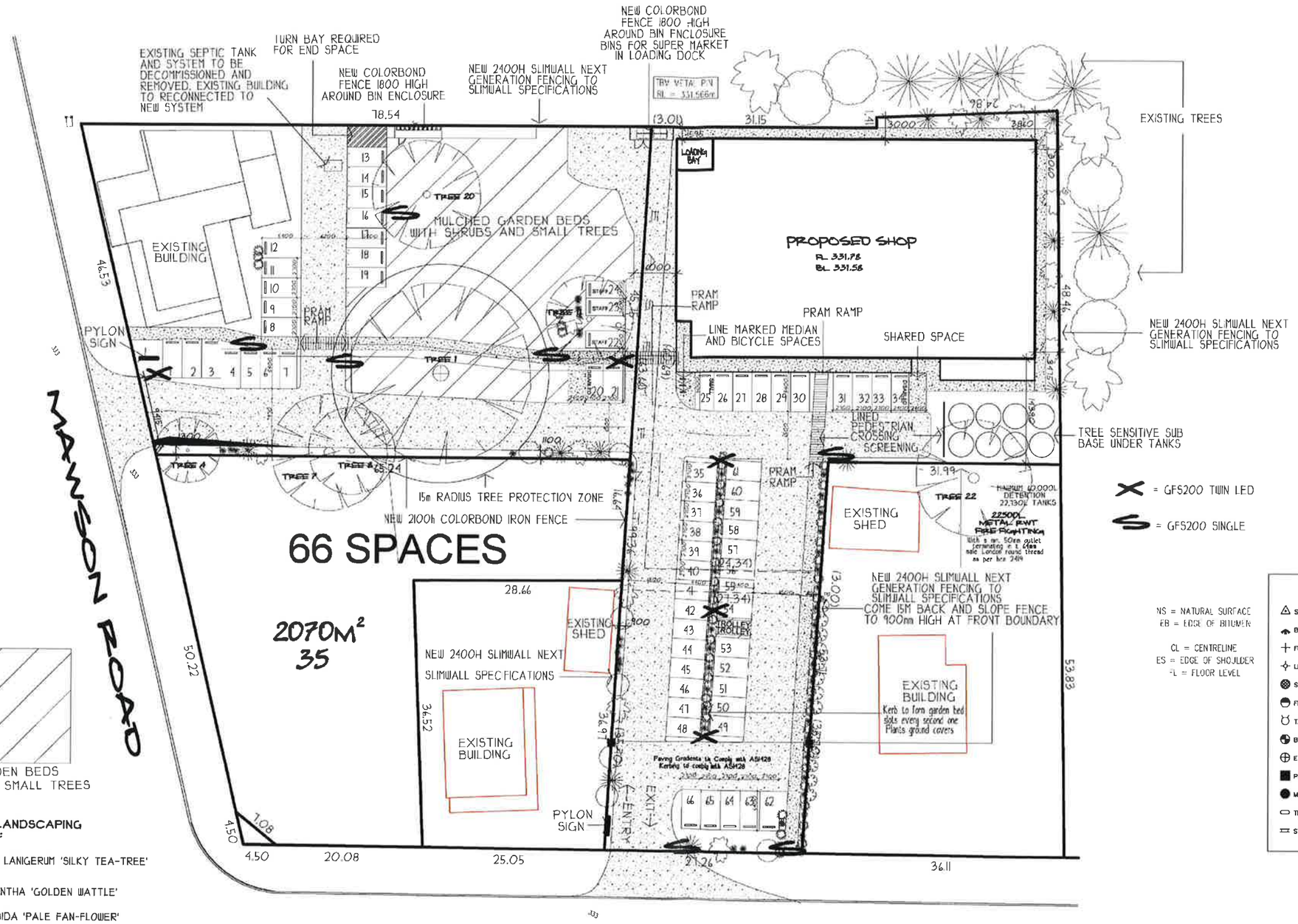
AREAS:

SHOP/STORE	245.26 m²
EXISTING RESIDENCE	146.07 m²
TOTAL	391.33 m²

A1 PAPER

APPROVED PLAN	PROPOSED SHOPS FOR KEVJOHN PTY LTD AT 8 BUTTUNDA RD 33 MAWSON RD MEADOWS	SHEET: 4 OF 9 DATE: 20th NOV '22

JBS



CONTOUR INTERVAL OF 0.200m
HEIGHT DATUM IS AHD VIDE PSM 6627/14902 RL = 332.550m
CO-ORDINATE DATUM IS MGA 2020 ZONE 54
SCALE FACTOR = 1.0000620
REFER TO CT FOR EASEMENT DETAILS
BOUNDARIES ARE SHOWN FOR PLOT PURPOSES ONLY

NS = NATURAL SURFACE
EB = EDGE OF BITUMEN
CL = CENTRELINE
ES = EDGE OF SHOULDER
FL = FLOOR LEVEL

LEGEND
- SURVEY STATION
- BENCH MARK
- FLOOR LEVEL
- LIGHT POLE
- SEWER PIT
- FIRE PLUG / STOP VALVE
- TAP
- BOREHOLE
- ETSA CONN
- PEG
- METAL PIN
- TELSTRA PIT
- STOBIE

LINED PEDESTRIAN CROSSING

MULCHED GARDEN BEDS WITH SHRUBS AND SMALL TREES

INDICATIVE LANDSCAPING SCHEDULE:

1. LEPTOSPERMUM LANIGERUM 'SILKY TEA-TREE'
2. ACACIA PYCNANTHA 'GOLDEN WATTLE'
3. SCAEVOLA ALBIDA 'PALE FAN-FLOWER'
4. AGAPANTHUS 'NAKED LADY'
5. COLEONEMA ALUUM - WHITE FLOWER DIOSMA
6. MYOPORUM PARVIFOLIUM 'CREEPING BOOBIALLA' GROUND COVER
7. OPHIOOOGON PLANISCAPUS NIGRESCENS 'BLACK MONDO GRASS'
8. ORNAMENTAL PEAR
9. ORNAMENTAL PLUMBS

NOTE - A TREE WELL AND ROOT BARRIER IS REQUIRED TO AVOID FUTURE PAVEMENT/ASPHALT DAMAGE TO LANDSCAPING WHERE REQUIRED

SITE PLAN
1 : 500

FOOTPATHS AROUND BUILDINGS

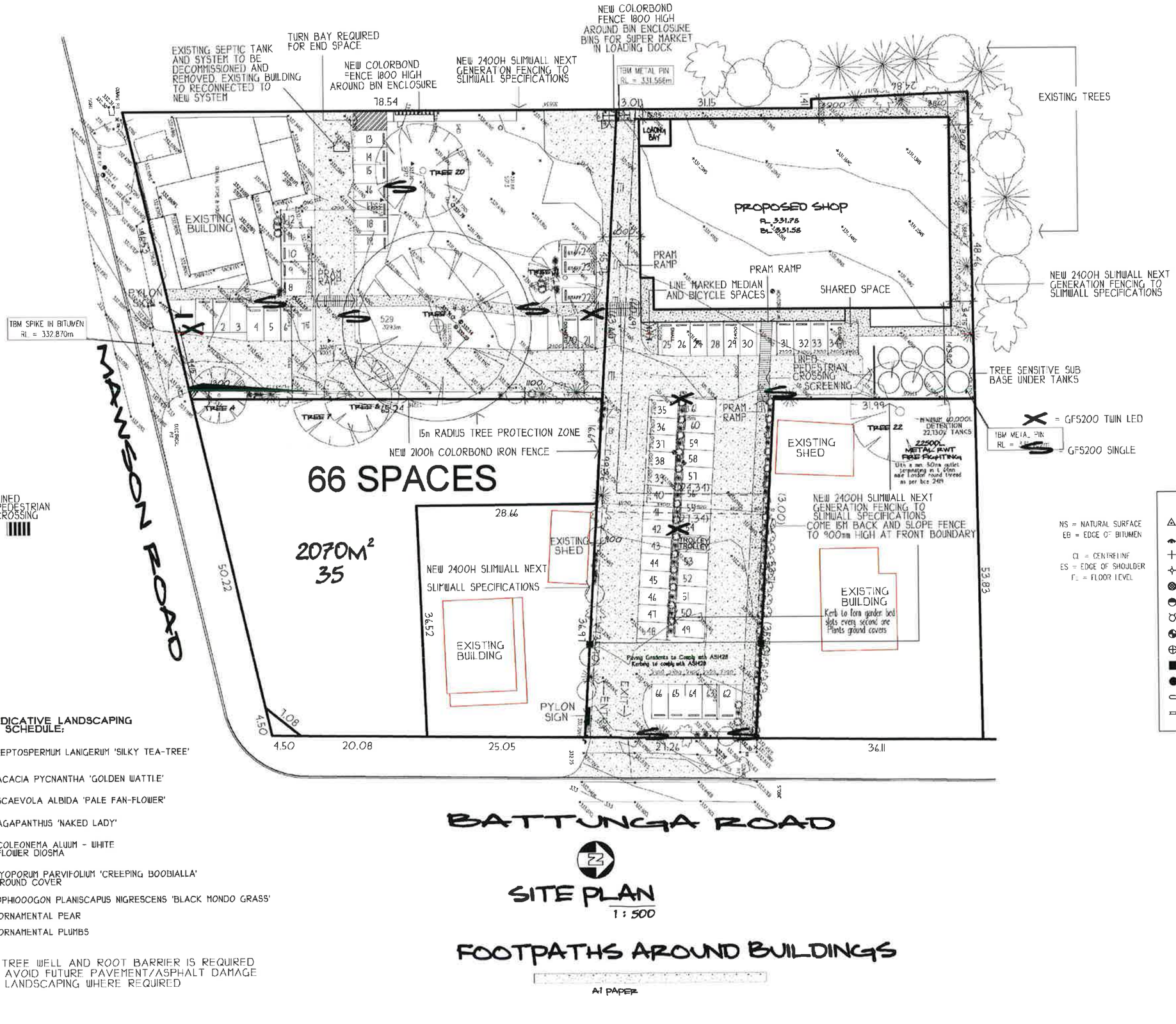
A1 PAPER

APPROVED PLAN

PROPOSED SHOPS
— KEVJOHN PTY LTD
— 5 BATTUNGA RD & 28 MANSON RD
MEADOWS

SHEET: 5 OF 9
DATE: 20th NOV '22

JBurgess



SITE PLAN
1 : 500

INDICATIVE LANDSCAPING SCHEDULE:

1. LEPTOSPERMUM LANIGERUM 'SILKY TEA-TREE'
2. ACACIA PYCNANTHA 'GOLDEN WATTLE'
3. SCAEVOLA ALBIDA 'PALE FAN-FLOWER'
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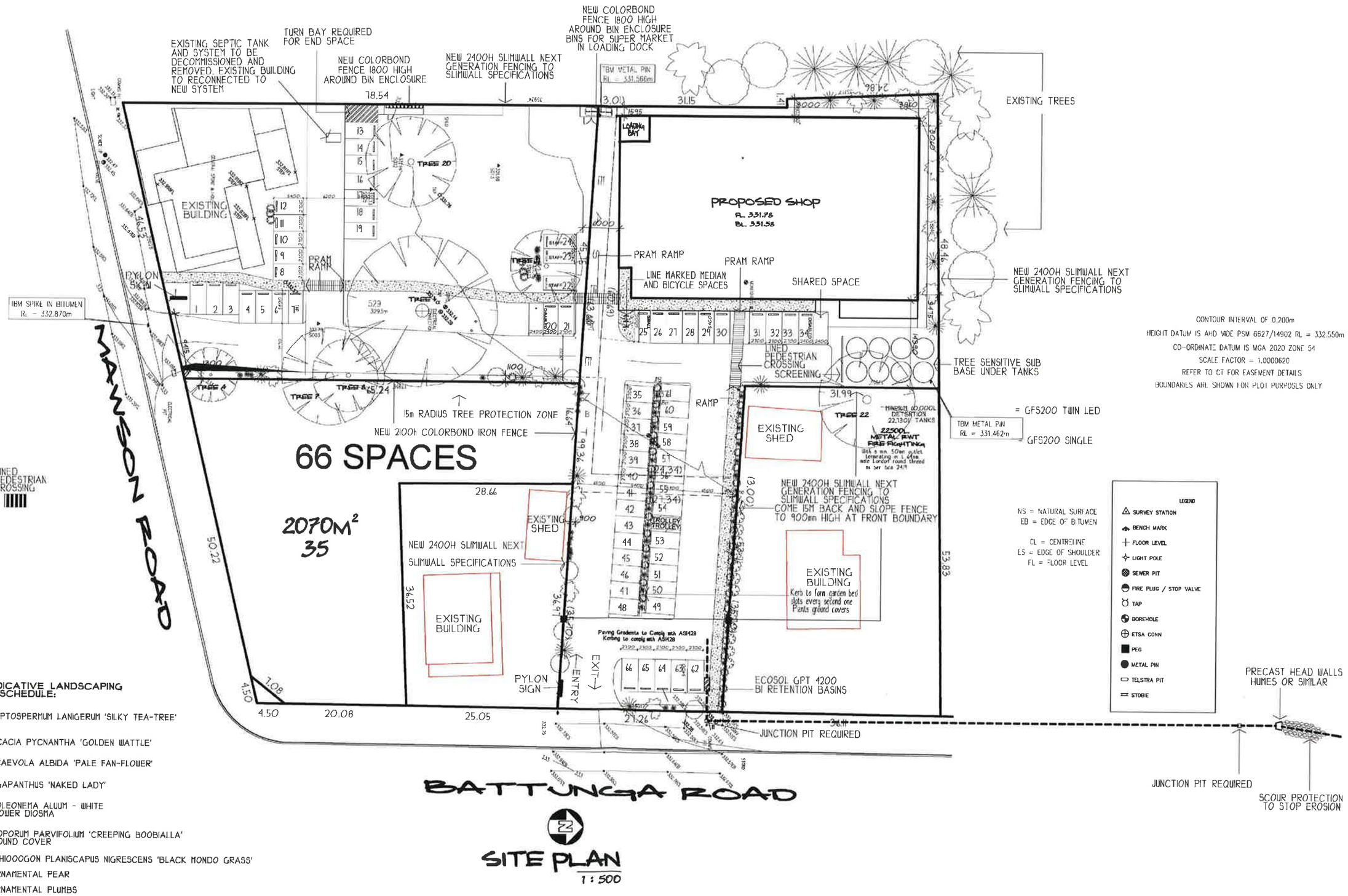
9. ORNAMENTAL PLUMBS

NOTE - A TREE WELL AND ROOT BARRIER IS REQUIRED TO AVOID FUTURE PAVEMENT/ASPHALT DAMAGE TO LANDSCAPING WHERE REQUIRED

FOOTPATHS AROUND BUILDINGS

A1 PAPER

APPROVED PLAN
PROPOSED SHOPS
for KEVJOHN PTY LTD
at 6 BATTUNGA RD 28 MANSON RD
MEADOWS
SHEET: 6 OF 9
DATE: 20th NOV '22
JB design



INDICATIVE LANDSCAPING SCHEDULE:

1. LEPTOSPERMUM LANIGERUM 'SILKY TEA-TREE'
2. ACACIA PYCNANTHA 'GOLDEN WATTLE'
3. SCAEVOLA ALBIDA 'PALE FAN-FLOWER'
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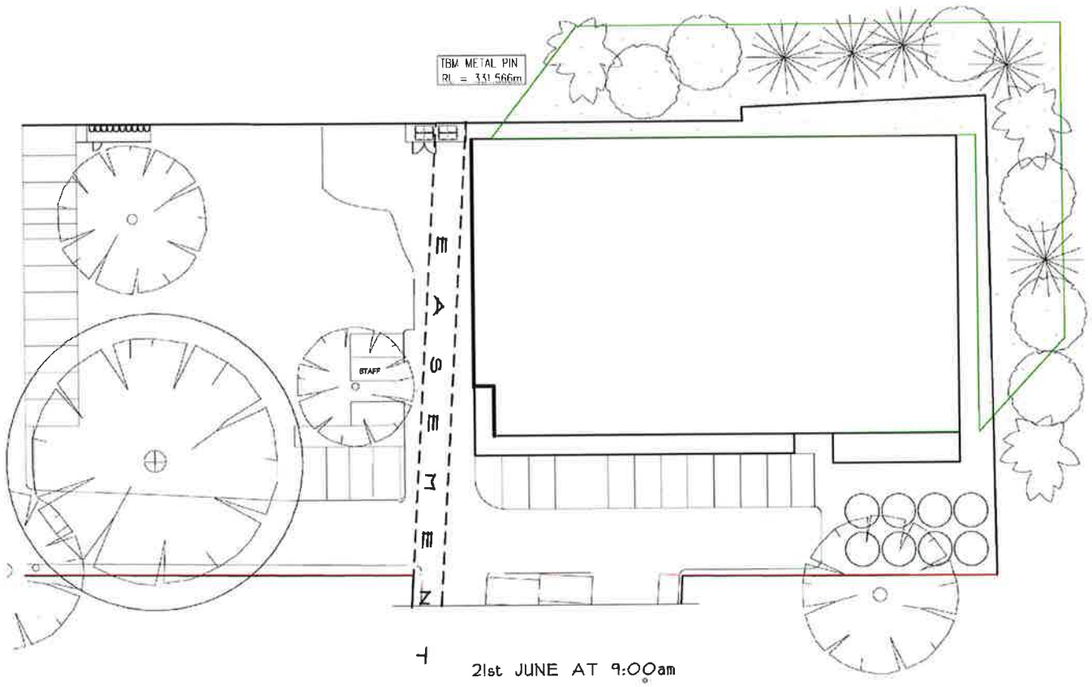
9. ORNAMENTAL PLUMBS

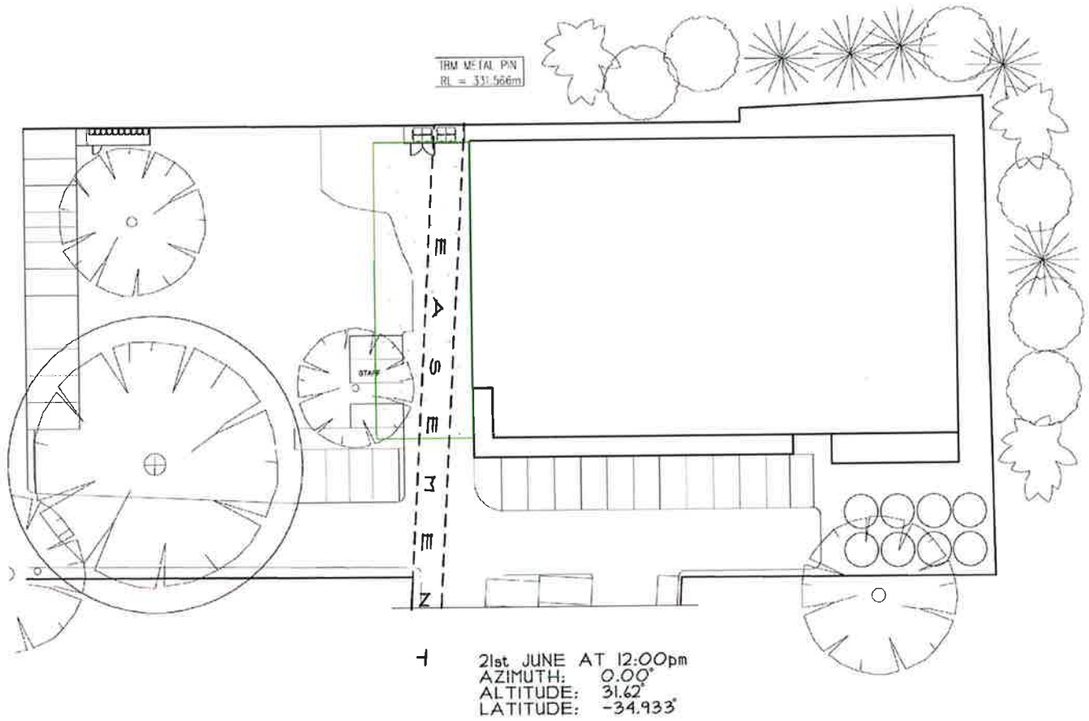
NOTE - A TREE WELL AND ROOT BARRIER IS REQUIRED TO AVOID FUTURE PAVEMENT/ASPHALT DAMAGE TO LANDSCAPING WHERE REQUIRED

SITE PLAN
1 : 500

A-1 PAPER

APPROVED PLAN
PROPOSED SHOPS
no KEVJOHN PTY LTD
at 8 BATTUNGA RD 38 MAWSON RD
MEADOWS
SHEET: 7 OF 9
DATE: 20th NOV '22
JBurgess

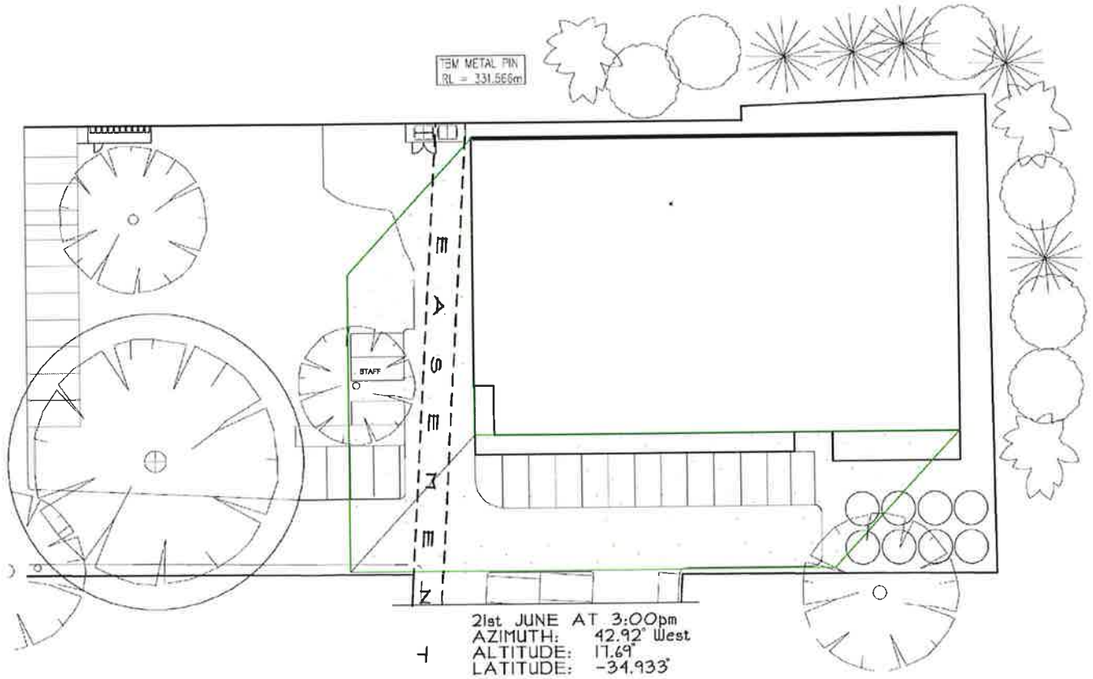




THE FOLLOWING SUNSHADE DETAILS ARE DERIVED BY THE SUN PATH DIAGRAMS PROVIDED BY THE AUSTRALIAN NATIONAL UNIVERSITY IN CANBERRA ACT.

SUN POSITION ANGLES
FOR: MEADOWS
SOUTH AUSTRALIA
LATITUDE: -35.180

DATE	TIME	AZIMUTH ANGLE (degrees)	ALTITUDE ANGLE (degrees)	LENGTH OF SHADOW (Xm) x Building Height m.
WINTER SOLSTICE JUN 21st	9.00am	42.92deg.E	17.69deg	3.13m
	12.00pm	0.00deg	31.62deg	1.62m
	3.00pm	42.92deg.W	17.69deg	3.13m



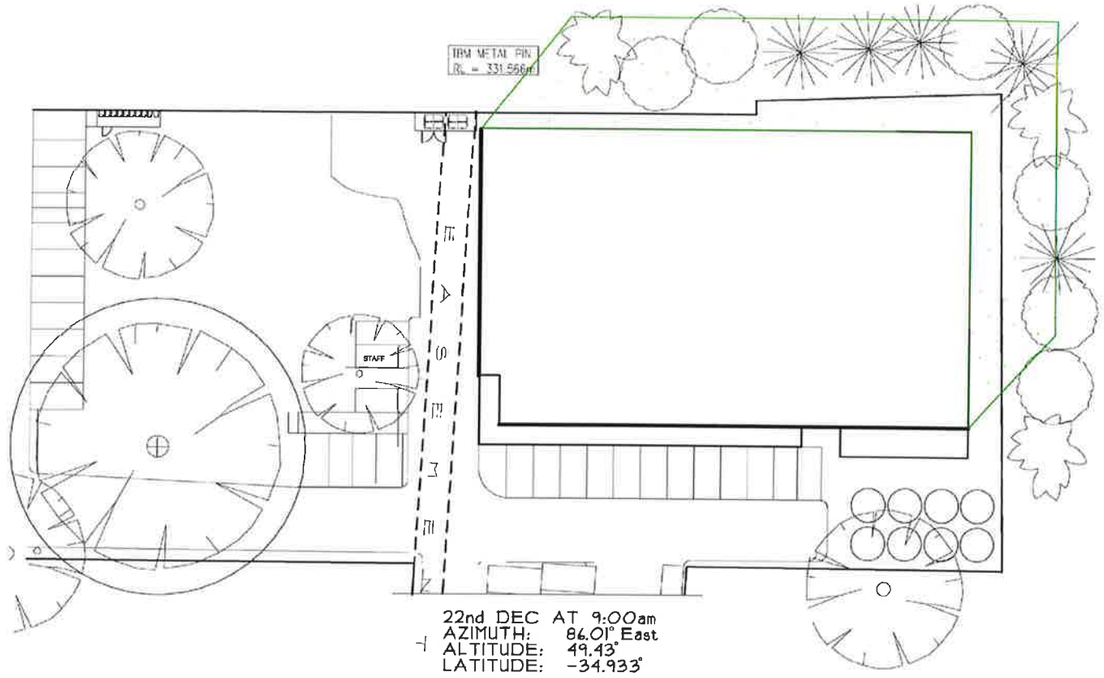
A1 PAPER

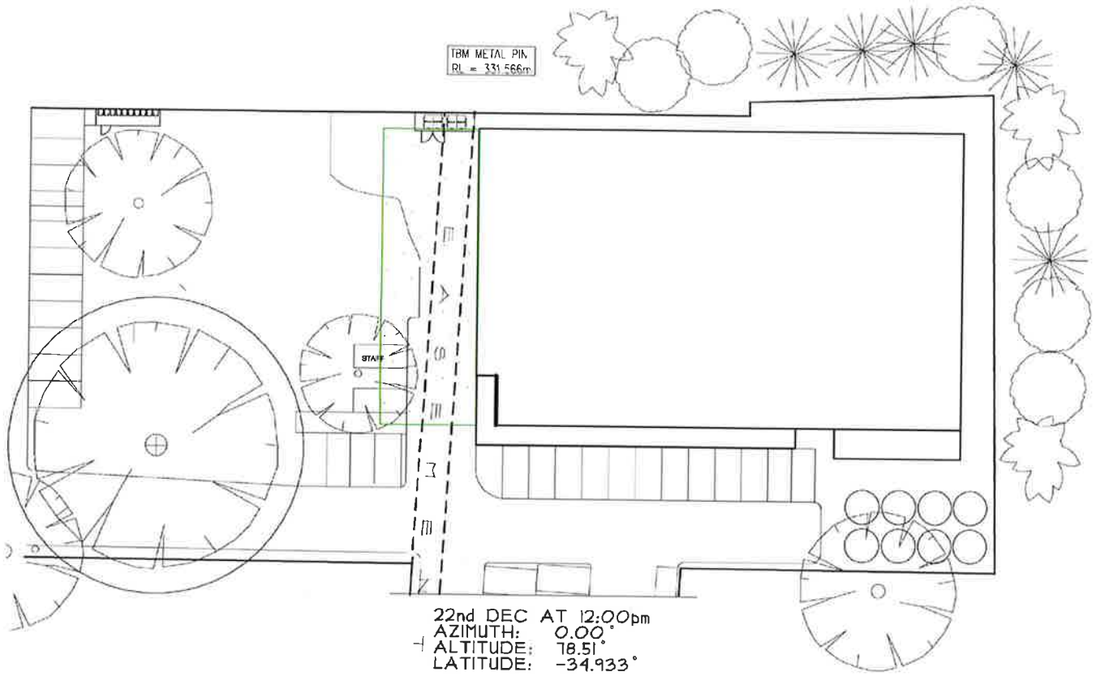
APPROVED PLAN

PROPOSED SHOPS
for KEVJOHN PTY.LTD
at 5 BUTTUMBA RD & MAHROH RD
MEADOWS

SHEET: 8 OF 9
DATE: 20th NOV '22

JBurgess

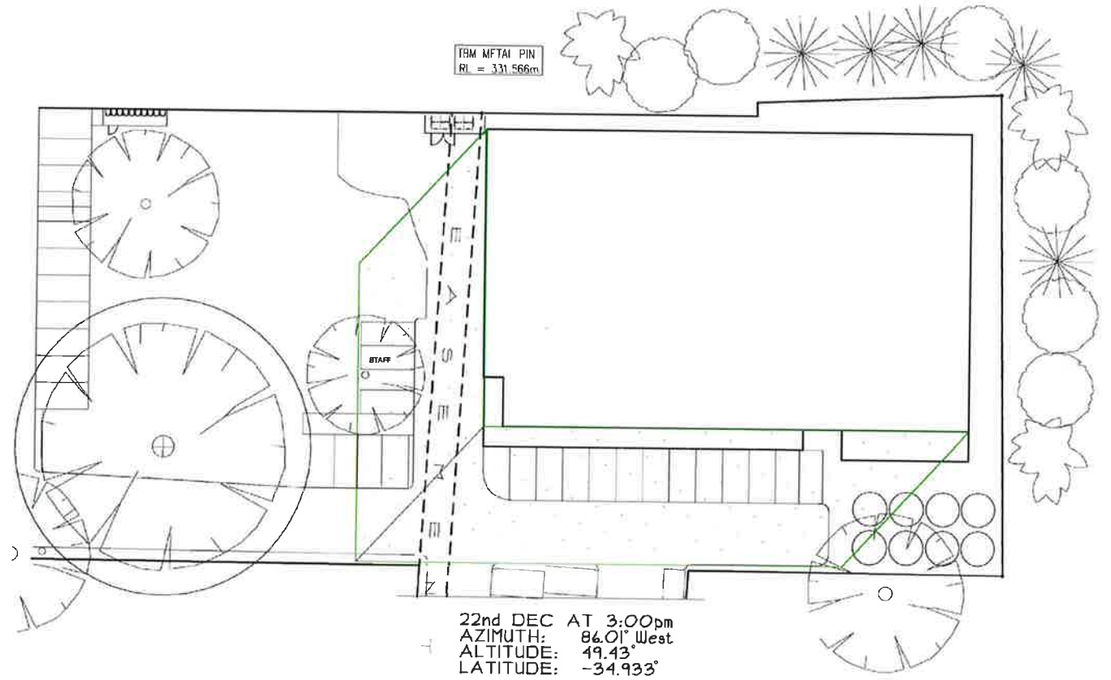




THE FOLLOWING SUNSHADE DETAILS ARE DERIVED BY THE SUN PATH DIAGRAMS PROVIDED BY THE AUSTRALIAN NATIONAL UNIVERSITY IN CANBERRA ACT.

SUN POSITION ANGLES
FOR: MEADOWS
SOUTH AUSTRALIA
LATITUDE: -35.180

DATE	TIME	AZIMUTH ANGLE (degrees)	ALTITUDE ANGLE (degrees)	LENGTH OF SHADOW (Xm) x Building Height m.
SUMMER SOLSTICE DEC 22nd	9.00am	86.01deg.E	49.43deg	0.85m
	12.00pm	0.01deg.E	78.51deg	0.20m
	3.00pm	86.01deg.W	49.43deg	0.85m



A1 PAPER

APPROVED PLAN

PROPOSED SHOPS
for KEVJOHN PTY.LTD
at 33, BUTTUSS RD & 33 MAWSON RD
MEADOWS

SHEET: 9 OF 9
DATE: 20th NOV '22

MEADOWS
GENERAL STORE
ANTHONYDONATOARCHITECTS

MEADOWS
GENERAL STORE
HAMPSON
CENTRAL
MEADOWS
CENTRAL
ANTHONYDONATOARCHITECTS

HARRISON CENTRAL
HARRISON CENTRAL
ANTHONYDONATOARCHITECTS
Suite 5/39 Fullarton Road | Kent Town SA 5067
t. 08 8364 6688 | f. 08 8364 5355 | www.adarchitects.com.au

ANTHONYDONATOARCHITECTS
Suite 3/36 Fullarton Road | Kent Town SA 5067
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STATEMENT OF EFFECT

Prepared for

Kevjohn Pty Ltd

Proposed shops and associated car parking, 33 Mawson Road and 5 Battunga Road, Meadows (Development Application 580/514/21)

Prepared by

C L Rowe & Associates Pty Ltd
Urban and Regional Planning Consultants

23 May 2022

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Goolwa SA 5214

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C L Rowe
& Associates

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1. INTRODUCTION

This "Statement of Effect" relates to the proposal by Kevjohn Pty Ltd to construct a shop (supermarket) with associated car parking, landscaping and fencing, at number 33 Mawson Road, and number 5 Battunga Road, Meadows.

According to Map MtB/34 of the Mount Barker District Council Development Plan (consolidated 20 August 2020), the subject land lies within the Mixed Use Zone; at the interface with the Deferred Urban and Local Centre zones. The proposed development constitutes a non-complying form of development within the Mixed Use Zone by virtue of the "Procedural Matters" which identifies a "shop or group of shops" which have a gross leasable area of 250m^2 or more as a non-complying development.

This "Statement of Effect" has been prepared pursuant to the provisions of Regulation 17(4) of the Development Regulations 2008. In accordance with the requirements of Regulation 17(5), the statement contains:

- a description of the nature of the development and the nature of the locality;
- a statement as to the provisions of the Development Plan which are relevant to the assessment of the proposed development;
- an assessment of the extent to which the proposed development complies with the provisions of the Development Plan; and
- an assessment of the expected social, economic and environmental effects of the development on its locality.

2. SUBJECT LAND AND LOCALITY

The subject land comprises allotment 529 (F5444), number 33 Mawson Road, Meadows; and allotment 537 (F18522), number 5 Battunga Road, Meadows, these being the allotments to which Certificates of Title Volume 5222 Folio 619 and Volume 5067 Folio 654 refer (respectively).

The site of the proposed development:

- is irregular in shape;
- is approximately 7,428.52m^2 in total area;
- has road frontage of 46.53 metres to Mawson Road and 27.26 metres to Battunga Road;
- has existing access/egress points on both Mawson and Battunga Roads;
- exhibits a shop ("Meadows Mini Mart"/newsagency) and a residence in a long existing single-storey building (masonry construction with corrugated iron roofing and "bull nose" verandahs), together with associated garden areas (allotment 529);
- contains two (2) long existing bores; and
- generally incorporates a cleared and relatively level vacant allotment (allotment 537).

It is understood that the land at number 33 Mawson Road has been utilised as a shop/dwelling (with associated private open space) for many years, whilst the property at number 5 Battunga Road appears to have been utilised for residential purposes (i.e. a single detached dwelling), although all buildings were demolished approximately five (5) years ago.

The current use and configuration of the subject land are depicted in Aerial photograph 1.

Aerial photograph 1: Subject land.

Aerial photograph 2: Subject land and locality.

The immediate locality (refer Aerial photograph 2) incorporates a miscellany of established land uses, including single storey detached dwellings (of differing designs and ages) on individual allotments of varying sizes; a petrol filling station/motor repair station; offices/consulting rooms; a shop/café; a shop and dwelling (Meadows Mini Mart); a hotel; a hardware and fodder store; a veterinary clinic; and a "crash repair" business (refer Photographs 1 – 9).

Overall the terrain is relatively level; and the immediate locality is considered to exhibit a mixed commercial/residential character which is typical of many long-established small townships.

Photograph 1: Existing shop/dwelling, 33 Mawson Road

Photograph 2: Existing petrol filling station, 35 Mawson Road

Photograph 3: Petrol filling station/crash repairer, 35 Mawson Road

Photograph 4: Hotel, 32 Mawson Road

Photograph 5: Hardware and fodder store, 30 Mawson Road

Photograph 6: Office and shop/cafe, 34 Mawson Road

Photograph 7: Dwelling, 3 Battunga Road

Photograph 8: Dwelling, 7 Battunga Road

Photograph 9: Veterinary clinic, 2 Battunga Road

3. PROPOSED DEVELOPMENT

The applicant company is seeking consent to construct a single-storey supermarket (1,470m^2 in floor area) upon the subject land. It is understood that the proposed supermarket is to be operated as a Foodland or IGA store under the management of a highly experienced company which operates/manages a significant number of supermarkets elsewhere in regional South Australia.

The proposed development will incorporate:

- the construction of the proposed supermarket building (including the associated loading dock and plant/pump room);
- the development of a sealed car parking area which will provide eighty-one (81) car parking spaces and two-way access/egress points on both Mawson Road and Battunga Road;
- the decommissioning of the two existing bores;
- the provision of bicycle parking and pedestrian pathways;
- the provision of rainwater tanks adjacent the northern property boundary to retain/provide a minimum of 60,000 litres of potable water and 22,500 litres of water specifically designated for firefighting purposes;
- the installation of wastewater and stormwater management systems;
- landscaping;
- the erection of a new 2.4 metre high acoustic fencing ("Slim Wall" or similar product) and/or 2.1 metre high "colorbond" fencing along the property boundaries; and
- three (3) illuminated pylon signs (5.35 metres in height and 1.5 metres wide), two at the Mawson Road frontage and one at the Battunga Road entry.

The proposed supermarket building will:

- be approximately 49.36 metres long and 30.0 metres wide;
- have a pitched roof (9°) with gable ends presenting at the northern and southern frontages;
- be approximately 5.25 metres high to the top of the parapet wall and 7.04 metres high (to the top of the roof line); and
- be constructed of "tilt-up" concrete walls ("Evening Haze" in colour) and "Colorbond" roof cladding ("Surf Mist" in colour). "Colorbond" trim around the proposed building and the loading dock, as well as the loading dock security door, will be "Mangrove" in colour.

The southern wall of the supermarket building will exhibit a stone feature (e.g. "stick on" Limestone panels) within a hardwood timber frame.

Evening Haze

Surf Mist

Mangrove

Indicative stone wall feature

Public access to the supermarket is to be gained via automatic doors which are to be located in the eastern frontage, towards the south-eastern corner of the proposed building. Part (30.0 metres) of the eastern façade will comprise full-height fixed glass windows and an attached verandah (which will provide some protection from the weather at the supermarket entrance).

A pump room (9.0 metres x 3.0 metres) is to be located at the northern end of the eastern wall of the supermarket; and an undercover loading dock (15.685 metres x 6.0 metres) is located at the south-western corner of the supermarket building. All plant will be located at ground level, adjacent the proposed building.

The hours of operation for the proposed supermarket are likely to be between 7.00 am to 9.00pm, seven (7) days a week. Deliveries and rubbish collection will be between 7.00am and 10.00pm, Monday to Friday; and 7.00am to 5.00pm Saturday and Sunday.

It is intended that the external signage will be provided to the proposed supermarket, and pylon signs will be erected at each of the proposed site access/egress points so as to identify the retail tenants, as well as at the south-western corner of the site. The signage to be affixed to the proposed building will be the subject of a separate development application.

The small open plaza to the south of the proposed supermarket will incorporate an open grassed area; the existing large Manna gum tree; and some outdoor furniture. This area also has the potential to be developed to accommodate some additional small shops at some time in the future (which will require another development application).

The existing shop/dwelling which fronts Mawson Road is to be retained in its entirety, although a part of the associated rear yard area is incorporated within the proposed on-site car parking area. The existing "shop" will be retained but the current residential land use component will cease prior to the commencement of the construction of the proposed development. Further consideration will be given to the future use of this part of the building at a later time, with potential land use alternatives being offices, consulting rooms, a café and/or another shop. Any future change in land use will be the subject of a separate development application and will share the proposed carparking arrangements.

4. PLANNING ASSESSMENT

According to Map MtB/34 of the Mount Barker District Council Development Plan (consolidated 20 August 2020), the subject land lies within the Mixed Use Zone; at the interface with the Deferred Urban and Local Centre Zones.

The following provisions of the Development Plan are considered to be the relevant (to varying degrees) in respect to the assessment of the subject proposal.

Mixed Use Zone:	Objectives 1, 2, 3 and 4 Principles of Development Control 1, 2, 4, 5, 9, 10, 11, 12, 15 and 16.
Local Centre Zone:	Objectives 1 and 2. Principles of Development Control 1 and 4.
Deferred Urban Zone:	Objectives. 3 and 4. Principle of Development Control 3.
Centre and Retail Development:	Objectives 1, 2, 3, 5 and 6. Principles of Development Control: 1, 2, 3, 7, 9 and 12.

Design and Appearance:	Objective 1. Principles of Development Control 1, 2, 3, 4, 7, 9, 12, 13, 14, 15, 16, 18, 20 and 21.
Hazards:	Objectives 1, 2, 4, 8, 9, 10 and 11. Principles of Development Control 1, 2, 4, 5, 7, 9, 10, 13 and 16.
Heritage:	Objectives 1, 2 and 3. Principles of Development Control 1, 7 and 11.
Historic Conservation Area:	Objectives 1, 2, 3 and 4.
Infrastructure:	Objectives 1, 2, 4, 8, 9, 10 and 11. Principles of Development Control 1, 2, 4 and 6.
Interface between Two Zones:	Objectives 1, 2 and 3. Principles of Development Control 1, 2, 3, 5, 6, 7 and 22.
Landscaping, Fences and Walls:	Objectives 1 and 2. Principles of Development Control 1, 2, 3, 5 and 6.
Orderly and Sustainable Development:	Objectives 1, 2, 3 and 7. Principles of Development Control 1, 3, 7, 9 and 12.
Regulated Trees:	Objectives 1 and 2. Principles of Development Control 1, 2 and 3.
Significant Trees:	Objective 2. Principles of Development Control 1, 2, 3, 4, 5, 6, 7 and 8.
Siting and Visibility:	Principles of Development Control 1, 2, 5, 9 and 10.
Transportation and Access:	Objective 2. Principles of Development Control 5, 6, 8, 19, 25, 26, 29, 30, 33, 34, 36, 39, 41, 42, 45, 46, 47, 52 and 53.
Waste:	Objective 1. Principles of Development Control 1, 2, 3, 5, 9, 11 and 14.

Our comments and opinions, as they relate to the most relevant of the aforementioned provisions of the Development Plan, follow. For ease of presentation, they have been provided under key issue headings.

4.1 Mixed Use Zone

Objective 1:
A functional and diverse zone accommodating a mix of commercial, community, light industrial, residential, office and small-scale shop land uses.

Objective 2:
Development that minimises any adverse impacts upon the amenity of the locality within the zone.

According to the Mount Barker District Council Development, the township of Meadows contains only two zones in which shops are envisaged, these being the Mixed Use and Local Centre Zones.

The subject development proposal seeks to construct a shop (supermarket) within the Mixed Use Zone. The provisions of Objective 1 speak in favour of shops, the only questionable aspect being the scale of the proposed development. Regarding the latter, it is noted that:

- no zone provisions specifically speak against the development of a group of shops over 250m^2 within the Mixed Use Zone (but do specify that such a land use is subject to the non-complying assessment process);
- the provisions of the adjoining Local Centre Zone simply suggest that a group of shops should be no greater than 450m^2 (but do not deem such a land use to be "non-complying");
- the *Meadows Township Plan (Mount Barker District Council, October 2019)* speaks in favour of an anchor retail tenant within the township in the short-medium term by creating relevant policy conditions and support for the development of a supermarket in a main street locality; and
- the subject land now lies within the Suburban Business Zone under the Planning and Design Code (the Code), the provisions of which envisage/support a shop (supermarket) or group of shops of 1,000m^2 in floor area.

It is also noted that there are limited opportunities within the Mixed Use and Local Centre Zones for the development of a supermarket.

At the time of preparing this document only three (3) parcels of land were for sale within the Mixed Use and/or Local Centre Zones, all of which were 1,500m^2 or less in area. None of these allotments could accommodate even a small supermarket development, given the need for considerable off-street car parking and landscaping. In addition, it is noted that the two (2) allotments which lay within the Local Centre Zone (i.e. at numbers 42 and 70 Mawson Road) adjoined established residential land uses. As such, these locations may be less appropriate for shops given the potential impacts upon the residential character and/or amenity within the immediate locality.

Further, given the nature and character of the long established land uses within the Local Centre Zone, it is considered highly unlikely that multiple contiguous allotments could be acquired so as to establish an appropriately located and sized site to accommodate a supermarket.

Another consideration is the fact that the properties in proximity to the subject land exhibit a miscellany of land uses, probably by evolution rather than design. Such all-encompassing precincts are typical of the ad hoc development which tended to occur in small townships over many years, when any and all forms of commercial and/or industrial land use were generally established in and/or about the one area of a town. These existing precincts tended to be formally recognised with the advent of planning legislation in the 1970's.

The immediate locality exhibits a broad range of land uses which include several single-storey detached dwellings (of differing designs and ages) on individual allotments of varying sizes; a petrol filling station/motor repair station; a shop/dwelling (Meadows Mini Mart); a "crash repair" business; a veterinary clinic; a hotel; a shop/café; offices/consulting rooms; and a hardware and fodder store. Collectively, these land uses serve to establish a commercial character within the immediate locality.

Zonings and zone provisions aside, it is considered that the proposed development will complement the existing land uses within the locality; will be in keeping with the long established commercial character of the immediate locality; will provide convenient local and improved shopping options for the residents of Meadows and its environs; will expand the economic base of the township; and may afford economic benefits, including enhanced employment opportunities.

It is noted that the *Meadows Township Plan* anticipates sufficient future population growth to sustain a small-scale supermarket (i.e. approximately 500m^2), an assertion that was apparently confirmed by a retail analysis of the township which was undertaken for Council by URPS and Property and Advisory Pty Ltd in 2018. Interestingly, since the release of the Township Plan, the Code has come into effect, the provisions of which anticipate a shop or group of shops of up to 1,000m^2 in floor area in the now Suburban Business Zone. Further, the Code does not specify a maximum size of a shop or group of shops within the Suburban Business Zone or specifically speak against larger shopping proposals, but does indicate that shops or a group of shops over 1,000m^2 in floor area must be assessed as a "Restricted Development".

The estimated resident population of Meadows (and its surrounding district) was 1,943 in June 2020. This was an increase of 21.06% on the estimated population of 1,605 in June 2012. Further, according to the Meadows Township Plan, the population is likely to continue to grow to a projected 2,561 by 2036. This represents a further 31.8% increase over the next fourteen (14) years. This projected population increase will likely result from on-going residential infill development, and the development of the Deferred Urban land on the western edge of the township.

Collectively, all of the aforementioned suggests that the community of Meadows and its environs will be well served by a supermarket; the local community will continue to grow in number in the foreseeable future; the subject land is well suited, in terms of its size and location, to accommodate a modest supermarket development; and the proposed supermarket should afford reasonable economic benefits.

Objective 3:
The maintenance of an attractive northern entrance to the Meadows town centre.

The subject development proposal should have no detrimental impact upon the visual appeal of the entrance to the township. The subject land only has a 27.26 metre frontage to Battunga Road, and the proposed supermarket is to be located adjacent the western boundary of the subject land, approximately 70.0 metres from Battunga Road. Further. the site of the proposed supermarket building will be screened, to some degree, by the existing neighbouring residential land uses at numbers 3 and 7 Battunga Road, the petrol filling station (and associated activities) at the north-western corner of the intersection of Battunga and Meadows Roads; and the proposed landscaping.

Given the above, views of the proposed building by motorists in southbound vehicles along Battunga Road should be limited.

In addition, it is also considered that the properties along Battunga Road which directly adjoin the subject land do not exhibit high street appeal. This being the case, the proposed development, being new and contemporary in design, may serve to enhance the amenity and streetscape within the immediate locality.

Overall, it is difficult to envisage that the proposed development will have any adverse impact upon the visual amenity of the locality.

Objective 4:
Development that contributes to the desired character of the zone.

Principle of Development Control 6:
Development should not be undertaken unless it is consistent with the desired character for the zone

The "Desired Character" statement for the Mixed Use Zone speaks of establishing a wide range of low-impact light and service industrial activities; limited non-residential/retail development which is of a moderate scale and intensity resulting in a visually unobtrusive built form and no detrimental impact upon the retailing along the main street; and providing ongoing opportunities for local employment, home-based industry and commercial ventures, catering for local needs and passing traffic.

The immediate locality exhibits a mix of residential, commercial, industrial and retail land uses of varying design, physical standards and visual appeal. The subject development proposal should not only complement these existing uses, but should serve to enhance the visual appearance and amenity of the locality through the development of buildings of contemporary design. Further, whilst the proposed development may not be considered (by some) to be small in scale, it will primarily comprise a large open car park area (over 65+% of the site), much of which will be screened from view by existing neighbouring land uses and/or built form.

In addition, the proposed development will provide approximately fifty (50) on-going employment opportunities, as well as improved retail prospects for persons residing in the township and its surrounds, as well as for those who will pass through the township.

As for the economic viability and/or impacts of the proposed development, no specific Retail Demand and Impact Analysis has been undertaken at this time.

Notwithstanding this, it is noted that:

- there are no policies in the Development Plan that specifically require an assessment of the commercial merit of the subject development proposal, or its likely impacts upon any existing retailers/traders;
- according to the aforementioned *Meadows Township Plan,* a retail analysis undertaken by URPS and Property and Advisory Pty Ltd for Council (i.e. the Meadows Retail Study, May 2018) confirmed that a small-scale supermarket in Meadows could be possible in the short to medium term; and
- ultimately the market will dictate the economic viability of the proposed supermarket and the impacts thereof upon existing shops in the township of Meadows.

The *Meadows Township Plan* also recognises that: *"The township of Meadows is centered on Mawson and Battunga Roads with a concentration of commercial development at the junction of these two roads."* Whilst this is a statement of fact, it also could be construed to suggest that the land uses in proximity to the Battunga Road/Mawson Road intersection collectively comprise a pseudo "town centre". This being the case, the development of a supermarket, as proposed, would be well suited to such a precinct/locality.

Principle of Development Control 1:
The following forms of development are envisaged in the zone:
- *community facility*
- *community centre*
- *light industry*
- *service industry*
- *service trade premises*
- *store*
- *warehouse.*

It is acknowledged that the provisions of the cited Principle of Development Control could imply (by omission) that a shop or group of shops is not envisaged in the Mixed Use Zone. However, this position is considered to be at odds with the provisions of Objective 1 and Principle of Development Control 2.

Principle of Development Control 2:
Shop or retail development should not hinder the function of Main Road (or Old Princes Highway), Nairne or Mawson Road, Meadows and should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry.

Whilst there is no designated town centre, Mawson Road is generally encompassed within the Local Centre Zone and exhibits an assortment of small-scale commercial and retail businesses, as well as several churches and community services/facilities, all of which are interspersed amongst long-established residential development.

It is likely that some of the existing small businesses (e.g. the bakeries, cafés and hotel) are frequented regularly by local residents and the passing commuting and tourist traffic, whilst the remainder either provide goods and services on an intermittent basis to meet the general needs of the local community or tourists.

Currently, the day-to-day food and grocery requirements of local residents are primarily obtained from supermarkets and shops which are located in Mount Barker and Strathalbyn, these being approximately 17.5 kilometres and 19.0 kilometres (respectively) from Meadows.

The proposed supermarket will provide a conveniently located and readily accessible shopping alternative for the local residents, which should not only save the time, effort and expenses associated with trips to and from the aforementioned towns, but should also provide general benefits to the local community (e.g. approximately fifty (50) new employment opportunities).

Further, the proposed supermarket will provide the high volume, detached, self-serve style of shopping which is currently experienced by local residents at the existing supermarkets which are located in other larger townships. By contrast, the existing small-scale businesses within the township will likely continue to connect with their customers (local and transient) on a more personal and engaging level. This point of difference should enable the existing local businesses to maintain their customer base and economic viability.

Principle of Development Control 5:
Development listed as non-complying is generally inappropriate.

The subject development proposal constitutes a non-complying form of development within the Mixed Use Zone because of its scale (i.e. a floor area greater than 250m^2), not because of the proposed form of land use. Interestingly, under the Code, the subject land is now located within the Suburban Business Zone, wherein the "Restricted Development Classification" only relates to a shop or group of shops which are greater than 1,000m^2 (gross leasable floor area).

Further, it is considered that there is a strong argument to support the assertion that the subject development proposal is an appropriate alternative form and scale of land use within the immediate locality, given the location of the subject land; the character of the locality; the history of the site; the existing retail, commercial and industrial land uses within the locality; and the existence of residential development within close proximity.

Principle of Development Control 9:
Non-residential development that is visually prominent from Battunga Road should:

(a) on an allotment where a dwelling already exists, maintain the existing dwelling's facade or incorporate alterations or additions that have a dwelling-like appearance in their shape, form, scale and materials
(b) in the case of new built form, adopt a setback from Battunga Road at least equal to that of existing dwellings in the immediate locality and be designed to complement adjacent dwellings in terms of bulk, scale and external materials
(c) incorporate attractive landscaping adjacent to the edge of the Battunga Road reserve (except for the positioning of ingress/egress points) with the landscaping bed being at least 3 metres wide
(d) screen car parking areas visible from Battunga Road with an appropriate combination of landscaping and fencing.

The proposed development is retail in nature. To mitigate the potential of any visual impact when viewed from Battunga Road, the proposed supermarket has been sited in the north-western corner of the subject land, approximately 68.0 metres from the alignment of Battunga Road and between (approximately) 72.0 – 76.0 metres from the alignment of Mawson Road. In addition, the proposed supermarket building will be screened (to some degree) from view by the existing residential development at numbers 3 and 7 Battunga Road; the proposed new perimeter fencing; and the landscaping to be undertaken within the proposed car park area.

Principle of Development Control 10:
The bulk and scale of development should be compatible with adjoining land uses.

It is acknowledged that the proposed supermarket, with a floor area of approximately 1,470m^2, will likely be the largest retail/commercial building in the Mixed Use Zone. However, supermarkets of the size proposed are not uncommon in regional towns (e.g. Littlehampton - 1,220m^2; Kapunda - 1,490m^2; Stirling - 2,000m^2 (one of three supermarkets); Woodside - 1,700m^2; Nairne - 1,400m; Ardrossan - 1,400m^2; Wallaroo - 2,000m^2; Freeling - 1,255m^2; and Williamstown – 1,450m^2).

It is also noted that, under the provisions of the Code (Suburban Business Zone), a shop or group of shops up to 1,000m^2 in floor area are now anticipated forms of development within the immediate locality.

Further, the proposed building is to be discretely located behind other existing land uses and buildings; will have limited frontage to, and viewing from, Mawson and Battunga Roads; will be single-storey in design; will be well setback from both Mawson and Battunga Roads; and will be located to the rear of a landscaped car parking areas. In addition, the immediate locality exhibits the existing hotel, hardware/fodder store and petrol filling station complex (which includes a motor repair station and a crash repair business), all of which exhibit built form of a reasonable scale. These existing land uses should serve to reduce the visual prominence of the proposed supermarket building.

Principle of Development Control 11:
Allotments should have a maximum site coverage of no more than 40 per cent.

The proposed supermarket (including the verandah, loading dock and plant room), and the existing shop/dwelling will have a collective floor area of approximately 2,065.76m^2. This equates to a site coverage of approximately 27.78%.

Principle of Development Control 12:
Non-residential buildings and domestic structures should:
(a) not be situated within 600 millimetres of the allotment boundary
(b) be no more than 5 metres in height
(c) be sited outside the 1-in-100-year average return flood event area
(d) have external cladding of low reflective materials

In regard to the cited Principle of Development Control, it is noted that the proposed building will be located a minimum of 1.595 metres from any property boundary; will be single-storey in design (i.e. approximately 7.0 metres in height); and will be constructed of low reflective material. Further, whilst the subject land is located near a small watercourse, the limited available information (i.e. the Meadows Township Flood Study 1992) suggests that there is little likelihood of impact by a 1 in 100 year average return flood event.

Principle of Development Control 15:
The operation of non-residential uses, including the freight loading and deliveries should be restricted to the hours between 8.00 am to 6.00 pm during Monday to Saturday and should be restricted to the hours between 10.00 am to 6.00 pm on Sunday.

The proposed supermarket is likely to trade between the hours of 7.30am and 9.00pm every day. These hours of operation are not extraordinary for the form of development proposed; and are the same as the trading hours of many supermarkets which are located in some of the smaller townships within the Adelaide Hills (e.g. Foodland - Littlehampton; Foodland - Balhannah; Foodland - Birdwood; Foodland - Lobethal; Foodland - Nairne; and Foodland - Woodside).

It is also noted that Environmental Noise Assessment of the proposed supermarket, as undertaken by Sonus Pty Ltd (Acoustic Engineer) assumed that the supermarket would operate between the hours of 7.00am – 10.00pm, and recommended that deliveries to the site only occur during those hours.

Principle of Development Control 16:
Car parking areas should be provided at the rear or side of premises.

The proposed supermarket building is located so as to achieve maximum setback from the two road frontages. As such, the proposed on-site car parking is spread across the subject land but is, in the main, screened from view by existing neighbouring land uses.

4.2 Local Centre Zone

As the subject land is located at the interface with the Local Centre Zone, it is considered appropriate that the proposed development be assessed, in general, against the primary provisions and intent of the Local Centre Zone.

Objective 1:
A centre accommodating small-scale convenience shopping, office, medical and community facilities to serve the local community.

Objective 2:
A centre characterised by traditional corner stores or small groups of shops located within easy walking distance of the population they serve.

Principle of Development Control 1:
The following forms of development are envisaged in the zone:
- *shop or group of shops with a maximum gross leasable floor area in the order of 450 square metres .....*

Principle of Development Control 4:
Development should not be undertaken unless it is consistent with the desired character for the zone.

It is noted that the cited provisions of the Local Centre Zone, and the "Desired Character" statement for the zone, generally seek small scale shopping (in the order of 450m^2) and service uses which meet the day-to-day needs of residents.

The subject development proposal seeks to establish a supermarket of modest size which will complement, and be a logical extension of, the existing cluster of commercial, industrial, and retail land uses which lay at the intersection of Mawson and Battunga Roads. Apart from the scale of the proposed development, the proposed land use is considered to be consistent with the intent and desired character of the Local Centre Zone.

4.3 Deferred Urban Zone

As the subject land is also located at the interface with the Deferred Urban Zone, it is also considered appropriate that the proposed development be assessed, in general, against any relevant provisions thereof.

Objective 3:
Prevention of development likely to be incompatible with long-term urban development, or likely to be detrimental to the orderly and efficient servicing and conversion of the land for urban use.

Objective 4:
Development that contributes to the desired character of the zone.
Principle of Development Control 5:
Development should not be undertaken unless it is consistent with the desired character for the zone.

Principle of Development Control 3:
Development should not be undertaken if it will be prejudicial to the orderly and economic development of future urban land uses within the zone.

A Deferred Urban Zone lies immediately to the west of the subject land. This zone incorporates approximately 18.8 hectares of land which generally exhibits detached dwellings on allotments of approximately 1,500m^2 in area and/or rural living allotments which appear to be utilised for grazing (on a small scale) or horse keeping.

The "Desired Character" statement for the zone seeks the continued use of the land for primary production, but recognises that the land is "earmarked" for the future development of residential land uses (our interpretation).

The subject development proposal should have no direct and/or extraordinary impacts beyond the western boundary of the subject land. Whilst the proposed supermarket will be located adjacent the western property boundary, the focus of the proposed land use and associated activities will be to the east.

Further, the proposed land use is a form of development which will not produce any hazardous waste material or excessive noise, and all associated stormwater and wastewater will be managed by conventional engineering means.

It is also noted that supermarkets/shopping complexes of all sizes have long co-existed with residential development throughout the metropolitan and outer-metropolitan areas, as well as within regional townships.

As for the proposed development, the design, scale and location thereof are considered to be nothing out of the norm and, as such, little if any impacts are anticipated beyond the bounds of the subject site.

In addition, the proposed supermarket will service the local community, including any owners/occupiers of future additional residential allotments to the west. If and when the "Deferred Urban" land to the west of the subject land is developed for residential purposes, the proponents thereof will be able to take into account the existence of the supermarket (and the associated activities and/or impacts) when determining the layout of future allotments, roadways and public open space.

In short, it is considered that the subject development proposal should have no significant or extraordinary impacts upon the future use and/or development of the Deferred Urban Zone to the west of the subject land.

4.4 General Development Plan Provisions

4.4.1 Centres and Retail Development

Objective 1:
Shopping, administrative, cultural, community, entertainment, educational, religious and recreational facilities located in integrated centres.

Objective 2:
Centres that ensure rational, economic and convenient provision of goods and services and provide:
(a) a focus for community life
(b) safe, permeable, pleasant and accessible walking and cycling networks.

Principle of Development Control 1:
Development within centres should:
(a) integrate facilities within the zone
(b) allow for the multiple use of facilities and the sharing of utility spaces
(c) allow for the staging of development within the centre
(d) be integrated with public and community transport.

The subject development proposal seeks to establish a moderate-sized supermarket upon the subject land. Whilst not located in a designated "centre" zone, the immediate locality exhibits a miscellany of long-existing retail, commercial and industrial land uses which collectively give the appearance of a local centre or town centre precinct. The proposed development will complement this existing node of non-residential land uses.

Further, as previously suggested, the Local Centre Zone within the Meadows township affords little or no potential for the development of a supermarket, primarily because of the long-established mix of residential and non-residential land uses (and the character that has evolved); the size and configuration of the long-existing allotments; and the lack of appropriately sized/available land.

Quite simply, the purchase of a sufficient number of individual allotments within the Local Centre Zone so as to establish a site large enough to accommodate a supermarket would be an extremely difficult and expensive exercise, and would likely be detrimental to the economic viability of such a project. On the other hand, the subject land comprises two (2) large allotments, one of which has been vacant for five (5) or more years and the other exhibits a shop/dwelling (of heritage significance) which is to be retained.

Also, as previously stated, the subject land is currently zoned "Suburban Business" under the Code, the provisions of which anticipate shops or a group of shops four (4) times the size of that which is suggested to be appropriate under the Mixed Use Zone provisions. Something even greater in scale is not opposed within the Code, but must be assessed as "Restricted Development". This being the case, the current "Suburban Business" Zone provisions are considered to be conducive to the development of a small supermarket, and generally reflect the findings/recommendations of the *Meadows Township Plan,* although interestingly the current zone provisions envisage a larger supermarket than that promoted in the *Meadows Township Plan*.

Objective 3:
The provision of a safe pedestrian environment within centres which gives high priority to pedestrians and public transport.

It is considered that the subject site and surrounds currently offer poor pedestrian connectivity, given that the subject site is primarily undeveloped, and no formal footpaths have been developed along the adjacent road verges.

The proposed development has been designed so as to provide safe and convenient movement of pedestrians between Mawson Road and the proposed supermarket. In addition, like many supermarket/shopping developments, the proposed car park area will provide for the movement of pedestrians through the car park area by formalising and regulating the movement of flow of vehicles; providing unobstructed sight lines; and providing a level and sealed surface (thereby minimising trip hazards).

Objective 5:
Centres developed in accordance with a hierarchy based on function, so that each type of centre provides a proportion of the total requirement of goods and services commensurate with its role.

Objective 6:
The hierarchy of centres is as follows:
- *Regional Town Centre*
- *Neighbourhood Centre*
- *Local Centre.*

Principle of Development Control 9:
A shop or group of shops with a gross leaseable area of greater than 80 square metres should be located within a centre zone (except within the Residential Neighbourhood Zone).

The proposed development seeks to establish a small supermarket, albeit in the Mixed Use Zone rather than in the Local Centre Zone (now Local Activity Centre Zone) which lies directly across Mawson Road (approximately 20 metres to the south) and Battunga Road (approximately 10.0 metres to the east).

The proposed supermarket will meet the day-to-day food and grocery requirements of local residents, with all other needs to be met by shops and services primarily being provided in the regional centres of Mount Barker and Strathalbyn. This is consistent with the hierarchy and role of centres detailed in the cited Principles of Development Control.

Further, as previously stated, the *Meadows Township Plan* recognised that the township is centred on Mawson and Battunga Roads, with a concentration of commercial development at the junction of the two roads. This being the case, the establishment of a supermarket in the perceived informal "town centre" would be practical and logical, despite the requirements of the applicable zoning provisions.

Principle of Development Control 3:
Development within centres should provide:
(a) public spaces such as malls, plazas and courtyards
(b) street furniture, including lighting, signs, litter bins, seats and bollards, that is sited and designed to complement the desired character
(c) unobtrusive facilities for the storage and removal of waste materials
(d) public facilities including toilets, infant changing facilities for parents, seating, litter bins, telephones and community information board
(e) access for public transport and sheltered waiting areas for passengers
(f) lighting for pedestrian paths, buildings and associated areas
(g) a single landscaping theme
(h) safe and secure bicycle parking.

Whilst the subject land does not lay within a centre zone, the provisions of Principle of Development Control 3 provide general guidelines for the design of "centre" type development. It is noted that the proposed development incorporates all of the specified features (i.e. a plaza, street furniture, waste storage facilities, public toilets, sheltered waiting areas, external lighting, landscaping and bicycle parking facilities).

Principle of Development Control 7:
Centres should develop on one side of an arterial road or in one quadrant of an arterial road intersection.

Whilst the subject land has frontage to two secondary arterial roads, it is wholly located within the north-eastern quadrant of the intersection of the arterial roads, as per the requirements of Principle of Development Control 7.

Principle of Development Control 12:
A shop or group of shops located outside of zones that allow for retail development should:
(a) be of a size and type that will not hinder the development, function or viability of any centre zone
(b) not demonstrably lead to the physical deterioration of any designated centre
(c) be developed taking into consideration its effect on adjacent development.

The provisions of Principle of Development Control 12 indicate that a shop or group of shops can be developed outside of centre zones, provided they do not hinder the development, function and/or viability of an existing centre zone.

As previously stated, the *Meadows Township Plan* supported the development of a small-scale "anchor" supermarket in the main street locality, the viability of which was briefly addressed in the *Meadows Retail Study* (as prepared by Property and Advisory Pty Ltd in May 2018). The study indicated that the township contained approximately 2,150m^2 of retail floor space at the time, approximately 1,133m^2 (52.7%) of which was "food" related (i.e. the Mini-Mart, bakery/take-away shops and delicatessens), whilst the remainder accommodated "household goods" (e.g. chemist, hardware, newsagent, pet supplies and fodder); "personal and professional" services; and the post office.

Whilst the study did not specifically address the likely economic impacts of a supermarket development upon the existing traders within the township, it did indicate that there is a dearth of retail facilities within a convenient distance to Meadows; and the two closest towns (i.e. Echunga and Macclesfield) only had approximately 315m^2 of retail floorspace (in total).

The study also indicated that the township of Meadows is characterised by:

- a higher per capita income than surrounding rural areas and South Australia (on average);
- a relatively young population;
- a high percentage of dwelling owners/purchasers;
- very low unemployment;
- a concentration of households in the two highest income quintiles (within 5 kilometres of Meadows); and
- substantially higher total retail expenditure per household than the South Australian average.

In addition, the study suggested that any future supermarket may derive income from:

- a reduction in turn-over of the existing food-based retailers within the township;
- the convenience of the supermarket motivating some local households to divert expenditure currently escaping (in the main) to Mount Barker and Strathalbyn; and
- through traffic.

A retail analysis/impact study specifically relating to the proposed supermarket development, and the likely impacts thereof, has not been prepared at this time, primarily because most of the available demographic data still relates to the 2016 Census (which was a flawed process and, as such, the quality and accurateness of the data is questionable). Regardless, the data is now five (5) years old, and circumstances (including population growth; decentralized living trends; the general impact of Covid 19; increased housing demands; and working arrangements) have changed significantly, resulting in increased demands for land and dwellings in the regional and coastal areas.

It is also noted that:

- the planning provisions have been amended since the release of the *Meadows Township Plan* in October 2019;
- the current provisions under the Code allow for the development of a shop or group of shops of up to 1,000m^2 (or more subject to assessment as Restricted Development) upon the subject land, this being a significant increase over the 250m^2 espoused under the Mixed Use Zone; and
- there are IGA and/or Foodland supermarkets (of varying sizes) in sixty (60) or more regional townships across South Australia, many of which have similar or smaller populations than Meadows (e.g. Birdwood, Burra, Cleve, Crystal Brook, Jamestown, Kingston SE, Lameroo, Maitland, Meningie, Minlaton, Normanville, Peterborough, Pinnaroo, Robe, Sedan, Streaky Bay, Tailem Bend, Wudinna and Yorketown); and
- the aforementioned supermarkets seemingly operate without major negative impacts upon the local communities and/or other local retail/commercial activities.

4.4.2 Design and Appearance

Objective 1:
Development of a high architectural standard that responds to and reinforces positive aspects of the local environment and built form.

Principle of Development Control 1:
The design of a building may be of a contemporary nature and exhibit an innovative style provided the overall form is sympathetic to the scale of development in the locality and with the context of its setting with regard to shape, size, materials and colour.

Principle of Development Control 2:
Buildings should be designed and sited to avoid creating extensive areas of uninterrupted walling facing areas exposed to public view.

Principle of Development Control 3:
Buildings should be designed to reduce their visual bulk and provide visual interest through design elements such as:
(a) articulation
(b) colour and detailing
(c) small vertical and horizontal components
(d) design and placing of windows
(e) variations to facades.

The "Desired Character" statement for the Mixed Use Zone provides little guidance regarding the desired design of buildings, other than to state that *"non-residential development will be of a moderate scale and intensity resulting in a visually unobtrusive built form."*

The majority of existing non-residential buildings along Battunga Road and Mawson Road comprise "small-scale" shop fronts in a traditional linear pattern. Exceptions include the land uses which require bigger footprints, such as the hotel, the hardware/fodder store and the petrol filling station/motor repair station. These buildings, which are clustered together at the intersection of Battunga and Mawson Roads, are of varying ages, designs and condition. Collectively they each contribute to the character of the locality, but do not establish a pattern or standard of built form.

The proposed supermarket is to be located in the north-western corner of the subject land. As such, it will not contribute significantly to the streetscape. In addition, the building is conventional in design and "fit for purpose", with full-height windows dominating the front (eastern) façade. The "pump" room adjacent the north-eastern corner of the building also adds a variation to the eastern façade.

The northern and western facades are plain but face open space areas on the neighbouring properties. In addition, existing trees on the adjoining properties will likely serve to screen a good part of these building walls from view, as will the proposed new 2.4 metre high perimeter fencing.

The visual appearance of the southern façade of the proposed building will be punctuated by the loading dock, the wall feature (i.e. a hard wood timber frame around "stick on stone"), the step in the alignment of the wall (south-eastern corner), a section of full-height windows and future signage.

In addition, it is noted that the proposed building is to be one-storey (7.04 metres high at the roofline); is to be well setback from any road frontage; and will be partially screened from view from the south and east by existing neighbouring trees and buildings, as well as the proposed landscaped car park.

Overall, it is considered that the proposed supermarket building will be acceptable in both design and location, and will be screened from view (to varying degrees) by adjacent buildings, fences and trees.

Principle of Development Control 4:
Where a building is sited on or close to a side boundary, the side boundary wall should be sited and limited in length and height to minimise:
(a) the visual impact of the building as viewed from adjoining properties
(b) overshadowing of adjoining properties and allow adequate sun light to neighbouring buildings.

The proposed supermarket building is to be single-storey in design; and will be setback approximately 3.0 metres from the northern property boundary and approximately 1.595 – 3.86 metres from the western property boundary.

As suggested earlier, it is considered that the northern and western facades of the proposed supermarket building (which are to be 5.25 metres high to the top of the parapet wall) will be screened (in part) from the view of the neighbouring residents by the proposed new fencing (2.4 metres high) and the existing trees which are located on the neighbouring properties adjacent the property boundaries.

As for the issue of overshadowing, it is suggested that the shadow diagrams prepared by JB Building Design (which form part of the application documentation) indicate that the proposed supermarket building will cast some shadow over the rear open space area of adjacent property to the west in the afternoon, and no shadow over the neighbouring properties to the east. These likely shadow impacts are considered to be acceptable (and certainly not extraordinary); and comply with the generally accepted requirement of access to two (2) or more hours of direct sunlight between the hours of 9.00am and 3.00pm. It is also noted that the existing trees located along the eastern boundary of the neighbouring property at number 31 Mawson Road will likely already have significant shadowing impact upon the existing dwelling and outdoor living areas which are located on that property.

Principle of Development Control 7:
The external walls and roofs of buildings should not incorporate highly reflective materials which will result in glare.

All of the materials to be utilised in the construction of the proposed building are to be non-reflective, whilst all external finishes will be in natural tones.

Principle of Development Control 9:
Building design should emphasise pedestrian entry points to provide perceptible and direct access from public street frontages and vehicle parking areas.

The subject development proposal incorporates internal pedestrian pathways and formal, sealed car parking arrangements which should provide for the safe and efficient movement of pedestrians within the subject site.

Principle of Development Control 12:
Buildings, landscaping, paving and signage should have a co-ordinated appearance that maintains and enhances the visual attractiveness of the locality.

The proposed development has been purposely designed so as to present a visually appealing and efficient land use, and to complement the existing land uses within, and character of, the immediate locality.

Principle of Development Control 13:
Buildings (other than ancillary buildings or group dwellings) should be designed so that their main façade faces the primary street frontage of the land on which they are situated.

The subject land is irregular in shape and has two relatively narrow street frontages. Neither of the road frontages provide the opportunity for the proposed supermarket to be located so as to present directly to an adjacent road. The existing shop/dwelling (local heritage building) which fronts Mawson Road is to be retained, leaving only a sufficient area of land to accommodate the proposed car park access/egress point.

Likewise, the Battunga Road frontage, which is only 27.26 metres wide, will also contain a site access/egress point, leaving little usable space to accommodate any built form.

It is also noted that the proposed supermarket is to be located adjacent the northern and western property boundaries, and will present to the south and east towards the proposed on-site car parking.

The proposed building site is considered to be logical, given the configuration and gradient of the land; and the aforementioned existing land use circumstances. Further, the siting of the proposed building will lessen potential visual impact upon the streetscape and the entrance to the township via Battunga Road.

Principle of Development Control 14:
Where applicable, development should incorporate verandas over footpaths to enhance the quality of the pedestrian environment.

The proposed supermarket building incorporates a verandah along the eastern facade so as to provide customers/pedestrians with shelter from the weather.

Principle of Development Control 15:
Development should be designed and sited so that outdoor storage, loading and service areas are screened from public view by an appropriate combination of built form, solid fencing and/or landscaping.

The proposed loading dock associated with the supermarket is to be located adjacent the western property boundary, at the southern end of the proposed supermarket. This facility will be enclosed, in keeping with the recommendations of the consulting acoustic engineers (Sonus Pty Ltd).

In addition, the proposed "pump room" at the north-eastern corner of the proposed supermarket building will house infrastructure; and the area adjacent the northern property boundary (which is to contain the proposed bank of aboveground rainwater tanks) is to be screened from public view by a proposed fence.

Principle of Development Control 16:
Outdoor lighting should not result in light spillage on adjacent land.

The outdoor lighting will primarily be located on the eastern facade of the proposed supermarket building and within the proposed car parking area. This lighting will be specifically designed to avoid overspill, and will be electronically controlled to operate primarily during the prescribed hours. Some limited lighting will likely continue to operate, for security reasons, throughout the night.

Further details regarding external lighting can be provided once final engineering plans and the final project design have been completed.

Principle of Development Control 18:
The setback of buildings from public roads should:
(a) be similar to, or compatible with, setbacks of buildings on adjoining land and other buildings in the locality
(b) contribute positively to the streetscape character of the locality
(c) not result in or contribute to a detrimental impact upon the function, appearance or character of the locality.

Principle of Development Control 20:
Except where specified in a particular zone, policy area, or precinct, buildings and structures should be set back from road boundaries having regard to the requirements set out in Table MtB/1 - Building Setbacks from Road Boundaries.

Principle of Development Control 21:
Except where specified in a zone, policy area or precinct, or Table MtB/1 - Building Setbacks from Road Boundaries, the setback of development from a secondary street frontage should reflect the setbacks of the adjoining buildings and other buildings in the locality.

The proposed supermarket building is to be setback approximately 68.0 metres from Battunga Road and approximately 72.0 - 76.0 metres from Mawson Road. These setback distances exceed any requirements specified under Table MtB/1 - Building Setbacks from Road Boundaries and/or any other provisions of the Development Plan.

4.4.3 Hazards

Objective 1:
Maintenance of the natural environment and systems by limiting development in areas susceptible to natural hazard risk.

Objective 2:
Development located away from areas that are vulnerable to, and cannot be adequately and effectively protected from the risk of natural hazards.

Principle of Development Control 1:
Development should be excluded from areas that are vulnerable to, and cannot be adequately and effectively protected from, the risk of hazards.

We have not been able to identify any documentation that indicates that the subject land is vulnerable to hazards.

The only flood plan documentation sourced indicates that the subject land lies outside of the area likely to be affected by a 1 in 100 year ARI flood event. In addition, the subject land lies within the township and, as such, the threat of impact by bushfire is considered to be no greater than that which faces all of the other land uses which are located at or near the periphery of the township.

Further, according to information received from the Environment Protection Authority (EPA), the hazard presented by the underground contamination of the subject land and adjoining properties, due to the previous (circa 2009) leaking of petroleum from the underground tanks of the petrol filling station at 35 Mawson Road, appears to be managed and on the improve (refer Objective 11, page 29).

Given the above, we believe that the subject land, and/or any future use thereof, should not be at any greater risk to any known or potential hazard than are any other land uses within the immediate locality.

Objective 5:
Development located to minimise the threat and impact of bushfires on life and property.

Principle of Development Control 9:
Development in a Bushfire Protection Area should be in accordance with those provisions of the Minister's Code: Undertaking development in Bushfire Protection Areas that are designated as mandatory for Development Plan Consent purposes.

Principle of Development Control 10:
Buildings and structures should be located away from areas that pose an unacceptable bushfire risk as a result of one or more of the following:
(a) vegetation cover comprising trees and/or shrubs
(b) poor access
(c) rugged terrain
(d) inability to provide an adequate building protection zone
(e) inability to provide an adequate supply of water for fire-fighting purposes.

Principle of Development Control 13:
Buildings and structures should be designed and configured to reduce the impact of bushfire through using simple designs that reduce the potential for trapping burning debris against the building or structure, or between the ground and building floor level in the case of transportable buildings.

Principle of Development Control 16:
Vehicle access and driveways to properties and public roads created by land division should be designed and constructed to:
(a) facilitate safe and effective operational use for fire-fighting and other emergency vehicles and residents
(b) provide for two-way vehicular access between areas of fire risk and the nearest public road.

The subject site lies within the bounds of the township of Meadows, and within the Medium Bushfire Risk Area (refer BPA Map MtB/20). As such, the risk of threat by bushfire is considered to be minimal. Notwithstanding this, the subject development proposal incorporates a 22,500 litre metal rainwater tank specifically for firefighting purposes and, if required, the water retained in the other proposed rainwater tanks can also be utilised for this purpose.

In addition, the proposed development has been designed in accordance with the Minister's Code*:* "Undertaking development in Bushfire Protection Areas". This code gives some general guidance as to the bushfire prevention measures that should be implemented and/or taken into account. These include the provision of a dedicated firefighting water supply of at least 5,000 litres; ensuring that gaps between the building floor and the ground are enclosed (to prevent burning debris from entering); buildings being set back 20 metres from flammable/combustible vegetation and located and designed to minimise risk from bushfires; and the provision of internal driveways that are appropriately designed and built for entry and exit of vehicles, including fire fighting vehicles, during a fire.

In regard to the cited provisions of the Development Plan and the aforementioned criteria (Minister's code), we have noted the following:

- The subject development proposal seeks to establish a supermarket which will result in most of the site being covered by buildings or being sealed for carparking purposes (thereby minimising combustible vegetation).
- The subject land is readily accessed via the existing local road network.
- The proposed access/egress points on Mawson Road and Battunga Road will afford easy access for emergency service vehicles.
- The proposed car parking layout will enable emergency service vehicles to easily move throughout the subject site.
- The design of the proposed building incorporates concrete footings and, as such, there will be no open underfloor areas which could trap inflammable material.
- An adequate water supply for firefighting purposes can be provided on-site through the storage of stormwater in rainwater tanks (i.e. a practice adopted elsewhere within the wider locality).

We have also noted that:

- the Meadows CFS Station is located only approximately 520 metres (by road) from the subject site, should the assistance of the local CFS be required;
- the site access points, and car park layout have been designed to readily accommodate the movement of heavy trucks (including emergency services vehicles); and
- the design of the proposed building will ultimately be assessed against the provisions of the Building Code of Australia and, as such, will have to meet the fire safety requirements contained therein.

Objective 8:
Protection of human health and the environment wherever site contamination has been identified or suspected to have occurred.

Objective 9:
Appropriate assessment and remediation of site contamination to ensure land is suitable for the proposed use and provides a safe and healthy living and working environment.

Objective 11:
Remediation of adverse impacts (including land contamination) of existing or past industrial/agricultural activities.

Since mid-2009 various assessments of soil, groundwater and soil vapour have been conducted at the petrol filling station at 33 Mawson Road and the surrounding properties. These assessments have indicated the presence of petroleum hydrocarbon based compounds in the groundwater, with the affected properties being identified as numbers 3 – 7 Battunga Road and numbers 25 – 35 Mawson Road. This matter is the subject of a Section 83A notification by the Environment Protection Authority (EPA) which has warned local landowners of the detrimental impacts upon ground water quality.

It is understood that this site contamination has been monitored over the years by A M Environmental Consulting Pty Ltd. According to the EPA, the results of the 2017 testing suggested that the petroleum was degrading and, as a consequence, the impacts are attenuating. Recent advice from the EPA (Emma Bradford, Senior Adviser – Site Contamination) indicates that further testing of land within the locality was undertaken in February 2022, but the results thereof are not yet available to the public

The proposed development will result in most of the subject land being covered by buildings and/or sealed for car parking purposes. The proposal also incorporates the decommissioning of two (2) existing bores which are located upon the subject land. The latter will be undertaken by an appropriately licensed contractor under permit from the Department for Environment and Water. It is also noted that the proposed development will not be utilising groundwater for any purpose.

Further, it is noted that (for information purposes only) the State Planning Commission Practice Direction 14 (Site Contamination Assessment 2021) indicates that the subject development proposal entails a change of land use from Residential 1 (being the most sensitive land use) to a Commercial class 1 (shop), which is considered to be a less sensitive land use. Whilst not directly relevant to the subject development proposal, it is interesting to note that, under the Code, site contamination investigations are only required to accompany a development application if the land use is proposed to be changed to a more sensitive use, or land division is proposed for the purpose of a sensitive use.

Given the aforementioned, it is considered that the existing ground water contamination issue should have no adverse impact upon the proposed land use.

Objective 10:
Minimisation of harm to life, property and the environment through appropriate location of development and appropriate storage, containment and handling of hazardous materials.

It is considered that the form of land use proposed is anticipated in the Mixed Use Zone. As such, the subject land and locality must be considered to be appropriate to accommodate the proposed land use. Further, the proposed land use, being retail in nature, will not involve the handling of any hazardous material, nor should it produce any hazardous waste.

Principle of Development Control 2:
Development located on land subject to hazards as shown on the Overlay Maps - Development Constraints should not occur unless it is sited, designed and undertaken with appropriate precautions being taken against the relevant hazards.

According to Map MtB/34 "Development Constraints", the subject land does not lie near any land which has been determined to be of "High environmental significance".

Objective 4:
Development located and designed to minimise the risks to safety and property from flooding.

Principle of Development Control 4:
Development should not occur on land where the risk of flooding is likely to be harmful to safety or damage property.

Principle of Development Control 5:
Development should not be undertaken in areas liable to inundation by tidal, drainage or flood waters unless the development can achieve all of the following:
(a) it is developed with a public stormwater system capable of catering for a 1-in-100 year average return interval flood event
(b) buildings are designed and constructed to prevent the entry of floodwaters in a 1-in-100 year average return interval flood event.

Principle of Development Control 7:
Development, including earthworks associated with development, should not do any of the following:
(a) impede the flow of floodwaters through the land or other surrounding land
(b) increase the potential hazard risk to public safety of persons during a flood event
(c) aggravate the potential for erosion or siltation or lead to the destruction of vegetation during a flood
(d) cause any adverse effect on the floodway function
(e) increase the risk of flooding of other land
(f) obstruct a watercourse.

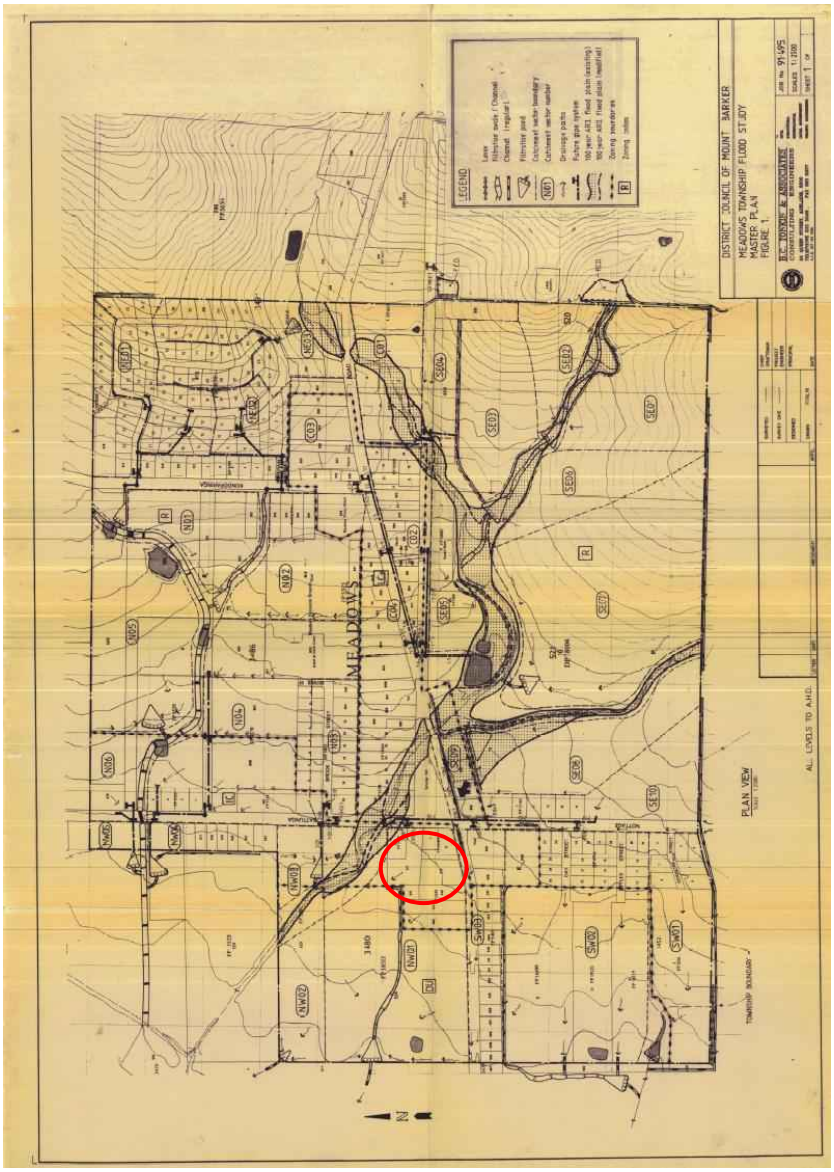
The subject land lies close to a small watercourse which runs from Meadows Creek in the west and traverses the property at number 9 Battunga Road.

Investigations (including a review of Flood Assessment Maps, Water Connect, Department for Environment and Water) failed to identify any flood mapping or relevant information pertaining to the flood potential of this creek and/or the locality in general, other than the *Meadows Township Flood Study* master plan. This plan, which was prepared by D C Tonkin and Associates in 1992, identifies the 1 in 100 year ARI flood plain (existing and modified) for the local waterways, including the small creek to the north of the subject land.

It is noted that the subject land is not located within the identified flood plain (refer Plans 1 and 2). This being the case, based on the limited information available it is considered reasonable to assume that the subject land is unlikely to be affected (to any significant degree, if at all) by flood water.

Plan 1: 1992 Meadows Township Flood Study Master Plan (extract)

Plan 2: 1992 Meadows Township Flood Study Master Plan



4.4.4 Heritage Places

Objective 1:
The conservation of State and Local Heritage Places.

Objective 2:
The continued use, or adaptive re-use of State and Local Heritage Places that supports the conservation of their cultural significance.

Objective 3: Conservation of the setting of State and Local Heritage Places.

Principle of Development Control 1:
A heritage place spatially located on Overlay Maps - Heritage and more specifically identified in Table MtB/9 - State Heritage Places or in Table MtB/8 - Local Heritage Places should not be demolished, destroyed or removed, in total or in part, unless either of the following apply:
(a) that portion of the place to be demolished, destroyed or removed is excluded from the extent of the places identified in the Table(s)
(b) the structural condition of the place represents an unacceptable risk to public or private safety.

Principle of Development Control 7:
Development that materially affects the context within which the heritage place is situated should be compatible with the heritage place. It is not necessary to replicate historic detailing, however design elements that should be compatible include, but are not limited to:
(a) scale and bulk
(b) width of frontage
(c) boundary setback patterns
(d) proportion and composition of design elements such as rooflines, openings, fenestration, fencing and landscaping
(e) colour and texture of external materials.

Principle of Development Control 11:
Trees or groups of trees that contribute to the historic and visual setting of a state or local heritage place should be preserved and protected against disfigurement. If it is necessary to fell these trees, replanting should proceed.

According to Overlay Map MtB/34 Heritage, the land at number 33 Mawson Road is a "Local heritage place". Part 11 of the Code indicates that the existing shop/dwelling and three (3) pug-holes to the rear thereof are features of local heritage significance.

It is proposed that the existing building be retained, as is, including the doors of the original A C Harley & Co baker's oven (which is all that remains at this time). This being the case, it is considered that the subject development proposal should have little, if any, physical impact upon the built form and/or setting of this local heritage place.

In addition, it is also proposed to retain a number of existing mature trees which are located adjacent the local heritage building. These trees have been identified as trees numbers 4, 7, 8 and 19 on the amended site plan which has been submitted as part of the development application documentation.

The retention of the aforementioned trees is generally in accord with the recommendations of Council's Urban Forest Officer; and will serve to preserve (in part) the long-established setting in which the "local heritage" building is located. It is also considered that the following architect's images demonstrate that neither the existing local heritage place or the setting within which it sits will be significantly impacted upon by the built form and/or mass of the ;proposed supermarket building, or the removal of a number of existing trees.

Images 1, 2 & 3: Architect's images of the proposed development

As for the issue of the pug holes (clay pits), a site inspection and desk-top research have provided no information regarding the possible location of these features. There also appears to be some confusion in respect to the location of the pug holes. According to the *"DC Mount Barker Heritage Survey" (Heritage Online, 2004)* and *'Meadows Heritage" (Paul B Stark, July 1983)*, there may have initially (circa 1855) been three (3) pug-holes, although they were either abandoned or combined over time and utilised as a dam (which was apparently in existence in 2004). There is no dam, or signs thereof, upon the subject land.

In addition, both of the aforementioned documents refer to the pug holes being at number 7 Mawson Road which may, or may not have been, the subject land at some previous point in time. However, there is an existing dam to the rear (north) of the property at number 7 Mawson Road, which is located towards the western end of the township. Further, to add to the confusion, there is some evidence to suggest that a property on Mawson Road to the east of Battunga Park, on or adjacent to the existing site of the Meadows and District Kindergarten, was also previously identified as number 7 Mawson Road.

Regardless, in accordance with Section 27 of the Heritage Places Act 1993, the applicant company will not excavate or disturb the subject land without the required permit from Council.

4.4.5 Historic Conservation Area

Objective 1:
The conservation of areas of historical significance.

Objective 2:
Development that promotes, conserves and enhances the cultural significance and historic character of identified places and areas.

Objective 3:
Development that complements the historic significance of the area.

Objective 4:
The retention and conservation of places such as land, buildings, structures and landscape elements that contribute positively to the historic character of the area.

The Meadows Historic Conservation Area incorporates much of the township, and exhibits twenty-one (21) buildings/properties of local heritage significance and twenty (20) contributory items/properties. The provisions of the Development Plan indicate that these buildings/properties should be retained and preserved, and their continued economic use/habitation encouraged. The Development Plan also states that "*Addition and infill development should be set back further than neighbouring Local Heritage Places or Contributory Items, with carports, garaging and outbuildings recessed from the main frontage and located to the rear of the allotment.*"

The subject land is located at the western extremity of the prescribed historic conservation area.

While the locality includes two (2) places of local heritage significance (including the shop/dwelling at number 33 Mawson Road) and five (5) contributory items/properties (including 5 Battunga Road), it is considered that the historical pattern of development within the locality and the design, style and siting of the built form has been compromised to some extent. The old dwelling at number 5 Battunga Road has been demolished for a number of years, and the current vacant allotment contributes nothing in regard to the historical character of the locality and/or township. Further, the more recent developments within the locality (including the hardware/fodder store, the petrol filling station, the motor repair station, the crash repair business and the veterinary clinic) are considered to be at odds with the long existing historical development, in terms of their design, scale and appearance.

Whilst the proposed building is to be contemporary in design and larger in size than all of the existing buildings within the locality, it will be located towards the north-western corner of the subject land, some distance behind and away from the historically significant buildings. This being the case, the proposed new building should not detract from the visual appeal of the older buildings, nor should it detrimentally affect the historic and/or visual setting of the local heritage places and/or the local contributing items/properties.

In addition, the 3D images prepared by Anthony Donato Architects (refer Images 1 – 3, page 33) demonstrate the separation between the proposed supermarket development and the local heritage listed building, as well as the scale of the proposed and existing built form. It is considered that these images indicate that the proposed supermarket building should not have any significant visual and/or physical impacts upon the existing local heritage listed shop/dwelling, nor should it be detrimental to the setting of the existing building.

4.4.6 Infrastructure

Objective 5:
The efficient and cost-effective use of existing infrastructure.

Principle of Development Control 1:
Development should not occur without the provision of adequate utilities and services, including:
(a) electricity supply
(b) water supply
(c) drainage and stormwater systems
(d) waste disposal
(e) effluent disposal systems
(f) formed all-weather public roads
(g) telecommunications services
(h) social infrastructure, community services and facilities.

It is noted that:

- the subject land can be readily connected to the existing underground power cable which runs along Battunga Road;
- stormwater and effluent disposal can be achieved by conventional engineering means;

- a potable water supply will be provided by retaining stormwater on-site in rainwater tanks, as is the norm for development within the township;
- the proposed development has been designed to accommodate waste collection vehicles;
- the subject development proposal is retail/commercial in nature and, as such, the development and operation thereof should place no demands upon any social and/or community services or facilities;
- the subject land is ready accessed via the existing local road network; and
- the location and design of the proposed site access/egress points have been assessed and accepted by the Department for Infrastructure and Transport.

Given the aforementioned, no problems are anticipated in regard to any infrastructure related matters.

Principle of Development Control 2:
Development should only occur only where it provides, or has access to, relevant easements for the supply of infrastructure.

The subject land has two (2) street frontages and RCI Consultant Engineers has advised that stormwater can be managed on-site and directed via underground pipes to the small watercourse which is located to the north of the subject land (in keeping with one of Council's preferred options). Given these circumstances, no easements may be required.

Principle of Development Control 4:
Development should not take place until adequate and co-ordinated drainage of the land is assured.

In regard to the issue of stormwater, it is noted that Council (Veli Sedev, Infrastructure Planning Engineer and Mitchell Bowley, Development Engineer) provided the following preliminary advice.

- Council would typically require detention such that post development flows are not greater than predevelopment flows for the 10% and 1% year event.
- Council would require the typical water quality reduction targets to EPA requirements to be met for phosphorus, nitrogen, suspended solids and gross pollutants, and this should be done by using WSUD methods such as bio filtration systems which can easily be incorporated into carparks by having the carpark grades and kerbs fall towards the bioretention beds so surface water goes straight into the treatment system and not into a pit and pipe network.
- There may be opportunity for the applicant to negotiate an easement over 9 Battunga Road to discharge stormwater via gravity to the existing water course north of the site. This is the preferred option for Council.

- Alternatively, there may be potential to discharge into the 600mm pipe on the eastern side of Battunga Road, however, the capacity of this pipe is unknown, and the catchment would not have been allowed for the proposed development in its sizing as the natural lay of the land is away from the pipeline. Depending on the development grades a pump and sump may be required for a portion of the catchment. Further investigation and assessment of pipe capacity will be required to satisfy this option.
- A second alternative involves the construction of a new pipe on the western side of Battunga Road which discharges into the water course north of the site. Depending on the development grades, a pump and sump may be required for a portion of the catchment. If the pipe is sized for the undetained flow, there may be opportunity to consider no detention. This development is located on the downstream side of the water course from the Meadows township and growth areas and may benefit by getting the flows into the watercourse prior to the upstream catchment arriving. This is considered the last resort option (and costly).

- The site has frontage on to Battunga Road and Mawson Road. Both roads are in the care and control of state government (DIT). DIT will have an interest in guiding stormwater management requirements and site access. The subject development proposal will need to be referred to DIT for comment, particularly if the easement option above to discharge to the creek cannot be achieved.

It is preferred that stormwater from the subject land and the proposed development be directed (via an underground pipe system) to the small watercourse to the north. This being the case, a drainage system will be designed to meet conventional engineering standards, and will likely incorporate a series of underground drainage pipes, side entry pits, grated strip drains, gross pollutant traps and box culverts for on-site detention (if required).

A preliminary Stormwater Management Plan, as prepared by RCI Consulting Engineers (dated 12th May 2022), complete with relevant data, has been provided with the development application documentation. This incorporates:

- 60.00 kilolitres of detention in above ground tanks with a 50mm diameter orifice to be installed to detain roof stormwater flows;
- 72.50 kilolitres of underground detention with a 250mm diameter orifice is to be installed to detain roof stormwater and the carpark surface stormwater flows;
- above ground rainwater tanks to be installed to treat roof stormwater flows; and
- carpark areas to be graded towards the landscaping areas containing raingardens/bioretention basins (or discharge to bioretention via pipe system) to treat surface stormwater flows.

It is suggested that, should Council require more detailed information regarding the issue of stormwater management/disposal, it would be appropriate for the matter be treated as a "reserve matter", pursuant to Section 33(3) of the Development Act 1993.

Principle of Development Control 6:
In areas where no reticulated water supply is available, buildings whose usage is reliant on a water supply should be equipped with an adequate and reliable on-site water storage system.

The subject development proposal incorporates the provision of aboveground rainwater tanks adjacent the northern property boundary. These rainwater tanks will provide a minimum of 60,000 litres of potable water and 22,500 litres specifically for firefighting purposes.

4.4.7 Interface Between Two Zones

Objective 1:
Development located and designed to minimise adverse impact and conflict between land uses.

Objective 2:
Protect community health and amenity from adverse impacts of development.

Objective 3:
Protect desired land uses from the encroachment of incompatible development.
Principle of Development Control 1:
Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:
(a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants
(b) noise
(c) vibration
(d) electrical interference
(e) light spill
(f) glare
(g) hours of operation
(h) traffic impacts.

Principle of Development Control 2:
Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.

Principle of Development Control 3:
Development adjacent to a Residential Zone or residential area within a Township Zone should be designed to minimise overlooking and overshadowing of adjacent dwellings and private open space.

Principle of Development Control 5:
Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses desired for the zone should be designed to minimise negative impacts.

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

Principle of Development Control 7:
Outdoor lighting should be designed and installed so that it does not overspill or intrude on sensitive land uses (e.g. residential) or detrimentally impact on road safety in the locality, so that it complies with relevant Australian Standards AS 4282-1997: Control of the obtrusive effects of outdoor lighting.

Principle of Development Control 22:
Development should reduce conflict between residential uses, townships and rural uses by the provision of a vegetated buffer which satisfies all of the following:
(a) which contains random plantings comprising a combination of fast and slow growing hardy local indigenous species spaced to cater for mature size
(b) with species selected with foliage from the base to the crown with long, thin and rough foliage to facilitate the more efficient capture of spray droplets
(c) which is provided with a suitable watering system and access tracks either side for fire protection and access.

The subject land does not adjoin any existing residential zone; however, the Mixed Use Zone does allow for detached dwellings, and the land to the west (which lies within the Deferred Urban Zone) will likely be developed for residential purposes in the future.

It is considered that the subject development proposal has been designed to minimise potential impacts upon the existing and/or possible future neighbouring land use, whether they be residential or non-residential in nature. This assertion is based on the following.

The proposed supermarket is not likely to create any odours, vibrations, electrical interference and/or noxious fumes. In addition, the proposed built form has been designed and located so as to present to the east, thereby focusing the main activities towards areas which are primarily away from the neighbouring properties/land uses.

Regarding the issue of **privacy** to be experienced by the owners/occupiers of the neighbouring properties, it is noted that the proposed building:

- is single-storey in design;
- will be located behind new boundary fencing which will be 2.1 metres or 2.4 metres in height; and
- will be screened from view by existing trees which are located both on-site (and are to be retained as part of the proposed development) and on neighbouring properties, as well as the vegetation to be introduced under the proposed landscaping scheme.

Collectively these features should ensure that the privacy currently experienced by the occupants of the neighbouring properties should be maintained.

As for the issue of **noise**, it is noted that:

- the proposed supermarket building is to be constructed of concrete tilt-up panels which provide good acoustic insulation, particularly at the sort of low frequencies that cause many of the complaints in residential buildings;
- "tilt-up" concrete panels can provide acoustic performance well in excess of the 50 dB required by the BCA;

- the subject development proposal incorporates the provision of new 2.1 metre and 2.4 metre high fencing along all property boundaries, the majority of which will be "Slim Wall" panel fencing (cement fibre laminated to an expanded polystyrene core) which is visually appealing and typically reduces the transmission of noise by up to 20+dB or 4-5 times;
- the deliveries to the proposed supermarket will be restricted to specific hours so as to minimise the potential of nuisance on the weekends and/or during the night-time, and the frequency thereof is expected to be less than for a metropolitan supermarket;
- the trees which are located on the neighbouring properties (adjacent the property boundaries), as well as the trees to be retained on the subject land and the vegetation to be introduced in the proposed landscaping scheme, will all serve to reduce noise pollution through sound attenuation, as leaves, twigs, and branches on trees, shrubs and herbaceous growth absorb and deflect sound energy; and
- the provisions and requirements of the Environment Protection Act 1993 (administered by the Environment Protection Authority) adequately address and govern air and noise emission matters (refer Environment Protection (Noise) Policy 2007 and Environment Protection (Air Quality) Policy 2016).

An environmental noise assessment of the subject development proposal has been undertaken by Sonus Pty Ltd, audio engineering and acoustic consultants.

The assessment considered noise from general car park activity, loading activities within the loading area, and mechanical plant serving the building. Appropriate noise criteria for the assessment of these noise sources were derived in accordance with the *Environment Protection (Noise) Policy 2007*.

Noise levels from the site were predicted to achieve the relevant criteria at all residences in the vicinity, with the inclusion of the following treatments.

- Ensure that deliveries to the site occur during the daytime hours only (7am to 10pm).
- Construct an acoustic barrier with absorption material on the southern side of the loading dock.
- Construct a canopy with acoustic absorption material over the loading dock.
- Locate any rooftop mechanical plant in the specified area.

Sonus Pty Ltd concluded that, if the aforementioned was adhered to, it would consider the subject development proposal to have been "*designed to minimise adverse impacts* and *does not unreasonably impact the amenity of sensitive receivers*, thereby achieving the relevant provisions of the Planning and Design Code related to environmental noise".

It is noted that all of the measures recommended by Sonus Pty Ltd already existed within, or have been incorporated in, the subject development proposal.

A copy of the Environmental Noise Assessment report, as prepared by Sonus Pty Ltd, has been provided with the development application documentation.

Regarding **overshadowing**, as previously stated (refer Principle of Development Control 4, 4.4.2 Design and Appearance, page 23), the shadow diagrams prepared by J B Building Design, indicate that the proposed building will cast very little shadow over the adjacent properties at any given time throughout the year. Clearly, these plans indicate that all neighbouring properties will receive two (2) or more hours of direct sunlight per day, as is the conventional requirement.

As previously indicated, **outdoor lighting** is to be provided around the facade of the proposed building and throughout the proposed car parking area The lighting will be designed and angled to avoid light spill to neighbouring properties. Some limited lighting will likely continue to operate, for security reasons, throughout the evenings. The provision of 2.4 metre high fencing along the boundaries of the subject land, as proposed, should also serve to reduce the potential of light spill from the subject land/proposed development.

Further details regarding external lighting can be provided once final engineering plans and the final project design have been completed.

Finally, the **hours of operation** for the proposed supermarket will be in the range of 7.30am to 9.00pm. These trading hours are not considered to be extraordinary offers flexibility to both the supermarket operator and the community; and lay within the hours of operation suggested by Sonus Pty Ltd.

Overall, it is considered that the subject development proposal has been designed to minimise adverse impacts upon the neighbouring properties and, as such, it meets the cited provisions and intent of the Development Plan.

4.4.8 Landscaping, Fences and Walls

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

Objective 2:
Functional fences and walls that enhance the attractiveness of development.

Principle of Development Control 1:
Development should incorporate open space and landscaping and minimise hard paved surfaces in order to:

(a) complement built form and reduce the visual impact of larger buildings (eg taller and broader plantings against taller and bulkier building components)
(b) enhance the appearance of road frontages
(c) screen service yards, loading areas and outdoor storage areas
(d) minimise maintenance and watering requirements
(e) enhance and define outdoor spaces, including car parking areas
(f) maximise shade and shelter
(g) assist in climate control within and around buildings
(h) minimise heat absorption and reflection
(i) maintain privacy
(j) maximise stormwater re-use

(k) complement existing vegetation, including native vegetation
(l) contribute to the viability of ecosystems and species
(m) promote water and biodiversity conservation
(n) minimise the impacts of chemical spay drift and dust transference.

Principle of Development Control 3:
Landscaping should:
(a) include the planting of locally indigenous species where appropriate
(b) be oriented towards the street frontage
(c) result in the appropriate clearance from powerlines and other infrastructure being maintained

Principle of Development Control 5:
Where supplementary watering is necessary for landscaped areas, water efficient irrigation systems should be used.

Principle of Development Control 6:
Fences and walls, including retaining walls, should:
(a) not result in damage to neighbouring trees
(b) be compatible with the associated development and with existing predominant, attractive fences and walls in the locality
(c) enable some visibility of buildings from and to the street to enhance safety and allow casual surveillance
(d) incorporate articulation or other detailing where there is a large expanse of wall facing the street
(e) assist in highlighting building entrances
(f) be sited and limited in height, to ensure adequate sight lines for motorists and pedestrians especially on corner sites
(g) in the case of side and rear boundaries, be of sufficient height to maintain privacy and/or security without adversely affecting the visual amenity or access to sunlight of adjoining land
(h) be constructed of non-flammable materials.

The subject development proposal incorporates a **landscaping** scheme which proposes the retention of five (5) mature trees (and protection measures for a tree which is located on a neighbouring property), as well new landscaping throughout the car park area and along perimeter boundaries. The trees and vegetation to be planted will be indigenous species so as to complement the existing trees, and to be consistent with the character of the locality. Suitable protection measures around the existing trees within the site will be employed (including managed excavation, surface treatments and kerbing alignment) to ensure root protection zones are not adversely affected.

As previously indicated, new **fencing** is proposed along all site property boundaries. The fencing will comprise 2.1 metre high "colorbond" and/or 2.4 metre high and "Slim Wall" acoustic panels (or similar) in order to achieve an appealing appearance and acoustic mitigation.

Further, based on the levels across the subject land, and the likely bench and finished floor levels of the proposed building, no **retaining walls** will likely be required. More details regarding retaining walls will be known once final design plans and engineering details are available.

4.4.9 Orderly and Sustainable Development

Objective 1:
Orderly and economical development that creates a safe, convenient and pleasant environment in which to live.

Objective 2:
Development occurring in an orderly sequence and in a compact form to enable the efficient provision of public services and facilities.

Objective 3:
Development that does not jeopardise the continuance of adjoining authorised land uses.

Objective 7:
Urban development contained within existing townships and settlements and located only in zones designated for such development.

Principle of Development Control 1:
Development should not prejudice the development of a zone for its intended purpose.

Principle of Development Control 3:
Development should be consistent with the desired character statements for the zones, policy areas and precincts.

Principle of Development Control 4:
The economic base of the region should be expanded in a sustainable manner.

Principle of Development Control 7:
Development should be located and staged to achieve the economical provision of public services and infrastructure, and to maximise the use of existing services and infrastructure.

Principle of Development Control 9:
Vacant or underutilised land should be developed in an efficient and co-ordinated manner to not prejudice the orderly development of adjacent land.

Principle of Development Control 12:
Development should not place demand on existing services or infrastructure to the detriment of other users or to a level that exceeds the capacity of the services.

The subject development proposal seeks to establish a modest-sized supermarket upon a site which has either been underutilised for many years or has (in part) been vacant for approximately five (5) years. Whilst the provisions of the Mixed Use Zone do not anticipate a shop development of the scale proposed, they do anticipate shops (in general) and do not specifically speak against shops of any scale.

Further, the subject land is the only parcel of land within the township which is of the size required to accommodate a small supermarket development.

Apart from the suitability of the size of the subject land, the development site is considered to be ideal because it is located in a cluster of mixed land uses which are residential, commercial and retail in nature; is readily accessed via the existing road network (at two points); is already connected to electricity services (preliminary agreement has been arranged with SA Power Networks); can be connected to NBN (preliminary arrangements are in place); can be connected to the existing community wastewater management scheme; and is located near a small creek which offers an option in regard to stormwater disposal (as preferred by Council).

The requirement for local residents to shop on a regular basis at supermarkets located in Mount Barker and Strathalbyn is considered to be neither convenient nor economical; and the money spent "out of the town" provides no benefit to the local community. By contrast, the proposed supermarket will undoubtedly be convenient, and should save the time and cost currently expended as a consequence having to attend shopping at places which are seventeen or more kilometres away.

Furthermore, the "local" supermarket can get involved with the local community; and will offer an additional fifty (50) employment opportunities.

In respect to economic issues, it is considered that the proposed supermarket should have little adverse impact upon the viability of an existing retail/commercial businesses within the township. The supermarket will provide a convenient shopping option to meet the day-to-day needs of the local community, whereas the existing smaller shops in the township will continue to offer a more personalised and specialised shopping option, with emphasis seemingly being on food and tourism.

As for potential economic impacts upon existing traders, Property and Advisory Pty Ltd undertook a "Retail Study of Meadows" (for Council) in 2018. This study indicated that the town could sustain a small supermarket of 500m^2 in area; which would likely derive income from:

- a reduction in turnover of the existing food-based retailers in the township;
- local residents/households diverting expenditure currently escaping to Mount Barker, Strathalbyn and elsewhere; and
- through traffic and/or visitors to the township.

The study also indicated that:

- Meadows is quite isolated from competing retail centres;
- the nearest shopping facilities of note (at Mount Barker and Strathalbyn) are each some 20 minutes' drive from the township;
- the closest competing centres are Macclesfield and Echunga (both 8 – 10 kilometres from Meadows) but neither offer more than the most basic facilities; and

- a supermarket in Meadows is likely to be a marginal proposition in the short-term, but could become better established in the medium term, as the number of households in the town rises with new residential subdivision occurring.

It is also noted that:

- the provisions of the now Suburban Business Zone (under the Planning and Design Code) anticipate a shop or group of shops of up to 1,000m^2 in floor area; and
- the existing shop/dwelling, which is located upon the subject land, is owned by the applicant company and, as these land uses are to be retained (albeit in the short-term), any future impacts in respect to the economic viability of these existing land uses will essentially only affect the applicant company.

4.4.10 Regulated Trees

Objective 1:
The conservation of regulated trees that provide important aesthetic and/or environmental benefit.

Objective 2:
Development in balance with preserving regulated trees that demonstrate one or more of the following attributes:
(a) significantly contributes to the character or visual amenity of the locality
(b) indigenous to the locality
(c) a rare or endangered species
(d) an important habitat for native fauna.

Principle of Development Control 1:
Development should have minimum adverse effects on regulated trees.

Principle of Development Control 2:
A regulated tree should not be removed or damaged other than where it can be demonstrated that one or more of the following apply:
(a) the tree is diseased and its life expectancy is short
(b) the tree represents an material risk to public or private safety
(c) the tree is causing damage to a building
(d) development that is reasonable and expected would not otherwise be possible
(e) the work is required for the removal of dead wood, treatment of disease, or is in the general interests of the health of the tree.

Principle of Development Control 3:
Tree damaging activity other than removal should seek to maintain the health, aesthetic appearance and structural integrity of the tree.

The applicant company engaged Adelaide Arb Consultants, Arborists, to undertake a pre-development survey of the twenty-two (22) existing trees which are located upon or immediately adjacent to the subject land (refer Aerial photograph 3).

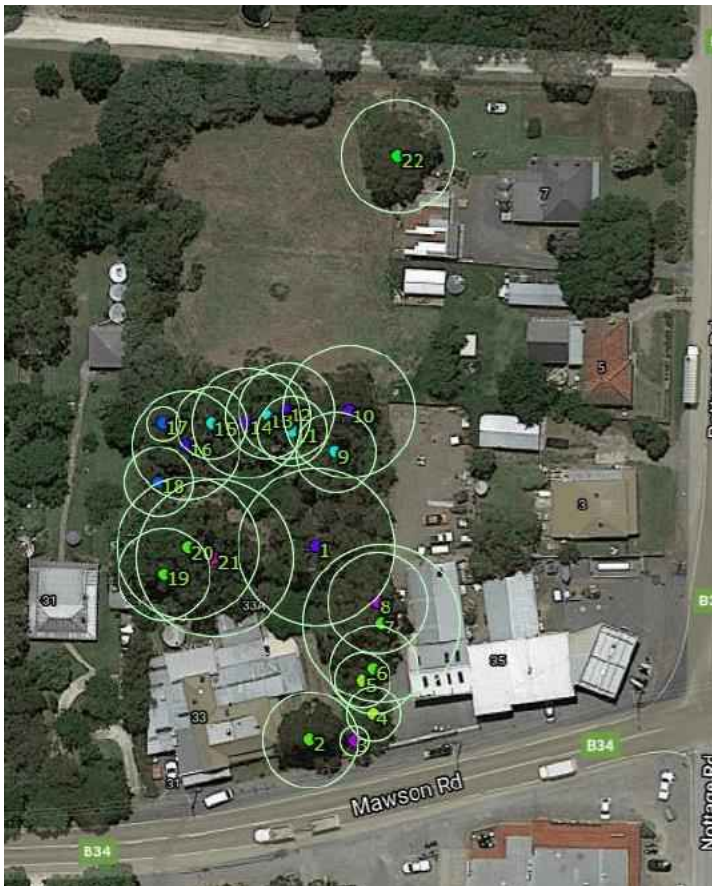
The aim of the survey was to gain an understanding of the tree population including health, structure, condition, and the vegetation controls required under South Australian legislation. A copy of this report has been included in the development application documentation.

Amongst the twenty-two (22) existing trees, the consultant arborists identified:

- three (3) significant trees (i.e. trees identified as numbers 7, 20 and 21);
- four (4) regulated trees (i.e. trees identified as numbers 6, 8, 19 and 22);
- two (2) trees (i.e. trees identified as numbers 11 and 15) which constitute "native vegetation" under the Native vegetation Act 1991 but may have actually been planted;
- two (2) trees (i.e. trees identified as numbers 1 and 10) which may be native vegetation and significant trees;
- five (5) trees (i.e. trees identified as numbers 9, 12, 13, 14 and 16) which may be native vegetation and regulated trees; and
- six (6) trees ((i.e. trees identified as numbers 2, 3, 4, 5, 17 and 18) which are not controlled.

It should be noted that tree number 22 is located on the adjoining property at number 7 Battunga Road. The applicant company has agreed to establish a fifteen (15) metre "tree protection zone" upon the subject land to preserve and protect the root system of this tree from the impacts of the proposed development. This action will include, but will not be limited to, the provision of "tree sensitive subbase" (where required) under the rainwater tanks which are to be located in the north-eastern corner of the subject land.

Aerial photograph 3: Existing trees (numeric identification)



The subject development proposal initially incorporated the retention of the Rough-barked Manna Gum which is identified as tree number 1. Subsequent advice received from Council indicated a preference to also retain the trees which are identified as numbers 4, 5, 7 and 8. These trees are all located adjacent the eastern boundary of the property at 33 Mawson Road, to the east of the existing shop/dwelling (Meadows Mini-Mart). Only tree number 8 is a "regulated tree".

The applicant company is of the opinion that tree number 5 cannot be retained. Whilst this tree is in good condition, it is not controlled or protected by any legislation, and it is located approximately 3.5 metres from the eastern boundary of the subject land, near the Mawson Road frontage. The tree will impact upon the design of the proposed development, as it will be located in the middle of a proposed primary internal driveway. The realignment of the proposed driveway to avoid this tree would likely result in the loss of up to ten (10) proposed on-site car parks. It is therefore proposed that tree number 5 be removed and replaced with appropriate trees and shrubs, to be planted in more acceptable position (but still within the same general area), as part of the proposed landscaping scheme.

In addition, it is now proposed that the tree number 19, being a “regulated tree” located to the south of the proposed shops, be retained.

The applicant company also considered retaining tree number 2 which is located adjacent the existing shop/dwelling. This tree presents well to Mawson Road and contributes to the streetscape. However, it is noted that the subject tree has been assessed as being only fair in health, and of poor structure and form. There is also a concern that this tree may impact upon the sight lines from the proposed access/egress point on Mawson Road. Accordingly, it has been decided that this tree should also be removed.

In summary, it is proposed that the following trees be retained.

Tree number	Legislative Control	Common Name
1	Significant & Native Vegetation	Rough bark Manna Gum
4	Not controlled	Desert Ash
7	Significant	Flooded Gum
8	Regulated	Southern Mahogany
19	Regulated	Flooded Gum

All of the other existing trees are to be removed to facilitate the proposed development. The loss of any existing trees should be offset (to some degree) by the establishment of the proposed landscaping scheme.

Adelaide Arb Consultants has subsequently:

- recommended/agreed to the removal of some regulated trees (i.e. numbers 6, 13 and 14) and significant trees (i.e. trees numbers 7 and 10) due to poor condition, subject to the consent of Council;
- recommended that regulated trees numbers 9, 12 and 13, and significant trees numbers 20 and 21 not be removed, but accepted that this could occur to facilitate the proposed development, subject to planning consent;

- advised that some of the trees that are recommended/proposed to be removed (i.e. trees numbers 10, 11, 12, 13, 14, 15 and 16) qualify as Native Vegetation and, as such, their removal requires the approval of the Native Vegetation Council and will likely necessitate a "Significant Environmental Benefit" payment;
- expressed the opinion that it would not be worthwhile to retain three (3) of the trees (i.e. trees numbers 2, 4 and 7) which have been "earmarked" for retention; and
- there are trees that are proposed to be retained that are likely to be significantly impacted by the proposed internal road and carpark layout.

In regard to the latter, Adelaide Arb Consultants has acknowledged that the subject development proposal incorporates the provision of "Trafficable Surface Treatment Across Root Protection Zones". However, the consultants have indicated that:

- consideration must also be given to how future land will be used/built upon, the age of the tree, the condition of the tree and the extent of the surface treatment;
- the impact on trees numbers 1 (significant tree), 8 and 19 (regulated trees) will likely be significant; and
- consideration should be given to modifying the design around trees numbers 1, 8 and 19, or alternatively seek their removal.

The applicant company has amended the plans of the proposed development so as to provide a greater level protection to the aforementioned trees (in particular tree number 1), and will adopt and adhere to the tree protection guidelines/measures agreed to be Council (refer further information 4.4.11 Significant Trees).

4.4.11 Significant Trees

Objective 2:
The conservation of significant trees should occur in balance with achieving appropriate development, while avoiding the indiscriminate and inappropriate removal of significant trees.

Principle of Development Control 1:
Development should preserve the following attributes where a significant tree demonstrates at least one of the following attributes:
(a) it makes an important contribution to the character or amenity of the local area
(b) it is indigenous to the local area
(c) its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species
(d) it represents an important habitat for native fauna
(e) it is part of a wildlife corridor of a remnant area of native vegetation
(f) it is important to the maintenance of biodiversity in the local environment
(g) it forms a notable visual element to the landscape of the local area.

Principle of Development Control 2:
Development should be undertaken so that it has a minimum adverse effect on the health of a significant tree.

Principle of Development Control 3:
Development should be designed and undertaken to retain and protect significant trees.

Principle of Development Control 4:
Significant trees should be preserved, and tree-damaging activity should not be undertaken, unless:

(a) in the case of tree removal, where at least one of the following apply:
(i) the tree is diseased and its life expectancy is short
(ii) the tree represents an unacceptable risk to public or private safety
(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area
(b) the tree is shown to be causing or threatening to cause substantial damage to a substantial building or structure of value
(c) all other reasonable remedial treatments and measures have been determined to be ineffective
(d) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.
(e) in any other case, any of the following circumstances apply:
(i) the work is required for the removal of dead wood, treatment of disease, or is in the general interests of the health of the tree
(ii) the work is required due to unacceptable risk to public or private safety
(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area
(iv) the tree is shown to be causing or threatening to cause damage to a substantial building or structure of value
(v) the aesthetic appearance and structural integrity of the tree is maintained
(vi) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.

Adelaide Arb Consultants identified five (5) significant trees upon the subject land. Two (2) of these trees (identified as numbers 1 and 7) are to be retained. Two of the trees (identified as numbers 10 and 21) have been assessed as displaying signs of decay and/or major levels of die back and, as such, have short life expectancies. Their removal has been recommended. The fifth tree (identified as number 20) exhibits some degree of die back in the upper crown and it has been recommended that it be monitored. However, this tree impinges upon the design of the proposed car park and therefore its removal is proposed.

Council's Urban Forest Officer has informally expressed the opinion/desire that trees numbers 1 and 7 should be retained.

Principle of Development Control 5:
Development involving ground work activities such as excavation, filling, and sealing of surrounding surfaces (whether such work takes place on the site of a significant tree or otherwise) should only be undertaken where the aesthetic appearance, health and integrity of a significant tree, including its root system, will not be adversely affected.

Principle of Development Control 6:
Where development is to take place in respect of, or in close proximity to a significant tree (whether such development takes place in the site of the tree or otherwise) that tree should be protected by appropriate measures during the course of the development, to prevent any disturbance to:
(a) the root plate including compaction, excavation, filling
(b) the main canopy causing damages to branches.

Principle of Development Control 7:
A tree protection zone should be erected for the protection of a significant tree during the construction and development activity should:
(a) consist of solid, chain mesh, steel or similar fabrication with posts erected at maximum intervals of 3 metre
(b) incorporate on all sides a clearly legible sign displaying the words 'Tree Protection Zone'
(c) be a minimum of 1.8 metres high
(d) be fixed in place to prevent unauthorised movement
(e) provide enclosure and protection to the root plate and main canopy.

Principle of Development Control 8:
Land should not be divided or developed where the division or development would be likely to result in a substantial tree-damaging activity occurring to a significant tree.

As previously stated, Adelaide ARB Consultants has advised that, of the identified significant trees located upon the subject land, tree number 1 should be retained; trees numbers 7, 10 and 20 are only in poor/fair condition and, as such, should be removed; and tree number 21 is worthy of retention but will have to be removed to facilitate the proposed development.

According to Adelaide ARB Consultants, tree number 1:

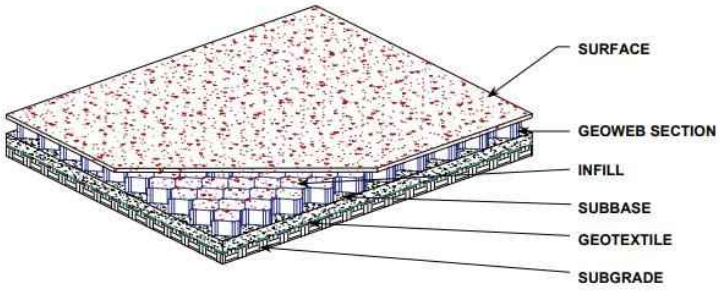
- is a remnant Manna Gum (*Eucalyptus viminalis*) which qualifies as a significant tree under the current Planning, Development and Infrastructure Act and Native Vegetation;
- is a mature specimen in fair health;
- has been assessed as having a useful life expectancy of >20 years, if undisturbed; and
- requires a Tree Protection Zone with a radius of 15.0 metres (i.e. 707m^2).

The applicant company is committed to retaining tree number 1, and acknowledges the environmental and aesthetic benefits thereof. The plan of the proposed development has been amended so as to ensure that the "Tree Protection Zone" applicable to tree number 1 affords the best achievable level of protection. Further, the design of the proposed internal driveway will generally be in accord with Council's *"Surface Design for Public Road/Driveway Trafficable Crossing Zone Over Tree Root Protection Zone"*.

A similar alternative driveway/paving option being considered is provided by Geofabrics Australasia. This system minimises compaction of natural soils and allows air and water to penetrate through the pavers into the soil and roots below, while not destabilising the pavement above or detrimentally affecting the stability and/or health of adjacent trees.

The system comprises a "Bidim" underlay (nonwoven geotextile made of recycled polymers which is highly porous, allowing water to pass through while preventing soil migration) on the subgrade; with 100mm deep "Geoweb" (robust three-dimensional panels housing a network of interconnected cells that confine and compact soil) filled with 20mm porous aggregate (enabling hydration of the dry soils and roots below); and a sealed or paved road surface.

Image 4: Alternative internal road construction option (Geofabrics Australasia).



Photographs 10, 11 & 12: "Geoweb" system

Further tree protection measures will include reducing the potential impact by previous soil and ground water contamination (by petroleum) through the provision of clean soil around the tree and the cessation of watering from underground water supplies; ensuring no root damage during the construction stage by any activity (including trenching); and the prevention of soil compaction within the Tree Protection Zone.

Details of the proposed tree protection measures will be provided during the later stages of the development application process (Building Rules Consent stage).

4.4.12 Siting and Visibility

Principle of Development Control 1:
Development should be sited and designed to minimise its visual impact on:
(a) the natural, rural or heritage character of the area....

Principle of Development Control 2:
Buildings should be sited in unobtrusive locations and, in particular, should:
(a) be grouped together
(b) where possible be located in such a way as to be screened by existing vegetation when viewed from public roads ....

Principle of Development Control 5:
Buildings and structures should be designed to minimise their visual impact in the landscape, in particular:
(a) the profile of buildings should be low and the rooflines should complement the natural form of the land
(b) the mass of buildings should be minimised by variations in wall and roof lines and by floor plans which complement the contours of the land
(c) large eaves, verandas and pergolas should be incorporated into designs so as to create shadowed areas that reduce the bulky appearance of buildings.

Principle of Development Control 9:
Development should be screened through the establishment of landscaping using locally indigenous plant species:
(a) around buildings and earthworks to provide a visual screen as well as shade in summer, and protection from prevailing winds
(b) along allotment boundaries to provide permanent screening of buildings and structures when viewed from adjoining properties and public roads

The proposed building is to be sited in an unobtrusive location upon the subject land, being well setback from both Mawson Road and Battunga Road; contained within a cluster of commercial, retail, industrial and residential development; and screened from view (to a significant extent) by existing buildings and vegetation on adjoining properties.

Whilst the proposed supermarket building will be larger than any other building in the immediate locality, the primary view of this building (being from the proposed car park and Battunga Road to the east) will be of fenestration in the south-eastern portion of the proposed building and the verandah which will run along part of the eastern façade.

These features, along with the external pump room and the loading dock, should serve to fragment the form of the proposed building; reduce the perceived bulk and mass of the proposed building; and make the overall appearance of the building more appealing/acceptable. The landscaping to be provided in the proposed "plaza" and car park areas in general should also serve to screen and soften the view of the building.

Given the above it is considered that the proposed development complies with the requirements and intent of the cited provisions.

Principle of Development Control 10:
Facilities for the storage and removal of waste should not be obtrusive or have an untidy appearance when viewed from adjoining roads or allotments.

Waste bins associated with the operation of the proposed supermarket are to be located at the rear (western end) of the proposed loading dock. There is also sufficient area between the proposed building and the western property boundary to accommodate smaller waste receptacles.

It is also noted that all air-conditioning infrastructure, plant and machinery is to be located at ground level, between the proposed building and the western and/or northern fences. As such, all infrastructure and plant will be out of the view of the public.

4.4.13 Transportation and Access

Objective 2:
Development that:
(a) provides safe and efficient movement for all transport modes
(b) ensures access for vehicles including emergency services, public infrastructure maintenance and commercial vehicles
(c) provides off-street parking
(d) is appropriately located so that it supports and makes best use of existing transport facilities and networks
(e) provides convenient and safe access to public transport stops.

Principle of Development Control 14:
Driveway crossovers should be separated and the number minimised to optimise the provision of onstreet visitor parking (where on-street parking is appropriate).

Principle of Development Control 18:
Development should provide for the on-site loading, unloading and turning of all traffic likely to be generated.

Principle of Development Control 19:
Development should make provision on site for locating loading and storage areas at the rear or side of the site to contribute to attractive streetscapes.

Principle of Development Control 29:
Development should have direct access from an all-weather public road.

Principle of Development Control 30:
Development should be provided with safe and convenient access which:
(a) avoids unreasonable interference with the flow of traffic on adjoining roads
(b) provides appropriate separation distances from existing roads or level crossings
(c) accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision
(d) is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.

Principle of Development Control 34:
Development with access from arterial roads or roads as shown on Overlay Maps – Transport should be sited to avoid the need for vehicles to reverse onto or from the road.

Principle of Development Control 36:
Driveways, access tracks and parking areas should be designed and constructed to:
(a) follow the natural contours of the land
(b) minimise excavation and/or fill
(c) minimise the potential for erosion from surface runoff
(d) avoid the removal of existing vegetation
(e) be consistent with Australian Standard AS: 2890 - Parking facilities.

Principle of Development Control 39:
Development should provide off-street vehicle parking and specifically marked accessible car parking places to meet anticipated demand in accordance with Table MtB/2 - Off Street Vehicle Parking Requirements.

Principle of Development Control 41:
Development should be consistent with Australian Standard AS: 2890 - Parking facilities.

Principle of Development Control 42:
Vehicle parking areas should be sited and designed to:
(a) facilitate safe and convenient pedestrian linkages to the development and areas of significant activity or interest in the vicinity of the development
(b) include safe pedestrian and bicycle linkages that complement the overall pedestrian and cycling network
(c) not inhibit safe and convenient traffic circulation
(d) result in minimal conflict between customer and service vehicles
(e) avoid the necessity to use public roads when moving from one part of a parking area to another
(f) minimise the number of vehicle access points onto public roads
(g) avoid the need for vehicles to reverse onto public roads
(h) where practical, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points
(i) not dominate the character and appearance of a site when viewed from public roads and spaces
(j) provide landscaping that will shade and enhance the appearance of the vehicle parking areas

(k) include infrastructure such as underground cabling and connections to power infrastructure that will enable the recharging of electric vehicles
(l) where appropriate, provide for trolley collection areas.

Principle of Development Control 45:
Vehicle parking areas should be sealed or paved to minimise dust and mud nuisance.

Principle of Development Control 46:
To assist with stormwater detention and reduce heat loads in summer, outdoor vehicle parking areas should include landscaping.

Principle of Development Control 47:
Vehicle parking areas should be line-marked to delineate parking bays, movement aisles and direction of traffic flow.

Principle of Development Control 52:
Development should provide off-street vehicle parking and specifically marked accessible car parking places to meet anticipated demand.

Principle of Development Control 53:
Loading areas and designated parking spaces for service vehicles should:
(a) be provided within the boundary of the site
(b) not be located in areas where there is parking provided for any other purpose.

The subject development proposal incorporates the provision of an on-site car park which has been purposely designed to suit the subject site and the proposed land use, as well as to comply with the requirements of AS2890 - Parking facilities.

The proposed car park area will be sealed, and line marked; will incorporate landscaping; will be accessed/egressed at two points (on secondary arterial roads), the location and design of which have been accepted by the Department for Infrastructure and Transport (DIT); and will provide eighty-one (81) car parking spaces (including two (2) designated disabled spaces), as well as bicycle parking facilities and pedestrian pathways.

Frank Siow and Associates, Traffic Engineers, has undertaken a traffic and parking assessment of the proposed development and site, a copy of which (dated 23 May 2022) has been provided as part of the development application documentation.

In regard to the issue of the proposed **on-site car parking**, the consulting traffic engineers have advised that:

- the Development Plan requirement of 5.5 spaces per 100m^2 for shops (refer Table MtB/2 – Off-Street Vehicle Parking Requirements) is considered to be conservatively high for a supermarket which is located outside of the metropolitan area;
- based on the provisions of the Development Plan, eighty-one (81) on-site car parks are required (as is the number of car parking spaces proposed);

- past general experience relating to retail development in non-metropolitan areas (including the conduct of parking surveys) indicates peak demands of less than four (4) car park spaces per 100m^2;
- a car parking rate of four (4) car park spaces per 100m^2, fifty-nine (59) car parks would be more than adequate for the proposed development (as opposed to the eighty-one (81) car parks proposed - our emphasis);
- when assessing the issue of the adequacy of the car parking to be provided as part of a development proposal, it is not unreasonable or uncommon to include on-street parking opportunities in the streets which are adjacent the subject land;
- there are relatively wide verges on Battunga Road and Mawson Road (adjacent the subject land) where the parking of vehicles appears to be quite commonplace; and
- it is considered that the verges on Battunga Road and Mawson Road could accommodate the parking of five (5) vehicles.

As for the issue of the **movement of service and/or waste collection vehicles**, the consultant traffic engineers noted that:

- the proposed development has been designed in accordance with AS2890.2-2018 and will accommodate deliveries to the proposed supermarket involving heavy rigid (HRV) trucks up to 12.5 metres long;
- "swept path" assessment indicates that a HRV would be able to conveniently enter the site via Mawson Road, turn-around, reverse into the proposed loading dock, and exit the site (in a forward direction) onto Battunga Road;
- service vehicles attending the proposed smaller shops will likely involve vans and/or utilities which could utilise to provide on-site car parking spaces (on an infrequent and short-term basis);
- waste collection would typically involve smaller sized trucks (e.g. an 8.8 metre long MVR truck); and
- deliveries to the proposed supermarket and shops, and waste collection, would typically be scheduled during quiet periods of the day.

In addition, the traffic consultant has advised that, as the subject development proposal has been designed for HRV trucks (i.e. the largest permitted rigid truck size in South Australia under the general access classification), the development site should be readily accessed by fire and emergency trucks which would typically be shorter in length.

Finally, on the issue of **traffic impact,** the consultant traffic engineers have advised that:

- based on previous Department for Infrastructure and Transport (DIT) guidelines (*Trip generation rates for assessment of development proposals*), the peak hour trip rate of 13.65 trips per 100m^2 applies to the proposed supermarket, whereas the *New South Wales Guide to Traffic Generating Developments* identifies an average peak hour trip rate of 12.3 – 12.5 trips per 100m^2 for retail centres that are less than 10,000m^2 in floor area;

- utilising the aforementioned DIT guideline, the proposed supermarket would be expected to generate approximately two hundred (200) vehicles per hour (i.e. 100 vph in and 100vph out) spread between the two access/egress points;
- their SIDRA assessment indicates that the proposed development would not result in unacceptable traffic impacts at the intersection of Battunga Road/Mawson Road/Nottage Road; and
- they estimate that the degree of saturation of the intersection would likely increase from 0.574 to 0.669 during PM peak hour, this being well below the typical maximum practical saturation of 0.8 – 0.9.

It is also noted that in June 2021 the Department for Infrastructure and Transport (Daniel Sladic, Transport Assessment Officer, Transport Network and Investment Strategy, Transport Planning and Program Development Division) provided the following advice regarding the proposed development.

- Two-way access to the development via Mawson Road and Battunga Road is supported.
- All vehicles should enter and exit the site in a forward direction.
- The new access points should be designed to cater for simultaneous movements of the largest vehicle expected to use the site (the Planning and Design Code stipulates between 9-12 metres where HRV are expected).
- It would be good to get an understanding regarding anticipated traffic volumes and impact to adjoining road network.
- Any warranted turn treatment to facilitate access to/from the site should be designed and constructed in accordance with Austroads Guides/Australian Standards and to the satisfaction of DIT.
- Consideration should be given as to how any turning treatment will interact with the adjacent land uses noting existing constraints.
- Details should be provided regarding sight distance at both access points and how this may be maintained with cars parked on the roadside verge.
- Consultation should be undertaken with Council to determine any plans they may have regarding road upgrades in the vicinity.

Regarding the aforementioned comments from the Department for Infrastructure and Transport, the consultant traffic engineers have advised that:

- the access points to the proposed development have been designed to accommodate the largest expected service vehicle entering from Mawson Road and exiting to Battunga Road;
- SIDRA analysis shows that the development would not result in adverse impacts on the adjacent intersection;
- given the relatively low traffic flows at each of the access points, it is considered that auxiliary turn lanes are not necessary;

- SIDRA analysis indicates that the potential queues and delays for right turn in vehicles into the subject development would be minimal;
- it is noted that the subject site is located within the town centre where even the DIT intersection does not have separate turn lanes for the various turning movements nor for other existing car parks in the town centre;
- it is noted that there is a very wide sealed area on the southern side of Mawson Road which, in the event that a vehicle is turning right into the subject development, through traffic would be able to pass this right turn vehicle using the sealed verge;
- the above situation (i.e. the wide sealed road verge) is not an uncommon arrangement for country town centres;
- it is noted that the verge on the eastern side of Battunga Road currently accommodates a footpath and drainage channel and, as such, it would not be possible to widen the road to accommodate a right turn lane;
- notwithstanding the above matter relating to Battunga Road, SIDRA analysis shows that there would be minimal delays to traffic turning into the subject development;
- the verge of both roads on the subject development frontage are quite wide and, in the event that there are parked cars present, there should be sufficient clearance between the parked cars and the edge of road to enable adequate sight lines to be maintained of the road traffic from site exit points; and
- in the event the sight line issues arise at site egress points, Council could (if necessary) impose appropriate parking controls along the roadways.

Principle of Development Control 5:
Land uses that generate large numbers of visitors such as shopping centres, places of employment, schools, hospitals and medium to high density residential uses should be located so that they can be serviced by the public transport network and encourage walking and cycling.

Principle of Development Control 6:
Development generating high levels of traffic, such as schools, shopping centres and other retail areas, and entertainment and sporting facilities should incorporate passenger pick-up and set-down areas. The design of such areas should minimise interference to existing traffic and give priority to pedestrians, cyclists and public and community transport users.

Principle of Development Control 8:
Development should provide safe and convenient access for all anticipated modes of transport.

Principle of Development Control 25:
Development should encourage and facilitate cycling as a mode of transport by incorporating end-of journey facilities including:
(a) showers, changing facilities and secure lockers
(b) signage indicating the location of bicycle facilities
(c) bicycle parking facilities provided at the rate set out in Table MtB/3 - Off Street Bicycle Parking Requirements.

Principle of Development Control 26:
On-site secure bicycle parking facilities should be:
(a) located in a prominent place
(b) located at ground floor level
(c) located undercover
(d) located where surveillance is possible
(e) well lit and well signed
(f) close to well used entrances
(g) accessible by cycling along a safe, well lit route.

The subject development proposal has been designed to allow for the safe and convenient movement of pedestrians, cyclists, and motorists to, from and within the subject land.

Principle of Development Control 33:
Development with access from roads with existing or projected traffic volumes exceeding 6000 vehicles per day should be sited to avoid the need for vehicles to reverse onto or from the road.

According to the Department for Infrastructure and Transport, the estimated average number of vehicles per day (two-way) travelling passed the subject land is approximately 7,300 on Mawson Road and 5,200 on Battunga Road. Regardless, the subject development proposal incorporates two access/egress points which have been designed to allow for simultaneous movement of vehicles to and from the subject land in a safe and efficient manner. It is also noted that the designs of these access/egress points have been accepted by the Department for Infrastructure and Transport.

Principle of Development Control 38:
Development should be sited and designed to provide convenient access for people with a disability.

The proposed on-site car parking will provide designated car parking spaces and pedestrian pathways for use by disabled persons.

Given all of the aforementioned, it is considered that the subject development proposal meets all of the cited general provisions of the Development Plan. In doing so it will provide sufficient off-street car parking and bicycle parking spaces/facilities; will enable the safe and efficient movement of vehicles, pedestrians and cyclist to, from and within the subject site; and will likely not interfere with the movement of vehicles along the local road network.

4.4.14 Waste

Objective 1:
Development that, in order of priority, avoids the production of waste, minimises the production of waste, reuses waste, recycles waste for reuse, treats waste and disposes of waste in an environmentally sound manner.

Principle of Development Control 1:
Development should be sited and designed to prevent or minimise the generation of waste (including wastewater) by applying the following waste management hierarchy in the order of priority as shown below:
(a) avoiding the production of waste
(b) minimising waste production
(c) reusing waste
(d) recycling waste
(e) recovering part of the waste for re-use
(f) treating waste to reduce the potentially degrading impacts
(g) disposing of waste in an environmentally sound manner.

Principle of Development Control 2:
The storage, treatment and disposal of waste materials from any development should be achieved without risk to health or impairment of the environment.

Principle of Development Control 3:
Development should avoid as far as practical, the discharge or deposit of waste (including wastewater) onto land or into any waters (including processes such as seepage, infiltration or carriage by wind, rain, sea spray, stormwater or by the rising of the water table).

Principle of Development Control 5:
Development should include appropriately sized area to facilitate the storage of receptacles that will enable the efficient recycling of waste.

Principle of Development Control 9:
Waste water disposal systems should be designed and sited so that: (a) no part of a septic tank effluent disposal area or any other waste water disposal area (eg irrigated area) is located within 50 metres of a watercourse identified as a blue line on a current series 1:50 000 government standard topographic map or within 50 metres of any readily identifiable watercourses not depicted on a current 1:50 000 government standard topographic map (b) no part of a waste water disposal area is located on any land with a slope greater than 20 per cent (1-in-5), or depth to bedrock or seasonal or permanent watertable less than 1.2 metres.

Principle of Development Control 11:
Where appropriate, stormwater, and/or waste water should be re-used for such purposes such as vehicular/plant wash-down, control of dust, washing or equipment and landscape irrigation.

Principle of Development Control 14:
Areas for activities such as commercial car parking, loading and unloading, wash down of vehicles, storage of plant or equipment, or storage of waste refuse bins should be suitably paved, bunded to exclude stormwater run-off from external sources, and designed so that water that has made contact with such areas is either:
(a) directed to a sediment trap, separator or other appropriate treatment device and then to sewer
(b) directed to a wastewater holding tank.

Council (Alex Hodge, Environmental Health Officer and Madhawa Rupasinghe, Wastewater Engineer) has advised that:

- the subject development proposal can be connected to either the existing sewer system or STEDS;
- the nearest sewer connection point is on Mawson Road directly adjacent the subject land; and
- recycled water is available (100mm connection), if required.

Preliminary engineering investigations/evaluations undertaken by RCI Consultant Engineers indicate that the proposed supermarket development can be connected to the existing sewer pipe which is located adjacent the subject land in Mawson Road.

In addition, as previously indicated, Council (Veli Sedev, Infrastructure Planning Engineer and Mitchell Bowley, Development Engineer) has identified that available options in regard to stormwater management (refer 4.4.6 Infrastructure, Principle of Development Control 4, pages 36 and 37). At this time the preferred option is for the stormwater to be directed from the subject development/subject site via an underground pipe running north along the western alignment of Battunga Road, and discharged into the small watercourse which runs through the property at number 9 Battunga Road.

The full, detailed final design for stormwater management will have to be submitted to Council for consideration and approval.

5. SOCIAL, ENVIRONMENTAL AND ECONOMIC IMPACTS

5.1 Social Impacts

The proposed development will provide a supermarket which could contribute, along with the existing neighbouring land uses, to the creation of an active pseudo town centre and community meeting place. This could have benefits (of a social nature) to the local community.

It is also considered that a development of the form and scale proposed should have little, if any, adverse social impacts. Whilst it will provide a convenient shopping option for the local community, the proposed land use per se cannot directly place any additional demand upon any existing social/community services and/or community facilities.

5.2 Environmental Impacts

The environmental impacts are difficult to quantify, but are likely to be minimal.

It would appear that there are suitable solutions available in regard to wastewater and stormwater management/disposal, although further engineering investigations are required in order to finalise the design of the systems.

As for the potential of inundation of the subject land by flood water, this appears to be minimal, given the *Meadows Township Flood Plan* (circa 1992).

The waste material associated with the operation of the proposed supermarket can be addressed in a conventional manner, through the storage of waste in appropriate waste receptacles and the collection/removal of such waste on a regular basis (and at a suitable time) by appropriate contractors.

The subject development proposal also seeks to retain five (5) trees which exist upon the subject land (four (4) of which are either "significant" or "regulated").

The project consultant arborist has presented a detailed report regarding the trees which exist upon the subject land, and Council's Urban Forest Officer and the applicant company have seemingly come to a general agreement regarding the trees that should be retained. Further, the applicant company will introduce Tree Protection Zones, where required; will adopt specific construction practices within the Tree Protection Zones; and will undertake tree and vegetation plantings as part of the proposed landscaping scheme.

5.3 Economic Impacts

The economic effects of the proposed development are also difficult to estimate, although it is suggested that the outcome should be beneficial to the local community.

The *Meadows Township Plan*, as prepared by Mount Barker District Council in 2019, promotes the idea of a small-scale anchor supermarket in Meadows, suggesting that future population growth will likely make such a venture viable. Council has also indicated that this assertion/finding was confirmed by the *Meadows Retail Study* (as prepared by Property and Advisory Pty Ltd in May 2018). .

Once trading, the proposed supermarket will provide a convenient shopping alternative for the local community who have had to travel to Mount Barker or Strathalbyn to shop for required grocery and food items. These supermarkets are over seventeen (17) kilometres from Meadows, so regular trips to these stores would be neither convenient nor economical.

On-going benefits likely to be experienced by the local community include the saving of time and expense as a consequence of having a supermarket within the township; the retention of revenue within the local community through additional local shopping option; the likely increase in employment opportunities; and the potential for inclusion of the supermarket owners/operators in the affairs of, and events conducted by, the local community.

In addition, a supermarket should assist in the attraction of new residents to the township, makes the community a more attractive place to live, and obviously gives the local community a reliable shopping option.

6. CONCLUSION

The proponent company is seeking consent to construct a modest sized supermarket, with associated car parking, landscaping and fencing, on land which is located in the Mixed Use Zone at the western periphery of the township of Meadows.

The subject land comprises two properties, one which exhibits a shop and dwelling (Meadows Mini Mart) and a large area of associated open space. This building is of local heritage significance. The second part of the subject site has been vacant for approximately five years.

Whilst the Mixed Use Zone only anticipates shops or a group of shops of up to 250m^2 in area, it strangely envisages a mix of industrial, commercial, retail and residential development at different scales. Interestingly, under the now existing Planning and Design Code (Suburban Business Zone), the subject land could accommodate a shop or group of shops up to (and potentially over) 1,000m^2 in floor area.

According to Map MtB/34 of the Mount Barker District Council Development Plan (consolidated 20 August 2020), the subject land lies within the Mixed Use Zone; at the interface with the Deferred Urban and Local Centre Zones.

The proposed development constitutes a non-complying form of development within the zone by virtue of the "Procedural Matters" which identifies a “shop or group of shops” which have a gross leasable area of 250m^2 or more as constituting non-complying development.

The subject proposal has been assessed against the relevant provisions of the Mount Barker Development Plan so as to determine its appropriateness and to identify any likely social, economic and/or environmental impacts. It is my opinion that the subject development proposal represents an appropriate, rational and practical form of development for the subject land and the locality. In forming this position we were mindful of the following.

- The subject land lies in the Mixed Use Zone, at the interface with the Local Centre and Deferred Urban zones; and within a cluster of established residential, retail, commercial and industrial land uses of varying appearance and scale which seemingly have little correlation.
- The *Meadows Township Plan*, as prepared by Council in 2019, identifies the need/potential for a small-scale anchor supermarket in Meadows, the viability of which is based on anticipated future population growth for Meadows and its environs, and the retail analysis undertaken by Council.
- The character of the immediate locality is definitely mixed, but has a distinct commercial feel.
- The main portion of the subject land has either been underutilised or vacant for many years.
- No appropriate alternative sites of the required size, configuration, location and/or zone can be identified elsewhere in the township.
- The provisions of the Mixed Use Zone do not specifically speak against shop development.

- The proposed supermarket will complement the form of the existing development within, and the character of, the immediate locality.
- The proposed supermarket will afford the local community the opportunity to purchase their day-to-day shopping needs locally, rather than having to travel to Mount Barker and/or Strathalbyn (approximately 17 – 19 kilometres) on what could be a regular basis.
- The proposed development has been designed to be sympathetic to the local environment and the existing neighbouring land uses; and respectful to the existing Local Heritage Place and the Heritage Conservation Area.
- The proposed development provides ample on-site car and bicycle parking; appropriately located and designed access/egress points which have been agreed to "in principle" by the Department for Infrastructure and Transport; a car parking layout which is in accord with AS2890 – Parking Facilities; and an acceptable landscaping scheme.
- The subject land is not likely to be inundated by flood water, nor should it be at serious risk from bushfires.
- The proposed development generally meets the principles and intent of the Development Plan in regard to site coverage; building height; setbacks; privacy; overshadowing; on-site car and bicycle parking; fencing; and landscaping.
- The proposed development can be connected to electricity services, sewer or the existing Community Wastewater Management System, and an appropriate stormwater management system.
- The subject land is readily accessed via the existing local road network.
- The proposed development will likely not create any nuisance, pollutants, noise or waste product which could detrimentally affect the use and enjoyment of neighbouring properties.
- The proposed land use should not present a threat to the natural environment.

Given the aforementioned, it is considered that the subject development proposal will likely have little (if any) detrimental impact upon the character of the locality; the amenity experienced by local residents; or any existing land use within the immediate and wider localities.

Accordingly, it is considered that the subject development proposal exhibits considerable merit; is, on balance, an orderly and proper development; is an appropriate alternative land use for the site and the specific location within the Mixed Use Zone; and is unlikely to be the subject of reasonable objection.

For all of the reasons espoused herein, we support the subject development proposal; and consider it worthy of consent.

Craig Rowe MPIA
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23 May 2022

Mr Craig Rowe
C L Rowe & Associates
PO Box 573
GOOLWA SA 5214

Dear Mr Rowe,

3-5 BATTUNGA ROAD & 33 MAWSON ROAD, MEADOWS
PROPOSED RETAIL DEVELOPMENT
TRAFFIC AND PARKING ASSESSMENT

We refer to the mixed use development on the subject site. The subject site is located at the north-western corner of the intersection of Battunga Road/Mawson Road/Nottage Road, Meadows.

We understand that the proposed development was lodged under the Mount Barker District Council (Consolidated – 20 August 2020) Development Plan. The subject land is located within the *Mixed Use Zone*.

Battunga Road and Mawson Road are roads under the care, control and management of the Department for Infrastructure and Transport (DIT). The DIT's latest traffic data (2019) shows that Battunga Road carries approximately 5,200 vehicles per day and Mawson Road, adjacent to the subject site, carries approximately 7,300 vehicles per day. Nottage Road is a Council road.

The priority road at the intersection is Mawson Road, with a STOP sign control on Battunga Road and a Give Way control on Nottage Road.

1.0 THE PROPOSAL

The proposal comprises of a new retail tenancy (small supermarket) with approximately 1,470m2 of retail floor area. The retail tenancy would have a dedicated loading dock. Servicing of the supermarket would be by rigid trucks.

There is an existing shop/residence adjacent to Mawson Road that would be retained in the development. This current authorised use does not have any parking provision on-site.

The proposed car park layout has been designed to retain a significant tree, with the necessary tree protection zone around it, as well as other notable trees on the subject site.

Eighty-one (81) parking spaces would be provided on-site, including 2 disabled parking spaces. Access would be provided at Mawson Road and Battunga Road. These access points would be located approximately 50m to 60m away from the intersection.

2.0 PARKING ASSESSMENT

2.1 Parking rate consideration

As the proposed development was lodged under the previous Development Plan, the relevant parking requirements from *Table MtB/2 –Off-Street Vehicle Parking Requirements* are:

Shop (excluding restaurant, café and tea room)	5.5 spaces per 100 square metres of gross leaseable floor area

We are of the opinion that the above parking rate is conservatively high.

We have undertaken parking surveys at an existing supermarket and shop on Wellington Road, Mount Barker, on Saturday 29/5/2021 between 11am and 2pm, to provide supporting information to show that current parking demands for retail land uses would typically be lower than specified in *Table MtB/2*.

The peak parking demand recorded at the Wellington Road retail land use in Mount Barker (which is a supermarket and a bottle shop) was approximately 2.4 spaces per 100m2 and this peak parking occurred between 1pm and 1.15pm.

We have previously undertaken parking surveys at the same Wellington Road site in March 2016 (Thursday 10/3/2016 and Saturday 12/3/2016) where we found that the peak parking demand was equivalent to 3.6 spaces per 100m2.

Another example of a lower parking demand outside of metropolitan Adelaide is from our previous parking surveys at the Gawler Green Shopping Centre, where we found the peak parking demand to be 3.3 spaces per 100m2 or less.

For the reasons detailed above, we are of the opinion that the parking rate specified in *Table MtB/2 –Off-Street Vehicle Parking Requirements* (5.5 spaces per 100m2) for retail developments is overly high.

2.2 Parking requirement

There is no change proposed to the existing shop/residence adjacent to Mawson Road.

The current authorised use does not have any parking provision on-site. Based on existing use rights, we are of the opinion that there is no parking requirement that needs to be provided by this existing use.

Based on the parking rate of 5.5 spaces per 100m2, the parking required for the new retail tenancy of 1,470m2 floor area would be 81 spaces (rounded up). As the parking provision on-site would be 81 spaces, the parking requirement of the Development Plan would be met.

Notwithstanding the above, as indicated earlier, we are of the opinion that the parking rate of 5.5 spaces per 100m2 specified in *Table MtB/2 –Off-Street Vehicle Parking Requirements* is considered to be conservatively high. Our experience with retail developments in non-metropolitan areas has identified peak parking demands that are less than 4 spaces per 100m2. We are of the opinion that a similar rate would be more than adequate to meet the anticipated future parking demands of the proposed development. If the lower rate of say 4 spaces per 100m2 were to be applied to the subject development, the parking required would be 59 spaces, which would be well below the parking provision of 81 spaces. That is, there would likely be a surplus parking provision of up to 22 spaces on the subject site.

2.3 Other parking considerations

In our experience, it is not unreasonable or uncommon to include on-street parking opportunity in the adjacent streets abutting the development site, when considering the parking adequacy issue. We note that there are relatively wide verges on Battunga Road and Mawson Road, adjacent to the subject site, where verge parking appears to quite commonplace in the town centre.

From our site inspection, we think that there would be up to 5 on-street parking spaces that would be available abutting the subject development site. Regard should be given to this on-street parking capacity of 5 spaces, when considering the parking adequacy issue for the development.

2.4 Summary of parking assessment

Based on the above parking assessment, we are of the opinion that adequate parking would be provided for the development.

3.0 SERVICE VEHICLE REQUIREMENTS

We understand that servicing and waste collection would typically be scheduled during quieter periods of the day.

Servicing for the small supermarket would involve rigid trucks up to 12.5m long HRV size. Our swept path assessment shows that the HRV would be able to conveniently enter the car park from Mawson Road, then turnaround on-site to reverse into the loading dock. On completion of the servicing, the HRV truck would then exit the site in a forward direction to Battunga Road.

We understand that Council has sought further commentary regarding the reversing of the HRV truck into the loading dock from the main car park aisleway. We provide the following comments regarding this type of service vehicle manoeuvres within a car park:

- The proposed retail development is a relatively small scale supermarket and is of a much smaller scale than a typical Woolworths, Coles or Aldi supermarket. It is anticipated that the servicing requirements of the proposal would be much lower than for the major type supermarkets.

- In our opinion, it would be unrealistic and not feasible to consider a separate driveway to the loading dock for the proposed development, given the small scale nature of the supermarket and the site constraints. To design a separate driveway for service trucks to the loading dock would require extensive areas to be set aside for this purpose, which would cater to only infrequent access movements of trucks.

- Supermarket operators would typically and appropriately manage their servicing requirements to ensure the least impact on their customers. Frequently, the large service trucks would only access the site during quieter periods of the day, such as early morning when patronage of the supermarket is lowest. This is not an uncommon arrangement to deal with the service vehicle access issue. As indicated above, supermarket operators would typically adopt such an approach or, if necessary, Council could include a condition to restrict access by large service trucks to off-peak periods, such as 7am to 10am for example.

- There are many examples that we are aware of at major shopping centres where large service vehicles share the same aisleway to reverse into the loading dock positions, ie no separate driveways are provided to the loading docks. They include: (1) the Hilton Shopping centre, where the major supermarket has a

loading dock which requires semi-trailers to reverse into from the main aisleway in front of the centre entrance; and (2) the new Aldi supermarket development in Glenelg where the semi-trailer would reverse into the loading dock immediately adjacent to the main entrance to the car park. Restricting the times when these large service vehicles can access the site in these instances would help minimise the traffic impact on users of the centre.

Waste collection would also occur in the manner described above but typically would involve a smaller truck such as an 8.8m long MRV truck. For the smaller shops, we understand that service vehicles would typically involve passenger type vehicles (such as vans and utes). These smaller service vehicles can utilise the normal parking spaces for the infrequent servicing activities.

The design of the proposed car park for the supermarket accommodates the 12.5m long HRV truck, which is the largest rigid truck permitted in South Australia. From previous work that we have undertaken, we understand that the vehicles operated by the Metropolitan Fire Service would typically have dimensions and turning circles that are less than or equal to the HRV design vehicle.

Given that the proposed development has been designed to the HRV truck movements, fire access vehicles would also be able to satisfactorily access the site during emergencies.

4.0 TRAFFIC IMPACT

The previous DIT's guidelines, *Trip generation rates for assessment of development proposals*, has a peak hour trip generation rate of 13.65 trips per 100m2 for a supermarket.

The *NSW's Guide to Traffic Generating developments* identifies an average peak hour trip rate of 12.3 to 12.5 trips per 100m2 for a retail centre that is less than 10,000m2 in floor area. If conservatively, the higher trip rate of the previous DIT guidelines were to be used (13.65), the proposed development would be expected to generate approximately 200 vehicles per hour (ie 100 vph in and 100 vph out). These trips would be spread between two access points in Mawson Road and Battunga Road.

Our SIDRA assessment indicates that the proposed development would not result in unacceptable traffic impacts at the intersection of Battunga Road/Mawson Road/Nottage Road. We estimate that the degree of saturation of the intersection would increase from 0.574 to 0.669 during the PM peak hour. The resulting degree of saturation would be below the typical maximum practical saturation of 0.8-0.9.

The SIDRA analyses of the existing and future traffic volumes are shown in APPENDIX 2 to 5.

We note that if the STOP/Give Way control at the intersection were to be relocated to Mawson Road, ie Battunga Road and Nottage Road would become the priority roads, the degree of saturation for the existing and future conditions would be much lower at 0.387 and 0.386 respectively. Given that this is a DIT intersection, we leave it to DIT to consider if this reallocation of priority is appropriate, however, we make the observation that the operation of the intersection could be improved by such a measure.

5.0 PRELIMINARY CONSULTATION WITH DIT

Preliminary comments were sought from DIT concerning access points for the development. In an email dated 25 June 2021, DIT provided the following comments below:

- *Two-way access to the development via Mawson Road and Battunga Road is supported.*
- *All vehicles should enter and exit the site in a forward direction.*

- *The new access points should be designed to cater for simultaneous movements of the largest vehicle expected to use the site (the Planning and Design Code stipulates between 9-12 metres where HRV are expected).*
- *It would be good to get an understanding regarding anticipated traffic volumes and impact to adjoining road network.*
- *Any warranted turn treatment to facilitate access to/from the site should be designed and constructed in accordance with Austroads Guides/Australian Standards and to the satisfaction of DIT.*
- *Consideration should be given as to how any turning treatment will interact with the adjacent land uses noting existing constraints.*
- *Details should be provided regarding sight distance at both access points and how this may be maintained with cars parked on the roadside verge.*
- *Consultation should be undertaken with Council to determine any plans they may have regarding road upgrades in the vicinity.*

In the above email, DIT confirmed that the proposed two-way access points on both roads are supported.

The access points have been designed to accommodate the largest expected service vehicle entering from Mawson Road and exiting to Battunga Road (see APPENDIX 1).

Section 4.0 details the traffic impact analysis for the development, in particular its impact on the adjacent intersection. SIDRA analyses shows that the development would not result in adverse impacts on the adjacent intersection.

Given the relatively low traffic flows at each of the access points, it is considered that auxiliary turn lanes are not necessary. SIDRA analyses show that the potential queues and delays for right turn in vehicles into the subject development would be minimal (see APPENDIX 4 and 5). It should be noted that the subject site is located within the town centre where even the DIT intersection does not have separate turn lanes for the various turning movements nor for other existing car parks in the town centre.

On Meadows Road, it is noted that there is a very wide sealed area on the southern side which, in the event that a vehicle is turning right into the subject development, through traffic would be able to pass this right turn vehicle using the sealed verge. This is not an uncommon arrangement for country town centres.

On Battunga Road, it is noted that the verge on the eastern side currently accommodates a footpath and drainage channel. It would not be possible to widen the road to accommodate a right turn lane. SIDRA analysis shows that there would be minimal delays to traffic turning into the subject development.

Finally, the verge of both roads adjacent to the subject development frontage are quite wide and, in the event that there are parked cars present, there should be sufficient clearance between the parked cars and the edge of road to enable adequate sight lines to be maintained for exit traffic to view main road traffic. If necessary, parking controls could be used by Council to control where parking could occur.

6.0 SUMMARY

The proposed development comprises of a new retail tenancy (small supermarket) on the subject site. An existing shop/residence (with existing use rights) adjacent to Mawson Road would be retained in the development.

Based on our parking assessment, we are of the opinion that the parking provision on-site (81 spaces) would meet the requirements of the Development Plan. The parking provision would also likely to well exceed the

parking demands by up to 22 spaces, based on our experience with parking demands at retail developments in non-metropolitan areas.

The proposed car park would have 81 on-site parking spaces and would be designed to the requirements of the relevant parking standards. The proposed car park layout would also satisfactorily accommodate the servicing and deliveries anticipated for the development and provide suitable access for fire vehicles.

The proposed development is also envisaged not to result in unacceptable traffic conditions in the adjacent road network, including the intersection of Battunga Road/Mawson Road/Nottage Road

On the basis of the above assessment, we are of the opinion that the proposed development would be supportable from a traffic and parking perspective.

Yours sincerely,

Frank Siow

FRANK SIOW
Principal Consultant

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APPENDIX 1: SWEPT PATHS OF HRV

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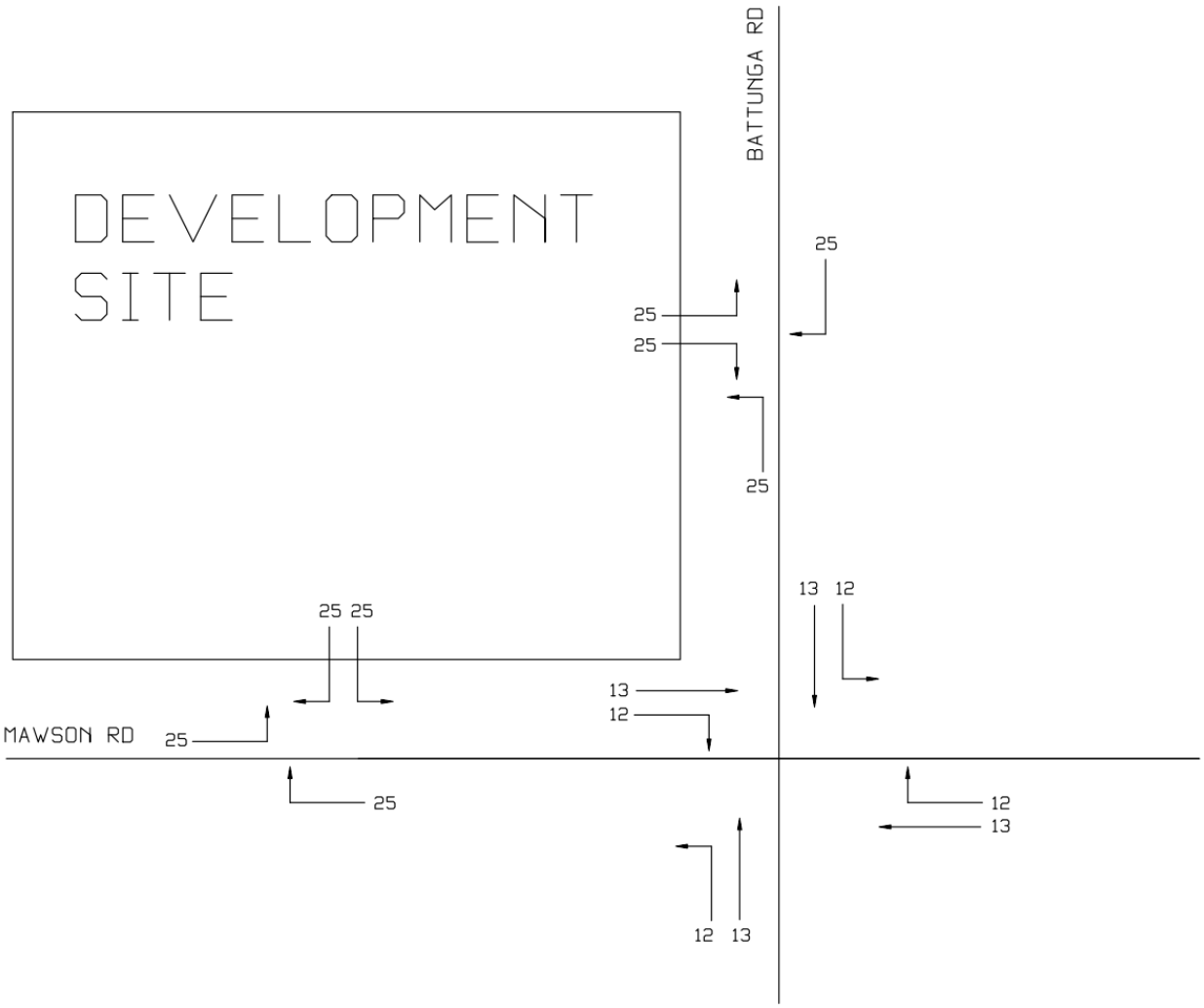
APPENDIX 2: DISTRIBUTION OF NEW TRIPS



TRIP DISTRIBUTION
PM PEAK HOUR

APPENDIX 3: BATTUNGA RD MAWSON RD INTERSECTION

Existing situation

MOVEMENT SUMMARY

Site: 101 [Battunga Rd-Mawson Rd- Nottage Rd Existing (Site Folder: General)]

PM Peak
Existing
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Nottage Rd														
1	L2	9	9.3	9	9.3	0.059	9.1	LOS A	0.2	1.5	0.43	0.94	0.43	49.9
2	T1	16	9.3	16	9.3	0.059	12.2	LOS B	0.2	1.5	0.43	0.94	0.43	49.7
3	R2	12	9.3	12	9.3	0.059	12.3	LOS B	0.2	1.5	0.43	0.94	0.43	49.7
Approach		37	9.3	37	9.3	0.059	11.5	LOS B	0.2	1.5	0.43	0.94	0.43	49.7
East: Mawson Rd E														
4	L2	9	6.3	9	6.3	0.120	6.9	LOS A	0.3	2.5	0.19	0.12	0.19	56.3
5	T1	167	6.3	167	6.3	0.120	0.4	LOS A	0.3	2.5	0.19	0.12	0.19	58.1
6	R2	35	6.3	35	6.3	0.120	7.0	LOS A	0.3	2.5	0.19	0.12	0.19	56.0
Approach		211	6.3	211	6.3	0.120	1.8	NA	0.3	2.5	0.19	0.12	0.19	57.7
North: Battunga Rd														
7	L2	41	8.5	41	8.5	0.574	12.0	LOS B	3.9	28.9	0.64	1.13	1.07	47.0
8	T1	29	8.5	29	8.5	0.574	15.4	LOS C	3.9	28.9	0.64	1.13	1.07	46.9
9	R2	252	8.5	252	8.5	0.574	17.0	LOS C	3.9	28.9	0.64	1.13	1.07	46.9
Approach		322	8.5	322	8.5	0.574	16.2	LOS C	3.9	28.9	0.64	1.13	1.07	46.9
West: Mawson Rd W														
10	L2	142	7.8	142	7.8	0.192	5.7	LOS A	0.2	1.4	0.05	0.26	0.05	55.5
11	T1	188	7.8	188	7.8	0.192	0.1	LOS A	0.2	1.4	0.05	0.26	0.05	57.4
12	R2	17	7.8	17	7.8	0.192	6.3	LOS A	0.2	1.4	0.05	0.26	0.05	55.2
Approach		347	7.8	347	7.8	0.192	2.7	NA	0.2	1.4	0.05	0.26	0.05	56.5
All Vehicles		917	7.8	917	7.8	0.574	7.6	NA	3.9	28.9	0.31	0.56	0.46	52.7

Future situation with development traffic

MOVEMENT SUMMARY

Site: 101 [Battunga Rd-Mawson Rd- Nottage Rd Future with DA traffic (Site Folder: General)]

PM Peak
Existing + DA traffic
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Nottage Rd														
1	L2	21	9.3	21	9.3	0.099	9.2	LOS A	0.3	2.6	0.43	0.95	0.43	49.7
2	T1	29	9.3	29	9.3	0.099	13.0	LOS B	0.3	2.6	0.43	0.95	0.43	49.5
3	R2	12	9.3	12	9.3	0.099	13.4	LOS B	0.3	2.6	0.43	0.95	0.43	49.5
Approach		62	9.3	62	9.3	0.099	11.8	LOS B	0.3	2.6	0.43	0.95	0.43	49.6
East: Mawson Rd E														
4	L2	9	6.3	9	6.3	0.137	7.0	LOS A	0.4	3.3	0.23	0.14	0.23	56.0
5	T1	180	6.3	180	6.3	0.137	0.5	LOS A	0.4	3.3	0.23	0.14	0.23	57.8
6	R2	47	6.3	47	6.3	0.137	7.1	LOS A	0.4	3.3	0.23	0.14	0.23	55.7
Approach		236	6.3	236	6.3	0.137	2.1	NA	0.4	3.3	0.23	0.14	0.23	57.3
North: Battunga Rd														
7	L2	53	8.5	53	8.5	0.669	13.8	LOS B	5.1	38.4	0.69	1.21	1.38	45.4
8	T1	42	8.5	42	8.5	0.669	18.0	LOS C	5.1	38.4	0.69	1.21	1.38	45.3
9	R2	252	8.5	252	8.5	0.669	20.4	LOS C	5.1	38.4	0.69	1.21	1.38	45.3
Approach		347	8.5	347	8.5	0.669	19.1	LOS C	5.1	38.4	0.69	1.21	1.38	45.3
West: Mawson Rd W														
10	L2	142	7.8	142	7.8	0.208	5.8	LOS A	0.3	2.4	0.09	0.25	0.09	55.4
11	T1	201	7.8	201	7.8	0.208	0.1	LOS A	0.3	2.4	0.09	0.25	0.09	57.3
12	R2	29	7.8	29	7.8	0.208	6.4	LOS A	0.3	2.4	0.09	0.25	0.09	55.1
Approach		372	7.8	372	7.8	0.208	2.8	NA	0.3	2.4	0.09	0.25	0.09	56.4
All Vehicles		1017	7.8	1017	7.8	0.669	8.7	NA	5.1	38.4	0.35	0.60	0.58	51.8

APPENDIX 4: BATTUNGA ROAD ACCESS POINT

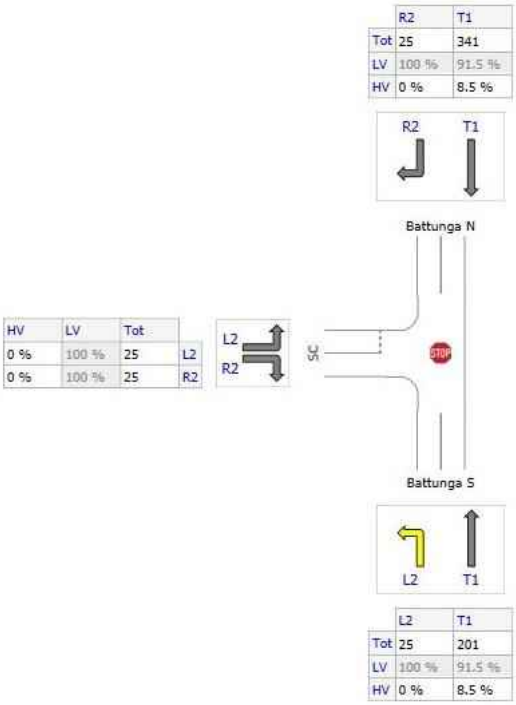
MOVEMENT SUMMARY

Site: 101 [Battunga Rd Access Point (Site Folder: General)]

Shopping Centre access
PM peak
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Battunga S														
1	L2	25	0.0	25	0.0	0.122	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	57.7
2	T1	201	8.5	201	8.5	0.122	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	59.3
Approach		226	7.6	226	7.6	0.122	0.6	NA	0.0	0.0	0.00	0.07	0.00	59.1
North: Battunga N														
8	T1	341	8.5	341	8.5	0.202	0.1	LOS A	0.2	1.6	0.06	0.04	0.06	59.3
9	R2	25	0.0	25	0.0	0.202	6.4	LOS A	0.2	1.6	0.06	0.04	0.06	57.1
Approach		366	7.9	366	7.9	0.202	0.5	NA	0.2	1.6	0.06	0.04	0.06	59.2
West: SC														
10	L2	25	0.0	25	0.0	0.053	6.2	LOS A	0.2	1.3	0.35	0.63	0.35	52.3
12	R2	25	0.0	25	0.0	0.053	8.3	LOS A	0.2	1.3	0.35	0.63	0.35	51.8
Approach		50	0.0	50	0.0	0.053	7.2	LOS A	0.2	1.3	0.35	0.63	0.35	52.1
All Vehicles		642	7.2	642	7.2	0.202	1.1	NA	0.2	1.6	0.06	0.10	0.06	58.5



APPENDIX 5: MAWSON ROAD ACCESS POINT

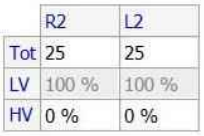
MOVEMENT SUMMARY

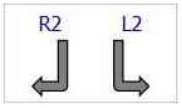
Site: 101 [Mawson Rd Access Point (Site Folder: General)]

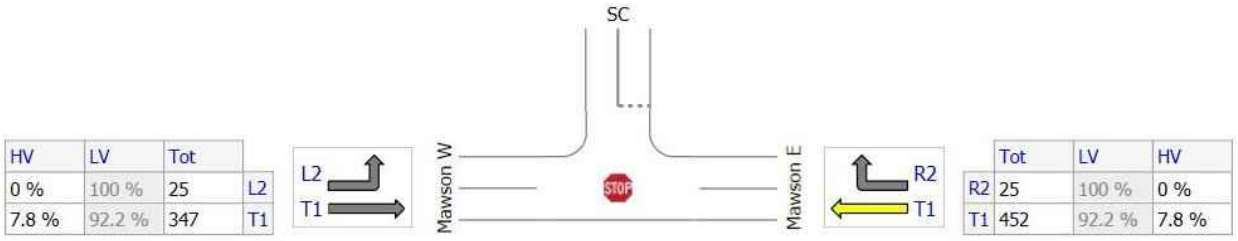
Shopping Centre access
PM peak
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Mawson E														
5	T1	452	7.8	452	7.8	0.264	0.2	LOS A	0.3	2.0	0.07	0.03	0.07	59.4
6	R2	25	0.0	25	0.0	0.264	7.3	LOS A	0.3	2.0	0.07	0.03	0.07	54.6
Approach		477	7.4	477	7.4	0.264	0.5	NA	0.3	2.0	0.07	0.03	0.07	59.2
North: SC														
7	L2	25	0.0	25	0.0	0.070	5.2	LOS A	0.2	1.6	0.48	0.70	0.48	47.7
9	R2	25	0.0	25	0.0	0.070	8.8	LOS A	0.2	1.6	0.48	0.70	0.48	47.0
Approach		50	0.0	50	0.0	0.070	7.0	LOS A	0.2	1.6	0.48	0.70	0.48	47.3
West: Mawson W														
10	L2	25	0.0	25	0.0	0.200	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	30.3
11	T1	347	7.8	347	7.8	0.200	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach		372	7.3	372	7.3	0.200	0.4	NA	0.0	0.0	0.00	0.04	0.00	57.4
All Vehicles		899	6.9	899	6.9	0.264	0.8	NA	0.3	2.0	0.06	0.07	0.06	58.0







FRANK SIOW & ASSOCIATES

Traffic and Parking Consultants

P.O. Box 253
Kensington Park SA 5068
franksiow.com.au

31 October 2022

Mr Craig Rowe
C L Rowe & Associates
PO Box 573
GOOLWA SA 5214

Dear Mr Rowe,

3-5 BATTUNGA ROAD & 33 MAWSON ROAD, MEADOWS
PROPOSED RETAIL DEVELOPMENT
FURTHER SUPPLEMENTARY INFORMATION – SERVICE VEHICLE ACESS

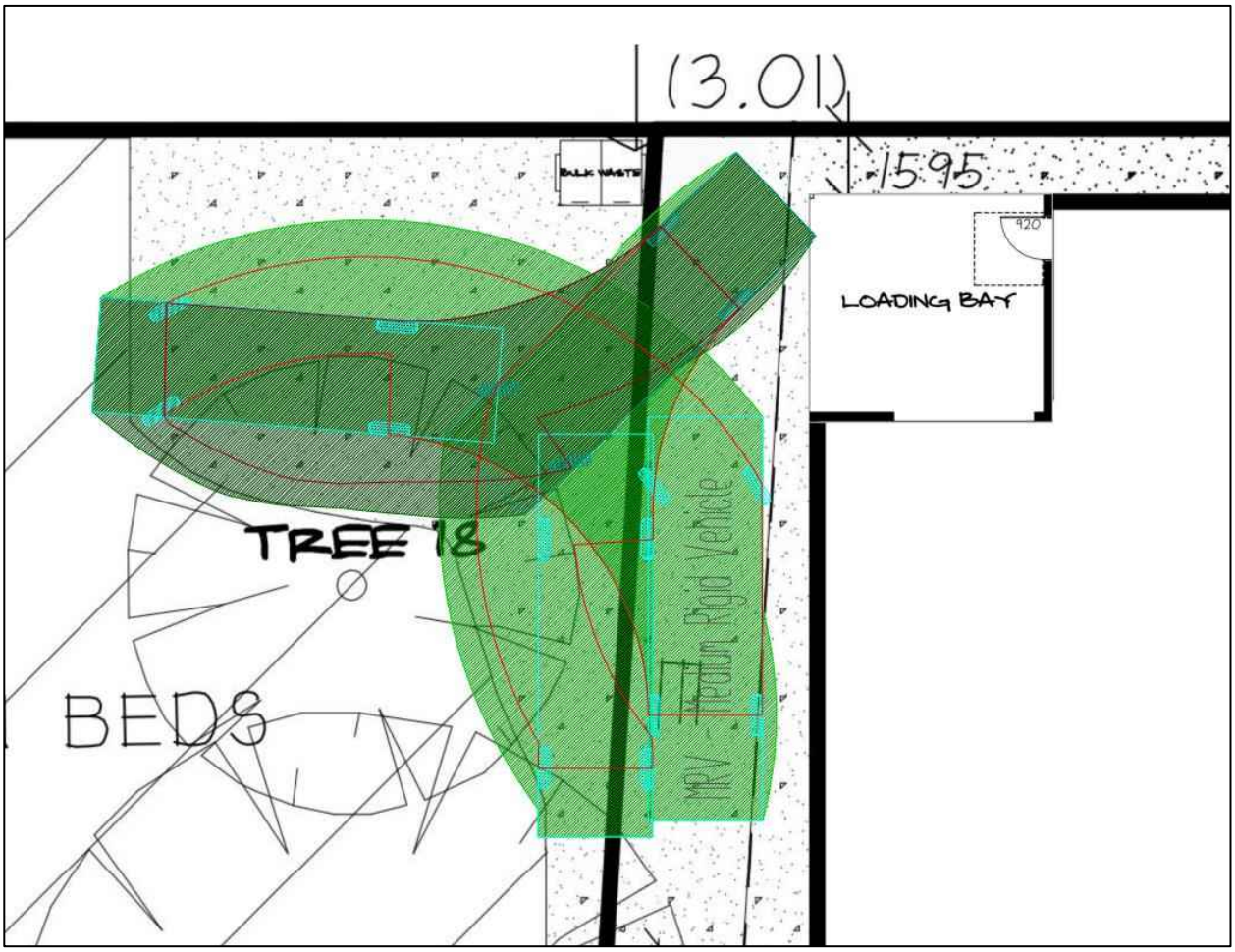
We have read the Council Assessment Panel report dated 21 September 2022 for the proposed development and noted some of the relevant comments provided with respect to the Engineering assessment of the proposal by Council (see below):

- *After assessment of the proposed development, it is anticipated that the development would operate satisfactorily and safely from an Engineering perspective.*
- *Council's Development Engineers have reviewed the proposed car parking and advise that the design, layout and line marking of the car park can meet relevant standards.*
- *The car park design includes a clear and safe route for pedestrians from both Battunga Road and Mawson Road. The low speed environment of the car park is also acknowledged.*
- *The provision of on-site car parking is adequate.*
- *Vehicle access and on-site manoeuvring of expected vehicles are appropriate and accord with relevant Australian Standards.*

We also note that DIT, in their referral response to Council dated 16 August 2022, has stated that the report by Frank Siow & Associates '*has satisfactorily addressed the traffic related matters associated with the development and that the proposed access layout is acceptable*'.

Notwithstanding that the above Council Assessment Panel report appears to have accepted the traffic and parking aspects of the development, we understand that the proposed service area would be further amended to provide a turnaround in the service area so that all small and medium service trucks (up to 8.8m long MRV size as per AS 2890.2:2018) are able to drive forward into the area, turnaround and exit the service area in a forward direction. This amendment would enable the majority of service vehicle manoeuvres to occur within the service area clear of the main car park aisleways.

The swept path diagram for the MRV truck is included on the following page.



The infrequent access by the larger 12.5m long HRV truck (as per AS 2890.2:2018), which is anticipated to occur only approximately 10 times per week (or less than 2 times per day), would be via a reverse manoeuvre into the service area from the main car park aisleway, which is as currently proposed and accepted by Council and DIT (see previous comments).

We make the following comments in relation to service vehicle access and shared use of the car park aisleways:

- The proposed retail development is a relatively small scale supermarket. Servicing requirements of the proposal would be low. With the proposed amendment to the service area, all of the small and medium size service vehicles would be able to drive in forward and exit forward from the dedicated service area provided at the rear of the shop. While the larger HRV service vehicle would reverse into the service area from the car park aisleway (as currently proposed), the HRV would only require very infrequent access. As is typical of many shopping centres, access by large vehicles would be appropriately managed by the operator and typically restricted to quieter periods of the day to minimise conflicts.

- The proposed car park aisleways for the development have been designed to accommodate the service vehicles anticipated in accordance with AS 2890.2:2018.

- In our experience, it is not uncommon for service vehicles to share car park aisleways to access service areas. Examples that we are aware of where large service vehicles share the same aisleway to reverse into the loading dock positions include major shopping centres such as: (1) the Hilton Shopping centre which requires semi-trailers to use the main car park aisleway to reverse into the loading dock; (2) the standalone Aldi supermarkets in Glenelg and Kensington Park where the semi-trailer would utilise the

main car park aisleway to reverse into the loading dock immediately adjacent to the main entrance; and (3) the IGA supermarket in Wellington Road Mount Barker where service trucks would utilise the main car park aisleway to access the service area at the rear of the shop.

- In our opinion, it would be unrealistic and not feasible to consider a separate driveway to the loading dock for the proposed development, given the small scale nature of the supermarket and the site constraints. To design a separate driveway for service trucks to the loading dock would require extensive areas to be set aside for this purpose, which would cater to only infrequent access movements of trucks.

- Supermarket operators would typically and appropriately manage their servicing requirements to ensure the least impact on their customers. Frequently, the large service trucks would only access the site during quieter periods of the day, such as early morning when patronage of the supermarket is lowest. This is not an uncommon arrangement to deal with the service vehicle access issue. As indicated above, supermarket operators would typically adopt such an approach or, if necessary, Council could include a condition to restrict access by large service trucks to off-peak periods, such as 7am to 10am for example.

In summary, the amendment proposed by the Applicant with the provision of a turnaround in the service area for all small and medium size service vehicles would further improve service vehicle access to a development where, we understand, Council and DIT have already indicated acceptance of the current service vehicle access arrangement.

We also note that there would be a reduction of 4 parking spaces (to 66 parking spaces) arising in order for a number of existing trees to be retained as suggested by Council. We consider this reduction to be relatively minor and we are of the opinion that adequate parking would be provided for the development.

Yours sincerely,

Frank Siow

FRANK SIOW
Principal Consultant

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Document: # - R0520-033MawRdVarSpPreDev
Prepared for Kevjohn Pty Ltd
Attn: Robert Weger
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Victor Harbor SA 5211
Date: 16th February 2021

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Pre-Development Tree Survey

33 Mawson Road, Meadows

Prepared for

Robert Weger

Kevjohn Pty Ltd

Compiled by

Michael Palamountain

Adelaide Arb Consultants

Executive Summary

- Adelaide Arb Consultants carried out a pre-development survey of 22 trees within and adjacent to a proposed development site at 33 Mawson Road, Meadows.
- The survey identified the following Legislative Controls that apply to this group of trees:
    - 3x Significant Trees
    - 4x Regulated Trees
    - 2 x Native Vegetation
    - 2x Significant Trees that also qualify as Native Vegetation.
    - 5x Regulated Trees that also qualify as Native Vegetation.
    - 6x trees that are not controlled.
    - Some of the locally indigenous trees may be planted and may not qualify as Native Vegetation.
- The Useful Life Expectancy of the surveyed trees varies across the site as follows:
    - 7x trees > 20 years.
    - 7x trees 10-20 years.
    - 2x trees 5-10 years
    - 6x trees 1-5 years
- The decision to remove or retain trees should consider the Legislative Control of the trees, their Useful Life Expectancy, and the nature of the proposed development.
- The final design solution for the site will require further refinement to ensure those trees that are to be retained are protected and managed to ensure their sustainability at the site, during and after development.

Thank you for the opportunity to provide you with this pre-development advice. Should you require any further assistance or clarification, please do not hesitate to contact our office.

Yours sincerely

Michael Palamountain
Senior Consulting Arboriculturist
Bachelor of Science
Diploma of Arboriculture
International Society of Arboriculture – Certified Arborist AU-0007A

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Introduction

Brief

Adelaide Arb Consultants were commissioned by Robert Weger of KevJohn Pty Ltd to conduct a pre-development survey of 22 trees within and adjacent to 33 Mawson Road, Meadows.

The aim of the survey is intended to gain an understanding of the tree population within these areas including health, structure, condition, and vegetation controls implemented under South Australian legislation.

Additionally, tree protection zones and were requested in the event specific trees may be retained as part of any future development at the site.

Tree Report Scope

The assessment criteria included the following:

- Larger trees within and adjacent to the subject land that may be affected by the proposed development.
- The tree's current health, structure, and sustainability within their current environmental conditions.
- The tree's Legislative Control status under the current provisions of the *Development Act 1993* and *Native Vegetation Act 1991.*
- Calculate Tree Protection Zones and provide general tree protection guidelines as outlined in Australian Standard AS 4970-2009 *Protection of trees on development sites,* to maintain suitable trees in their current condition during any future development of the site.
- Crown management possibilities that conform to the current guidelines of Australian Standard AS 4373-2007 *Pruning of amenity trees* to reduce the risk of potential branch failure and prolong the Useful Life Expectancy of the tree, where relevant for selected trees. Where trees are not suitable for retention, they may be recommended to be removed.
- This report does not undertake a detailed risk assessment of all trees. Only Tree 1 had a specific risk assessment undertaken.
- This is a pre-development tree report. This report does not assess the impacts of any development activities on the subject trees. Design proposals at the site are currently in their concept stage. Once preliminary decisions have been made about tree retention and removal (in consultation with Mount Barker District Council), then a design solution for the site will need to be refined. Adelaide Arb Consultants understands we will be involved with the property owner in developing a design solution for the site where suitable trees are to be retained and protected in accordance with AS 4970-2009 *Protection of trees on development sites.*

Provided Information

The following documents and plans were provided by Robert Weger to assist in the assessment process.

- *Site Plan – Existing Building* dated 15th November 2020 prepared by JB Designs. This plan indicates existing site features and the approximate location of trees.
- *Site Plan – Proposed Shops* dated 25th January 2021 prepared by JB Designs. This plan indicates some concept features of the proposed development at the site, including approximate location of various buildings and car parking layout.

Survey method

The data was collected by Michael Palamountain on Monday 8th February 2021 using the Tree Plotter® Data Collection Platform. This platform enabled the collection of visual tree assessment data, as well as precise GIS location data. The survey collected data on the larger trees at the site with a trunk circumference of greater than ~1.0m. The assessment and collection of data included the following criteria:

- **Tree Number**
- **Location including GIS Reference**

The coordinate system for asset locations will be expressed as Eastings and Northings in Map Grid of Australia 2020 (MGA 2020 – Zone 54).

- **Tree Genus, Species, Common Name and Origin**
- **Digital Photography**
- **Crown Size (Height x Spread)**
- **Tree Age**

Tree age will range between young and senescent with the following criteria considered.

Young – newly planted, unestablished trees.

Immature – established trees within the first 20% of the trees ULE.

Mature – established trees that have developed their full crown potential. These trees may range between 20-70% of their ULE.

Over-Mature – established trees that have developed their full crown potential and have started health and structural decline. These trees may range between 70 and 95% of their ULE.

Senescent – Trees nearing the end of their ULE and generally past 95% of this parameter.

- **Trunk Circumference (measured at one metre above natural ground level)**
- **Legislative Control Status**
    - *Not Controlled*
    - *Development Act 1993.*
        - *Regulated Trees (Trunk circumference greater than 2.0m.*
        - *Significant Trees (trunk circumference greater than 3.0m)*
        - *Various trees are exempt under certain circumstances.*
    - *Native Vegetation Act 1991*
- **Diameter at Breast Height (DBH)**

The nominal trunk diameter at 1.4 metres above ground level determined from the circumference of the trunk divided by pi. This measurement is utilised to calculate the Tree Protection Zone radius.

- **Tree Protection Zone (TPZ) Radius**

A specified area above and below ground and at a specified distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development.

- **Diameter at Root Buttress (DRB)**

The nominal trunk diameter measured immediately above the trunk ad root buttress determined from the circumference of the trunk divided by pi. This measurement is utilised to calculate the Structural Root Zone radius.

- **Structural Root Zone (SRZ)**

The area around the base of the tree required for the tree's stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is minimally circular with the trunk at its centre and is expressed by its radius in metres.

This zone considers a tree's structural stability only, not the root zone required for a tree's vigour and long-term viability, which will usually be a much larger area.

- **Tree Health**

A visual assessment of the tree's health is determined by considering the foliage density and colour, the presence of any pests or disease and the proportion of deadwood within areas of the crown. The situation of deadwood within the crown is also considered, i.e., terminal deadwood is likely a better indication of health decline opposed to internal deadwood where natural crown shading leading to poor photosynthetic success may be the cause of such decline and is therefore not a health concern.

- **Structural Integrity**

A visual assessment of the primary and secondary structure will enable the calculation of the trees ULE, potential for failure. Consideration to specific structural flaws will be given such as but not limited to poor/unstable root buttressing, trunk defects and included bark unions.

- **Useful Life Expectancy**
- **Additional comments relevant to the individual assessment**
- **Recommended Crown Management**

Site Access and Assessment

Site Visit Details

This tree survey involved a Level 2 Visual Tree Assessment[1], carried out from ground level. All measurements are estimates unless otherwise specified within the report and measurements relating to the trees' locations, crown projection or root zone extent are taken from the centre of the tree at ground level.

Site Description

The property is located at 33 Mawson Road, Meadows, which is the current site of Meadows Mini Mart. The trees are located within a large allotment to the east and north of the existing shop and attached dwelling. The tree population consists of the following:

- A moderate density of trees.
- A mixture of tree species, including:
  - Locally indigenous tree species. While tree 1 appears to be an original remnant tree, the origin of the remaining indigenous trees is uncertain. They appear to be younger trees, planted as a group or semi formal row along the rear northern boundary.
  - Introduced Australian Native trees – all planted within the site at various points in time.
  - Exotic trees – all planted within the site at various points I time.

Tree and Environmental Observations

Tree No.: 1 **Botanical Name:** *Eucalyptus viminalis subsp. cygnetensis*

Common Name: Rough-barked Manna Gum

Origin: Indigenous

Crown Size (HxS): >20m x >20m

Age: Mature **Circ @ 1m (cm):** 652

Legislative Control: Significant Tree[2] and Native Vegetation[3]

DBH (cm): 146.8 **TPZ Radius (m):** 15.00

DRB (cm): 194 **SRZ Radius (m):** 4.37

Health: Fair **Structure:** Fair

Form: Fair **ULE:** >20 years

Comments: This is a mature remnant tree located centrally within the site.

The tree has two main trunks emerging from ground level. The eastern trunk has an upright habit with primary branches from 5m to form an open and irregular crown. There are several large dead branches in this part of the tree. There is evidence of minor thinning and some dieback in the upper crown to the north west.

The western stem has a strong lean towards the West. There is an open cavity on the topside / tension side of this western stem. An upright primary branch emerges from the top side of the western stem at 2m and supports some irregular branches. A low branch from this section growing towards the east requires pruning for future car park clearances, and a broken branch to the north at approximately 5m needs to be removed. Another low primary branch emerges from the western stem at 2m to the north and supports an array of irregular secondary branches that are approximately 3 to 4 metres above the ground.

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Medium	Probable	Somewhat Likely
Consequence of Failure & Impact		
Severe		

TRAQ Risk Rating - Moderate

Recommended Crown Management

Asset Clearance Prune

If this tree is retained as part of the proposed development, it will require pruning to maintain acceptable levels of risk and to provide suitable clearances for vehicles in the proposed car park area.

- Remove larger dead branches over 50mm in diameter throughout the crown.
- Removed the broken branch at 4m to the North on the western trunk.
- Remove the low primary branch at 2.5m to the north on the western trunk back to the main stem and upright branch.
- Reduce leverage of the upright branch on the western stem through reduction pruning by 20 to 30%.
- Remove any remaining lower branches to provide approximately 4m clearance over car park and driveway areas.
- Reduce leverage of the secondary branch at approximately 8m to the north-east through reduction pruning by 40%.

Tree No.: 2 **Botanical Name:** *Eucalyptus grandis*

Common Name: Flooded Gum

Origin: Introduced Native

Crown Size (HxS): 14-20m x 14-20m

Age: Mature **Circ @ 1m (cm):** 239

Legislative Control: Exempt tree – proximity to dwelling in bushfire zone[4]

DBH (cm): 76 **TPZ Radius (m):** 9.12

DRB (cm): 82 **SRZ Radius (m):** 3.04

Health: Fair **Structure:** Poor

Form: Poor **ULE:** 1-5 years

Comments:

8.3m from dwelling. Previously lopped tree with multiple week epicormic shoots forming the crown. Unstable tree.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 3

Botanical Name: *Eucalyptus botryoides*

Common Name: Southern Mahogany

Origin: Introduced Native

Crown Size (HxS): 4-7m x 4-7m

Age: Semi Mature **Circ @ 1m (cm):** 89

Legislative Control: Not Controlled

DBH (cm): 23 **TPZ Radius (m):** 2.76

DRB (cm): 28 **SRZ Radius (m):** 1.9

Health: Fair **Structure:** Poor

Form: Poor **ULE:** 1-5 years

Comments:

Small, lopped tree with a crown of epicormic regrowth.

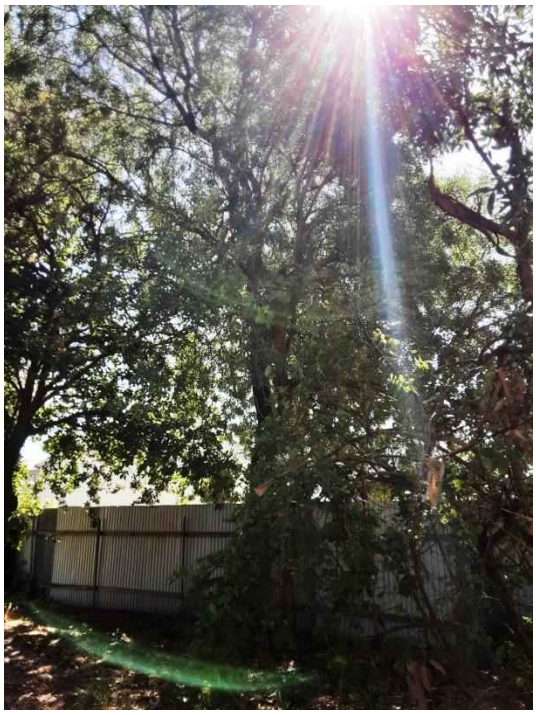
Will become an unstable tree.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 4

Botanical Name: *Fraxinus angustifolia subsp. angustifolia*



Common Name: Desert Ash

Origin: Exotic

Crown Size (HxS): 8-13m x 8-13m

Age: Mature **Circ @ 1m (cm):** 138

Legislative Control: Not Controlled

DBH (cm): 43 **TPZ Radius (m):** 5.16

DRB (cm): 48 **SRZ Radius (m):** 2.4

Health: Good **Structure:** Fair

Form: Fair **ULE:** >20 years

Comments:

None noted.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 5

Botanical Name: *Quercus robur*

Common Name: English Oak

Origin: Exotic

Crown Size (HxS): 4-7m x 4-7m

Age: Semi Mature **Circ @ 1m (cm):** 143

Legislative Control: Not Controlled

DBH (cm): 44 **TPZ Radius (m):** 5.28

DRB (cm): 51 **SRZ Radius (m):** 2.49

Health: Good **Structure:** Good

Form: Good **ULE:** >20 years

Comments:

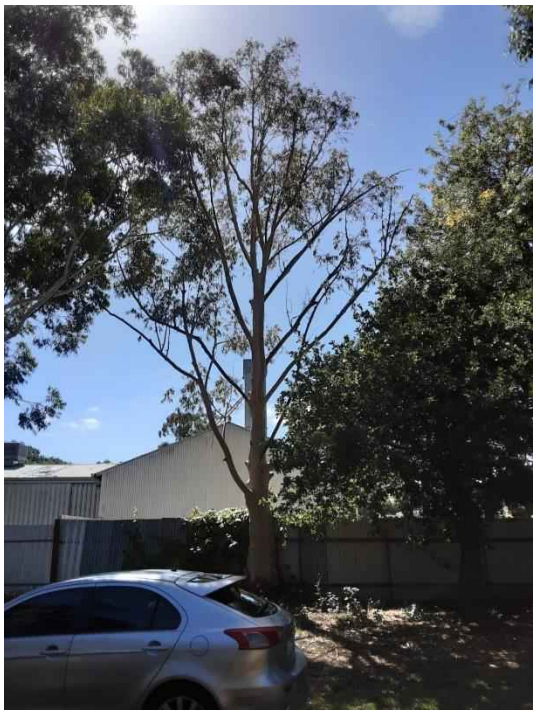
None noted.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 6

Botanical Name: *Eucalyptus grandis*



Common Name: Flooded Gum

Origin: Introduced Native

Crown Size (HxS): 14-20m x 8-13m

Age: Mature **Circ @ 1m (cm):** 232

Legislative Control: Regulated Tree[5]

DBH (cm): 70 **TPZ Radius (m):** 8.40

DRB (cm): 80 **SRZ Radius (m):** 3.0

Health: Poor **Structure:** Fair

Form: Fair **ULE:** 1-5 years

Comments:

This tree is in fair health with thinning foliage density and is declining.

There are a moderate number of dead branches throughout the crown and extensive borer activity on the lower trunk.

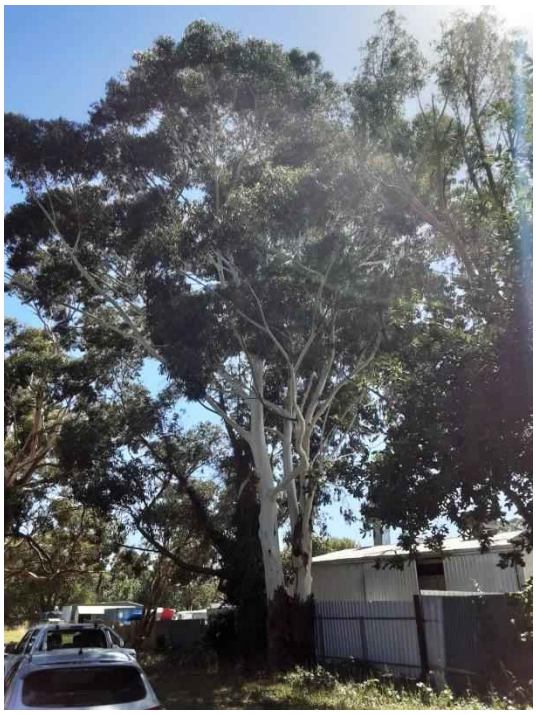
This tree has a short life expectancy.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 7

Botanical Name: *Eucalyptus grandis*



Common Name: Flooded Gum
Origin: Introduced Native
Crown Size (HxS): >20m x
Age: Mature
Circ @ 1m (cm): 393
Legislative Control: Significant Tree
DBH (cm): 125
TPZ Radius (m): 15.00
DRB (cm): 140
SRZ Radius (m): 3.81
Health: Fair
Structure: Poor
Form: Fair
ULE: 5-10 years

Comments:

This tree has two main stems at approximately 1m above the ground with a bark inclusion present between them. The eastern stem is growing towards the car repair workshop to the east and has previously been lopped. There is evidence of ongoing pruning on the eastern side to reduce overhang to the adjoining car repair workshop. The western stem is upright and does not appear to have been lopped. The primary branches are well attached but are over extended. There is evidence of ongoing branch failure from this tree. The staff at the adjoining car repair workshop advise me of ongoing branch failures from this tree.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 8

Botanical Name: *Eucalyptus botryoides*

Common Name: Southern Mahogany

Origin: Introduced Native

Crown Size (HxS): 14-20m x 14-20m

Age: Mature **Circ @ 1m (cm):** 250

Legislative Control: Regulated Tree

DBH (cm): 80 **TPZ Radius (m):** 9.60

DRB (cm): 95 **SRZ Radius (m):** 3.2

Health: Fair **Structure:** Fair

Form: Fair **ULE:** 10-20 years

Comments:

This tree has a single trunk with a slight bias to the north. The main trunk and primary branches are covered in ivy. Some sections of the crown to the east have been lopped to reduce overhang to the adjoining car repair site.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 9

Botanical Name: *Eucalyptus viminalis*

Common Name: Manna Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 14-20m

Age: Mature

Circ @ 1m (cm): 213

Legislative Control: Regulated Tree and Native Vegetation

DBH (cm): 64

TPZ Radius (m): 7.68

DRB (cm): 77

SRZ Radius (m): 2.97

Health: Good

Structure: Good

Form: Good

ULE: >20 years

Comments:

This tree has a single trunk with primary branches from about 9m to form an open and irregular crown.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

- Remove larger dead branches greater than 50 mm in diameter.
- Reduce leverage of the primary branch at 8m. to the West through reduction pruning by 10 to 30%

Tree No.: 10

Botanical Name: *Eucalyptus viminalis subsp. cygnetensis*

Common Name:	Rough-barked Manna Gum
Origin:	Indigenous
Crown Size (HxS):	14-20m x 14-20m
Age: Over Mature	**Circ @ 1m (cm):** 330
Legislative Control: Vegetation	Significant Tree and Native
DBH (cm): 105	**TPZ Radius (m):** 12.60
DRB (cm): 116	**SRZ Radius (m):** 3.52
Health: Poor	**Structure:** Fair
Form: Fair	**ULE:** 1-5 years

Comments: This tree has a single trunk with a narrow upright crown and a bias to the north east.

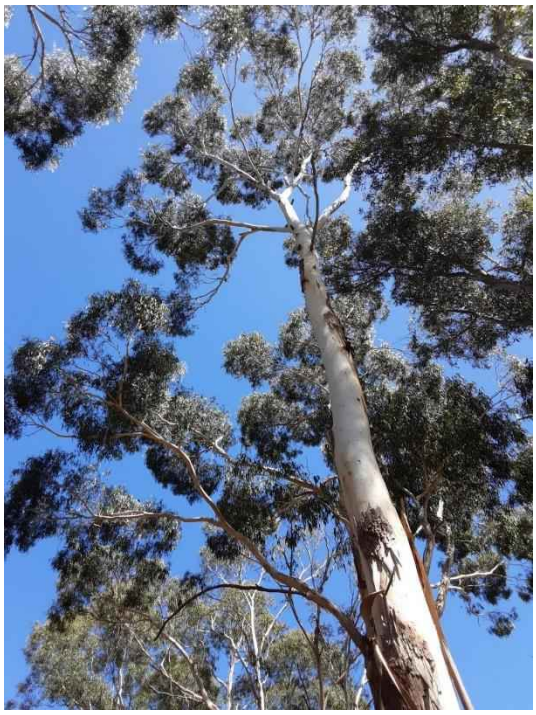
There is evidence of extensive internal decay in the lower trunk with several large old fungal fruiting bodies likely to be Phellinus. The foliage density in the upper crown is thinning. This tree has a short life expectancy.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 11

Botanical Name: *Eucalyptus viminalis*



Common Name: Manna Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 14-20m

Age: Mature **Circ @ 1m (cm):** 176

Legislative Control: Native Vegetation

DBH (cm): 55 **TPZ Radius (m):** 6.60

DRB (cm): 69 **SRZ Radius (m):** 2.83

Health: Good **Structure:** Good

Form: Good **ULE:** 10-20 years

Comments: This tree has a single upright trunk with primary branches from about 15m to form a narrow emergent crown.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 12

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum

Origin: Indigenous

Crown Size (HxS): >20m x >20m

Age: Mature **Circ @ 1m (cm):** 245

Legislative Control: Regulated Tree and Native Vegetation

DBH (cm): 76 **TPZ Radius (m):** 9.12

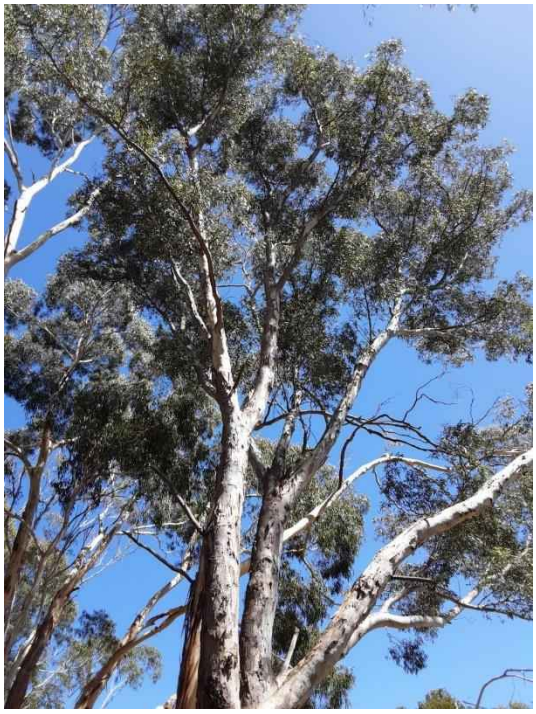
DRB (cm): 86 **SRZ Radius (m):** 3.11

Health: Fair **Structure:** Fair

Form: Fair **ULE:** 10-20 years

Comments:

This tree has a single trunk with 2 co-dominant stems at 3m that support an array of ascending branches to form a vase shaped crown. There is a moderate number of epicormic shoots along the main stems and branches. The stems and branches are elongated and over extended.



Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 13

Botanical Name: *Eucalyptus viminalis*

Common Name: Manna Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 8-13m

Age: Mature **Circ @ 1m (cm):** 217

Legislative Control: Regulated Tree and Native Vegetation

DBH (cm): 68 **TPZ Radius (m):** 8.16

DRB (cm): 79 **SRZ Radius (m):** 3

Health: Poor **Structure:** Fair

Form: Fair **ULE:** 5-10 years

Comments:

This tree has a single trunk with a sparse branching arrangement to form a narrow upright crown that is crowded by surrounding trees. The foliage in the upper crown is thinning and dying back. This tree has a short life expectancy.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 14

Botanical Name: *Eucalyptus viminalis subsp. cygnetensis*

Common Name: Rough-barked Manna Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 14-20m

Age: Mature

Circ @ 1m (cm): 291

Legislative Control: Regulated Tree and Native Vegetation

DBH (cm): 87

TPZ Radius (m): 10.44

DRB (cm): 87

SRZ Radius (m): 3.12

Health: Good

Structure: Poor

Form: Good

ULE: 10-20 years

Comments:

This tree has two co-dominant stems at 1.5m with a significant bark inclusion present between them (image above right). A third primary stem emerges at 1.5m to the north. These stems support an array of branches to form an upright crown with a broad spreading crown with an irregular habit.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 15

Botanical Name: *Eucalyptus viminalis*

Common Name: Manna Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 8-13m

Age: Mature **Circ @ 1m (cm):** 180

Legislative Control: Native Vegetation

DBH (cm): 57 **TPZ Radius (m):** 6.84

DRB (cm): 64 **SRZ Radius (m):** 2.74

Health: Poor **Structure:** Fair

Form: Fair **ULE:** 1-5 years

Comments:

This tree has a single trunk that divides into two co-dominant stems at approximately 5m to form a sparse vase-shaped crown. Foliage density is thinning in the upper crown with evidence of moderate dieback and moderate epicormic regrowth. This tree has a short life expectancy.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 16

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum

Origin: Indigenous

Crown Size (HxS): 14-20m x 8-13m

Age: Mature

Circ @ 1m (cm): 286

Legislative Control: Regulated Tree and Native Vegetation

DBH (cm): 86

TPZ Radius (m): 10.32

DRB (cm): 86

SRZ Radius (m): 3.11

Health: Good

Structure: Fair

Form: Fair

ULE: 10-20 years

Comments:

This tree has a single trunk that divides into 3 main upright stems at around 1.5m. The main stem to the West has a minor bark inclusion present. These three stems support an array of ascending branches to form a narrow upright crown with a bias to the West. The branch structure has minor bark inclusions present throughout. The primary and secondary branches are overextended with average taper.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 17

Botanical Name: *Eucalyptus fasciculosa*

Common Name: Pink Gum

Origin: Introduced native

Crown Size (HxS): 4-7m x 4-7m

Age: Mature **Circ @ 1m (cm):** 85

Legislative Control: Not controlled

DBH (cm): 27 **TPZ Radius (m):** 3.24

DRB (cm): 30 **SRZ Radius (m):** 2

Health: Good **Structure:** Fair

Form: Fair **ULE:** >20 years

Comments:

Small irregular tree.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 18

Botanical Name: *Eucalyptus fasciculosa*

Common Name: Pink Gum

Origin: Introduced native

Crown Size (HxS): 8-13m x 8-13m

Age: Mature **Circ @ 1m (cm):** 179

Legislative Control: Not controlled

DBH (cm): 54.75 **TPZ Radius (m):** 6.57

DRB (cm): 61 **SRZ Radius (m):** 2.6

Health: Good **Structure:** Fair

Form: Fair **ULE:** >20 years

Comments: Irregular tree with multiple ascending stems and a bias to the south-west. The two northern stems have a minor bark inclusion present.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 19

Botanical Name: *Eucalyptus grandis*

Common Name: Flooded Gum

Origin: Introduced Native

Crown Size (HxS): 14-20m x 14-20m

Age: Mature **Circ @ 1m (cm):** 244

Legislative Control: Regulated Tree

DBH (cm): 73 **TPZ Radius (m):** 8.76

DRB (cm): 86 **SRZ Radius (m):** 3.11

Health: Good **Structure:** Good

Form: Good **ULE:** 10-20 years

Comments:

This tree has a single upright trunk with radiating branches to form an excurrent crown. This tree currently has good foliage density.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 20

Botanical Name: *Eucalyptus grandis*

Common Name: Flooded Gum

Origin: Introduced Native

Crown Size (HxS): >20m x >20m

Age: Mature **Circ @ 1m (cm):** 358

Legislative Control: Significant Tree

DBH (cm): 113 **TPZ Radius (m):** 13.56

DRB (cm): 113 **SRZ Radius (m):** 3.48

Health: Fair **Structure:** Good

Form: Fair **ULE:** 10-20 years

Comments:

This tree has multiple upright stems to form a dense crown with an ascending habit. There is minor die back from the upper crown. Foliage density is good at present.

Recommended Crown Management

Monitor - This tree could be retained and managed if the plan allows.

Tree No.: 21

Botanical Name: *Eucalyptus globulus*

Common Name: Tasmanian Blue Gum

Origin: Introduced Native

Crown Size (HxS): >20m x >20m

Age: Over Mature **Circ @ 1m (cm):** 474

Legislative Control: Significant Tree

DBH (cm): 151 **TPZ Radius (m):** 15.00

DRB (cm): 178 **SRZ Radius (m):** 4.22

Health: Poor **Structure:** Fair

Form: Fair **ULE:** 1-5 years

Comments:

This is a multi-stemmed tree with an ascending habit and an array of moderately ascending secondary branches. The upper crown has moderate to major levels of dieback and this tree is in decline with a short life expectancy.

Recommended Crown Management

Remove - Not suitable to retain in the context of future development.

Tree No.: 22

Botanical Name: *Eucalyptus sp.*

Common Name: Unidentified Gum

Origin: Introduced native

Crown Size (HxS): 14-20m x 14-20m

Age: Mature **Circ @ 1m (cm):** 280

Legislative Control: Regulated Tree

DBH (cm): 90 **TPZ Radius (m):** 10.80

DRB (cm): 100 **SRZ Radius (m):** 3.31

Health: Good **Structure:** Fair

Form: Good **ULE:** >20 years

Comments

This tree is located on an adjoining property, approximately 2 metres outside the boundary. Trunk measurements are estimated.

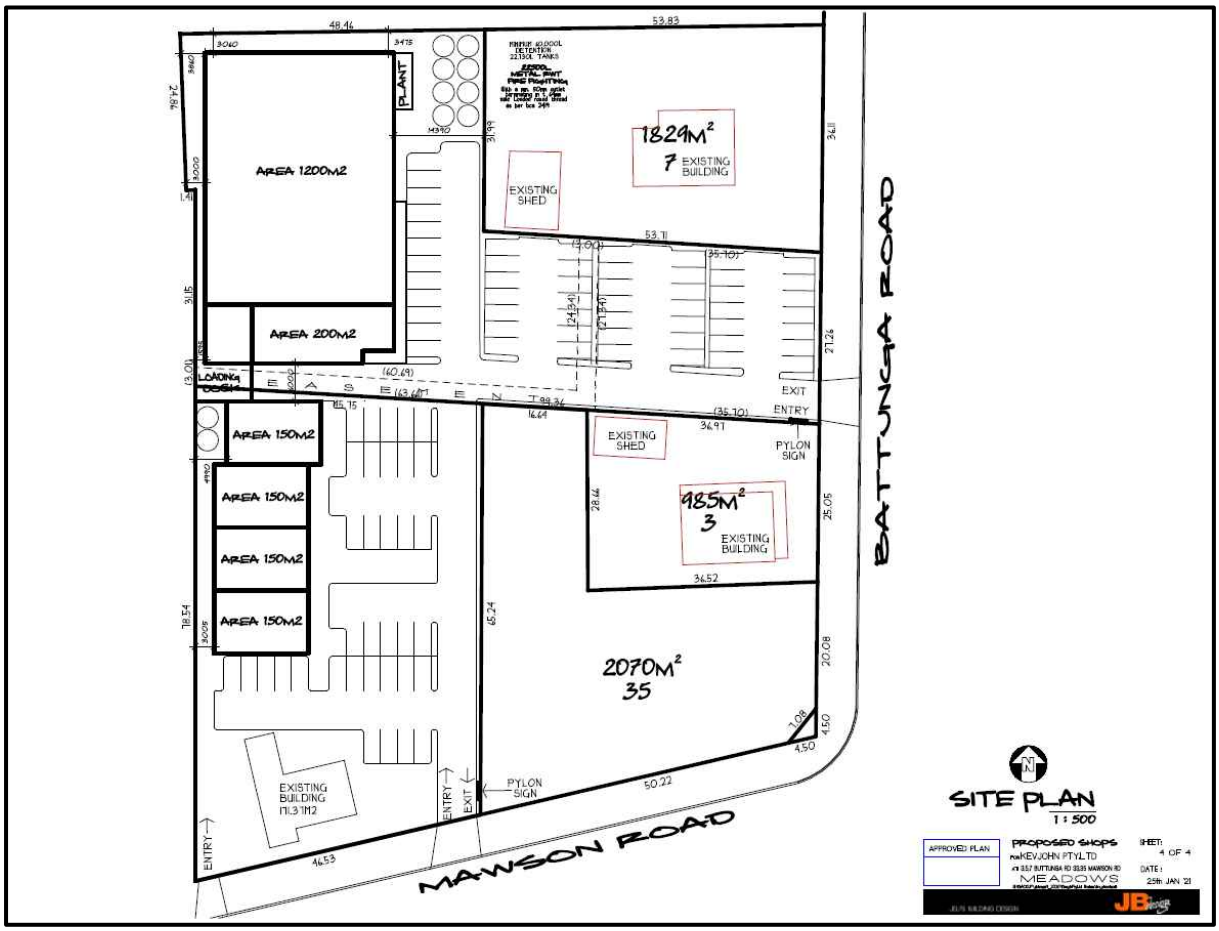
Recommended Crown Management

Monitor - Tree on adjoining land. Must be retained and protected.

Development Proposal

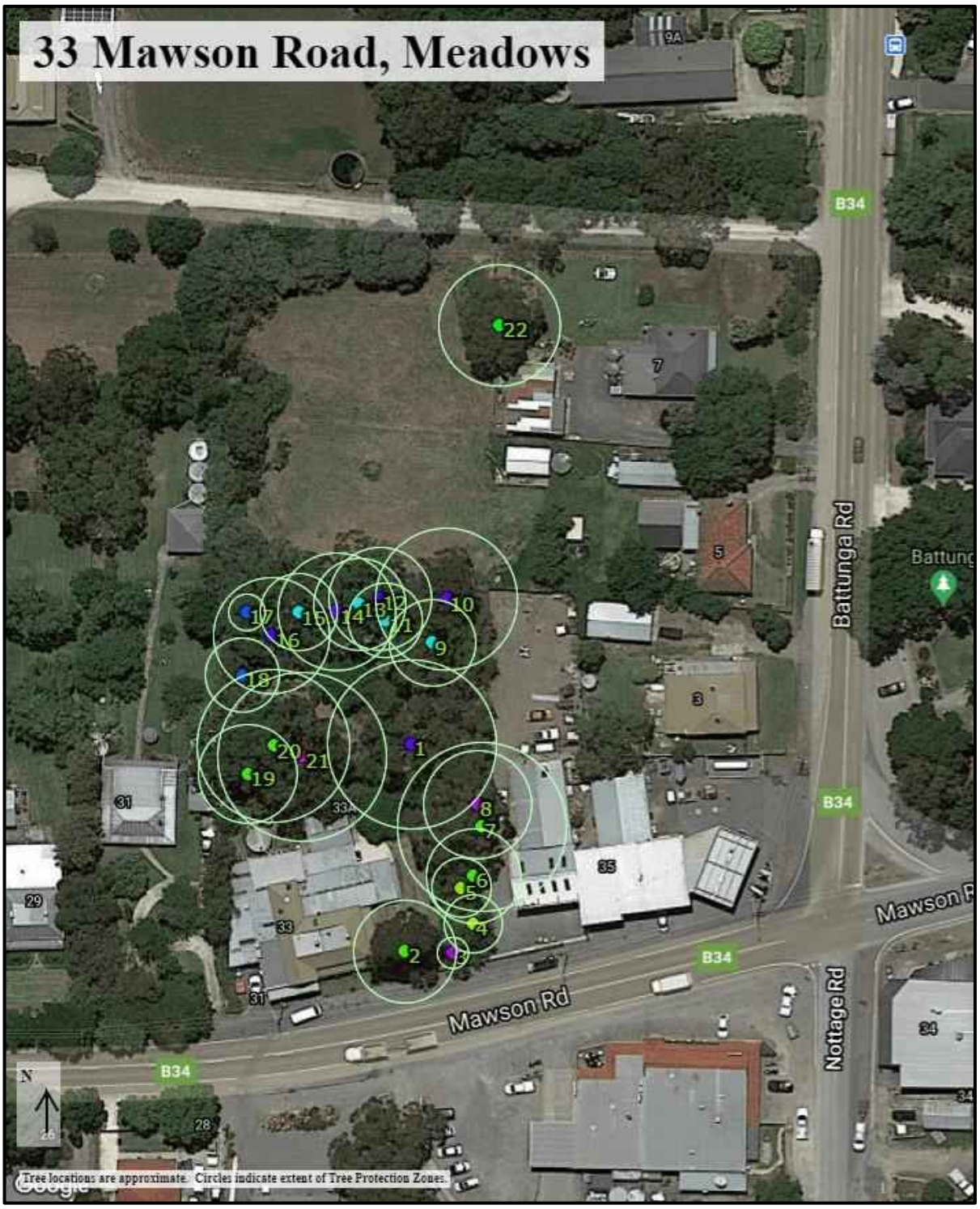
The development activities proposed at the site are in their concept stage. The nature of the proposed development includes the following elements, subject to development approval. Refer to a concept plan below (dated 25th January 2021).

- Demolition of existing structures and buildings.
- Removal of trees in poor health or with poor structure.
- Removal of trees that are not suitable to retain as part of any future development of the site.
- Removal of trees that are impeding the proposal, and reasonable modifications to the proposal are not achievable.

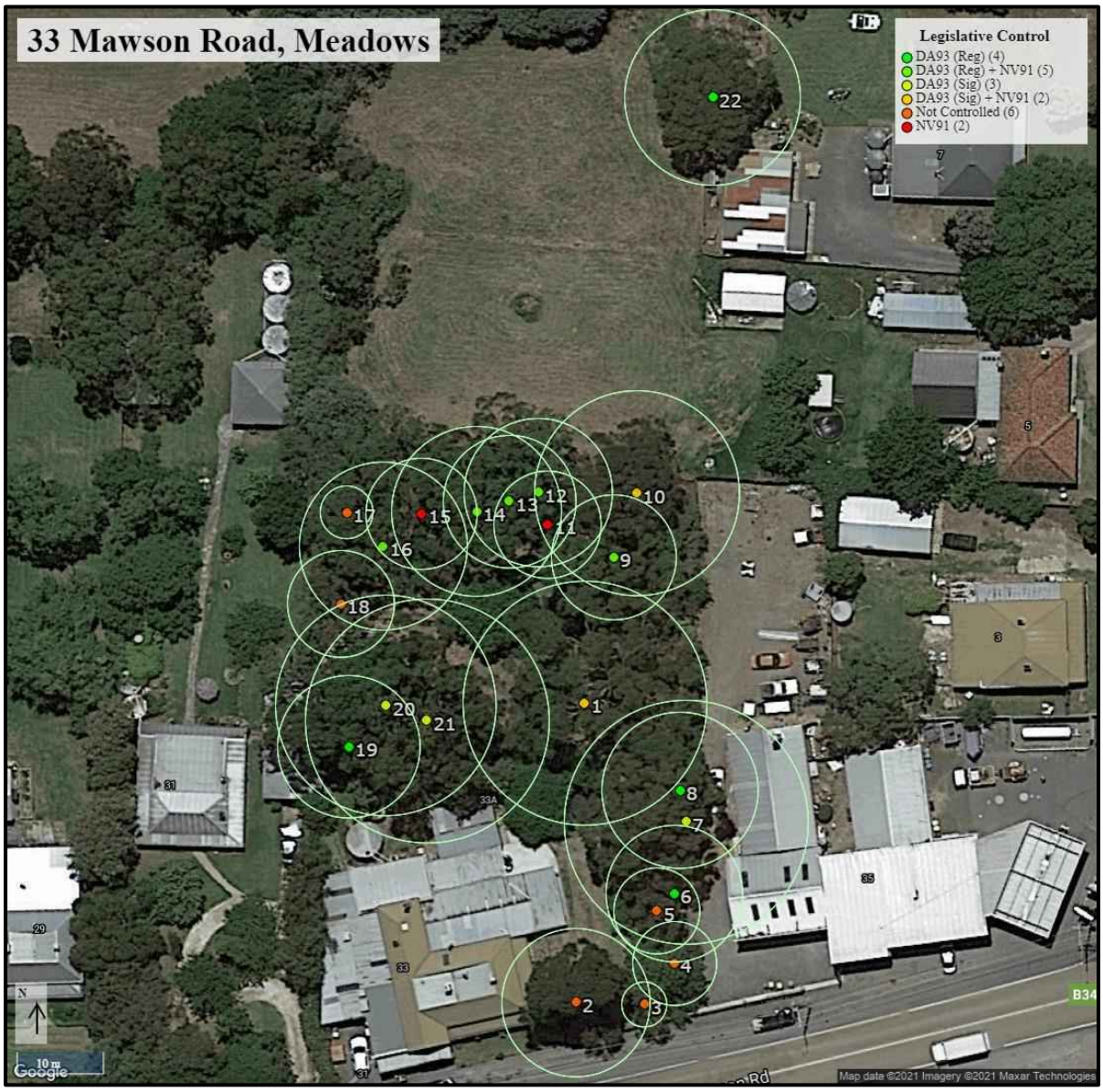


Findings Assessment

The survey identified 22 larger trees within and adjacent to the site as indicated in the image below.

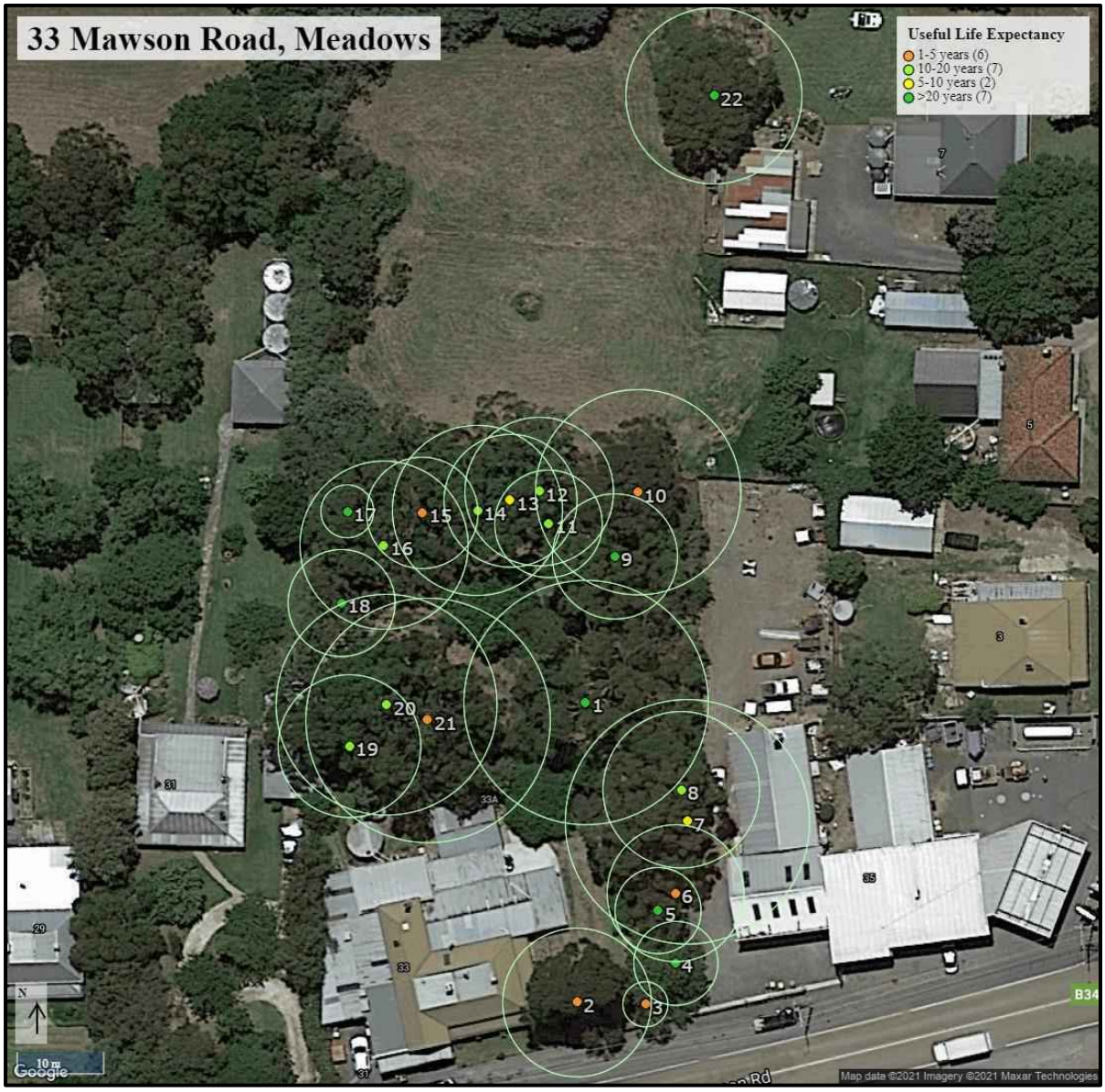


The Legislative Control that applies to the trees is outlined in the image below.



- Significant Trees under the *Development Act 1993*
  - 3 trees (7, 20, 21)
- Regulated Trees under the *Development Act 1993*
  - 4 trees (6, 8, 19, 22)
- Native Vegetation under the *Native Vegetation Act 1991.*
  - 2 trees (11, 15).
  - Please note, these may be planted trees and may not qualify as Native Vegetation.
- Native Vegetation and Significant Trees
  - 2 trees (1, 10).
  - Tree 10 is likely to be a remnant tree that qualifies as Native Vegetation.
  - Please note, tree 10 may be planted trees and may not qualify as Native Vegetation.
- Native Vegetation and Regulated Trees
  - 5 trees (9, 12, 13, 14, 16).
  - Please note, these may be planted trees and may not qualify as Native Vegetation.
- Not controlled
  - 6 trees (2, 3, 4, 5, 17, 18)

The Useful Life Expectancy[6] of the trees is outlined in the image below.



Tree Protection Plan

General

The following pages outline the guiding principles required when refining a design solution for the site, and/or when undertaking site preparations, including demolition works.

To protect suitable trees during the development process, a range of tree protection activities and structures are required as outlined in AS 4970-2009 *Protection of trees on development sites.* The tree protection zone is usually a restricted area delineated by fencing.

The following activities are restricted within the TPZ. Some of these works may be permitted by the determining authority and must be supervised by the project arborist[7].

a) machine excavation including trenching;
b) excavation for silt fencing;
c) cultivation;
d) storage;
e) preparation of chemicals, including preparation of cement products;
f) parking of vehicles and plant;
g) refuelling;
h) dumping of waste;
i) wash down and cleaning of equipment;
j) placement of fill;
k) lighting of fires;
l) soil level changes;
m) temporary or permanent installation of utilities and signs, and
n) physical damage to the tree.

Prior to any site works commencing, the site/project manager and relevant sub-contractors should meet on site with the project arborist to review work procedures, access routes, storage areas, parking areas and tree protection measures.

Tree removal, retention and management

Approved tree removal and pruning should be carried out before the installation of tree protection measures. The removal of controlled trees cannot occur without development approval. Failure to do so may constitute tree damaging activity[8].

The decision to retain or remove trees is subject to Development Approval from Mount Barker District Council. When determining the suitability of retaining or removing trees, consideration should be given to the following:

- The Legislative Control that applies to each tree.
- The current condition of the tree.
- The Useful Life Expectancy of the tree.
- The suitability of retaining the tree in the event of future development at the site.
- Whether the retention of the tree will present a substantial constraint to the development of the site and no reasonable design alternatives are available to minimise the impacts on the tree and or tree removal.

In such cases, tree removal could be considered under the following provisions of the Mount Barker District Council *Development Plan* (consolidated 20th August 2020):

Regulated Trees PDC 2

A regulated tree should not be removed or damaged other than where it can be demonstrated that one or more of the following apply:

(a) the tree is diseased, and its life expectancy is short

(b) the tree represents a material risk to public or private safety

(c) the tree is causing damage to a building

(d) development that is reasonable and expected would not otherwise be possible

Significant Trees PDC

Significant trees should be preserved, and tree-damaging activity should not be undertaken, unless:

(a) in the case of tree removal, where at least one of the following apply:

(i) the tree is diseased, and its life expectancy is short

(ii) the tree represents an unacceptable risk to public or private safety

(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area

(d) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.

Additional control applies to trees classified as Native Vegetation under the *Native Vegetation Act 1991.* Removal of trees controlled under this Act also requires written approval from the Native Vegetation Council of South Australia and is likely to attract a Substantial Environmental Benefit (SEB) Offset Payment.

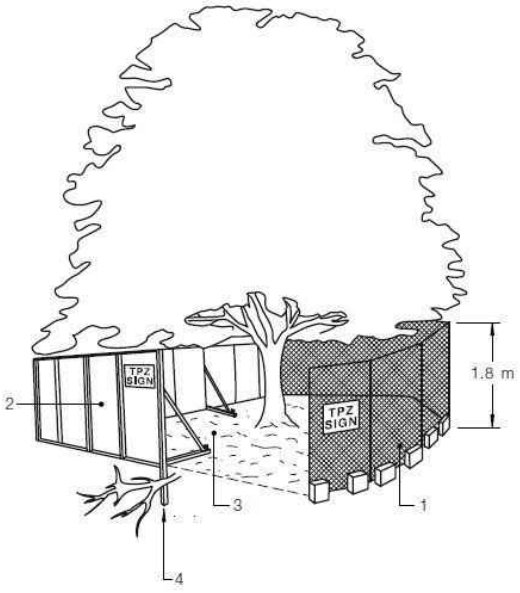
Where trees are to be retained on site, pruning recommendations are provided to enable the sustainable retention of the subject trees:

- All pruning must conform to the Australian Standard AS 4373 – 2007 *Pruning of amenity trees*.
- All pruning should be carried out or supervised by qualified arborists[9].

Tree Protection Zone establishment

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. The Tree Protection Zone should be established and managed as follows.

- Identify the trees within (and adjacent to) the subject allotment that are to be retained and protected during the development process. This may include trees on adjoining land and Council owned street trees.
- The Tree Protection Zone radius is to be equivalent to that calculated and noted in the Tree Observations and the attached Tree Protection Plan.
- Identify and mark the alignment of protective fencing as indicated on the Tree Protection Plan. This may vary from the actual TPZ radius after considering areas of acceptable encroachment (determined in consultation with the project arborist) and site access requirements. Fencing is only required within the subject allotment (provided boundary fencing is in place).
- Erect/construct protective fencing as indicated in the image below. AS 4687 *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.



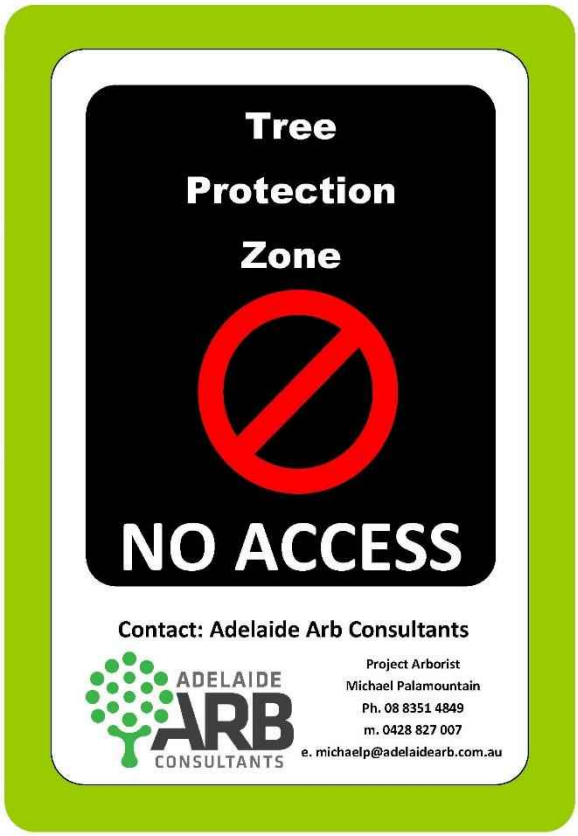
LEGEND:
1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
3 Mulch installation across surface of TPZ (at the discretion 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 3 PROTECTIVE FENCING

- Right: Australian Standard AS 4970-2009 *Protection of trees on development sites*, p16.

- All visible faces of the Tree Protection Zones to the construction area must be signed with appropriate Tree Protection Zone signage as shown below. A copy of such is attached as an addendum to this report and may be duplicated as required without permission. No alterations to the Tree Protection Zone sign are permitted without written consent from the author.

- Where fencing has been reduced from the full TPZ radius to facilitate vehicle/machinery access, heavy-duty ground protection will be required. This heavy-duty ground protection will be required for essential vehicle access, excavator access, crane access, pier drilling machinery access, hydro-excavation trucks etc.
    - Install vehicle access ground protection as indicated on the Tree Protection Plan.
    - Install a layer of geotextile fabric on top of the natural ground.
    - Cover the geotextile with a 100mm thick layer of organic mulch.
    - Install ground protection mats (e.g., BogMat https://www.bogmat.com.au/).



Demolition and site clearing activities

The demolition of existing structures, surfaces and vegetation will require heavy machinery to move about on the site. If these works occur within any TPZ area, they can potentially compact the soil and damage tree roots, trunks, and branches. The Tree Protection Zone for trees to be retained on site must be established prior to demolition and site work activities commencing as outlined in the previous sections. Demolition and site clearing works should follow these guidelines.

1. Ensure Tree Protection Zone fencing, and other tree protection measures are in place prior to demolition works commencing.
2. All vegetation proposed to be removed within or adjacent to a Tree Protection Zone must be removed using suitable tools in a manner that will not cause harm to remaining trees or disturbing their root zone.
    - Herbicides can be used to remove unwanted turf, weeds or groundcovers at the site. Herbicides should be applied by appropriately experienced contractors according to the manufacturer's product label recommendations. Apply herbicides with care to avoid accidental applications to surrounding vegetation.
3. The project arborist should be on site during demolition activities within a Tree Protection Zone.
4. No stockpiling of building rubble, demolition material, soil, or any other material within the Tree Protection Zone. These materials must be removed from site immediately or stockpiled piled outside of the Tree Protection Zone area or later disposal.
5. No Grade Changes within the TPZ. Lowering or raising of the grade (cut and fill) within the TPZ is not acceptable without specific Council approvals.
6. The demolition of structures within a Tree Protection Zone shall be carried out by machinery as carefully as possible to avoid damage to surrounding trees.
    - Demolition machinery should stand outside the Tree Protection Zone wherever possible to avoid soil compaction.
    - Demolition machinery can work on existing hard surfaces where present (e.g., existing driveways), or be placed inside the building to pull material in and down, away from the trees.
    - Where machinery must work within a Tree Protection Zone, suitable ground protection measures must be put in place as outlined in the section on Tree Protection Zone establishment.
7. Existing underground services should not be removed within a Tree Protection Zone as there is a risk of damage to the root system. These should be de-commissioned and left in place where possible. If they must be removed, please consult with the project arborist.

8. Existing hard surfaces (concrete/paving/bitumen etc.) should be retained where possible to act as ground protection from demolition machinery where possible. These can then be removed after demolition works as required.
9. When removing hard surfaces (concrete/paving/bitumen etc.) within a Tree Protection Zone, it is expected that there will be a mass of fine roots below the hard surface being removed.
    - Hand tools should be used to remove these hard surfaces adjacent to the trunk (within the structural root zone).
    - Demolition machinery should be used to carefully pull these surfaces up and away from the tree. The wheels of the machinery should be standing outside the Tree Protection Zone, or on any existing hard surfaces, or on established ground protection areas away from the tree. The works should proceed in a retreating manner, away from the tree.
    - Any roots that are exposed below the hard surfaces shall be wet down by hand and covered with a 50-100mm layer of mulch as soon as possible after being exposed.
    - Alternatively, exposed roots could be protected from desiccation by placing Hessian cloth (or similar) on top that is kept moist by periodic wetting. This must remain in place until the new surfaces are put into place.

Earthworks and trenching

Earthworks required to establish the site may include, excavation, cut and fill, levelling, footing preparation, batter formation and trenching activities. These activities have the potential to damage to tree trunks, branches, and the root zone. To minimise the impacts of these activities on the trees to be retained on site, the following precautions are required.

1. Ensure Tree Protection Zone fencing, and other tree protection measures are in place prior to earthworks commencing.
2. Excavation works can only proceed as approved by Council.
3. The project arborist should be on site during any earthworks works within a Tree Protection Zone.
4. All excavation machinery must be kept outside the Tree Protection Zone to avoid soil compaction, or suitable ground protection measures must be in place as outlined in the section on Tree Protection Zone establishment.
5. Excavation machinery must not come into contact with the trunk, branches, or roots within the Tree Protection Zone. Consider using a spotter to supervise, and/or use a smaller machine.
6. No earthworks are permitted within the Structural Root Zone without approvals. Seek direction from the project arborist.
7. No stockpiling of soil, debris, or any other material within the Tree Protection Zone. These materials are to be removed from the site immediately or stockpiled outside the area for.
8. **Cut and fill.**
    - No lowering of grade (cut) within a Tree Protection Zone. The soil surface can be skimmed by removing loose organic matter, turf or old gravel surfaces carefully using hand tools or with a trimming bucket of an excavator standing outside the Tree Protection Zone (or on suitable ground protection). Skimming of the surface should cease when fine tree roots are encountered and should not exceed 50-80mm below the original level.
    - Deep excavations adjacent to or within a Tree Protection Zone may require a batter or terraced levels. These may encroach further into the TPZ and may require approval. If this is required, please consult with the project arborist before proceeding.
    - There shall be no addition of additional material (fill) within a Tree Protection Zone without approval.
    - In some cases, fill material within a Tree Protection Zone may be permitted. If approved, the fill must consist of graded material that allows air and moisture movement. Suitable materials include single graded, no-fines gravel, washed single grade aggregate or similar.

Installation of underground services

A range of underground services may be required to service a new development. These may include but are not limited to:

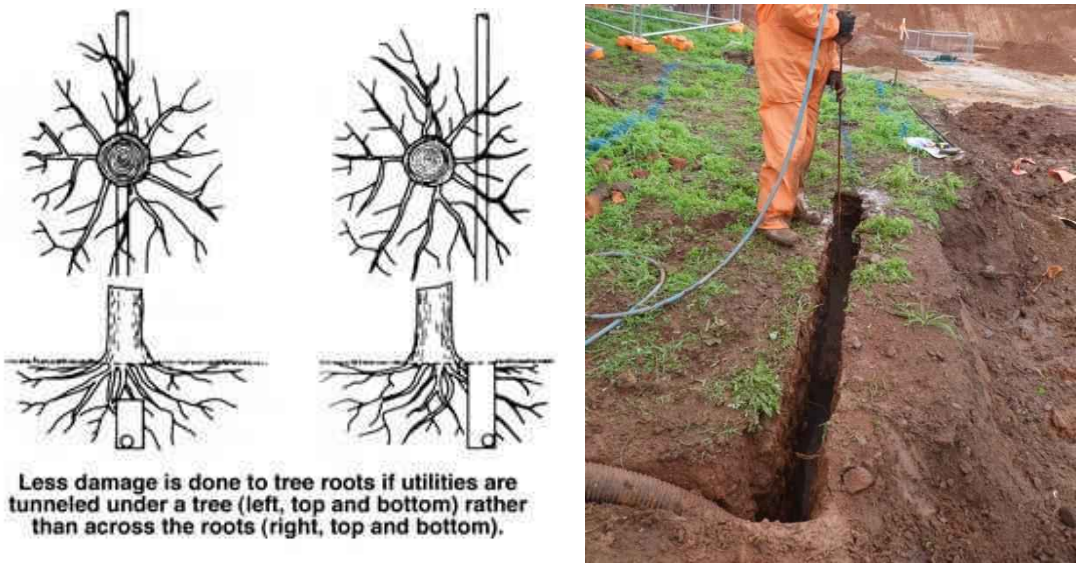
- Gas supply
- Electricity supply
- Water supply
- Sewer drainage
- Septic tank connections
- Stormwater drainage
- Irrigation pipes
- Telephone and communication cables
- Fire mains

Open trenching to install these services within a Tree Protection Zone has the potential to sever roots which can adversely affect tree health and stability. Unless otherwise approved, underground services should be installed according to the following guidelines.

1. All services should be routed outside the Tree Protection Zone where possible. If underground services must pass through a Tree Protection Zone, consult with the project arborist. These services should be installed by directional drilling or in manually excavated trenches.
2. Directional drilling.
    - 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.
    - Entry, exit points, connection points and inspection points should be located outside the Tree Protection Zone where possible.
3. Manual excavation
    - 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.
    - Excavate the soil using hand tools and hydro excavation down to the required depth for the entire length of the service required within the TPZ.
    - Use the lowest pressure possible to carry out the excavations whilst avoiding damage to the outer bark on tree roots.
    - When tree roots are encountered, the operator should avoid damaging the protective layer by directing high pressure water away from tree roots.

- Smaller tree roots (<20mm in diameter) may be damaged by the process, as this is generally unavoidable.
- Tree roots greater than 30mm in diameter shall left intact and undamaged.

4. Root pruning:
   - Retain as many roots as possible extending across the trench.
   - Any root pruning should be carried out in consultation with the project arborist.
   - Roots smaller than 50mmØ may be pruned back (preferably to a side branching root) using sharp pruning tools (such as secateurs or tree pruning handsaws).
   - Roots larger than 50mmØ should only be pruned after consultation with the project arborist.
5. Insert the underground service into the trench by weaving between exposed tree roots.
6. Backfill the trench as soon as possible after the service is installed to avoid root desiccation. If a trench is to remain exposed for more than 2 hours, the exposed roots and surrounding soil must be kept moist by hand irrigation and/or use of shading materials (hessian or boards). These roots must not be allowed to dry out.



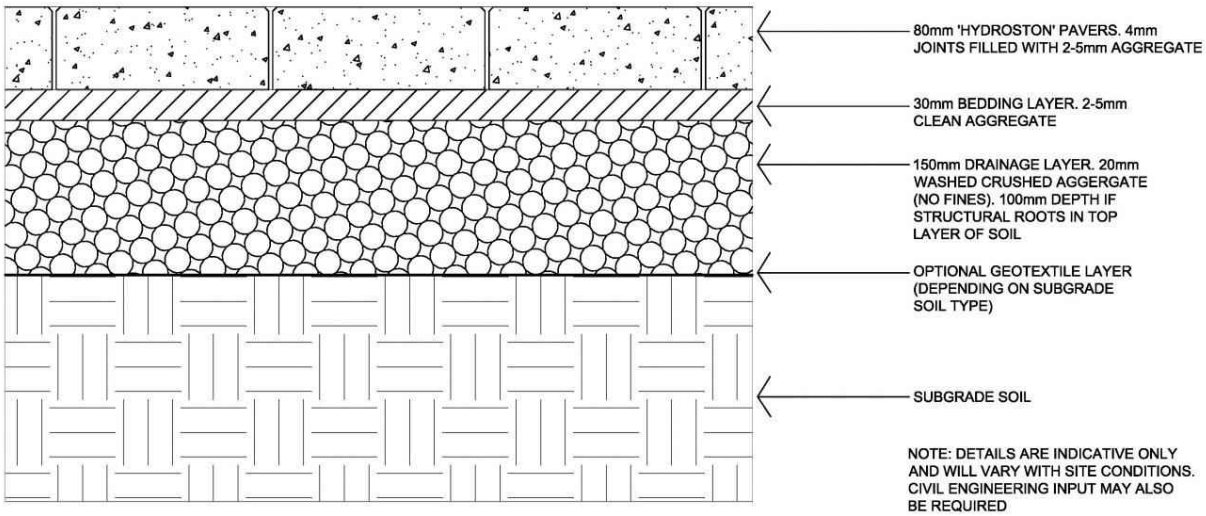
Examples of directional drilling (left) and manual excavation with hydro-excavation (right).

Paving within a Tree Protection Zone

Paving treatments and other hard surfaces include concrete paths and driveways, unit pavers, bitumen etc. Paving within a Tree Protection Zone can create an impervious surface, limiting air and water infiltration into the root zone, and may adversely affecting tree health. In addition, compaction works can increase soil density, impairing root development and growth. There is also a risk of root damage from grade changes when preparing for paving works. To ensure paving works do not adversely affect trees to be retained on site, the following guidelines should be followed.

1. The following guidelines are indicative only and may require consultation with permeable paving specialists and civil engineers.
2. Paving and surface sealing should be excluded from the Tree Protection Zone where possible. Surface sealing of the root zone should not exceed 20% of the Tree Protection Zone area[10].
3. If hard surfaces are required within a Tree Protection Zone, paving materials and methods should aim to avoid damage to the root system and use permeable materials.
4. Consider the finished paving levels in relation to the levels of surrounding structures in the design phase of the project. Adjust finished floor levels to ensure paving works do not lower grade by more than 50-80mm.
5. Tree root investigations may be required prior to designing and installing paver systems.
6. Consider future growth of tree roots and how they may impact on the paved surface. Paving works should remain outside the Structural Root Zone to reduce the likelihood of surface disruption in the future.
7. The project arborist should supervise any pavement installation work within a Tree Protection Zone.
8. Grade changes
    - No lowering of grade (cut) within a Tree Protection Zone for paving works without approval. The soil surface can be skimmed by removing loose organic matter, turf or old gravel surfaces carefully using hand tools or with a straight edge trimming bucket of an excavator standing outside the Tree Protection Zone (or on suitable ground protection). Skimming of the surface should cease when fine tree roots are encountered and should not exceed 50-80mm below the original level.
    - Any increase in grade (fill) must use permeable base layers that allow air and water to infiltrate.
9. Surface treatments
    - Final surface treatments should allow air and water to infiltrate into the root zone. There are two main types of permeable surface treatments:

- Systems in which the unit pavers are impervious but contain permeable joins where air and water can pass between pavers (e.g., Ecotrihex, Hydrapave).
- Systems in which the paver material is porous, and air and water can pass through the paver (e.g., HydroSTONE).
- The unit pavers should have a single-graded aggregate swept in to fill in the gaps between pavers to allow air and water to infiltrate. Regular paving sand is not suitable for this application.
- Additional aeration pipes may be required in some paving applications.



An example of a permeable paving system (Dr Martin Ely)

Landscaping around established trees

Care is required when landscaping around established trees. Damage can occur from a range of activities, including soil compaction, soil contamination, physical damage to the tree during landscaping works, damage to the root system from trenching and level changes, root disturbance from paving works and lawn installation etc. The following guidelines should be followed when landscaping around established trees.

To minimise the possible adverse impacts from these activities during landscaping activities, a tree protection zone (TPZ) is required. The TPZ roughly equates to the drip line of the tree but is accurately calculated in the body of the tree report. All potentially adverse activities must not occur within this zone or must be modified to minimise the impacts.

Landscaping guidelines

1. The landscape design should be reviewed by the project arborist prior to being finalised.
2. Landscaping contractors should observe the guidelines set out in the previous sections on Tree Protection Zone establishment and Site Establishment.
3. The growing environment for mature trees should be optimised with the use of mulches. Mulches should be organic in origin, semi composted and contain a mixture of coarse and fine particles. Mulches should be 75-100mm thick and applied out to the drip line of trees or further if possible, without coming into contact with the trunk. Mulches should be topped up every 1-2 years as required.
4. Irrigation systems around established trees should be set up as follows.
    - Drip irrigation systems are an effective way of applying water to the root zone of trees.
    - Connect the system to a reliable water source, preferably using a battery-operated programmable timer.
    - Use pressure reducers and relief valves as required.
    - Irrigation main lines should be radially arranged in relation to the root system rather than traversing the root system. Deep trenching across the drip line of trees must be avoided.
    - Install in-line dripper hose that emits ~3L of water per drip emitter per hour.
    - A parallel row pattern or a spiral pattern are simple installation methods to use with lines installed at 0.5m – 1.0m apart.
    - Irrigation should be applied during hotter months by providing one good soaking per week (2-3 hours at a time). Less water can be applied during cooler and wetter months.
    - Irrigate in the early morning. Avoid watering during the middle of the day.
    - Irrigation requirements should be adjusted according to species, soil type and climatic conditions.

5. Paving works should be kept to a minimum within a Tree Protection Zone. If paving must occur, it must utilize a no dig method, use permeable base preparations to minimum soil compaction requirements and utilise permeable unit pavers. Refer to the previous section on paving within a Tree Protection Zone.
6. Use caution when applying herbicides in the vicinity of established trees. Target the unwanted plants carefully and follow manufacturer's recommendations.
7. Pruning of established trees should be carried out by qualified arborists.
8. Retaining walls should not be installed within the Tree Protection Zone. If required, consult with the project arborist.
9. Fences on the boundaries of the property must be installed without damaging the root system of established trees.
    - Fencing must not use continuous strip footings.
    - Lightweight fencing panels attached to concrete pads and posts are recommended.
    - Concrete pads should be located outside the Structural Root Zone.
    - Grade changes (cut and fill) must be avoided during fence installation.

Other planting considerations

- Care is required when planting new vegetation within the drip line of established trees. Cultivation of the area under the tree should be kept to a minimum and undertaken with hand tools.
- Grade changes (cut or fill) within the drip line of established trees should be avoided. Do not build up soil levels by more than 100mm.
- The use of competitive plants should be kept to a minimum. Minimise the use of turf, and dense groundcovers etc.
- The mature size of larger plants and trees should be considered. Plants should be well spaced to allow them to reach their mature size.
- Select the largest trees for the size available. Larger trees provide greater benefits than smaller trees.
- Provide adequate growing area for the trees to grow in. Small openings in paved areas are usually inadequate for healthy tree growth.
- Species diversity is important a sustainable garden (and urban forest). While monoculture plantings may provide a desired aesthetic, they are generally more vulnerable to pest and disease outbreaks.
- Consider when to use shade trees or deciduous trees in relation to building orientation, the movement of the sun and the placement of windows.
- The use of locally indigenous vegetation should be considered for their habitat, biodiversity and wildlife corridor value.

Conclusions

- Adelaide Arb Consultants carried out a pre-development survey of 22 trees within and adjacent to a proposed development site at 33 Mawson Road, Meadows.
- The survey identified the following Legislative Controls that apply to this group of trees:
    - 3x Significant Trees
    - 4x Regulated Trees
    - 2 x Native Vegetation
    - 2x Significant Trees that also qualify as Native Vegetation.
    - 5x Regulated Trees that also qualify as Native Vegetation.
    - 6x trees that are not controlled.
    - Some of the locally indigenous trees may be planted and may not qualify as Native Vegetation.
- The Useful Life Expectancy of the surveyed trees varies across the site as follows:
    - 7x trees > 20 years.
    - 7x trees 10-20 years.
    - 2x trees 5-10 years
    - 6x trees 1-5 years
- The decision to remove or retain trees should consider the Legislative Control of the trees, their Useful Life Expectancy, and the nature of the proposed development.
- The final design solution for the site will require further refinement to ensure those trees that are to be retained are protected and managed to ensure their sustainability at the site, during and after development.

Endnotes

[1] Tree and risk assessments can be conducted at different levels and may employ various methods and tools. The level of assessment applied should be appropriate for the circumstances *Tree Risk Assessment Manual* Second Edition, published by International Society of Arboriculture 2017).

Level 1 - Limited visual assessment.

- A visual assessment from a specified perspective, near specified targets.
- The aim is to identify obvious defects or specified conditions.
- Typically identifies trees with imminent or probable likelihood of failure.
- This is the fastest and least thorough form of assessment intended for larger populations of trees.
- This can be carried out as a walkover, drive-by or fly-over inspection.

Level 2 - Standard assessment.

- A level 2 assessment is a detailed ground based visual tree inspection of a tree and its surroundings.
- The use of simple tools (mallet, binoculars, probes, spades), may be required.
- In some instances only limited information may be gained on specific internal, below ground or upper crown factors.
- For the majority of tree assessments the standard assessment provides adequate information to guide tree management.

Level 3 - Advanced assessment.

- A level 3 assessment is performed to provide detailed information about specific tree parts, defects, targets or site conditions.
- This assessment is usually conducted after a standard assessment has undertaken if additional information is required and with the approval of the client.
- Specialised equipment is often required for advanced assessment.
- The assessments are generally more time intensive and expensive.
- Advanced assessment techniques may include; aerial inspection, detailed target analysis, detailed site evaluation, decay testing, health evaluation, root inspection, tree stability monitoring and load testing.

NOTE: If tree condition cannot be adequately assessed at the specified level a higher level of assessment may be required.

[2] ***Significant tree*** means **(as defined in Section 4 Interpretation (1) of the *Development Act 1993*)**

(a) a tree declared to be a significant tree, or a tree within a stand of trees declared to be significant trees, by a Development Plan (whether or not the tree is also declared to be a regulated tree, or also falls within a class of trees declared to be regulated trees, by the regulations); or

(b) a tree declared to be a regulated tree by the regulations, or a tree within a class of trees declared to be regulated trees by the regulations that, by virtue of the application of prescribed criteria, is to be taken to be a significant tree for the purposes of this Act.

6A—Regulated and significant trees (as defined in the *Development Regulations 2008)*

(1) Subject to this regulation, the following are declared to constitute classes of regulated trees for the purposes of paragraph (a) of the definition of ***regulated tree*** in section 4(1) of the Act, namely trees within the designated area under subregulation (3) that have a trunk with a circumference of 2 metres or more or, in the case of trees with multiple trunks, that have trunks with a total circumference of 2 metres or more and an average circumference of 625 millimetres or more, measured at a point 1 metre above natural ground level.

(2) Subject to this regulation—

(a) a prescribed criterion for the purposes of paragraph (b) of the definition of ***significant tree*** in section 4(1) of the Act is that a regulated tree under subregulation (1) has a trunk with a circumference of 3 metres or more or, in the case of a tree with multiple trunks, has trunks with a total circumference of 3 metres or more and an average circumference of 625 millimetres or more, measured at a point 1 metre above natural ground level; and

(b) regulated trees under subregulation (1) that are within the prescribed criterion under paragraph (a) are to be taken to be significant trees for the purposes of the Act.

[3] ***native vegetation*** means a plant or plants of a species indigenous to South Australia including a plant or plants growing in or under waters of the sea but does not include-

(a) a plant or part of a plant that is dead unless the plant, or part of the plant, is of a class declared by regulation to be included in this definition; or

(b) a plant intentionally sown or planted by a person unless the plant was sown or planted—

(i) in compliance with a condition imposed by the Council under this Act or by the Native Vegetation Authority under the repealed Act, or with the order of a court under this Act or the repealed Act; or

(ii) in pursuance of a proposal approved by the Council under Part 4 Division 2; or

(iia) in circumstances involving the use of money paid into the Fund for the purpose of achieving a significant environmental benefit; or

(iii) in compliance with a condition imposed by a Minister, statutory authority or prescribed person or body under—

(A) the *River Murray Act 2003*; or

(B) the *Water Resources Act 1997*; or

(C) any other Act prescribed by the regulations for the purposes of this paragraph;

(From *Native Vegetation Act 1991 – Part 1 – Preliminary – 3 – Interpretation*)

Section 4—Definition of native vegetation—dead plants (*Native Vegetation Regulations 2017*)

For the purposes of paragraph (a) of the definition of ***native vegetation*** in section 3(1) of the Act, the class of plants, or parts of plants, comprising trees of a species indigenous to South Australia—

(a) that have a trunk circumference (measured at a point 300 millimetres above the base of the tree) of—

(i) in the case of a tree located on Kangaroo Island—1 metre or more; or

(ii) in any other case—2 metres or more; and

(b) that provide or have the potential to provide, or are a part of a group of trees or other plants (whether alive or dead) that provide or have the potential to provide, a habitat for animals of a listed threatened species under the *Environment Protection and Biodiversity Conservation Act 1999* of the Commonwealth,

is declared to be included in that definition.

The *Native Vegetation Regulations 2017* states that Native Vegetation may be cleared under a range of prescribed circumstances outlined in these regulations.

[4] ***Development Regulations 2008***

Schedule 3—Acts and activities which are not development.

17—Removal of trees in certain cases

(1) A tree-damaging activity in relation to a regulated tree (including a tree that also constitutes a significant tree) if—

(a) the tree is within 1 of the following species of trees:

Melaleuca styphelioides (Prickly-leaved Paperback)

Lagunaria patersonia (Norfolk Island Hibiscus); or

(b) the tree is within 20 metres of a dwelling in a Bushfire Protection Area identified as Medium Bushfire Risk or High Bushfire Risk in the relevant *Development Plan*; or

(c) the tree is on land under the care and control of the Minister who has primary responsibility for the environment and conservation in the State; or

(d) the tree is on land under the care and control of the Board of the Botanic Gardens and State Herbarium; or

(e) the tree is dead.

[5]**Regulated tree means— (as defined in Section 4 Interpretation (1) of the *Development Act 1993*)**

(a) a tree, or a tree within a class of trees, declared to be regulated by the regulations (whether or not the tree also constitutes a significant tree under the regulations); or

(b) a tree declared to be a significant tree, or a tree within a stand of trees declared to be significant trees, by a Development Plan (whether or not the tree is also declared to be a regulated tree, or also falls within a class of trees declared to be regulated trees, by the regulations);

Section 6A—Regulated and significant trees (as defined in the *Development Regulations 2008)*

(1) Subject to this regulation, the following are declared to constitute classes of regulated trees for the purposes of paragraph (a) of the definition of ***regulated tree*** in section 4(1) of the Act, namely trees within the designated area under subregulation (3) that have a trunk with a circumference of 2 metres or more or, in the case of trees with multiple trunks, that have trunks with a total circumference of 2 metres or more and an average circumference of 625 millimetres or more, measured at a point 1 metre above natural ground level.

[6] **Life expectancy** is the estimated life span, or remaining life span of a tree. The **useful life expectancy** is the number of years a tree can be expected to be useful at the site, with acceptable levels of amenity, health and risk under the current site conditions. Consideration should be given to tree benefits, amenity value, historical values, tree surroundings, site use, risk management options and costs, habitat opportunities and other relevant factors. Simply remaining alive (life expectancy) may not be reasonable in an urban setting. Trees should continue to provide amenity and other benefits with acceptable levels of risk (useful life expectancy). For some trees, habitat value may contribute to or increase a trees useful life expectancy.

[7] **Project arborist** - The person responsible for carrying out the tree assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification. The project arborist will be suitably experienced and competent in arboriculture, having acquired through training, qualification (minimum Australian Qualification Framework (AQF) Level 5, Diploma of Horticulture (Arboriculture)) and/or equivalent experience, the knowledge and skills enabling that person to perform the tasks required by this Standard.
(AS 4970 – 2009 *Protection of trees on development sites)*

[8] ***tree-damaging activity*** means

(a)the killing or destruction of a tree; or

(b)the removal of a tree; or

(c)the severing of branches, limbs, stems or trunk of a tree; or

(d)the ringbarking, topping or lopping of a tree; or

(e)any other substantial damage to a tree,

and includes any other act or activity that causes any of the foregoing to occur but does not include maintenance pruning that is not likely to affect adversely the general health and appearance of a tree or that is excluded by regulation from the ambit of this definition;

(From section 4 - Interpretation of the *Development Act 1993)*

Development Regulations 2008

Section 6A (8)

For the purposes of the definition of ***tree damaging activity*** in section 4(1) of the Act, pruning—

(a) that does not remove more than 30% of the crown of the tree; and

(b) that is required to remove—

(i) dead or diseased wood; or

(ii) branches that pose a material risk to a building; or

(iii) branches to a tree that is located in an area frequently used by people and the branches pose a material risk to such people, is excluded from the ambit of that definition.

[9] **Certificate Level 3 in Arboriculture** The person with training to AQF Level 3 in Arboriculture, or above, or equivalent recognized and relevant experience that enables the person to perform the tasks required by AS 4373 – 2007 *Pruning of amenity trees*.
Certificate Level 5 (Diploma of Arboriculture) The person responsible for carrying out the tree assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification. The project arborist will be suitably experienced and competent in arboriculture, having acquired through training, qualification (minimum Australian Qualification Framework (AQF) Level 5, Diploma of Horticulture (Arboriculture)) and/or equivalent experience, the knowledge and skills enabling that person to perform the tasks required by AS 4970-2009 *Protection of trees on development sites*.

[10] British Standards – BS 5837 – 2005 *Trees in Relation to Construction – Recommendations*

Meadows Foodland Supermarket

Environmental Noise Assessment

S7083C3

May 2022

sonus.

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sonus.

Document Title	:	Meadows Foodland Supermarket Environmental Noise Assessment
Document Reference	:	S7083C3
Date	:	May 2022
Author	:	Chris Turnbull, MAAS

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1 INTRODUCTION

An environmental noise assessment has been made for the Meadows Foodland supermarket development at 33 Mawson Road and 5 Battunga Road, Meadows.

The proposed development consists of a supermarket, associated car parking, and landscaping. A loading/delivery area is located to the southern side of the supermarket.

The nearest residences to the site are located to the east and southwest of the site. An overview of the site and the surrounding locality is provided in Appendix A.

The assessment has been based on the following:

- *Jelfs Building Design* drawing for the development titled "PROPOSED SHOPS" at "3,5, BUTTUNGA RD 33 MAWSON RD MEADOWS", sheet numbers 1-3 and 5-7, dated 8th Dec '21;
- The understanding that the supermarket will not be open prior to 7am; and,
- The understanding that delivery vehicles no larger than a heavy rigid size are expected to access the site.

2 CRITERIA

2.1 Mount Barker Council Development Plan

The proposed development is located within the Mount Barker District Council local government area. Although new application are now assessed under the *Planning and Design Code* (the **Code**), at the time of submitting the application, the Mount Barker Council Development Plan (the **Plan**) was most relevant. The assessment has therefore been conducted to address the provisions of the Plan rather than the Code.

The Plan has been reviewed and particular regard given to the following noise related provisions:

General Section – Interface Between Land Uses

Objective 1: Development located and designed to prevent adverse impact and conflict between land uses.

Objective 2: Protect community health and amenity from adverse impacts of development.

Objective 3: Protect desired land uses from the encroachment of incompatible development.

PRINCIPLES OF DEVELOPMENT CONTROL

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

   ….

   (b) Noise

   …

2. *Development should be sited and designed to minimise negative impact on existing and potential future land uses desired in the locality.*

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

Noise Generating Activities

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

2.2 Environment Protection (Noise) Policy 2007

The provisions of the Development Plan reference the *Environment Protection (Noise) Policy 2007* (the **Policy**). The Policy provides objective noise criteria to assess the environmental noise from a development.

The objective environmental noise criteria provided by the Policy are based on the *World Health Organisation Guidelines (1999)* to prevent annoyance, sleep disturbance and unreasonable interference on the amenity of an area. Therefore, compliance with the Policy will also satisfy the provisions in the Plan which are related to environmental noise.

General Activity

The goal noise levels of the Policy are based on the land uses principally promoted in the location of the noise source (the subject site) and noise receivers (residences). When operational, any assessment of noise from the proposed development, in accordance with the Policy, would be based on the most contemporary assessment of what is principally promoted. As the Code provides the most contemporary requirements for land uses, the Code has been used for the assessment of the land uses principally promoted. In accordance with the Code, the subject site is located within the "Suburban Business" zone. Existing residences to the northeast, east and southwest are located within the same zone. An additional residence to the northwest of the site is located within the "Deferred Urban" zone. No sub-zones apply.

When considering the principally promoted land uses and the "development" nature of the proposal, the following goal noise levels are provided by the Policy to be achieved at residences:

- Suburban Business zone
    - An average (L_{eq}) noise level of 57 dB(A) during the daytime (7am to 10pm); and,
    - An average (L_{eq}) noise level of 50 dB(A) at night (10pm to 7am).
- Deferred Urban zone:
    - An average (L_{eq}) noise level of 55 dB(A) during the daytime (7am to 10pm); and,
    - An average (L_{eq}) noise level of 48 dB(A) at night (10pm to 7am).

When measuring or predicting noise levels for comparison with the Policy, penalties may be applied to the average goal noise level for each characteristic of tone, impulse, low frequency and modulation of the noise source. A 5 dB(A) penalty is applied if the noise exhibits one characteristic, 8 dB(A) for two characteristics, and 10 dB(A) for three or four characteristics. In order to apply a penalty, the characteristic must be dominant when considered within the context of the existing acoustic environment at the receivers. The application of penalties is discussed in the "Assessment" section of this report.

Rubbish Collection

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

3 ASSESSMENT

The assessment has been based on previous noise measurements of activity at other similar sites. The noise measurements include:

- Delivery truck movements, including the movement, idle, and refrigeration components (for various truck and van sizes);
- Unloading activity, such as the unloading of pallets from a truck;
- Vehicle movements and general activity associated with car parking; and,
- Mechanical plant serving the building.

As is typical at the development application stage of a project, the mechanical plant has not yet been designed or selected. The assessment has therefore been based on measurements of typical mechanical plant selections for such a development including refrigeration and air conditioning. It is recommended that the assessment of mechanical plant be updated if the noise from the selected units is different to what is assumed in this assessment. The assessment has been based on the following external mechanical plant:

- 5 x *Tecumseh* 'Compac' condensing units;
- 6 x *Bitzer* 'Ecolite' series condensing units; and,
- 2 x *Temperzone* 'OPA550' package units.

The sound power levels for the above activities and equipment are provided in Appendix C.

3.1 Operational Assumptions

The predictions of noise from the use of the facility have been based on the following operational assumptions for the level of activity in any 15-minute[2] period:

- Daytime (7am to 10pm)
    - 45 vehicle movements around the car park, consisting of 25 cars to the east of the proposed supermarket building, and 20 cars to the south;
    - A delivery by a refrigerated heavy rigid truck which reverses into the loading dock, idles for up to 45 seconds (whilst being unloaded or waiting to be unloaded), and drives out in a forward direction;
    - Unloading activity using a tailgate loader and hand pallet jacks for up to 10 minutes; and,

[2] Default assessment period of the Policy.

- Continuous operation of all mechanical plant serving the building within the designated area on the building roof and within the ground level plant room.

- Night time (10pm to 7am)
  - 3 vehicle movements around the site to the staff car parking area located to the south of the supermarket building; and,
  - Continuous operation of all mechanical plant serving the building within the designated area on the building roof and within the ground level plant room.

3.2 Recommendations

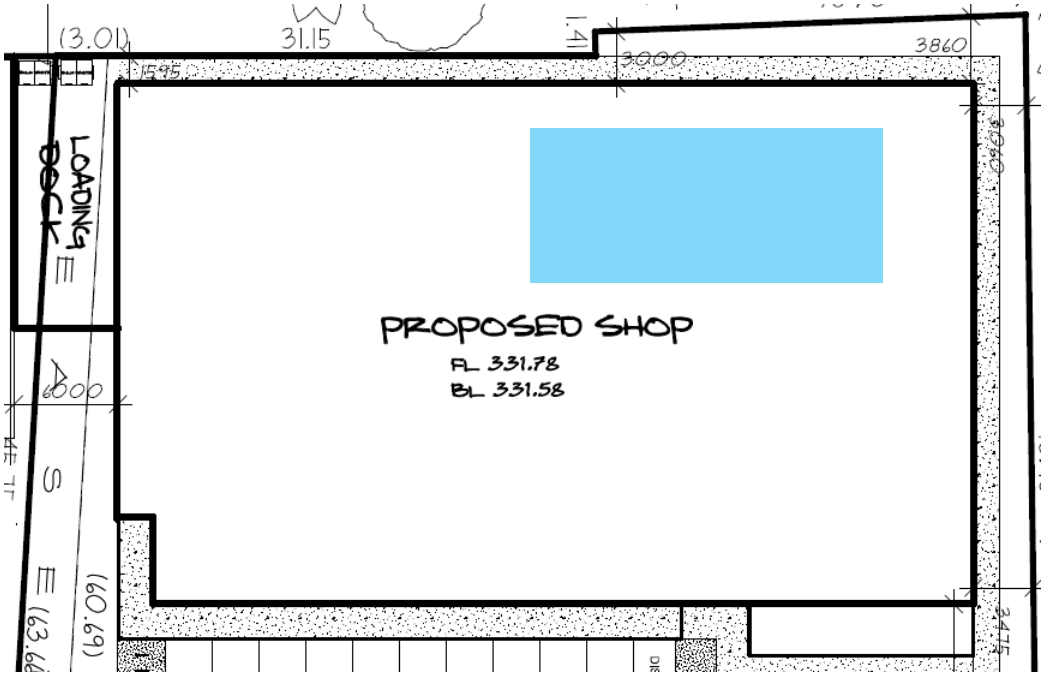
Based on the above noise sources and level of activity, the following acoustic treatments are recommended to achieve the goal noise levels of the Policy:

Rubbish Collection

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

Mechanical Plant

- Ensure that rooftop mechanical plant is located within the designated area as shown in **BLUE** in Figure 1;
- Ensure that the ground level "pump room" is constructed using pre-cast concrete, and the roof is constructed from a minimum of 0.42mm BMT sheet steel ("Colorbond" or similar), lined with an insulation blanket such as *Bradford Anticon 55* (or similar); and,
- Ensure that any ventilation openings to the pump room, or significant exhaust fans (if installed) are fitted with acoustic attenuation (such as acoustic louvres, lined ductwork or an in-line attenuator).



Loading Dock

- Ensure that all deliveries to the site are restricted to the daytime hours of the Policy (7am to 10pm);
- Ensure the truck is not idling during unloading or waiting for unloading;
- Construct a barrier along the southern side of the loading dock from minimum 0.42mm BMT sheet steel ("Colorbond" or similar) to a height of at least 3.5m for the extent shown in **GREEN** in Figure 2.
- Construct a canopy over the loading dock area for the extent shown in **RED** in Figure 2, such that it seals airtight with the wall at the western end of the loading dock, as marked in **PURPLE**;
- Install acoustic absorption material, such as 50mm thick insulation with a minimum density of 32 kg/m^3, to the underside of the canopy and the 3.5m barrier. The absorption material should be installed in accordance with Detail 1 to provide weather proofing;
- Construct sheet steel boundary fences as shown in Appendix B.

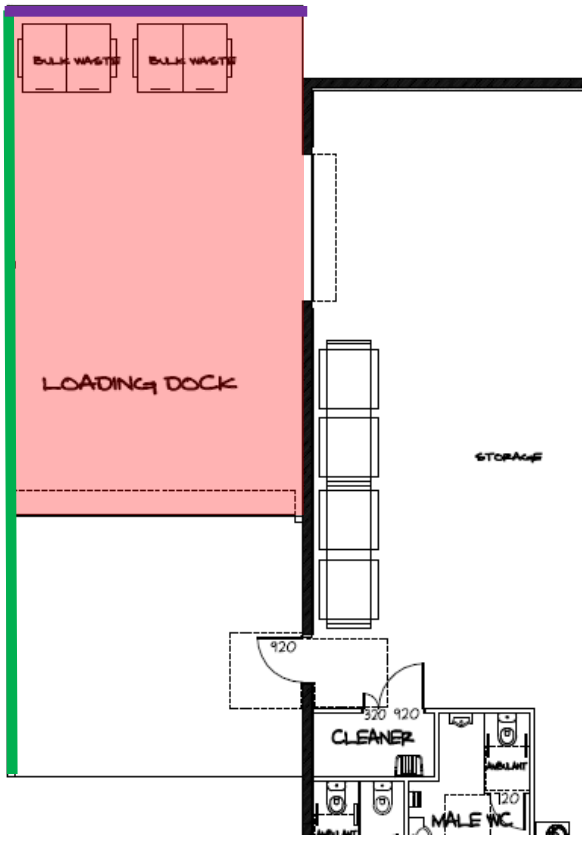
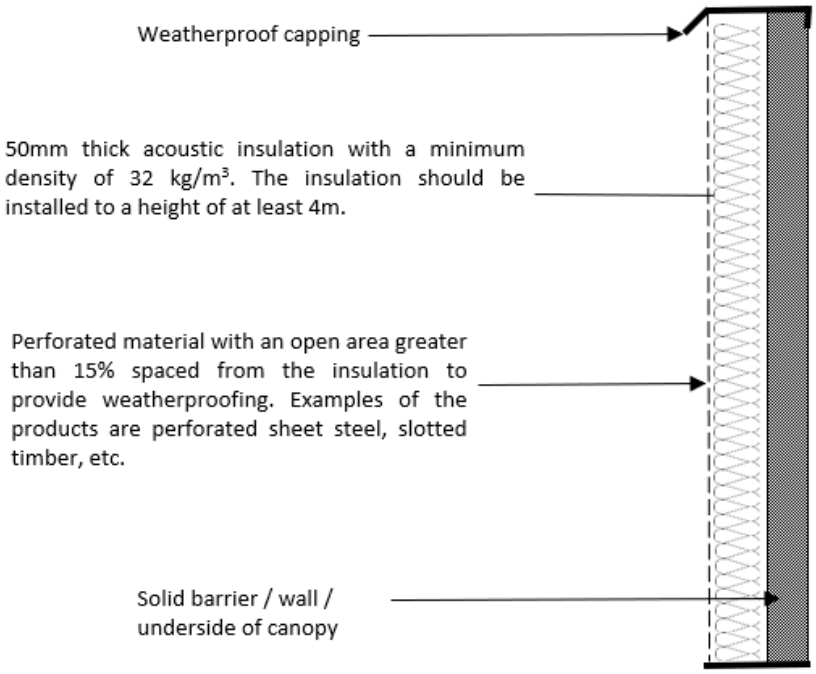


Figure 2: Extent of canopy and acoustic barrier



Detail 1: Installation of acoustic absorption material on barrier and underside of canopy

3.3 Character Penalties

The noise from vehicle movements into or out of a car park can attract a penalty for modulation when the background levels are low. Additionally, reversing tones may be present when delivery trucks depart the site, therefore attracting another penalty for tonality.

For the residence in the Deferred Urban zone to the northwest, the noise emissions from the development during the night are dominated by mechanical plant, and therefore the character of noise from the development during the night time period will be broadband steady state in nature, and as such a penalty is not warranted at this residence. A 5 dB(A) penalty for modulation has conservatively been applied to the predicted noise levels at other residences during the night time period. 8 dB(A) has been added to the predicted noise levels at all residences during the daytime for modulation and tonality.

3.4 Predicted Noise Levels

Based on the assumed level of activity, the incorporation of the recommendations provided, and the addition of any relevant penalties, the predicted noise levels at the closest residences to the development will be no greater than those shown in the following table:

	Day Period (7am to 10pm)		**Night Period (10pm to 7am)**	
	Criteria	Prediction	Criteria	Prediction
Suburban Business zone	57 dB(A)	57 dB(A) [2]	50 dB(A)	49 dB(A) [1]
Deferred Urban zone	55 dB(A)	54 dB(A) [2]	48 dB(A)	44 dB(A)

[1] Includes a 5 dB(A) penalty
[2] Includes an 8 dB(A) penalty

4 CONCLUSION

An environmental noise assessment has been made of the Meadows Foodland supermarket development at 33 Mawson Road and 5 Battunga Road, Meadows.

The assessment considers noise from general car park activity, loading activities within the loading area, and mechanical plant serving the building.

Appropriate noise criteria for the assessment of these noise sources have been derived in accordance with the *Environment Protection (Noise) Policy 2007*. Noise levels from the site are predicted to achieve the relevant criteria at all residences in the vicinity, with the inclusion of the treatments described in this report, including:

- Ensure that deliveries to the site occur during the daytime hours only (7am to 10pm);
- Construction of boundary fences;
- Construct an acoustic barrier with absorption material on the southern side of the loading dock;
- Construct a canopy with acoustic absorption material over the loading dock; and,
- Locate the rooftop mechanical plant in the specified area.

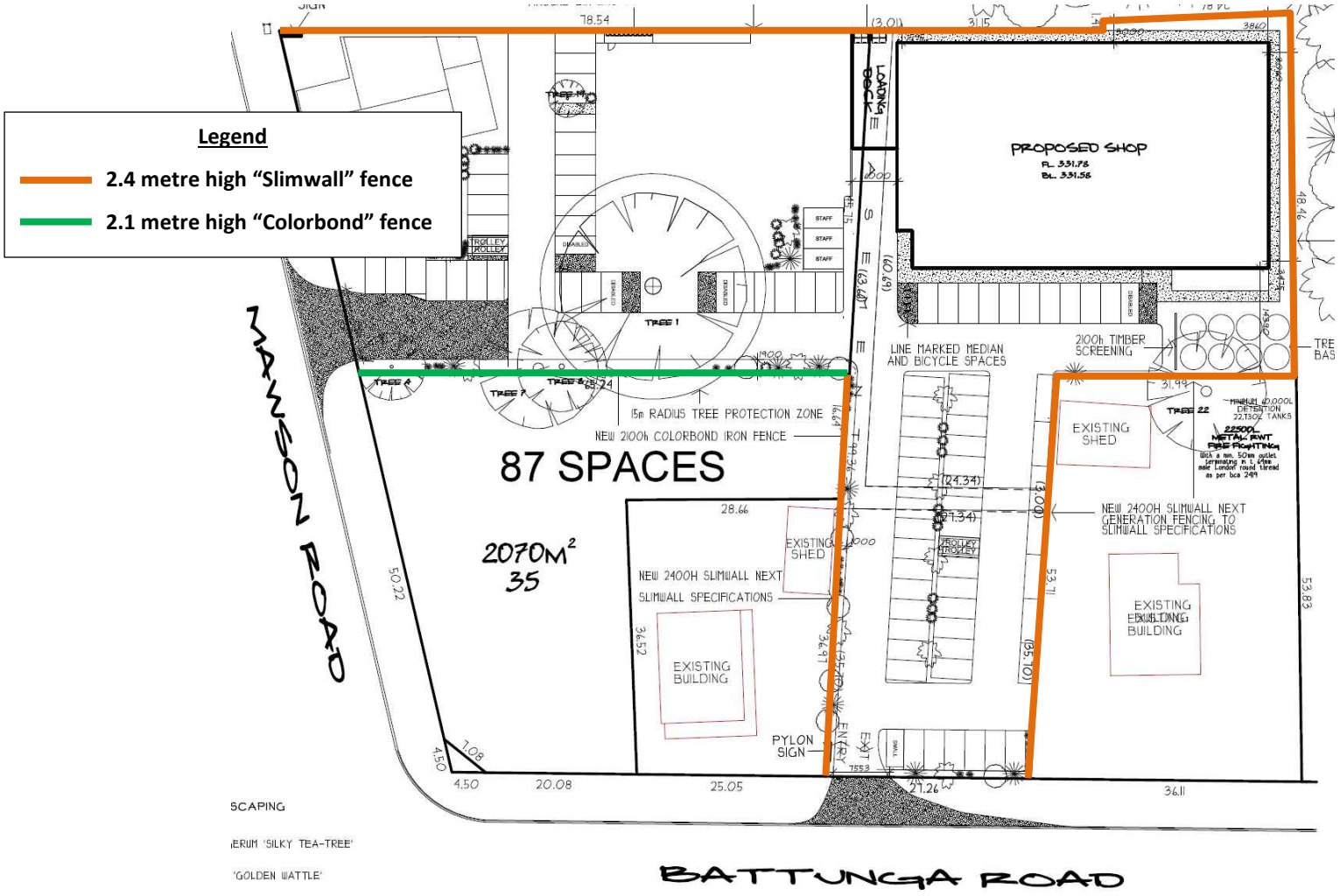
In doing so, it is considered that the development has been *designed to minimise adverse impacts* and *does not unreasonably impact the amenity of sensitive receivers*, thereby achieving the relevant provisions of the Mount Barker Council Development Plan related to environmental noise.

APPENDIX A – Subject Site and Surrounding Locality

Legend

- Site Boundary
- Zone Boundaries
- Residences within SB Zone
- Residences within DU Zone

APPENDIX B – Boundary Fence Locations and Heights



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APPENDIX C – Noise Level Data

Activity		Sound Power Level
Delivery Activity	Refrigerated Delivery Truck Movement	101 dB(A)
	Refrigerated Truck Idling	97 dB(A)
	Unloading Activity	82 dB(A)
Mechanical Plant	*Temperzone* 'OPA550' package unit	84 dB(A)
	Bitzer 'LHL5E/4EES-4Y' Condensing unit	71 dB(A)
	Bitzer 'LHL5E/4CES-6Y' Condensing unit	72 dB(A)
	Bitzer 'LHL3E/2CES-3Y' Condensing unit	69 dB(A)
	Tecumseh 'PACS4546Z' Condensing unit	73 dB(A)
	Tecumseh 'PACS4524Z' Condensing unit	70 dB(A)
	Tecumseh 'PACS2522Z' Condensing unit	76 dB(A)
	Tecumseh 'PACS2480Z' Condensing unit	71 dB(A)
	Tecumseh 'PACS4531Z' Condensing unit	71 dB(A)
	Ground Level Pump Room	89 dB(A)[1]

Notes:

1. *Internal Sound Pressure Level*

sonus.

C L Rowe & Associates
PO Box 573
Goolwa SA 5214

S5415C1

Attention: Craig Rowe **18 October 2022**

Dear Craig,

MEADOWS SUPERMARKET
ASSESSMENT OF UPDATED LAYOUT

Sonus previously conducted an environmental noise assessment of the proposed supermarket at 33 Mawson Road and 5 Battunga Road, Meadows. The assessment was summarised in Sonus report "S7083C6", dated August 2022 (the **Assessment**).

Since the Assessment, the layout has been updated to include a reduced boundary fence height in some locations and minor modifications to the loading bay area. The revisions are included on *Jelfs Building Design* drawing set for the development titled "PROPOSED SHOPS" at "3, 5, BUTTUNGA RD 33 MAWSON RD MEADOWS", sheets 1-9, dated 4 October 2022.

This letter summarises an updated assessment to include the revised drawings. Specifically, the updated layout has been assessed to ensure compliance with the requirements of the *Environment Protection (Noise) Policy 2007* (the **Policy**) and the South Australian Planning and Design Code (the **Code**).

CRITERIA

Objective noise criteria for the project are established in the Assessment. The following summarises the goal noise levels:

- Within the *Suburban Business* zone:
  - An average (L_{eq}) noise level of 57 dB(A) during the daytime (7:00am to 10:00pm); and,
  - An average (L_{eq}) noise level of 50 dB(A) at night (10:00pm to 7:00am).
- Within the *Deferred Urban* zone
  - An average (L_{eq}) noise level of 55 dB(A) during the daytime (7:00am to 10:00pm); and,
  - An average (L_{eq}) noise level of 48 dB(A) at night (10:00pm to 7:00am).

The goal noise levels apply to all noise sources at the development, including vehicular activity on the site, delivery activity and mechanical plant.

ASSESSMENT

Predictions of the noise from the revised layout have been made by updating the noise model used for the Assessment. With the updated layout, the predicted average noise levels at sensitive receivers will be the same as those predicted in the Assessment, which are shown again in the following table. As noted in the Assessment, a 5 dB(A) character penalty for modulation has been applied to the predicted night time levels, and 8 dB(A) has been added to the predicted levels during the daytime for tonality and modulating characteristics.

	Day Period (7:00am to 10:00pm)		**Night Period (10:00pm to 7:00am)**	
	Criteria	Prediction	Criteria	Prediction
Suburban Business zone	57 dB(A)	57 dB(A) [2]	50 dB(A)	46 dB(A) [1]
Deferred Urban zone	55 dB(A)	52 dB(A) [2]	48 dB(A)	46 dB(A)

[1] Includes a 5 dB(A) penalty
[2] Includes an 8 dB(A) penalty

Based on the assessment of the updated layout, the predicted noise levels achieve the objective criteria and therefore it is considered that the requirements of the *Environment Protection (Noise) Policy 2007* and the South Australian Planning and Design Code relating to environmental noise are satisfied.

If you have any questions or require clarification, please call me.

Yours faithfully
Sonus Pty Ltd

Chris Turnbull
Principal

+61 417 845 720
ct@sonus.com.au

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A1

PRELIMINARY
(CONCEPT ONLY)
NOT TO BE USED FOR CONSTRUCTION

EXISTING TREES AND STRUCTURES TO BE REMOVED SHOWN DASHED (TYP).

FEATURE SITE SURVEY BY OTHERS.

MAWSON ROAD

BATTUNGA ROAD

FP5444

FP15442

DP48575

TBM SPIKE IN BITUMEN RL = 332.870m

TBM METAL PIN RL = 331.566m

TBM METAL PIN RL = 331.462m

529 3293m²

537 4158m²

B 99.36

A 268°02'30" 141.41

SHED

TANK

GENERAL STORE & HOUSE

MONITORING WELL

BORE

ELECTRICAL CONNECTION

SEWER PIT

STOP VALVE

COMMS PIT

LIGHT

ELECTRICAL PIT

STORIE

TITLE:	DEMOLITION PLAN
ADDRESS:	No. 33 Mawson Road & No. 5 Battunga Road, MEADOWS, SA
CLIENT:	ROBERT WEGER

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JOB No.	SHEET No.	ISSUE No.
C33330	1 of 3	D

DRAWN :	DESIGN:	DATE:
H.C.	D.A.	2-Feb-22

0 5 10 15
SCALE 1:250 METRES

No.	REVISION	BY	DATE
A.	SHOP REMOVED AS PER CLIENT REQUEST	H.C.	12.05.22
B.	ADDITIONAL TREES TO REMAIN	H.C.	17.08.22
C.	ADDITIONAL TREE TO REMAIN	H.C.	31.08.22
D.	ADDITIONAL TREES TO BE REMOVED	H.C.	31.08.22

A1

PRELIMINARY
(CONCEPT ONLY)
NOT TO BE USED FOR CONSTRUCTION

FEATURE SITE SURVEY BY OTHERS.

TBM METAL PIN
RL = 331.566m

EXISTING SEPTIC SYSTEM TO BE DECOMMISSIONED AND REMOVED. EXISTING BUILDING TO BE CONNECTED TO NEW SYSTEM.

LOCATE & CONNECT SEWER DRAIN TO NEW SIP/CWMS CONNECTION POINT. CONNECTION TO BE AS PER COUNCIL STANDARD DETAILS. CLIENT TO CONFIRM PROPOSED DEPTH OF NEW CONNECTION POINT PRIOR TO FINAL DESIGN. DEPTH OF SEWER MAIN IN MAWSON ROAD ≈2.10m (MEASURED BY CLIENT).

TBM SPIKE IN BITUMEN
RL = 332.870m

JUNCTION BOX PRIOR TO GRAVITY FLOW CONNECTION TO NEW SIP/CWMS CONNECTION.

SEWER PUMP STATION WITH CLASS D TRAFFICABLE LID (LOCATION TO BE CONFIRMED BY CLIENT)

SCHEMATIC SEWER DRAIN RUN FROM PROPOSED SHOP

PROPOSED SHOP TRADE WASTE ARRESTOR (LOCATION TO BE CONFIRMED BY CLIENT)

PROPOSED SHOP
FL: 331.78 (TBC)
BL: 331.58 (TBC)

LAWN AREA
BL: 331.78 (TBC)

MAWSON ROAD

BATTUNGA ROAD

GENERAL STORE & HOUSE

TURNING BAY

GUM

MONUMENTS MEET

FP5444

FP15442

DP48576

IMPORTANT NOTES:
1. FURTHER INVESTIGATION BY A LICENSED PLUMBER TO BE CARRIED OUT TO OBTAIN SIP/CWMS CONNECTION POINT LOCATION/DEPTH PRIOR TO FINAL DESIGN.
2. CLIENT/PLUMBER TO CONFIRM PUMP STATION LOCATION AND SEWER DRAIN LAYOUT PRIOR TO FINAL DESIGN.

DESIGN LEGEND
— — —: GRAVITY FLOW SEWER DRAIN PIPE.
→→→: PUMP STATION RISING MAIN

TITLE: SEWER PLAN
ADDRESS: No. 33 Mawson Road & No. 5 Battunga Road, MEADOWS, SA
CLIENT: ROBERT WEGER

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JOB No.	SHEET No.	ISSUE No.
C33330	3 of 3	E

DRAWN: H.C. | DESIGN: D.A. | DATE: 2-Feb-22

SCALE 1:250 METRES

No.	REVISION	BY	DATE
A.	SHOP REMOVED AS PER CLIENT REQUEST	H.C.	12.05.22
B.	CARPARK LAYOUT AMENDED	H.C.	23.05.22
C.	CARPARK LAYOUT AMENDED	H.C.	17.08.22
D.	TRADE WASTE RELOCATED	H.C.	31.08.22
E.	CARPARKS REMOVED & GARDEN BED ADDED	H.C.	31.08.22

A1

PRELIMINARY
(CONCEPT ONLY)
NOT TO BE USED FOR CONSTRUCTION

FEATURE SITE SURVEY BY OTHERS.

TBM METAL PIN
RL = 331.566m

30m2 (L:6.00m x W: 5.00m)
BIO-RETENTION BASIN 4

MULCHED AREA
BL: 331.18 (TBC)

PROPOSED SHOP
FL: 331.78 (TBC)
BL: 331.58 (TBC)

MINIMUM 12.5 KILOLITRES UNDERGROUND DETENTION (ROCLA OSD SYSTEM OR SIMILAR)
42 1200mm x 900mm BOX CULVERTS

7 x 22.5 KILOLITRE COMBINATION RETENTION/DETENTION TANKS (CONNECTED TOGETHER AT TOP AND BOTTOM). 157.5 KILOLITRES TOTAL (97.5 KILOLITRES FOR RETENTION AND 60.0 KILOLITRES FOR DETENTION). CONNECT ALL SHOP DOWNPIPES TO TANKS. A 90mm DIPPIPE IS TO BE INSTALLED ON THE END TANK AT THE EDGE OF THE DETENTION COMPONENT.

NON COMBUSTIBLE 22.5 KILOLITRE WATER TANK, (FOR BUSHFIRE FIGHTING PURPOSES).

NOTE:
DETENTION DEPTH IN ROCLA OSD ONLY CONSIDERED FOR 600mm TO ALLOW FOR EMERGENCY OVERFLOW PIPE IN THE EVENT OF AN ORIFICE BLOCKAGE ((1.2x2.4x0.6)*42)=72.576 KILOLITRES. AN ORIFICE PLATE WITH A Ø250mm ORIFICE IS TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500 TO OUTLET (IN FRONT OF OUTLET PIPE).

TBM METAL PIN
RL = 331.462m

30m2 (L:6.00m x W: 5.00m)
BIO-RETENTION BASIN 1

35m2 (L:41.20m X W: 0.85m)
BIO-RETENTION BASIN 3

24m2 (L: 40.00m x W: 0.60m)
BIO-RETENTION BASIN 2

CONCRETE PAVING IN ACCORDANCE WITH MOUNT BARKER DISTRICT COUNCIL TRAFFICABLE CROSSING ZONE OVER TREE ROOT PROTECTION ZONE DETAIL (SHOWN HATCHED)

TBM SPIKE IN BITUMEN
RL = 332.870m

ALL CARPARKS PAVING TO BE ASPHALT/BITUPEN LLLO

USING EXISTING GROUND/PAVING SURFACE LEVELS AND AS CONSTRUCTED EDGE OF BITUMEN LEVELS ALONG MAWSON ROAD FOR NEW CROSSOVER DESIGN (TYP).

EXTENT OF TREES TO REMAIN IN THIS AREA TO BE CONFIRMED ON FINAL DESIGN ONCE FINISHED SURFACE LEVELS HAVE BEEN ESTABLISHED.

THIS AREA TO BE CUT DOWN TO ALLOW PAVEMENT TO SLOPE TO BIO-RETENTION BASIN (TYP)

DENOTES TREE ROOT PROTECTION ZONE (TPZ). ANY EXCAVATIONS OR FILLING WITHIN SUCH TPZ ARE TO BE IN ACCORDANCE WITH THE ARBORISTS RECOMMENDATIONS (REFER ARBORIST REPORT).

LINE MARKING AND WHEEL STOP IN ACCORDANCE WITH AS/NZS 2890.1:2004 (TYP)

LINE MARKING IN ACCORDANCE WITH AS/NZS 2890.1:2004 (TYP)

RAMP PAVING UP TO BE +100mm ABOVE ADJACENT EDGE OF BITUMEN (E.O.B) LEVEL ALONG BATTUNGA ROAD 3.00m INTO ALLOTMENT.

MATCH EXISTING VERGE LEVELS FOR NEW CROSSOVER DESIGN TO ALLOW UNOBSTRUCTED FLOW OF SURFACE STORMWATER THROUGH VERGE AREA.

IMPORTANT NOTES:
1. STORMWATER AND PAVING LAYOUT SHOWN ON THIS PLAN IS CONCEPT ONLY FOR CLIENT REVIEW. ALL PAVEMENT GRADES/STORMWATER PIPE RUNS ARE SUBJECT TO CHANGE DURING DETAILED DESIGN STAGE ONCE FINAL DESIGN LEVELS HAVE BEEN CONFIRMED.
2. COUNCIL/DIT TO CONFIRM THE ALLOWABLE STORMWATER PIPE CONNECTION INVERT LEVEL TO THE CREEK. THIS CONCEPT IS SUBJECT TO CHANGE AND A STORMWATER PUMP STATION MAY BE REQUIRED PENDING THIS OUTCOME.

STORMWATER PIPE CONNECTION TO CREEK AND INVERT LEVEL TO BE CONFIRMED BY COUNCIL/DIT. PROVIDE ANTI-SCOURING DEVICE (RENO MATTRESS OR SIMILAR) WHERE STORMWATER DISCHARGES TO CREEK. ALIGMENT OF STORM WATER PIPE/RINGWALL AND HEADWALL TO BE CONFIRMED ON SITE IN RELATION TO CREEK BANK.

ECOSOL GPT 4200 (LOCATION AS PER THE ARCHITECTURAL SITE PLANS, EXACT LOCATION TO BE CONFIRMED ON FINAL DESIGN.

JUNCTION TO COUNCIL/DIT SPECIFICATIONS

PRECAST WINGWALLS, HEADWALL AND CONCRETE BASE (ROCLA, HUMES OR SIMILAR).

SIDE ENTRY PIT

DESIGN LEGEND

- SD : CONCRETE SPOON DRAIN @ 0.30% FALL (MIN).
- : CONCRETE SUMP (HEAVY DUTY GRATE) U.N.O.
- : SIDE ENTRY PIT
- : CARPARK PAVING GRADE DIRECTION (INDICATIVE ONLY - TO BE CONFIRMED).
- : GRAVITY FLOW STORMWATER PIPE (PVC DWV GRADE U.N.O) AT 1 IN 250 (0.40%) MIN FALL (U.N.O) ø's TO BE CONFIRMED.
- : (CB):- CONCRETE BORDER (UK):- 100mm UPRIGHT KERB (UK/WT):- 100mm UPRIGHT KERB AND WATER GUTTER (SLOTTED UK):- 100mm UPRIGHT KERB SLOTTED AT INTERVALS
- : CONCRETE SLEEPER RETAINING WALL.
- : RAMP PAVING IN ACCORDANCE WITH AS 1428.1:2021. LOCATION AND SETUP TO BE CONFIRMED ON FINAL DESIGN.
- : KERB RAMP IN ACCORDANCE WITH AS 1428.1:2009

MAWSON ROAD

BATTUNGA ROAD

FP5444

FP15442

FP49574

TITLE: SITEWORKS PLAN

ADDRESS: No. 33 Mawson Road & No. 5 Battunga Road, MEADOWS, SA

CLIENT: ROBERT WEGER

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JOB No.	SHEET No.	ISSUE No.
C33330	2 of 3	E

DRAWN : H.C. DESIGN: D.A. DATE: 20 - 11 - 22

SCALE 1:250 METRES

No.	REVISION	BY	DATE
A.	SHOP REMOVED AS PER CLIENT REQUEST	H.C.	12.05.22
B.	CARPARK LAYOUT AMENDED	H.C.	23.05.22
C.	CARPARK LAYOUT AMENDED/ADDITIONAL STORMWATER & CROSSOVER INFORMATION ADDED	H.C.	17.08.22
D.	CARPARK, PEDESTRIAN PATHS AMENDED, STORMWATER BASIN RELOCATED	H.C.	31.08.22
E.	CARPARKS REMOVED & GARDEN BED ADDED	H.C.	31.08.22

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Residential Commercial Industrial Consulting Engineers

STORMWATER MANAGEMENT PLAN

Issue A Date: 12/05/2022

Proposed Commercial Development
No. 33 Mawson Road & No. 5 Battunga Road, Meadows

Image from Google Maps 10.02.2022

Design Parameters:

- WSUD measures for stormwater pollution tratment.
- The Post-Development stormwater flow rates are not to exceed Pre-development rates for the 1% AEP Major storm and 10% AEP Minor storm.

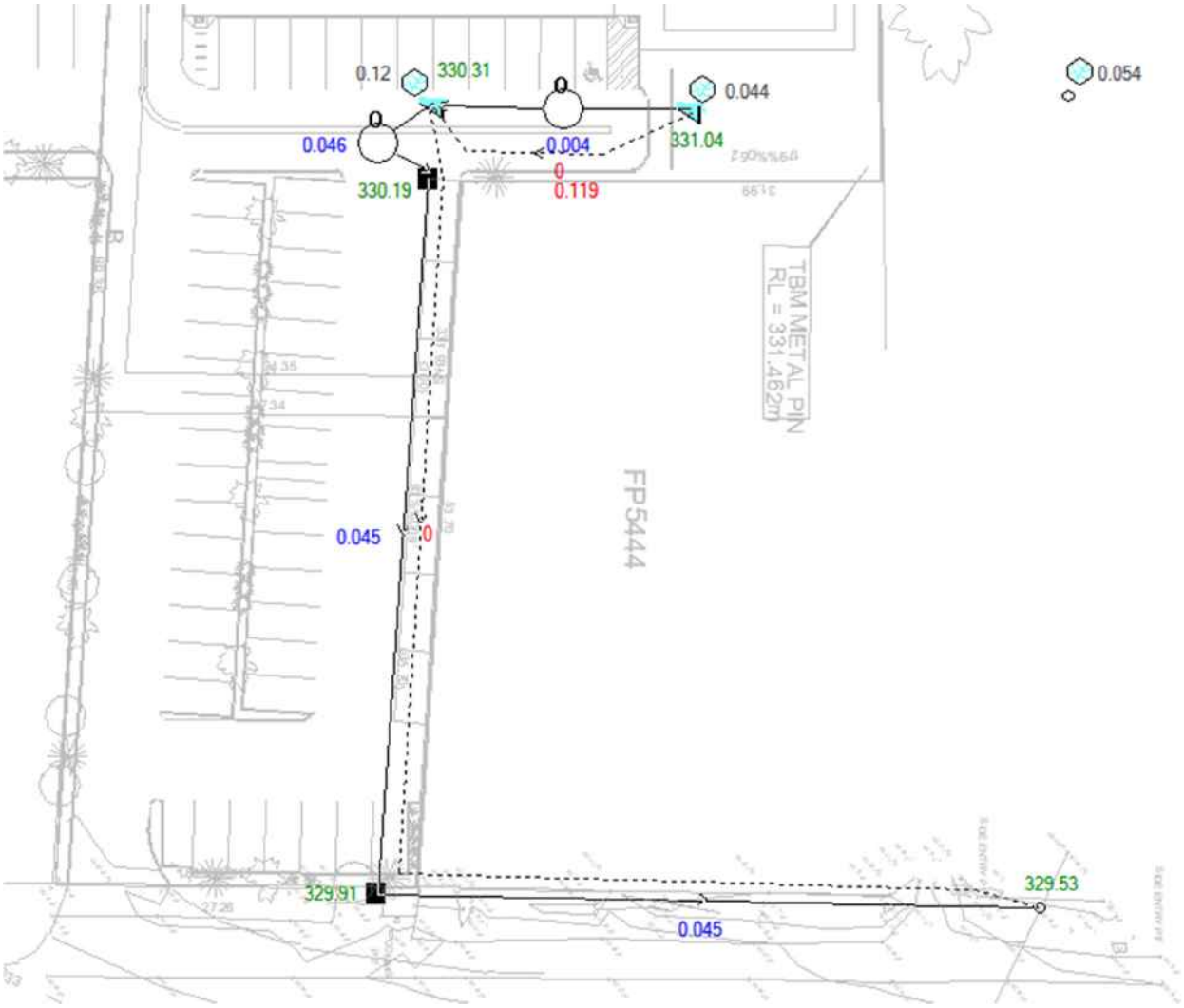
Proposed Stormwater Management Strategy:

- 60.00 kilolitres of detention in above ground tanks with a 50mm diamater orifice is to be installed to detain the proposed shop roof stormwater flows (all shop downpipes connected to the tanks).
- 72.50 kilolitres of underground detention with a 250mm diamater orifice is to be installed to detain the possible future development site stormwater and the carpark surface stormwater flows.
- Above ground rainwater tanks shall be installed for the proposed shop to treat roof stormwater flows.
- Carpark areas are to be graded towards the landscaping areas containing raingardens/bioretention basins (or discharge to bioretention via pipe system) to treat surface stormwater flows.

Note:
An allowance for an additional 700m² of impervious area has been included in the underground detention system.

DRAINS Model (Meadows IL/CL):

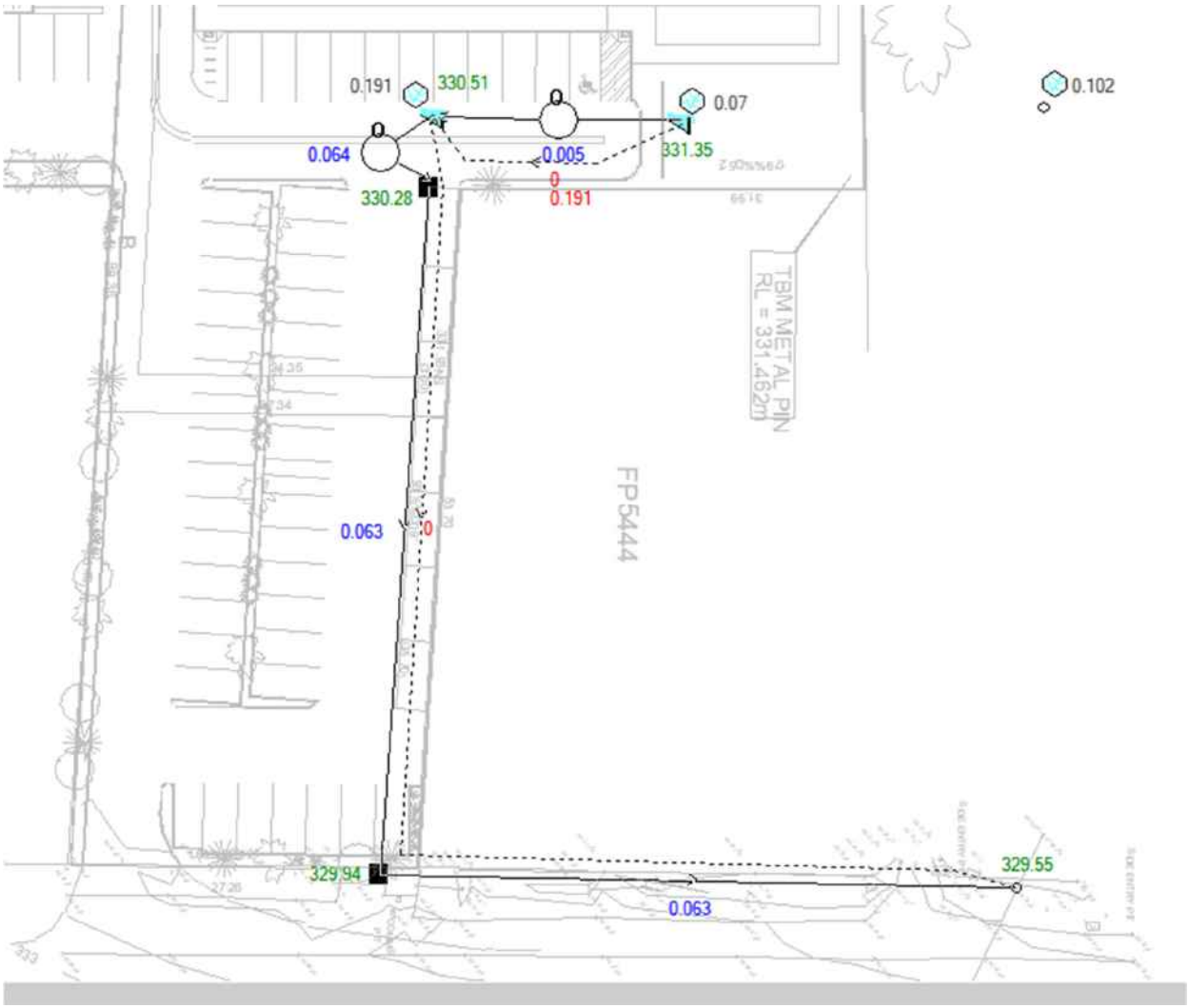
Post-Development Minor Storm 10% AEP Results:



Peak Flow at Creek Outlet:

Pre-Development = 0.054m3/sec
Post-Development = 0.045m3/sec

Post-Development Major Storm 1% AEP Results:



Peak Flow at Creek Outlet:

Pre-Development = 0.102m3/sec
Post-Development = 0.063m3/sec

Conclusion:

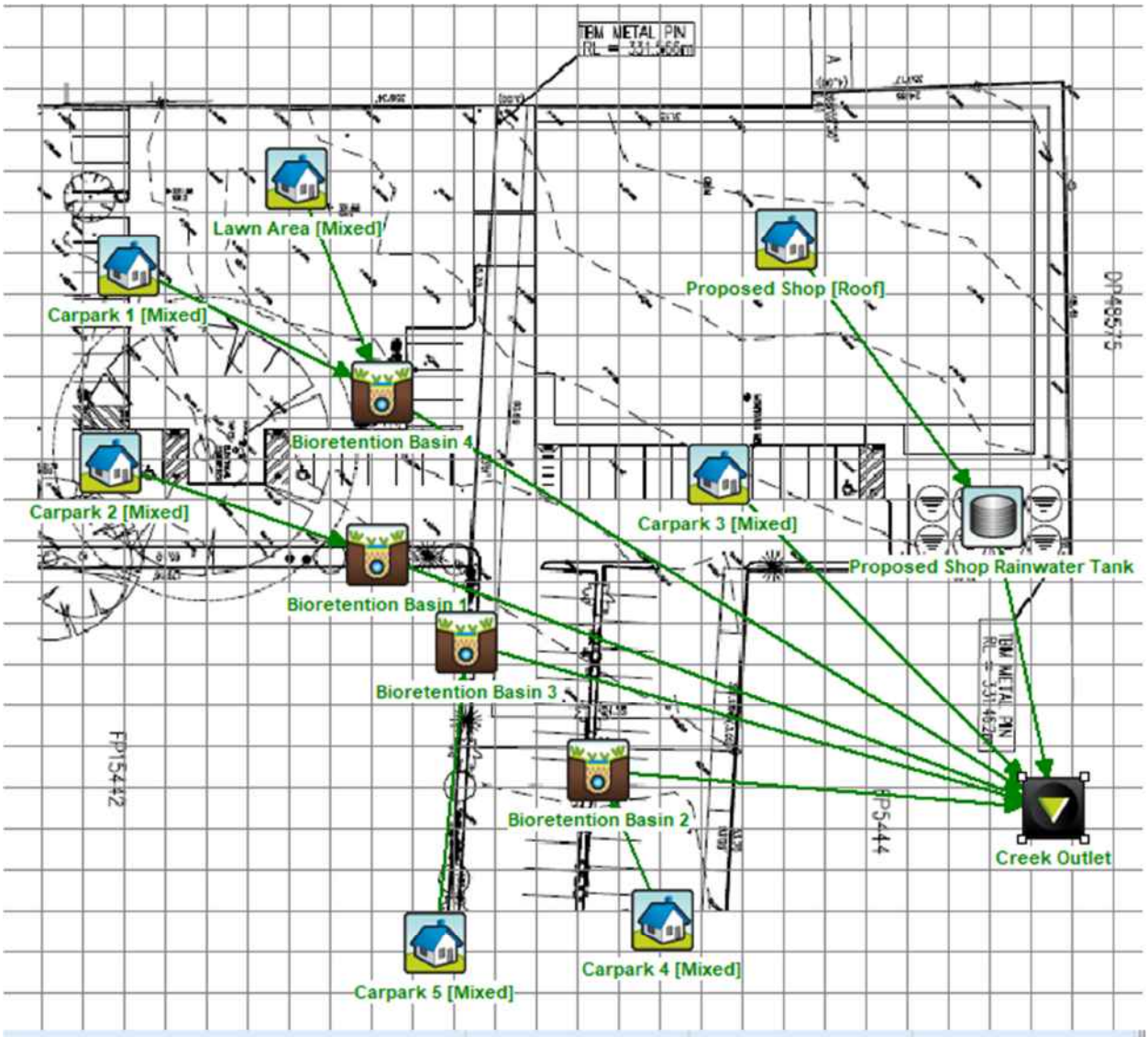
The peak discharge rates post development for the critical minor and major storm events do not exceed the pre-development discharge rates, and therefore meet the councils requirements.

Stormwater Quality Treatment Measures:

Water Sensitive Urban Design target reductions:

- 80% reduction in Total Suspended Solids (TSS).
- 60% reduction in Total Phosphorous (TP).
- 45% reduction in Total Nitrogen (TN).

Post Development MUSIC Model:

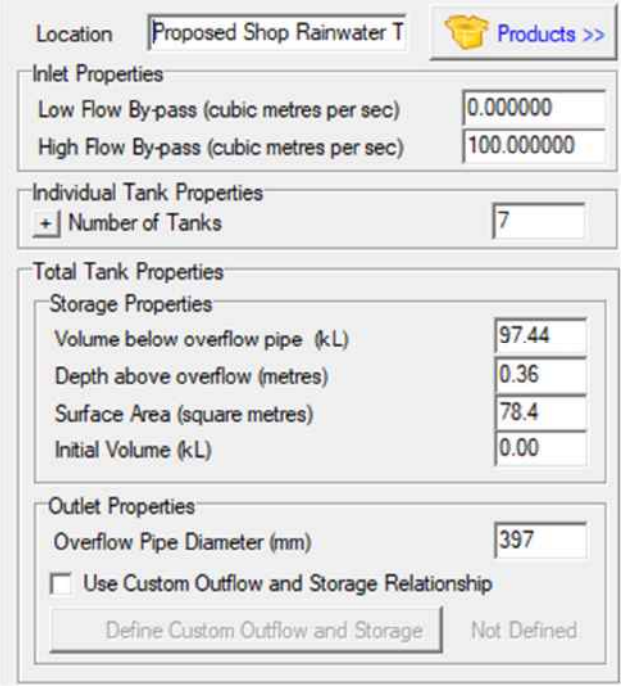


	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.43	0.916	36
Total Suspended Solids (kg/yr)	216	49.6	77
Total Phosphorus (kg/yr)	0.486	0.139	71.4
Total Nitrogen (kg/yr)	3.82	1.38	63.9
Gross Pollutants (kg/yr)	60.1	9.69	83.9

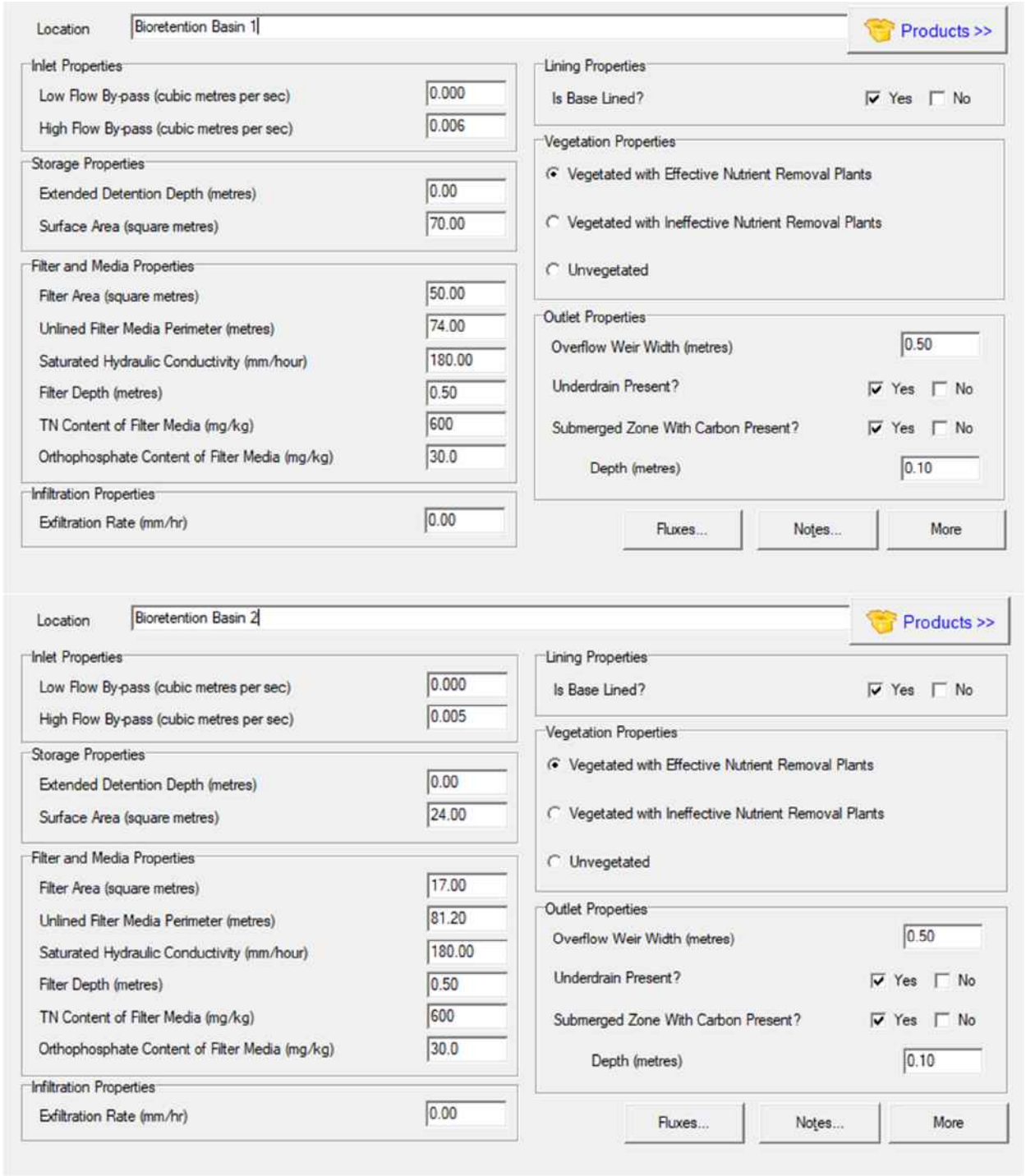
Note: The Total Suspended Solids reduction target of 80% has not been met in the above model, however the carpark underground detention system will provide additional reduction of Total Suspended Solids prior to the stormwater discharging to the creek and therefore is acceptable.

Rainwater Tanks:

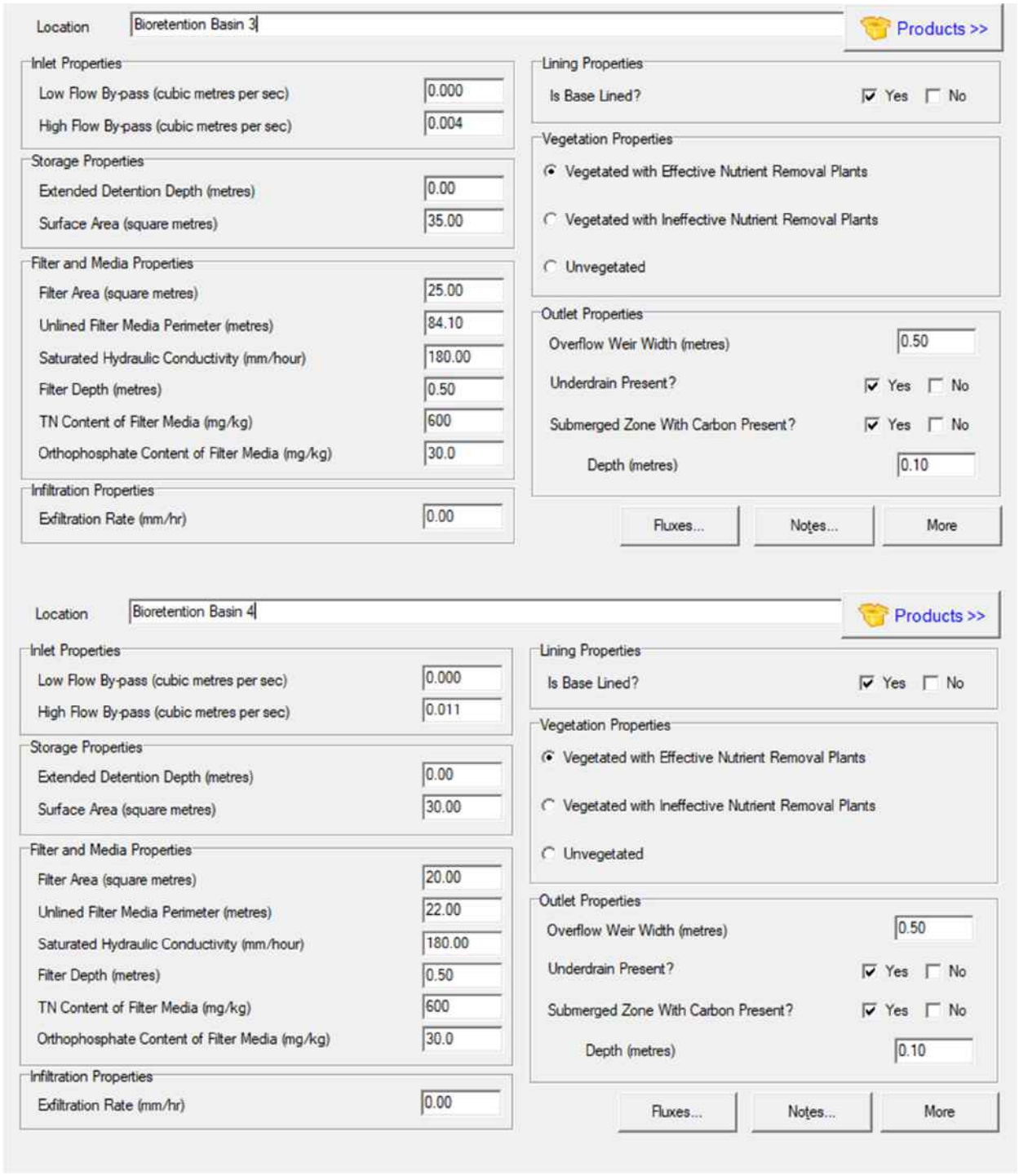
- Proposed Shop: 7 x 22.50 kilolitre rainwater tanks (97.5 kilolitres retention)



Bio-Retention Basins:



Stormwater Management Plan: 33330



Appendix A:

Location

Label: Not provided
Latitude: -35.174 [Nearest grid cell: 35.1625 (S)]
Longitude: 138.756 [Nearest grid cell: 138.7625 (E)]

IFD Design Rainfall Depth (mm)

Issued: 10 February 2022

Rainfall depth for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).
FAQ for New ARR probability terminology

Table | Chart

Unit: mm

	Annual Exceedance Probability (AEP)						
Duration	**63.2%**	**50%#**	**20%***	**10%**	**5%**	**2%**	**1%**
1 min	1.39	1.54	2.04	2.42	2.82	3.40	3.89
2 min	2.48	2.74	3.60	4.25	4.93	5.90	6.70
3 min	3.31	3.65	4.82	5.69	6.61	7.93	9.01
4 min	3.97	4.39	5.80	6.86	7.99	9.60	10.9
5 min	4.53	5.01	6.63	7.86	9.15	11.0	12.6
10 min	6.49	7.19	9.56	11.3	13.2	16.0	18.3
15 min	7.82	8.65	11.5	13.7	15.9	19.3	22.1
20 min	8.85	9.79	13.0	15.4	18.0	21.8	24.9
25 min	9.72	10.7	14.2	16.9	19.7	23.8	27.2
30 min	10.5	11.6	15.3	18.2	21.2	25.6	29.2
45 min	12.3	13.6	18.0	21.3	24.8	29.8	34.1
1 hour	13.8	15.2	20.1	23.8	27.6	33.3	37.9
1.5 hour	16.2	17.9	23.6	27.8	32.3	38.9	44.3
2 hour	18.2	20.1	26.4	31.2	36.2	43.5	49.6
3 hour	21.5	23.7	31.1	36.7	42.6	51.3	58.5
4.5 hour	25.3	27.9	36.7	43.4	50.4	60.7	69.3
6 hour	28.5	31.4	41.3	48.9	56.9	68.5	78.4
9 hour	33.5	37.0	48.8	57.8	67.3	81.3	93.2
12 hour	37.6	41.5	54.8	65.0	75.8	91.6	105
18 hour	44.0	48.6	64.3	76.2	88.9	107	123
24 hour	49.0	54.1	71.6	84.8	98.9	119	136
30 hour	53.2	58.7	77.5	91.7	107	129	147
36 hour	56.7	62.6	82.5	97.5	113	136	155
48 hour	62.6	69.1	90.7	107	124	147	167
72 hour	71.6	78.8	103	120	138	162	181
96 hour	78.5	86.3	112	129	147	170	189
120 hour	84.3	92.6	119	136	154	176	193
144 hour	89.4	98.2	125	142	159	180	196
168 hour	94.0	103	131	148	163	183	198

Note:
The 50% AEP IFD **does not** correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.
* The 20% AEP IFD **does not** correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 4.48 ARI.

Bioretention Basin High Flow Bypass Calculations:

Rational method calculation. To be confirmed on final design with DRAINS Model.

Bioretention 1

$$Cw = \frac{(828 \times 0.9) + (92 \times 0.1)}{920} = 0.82$$

50% of 1 EY 5 minute = 2.27mm (50% of 63.2% AEP)

$I = \frac{2.27}{5} \times 60 = 27.24$ mm/hr Catchment Area (A) = 920m²

$$Q = \frac{C \times I \times A}{3600} \therefore \frac{0.82 \times 27.24 \times 920}{3600} = 5.71 \text{ L/s} \therefore 0.006 \text{ m}^3/\text{s}$$

Bioretention 2

$$Cw = \frac{(730 \times 0.9) + (30 \times 0.1)}{760} = 0.87 \quad I = 27.24 \text{ mm/hr} \quad A = 760\text{m}^2$$

$$Q = \frac{0.87 \times 27.24 \times 760}{3600} = 5.00 \text{ L/s} \therefore 0.005 \text{ m}^3/\text{s}$$

Bioretention 3

$$Cw = \frac{(627 \times 0.9) + (33 \times 0.1)}{660} = 0.86 \quad I = 27.24 \text{ mm/hr} \quad A = 660\text{m}^2$$

$$Q = \frac{0.86 \times 27.24 \times 660}{3600} = 4.29 \text{ L/s} \therefore 0.004 \text{ m}^3/\text{s}$$

Bioretention 4

$$Cw = \frac{(1609 \times 0.9) + (401 \times 0.1)}{2010} = 0.74 \quad I = 27.24 \text{ mm/hr} \quad A = 2010\text{m}^2$$

$$Q = \frac{0.74 \times 27.24 \times 2010}{3600} = 11.25 \text{ L/s} \therefore 0.011 \text{ m}^3/\text{s}$$

Headwalls

Humes manufactures a range of headwalls (to suit pipes of DN300 to DN3600) to conform to the requirements of individual state and local authorities.

Humes also manufactures multiple cell headwalls (for both pipes and box culverts), sloping headwalls and end walls, small box culvert headwalls, and compact headwalls.

For projects with specific needs, Humes can work with you to produce a customised headwall design delivering a cost effective solution.

Benefits

Humes precast concrete headwalls offer significant advantages over in-situ concrete headwalls:

- reduced installation time and labour
- no requirement for premix concrete so remote sites are not an issue
- no wastage of excess concrete and no clean up required
- no formwork costs
- 'at-strength' concrete on delivery
- Swiftlift® anchors enable easy handling.

Figure 1 – Example of a single cell headwall

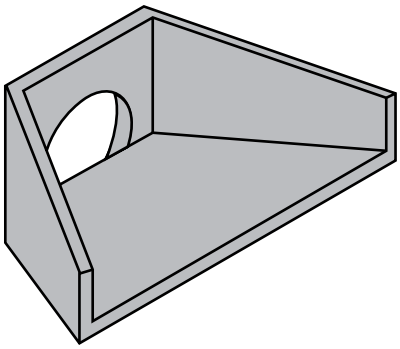


Figure 2 – Example of a multiple cell headwall

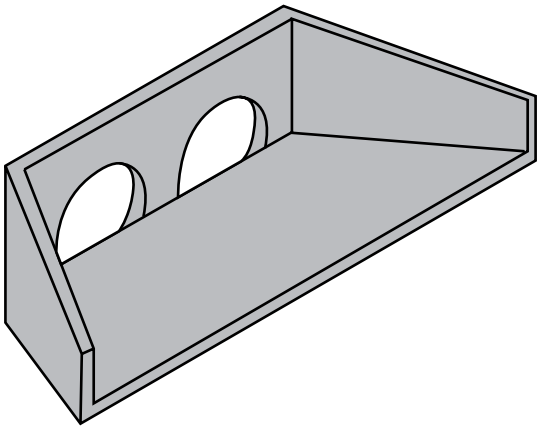
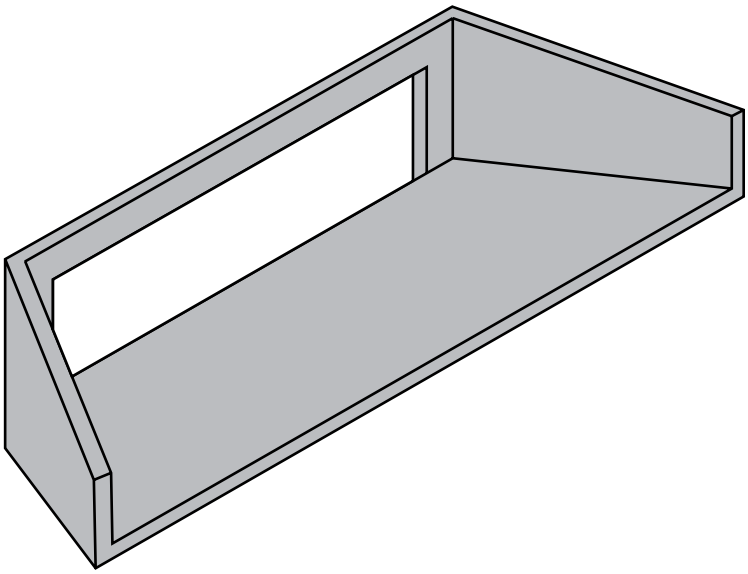


Figure 3 – Example of a multiple cell headwall for box culverts



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Rock Sizing for Bank Stabilisation

WATERWAY MANAGEMENT PRACTICES

Photo 1 – Lower bank rock stabilisation with voids filled with small rocks

Photo 2 – Rock stabilisation with plants introduced at time of rock placement

1. Introduction

The placement of rocks on waterway banks is commonly referred to as 'rock beaching'. Rock beaching has been one of the most widely adopted techniques for the control of bank erosion. To date, its application has primarily been in the form of loosely dumped rock with open voids (Photo 1); however, the practice of filling the voids with soil and actively establishing plants is becoming more common (Photo 2).

The active establishment of a vegetative cover over the rocks provides many benefits including:

- increased stabilisation of the rocks
- improved terrestrial habitat
- improved aquatic habitat
- improved fish passage conditions during high flows
- improved aesthetics

In many minds, rock beaching still represents a form of 'hard engineering'. In its traditional open-void form, rock beaching can be both unsightly and incompatible with the waterway's natural features. On the other hand, when the rock-lined surface is appropriately vegetated it is often viewed as a form of 'soft engineering'.

Rock beaching provides many benefits over most hard engineering techniques, including its ability to adjust to minor bed and bank movements, and its ability to integrate with vegetation.

2. Attributes of rock stabilisation of banks

2.1 Short-term stability

Rock stabilisation provides the benefit of instantaneous scour protection.

In hydraulic terms, a rock-lined surface typically represents a 'smooth' surface relative to a fully vegetated bank. This hydraulic 'smoothness', however, can contribute to the initiation of bank scour immediately downstream of the protected area. High flow velocities attracted to the 'smooth' rock-lined surface can pass downstream onto an area of unprotected bank.

Similarly, rock protection on the outside of a channel bend can encourage high velocities to exist at the toe of the bank causing bed erosion and possible undermining of the rock protection. In extreme cases, this toe erosion can cause total failure (slippage) of the bank.

It is worth noting that in a well-vegetated watercourse, high flow velocities are kept away from the banks by the effects of the vegetation roughness.

2.2 Long-term stability

In stable creeks (i.e. creeks not subject to channel ongoing expansion or migration) rock protected areas usually exhibit good long-term stability, especially if suitable deep-rooted vegetation is established over the rocks.

In dynamic creeks (i.e. creeks subject to active channel expansion or migration) rock stabilisation measures regularly fail over time as the channel moves. However, rock beaching has some degree of flexibly and thus is generally not damaged by slight channel movements.

Extra protection of the toe may be required if long-term bed scour is expected, especially on the outside of channel bends.

2.3 Aesthetics

Weed invasion of rock-protected surfaces can become unsightly. Better long-term aesthetics are usually obtained when the rock-lined surface is fully vegetated.

The use of broken concrete and building rubble for bank protection can be extremely unsightly, and is generally not recommended, especially in publicly accessible areas.

2.4 In-stream ecology

The battering of the banks for the purpose of rock placement may result in the formation of an open-canopy watercourse. Such an open canopy can result in increased weed infestation and adverse temperature variations within the stream.

Where feasible, canopy-producing trees can be planted in special planting cells placed randomly amongst the rock protection. Use of these planting cells has been problematic in the past and will require careful consideration especially in regards to the provision of adequate groundwater to the plant roots.

Cavities around the rocks can provide aquatic habitat and shelter if large rocks are placed along the water's edge, especially if most rocks smaller than 200 mm are removed from this area.

At regular intervals along the edge of the low-flow channel, shade-producing ground covers can be planted to improve aquatic habitat.

2.5 Riparian habitat

Rock protection may create a uniform bank surface lacking in habitat diversity. Ecological impacts can be reduced if the rock stabilisation is applied only over small sections for the watercourse, such as local bank failures and sharp bends. It is important to remember that bank erosion is a natural feature of most waterways; therefore, the aim should be to only stabilise problematic bank erosion.

Significant cavities in the rock can encourage vermin. The use of a wide range of rock sizes, especially in the upper bank region, may minimise this problem.

Rock-protected banks can open up the natural riparian canopy resulting in changes to the riparian vegetation, associated fauna, as well as water temperatures. To minimise these impacts, suitable bank vegetation should be established.

Rock protected banks can cause significant problems to burrowing fauna such as platypus and some bird species—professional advice should be sought on these matters.

2.6 Impact of high sediment loads

High sediment loads moving down the stream can infill cavities between those rocks located near the waterline, thus impacting on potential aquatic habitat values. In some cases this can be a positive outcome because the aquatic habitat introduced by the rocks may encourage non-native species.

Sedimentation at the toe of the rock protection can also promote weed invasion by smothering the preferred vegetation.

2.7 Hydraulic aspects

Rock beaching is often associated with the formation of trapezoidal channel cross-sections. The development of such uniform channel conditions can significantly reduce the hydraulic resistance of the watercourse resulting in increased channel velocities, increased bed and bank erosion, and reduced flood levels.

2.8 Public safety

Safety problems can exist in publicly accessible areas if large voids between the rocks are not filled with soil or small rocks.

2.9 Maintenance

Maintenance costs are usually related to the desired long-term aesthetics of the rock protection. The control of weed growth can be an expensive, labour-intensive exercise of either weed removal, or unsightly weed spraying.

Long-term maintenance is best controlled with the development of a canopy cover to reduce weed growth. Maintenance activities can also be reduced by giving preference to the growth of shrubs instead of single-trunk trees. However, such planting schemes must be compatible with the local flood management objectives.

2.10 Construction issues

Critical construction issues include ensuring supply of the specified rock size, and ensuring the rocks are appropriately recessed into the terrain to allow the unrestricted entry of overland flows (i.e. local stormwater runoff) into the channel.

Most failures of rock-lined hydraulic structures are considered to occur as a result of inappropriate placement of the rock, normally as a result of inadequate design detailing, inappropriate rock selection, or poor construction supervision. Rock-lined channel banks are usually most susceptible to failure during the first two years following placement of the rocks.

Where appropriate, permanent rock-lined channels and chutes should be topped with a light covering of soil and planted to accelerate the integration of these structures into the surrounding environment.

3. Gabions and rock mattresses

Most of the issues previously discussed for loose-rock stabilisation measures also apply to the application of gabions and rock mattresses for bank stabilisation.

Key operational issues associated with gabions and rock mattresses include:

- damage to the wire baskets caused by the erosive effects of sediment and debris often associated with flood flows;
- the provision of appropriate anchorage of the baskets to adjacent fixed structures;
- good anchorage of mattresses to the soil (e.g. on steep slopes or areas of high flow velocity such as shown in Photo 3); and
- establishment of appropriate vegetative cover for long-term stability and weed control.

The longevity of gabion and rock mattress lined waterway structures is usually reliant on the establishment and retention of appropriate vegetation across the mattresses. This is not necessarily the case for gabion structures constructed away from aquatic environments.

The key to successful revegetation is the selection of appropriate, low maintenance species, especially where such vegetation can reduce the channel's hydraulic capacity. Inappropriate plant selection can result in ongoing maintenance issues.

If inappropriately vegetated, the structures can lose their aesthetic appeal and experience durability and maintenance problems. Unsightly weed infestation can be a maintenance problem in some environments (photos 5 & 6).

Photo 3 – Damage to rock mattresses caused by flood flows

Photo 4 – Vines establish well on gabions structures

Sediment can be very difficult to remove from the surface of wire baskets without causing damage to the wire, especially if the location or shape of the structure is difficult to distinguish under the sediment load. Consequently, their use may not be appropriate in areas requiring high maintenance, such as areas subject to sediment deposition during floods.

Photo 5 – Rock gabion and mattress channel stabilisation (during construction)

Photo 6 – Gabion structure during vegetation establishment phase – note; vegetation density can become excessive unless appropriate species are selected

4. Design of rock protection measures

The critical design parameter is the rock size (d). Secondary design parameters are the rock type (relating to density), colour, durability, shape (angular or rounded), and grading (coefficient of uniformity, $C_u = d_{60}/d_{10}$).

Rock size is primarily dependent on the local flow velocity, nominated safety factor, rock shape, density and grading; and to a lesser degree, bank slope. Bank slope is generally not critical unless the slope is steeper than 1:1.5 (V:H).

The following issues should be considered when designing the rock protection:

- Design flow velocity adjacent to the protected bank
- Rock type, size and size distribution
- Depth at which the rocks are founded (depth below current bed level)
- Elevation of the top of protection
- Thickness of protection
- Type of backing material
- Face slope
- Alignment of rock beaching
- Establishment of vegetation on rock-lined surfaces

4.1 Nomination of the design flow velocity

In straight, heavily vegetated watercourses, the flow velocity adjacent to the bank may be only a small percentage of the average channel velocity. Such locations generally do not experience severe bank erosion, and thus are not usually in the need of rock protection.

In most cases where bank erosion has occurred, there is usually some local condition, e.g. locally induced turbulence or a channel bend, that results in flow velocities adjacent to the bank being equal to, or greater than, the average channel velocity. Thus, 'average flow velocities' as determined by numerical modelling should always be used with caution in sizing rock.

It should be noted that flood mapping exercises often involve hydraulic modelling which is based on worst case channel roughness (i.e. full vegetation cover even if such vegetation does not currently exist). Such modelling produces 'worst case' flood levels, but also the lowest channel velocity conditions. Consequently, the flow velocities used in the design of rock protection may need to be based on relatively smooth ('as constructed') bank roughness conditions rather than the long-term high roughness conditions.

When determining an appropriate design velocity, the California Department of Public Works (1960) recommends—in the absence of known local conditions or other relevant information—the following approximations:

- Impinging velocities (e.g. on the outside of a bend or directly in line with the upstream channel) adopt a bank velocity 1.33 times the average channel velocity.

i.e., outside of channel bends: $V_{design} = 1.33\ V_{ave}$ (1)

- In straight sections of a natural (irregular) watercourse, adopt a bank velocity 0.67 times the average channel velocity.

i.e., straight natural channels: $V_{design} = 0.67\ V_{ave}$ (2)

However, in straight sections of a constructed, uniform cross-section channel, adopt a bank velocity equal to the average channel velocity.

4.2 Rock type and grading

Crushed rock is generally more stable than natural rounded stone. A 36% increase in rock size is recommended for rounded rock.

The rock should be durable and resistant to weathering, and should be proportioned so that neither the breadth nor the thickness of a single rock is less than one-third its length.

Broken concrete and building rubble should not be used. Such material can:

- increase the potential for vermin habitat;
- increase the risk of further bank slumping as a result of the loss of soil from behind the concrete rubble caused by lateral inflows; and
- decrease the site's aesthetic appeal.

In most situations the nominal rock size is usually between 200 mm to 600 mm.

Maximum rock size generally should not exceed twice the nominal (d_{50}) rock size, but in some cases a maximum rock size of 1.5 times the average rock size may need to be specified.

Table 1 provides a suggested distribution rock size. The distribution of rock size can also be described by the coefficient of uniformity, $C_u = d_{60}/d_{10}$, which usually falls in the range 1.1 to 2.70, but typically around 2.1. Witter & Abt (1990) reported that poorly graded rock ($C_u = 1.1$) has a critical discharge 8% greater than well-graded rock ($C_u = 2.2$).

Table 1 – Typical distribution of rock size (provided as a guide only, not for design)

Rock size ratio	Assumed distribution value
d_{100}/d_{50}	2.00
d_{90}/d_{50}	1.82
d_{75}/d_{50}	1.50
d_{65}/d_{50}	1.28
d_{40}/d_{50}	0.75
d_{33}/d_{50}	0.60
d_{10}/d_{50}	> 0.50

4.3 Depth at which the rocks are founded (depth below current bed level)

Extra rock is usually required at the base of the bank to provide toe stability and to allow for the rearrangement of the cross-section if long-term variations in adjacent bed levels are likely to occur. This storage of extra rock is usually formed in one of the following ways:

- inward or outward benching at the toe of the bank
- extension of the rock protection well-below the current bed level (figures 2 to 7)

Ideally the rock protection should be founded in a toe trench dug to hard rock, or keyed into soft rock where available. If bedrock is not within reach, the toe should be carried below the expected depth of future bed scour.

4.4 Elevation of the top of protection

The rock protection usually does not need to extent to the top of the bank, especially if bank undermining was the main cause of the creek erosion. In such cases the upper bank may only need to be stabilised with suitable vegetation.

In general, if the protected bank is significantly higher than the opposite bank, then the rocks need only to extent to the height of the lower bank.

Table 2 provide a general guide to rock placement. This information **must** be adjusted based on actual conditions and hydraulic requirements.

Table 2 – Typical placement of rock within waterways and channels

Location	Placement
Straight reaches	1/3 to 1/2 bank height
Significant channel bends	2/3 bank height (outside of bend) 1/3 bank height (inside of bend)
Banks impacted by jetting from a stormwater or culvert	At least the height of the outlet jet

The typical extent of rock protection on channel bends is presented in Figure 1.

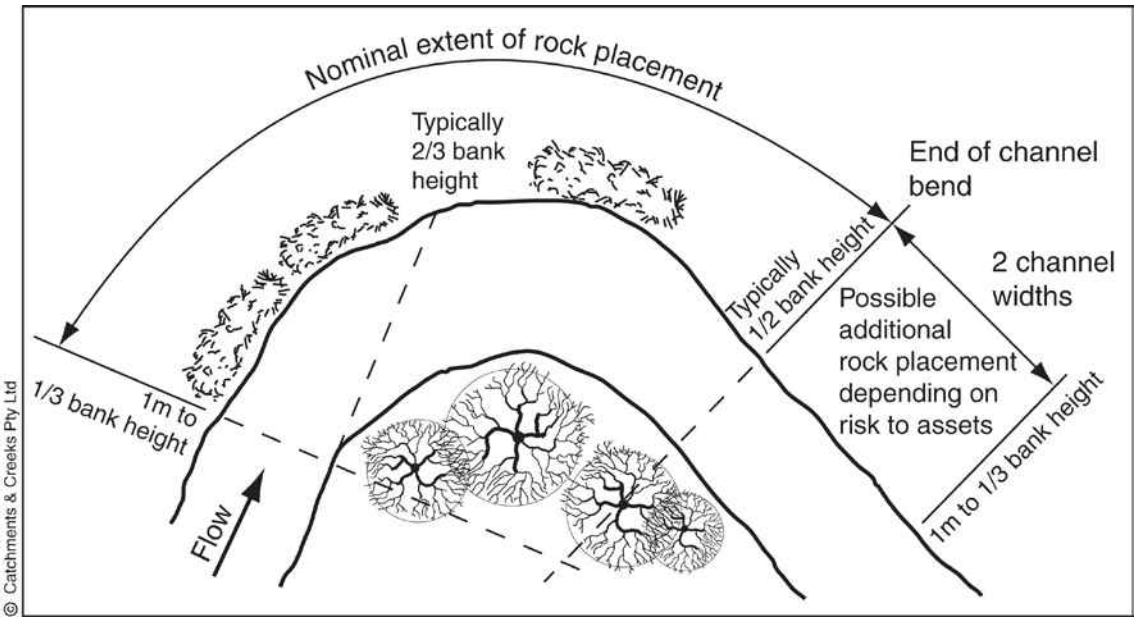

Figure 1 – Typical extent of rock protection on channel bends

4.5 Thickness of protection

The thickness of the armour layer should be sufficient to allow at least two overlapping layers of the nominal rock size. The thickness of rock protection must also be sufficient to accommodate the largest rock size. It is noted that additional thickness will **not** compensate for undersized rock.

In order to allow at least two layers of rock, the minimum thickness of rock protection (T) can be approximated by the values presented in Table 3.

Table 3 – Minimum thickness (T) of rock lining

Min. thickness (T)	Size distribution (d_{50}/d_{90})	Description
1.4 d_{50}	1.0	Highly uniform rock size
1.6 d_{50}	0.8	Typical upper limit of quarry rock
1.8 d_{50}	0.67	Recommended lower limit of distribution
2.1 d_{50}	0.5	Typical lower limit of quarry rock

4.6 Backing material or filter layer

Non-vegetated armour rock must be placed over a layer of suitably graded filter rock, or geotextile filter cloth (figure 2 & 5). The geotextile filter cloth must have sufficient strength and must be suitably overlapped to withstand the placement of the rock.

If the dumped rock contains sufficient fines, then in some circumstances, a filter layer may not be needed.

Armour rock that is intended to be vegetated by appropriately filling all voids with soil and pocket planting (figures 3 & 4) will generally not require an underlying filter layer. The exception is cases where the long-term viability of the vegetation is questionable due to possible high scour velocities, or limited natural light and/or rainfall.

When rock is placed on a dispersive (e.g. sodic) soil, then **prior** to placing the filter cloth or filter layer, the exposed bank **must** first be covered with a layer of non-dispersive soil, typically minimum 200 mm thickness, but preferably 300 mm (figures 6 & 7).

4.7 Face slope

Maximum batter slope is typically 1:2 (V:H) for non-vegetated, and 1:2.5 (V:H) if vegetated.

4.8 Alignment of rock beaching

An irregular cross-section is often desirable to increase hydraulic resistance and decrease flow velocities adjacent the channel banks. An irregular cross-section can also increase the waterway's habitat values.

4.9 Establishment of vegetation on rock-lined surfaces

Wherever practical, rock protected areas should be lightly covered with soil (to fill all voids) and pocket planted to encourage plant growth across the bank and along the water's edge.

Benefits of revegetation include:

- improved aesthetics;
- improved shading of the low-flow channel;
- improved aquatic and terrestrial habitat values;
- increased food source for aquatic and terrestrial wildlife both in plant material and insects;
- improved structural strength and scour resistance of the bank; and
- reduced flow velocities adjacent to the channel's bed and banks.

Common revegetation problems that may need to be addressed during the design phase include:

- poor aesthetics due to poor plant selection or weed invasion;
- steep banks that can be difficult to maintain and weeded; and
- reduce hydraulic capacity of waterway if woody species are establish within critical hydraulic areas.

Relying on natural revegetation of rock-protected banks often encourages the invasion of weed species, and is therefore not recommended.

In areas where revegetation is not desired (i.e. when hydraulically efficient channels are required for flood control) then the establishment or retention of an effective canopy cover (i.e. shade trees) is generally the preferred means of controlling weed growth. Ideally however, such areas should be covered with non-invasive ground covers that do not impact on channel roughness.

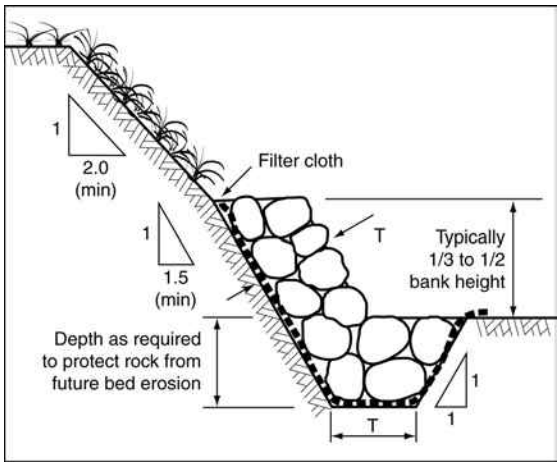

Figure 2 – Open rock, toe protection

Advantages:

Reduced quantity of rock.

Disadvantages:

Problems can occur with lateral inflows (i.e. local stormwater runoff) entering into, or washing under, the rock.

Can result in reduced aquatic habitat values in absence of vegetation.

Use:

Partial bank protection is used in areas where channel velocities are high, but upper-bank and over-bank velocities are low.

Also, the inside face of fully shaded, high velocity channel bends.

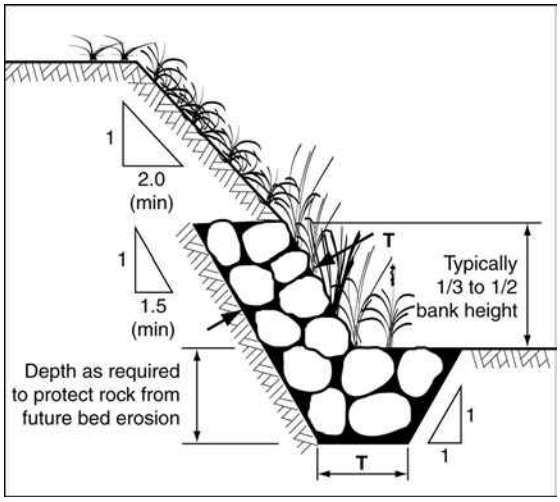

Figure 3 – Vegetated rock, toe protection

Advantages:

Improved aquatic habitat values.

Retention of riparian values.

Disadvantages:

Care must be taken to ensure all voids are filled with soil to prevent loss of upper bank soil into the rock layer.

Use:

Partial bank protection is used in areas where channel velocities are high, but upper-bank and over-bank velocities are low.

Also, toe protection of channel banks in regions of high flow velocity or areas where the channel bed may experience scour.

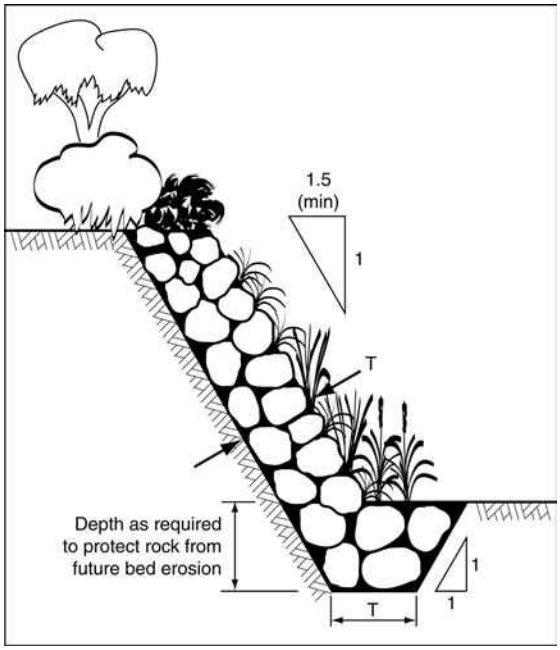

Figure 4 – Full face, vegetated rock

Advantages:

Retention of aquatic habitat values.

Very high scour protection once vegetation is established.

Retention of riparian values.

Banks can be steeper than vegetated banks that do not contain rock protection.

Disadvantages:

High installation cost.

Use:

Outside face of high velocity or sharp channel bends.

Also, areas where both the channel velocity and over-bank flow velocities are likely to be erosive.

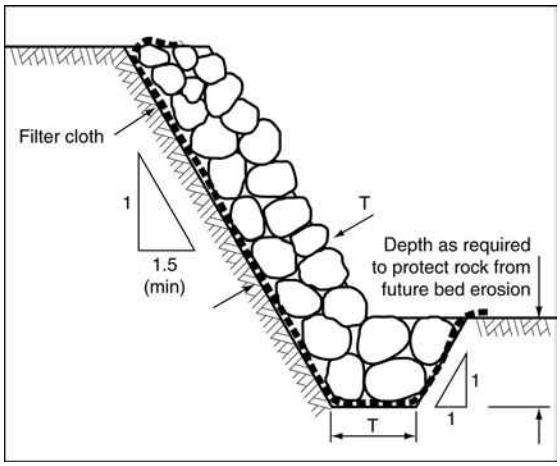

Figure 5 – Full face, open rock

Advantages:

Cheaper installation cost compared to vegetated rock protection.

Generally steeper bank grades can be formed compared to partially protected banks.

Disadvantages:

Poor aesthetics.

High risk of weed invasion unless fully shaded.

Use:

Heavily shaded, high velocity areas.

Outside face of fully shaded channel bends.

Very high velocity regions where vegetation is not expected to survive.

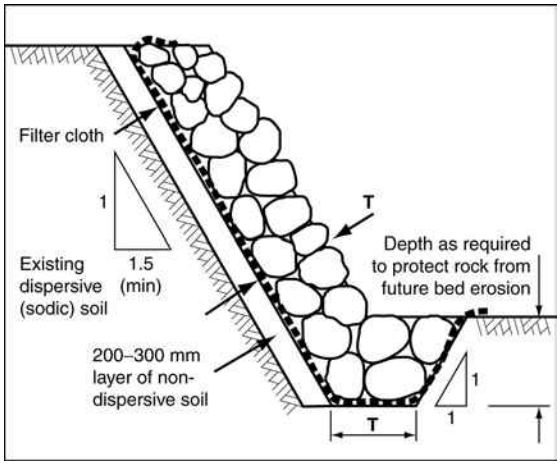

Figure 6 – Full face, open rock on dispersive soil

Advantages:

Long-term protection of highly erodible soils.

Disadvantages:

Poor aesthetics.

High risk of weed invasion unless fully shaded.

Very poor aquatic habitat values.

Use:

Heavily shaded areas containing dispersive soils.

Outside face of fully shaded channel bends.

Very high velocity regions where vegetation is not expected to survive.

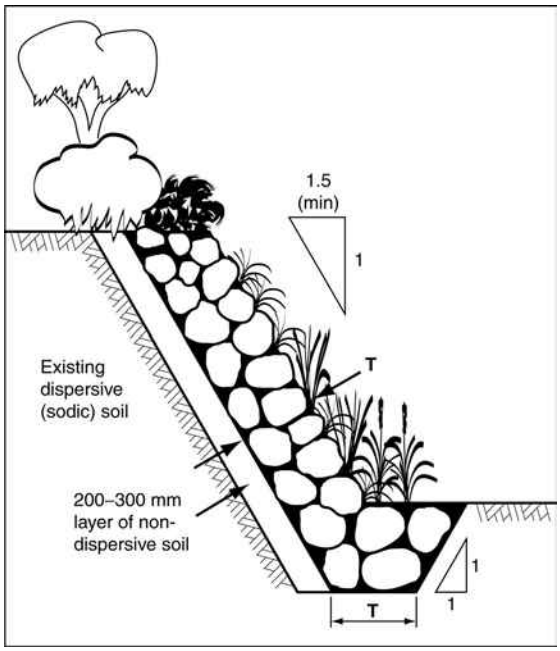

Figure 7 – Full face, vegetated rock on dispersive soil

Advantages:

Retention of aquatic habitat values.

Long-term protection of highly erodible soils.

Reduced maintenance costs.

Disadvantages:

Higher installation cost compared to non-vegetated rock protection.

Use:

Outside face of high velocity or sharp channel bends in dispersive soil regions.

Dispersive soil areas where both the channel velocity and over-bank flow velocities are likely to be erosive.

Wherever practical, vegetation should extend to the water's edge to increase the value and linkage of aquatic and terrestrial habitats.

Rock protection along the toe of newly formed or disturbed banks (Photo 8) is usually necessary to provide short-term bank stabilisation during plant establishment, especially on the outside of channel bends. Without such rock protection, out-of-season storms can cause bank erosion before the plants are established (Photo 7).

Photo 7 – Erosion along the toe of newly rehabilitated channel bank

Photo 8 – Rock stabilisation of lower bank following weed removal and revegetation

During plant establishment it may also be necessary to protect any areas of exposed earth with temporary erosion control products such as *Erosion Control Blankets, Mats* or *Mesh* (e.g. upper bank area in Photo 8). The use of erosion control blankets and mats reinforced with synthetic netting (Photo 7) is **not** recommended along waterways containing ground-dwelling wildlife (i.e. most natural waterways).

4.10 Manning's roughness of non-vegetated rock-lined surfaces

The Manning's roughness of rock-lined surfaces may be determined from Equation 1, which was specifically developed for application in both shallow-water and deep-water flow conditions. Rock roughness values are also presented in Table 4.

$$n = \frac{d_{90}^{1/6}}{26\left(1 - 0.3593^{(X)^{0.7}}\right)} \qquad (1)$$

where: $X = (R/d_{90})(d_{50}/d_{90})$

R = hydraulic radius of flow over rocks [m]

d_{50} = mean rock size for which 50% of rocks are smaller [m]

d_{90} = rock size for which 90% of rocks are smaller [m]

For 'natural' rock extracted from streambeds the relative roughness (d_{50}/d_{90}) is typically in the range 0.2 to 0.5. For quarried rock the ratio is more likely to be in the range 0.5 to 0.8.

Table 4 – Manning's (n) roughness of rock-lined surfaces

	d_{50}/d_{90} = 0.5				d_{50}/d_{90} = 0.8			
d_{50} =	**200mm**	**300mm**	**400mm**	**500mm**	**200mm**	**300mm**	**400mm**	**500mm**
R (m)	Manning's roughness (n)				Manning's roughness (n)			
0.2	0.10	0.14	0.17	0.21	0.06	0.08	0.09	0.11
0.3	0.08	0.11	0.14	0.16	0.05	0.06	0.08	0.09
0.4	0.07	0.09	0.12	0.14	0.04	0.05	0.07	0.08
0.5	0.06	0.08	0.10	0.12	0.04	0.05	0.06	0.07
0.6	0.06	0.08	0.09	0.11	0.04	0.05	0.05	0.06
0.8	0.05	0.07	0.08	0.09	0.04	0.04	0.05	0.06
1.0	0.04	0.06	0.07	0.08	0.03	0.04	0.05	0.05

5. Rock sizing for the banks of low gradient channels (not rock chutes)

Equation 2 can be used to size rock placed on the bed of waterway channels. The same equation can be used for sizing rock on bank slopes equal to or less than 1:2 (V:H), but a 25% increase in rock size should be applied for bank slopes of 1:1.5.

$$d_{50} = \frac{K_1 . V^2}{2.g.K^2 (s_r - 1)} \quad (2)$$

'K' is a variable that takes into account the degree of flow turbulence. Table 5 provides the recommended K-values for various uniform channel gradients (i.e. straight, uniform cross-sectional channels where a constant flow velocity is achieved). In non-uniform flow a K-value of 1.1 should be used for low-turbulent deepwater flow, 1.0 for low-turbulent shallow water flow, and 0.86 for highly turbulent and/or supercritical flow.

Table 5 – Suggested values of 'K' for uniform flow conditions

Bed slope (%)	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0
K =	1.09	1.01	0.96	0.92	0.89	0.86	0.83	0.80
Flow conditions	Low turbulence ™ ™ ™ ™ ™ ™ ™ ™ ™ Highly turbulent (whitewater)							

[1] Tabulated results are applicable to uniform flow conditions, and Manning's n based on Equation 1.

where:

d_{50} = nominal rock size (diameter) of which 50% of the rocks are smaller [m]

K = equation constant based on flow conditions

= 1.1 for low-turbulent deepwater flow, 1.0 for low-turbulent shallow water flow, and 0.86 for highly turbulent and/or supercritical flow

K_1 = correction factor for rock shape

= 1.0 for angular (fractured) rock, 1.36 for rounded rock (i.e. smooth, spherical rock)

K_2 = correction factor for rock grading

= 0.95 for poorly graded rock ($C_u = d_{60}/d_{10} < 1.5$), 1.05 for well graded rock ($C_u > 2.5$), otherwise $K_2 = 1.0$ ($1.5 < C_u < 2.5$)

s_r = specific gravity of rock (e.g. sandstone 2.1–2.4; granite 2.5–3.1, typically 2.6; limestone 2.6; basalt 2.7–3.2)

S_o = bed slope = tan(θ) [m/m]

V = depth-average flow velocity at location of rock [m/s]

Equation 2 reduces to the commonly used Equation 3 for angular rock with $s_r = 2.6$

$$d_{50} = 0.04\ V^2 \quad (3)$$

This fact sheet is presented for educational purposes as part of a series developed and published by:
Catchments & Creeks Pty Ltd (www.catchmentsandcreeks.com.au)
PO Box 314
Ferny Hills, Qld 4055
Australia

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View north of the Mawson Road site frontage

View north of the Mawson Road site frontage

View north of the Mawson Road site frontage

View north from the Mawson Road front boundary

View south-west toward the rear of the existing building from the middle of the site

View north-west toward the proposed supermarket site from the middle of the site

View north-west toward the proposed supermarket site from the middle of the site

View north toward the proposed supermarket site from the middle of the site

View east toward Battunga Road from the middle of the site

View west toward Battunga Road from the middle of the site

Item 5.1.1.1 - Attachment 3

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Chris Zanker
* HOME ADDRESS: 13 Dadliffe Rd Meadows SA
* POSTAL ADDRESS PO Box 142 Meadows SA 5201
PHONE NO: 0402 891 572 EMAIL: czanker@icloud.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☑ Other (please state): Meadows Resident

YOUR COMMENTS:

* I/~~We~~

☐ Support the proposal and provide the following comments.

☑ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

1. I oppose the destruction of the trees, they need to be

preserved.

2. A mini supermarket already exists. This building/business could be expanded. A new IGA/ Foodland type of business will destroy the existing MiniMart and butcher and baker, as has been seen in so many country towns

3. The proposed parking is not sufficient for larger vehicles such as trucks, trailers, caravans etc, with insufficient on on existing roads, see proposed landscape plan Rev A

4. Exit and entry not compatible with traffic on roads

* ~~I/We~~

☐ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☑ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☑ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

✓

Your written representation must be received by Council no later than 11.59pm on Wednesday 29 June 2022, to ensure that it is a valid representation and taken into account.

If you make representation you will be notified by a separate letter of the date and time of the Council's Assessment Panel (CAP) meeting at which CAP will consider the application.

Representor's Declaration:

I am aware that the representation will become a public document as prescribed in the Freedom of Information Act 1991, and will be made available to the applicant, agencies and other bodies pursuant to the Development Act 1993 and may be uploaded to the Council's website as an attachment to a Council Assessment Panel agenda.

SIGNED C P Zanella DATE 29/6/22

council@mountbarker.sa.gov.au

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YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Tammelaine + Sean Ebert
* HOME ADDRESS: 497 Dashwood Gully Road Kangarilla 5157
* POSTAL ADDRESS PO Box 39, Kangarilla
PHONE NO: 0412480939 EMAIL: tammelaine_ebert@hotmail.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☐ Other (please state): .....

YOUR COMMENTS:

* I/We

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

We support the proposal as we think it will be benificial for the local community.

It will provide job opportunities for our younger community. It would also be great having a local supermarket as it will be convenient for our grocery shopping and last minute needs.
It will also be great having some carparking off the main roads creating a safer experience for those with young children and disabilities.
It will also be benificial for those in the community with mobility/disabilities as many local stores do not have access for people with disabilities.

* I/We:

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

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SIGNED [signature] DATE 28-6-2022

council@mountbarker.sa.gov.au

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YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Samantha Jackson

* HOME ADDRESS: 5 Day Street Meadows

* POSTAL ADDRESS 5 Day Street Meadows

PHONE NO: 0423504203 EMAIL: samanthajackson2819@gmail.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☑ The owner or the occupier of the property located at: 5 Day street Meadows

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

we live in Meadows fairly close to the proposed supermarket site, we are renting but own a block of land in the Mawson Green estate

~~We~~ we are building our house this year and have lived in Meadows for 4 years already. We need a proper supermarket as our town has grown ~~and~~ considerably and need easier and better access to more ~~S~~shops. I also used to own a cafe in Meadows and it would have been helpful to us being closer to the shops instead of constant trips to Mt Barker. I also have 3 children, 2 that are coming into working age in the next 5 years so would be awsome for jobs for younger people to gain first time job experience as lots of teens feel disadvantaged not having access to public transport to get them to and from jobs in Mt Barker or Mclarrenvale.

* I/We:

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

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SIGNED _____ DATE 21/06/2022.

council@mountbarker.sa.gov.au

MOUNT BARKER DISTRICT COUNCIL

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YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Susan & Peter Jackson

* HOME ADDRESS: 497 Dashwood Gully Rd Kangarilla 5157

* POSTAL ADDRESS P.O. Box 39 Kangarilla 5157

PHONE NO: ..... EMAIL: .....

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

It will be good to have a full supermarket in Meadows with a carpark.

- it will provide an additional service to increased population
- it will provide employment
- off road parking.
- the plan looks good.

* I/We:

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

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SIGNED Jackson R. DATE 28/6/22.

green light planning

Mr A Stuart
Chief Executive Officer
Mt Barker District Council
PO Box 54 Mt Barker
MT BARKER, SA 5251

Attention: Mr Andrew Houlihan

Dear Mr Stuart,

RE: Representation in respect to DA 580/514/21 by Kevjohn Pty Ltd.

Green Light Planning Solutions has been engaged by Meadows Investment Trust as the owners of the land at Lot 1003 Mawson Road, Meadows.

We have been instructed to lodge a representation on behalf of our client opposing the development application lodged by Kevjohn Pty Ltd for the *"construction of a shop (supermarket) and associated car parking, fencing, two pylon signs, building signage, water storage tanks, landscaping and infrastructure and the removal of three significant trees and six regulated trees"* on land located at 5 Buttunga Road and 33 Morrison Road, Meadows.

We enclose, as part of this representation, the following documents:

1. A legal opinion from Mellor Olsson Lawyers in respect of the proposal and its processing; and
2. Traffic and Parking advice from Stantec Engineers.

Our client wishes to be heard at the Development Assessment Panel meeting in relation to this representation, whether itself or by its broader consultant team.

This proposal is for a single storey, 1,470 m2 shop (namely a supermarket), with associated car parking, landscaping and signage, together with the removal of a number of significant and regulated trees (**'the proposal'**). The operator of the supermarket is unknown.

The proposal is to be located in the Mt Barker District Council within the Mixed Use Zone. We have reviewed the proposal and undertaken an assessment against the Council's Development Plan.

There is a clear and obvious disconnect between the policy intent of the Council's Development Plan, the intent of the Mixed Use Zone and the land use proposal as submitted by Kevjohn Pty Ltd for the subject site.

It is therefore our opinion that the proposal does not warrant development plan consent. We have set out below the reasons for reaching this view.

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Mt Barker District Council - Development Plan

As referred to above, the subject site of the application is located within the Mt Barker Council's Mixed Use Zone.

The Mixed Use Zone has four (4) objectives and a variety of principles of development control, as well as a specific desired character statement for Meadows itself.

The provisions for the zone are additional to the City Wide provisions expressed as applying to the whole of the council area.

The four (4) objectives for the zone are:

OBJECTIVES

1 *A functional and diverse zone accommodating a mix of commercial, community, light industrial, residential, office and small-scale shop land uses.*

2 *Development that minimises any adverse impacts upon the amenity of the locality within the zone.*

3 *The maintenance of an attractive northern entrance to the Meadows town centre.*

4 *Development that contributes to the desired character of the zone*

(my emphasis)

Of particular relevance is the clear statement that the zone contains a mix of uses and, where one of those uses is a shop, that it be of a "*small-scale*". Additionally, any such use should "*minimise[s] any adverse impacts on the amenity of the locality"* and *"contribute*[s] *to the desired character"*.

Even if a supermarket was envisaged in the Mixed Use Zone, which it clearly is not, it fails to meet the objectives given its not small-scale in nature and will give rise to adverse impacts on the locality (with no steps being taken to minimize those adverse impacts). These adverse impacts include negative streetscape impacts, unacceptable traffic and safety impacts, the loss of significant and regulated trees, and the loss of mixed use land for community, light industrial and residential purposes of which this zone is intended.

The desired character is critical as it speaks to the functionality of the zone as well as the specific pattern of development for Meadows.

DESIRED CHARACTER
Function
The zone will establish a wide range of light and service industrial activities, compatible with one another, thereby creating an attractive and active locality. It will be important that the zone will provide ongoing opportunities for local employment, home-based industry and commercial ventures, catering

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for local needs and passing traffic. Retailing in the zone will be limited to that which is ancillary to the activity on site, and will not displace retailing in the traditional main streets of Nairne and Meadows.

Enterprises which service the needs of the rural hinterland are envisaged

Pattern of Development / Built Form
Meadows
The zone will provide for low impacting light industrial uses with associated detached dwellings. It is expected that non-residential development will be of a moderate scale and intensity resulting in a visually unobtrusive built form. It is essential that development does not result in uses that undermine the traditional role of Mawson Road as the main street. Development will reinforce the linear pattern of growth along Battunga Road and the scenic and northern gateway entrance. Built form will be generally small scale with well-vegetated curtilage, including maintaining the predominance of dwellings as part of the streetscape. It is important that the existing character of the northern entrance is maintained through discrete placement in the outdoor storage of materials and limited advertising

(my emphasis)

In terms of the functionality of the zone, it's clear from the above that the clear intent of the Mixed Use Zone in respect of land uses is low impact, light and service industries that are compatible with each other, and that any retailing will be limited to that which is ancillary to the activity on site. Furthermore, any such retailing is not to displace retailing in the traditional main streets of Nairne and Meadows.

In addition, the pattern of development sought for the zone is low impact, light industrial uses with associated detached dwellings, where any non-residential development is of an intensity that is moderate in scale. It specifically states that *"It is essential that development does not result in uses that undermine the traditional role of Mawson Road as the main street".*

This Plan is seeking a particular built form outcome that is, small in scale maintaining the predominance of dwellings. In contrast, the proposal seeks the removal of a dwelling at the rear of the existing mini mart shop. Furthermore, it is not a low impact, light industrial or service industry, nor is the proposed shop 'ancillary retailing', as the desired character seeks.

This proposal is for a new stand- alone 1,470m2 supermarket almost six (6) times the size of the non-complying trigger. It will completely displace and undermine the traditional main street of Meadows, by seeking to develop a magnet retail tenancy outside of a centre zone and the existing Local Centre Zone in a location that is set back from the Mawson Road, Main Street frontage. It will be surrounded by disjointed sections of car parking, as opposed to a development in the Local Centre Zone which would activate the streetscape.

Within the Mixed Use Zone there are also some twenty one (21) Principles of Development Control (PDC) in which to guide development within the zone. There are six (6) principles which are most relevant to this matter:

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PRINCIPLES OF DEVELOPMENT CONTROL

Land Use

1 *The following forms of development are envisaged in the zone:*
- *community facility*
- *community centre*
- *light industry*
- *service industry*
- *service trade premises*
- *store*
- *warehouse.*

2 *Shop or retail development should not hinder the function of Main Road (or Old Princes Highway), Nairne or Mawson Road, Meadows and should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry*

5 *Development listed as non-complying is generally inappropriate*

6 *Development should not be undertaken unless it is consistent with the desired character for the zone.*

15 *The operation of non-residential uses, including the freight loading and deliveries should be restricted to the hours between 8.00 am to 6.00 pm during Monday to Saturday and should be restricted to the hours between 10.00 am to 6.00 pm on Sunday.*

16 *Car parking areas should be provided at the rear or side of premises*

(my emphasis)

This medium scale, stand-alone supermarket (which also retains the existing shop on the site) does not satisfy any of these principles and is clearly inconsistent with them.

As stated in the CL Rowe & Associates report (for Kevjohn Pty Ltd), what is proposed will not be a small –scale industrial or service land use, or community facilities- rather, it is a shop in the form of a medium scale supermarket with associated car parking, landscaping and signage.

Most notably, the Procedural Matters section lists a variety of land use types which are 'non-complying' in the Mixed-Use Zone. This includes a shop or group of shops, other than where the gross leasable floor area is both less than 250 square metres and it is either ancillary to a manufacturing or warehousing use (and 25% or less of the total floor area is used for this purpose), or where the retail is for the sale of products associated with primary production or animal husbandry.

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The precise terms are as follows:

> *Except where the gross leasable area is less than 250 square metres and it achieves one of the following:*
> *(a) it is in the form of retailing which is ancillary to manufacturing or warehousing uses and no more than 25 per cent of the total floor area of all buildings on the allotment is used for the purposes of sale or display to customers*
>
> *(b) it is for the sale of specialty products directly associated with primary production or animal husbandry*

There can be no ambiguity or uncertainty as to what is being sought by the Development Plan.

It makes it clear that within the Zone both the size of a shop should be limited (less than 250 square metres) and the types of shops should be limited (to those where the shop is ancillary to a manufacturing or warehouse use or the shop is selling products associated with primary production or animal husbandry).

Whilst it is accepted as a general proposition that just because a use is listed as non-complying in a Development Plan does not mean that it cannot obtain approval, in the case of this Development Plan it is far more restrictive, in that it sets out, in Principle 5, that *'[d]evelopment listed as non-complying is generally inappropriate'*. We discuss this further below.

In this instance it is clear that what is proposed does not come within any of the particular types of shops sought and, furthermore, is significantly larger than the maximum size of shop sought by the Development Plan.

The proposal is most certainly an application for a "shop". Due to its size, the use is non-complying in the Mixed Use Zone of the Mount Barker District Council Development Plan.

CL Rowe & Associates acting for Kevjohn Pty Ltd acknowledge this point in their planning statement of support/ effect on page 1 and we agree:

"The proposed development constitutes a non-complying form of development within the Mixed Use zone by virtue of the Procedural Matters which identifies a shop or group of shops which have a gross leasable area of 250 square metres or more as a non complying development.

In short, a land use of this nature and size is not envisaged or anticipated in this Zone.

Whilst the Mixed Use Zone does make mention of shops being in the Zone, it states clearly in PDC 2 that if there is to be a shop, the shop should firstly '*not hinder the function of Main Road (or Old Princes Highway), Nairne or Mawson Road, Meadows'* and, secondly, *'should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry'*.

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It is unconceivable to suggest that a 1,470 square metre supermarket, which retains the existing "mini mart" shop, is a suitable land use in this zone given the clear and unambiguous language in the Development Plan provisions, which speak to the contrary and seek to limit both the size and the type of shops that can be supported within this locality.

The proposed supermarket is some 1,220 square metres, or almost six (6) times greater than the non-complying trigger, and it fails both the exception tests.

The Development Plan is clear that shops of this size are not encouraged in the Zone and, based on the Development Plan provisions, one could go as far as to say that the provisions are such that the use is in fact actively discouraged, and as such, the proposal does not warrant Development Plan Consent.

Moreover, the Plan makes it clear that non-complying developments are generally inappropriate, as is development that is not aligned or consistent with the desired character for the Zone, the proposal therefore fails to achieve PDC 5 and 6.

The proposal fails to adhere to the hours of operation in PDC 15 as it seeks to operate and have deliveries outside the specified hours. In addition, as the supermarket is itself located at the rear of the site, as opposed to activating the main street, the ability for the car parking to be located to the rear or side of the site as per PDC 16, is compromised with a resultant negative impact on the streetscape.

In our view the proposal will be detrimental to the amenity of the locality of the Mixed Use zone for an array of reasons, which I detail within further sub-headings below.

In addition to the clear and obvious disconnect with the intent of Council's Development Plan, my clients have received legal advice that this application is "seriously at variance" to the Development Plan.

A copy of this legal advice from Mr Anthony Kelly of Mellor Olsson Lawyers is attached in **Appendix A**. It is a view I support, on the basis that there is nothing at all in the Development Plan which supports a development of this kind in this locality.

It is noted that the applicant has chosen not to undertake a Development Plan Amendment (DPA) and seek to rezone the land prior to lodging an application.

In our view and given the timing of when this application was lodged, a DPA would be a far more appropriate and thorough process in which to assess the land use suitability of any future development of this (and the surrounding) land.

Instead, Kevjohn Pty Ltd appear to be attempting to implement a pseudo-rezoning without going through the rigor of a DPA process lor now Code Amendment.

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If there is a view that this Zone (and thus subject land) should be put to uses other than community facilities, light or service industry, service trade premises or store and warehousing, what should occur is a comprehensive assessment be undertaken to determine whether the zoning should be changed and, if so, what the most appropriate and strategic use of the land should be.

The fact that this is the desirable and preferable approach has been made clear on a number of occasions by the Supreme Court.

Kevjohn Pty Ltd have instead elected to lodge an application for a land use which is not sought after or envisaged on the site (or in the locality more broadly), fails to activate the Main Road and instead creates a retail magnet behind an existing shop, which it plans to retain.

Other areas in which this proposal fails to address the policy intent of Council's Development Plan.

There are several other areas in which this proposal fails to address the policy intent of Council's Development Plan. These have been outlined below in the order they appear in the Development Plan;

- Advertising
- Centres and Retail Development
- Orderly and sustainable development
- Significant Trees
- Historic Conservation Area
- Transport and Access

1. Advertising

The focus here is on the proposal's conflict with PDC 17 relating to Freestanding Advertising. The proposal seeks to provide far more signage that is recommended as per on the general provisions.

PDC 17 *Freestanding advertisements and/or advertising hoardings should be:*

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

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

The proposal seeks to provide two pylon signs plus building signage. The additional signage is presumably to highlight the building but the illuminated nature of the signage at more than 5 metres in height would appear to be inconsistent with the Mixed Use nature of the site and locality, particularly when one considers the Zone is seeking small-scale retail, ancillary to activities on the site.

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2. **Centres and Retail Development**

No retail arguments have been mounted for the justification of a medium-scale supermarket in this location and the applicant has failed to demonstrate why such a significant departure from the Mixed Use Zone intent and general provisions around the location of shops greater than 80m2 in centre zones is necessary in this instance.

The Development Plan makes it clear that the Local Centre Zone land on the corner of Mawson Road and Nottage Road is the preferred location for local centre scale shops and, even then, according to the Plan the shops should be small-scale with a maximum gross leasable floor area of in the order of 450m2.

The Development Plan stipulates quite clearly the requirements for retail shops in the various zones. It states that shops greater than 80m2 should be located in a Centre Zone.

The proposal fails to achieve this.

It states that retail shops in the Mixed Use Zone should actually be limited to that which is ancillary to the activity on a site, and states that it will not displace retailing in the traditional main streets of Nairne and Meadows. Moreover, shops greater than 250m2 are non-complying.

The proposal is for 1,470m2, well above the 250m2 non-complying trigger and arguably if developed would replace the location of local level shops in the Local Centre Zone

Shops is the local centre zone do not have the same restrictive ancillary requirements as the Mixed Use Zone, but even so are still limited to 450m2.

Each zone is intended to fulfil its function and this proposal fails to fulfil its zone requirements and by default impacts on the ability for other zones to undertake that role.

The Council-Wide provisions of the Development Plan make it clear that operations such as the proposed shop should be located in a centre zone, as per the below

9 A shop or group of shops with a gross leasable area of greater than 80 square metres should be located within a centre zone (except within the Residential Neighbourhood Zone).

In addition, if a shop is to be located in a zone that is outside a zone that allows for retail development (such as the Mixed Use Zone) the shops should be an appropriate size that will not hinder the Development, function or viability of a centre zone, lead to the deterioration of another centre and be development taking into account the effect on adjacent land.

12 A shop or group of shops located outside of zones that allow for retail development should:

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(a) be of a size and type that will not hinder the development, function or viability of any centre zone

(b) not demonstrably lead to the physical deterioration of any designated centre

(c) be developed taking into consideration its effect on adjacent development

The proposal fails to meet PDC 12 in that it seeks to locate a land use that should be in a centre zone in the Mixed Use Zone. Locating a medium scale centre outside of a Local Centre Zone has the potential to impede the Centre's hierarchy.

3. Orderly and sustainable development

With respect to orderly and sustainable development, the proposal fails to achieve many of the Council Wide objectives and PDCs. By proposing a medium-scale shop, namely a supermarket, in the Mixed Use zone, the proposal contravenes Objectives, 4, 6 and 7 of the general provisions, as shops of this size and nature are not envisaged.

4 *Development that does not prejudice the achievement of the provisions of the Development Plan.*

6 *Urban development located only in zones designated for such development.*

7 *Urban development contained within existing townships and settlements and located only in zones designated for such development*

The proposal also fails to achieve the following relevant Council Wide PDC's,

1 *Development should not prejudice the development of a zone for its intended purpose.*

3 *Development should be consistent with the desired character statements for the zones, policy areas and precincts*

13 *Development should be undertaken in accordance with the following Concept Plan Maps (i) Concept Plan Map MtB/9 - Residential (Meadows*

If this development is permitted to proceed, Council would inhibit the ability for the site to be developed for its intended land uses purpose, namely small-scale low impact industrial and service industries, community facilities, small-scale ancillary shops, offices, and dwellings. The proposal is not consistent with the desired statement's function or pattern of development and is not in aligned with Concept Plan Map Mt/9 for Meadows.

4. Significant Trees and Regulated Trees

The proposal is at odds with Objectives 1 and 2 of Council's Development Plan.

1 *The conservation of significant trees, in Metropolitan Adelaide, that provide important aesthetic and environmental benefit.*

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2 *The conservation of significant trees should occur in balance with achieving appropriate development, while avoiding the indiscriminate and inappropriate removal of significant trees*

The CL Rowe and Associates report fails to list the removal of the trees in the proposed development section on page 6 of their report. The proposal is for a land use that is not envisaged in the Zone, nor on this subject site and as a result of the irregular shape of the two land parcels, it requires the removal of 3 significant trees and 6 regulated trees for the development to be achieved.

In addition, it conflicts with several Council Wide PDCs.

PDC 1 Development should preserve the following attributes where a significant tree demonstrates at least one of the following attributes:

(a) it makes an important contribution to the character or amenity of the local area
(b) it is indigenous to the local area
(c) its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species
(d) it represents an important habitat for native fauna
(e) it is part of a wildlife corridor of a remnant area of native vegetation
(f) it is important to the maintenance of biodiversity in the local environment
(g) it forms a notable visual element to the landscape of the local area.

It can be argued that the loss of the three significant trees including the 1 x manna gum one x flooded gum and 1 x Tasmanian blue gum together contravenes PDC 1 a-g.

PDC 2 Development should be undertaken so that it has a minimum adverse effect on the health of a significant tree.

PDC 3 Development should be designed and undertaken to retain and protect significant trees

In conflict with PDC 2 and 3 this proposal removes 3 significant and 6 regulated trees so is clearly not seeking to retain and protect significant trees, nor it is ensuring minimum adverse effect on the trees health.

PDC 4 seeks to preserve the health of significant trees and states that tree-damaging activity should not be undertaken. Clearly tree removal and tree damaging activities are being undertaken to facilitate the supermarket development and the level of car parking required to support the development.

The irregular shape of the allotments and the size of the supermarket box means that the car parking is not contiguous or well linked and thus the impact on the trees to achieve the car parking is greater.

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5. Historic Conservation Area

The subject site is also located within a Historic Conservation Area as per Council's Development Plan and the objectives for the Zone are as follows:

OBJECTIVES

1 *The conservation of areas of historical significance.*
2 *Development that promotes, conserves and enhances the cultural significance and historic character of identified places and areas.*
3 *Development that complements the historic significance of the area.*
4 *The retention and conservation of places such as land, buildings, structures and landscape elements that contribute positively to the historic character of the area.*
5 *Development that contributes to desired character of the Historic Conservation Areas.*

It is noted that the proposed contributory item at 33 Mawson Road is proposed to be retained but the proposal fails to enhance the cultural significance and heritage character and contribute positivity to that character (Objectives 2 and 3). Instead it seeks to create a cross over, carpark access point and car parking along Mawson Road to service the proposed medium-scale supermarket at the rear.

In addition, the desired character states:

The Historic Conservation Area is comprised of distinct and unique historic areas representing the early European (including East German and English) urban built form and land use settlement patterns of the District, including Callington, Dawesley, Echunga, Hahndorf, Kanmantoo, Littlehampton, Macclesfield, ***Meadows****, Mount Barker and Nairne.*

The specific Meadows desired character elements of the Development Plan includes;

Meadows Area 11

Function
An earlier unofficial subdivision known as Eden Bridge had taken place in 1856, but in 1884 Meadows was officially subdivided. The Meadows Historic Conservation Area will preserve the historic sites and structures that represent the town's governmental, local production and community and commercial service provision role to the district. Development including ***retail****, office, commercial, residential and community uses should where possible utilise existing historic building stock.*

Patterns of Development
The area predominantly comprises buildings and structures associated with the provision of civic, commercial and community services that will offer local centre and residential uses which are complementary to existing historical pattern of development in their design, style and siting. Subdivision, unless it preserves the visual setting of buildings, ratio of open space to built form and does not compromise the linear subdivisional layout is discouraged.

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Public Realm
The area will preserve the vegetated landscape settings including the visual qualities of dominant mature and significant trees and views, including the memorial garden and council reserve along the creek. Fencing should be minimal and of traditional materials including; corrugated galvanised iron, low hedges, metal post and rail fences, or square timber posts with wire cyclone mesh infill.

Built Form, Building Design and Character
The area will reinforce the small scale, single storeyed, built form of early European settlements. Development should maintain the existing pattern of development, including the prevailing siting pattern and addressing the street. Addition and infill development should be set back further than neighbouring Local Heritage Places or Contributory Items, with carports, garaging and outbuildings recessed from the main frontage and located to the rear of the allotment.

(my emphasis)

The proposal is in direct conflict with many of the desired character sentiments of the Historic Conservation Area including:

- Not utilizing existing building stock and opting for new built form;
- Not providing local centre and residential uses, the residential element is removed;
- Not delivering development consistent with the street pattern in design, style and siting; and
- Not retaining dominant significant and regulated trees.

6. Transport and Access

A review of the proposed supermarket and car park development with respect to traffic and parking, based on the architectural plans and the Traffic and Parking Assessment by Frank Siow and Associates has been undertaken by Stantec Engineers.

The review has identified some major traffic and parking layout concerns which will cause potential safety issues for heavy and light vehicles using the site.

Traffic advice from Stantec highlights the following concerns that speak to the development's ill suitability to this site, including:

- The proposed car park does not appear to conform to the Australian Standards with regards to parking space and aisle widths, including angled and parallel parking, and turn paths for vehicles at intersections and bends/corners;
- The car park does not meet the requirements of the Australian Standards for Off-street commercial vehicle facilities for width of circulation aisles for use by heavy vehicles entering the site;

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- The central intersection at the loading dock in the car park is poorly designed with insufficient sight distance and heavy vehicle manoeuvring space, and turn path diagrams are poorly prepared and do not demonstrate the actual vehicle movements to and from the loading dock;
- The proposed access points have design deficiencies for simultaneous movements of heavy and light vehicles, do not provide safe crossings for pedestrians and may obstruct/conflict with neighbouring driveways adjacent the site frontages;
- There is a lack of detail and inadequate information regarding number of deliveries and heavy vehicles on site per day;
- It is recommended that a maximum limit on delivery number be set at 3 or less per day given the shared heavy and light vehicle access routes (this is similar to an ALDI Store for instance which has only 2-3 deliveries per day); and
- The assessment has not considered the need for right turn lanes on both road frontages based on Austroads Guidelines.

7. Supermarket tenancy

It is noted that the CL Rowe & Associates report and the Sonus report make reference to the site being a Foodland Supermarket or an IGA supermarket. As part of this submission, we have made contact with Foodland and IGA and have been advised that they are not intending to 'grant a license' or 'issue an agreement for lease' for either a Foodland or an IGA store on the subject site.

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8. Summary

In summary, our client has serious concerns about the proposal for a stand-alone medium scale supermarket proposed for the Mixed Use Zone in Meadows within the Mt Barker Council area.

No retail arguments have been mounted for the justification of a medium-scale supermarket in this location and the applicant has failed to demonstrate why such a significant departure from the Mixed Use Zone intent and general provisions around the location of shops greater than 80m2 in centre zones is necessary.

The Development Plan makes it clear that the Local Centre Zone land on the other side of Mawson Road is the preferred location for shops and, even then, the shops should be small-scale with a maximum gross leasable floor area of a shop or group of shops in the order of 450 square metres.

The development is at odds with Objectives 2 and 3 of the Historic Character Area and seeks the removal of 3 significant trees and 6 regulated trees to achieve its car parking requirements.

There is in fact nothing in the Development Plan which supports the proposed development (in its current size and stand-alone model) being located on the subject site.

The proposal gives rise to significant local traffic impacts on the already busy road intersection of Mawson Road Battunga Roads and the hours of operation for the supermarket and loading / deliveries are outside those outlined in the Development Plan.

Well planned development in the right location is good for the community and the local economy.

Poor land use planning devoid of a comprehensive and robust land use assessment process to determine the highest and best use of land, has the potential to undermine the very strategic objectives and outcomes the Council is trying to achieve for its community.

In our view, the Development Plan is clear and thus the Council Assessment Panel has no option but to refuse the proposal for this site.

This is particularly so, as when one properly assesses the application, it is considered 'seriously at variance' to the Development Plan based on;

1. the proposed development being contrary to virtually all, if not actually all, provisions of the Development Plan, such that no support can be found for it at all; and/or
2. the size of the proposed shop (supermarket) is of such significance and is so far past what is being sought in the Development Plan (being in the vicinity of 6 times greater than the non-complying trigger) that this alone constitutes a basis to determine that it is contrary to the Development Plan and an important or grave departure from what is being sought by it and therefore being seriously at variance.

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As an aside, much is made by the applicant of the fact that there are now different provisions and requirements in the Planning and Design Code (**the Code**). This may well be the case, but this is not an application being assessed against the Code. This is an application which falls to be assessed against the Development Plan as at the time of the application being lodged.

The Code is of no relevance and should not be given any consideration. If the applicant wanted to have their application assessed against the Code, a fresh application would be required.

Given the Statement of Effect and other reports were only produced in very recent times (post the introduction of the Code) it does beg the question as to why a fresh application was not the applicant's approach. Instead, Kevjohn Pty Ltd appear to be attempting to achieve an opportunistic development outcome in an attempt to achieve a pseudo-rezoning.

Thank you for the opportunity to comment on the Kevjohhn Pty Ltd proposal, it is appreciated.

We re-iterate that our clients wish to be heard through their representatives at the Development Assessment Panel meeting in support of this representation.

Yours sincerely

Amanda Price-McGregor
Managing Principal
Green Light Planning Solutions

29 June 2022

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29 June 2022

Mrs Amanda Price-McGregor
Managing Director
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By email: greenlightplanning@outlook.com

Dear Amanda

PROPOSED DEVELOPMENT: 5 BATTUNGA ROAD & 33 MAWSON ROAD MEADOWS

We refer to our recent correspondence.

On behalf of the Meadows Investment Trust you have sought our opinion in respect of a development proposed on the land at 5 Battunga Road & 33 Mawson Road, Meadows (**'the Land'**).

The proposed development comprises the construction of a 1,470 square metre shop (being a supermarket) and associated car parking, fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure and the removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums) (**'the Proposed Development'**).

The Proposed Development is being processed as a non-complying form of development, as in the relevant zone a shop which has a gross leasable floor area which is not less than 250 square metres is deemed to be non-complying.

It is noted that the application was submitted under the now repealed *Development Act 1993* ('**the Act**'). As a consequence, the Proposed Development must be considered against the provisions of the relevant Development Plan as in force at the time. The relevant Development Plan is the Mount Barker District Council Development Plan consolidated on 20 August 2020.

You have asked us to consider whether the Proposed Development is seriously at variance with the provisions of the Development Plan, contrary to section 35(2) of the Act.

For the reasons which follow, in our opinion the Proposed Development is clearly seriously at variance with the Development Plan and therefore the Council Assessment Panel is obliged to refuse Development Plan Consent to the Proposed Development.

WHAT IS 'SERIOUSLY AT VARIANCE'?

Section 35(2) of the Act states that a relevant authority must not grant consent to a development which is seriously at variance with the provisions of the Development Plan.

This requires a council to assess a proposed development and make a determination as to whether or not the proposed development is seriously at variance with the relevant Development Plan.[1]

As stated by his Honour Justice Debelle in *Mar Mina (SA) Pty Ltd v City of Marion & Anor*,[2] in order for a proposal to be deemed seriously at variance with the Development Plan, the departure from the Development Plan must be *"... an important or grave departure in either quantity or degree from the Development Plan. It denotes something which is plainly not slight or trifling."*

His Honour then went on to comment that *"[t]he question of what is seriously at variance requires an examination of what is the essential thrust and objective of the Development Plan ... so far as they apply to the land the subject of the intended development and its locality... The power to approve a departure from the plan that is not seriously at variance with the plan is not to be used as a means of amending the plan."*[3]

It is in this context that one needs to consider the issue of whether the Proposed Development is seriously at variance with the Development Plan.

Importantly, in accordance with the principal espoused in *Mar Mina*, there are two grounds upon which a proposal can be seriously at variance to the Development Plan:

1. by virtue of there being numerous departures from the Development Plan, such that it makes the proposal contrary to the Development Plan as a whole and this constitutes an important or grave departure; or

2. there is a single or a few departures which are so contrary to the Development Plan that the result is an important or grave departure from the Development Plan.

It is our opinion that in this regard the Proposed Development is seriously at variance and should be refused as:

1. the Proposed Development is contrary to virtually all, if not actually all, of the provisions of the Development Plan, such that no support can be found for it at all; and/or

2. the size and nature of the proposed shop (supermarket) is of such significance and is so far past what is being sought in the Development Plan (being in the vicinity of 6 times greater than the non-complying trigger and contrary to both uses in the trigger)

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[1] *Upham v the Grand Hotel (SA) Pty Ltd* (1999) 74 SASR 557 at 146.

[2] [2008] SASC 120 at 33.

[3] Ibid at 40 and 41.

that this alone constitutes a basis to determine that it is contrary to the Development Plan and an important or grave departure from what is being sought by it.

IS THE DEVELOPMENT 'SERIOUSLY AT VARIANCE'?

The subject site for the Proposed Development is located within the Mixed Use Zone ('**the Zone**').

The Zone has four (4) Objectives and twenty-one (21) Principles of Development Control.

Mixed Use Zone provisions

It is evident that the clear objective of the Development Plan for the Zone is that the Zone comprise a mix of uses and, where that use is for a shop, that it be small-scale. In addition, it seeks to preserve the amenity of the locality and have development contribute to the desired character of the locality.

We have set out below the Objectives and Principles that we consider relevant to the question. Whilst ordinarily we would not include large extracts of the provisions, it is important in this instance to give an overall context for what is being sought by the Development Plan, as this is critical when considering issues relating to the shortcomings both in respect of the size of the supermarket and the cumulative shortcomings.

The Objectives are in the following terms:

- Objective 1:

  '*A functional and diverse zone accommodating a mix of commercial, community, light industrial, residential, office and small-scaled shop land uses.'*

- Objective 2:

  'Development that minimises any adverse impacts upon the amenity of the locality within the zone.'

- Objective 3:

  '*The maintenance of an attractive northern entrance to the Meadows town centre.'*

- Objective 4:

  '*Development that contributes to the desired character of the zone.'*

In terms of the desired character of the Zone, the relevant criteria are as follows:

> *The zone will establish a wide range of light and service industrial activities, compatible with one another, thereby creating an attractive and active locality. It will be important that the zone will provide ongoing opportunities for local employment, home-based industry and commercial ventures, catering for local needs and passing traffic. Retailing in the zone will be limited to that which is ancillary to the activity on site, and will not displace retailing in the traditional main streets of Nairne and Meadows.*
>
> *Enterprises which service the needs of the rural hinterland are envisaged*
>
> *Pattern of Development / Built Form*

Meadows

The zone will provide for low impacting light industrial uses with associated detached dwellings. It is expected that non-residential development will be of a moderate scale and intensity resulting in a visually unobtrusive built form. It is essential that development does not result in uses that undermine the traditional role of Mawson Road as the main street. Development will reinforce the linear pattern of growth along Battunga Road and the scenic and northern gateway entrance. Built form will be generally small scale with well-vegetated curtilage, including maintaining the predominance of dwellings as part of the streetscape. It is important that the existing character of the northern entrance is maintained through discrete placement in the outdoor storage of materials and limited advertising.'

(our emphasis)

The Principles of Development Control for the Zone then contain the following relevant provisions:

- Principle 2

  'Shop or retail development…should be restricted to the sale of specialty products directly associated with light and service industry, primary production and animal husbandry'

- Principle 5

  'Development listed as non-complying is generally inappropriate'

- Principle 12

  'Non-residential buildings and domestic structures should:

  …

  (b) be no more than 5 metres in height.

  …'

- Principle 15

  'The operation of non-residential uses, including the freight loading and deliveries should be restricted to the hours between 8:00 am to 6:00 pm during Monday to Saturday and should be restricted to the hours between 10:00 am to 6:00 pm on Sunday.'

What is clear from these provisions is that the development sought in the Zone and this locality is as follows:

1. A mix of uses, comprising commercial, community, light industrial, residential, office and shop uses, with a focus on:

   1.1. Light and service industrial activities;

   1.2. Home based industry and commercial ventures;

2. Where there is a shop use, it is to be small-scale;

3. Any shop or retailing in the Zone should be limited to that which is ancillary to the activity on the site and where the products being sold are specialty products associated with light and service industry, primary production and animal husbandry;

4. Any development should minimise the adverse impact on the amenity of the locality, including by being no more than 5 metres in height (in this regard we note the comments of the applicant that the proposed development is 'single storey'. This is not what is sought. What is sought is development which is 5 metres or less, not 7 metres, which is an increase of 40% over the numerical guideline in the Development Plan); and

5. Dwellings should be maintained so as to preserve the predominance of dwellings in the streetscape.

Having particular regard to Principle 5, it is noted that a development consisting of a shop or group of shops is 'non-complying' subject to the following exception:

> '*except where the gross leasable area is less than 250 square metres and it achieves one of the following:*
>
> *a) It is in the form of retailing which is ancillary to manufacturing or warehousing uses and no more than 25 per cent of the total floor area of all building on the allotment is used for the purposes of sale or display to customers.*
>
> *b) It is for the sale of specialty products directly associated with primary production or animal husbandry.'*

There is no dispute that the Proposed Development is a non-complying use as it is a shop with a gross leasable area of greater than 250 square metres and it does not satisfy either of the two additional limbs.

Whilst the fact that it is a 'non-complying' form of development adds weight to our opinion that the Proposed Development is seriously at variance with the Development Plan, it is accepted that the fact that it is 'non-complying' does not mean that it cannot be approved. However, as stated in *Remove All Rubbish Company Pty Ltd v City of Salisbury*[4], a *'prohibited use [that is, a non-complying use] is much more likely to be at serious variance with the Development Plan than a non-conforming use that is not so prohibited.'*

It is important for context to note that the types of development that are considered as 'complying' in the Zone are ones such as community facilities, community centres, light industry, service industry, service trade premises, stores and warehouses.

Council Wide provisions

The Council Wide provisions contain a range of relevant objectives and principles, as we have set out below.

Centre and Retail Development

- Objective 5

[4] (1989) 51 SASR 26 at [8].

'Centres developed in accordance with a hierarchy based on function, so that each type of centre provides a proportion of the total requirement of goods and services commensurate with its role.'

- Objective 6

  The hierarchy of centres is as follows:

  - *Regional Town Centre*
  - *Neighbourhood Centre*
  - *Local Centre.*

- Principle 9

  'A shop or group of shops with a gross leasable area of greater than 80 square metres should be located within a centre zone (except within the Residential Neighbourhood Zone).'

- Principle 12

  'A shop or group of shops located outside of zones that allow for retail development should:

  (a) be of a size and type that will not hinder the development, function or viability of any centre zone

  (b) not demonstrably lead to the physical deterioration of any designated centre

  (c) be developed taking into consideration its effect on adjacent development.

<u>Interface between Land Uses</u>

- Objective 1

  'Development located and designed to minimise adverse impact and conflict between land uses.'

- Principle 2

  'Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.'

- Principle 3

  'Residential development adjacent to non-residential zones and land uses should be located, designed and/or sited to protect residents from potential adverse impacts from non-residential activities.'

- Principle 5

  'Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses desired for the zone should be designed to minimise negative impacts.'

- Principle 6

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

Orderly and Sustainable Development

- Objective 3

  'Development that does not jeopardise the continuance of adjoining authorised land uses.'

- Principle 7

  'Development should be located and staged to achieve the economical provision of public services and infrastructure, and to maximise the use of existing services and infrastructure.'

Regulated Trees

- Principle 1

  'Development should have minimum adverse effects on regulated trees.'

Significant Trees

- Objective 1

  'The conservation of significant trees, in Metropolitan Adelaide, that provide important aesthetic and environmental benefit.'

- Objective 2

  'The conservation of significant trees should occur in balance with achieving appropriate development, while avoiding the indiscriminate and inappropriate removal of significant trees.'

- Principle 3

  'Development should be designed and undertaken to retain and protect significant trees.'

What is evident from the above Council Wide provisions is that the Development Plan places a significant weight on ensuring development occurs in an orderly manner and in the most appropriate locality and does not undermine the overall intent and purpose of the Development Plan.

Aside from the interface issues, the most significant aspect of the Council Wide provisions is the clear intent to have shops or groups of shops located in centre zones where those shops are more than 80 square metres. Whilst the existence of shops in other areas is not expressly excluded, the Council Wide provisions evidence a clear intention as to where shops should be located, namely in centre zones.

The Proposed Development is in fact in a location which adjoins the Local Centre Zone. The Development Plan provisions for the Local Centre Zone are not directly applicable to

the proposed development but provide a clear contrast to the provisions for the Mixed Use Zone.

Most significantly, the Local Centre Zone specifically envisages shops being located within it, with reference to a maximum gross leasable floor area of 450 square metres.

This is significant in the context of what is being sought in this instance- what is sought is a 1,470 square metre shop (namely a supermarket) where:

1. The Zone in which it is located only envisages shops which are small-scale (with a non-complying trigger of 250 square metres) and where the shops are ancillary to the activity on the site (i.e. not a shop in its own right) and where the products being sold are specialty products associated with light and service industry, primary production and animal husbandry;

2. The adjoining zone, being the Local Centre Zone, which specifically provides for shop activities but limits the desired size of those shops to a maximum gross leasable floor area of 450 square metres.

The consequence of this is that the Proposed Development is contrary to the hierarchy of centres as sought in the Development Plan and it will undermine what is trying to be achieved by the Development Plan through that hierarchy.

The reality of the situation is that the Proposed Development:

1. is not a small-scale shop. The proposed shop is some six times the gross leasable floor area non-complying trigger for the Zone, and more than three times the maximum gross leasable floor area for the adjoining Local Centre Zone;

2. is not a shop which is ancillary to the activity on the site (that is, it is not a subordinate use to other activities on the land); and

3. does not involve the sale of specialty products associated with light and service industry, primary production and animal husbandry.

Given this, the only conclusion that can possibly be drawn is that the Proposed Development is seriously at variance to the Development Plan based on the proposed shop use on its own. It is of a size and type of shop use that is not only not envisaged in the Zone but is actively discouraged and, furthermore, is sought to be placed in an adjoining Zone (albeit still at a much smaller scale, namely 450 square metres).

Support for this is also found in the study undertaken by Property & Advisory (referred to as the Meadows Retail Study), which alluded to there being the potential ability for the area to support a small supermarket of 500 square metres in area. This accords with what is in the Development Plan for the Local Centre Zone and is significantly less than what is being proposed as part of the Proposed Development.

Furthermore, when considered in the context of the remaining Development Plan provisions, it is clear that cumulatively the shortcomings are so extensive and so significant that there is no other conclusion that can be drawn other than that the proposal is seriously at variance to the Development Plan.

In this regard, the proposed development is contrary to the requirements of the Development Plan (both Council Wide and Zone provisions) to:

1. locate and design development to minimise adverse impact and conflict between land uses;

2. contribute to the desired character. In this regard we note that the appearance is not in keeping with what is sought by the Development Plan, being a significant and bulky building which is larger and taller than anything anticipated in the Zone (re-iterating what is sought in the Zone is development which is 5 metres or less in height, not 7 metres, which is an increase of 40% over the numerical guideline in the Development Plan);

3. maintain the predominance of dwellings as part of the streetscape;

4. restrict the hours of operation to between 8:00 am to 6:00 pm Monday to Saturday and between 10:00 am to 6:00 pm on Sunday, in accordance with Zone Principle 15. Instead, what is proposed are operations between 8:00 am and 9:00 pm Monday to Saturday. This largely just ignores what is being sought by the Development Plan, with little to no proper justification, other than it being what the applicant wants to do; and

5. Maintain and protect significant and regulated trees. What is proposed by the applicant is nothing more than a tokenistic gesture of offering to keep some regulated and significant trees whilst removing significantly more. The provisions of the Development Plan have largely been ignored, with the applicant effectively removing any trees that are in the way of the Proposed Development proceeding in the form sought. There is no reference back to the criteria in the Development Plan- the basis on which the applicant attempts to justify the removal of the trees is that the relevant trees will *'impact upon the design of the proposed development'*. This is not a relevant basis for the removal of a significant or regulated tree. Simply put, the removal of the majority of the trees proposed is neither justified nor in keeping with any of the provisions of the Development Plan as it relates to significant and regulated trees.

Furthermore, there are significant concerns in relation to the issues of sound and overshadowing. The assessment which has been undertaken clearly ignores the anticipated use of the land to the west of the Land, which is zoned as Deferred Urban. It is specifically anticipated that this area will be developed for residential purposes, yet no consideration has been given to the possibility of sensitive receivers being built in this location.

THE PROVISIONS OF THE DEVELOPMENT PLAN CANNOT BE IGNORED

The comments made by his Honour Justice Bleby in *Alexandrina Council v Strath Hub Pty Limited*[5] ('**Strath Hub**') are a reminder of the weight to be attributed to the planning objectives and principles in the Development Plan. His Honour said as follows:

> *'[The Development Plan] contains statements of planning objectives and principles to be applied sensibly and flexibly to particular circumstances. However, that does not mean that its objectives and principles may be ignored because it may seem convenient to do so in a particular case.'*

Whilst a shop on land in the vicinity of the Local Centre Zone may be suggested as a reason for the Council to circumvent the planning objectives in the Development Plan, it would be wrong to do so. There are two reasons for this.

[5] (2003) 129 LGERA 318 at 27.

The first is that the clear purpose and objective of the Development Plan can be achieved- that is, the Development Plan is not redundant. The Mixed Use Zone has developed in a manner which accords with what is sought by the Mixed Use Zone provisions. Likewise in respect of the Local Centre Zone. If anything, the intrusion of a 'non-complying' development in the Mixed Use Zone only highlights the importance in ensuring that the remaining land in the Mixed Use Zone, including the Land, remains set aside for purposes envisaged within the Mixed Use Zone.

The second is that even if there was a need to revisit what is sought by the Development Plan in the Zone (that is, whether it should continue to be zoned as a Mixed Use Zone), this should only be done by way of a Development Plan Amendment. In the *Strath Hub* decision his Honour said:

> *'Nor is it any answer to ignoring the Objective and the Principles of Development Control to say that the Objective of the plan cannot be or is unlikely to be achieved... If the view is taken that for some reason the objective is not achievable, it is for the relevant planning authority to decide upon an amendment to the Plan after due preparation and consideration of a Plan Amendment Report in accordance with the requires of Part 3 of the Development Act, and after the sort of consultation that the legislation requires. The perceived inability of the Development Plan to be carried out is no reason to ignore it in respect of a particular application for development.'*[6]

The remarks of Justice Bleby, as set out above, are especially pertinent to the Proposed Development.

If the locality is zoned whereby it makes development of the kind proposed not acceptable (and we say that is clearly the case in this instance) and there is a desire to allow this kind of development, that is ultimately an issue to be dealt with by undertaking a Development Plan Amendment process (or, as is the case now, a Code Amendment process). It is not a decision for the relevant authority to make arbitrarily in respect of a single proposal when the intent, so clearly set out in the Development Plan, is for the Zone to be preserved for uses other than the kind proposed.

DISCUSSION ON THE PLANNING AND DESIGN CODE

Whilst not strictly relevant in respect of whether the Proposed Development is seriously at variance with the Development Plan, the report lodged with the application refers in numerous instances to the provisions of the Planning and Design Code ('**the Code**').

The Proposed Development was submitted under the Act and is therefore only to be assessed against the provisions of the Development Plan.

The Code has no relevance to the assessment of the Proposed Development. Any reference to the fact that the Code is now in effect and that its provisions might allow for shop of a larger scale in the locality (which is not actually accepted) is entirely irrelevant as this application is to be assessed against the Development Plan and not the Code.

The applicant is at liberty to withdraw the application for the Proposed Development and re-submit a fresh application to be assessed against the provisions of the Code, but has chosen not to do so.

[6] Ibid at 39.

For the reasons set out above, we consider that the Development is seriously at variance with the provisions of the Development Plan and, on that basis, it must be refused Development Plan Consent.

Yours faithfully
MELLOR OLSSON

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29 June 2022

Project/File: 300303911

Amanda Price-McGregor
Green Light Planning
PO Box 158
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Dear Amanda,

Reference: Traffic and Parking Review of Proposed Development - 33 Mawson Road and 5 Battunga Road in Meadows - DA580/514/21

As requested this letter provides the findings and recommendations regarding Traffic and Parking for Proposed Shops and associated car parking at 33 Mawson Road and 5 Battunga Road in Meadows, as pertaining to DA580/514/21. It is understood that this application is being assessed under the former Development Plan for Mount Barker.

A Traffic and Parking Assessment by Fran Siow and Associates dated 23 May 2022 has been provided with the development application. This report provides the basis for this review along with the architectural plans provided with the development application.

The review has identified a number of matters where the proposed car parking, access points and heavy vehicle access will not meet the requirements of the relevant Australian Standards, and also is designed such that various safety and operational issues will arise which will cause conflict between vehicles and pedestrians both within and external to the site. These matters are highlighted in the following discussion in this letter.

Proposed Development

The proposed development comprises a new building for a retail use of approximately 1,470sq.m and 81 parking spaces on an existing site with frontages to Mawson Road and Battunga Road in Meadows. The proposed development will meet the requirements of the Development Plan for parking with 81 spaces required and provided.

The proposed development will also generate approximately 200 vehicles per hour during the shopping peak periods, which is consistent with relevant traffic generation guidelines for these uses. It has been assumed that the traffic generated by the development will be split equally between the two proposed access points, which is a reasonable assumption for the anticipated distribution of traffic to and from the site.

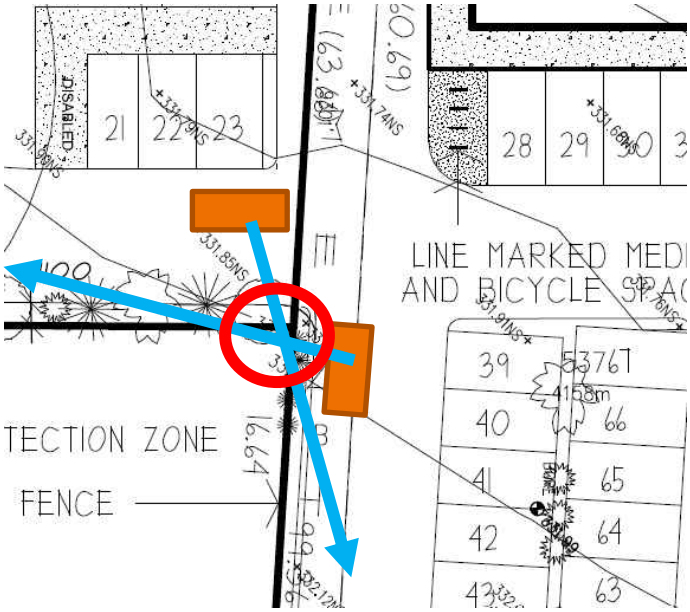
Car Park

1. The traffic report does not discuss or confirm that the parking layout will meet the requirements of *Australian Standard 2890.1:2004 Off-street car parking* with regards to the parking space and aisle dimensions. From the plans available there are no dimensions provided which confirm the suitability of the car park layout. For a User Class 3A for high turnover shopping centre, the

Reference: 33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review

parking spaces should be 2.7 metres wide with 6.2 metre wide aisles as a minimum. These dimensions should be confirmed.

2. It is unclear as to the dimensions of the proposed parallel parking if it meets the requirements of the Australian Standards. Additional clearance in aisle width is required when parallel spaces are opposite angled parking spaces which would typically require an aisle width of 6.7 to 7.1 metres in width. It does not appear to have been provided.
3. The parallel parking spaces also requires space between the parked vehicles and the boundary/fence to enable passengers to open doors and alight or enter a vehicle. There is no space shown on the plans to enable this to occur. A minimum of 900mm should be provided as a footpath alongside these parking spaces to enable safe and convenient access.
4. The car park is fragmented with regards to parking spaces across an irregular site. There are no footpaths shown to the western car parking areas from the proposed building. This will require pedestrians to walk significant distances on the entry driveway which will be difficult with trolleys and prams for instance. The provision of separate footpaths will facilitate a safe walking environment especially when considering the variety of people using this site, including children, elderly and disabled.
5. The central intersection in the proposed car park has a significant sight distance restriction to the south when vehicles are travelling northbound from the Battunga Road driveway. The existing fence on the neighbouring property will restrict sight distance making it extremely difficult for vehicles to enter the intersection safely. Drivers will not be able to see approaching vehicles from the south and vice versa. This will create a significant safety issue in the car park considering heavy vehicles will also be using this intersection.
6. A sight distance assessment should be provided for the intersection as per the diagram below:

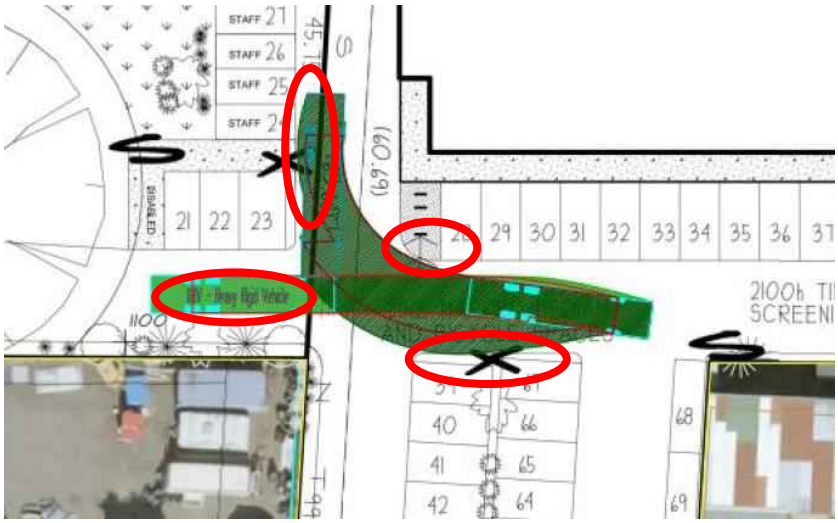


7. Turn paths for vehicles turning at the intersection should be provided in accordance with AS2809.1:2004 to ensure vehicles can pass each other safely in turning movements. This should also be provided for the other intersections and bends in the car park.

Reference: **33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review**

Loading Dock & Heavy Vehicle Access

8. It is unclear from the traffic assessment report provided with the development application as to the number and frequency of heavy vehicles required on the site. The report discusses Woolworths, Coles and ALDI supermarkets and states that the service requirements for the proposed development would be much lower than for the major type supermarkets.
9. This does not confirm the number of movements as Coles/Woolworths stores can have as many as 30 vehicles per day through their loading docks, whereas ALDI Stores will only have 2-3 per day. The actual number of service vehicles at the proposed development should be confirmed, and desirably a limit be made as a condition of development consent given the need for these vehicles to travel through the car park. A condition as a limit similar to an ALDI Store of up to 3 per day would be appropriate and only outside of peak hours for the store.
10. The proposed circulation aisles linking the access points to the loading dock (from Battunga Road and Meadows Road) appear to measure at 6.2 metres wide. These are too narrow for access by heavy vehicles as stated in *AS2890.2:2002 – Off-street commercial vehicle facilities* which requires a minimum of 6.5 metres for two way commercial vehicle travel. This does not include consideration of light vehicle parking in a shopping centre environment.
11. It is recommended that at least 7.0 metres aisle width is provided to ensure sufficient clearance between heavy vehicles and light vehicles parking and manoeuvring on these routes. This is generally adopted with wider aisles at ALDI Stores where heavy vehicles use the light vehicle car park for entry, exit and manoeuvring.
12. The turn paths provided for the loading dock entry manoeuvre indicates a reverse manoeuvre will be performed in the proposed 4 way intersection within the car park.
13. The turn path indicates the vehicle is entering located centrally in the aisle from the south (from Mawson Road). The lack of sight distance at this intersection will make this a hazardous travel path especially as shown. This turn path needs to be reviewed to ensure safe operation with the vehicle located appropriate on the correct side of the roadway when approaching the intersection.
14. The turn paths do not include appropriate clearances as required by the Australian Standards for vehicles manoeuvring. These should be provided to demonstrate sufficient clearance for the proposed vehicle is available (refer diagram below).

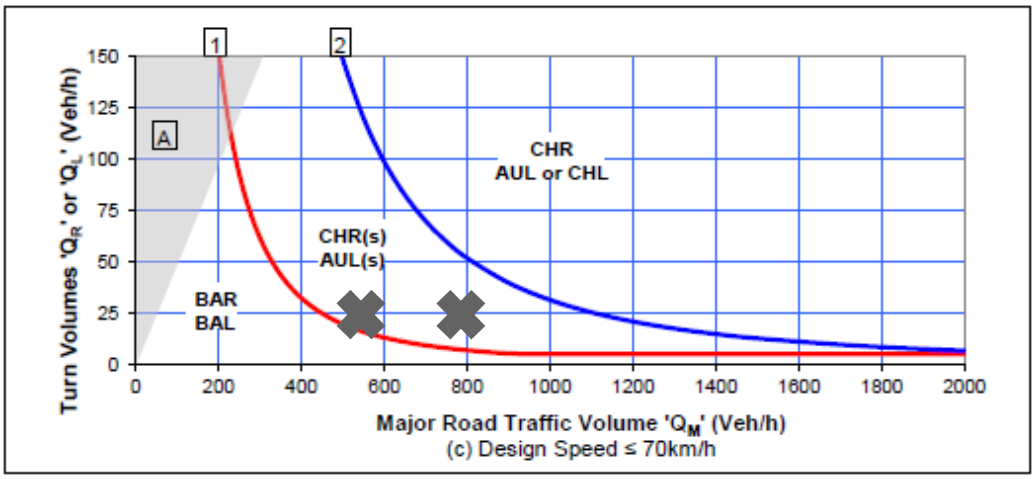


Reference: 33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review

15. The reverse position shown in the diagram does not align with the actual loading dock and shows the driver will need to perform an s-bend reverse manoeuvre. The turn path needs to be completed to demonstrate that a vehicle can safely and efficiently enter the loading dock.
16. The reverse manoeuvre will pass close to a bicycle parking area which will place these users in a high risk area if the turn becomes errant for any reason. The bicycle parking should be relocated or protection of the area (a type of guard fence) included on the plans.

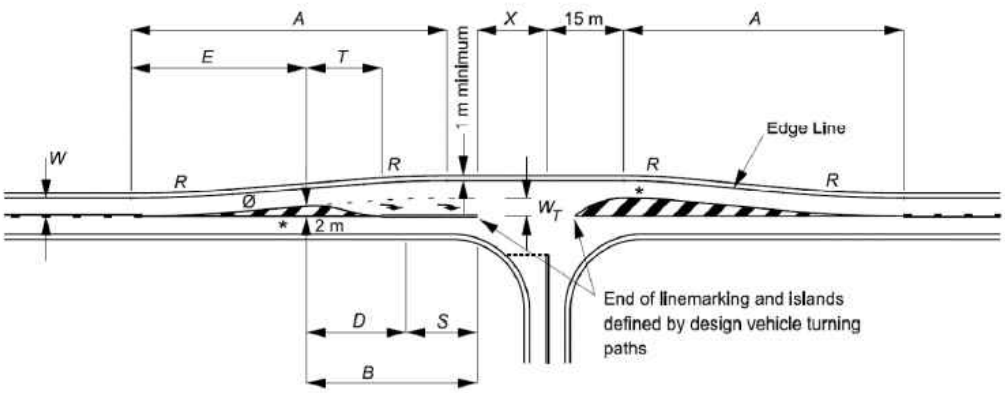
Access Points

17. The SIDRA analysis for the Battunga Road access point indicates 541 through vehicles (two-way) with 25 turning vehicles into the site. The Mawson Road access point has 800 through vehicles (two-way) with 25 vehicles turning right into the site.
18. The Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings (2019) provides in *Figure 2.25 Warrants for turn treatments on major roads*. For this location, the warrant indicates a right turn lane is required with a Short Channelised Right Turn lane recommended as a minimum treatment. The warrant assessment is show below:



The Austroads Guide to Road Design Part 4: Intersections and Crossings shows a CHR(S) in Figure A.29 as per below:

Figure A 29: Channelised right-turn treatment with a short turn slot [CHR(S)] two-lane rural road



19. Both access points will require a right turn lane in accordance with the Austroads guidelines to ensure safe and efficient vehicles entry to the site.

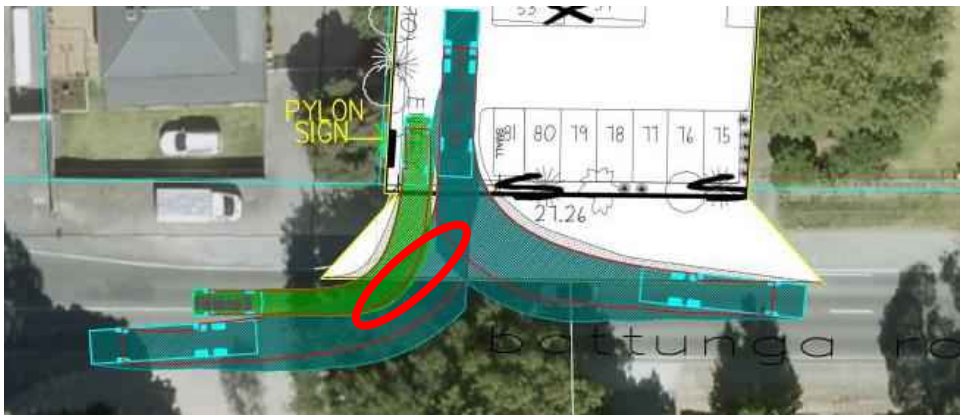
Mawson Road Access Point

20. The turn paths provided for the Mawson Road access point do not indicate the clearance required for heavy vehicles (minimum 300mm) between kerbs and other vehicles. The vehicles shown on the turn path diagram have no clearance to kerb of Mawson Road (truck entering) or kerb of the driveway (car exiting). It also demonstrates that if a vehicle was waiting to exit the driveway and positioned near the centreline, the trucks cannot enter the site form either direction, and likely result in a collision. The access point needs to be reviewed to provide an appropriate traffic management layout for simultaneous movements of required vehicles (heavy and light).
21. The required driveway on Mawson Road will also be very wide and be hazardous to pedestrians on the footpath who may be caught between entering and exiting vehicles. A pedestrian refuge should be provided between entering and exiting vehicles movements.
22. Pedestrian sight distance has not been applied in accordance with the Australian Standard for the exit movement from the access point.
23. The turn paths appear to indicate a turn from stop has been used to execute the turn. This is not an appropriate method of turn path simulation. The turn paths should be revised to provide an appropriate simulation of the turn which does not include turn from stop.
24. The proposed driveway appears to conflict with an existing driveway to the east of the site. This will lead to a potential conflict between the driveway, especially if a neighbouring vehicle is reversing from their driveway. The location and separation of the driveways should be confirmed.
25. Sight distance at the access point on Mawson Road should be confirmed with regards to vehicles abilities to see past parked vehicles in particular to the west.

Battunga Road Access Point

26. The turn paths provided for the Mawson Road access point do not indicate the clearance required for heavy vehicles (minimum 300mm) between kerbs and other vehicles. The vehicles shown on the turn path diagram has no clearance between vehicles exiting or entering.
27. The exiting vehicles appear to cross the centreline of Battunga Road (northbound) or the opposite kerb of the road (south bound);
28. A vehicle entering the site from the south (by left turn) will conflict with a heavy vehicle exiting by right turn from the site (southbound) – refer to diagram below;

Reference: 33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review



29. The proposed driveway will be very wide and be hazardous to pedestrians on the footpath who may be caught between entering and exiting vehicles. A pedestrian refuge should be provided between entering and exiting vehicles movements.
30. The access point needs to be reviewed to provide an appropriate traffic management layout for vehicle movements (heavy and light).
31. The turn paths appear to indicate a turn from stop has been used to execute the turn. This is not an appropriate method of turn path simulation and does not reflect real driving paths. The turn paths should be revised to provide an appropriate simulation of the turn which does not include turn from stop.
32. The proposed driveway appears to conflict with an existing driveway to the south of the site. This will lead to a potential conflict between the driveway, especially if a neighbouring vehicle is reversing from their driveway. The location and separation of the driveways should be confirmed.
33. Sight distance at the access point on Battunga Road should be confirmed with regards to vehicles abilities to see past parked vehicles in both directions from the driveway.

Intersection

34. It is understood that the District Council of Mount Barker is considering an upgrade to the adjacent Meadows Road and Battunga Road intersection with channelisation of movements and pedestrian crossing facilities. The proposed development does not consider the impact of the proposed development on the proposed intersection upgrade.
35. The proposed development access point on Mawson Road will conflict with a proposed pedestrian crossing ramp.

Reference: 33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review

Conclusions

The proposed development for a supermarket and car park on the subject site has been reviewed with regards to traffic and parking, based on the architectural plans and the Traffic and parking Assessment by Frank Siow and Associates.

The review has identified some significant traffic and parking layout matters which will cause potential safety issues for heavy and light vehicles and pedestrians at the site. The key issues identified include:

1. The proposed car park does not appear to conform to the Australian Standard 2890.1:2004 Off-street parking with regards to parking space and aisle widths proposed in the car park, including angled and parallel parking, and turn paths for vehicles at intersections and bends/corners;
2. The car park does not meet the requirements of Australian Standard 2890.2:2002 Off-street commercial vehicle facilities for width of circulation aisles for use by heavy vehicles entering the site;
3. The central intersection at the loading dock in the car park is poorly designed with insufficient sight distance and heavy vehicle manoeuvring space, and turn path diagrams are poorly prepared and do not demonstrate actual vehicle movements to and from the loading dock;
4. The proposed access points have design deficiencies for simultaneous movements of heavy and light vehicles, do not provide safe crossings for pedestrians and may obstruct/conflict with neighbouring driveways adjacent the site frontages;
5. Clarification of the number of deliveries and heavy vehicles on site per day is required. It is recommended that a maximum limit on delivery number be set at 3 or less per day given the shared heavy and light vehicle access routes (this is similar to an ALDI Store for instance which has only 2-3 deliveries per day);

Reference: 33 Meadows Road and 5 Battunga Road, Meadows – Traffic and Parking Review

6. The assessment has not considered the need for right turn lanes on both road frontages based on Austroads Guidelines.

Naturally, should you have any questions or require any further information, please do not hesitate to contact me on (08) 8334 3600.

Yours sincerely,

STANTEC AUSTRALIA PTY LTD

Paul Morris
Group Leader - Transportation SA
M.Trans&Traff, MAITPM
paul.morris2@stantec.com

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Melanie Roney
* HOME ADDRESS: 6 Nottage Road, Meadows 5201
* POSTAL ADDRESS as above
PHONE NO: 0409253209 EMAIL: melanie.roney@yahoo.com.au

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☑ Other (please state): A resident of Meadows

YOUR COMMENTS:

* I/We:

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

I support the proposal but would like to see two disabled car parking

spaces near the entrance to the Supermarket. Please design the parks to have Alternate side (eg. Driver and passenger) to a space (yellow lined area) to allow ease for entering and exiting car. Also have a ramp near to disabled parks to allow safe entry to supermarket. I have two people in my home who use disabled parks. One a driver and the other a passenger. Rarely in the same vehicle.

* I/We:

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

Your written representation must be received by Council no later than 11.59pm on Wednesday 29 June 2022, to ensure that it is a valid representation and taken into account.

If you make representation you will be notified by a separate letter of the date and time of the Council's Assessment Panel (CAP) meeting at which CAP will consider the application.

Representor's Declaration:

I am aware that the representation will become a public document as prescribed in the Freedom of Information Act 1991, and will be made available to the applicant, agencies and other bodies pursuant to the Development Act 1993 and may be uploaded to the Council's website as an attachment to a Council Assessment Panel agenda.

SIGNED Money DATE 26/6/22

From: Outreach <outreach@conservationsa.org.au>
Sent: Wednesday, 29 June 2022 1:50 PM
To: DA Representations
Subject: Category 3 Application – 580/514/21.

Good afternoon,

I'd like to apologise in advance for the brevity of my submission, but I've only yesterday become aware of the application and been subsequently told that today is the closing date.

I'm writing with regard to the proposal for a supermarket on Battunga / Meadows Roads, at Meadows (Category 3 Application – 580/514/21).

I've read the arborist's report closely and understand that not all the trees on the site are in good health, nor are they all protected by legislation. (I'm well aware of how poorly the legislative protections, such as they are with regard to trees and development but this is an issue for another time and place.)

I'm writing to encourage you to push the developer to design around the viable trees.

The wholesale removal of all trees from the block such as seems inevitable under the current design would result in an urban heat island. It takes only as little as 125 square metres of hard surface to form a UHI. Urban Heat Islands, in spite of their name, do not occur solely in built up urban areas. It's not just big towns – smaller towns such as Meadows can be adversely impacted it by it too.

As such any trees that can remain in order to provide canopy should be kept.

Additionally, the loss of trees across Adelaide and surrounding areas has been significant over the last 25 years. This has crept into country areas too, such as across the Mt Barker District Council, as the footprint of the greater Adelaide area expands. We need to start looking at the value of our trees, rather than simply thinking that it's just one or two and that we can plant "replacement" trees for them.

These "replacement" trees come at a cost: we lose beautiful established trees – often remnant native vegetation - it takes decades to regain the lost canopy and at least one hundred years to develop the habitat value which comes with them. Large "replacement" trees are nearly always replaced with much smaller trees and what is planted is very often offset far from the site of the original loss.

Councils are there to represent their communities and the expectations of those communities. The community would like to see better planning outcomes, in this case outcomes which retain the canopy and plan around the healthy trees on the site.

I'm willing to address the Council on this.

Yours sincerely,

Joanna

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO:
Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: JAMES & MANDY METTAM

* HOME ADDRESS: 3 MAWSON ROAD MEADOWS 5201

* POSTAL ADDRESS A/Above

PHONE NO: 0417803451 EMAIL: mandy.hardy66@gmail.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☐ Support the proposal and provide the following comments.

☒ Oppose the proposal and provide the following comments. WHY!

(Please note that your comments should demonstrate reasonable particularity)

The Mini Mart has served Meadows township for many years, their prices are comparable to Supermarkets & they have a great

Variety of products with friendly service that you don't get in a supermarket very often. There are plenty of supermarkets in surrounding areas - Mt Barker, Strathalbyn, The Hub are all close-by. Other businesses will also be affected, bakeries & takeaways will also suffer.

Traffic flow in Meadows is woeful currently. Adding a supermarket to an already congested intersection is only going to cause drivers to become more impatient leading to more serious accidents. Given that council wish to decrease parking around the vicinity, having a supermarket will only add to the traffic issues we already have in Meadows.

*** I/We:**

☒ **Do not wish to be heard by the Council Assessment Panel in support of my representation.**

☐ **Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:**

☐ **Appearing personally.** **OR**

☐ **Be represented by the following person:** .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

Your written representation must be received by Council no later than 11.59pm on Wednesday 29 June 2022, to ensure that it is a valid representation and taken into account.

If you make representation you will be notified by a separate letter of the date and time of the Council's Assessment Panel (CAP) meeting at which CAP will consider the application.

Representor's Declaration:

I am aware that the representation will become a public document as prescribed in the Freedom of Information Act 1991, and will be made available to the applicant, agencies and other bodies pursuant to the Development Act 1993 and may be uploaded to the Council's website as an attachment to a Council Assessment Panel agenda.

SIGNED _____ **DATE** 29.6.22

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

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YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Jennifer Hodgson

* HOME ADDRESS: 38 MADSON RD MEADOWS, 5201

* POSTAL ADDRESS AS ABOVE

PHONE NO: 0429 024 657 EMAIL: jmh.hodgson@gmail.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☑ The owner or the occupier of the property located at: 38 MADSON RD MEADOWS 5201

☐ Other (please state): .....

YOUR COMMENTS:

* I/~~We~~:

☐ Support the proposal and provide the following comments.

☑ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

RECEIVED
MOUNT BARKER
DISTRICT COUNCIL
29 JUN 2022
File: DA-514/21
Doc:

I strongly oppose to a Super Market developement in Meadows,

especially on this site, where there will be traffic congestion in and out

consider the trees to be removed, how many will be planted to take place and where

Consider the disruption to the people bordering the entance, ~~the~~ ~~the~~ trucks driving in + out early morning

I came to a county village not a Suburb of Mt Barker

* ~~I/We~~

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

Your written representation must be received by Council no later than 11.59pm on Wednesday 29 June 2022, to ensure that it is a valid representation and taken into account.

If you make representation you will be notified by a separate letter of the date and time of the Council's Assessment Panel (CAP) meeting at which CAP will consider the application.

Representor's Declaration:

I am aware that the representation will become a public document as prescribed in the Freedom of Information Act 1991, and will be made available to the applicant, agencies and other bodies pursuant to the Development Act 1993 and may be uploaded to the Council's website as an attachment to a Council Assessment Panel agenda.

SIGNED Jm Hodgson DATE 28/6/2022

Mt Barker & District Residents' Association Inc.
PO Box 19 Mount Barker, South Australia 5251

For the Community

28 June 2022

Members of the Council Development Assessment Panel
Mt Barker District Council
PO Box 54
Mt Barker 5251

RE: Category 3 Application - 580/514/21 - Construction of a shop (supermarket) and associated car parking, fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure and the removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums) (non-complying development), 5 Battunga Road & 33 Mawson Road, Meadows (Closes Wednesday 29 June 2022)

To the Members of CDAP, please consider the feedback and questions prepared by the Mt Barker & District Residents' Association (MBDRA) when determining the outcome of this Non-Complying Development Application (DA). We have detailed many important issues regarding this development application. **We are not supportive of it in its current form.**

NON-COMPLYING ASPECT

According to the applicant (p.14):

> *Principle of Development Control 5:*
> *Development listed as non-complying is generally* inappropriate.
>
> The subject development proposal constitutes a non-complying form of development within the Mixed Use Zone because of its scale (i.e. a floor area greater than 250m²), not because of the proposed form of land use. Interestingly, under the Code, the subject land is now located within the Suburban Business Zone, wherein the "Restricted Development Classification" only relates to a shop or group of shops which are greater than 1,000m² (gross leasable floor area).
>
> Further, it is considered that there is a strong argument to support the assertion that the subject development proposal is an appropriate alternative form and scale of land use within the immediate locality, given the location of the subject land; the character of the locality; the history of the site; the existing retail, commercial and industrial land uses within the locality; and the existence of residential development within close proximity.

According to the Local Government Association of SA and Planning Institute Australia a non-complying development is usually not encouraged or envisaged in a particular area when the uses

are inconsistent with the objectives and principles of the zone. They are not approved unless there are 'special circumstances'.

Question 1: **As such, what are the special circumstances that the applicant believes entitles this development to progress under the non-complying development application definition? This has not been clearly explained. This is a semi-rural, heritage area, surrounded by residents and small businesses.**

Question 2: Clarification is sought on the total number of trees to be retained, thus confirming the total number proposed to be removed, as some of the wording in the DA is contrary. The applicant appears to be only wishing to retain five (5), meaning in fact that sixteen (16) trees have been identified for removal (including the six (6) Regulated and three (3) Significant trees). Tree 22 is irrelevant as it is not on the proposed development site and is on private property to be retained by the property owner.

Assurance is also sought that any remaining trees are properly cared for to cater for the uses surrounding them and that they will not be removed for any future development. Although some trees are not 'protected' under the definition of Significant and Regulated, these trees in total provide a valuable canopy that add environmental and aesthetic value to the site. The value of the canopy can clearly be seen in any aerial photo of the site. The arborist's report confirms that there is 'a moderate density of trees'. It is disappointing that the applicant plans to 'cover most of the site by buildings or sealed for carparking purposes.' (p.28)

It is our opinion that the applicant has not Significantly demonstrated a satisfactory approach to incorporate (save) as many trees as possible, including the Significant and Regulated trees, especially as the building and most of the car parks will occur on already cleared land.

The following are some comments and questions in relation to the *Principles of Development Control* for both Regulated and Significant trees.

REGULATED TREES – OBJECTIVES 1 AND 2
Objective 1 and Objective 2(a): Aesthetics and Environmental benefit – the removal of trees will impact on the contribution to carbon reduction, temperature increase, the loss of habitat to fauna and the character and visual amenity of the locality.
Question 3: **Can the applicant provide assurance that proposed replacement mitigation strategies will address carbon emission and amenity to the same degree as the existing canopy?**

Objective 2(b) Indigenous to the locality
It must be noted that four (4) of the five (5) indigenous Regulated trees have been earmarked for removal and of the total of nine (9) indigenous trees across the site eight (8) are planned to be felled.
Question 4: **How does this demonstrate Objective 2(b) is being addressed when it clearly is not?**

Objective 2(d) an important habitat for native fauna.
There is no evidence that any study/examination was conducted to confirm whether the trees identified for removal provide habitat for fauna.
Question 5: What examination was carried out to determine whether the trees provide habitat

for native fauna such as birds, bats and possums?

Principle of Development Control 1: Development should have minimum adverse effects on Regulated trees
The applicant proposes to remove six (6) of the eight (8) Regulated trees, leaving only two (2). This clearly does not demonstrate a development that has a minimum adverse effect on Regulated trees. Further, this does not demonstrate an appropriate balance of preserving Regulated trees.

Principle of Development Control 2
*(a) the tree is diseased **and** its life expectancy is short*
A number of the trees were identified as having short life expectancies. This is a convenient outcome for the applicant as it means the trees can be removed. Surely the life expectancy is open to interpretation and of course can never be proved once the said trees are removed.
Question 6: **Have all trees been examined by the Council arborist for expected life expectancy? We request that all these trees be examined by the Council arborist.**

(d) Development that is reasonable and expected would not otherwise be possible
We do not believe that the applicant has demonstrated a reasonable effort to retain and incorporate a sufficient number of the existing trees into the proposed development.
Further, according to the plan, it appears that several trees are to be replaced by a lawned area.
Question 7: **Why do trees have to be replaced by water guzzling lawn? And where is the evidence that incorporating as many trees as possible was seriously considered?**

The arborist identified twelve (12) trees that could be retained, including five (5) Regulated and one (1) Significant tree.
Question 8: **Given there are so many trees assessed as in reasonable health why are they not being kept in the development plan especially as most of the development appears to be outside of the tree zone?**

SPECIFIC TREES
Tree 2
The applicant acknowledges that this tree presents well and contributes to the streetscape but then proposes to remove it because it *may* impact on sight lines. As this is just a supposition (not supported by evidence), this tree should be retained and pruned by a qualified arborist later if required to manage sight lines.

Tree 5
Council identified 4 trees that they specifically would like retained (4,5,7 and 8) but the applicant has decided that Tree 5 will be removed as it impinges on the proposed car park. The arborist also recommended that Tree 5 can be retained. The applicant claims keeping this tree would require a realignment of the proposed car park that *would likely result* in the loss of *up to* 10 car parks. This appears to be an assumption and not backed up by evidence. The applicant has already indicated an oversupply of car parks in its plan therefore it can accommodate the loss of 10 or more in order to keep this tree.
Question 9: **Why can't the applicant incorporate this tree in the existing plans as has occurred in other car park designs, such as the Unley shopping centre carpark?**

Question 10: **Was a workaround considered and designed? Where is the evidence that an alternative plan was investigated (ie where are the plans)?**

There are inconsistencies between what the applicant states the arborist has said, compared to the arborist's report on each tree. For example, the applicant indicates the arborist states that Tree 14 is in poor condition when in fact the arborist's report states it is in good health with a good life expectancy.

Trees 6, 7, 10, 13 and 14 are recommended/agreed to be removed "subject to the consent of Council".
Question 11: On what basis will Council be making its decision given their status, habitat and environmental value and that some of them are in good health?

The applicant states that the arborist has suggested retention of a number of trees (**9,12,13,20,21**) – but again this information is not consistent with the arborists report.
Question 12: **What influence does the arborist's report play in the decision-making process? There are at least 12 trees that the arborist has recommended be retained.**

Question 13: **What is the rationale to remove the trees that are deemed in good health?**
The removal of any trees listed under Native Vegetation status will require permission from the relevant government body.
Question 14: **What power has Council in retaining these trees given their status and environmental contribution?**

The applicant indicates that Significant trees 1 and 7 will be retained but then indicates the arborist has subsequently 'agreed' that trees 7 and 10 should be removed due to poor condition. However, the arborist's report states tree 7 is in 'fair health'.
Question 15: **Can the applicant confirm what they intend to do in relation to tree 7?**

It appears that the applicant is 'having a bet both ways' – remove trees deemed in 'poor condition' or short life expectancy and remove those that are in the way of the proposed development ('to facilitate the proposed development') despite the fact they are in good health and recommended by the arborist to retain.

SIGNIFICANT TREES
Principle of Development Control 1
(b) indigenous to the local area
There are 2 trees identified indigenous, one of these is proposed to be removed.
Question 16: **As this tree is indigenous how can its removal be justified?**

(d) it represents an important habitat for native fauna
As per argument with the Regulated trees,
There is no evidence in the submission that any study/examination was conducted to confirm whether the trees identified for removal provide habitat for fauna.
Question 17: **What examination was carried out to determine whether the trees provide habitat for native fauna such as birds, bats and possums?**

Principle of Development Control 3
Development should be designed and undertaken to retain and protect Significant trees
Three (3) of the five (5) Significant trees are identified for removal. This does not represent a high retention and protection rate indicating this control measure has not been met.
Question 18: **How can the removal of so many Significant trees be justified?**

Principle of Development Control 4
A(i) The tree is diseased and its life expectancy is short
If a number of trees have been assessed as diseased and having a short life expectancy, then this should be confirmed by the Council's arborist.
(d) It is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring
We do not believe the applicant has sufficiently demonstrated that alternative plans were considered, as evidenced by a lack of alternatives presented in the submission. Also, the language used in some cases in support of some decisions is only supposition, eg: may, likely.

SPECIFIC TREES
Trees 20 and 21
The Arborist identified five (5) Significant trees. Of these, three (3) have been identified in the application to be removed: 10, 20 and 21. There is conflicting commentary about these trees in the submission and inconsistency with the arborist's report. The applicant states the arborist recommended that Trees 20 and 21 be retained. The applicant indicates Tree 20 is impinging upon the design of the car park and therefore is proposing its removal. They also indicate that the arborist has identified it as being in poor condition so as such 'should be removed'. However, in fact the arborist has assessed Tree 20 as being in good health and recommended it be retained. The applicant indicates Tree 21 is worthy of retention but also needs to be removed, though the arborist's report disagrees with this.
Question 19: **What evidence is there that the applicant has made to incorporate Tree 20 into the design of the car park given the precedent has been set in other carparks (eg Unley shopping centre)?**
The removal of all Significant trees is at odds with *Principle of Development Control 8: land should not be developed where the development is likely to result in a substantial tree-damaging activity occurring to a Significant tree*
Question 20: **How does the applicant justify this when there has been no evidence of alternative plans being investigated?**

Re, statement (p.8)

> The small open plaza to the south of the proposed supermarket will incorporate an open grassed area; the existing large Manna gum tree; and some outdoor furniture. This area also has the potential to be developed to accommodate some additional small shops at some time in the future (which will require another development application).

This grassed area appears to be where some of the existing trees are located. It is not clear why the applicant is doing this instead of just incorporating existing trees into a landscaped area. There is reference in the proposal of potential future shops in this area and future development applications. The removal of these trees should not be in preparation for any future development

which is outside the scope of the current proposal.
Question 21: **What is the rationale for the grassed area when the trees in this location can be retained and incorporated?**

CARPARKS
The site plan indicates that the supermarket building will be built on already cleared land and that the bulk of the carparks will be at right angles to the building.
Most of the trees in question are in fact adjacent to the majority of the proposed development. There are some car parks planned for this location but it is doubtful that these additional car parks are needed given that the applicant's parking assessment report has indicated that there will be an oversupply of up to 22 car parks.

The applicant indicates that the shopping centre will be used by local residents and likely employ local residents. Given the Mt Barker District Council has emphasised in their Integrated Transport Plan for the district that there will be an increasing emphasis on walking, cycling and public transport, it can be assumed that many locals will not need access to car parks. The development requirements also state that the development should allow for all of these types of access.

From the Traffic and Parking Assessment Report:
parking demands that are less than 4 spaces per 100m2. We are of the opinion that a similar rate would be more than adequate to meet the anticipated future parking demands of the proposed development. If the lower rate of say 4 spaces per 100m2 were to be applied to the subject development, the parking required would be 59 spaces, which would be well below the parking provision of 81 spaces. That is, there would likely be a surplus parking provision of up to 22 spaces on the subject site.

The consultant who wrote this report based the revised car park figure on examination of the use of the supermarket on Wellington Rd, Mt Barker. Although Mt Barker has a number of supermarkets servicing it, its population is far greater than Meadows, implying that the proposed revised car park numbers are still too high.

NOISE ISSUES
It is ironic and contradictory that the applicant, in response to meeting requirements around sound absorption, points to trees in neighbouring properties in helping to absorb sound. This could be achieved by not removing so many from their own site!

The applicant indicates that the loss of existing trees will be offset to "some degree" by the establishment of the proposed landscaping.
Question 22: **Given it is impossible to immediately replace the numerous benefits of mature trees how does the applicant hope to achieve even a 'degree' of benefit?**

We thank you for the opportunity to comment on this Development Application and hope that you consider, carefully the research, comments and questions posed by this Association.

Kind regards

Dianne van Eck

Dianne van Eck

Chairperson

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

RECEIVED
MOUNT BARKER
DISTRICT COUNCIL
28 JUN 2022
File: DA - 514/21
Doc:

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: KEITH MOLYNEUX
* HOME ADDRESS: 3 BATTUNGA Rd MEADOWS 5201
* POSTAL ADDRESS 3 BATTUNGA Rd MEADOWS 5201
PHONE NO: 0407151141 EMAIL:

My interest/s are affected as: (please tick the following boxes as appropriate)

☑ The owner or the occupier of the property located at: 3 BATTUNGA Rd

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

WE HAVE FOUND THE DEVELOPER ALWAYS OPEN AND TRANSPARENT WITH US, EVEN SUPPLYING DETAILED

DRAWINGS. OUR REQUESTS ARE SIMPLE:

- COLOURBOND FENCING ALONG BOUNDARY BE A COLOUR OF OUR CHOICE. (MONUMENT)
- CCTV CAMERAS BE INSTALLED IN CAR PARK AREA ONLY TO IDENTIFY "HOON" DRIVERS WHO HAVE LOUD EXHAUST SYSTEMS SO THEY CAN BE IDENTIFIED AND REPORTED TO POLICE. (OR USE SPIKES AT THE EXIT WHEN CLOSED)
- THE EXIT ONLY BE ONE-WAY (NO RIGHT HAND TURN)
- COUNCILS ROAD TRAFFIC PLANS DOES NOT CONSIDER THE (80) SPACE CARPARK THAT COULD TURNOVER 3-4 TIMES A DAY. WE RECOMMEND A ROUND-ABOUT SYSTEM THAT SEEMS TO WORK WELL IN THE MT BARKER AREA (WE KNOW IT IS A STATE DECISION!!)

* I/We:

☐ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☑ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☑ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

Your written representation must be received by Council no later than 11.59pm on Wednesday 29 June 2022, to ensure that it is a valid representation and taken into account.

If you make representation you will be notified by a separate letter of the date and time of the Council's Assessment Panel (CAP) meeting at which CAP will consider the application.

Representor's Declaration:

I am aware that the representation will become a public document as prescribed in the Freedom of Information Act 1991, and will be made available to the applicant, agencies and other bodies pursuant to the Development Act 1993 and may be uploaded to the Council's website as an attachment to a Council Assessment Panel agenda.

SIGNED _____ DATE 27-06-2022

KEITH 0407151141

ROUNDABOUT LAYOUT SUGGESTION

27/06/22

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MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Irena Mountford

* HOME ADDRESS: 103 Mawson Rd Meadows 5201

* POSTAL ADDRESS .....

PHONE NO: 0431269277 EMAIL: .....

My interest/s are affected as: (please tick the following boxes as appropriate)

☐ The owner or the occupier of the property located at: .....

☒ Other (please state): local resident

RECEIVED
MOUNT BARKER
DISTRICT COUNCIL
28 JUN 2022
File: DA - 514/21
Doc:

YOUR COMMENTS:

* I/We:

☐ Support the proposal and provide the following comments.

☒ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

traffic entering + leaving Supermarket at this corner adds to an already chaotic + dangerous situation. Cars exiting/entering service station, parking at local businesses make this corner too dangerous with

cars entering/exiting a supermarket, especially those turning from left lane off Battunga Rd; and right off Mawson Rd.

I accept the idea of a supermarket but not on this site.

The possibly of saving some trees needs reviewing as they are ~~significant~~ significant trees and add to the amenity of Meadows.

*** I/We:**

☒ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

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SIGNED _____ DATE 24/6/2022

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

RECEIVED
MOUNT BARKER
DISTRICT COUNCIL
27 JUN 2022
File: DA - 514/21
Doc:

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

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YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: KATHRYN + COLIN MORITZ

* HOME ADDRESS: 9 BATTUNGA RD MEADOWS SA 5201

* POSTAL ADDRESS 9 BATTUNGA RD MEADOWS SA 5201

PHONE NO: K- 0413517947 or C- 0437506688 EMAIL: moritzka@bigpond.com

My interest/s are affected as: (please tick the following boxes as appropriate)

☑ The owner or the occupier of the property located at: 9 BATTUNGA RD MEADOWS SA

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☐ Support the proposal and provide the following comments.

☑ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

Please see attached sheets

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* I/We:

☐ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☑ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☑ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

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Representor's Declaration:

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SIGNED M Moritz DATE 26/6/22

From Kathy and Colin Moritz

9 Battunga Rd Meadows

SA 5201

Phone: 0413517947

moritzk@bigpond.com

Re proposed development number 580/514/21. We oppose to the above development for the following reasons in particularity.

Traffic

1. As shown by aerial photo 1, the entrance /exits to the proposed plan are 50m and less from the main Mawson, Battunga Rd intersection. As council have not done anything about upgrading the intersection by providing residents with a roundabout (which is the preferred upgrade), that was promised when the new subdivision was approved, the current intersection already poses long traffic queues. As we live at no 9 Battunga Rd, we already have to wait for extended times to leave our property due to the large flows of traffic along Battunga Rd and the speed at which traffic turns onto Battunga Rd from Mawson Rd. As the Meadows township plan currently being put out by council has no upgrade for the intersection apart from plantings and less parking (which planners have said there is off street parking available on Mawson and Battunga roads but this is not going to be available if the current upgrades through council go through), it will be a traffic hazard for vehicles to try and leave the supermarket onto Battunga Rd, turning left and particularly turning right. Traffic comes around the corner quite fast and will have little to no time to react to a vehicle suddenly in front of them turning right onto Battunga Rd from the Supermarket exit.
2. As a neighboring property, the extra traffic leaving the supermarket will make it even harder to leave / enter our property. DIT guideline expects supermarket to generate 200vph!
3. Objective 3 on page 19 says it should have good pedestrian access, however the access to the property is very dangerous for pedestrians due to the lack of footpaths, crossings and traffic from the intersection.

Noise

1. The hours are proposed to being open 7am-9pm 7 days a week with deliveries and rubbish collection being from 7am – 10pm Mon to Fri and 7am – 5pm on weekends. This means we will be subjected to extra traffic and truck noise every single day & night. The plant shed is also located to the north of the property which opens onto our property and the noise will be heard from our bedrooms which are at the front of the house, facing Battunga Rd. As a worker who is up around 5:15 each morning and goes to bed early, the extra noise will make it very difficult to sleep. We like to have our bedroom windows open at night for the fresh air, however the extra noise may make that impossible, which will affect both our physical and mental health.
2. The proposed fencing will not be able to cover all the noise and we feel is not sufficient. Early conversations with developers suggested they would put up whatever fencing property owners wanted and we suggested solid concrete walls 3m tall, which is not what they are proposing.
3. It is stated that our property's trees will also help with the noise. On the Northern side there are only 3 old pear trees which are diseased and are going to be chopped down and a row of shrubs we planted which range from 3 to 7 foot high and won't grow much higher. The western side has a

row of pine trees, some gum trees and the shrubs the same as the northern side. This is not an adequate buffer as the developers have described and we shouldn't be out of pocket to plant and grow trees as suggested is needed. The pine trees and gums on our Western fence may die due to the construction of the building and roots being damaged, this leaves less vegetation to reduce noise and view. Principle of development control 6 Pg 42

Location

1. The development talks about its immediate locality to land used for residential, community, industrial and retail buildings and how it would fit in. However, it also is immediately located near farmland. The rear and northern side is all deferred urban and open fields and will take away from the rural outlook. Applicants have suggested that the land to the west which lies within the deferred urban zone, will likely be developed for residential purposes in the future. I have made numerous calls to the council about the zoning as we have both mixed-use zone and deferred urban on our property and have been told that deferred urban will be the LAST zone to ever be allowed to be subdivided for housing.
2. Page 14 Principle of development control 9, it is designed to complement adjacent dwellings in the immediate locality, however the closest dwellings being 9, 7, 3 Battunga Rd and 33 Mawson Rd are all 100 yo plus stone cottages with ours built in 1865. A concrete structure of its size does not compliment those dwellings and as stated in principle of development control 4, it does not supply the desired character to match those dwellings.
3. The plans also say they are placing the building in the northwest of the land for less disruption to properties at both 3 and 7 Battunga Rd, however our home at 9 Battunga Rd is only 40 metres from the proposed building site and will pose the greatest impact on our property. We ask if keeping stock will become a problem as it will be close to a place food is sold plus It will devalue our property as stated by numerous real estate agents. 4.4.9 objective 3, Pg 43
4. Principle of development control 16 states car parks should be at the rear or side of the development; however they are placing them at the front and side, putting more impact on us and not following the control. Before or if development be granted on that site, we would ask that the building be constructed at least 20 metres to the south of our adjoining land, which then gives us a buffer between the building to help reduce noise and view of the building.
5. Undertaking development in Bushfire Protection areas says "buildings being set back 20 metres from flammable/combustible vegetation" however the design puts it close to our pine and gum trees and shrubs and are not 20 metres away.

Trees

1. It shows they are asking to remove numerous gum trees including a significant manna gum. Council have repeatedly told us manna gums are not to be removed as we have been trying to remove 1 on our property which threatens our shed and 3 - 20,000lt rainwater tanks. If we lose our water supply in a bushfire due to the manna gum falling and destroying them and we cannot save our property, then I suggest council think hard about allowing the same type, size tree being removed for a shopping centre!

Lighting

1. We are also concerned about the lighting and the affect on our sleep at night. As stated, they will be erecting a 5.35 mt high illuminated sign on Battunga rd and there will be security lighting on during the night. As stated before, our bedroom windows face the development, and we don't need light shining

through our open windows. Reference Page 39 Principle of Development control 7: Outdoor lighting should be designed and installed so that it does not overspill or intrude on sensitive land uses.

Water

1. It suggests applicant may negotiate easement over 9 Battunga Rd (our property) to discharge stormwater via gravity into creek on our property. We see no reason or benefit to us to be granting an easement.
2. We worry that the extra water into creek will cause flooding in winter as the level has risen to half full during the excess rainfall we have been experiencing. If flooding should occur, it will run straight to our home as it is downhill from the creek.
3. We also have a well on our property and worry the development may impact on the amount or quality of the ground water as it is used for stock, garden and bushfires!

Convenience

Applicant states the convenience of Meadows having a supermarket as a major requirement however it has been observed that many of the residents, especially the newer, younger aged residents now do online shopping and have the convenience of having it delivered to their door. I witness this on my morning walks, seeing numerous Coles and Woolworths trucks delivering throughout Meadows. For minor items, milk, bread, newspaper etc. the mini mart has served Meadows well and offers the friendliness and small-town service residents have grown to love. As Foodland is a noted "more expensive place to shop" it would be unlikely many residents would do a full weekly shop there, preferring the larger grocery retailers and just buy items they may have forgotten on their normal shop. The introduction of a Foodland supermarket will no doubt have a negative effect on the smaller businesses in Meadows, who currently employ locals also. These being the mini mart, butcher and bakery.

Conclusion

I ask the council to seriously consider the negative impact on the residents who will be seriously affected by such a development. As a family who have called Meadows "home" for the past 22 years, we have enjoyed the country town feel and friendliness of the locals.

The new developments of housing in Meadows is definitely diminishing that country town feel and the introduction of a supermarket complex will destroy it completely.

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

DEVELOPMENT NO: 580/514/21
Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Natashia Young + Michelle Crawden
Business
* ~~HOME~~ ADDRESS: 33 Mawson Road Meadows 5201
* POSTAL ADDRESS As Above
PHONE NO: 0408892175 EMAIL: meadowsminimart@outlook.com
0437883633

My interest/s are affected as: (please tick the following boxes as appropriate)

☒ The owner or the occupier of the property located at: 33 Mawson Road Meadows

☐ Other (please state): .....

YOUR COMMENTS:

*~~I~~/We:

☐ Support the proposal and provide the following comments.

☒ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

We are the Business Owners of the Meadows Minimart which is Currently

the town supermarket. We have owned the business for 16 years & oppose the new proposal for a supermaket as this will impact our business majorly. Our Prices is cheaper than Foodland. This Business has been here close to 100 years. Many of our Older Customers definetly oppose the new Supermarket & unfortunately cannot use computers or fill out forms so we are their voice also. We feel that our small Country town does not need a big Supermarket when there is already a Small Supermarket here we have put our heart & Soul into our business which may be taken away from us.

*~~I~~/We: We also noticed no Provision for water for us to the Minimoton the Plans.

☐ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☒ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☒ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

(Please note, matters raised in your representation will not need to be repeated at the Council Assessment Panel meeting).

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SIGNED Wayne (N. young) DATE 27/6/22

M Crawd M Crawden

Kerry Gale

From: Gary Whaite <gary.whaite@springshill.com.au>
Sent: Sunday, 26 June 2022 7:32 PM
To: DA Representations
Cc: Gary Whaite; Leigh Burrows
Subject: Development Application 580/514/21

We write to oppose the development application number 580/514/21. We live adjacent to the proposed development at number 31 Mawson road Meadows, and have done so for 26 years, in which time we have come to know the local community well.

The development in question is, broadly speaking, totally out of proportion in terms of its size and the needs of the community, and is shoe-horned into an inappropriate site. We believe the Mixed Zone provisions in terms of recommended retail area should be upheld in this instance.

The site itself is conceded in the application to be somewhat of a compromise, as is the medium term economic viability of the inappropriately sized supermarket business.

I suggest that the size and utility of the Meadows Mini Mart that we have lived beside for so long is more suitable to the needs of the township at the present time. It serves the convenience shopping needs of the local community extremely well and provides employment for 10 local people as well as the two local families that own the business, who are both deeply involved in the town and sports community. The new development will break this bond with very likely out of town ownership structure and less connection to the town.

The current application seeks to remove a great many trees, with those left behind in some sort of ‘plaza’ to the south, that is destined to be turned into a carpark and more shops in a foreshadowed future application.This is development by stealth. I think this is unsatisfactory and will not provide any of the benefits of a so called ‘community hub’. Quite the contrary.

Alongside these concerns I do not think the two entry and exit points are sufficiently removed from the Battunga road/Mawson road intersection to prevent further congestion of a junction that is already a pinch point for traffic and the subject of some contention as to a suitable future resolution.This despite the attested abstract traffic flow numbers in the report within the application.

As well, the ‘pylon signs’ seem to have confusingly grown from 2 to 3 across the application with one at each of the entry/exit points and a third on the boundary of our premises and the current Mini Mart, both of which are on the local heritage list and will not be enhanced by an unnecessary third sign. Heritage values should be protected.

The height and proximity of the proposed building to our boundary at number 31 Mawson road, with the loading dock right on the boundary, is of some concern to us, and the result of trying to build to big on too small a site. The trees on our property that are said in the application to provide convenient screening of the development will not be served well by the eastern shading. As well we note that there appears to be roof mounted plant on the loading bay at 5.4 metres high, this despite assurances to the contrary and at high dB levels according to included report.

Much is made in the application of ‘setback’ from the two main roads and the minimal impact on ‘amenity’ in a country town. On this criteria we say that the western boundary has been sacrificed to this end, and again reflects the too large footprint of the development. The proposed signage

on the front and side of the building at 8 metres high, one metre above the roofline, is unacceptable and would be too plainly visible from those properties (including ours), adjacent to site.

If and when Meadows grows to a size that warrants such a large supermarket it could be best developed within any further western extension to the township, as is proposed, where siting would not be space constrained and some realistic community space could be provided, and historic amenity values would not be compromised.

Yours sincerely

Gary Whaite and Leigh Burrows
31 Mawson road Meadows
0411294942 and 0478401846

Kerry Gale

From: Lorraine Rogers <lorr.rogers@gmail.com>
Sent: Monday, 20 June 2022 9:02 AM
To: Mount Barker District Council
Subject: Category 3 Development No.580/514/21 Meadows

Attention Chief Executive Officer Andrew Houlihan

I believe that there are a number of serious problems arising from this proposed development.

First: the entrances are too close to the main intersection of Mawson and Buttunga Roads. This will cause further congestion to this already busy corner.
The two pylon signs will be a hazard; a distraction to the approach of this intersection.

Second: this is a light farming area with animals and also residential properties. These will adjoin the proposed supermarket, car park and entrances. Traffic noise and car lights will make conditions for those living here insufferable.

Third: in this application, the effects of these major trees being removed has not been considered. The temperature of the local environment will increase dramatically; scientifically proven, the temperature can increase by as much as 6-10 degrees celsius and with the car park bituminised, this will be a localised climate change. Every little bit contributes to global warming. Climate change is a very real threat to all of us.

Fourth: there is no plan to cater for the habitat loss of the local fauna; the antechinus, ring tail and brushtail possums, the numerous bird species, insects etc.

And lastly, there is a shopping area further up Mawson Road with a chemist, bakery, butcher, takeaways, land agencies, etc.
A supermarket ,during the 80's, used to be with a group of other shops here. This is the commercial area of Meadows.

I believe that this proposed development is in the wrong place. It will severely change the character of the area.
It has not taken into consideration the negative effect it will have on the township. It will not enhance Meadows but fracture its layout.

Regards,
Lorraine Rogers
560 Brookman Road, Meadows 5201
lorr.rogers@gmail.com

MOUNT BARKER DISTRICT COUNCIL

STATEMENT OF REPRESENTATION FOR CATEGORY 3
Pursuant to Section 38(5) of the Development Act, 1993

RECEIVED
MOUNT BARKER
DISTRICT COUNCIL
17 JUN 2022

TO: Chief Executive Officer
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251

File: DA - 514/21
Doc:

THIS SHEET PROVIDES YOU WITH THE OPPORTUNITY TO MAKE COMMENTS IN RELATION TO A PROPOSED DEVELOPMENT; IF YOU WISH TO DO SO. PLEASE FIND ATTACHED DETAILS OF THE PROPOSED DEVELOPMENT.

5 Battunga Road, PL-1864, 1892
MEADOWS

DEVELOPMENT NO: 580/514/21

Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)

YOUR DETAILS: (all fields with an asterix * must be completed to ensure that this is a valid representation as per Regulation 35 of the Development Regulation 2008).

* NAME: Daniel Adams

* HOME ADDRESS: 109 Mawson Rd, Meadows SA 5201

* POSTAL ADDRESS As Above

PHONE NO: ..... EMAIL: .....

My interest/s are affected as: (please tick the following boxes as appropriate)

☑ The owner or the occupier of the property located at: 2 Battunga Rd, Meadows

☐ Other (please state): .....

YOUR COMMENTS:

* I/We:

☑ Support the proposal and provide the following comments.

☐ Oppose the proposal and provide the following comments.

(Please note that your comments should demonstrate reasonable particularity)

I believe it will be very beneficial to Meadows and the surrounding community.

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* I/We:

☑ Do not wish to be heard by the Council Assessment Panel in support of my representation.

☐ Wish to be heard by the Council Assessment Panel in support of my representation, and I will be:

☐ Appearing personally, **OR**

☐ Be represented by the following person: .....

Contact details: .....

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SIGNED _____ DATE 15/6/22

C L Rowe & Associates
Urban & Regional Planners
Local Government Consultants

PO Box 573
Goolwa SA 5214

t: 0430 348 377
e: clrowe@internode.on.net

25 July 2022

Michael Dickson
Senior Planner – City Development
District Council of Mt Barker
PO Box 54
MOUNT BARKER SA 5251

Dear Sir

Re: Development Application 580/514/21 – Proposed shop (supermarket), including landscaping, car parking, tree removal and fencing, at number 33 Mawson Road and number 5 Battunga Road, Meadows (Kevjohn Pty Ltd).

I refer to the above development application and, on behalf of the applicant company, provide the following responses to the principal matters raised within the seventeen (17) representations which were received during the public consultation stage of the application process. For ease of presentation my comments have been presented under subject headings.

I have also provided the following documents which should be read in conjunction with this correspondence.

- Correspondence from Botten Levinson Lawyers (dated 19 July 2022) which provided opinions and advice on the matter of "seriously at variance" and matters raised by Green Light Planning and Mellor Olsson Lawyers.
- Correspondence from Frank Siow and Associates (dated 25 July 2022) which specifically responds to traffic and parking issues raised by Stantec (refer representation submitted by Meadows Investment Trust).
- Correspondence from Botten Levinson Lawyers (dated 22 July 2022) providing advice regarding "trade competition".
- A copy of the latest amended plans, as prepared by J B Building Designs (dated 23 July 2022).

1. Submissions in support.

1.1 It is noted that the submissions received from Samantha Jackson, Tammelaine and Sean Ebert, Susan and Peter Jackson, Keith Molyneux, Melanie Roney and Daniel Adams supported the proposed development. Of these representations, four (4) came from residents of Meadows (including the owner/occupant of the neighbouring property at 3 Battunga Road), and two (2) came from residents of Kangarilla.

1.2 Reasons for supporting the proposal included the need for more shops in a growing community; convenience (i.e. not having to travel regularly to other towns to do grocery shopping); potential additional local employment opportunities; the provision of needed off-street car parking which will result in a safer environment within the locality; and better facilities for people with disabilities and/or mobility problems.

1.3 The Act specifically allows for representations to be lodged, not merely objections. The representations in favour carry equal weight to any negative representations.

2. Seriously at variance.

2.1 The representation lodged on behalf of Meadows Investment Trust contained advice from Mellor Olsson Lawyers claiming that the proposed development is seriously at variance to the Development Plan and should be refused.

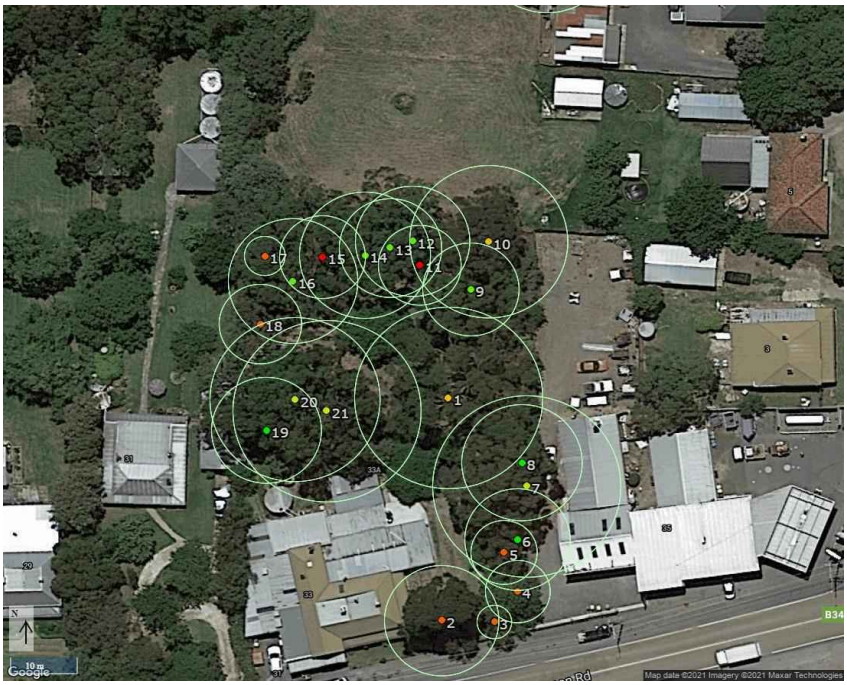
2.2 Botten Levinson Lawyers has provided advice on this matter, including the following.

- There are clearly provisions in the Development Plan which support the use proposed noting that there is already a shop within the Zone, and indeed other shops within the Zone.
- Mellor Olsson Lawyers and Green Light Planning are seeking to treat the Development Plan as a mandatory document which requires a full compliance. The courts make that clear – the Development Plan is a flexible document being a planners document and is not to be interpreted as a statute.
- The development is for a shop in a Mixed-Use Zone. The circumstances of the locality are relevant. The circumstances of this locality are that shops are appropriate. The Development Plan seeks that goal. The size of the supermarket does not of its own mean the application must be refused. It is a question of a full consideration of the Development Plan.
- The seriously at variance issue is a matter for the relevant authority to determine.
- The matters recited within the written advice provided can be taken into account by the relevant authority to properly conclude that the proposal is not one that must be refused.
- Based on the latest Supreme Court decision as to the interpretation of *seriously at variance* it can properly be said that a reasonable planning authority acting reasonably and having regard to the Development Plan, the conditions in the locality and the factual and historic context in which the project will be implemented, can properly and rightly conclude Development Plan consent can be granted.

3. Loss of trees.

3.1 Twenty-one (21) large trees exist upon the subject land (refer Aerial Photograph 1). According to Adelaide ARB Consultants, only one (1) of these trees appears to be an original remnant native tree, whilst the origin of the other trees is uncertain but they all appear to have been introduced to the site.

Aerial Photograph 1: Existing large trees



3.2 The subject development proposal has been reviewed and it is now proposed to retain nine (9) of the existing large trees, these being trees identified as numbers 1, 4, 7, 8, 9, 11, 16, 18 and 19.

3.3 Of the twelve (12) trees to be removed, the consultant arborist considered eight (8) to be "*not suitable in the context of the future development*", and two (2) are "*not controlled*" trees. The two remaining trees conflict with the design of the proposed development. Put another way, the development will be unreasonably impacted upon if the trees had to be maintained conflicting with the intent of the Zone.

3.4 The applicant has indicated a preparedness to also retain "significant" tree number 20 (Flooded Gum), and establish an appropriate Tree Protection Zone, should this be required by the Council. However this could result in the removal of up to eight (8) car parks (numbers 13 – 20 inclusive), or the requirement for specific site works and/or construction outcomes by Council (e.g. Council's *"Surface Design for Public Road/Driveway Trafficable Crossing Zone Over Tree Root Protection Zone").*

3.5 The landscaping scheme for the proposed development incorporates the planting of an additional twenty-six (26) trees ("Silky Tea-Tree" and "Golden Wattle"), as well as shrubs, flowers and ground covers. The proposed landscaping should adequately provide new landscaping to compensate for the loss of any fauna habitat and enhance the visual appearance of the proposed development. Further, the additional trees to be planted along the northern and north-western property boundaries should serve to provide added visual screening in response to the concerns expressed by Kathryn and Colin Moritz (9 Battunga Road).

3.6 Where required, an appropriate Tree Protection Zone will be established so as to achieve the best level of protection of a tree against potential detrimental impacts during the construction stage of the proposed development and/or any on-going activities on-site. The establishment of Tree Protection Zones will be in accord with the comprehensive requirements outlined in the report prepared by Adelaide ARB Consultants (dated 16 February 2021); and the design and construction of the proposed internal driveway in close proximity to any Tree Protection Zone will generally be in accord with Council's *"Surface Design for Public Road/Driveway Trafficable Crossing Zone Over Tree Root Protection Zone"*.

3.7 As for references made to the proposed removal of regulated trees, Botten Levinson Lawyers has advised as follows.

- This is a matter that falls within the planning judgement to be exercised by the relevant planning authority.
- It is clear that a balance is to be drawn between appropriate or reasonable development as anticipated by the development plan and the retention of native vegetation and regulated trees.
- The approach by then Senior Judge Trenorden in *Summers v City of Unley* [2002] SAERDC 113 should be applied. Her Honour made it clear of the *balance* sought by the Development Plan. Her Honour said:

  It could not be the intended consequence of the Development Plan provisions that every tree, regardless of species, characteristics, benefit provided, contribution to amenity, should be retained, unless it is diseased and will die, presents a safety risk to persons, buildings or valued structures…that cannot be the intended consequence of the Development Plan provisions; one can readily imagine examples to show how ridiculous such a result would be, and it would fly in the face of the objects of Development Plans. at [32].

4. Detrimental economic impact upon existing businesses.

4.1 A number of representors expressed concern that the proposed supermarket will have a detrimental impact upon the economic viability of small businesses in the town (e.g. the mini-mart, bakery and butcher).

4.2 The protection of existing businesses from competition is not normally a principle of relevance to a planning assessment.

4.3 Whilst the Mount Barker District Council Development Plan contains a general provision (Centres and Retail Development Principle of Development Control 12(a)) which seeks development of a "*size and type that will not hinder the development, function or viability of any centre zone*" (e.g. the Local Centre Zone in Meadows), it does not contain any provisions which specifically speak against commercial or trade competition and/or which seek to protect the economic viability of any existing land uses or business.

4.4 Separate advice received from Botten Levinson Lawyers concludes:

In short the South Australian planning system does not allow for objections based on trade competition if there will be no resultant loss to the community. In this instance if a business of a 'trade competitor' were to close down the supermarket will provide 'replacement facilities' meaning there will 'be no resultant detriment to the community'.

The objectors can of course object on 'planning grounds'. I have advised that having considered the Development Plan the proposal is appropriately located in seeking retail shopping in the main street(s) of Meadows.

4.5 No further response to the issue of trade competition is considered to be necessary as the proposed supermarket will, at worst, provide *replacement facilities* for the community but more likely will provide an additional range of goods that will provide a positive on-going benefit to the community.

5. Car parking and traffic.

5.1 A number of representors expressed concerns regarding the suitability of the proposed site access/egress points in regard to their design, location and potential detrimental impact upon local traffic movements; potential problems with the movement of heavy vehicles on-site; the proximity of the proposed access/egress points to the Mawson Road/Battunga Road intersection; the potential traffic hazard associated with right-hand turns onto Battunga Road; and the likely exacerbation of existing traffic congestion in the locality.

5.2 The plan of the subject development proposal has been amended to retain additional trees. As such, the total number of off-street car parks has been reduced by two (2) to seventy-nine (79); however, the proposal still provides more off-street car parking spaces than sought by the Development Plan.

5.3 Frank Siow and Associates, Traffic and Parking Consultants, reviewed the subject development proposal and provided a traffic and parking assessment report (dated 23 May 2022), which concluded that:

- the parking provision on-site (i.e. 81 spaces at the time of preparing the report) would meet the requirements of the Development Plan;
- the parking to be provided would likely well exceed the parking demands by up to 22 spaces, based on previous experience with parking demands at retail developments in non-metropolitan areas;
- the proposed car park would have 81 on-site parking spaces and would be designed to the requirements of the relevant parking standards;
- the proposed car park layout would also satisfactorily accommodate the servicing and deliveries anticipated for the development and provide suitable access for fire vehicles;

- the proposed development is also envisaged not to result in unacceptable traffic conditions in the adjacent road network, including the intersection of Battunga Road/Mawson Road/Nottage Road; and
- on the basis of the above assessment, we are of the opinion that the proposed development would be supportable from a traffic and parking perspective.

5.4 In regard to the proposed site access/egress points, Frank Siow and Associates has previously advised that that the access points have been designed to accommodate the largest expected service vehicle entering from Mawson Road and exiting to Battunga Road; and the Department for Infrastructure and Transport has confirmed that the proposed two-way access points on both roads are supported.

5.5 As for the issue of the proximity to the Mawson Road/Battunga Road intersection and the inference that the proposed development could detrimentally affect the existing traffic problems, Frank Siow and Associates has:

- advised that the subject development proposal should not result in unacceptable traffic conditions at the Mawson Road/Battunga Road intersection; and
- reviewed the current concept plan for the upgrade of the Mawson Road/Battunga Road intersection and has advised that the proposed Battunga Road access point would not be affected by the Council proposal, and the painted island proposal on Mawson Road would be a beneficial outcome for the proposed access point as it could potentially accommodate a right turn lane into the development with minor amendment to the line marking.

5.6 The representation made by Green Light Planning (on behalf of Meadows Investment Trust) raised a number of queries. A comprehensive response to those matters has been prepared by Frank Siow and Associates, and some minor adjustments have been made to the car parking layout of the proposed development (refer amended plan attached). A copy of this correspondence is provided herewith. It is noted that Frank Siow and Associates maintain their position that *"there are no traffic or carparking issues that prevent the application from being approved."* I wholly agree.

6. Noise

6.1 An environmental noise assessment of the subject development proposal has been undertaken by Sonus Pty Ltd, audio engineering and acoustic consultants. The assessment considered noise from general car park activity, loading activities within the loading area, and mechanical plant serving the building. Appropriate noise criteria for the assessment of these noise sources were derived in accordance with the *Environment Protection (Noise) Policy 2007*.

6.2 Noise levels from the site were predicted to achieve the relevant criteria at all residences in the vicinity, subject to the inclusion of the following treatments.

- Ensure that deliveries to the site occur during the daytime hours only (7am to 10pm).

- Construct an acoustic barrier with absorption material on the southern side of the loading dock.
- Construct a canopy with acoustic absorption material over the loading dock.
- Locate any rooftop mechanical plant in a specified area.

All of the measures recommended by Sonus Pty Ltd already existed within, or have been incorporated in, the subject development proposal.

6.3 On that basis Sonus Pty Ltd concluded that the subject development proposal has been "*designed to minimise adverse impacts* and *does not unreasonably impact the amenity of sensitive receivers*, *thereby achieving the relevant provisions of the Planning and Design Code related to environmental noise*".

6.4 Additional trees are proposed along part of the northern and north-western property boundaries, in part as a perceived additional noise attenuation measure.

6.5 The proposed supermarket building and plant room are to be constructed of concrete tilt-up panels which provide good acoustic insulation.

6.6 The subject development proposal incorporates the provision of 2.4 metre high "Slim Wall" panel fencing along most of the property boundaries which is visually appealing and typically reduces the transmission of noise by up to 20+dB or 4-5 times. Higher "acoustic" fencing is not warranted and would be visually intrusive.

7. Devaluation of property.

7.1 The economic impact of a development proposal upon the value of any other property is difficult to determine and/or substantiate; and has long been considered to be irrelevant in the assessment of the merits of a development proposal.

8. Impacts upon adjacent farmland.

8.1 Some of the land located to the west of the subject land lies within the Deferred Urban Zone. This land is currently utilised for small-scale agricultural purposes, the keeping of horses and/or rural living. As such, it generally exhibits an open rural character.

8.2 The provisions of the Deferred Urban Zone essentially "earmark" the land for the orderly and economic development of future urban land uses.

8.3 The subject land lies within the Mixed Use Zone, wherein retail, commercial and industrial land uses are envisaged. The proposed development will have no impact upon the use and the adjoining "Deferred Urban" land. Any potential impact upon the character of the "Deferred Urban" land is to be expected and unavoidable, given the nature of development that the Development Plan specifically envisages within the Mixed Use Zone.

9. Location of proposed building.

9.1 The proposed supermarket building has been located, as proposed, so as to achieve an acceptable design comprise which will lessen the visual prominence of the built form; minimise any detrimental impact upon the Battunga Road streetscape; minimise the impact upon the existing trees; minimise potential impacts upon the owners/occupants of the adjoining properties; minimise potential impacts upon the setting of the existing local heritage listed building; and achieve an effective and practical car park design/layout. The location of the proposed building means there will be little impact on the setting of the existing building.

9.2 The suggestion to relocate the proposed supermarket building further to the south would have negative consequences in regard to the existing trees, the overall car park layout, access to the proposed loading dock, and the visual prominence of the proposed built form.

10. Lighting.

10.1 Outdoor lighting is to be provided around the facade of the proposed building and throughout the proposed car parking area The lighting will be designed and angled to avoid light spill to neighbouring properties. Some limited non-invasive lighting will likely continue to operate, for security reasons, throughout the evenings.

10.2 The provision of 2.4 metre high fencing along the boundaries of the subject land, as proposed, will also serve to reduce any potential of light spill from the subject land/proposed development.

10.3 Security lighting at night is a common occurrence in commercial, retail and industrial developments, noting such uses are desired in the zone

11. Stormwater directed to creek/impact on well at 9 Battunga Road

11.1 Council staff have previously advised that Council would typically require stormwater detention such that post development flows are not greater than predevelopment flows for the 10% and 1% year event.

11.2 The direction of stormwater from the subject development proposal to the nearby creek to the north of the subject land has been the subject of discussion with relevant Council staff and appears to be the preferred option.

11.3 RCI Consulting Engineers has already prepared a preliminary Stormwater Management Plan for the subject development proposal, details of which have previously been provided to Council. It is clear an appropriate stormwater management system can be designed to conventional engineering standards, and this will address any potential impacts upon neighbouring properties, the watercourse and/or the environment in general. A condition to that effect can be imposed.

12. Freestanding signage.

12.1 Freestanding signage is common at shopping and commercial developments.

12.2 The proposed signage is provided to identify the existence of the supermarket and the site access points, rather than *advertise* the supermarket tenant.

12.3 As the proposed development has frontage to, and access/egress points on, two arterial roads, it is reasonable that two freestanding signs be permitted.

12.4 The proposed third sign, being located towards the south-western corner of the subject land, will be removed from the development proposal (in accord with Mr Whaite's representation).

12.5 The proposed freestanding signs are to be conventional in design; will be moderate in dimension; and will exhibit static wording/displays. Whilst the two proposed signs are to be illuminated, given the size, location and intensity of the illumination it is most unlikely that these signs will have any significant impact upon any neighbouring residents and/or passing motorists.

12.6 Neither of the two traffic consultancies which have reviewed/examined the subject development proposal from a traffic safety perspective (i.e. Frank Siow and Associates and Stantec) raised any concerns regarding the issue of the proposed signs. I agree.

13. Centres and retail development

13.1 It has been said the proposed development may be better located within a Centre Zone. However, the long-established existing land uses and the lack of any available land within the Local Centre Zone in Meadows (of a suitable size to accommodate a modest supermarket development) were prohibiting factors.

13.2 The subject land and the Mixed Use Zone, being located immediately adjacent to the Local Centre Zone, are appropriate alternatives. In addition, it is considered that the proposed supermarket development would complement the established residential, retail, commercial and industrial land uses within the immediate locality.

13.3 Green Light Planning claim that the *"Development Plan makes it clear that the Local Centre land on the corner of Mawson Road and Nottage Road is the preferred location for local centre scale shops."* Whilst the land at both corners of the Mawson Road and Nottage Road intersection lie within the Local Centre Zone, no provisions were found within the Development Plan (including the Meadows Concept Plan MtB/9) which identified either site as a "preferred" shopping development site".

13.4 Green Light Planning state that: *"The proposal fails to meet PDC 12 in that it seeks to locate a land use that should be in a centre zone in the Mixed Use Zone"*. PDC 12 actually establishes criteria/circumstances under which a shop or group of shops (of no specified size) can be located outside of zones that allow for retail development. The proposed development is considered to comply with PDC 12, as it will be of a size and type that will not hinder the development, function or viability of any centre zone; will not demonstrably (my emphasis) lead to the physical deterioration of any designated centre (already fully developed); and/or is to be developed taking into consideration its effect on adjacent development.

14. Orderly and sustainable development

14.1 Green Light Planning claimed that the proposed development will inhibit the ability of the subject land to be developed for its intended land use purposes. The provisions of the Mixed Use Zone generally speak in favour of shops, and this is the desired land use of the applicant company (i.e. the landowner). No other person or party are in a position to develop the subject land for any other purpose.

14.2 Green Light Planning expressed the opinion that the proposed supermarket development fails to comply with many of the council-wide Objectives and Principles of Development Control, specifically citing the following.

Objective 4: Development that does not prejudice the achievement of the provisions of the Development Plan.

Objective 6: Urban development located only in zones designated for such development.

Objective 7: Urban development contained within existing townships and settlements and located only in zones designated for such development.

PDC 1 Development should not prejudice the development of a zone for its intended purpose.

PDC 3: Development should be consistent with the desired character statements for the zones, policy areas and precincts.

PDC 13: Development should be undertaken in accordance with the following Concept Plan Maps:
(i) Concept Plan Map MtB/9 - Residential (Meadows)

The simple fact is the subject land lies within the township of Meadows and a shop (which is a form of "urban development") is an anticipated land use within the Mixed Use Zone (refer Mixed Use Zone Objective 1 and PDC 2). As for Concept Plan Map MtB/9 – Residential (Meadows), this simply identifies the subject land for "Mixed Use", as per the zoning. This being the case, I can come to no conclusion other than that the proposed development complies with the cited provisions.

15. Historic Conservation Area

15.1 The subject land is located at the western extremity of the prescribed historic conservation area.

15.2 It is proposed that the existing shop/dwelling at 33 Mawson Road be retained, as well as nine (9) of the existing mature trees which are located to the north and east of this building. These trees should serve to preserve (to some degree) the long-established setting in which the building is located, as well as minimise the visual impact of the proposed supermarket building. Further, the proposed adjacent access/egress point on Mawson Road should have minimal/tolerable impacts upon the setting of the existing dwelling/shop, given that it is open in design (i.e. it does not incorporate or introduce any intrusive built mass); it is a design feature which would reasonably be expected in order to enable land within the Mixed Use Zone to be developed (as intended); and it will provide access to off-street car parking for the existing shop/dwelling.

15.3 It is considered that the historical pattern of development within the locality and the design, style and siting of the built form has been compromised to some extent. The old dwelling at number 5 Battunga Road was demolished a number of years ago, and the current vacant allotment contributes nothing in regard to the historical character of the locality and/or town. Further, the more recent developments within the locality (including the hardware/fodder store, the petrol filling station, the motor repair station, the crash repairer and the veterinary clinic) are considered to be at odds with the long existing historical development, in terms of their design, scale and appearance.

15.4 The proposed supermarket building is to be setback against the western property boundary of the subject land, some distance behind and away from any historically significant buildings. This means the proposed new building should not detract from visual appeal of the older buildings, nor should they detrimentally affect the historic and visual setting of the local heritage places and/or the local contributing items/properties.

16. Scale of development

16.1 Green Light Planning has asserted that the proposed development is not small-scale, primarily because it exceeds 250m^2 in floor area (which is essentially only a trigger for the non-complying categorization within the Mixed Use Zone). There are no provisions under the Mixed Use Zone, or elsewhere in the Development Plan, which specifically define what constitutes a small-scale shop. This is therefore a subjective issue. For example, a supermarket with a floor area of approximately 1,470m^2 (as proposed) could conceivably be considered to be small in comparison to the new Woolworths supermarket in Mount Barker (3,600m^2) or the existing Coles supermarket in Victor Harbor (3,876m^2).

16.2 The "Desired Character" statement for the Mixed Use Zone (as it applies to the pattern of development/built form in Meadows) states: *"It is expected that non-residential development will be of a moderate scale and intensity resulting in a visually unobtrusive built form. It is essential that development does not result in uses that undermine the traditional role of Mawson Road as the main street"* (my emphasis). Contrary to the viewpoint expressed by Green Light Planning, the proposed development is considered to be in keeping with the intent of the "Desired Character" statement, as it clearly is of a moderate (average, modest, middling) size and should serve to reinforce and contribute to the role/function of Mawson Road as the main street of the town, given that it has frontage to Mawson Road (which will incorporate an access/egress point).

16.3 Botten Levinson Lawyers has addressed a number of the "submissions" made by Green Light Planning (refer correspondence dated 19 July 2022, pages 3 – 5, GLP and the Development Plan, points 1 – 8). In general, the matters addressed include the intent of the zone; the scale of the proposed land use/supermarket; the impact upon amenity; the "Desired Character" of the zone; the nature of the proposed development; and the hours of operation.

16.4 Interestingly, Botten Levinson Lawyers has also suggested that Mellor Olsson Lawyers and Green Light Planning appear to be seeking to treat the Development Plan as a mandatory document which requires a full compliance. The courts make that clear – the Development Plan is a flexible document being a planners document and is not to be interpreted as a statute.

16.5 Properly understood, the proposal is small scale in the context of the land and the Development Plan.

17. Non-complying development

17.1 The subject development proposal constitutes a non-complying form of development within the Mixed Use Zone because of its scale (i.e. a floor area greater than 250m^2), not because of its form of land use.

17.2 Mixed Use Zone Principle of Development Control 5 states: *"Development listed as non-complying is generally inappropriate"*. This provision is standard and somewhat ambiguous, as the word "generally" provides no definiteness and therefore affords potential for exceptions. It is certainly not the intent of the provision to prohibit shops in the zone, which is seemingly the narrow view taken by Green Light Planning. The Development Plan does not identify and/or specifically address all land use forms, zone by zone. The fundamental principle of planning assessment is that each development application is assessed on its merits, taking into account all relevant Development Plan provisions and prevailing circumstances. That equally applies to the assessment of a non-complying development as referred to in footnote 5 in the Botten Levinson Lawyers letter dated 19 July 2022.

18. Water supply for existing mini-mart

18.1 The applicant company will ensure, as the owner/landlord of the existing shop/dwelling at number 33 Mawson Road, that the lessees/occupants thereof will be provided with an adequate water supply, fit for purposes.

19. Overshadowing

19.1 Mr Whaite suggested that the trees on his property at 31 Mawson Road "*will not be served well by the eastern shading*".

19.2 The shadow diagrams prepared by J B Building Design demonstrate indicate that the proposed buildings will cast very little shadow over the adjacent properties at any given time throughout the year. Clearly, these plans indicate that all neighbouring properties will receive two (2) or more hours of direct sunlight per day, as is the conventional requirement.

On behalf of the applicant company I thank you for affording the opportunity to provide a response to the issues raised in the representations; and trust that my comments and opinions will be of assistance in the assessment of the subject development proposal.

Should you require any additional information or wish to discuss the subject matter, please do not hesitate to contact the undersigned on telephone 0430 348 377.

Finally, please be advised that the applicant company desires to attend any future meeting of the Council Assessment Panel at which the subject development proposal may be considered and respond to any representors, either in person or by agent.

Yours faithfully

Craig Rowe MPIA
C L ROWE AND ASSOCIATES PTY LTD

BOTTEN LEVINSON Lawyers

Our ref: GM/211160

19 July 2022

Mr Craig Rowe
CL Rowe & Associates
Urban and Regional Planners
PO Box 573
GOOLWA SA 5214

By email: clrowe@internode.on.net

Dear Mr Rowe

DA 580/514/21 – Proposed supermarket at 33 Mawson Road and 5 Battunga Road, Meadows

You have sought my advice in relation to the above development proposed at Meadows.

I have sighted the plans and understand that an application was submitted under the *Development Act* for a new supermarket together with associated car parking on the above land. The *land* is unusual in shape with frontage/access from both Mawson Road and Battunga Road. Access from Mawson Road is taken adjacent to the existing Meadows Mini-Mart leading to an open park reserve area where a significant tree is to retained, together with some car parking, and then the new building is at the northern end of that section of the land. The land also has access from Battunga Road and car parking is proposed on that part of the land. Access and car parking can be taken from either road.

The land is within the area of the District Council of Mt Barker. Pursuant to the Development Plan, consolidated on 20 August 2020, the land is located within the *Mixed Use Zone*.

Mawson Road is the main road through Meadows, and to a certain extent Battunga Road falls within that descriptor. Battunga Rd may be seen as the 'second main road' in Meadows. Clearly they are the two main roads in Meadows.

Within the Zone a "shop" of more than 250m^2 is non-complying development. As such, you prepared and submitted a very extensive Statement of Effect dated 23 May 2022 (SOE).

In the SOE you considered all the relevant provisions of the Development Plan and in my view properly contended that despite the development being non-complying, the development was worthy of the grant of Development Plan Consent. In addition to your SOE, you also provided to the Council three expert reports from :

1. Sonus – acoustic engineers;

Level 1 Darling Building
28 Franklin Street, Adelaide
GPO Box 1042, Adelaide SA 5001
t. 08 8212 9777
e. info@bllawyers.com.au
www.bllawyers.com.au

2. Adelaide ARB Consultants - arborists dealing with a number of trees on the land noting that there are a number of *regulated trees* as defined by the Development Act and other vegetation; and

3. Frank Siow and Associates – traffic engineers dealing with car parking and access issues.

Public Notification

As the application is for a non-complying development, the application was treated as a Category 3 development. It was publicly notified.

You instruct that 16 representations were lodged, six in support and the other representations were against the proposal expressing concern as to various things but essentially in relation to traffic and removal of trees.

Further, a representation was lodged on behalf of Meadows Investment Trust (MIT) as the owners of the land at Lot 1003 Mawson Road, Meadows by Green Light Planning (GLP) which also attached an opinion from Mellor Olsson Lawyers (MOL) and a report from Stantec Australia Pty Ltd dealing with traffic matters (Stantec). I will refer to those three documents as the MIT bundle.

The MIT bundle assert that not only should the development not be granted development consent, it must not be granted development plan consent because the development is "seriously at variance" with the relevant provisions of the Development Plan. Under the provisions of the *Development Act*, if a development *is seriously at variance* with the Development Plan, the courts have determined that planning consent simply cannot be granted to such an application. In other words, the section serves as a *prohibition*.

Seriously at variance

You have sought my opinion largely as to the issue as to whether or not the development can be said to be seriously at variance as has been submitted by the MIT.

Before commenting in relation to the submissions made by MIT, you make a very valid point in your SOE that the land use itself is not non-complying. Indeed, it is clear the land use – being for shops – is a desired use within the Zone.

On that basis, the real question is whether, or not, the size of the shop is such that it can be said to be seriously at variance (**SAV**).

Before dealing with the issue I make the following general observations

1. The question then of whether a proposal is seriously at variance with the development plan (**SAV**) is a planning issue for the planning authority not a legal issue for lawyers to determine.

2. Courts only intervene if there is an appeal (in which case the ERD Court itself has to make the same decision) or if there is judicial review of an authority's decision process involving proceedings in the Supreme Court.

3. The fact that a seemingly or at least a potential retail competitor has procured from its advocates an opinion that this development is SAV is not to the point.

The relevant authority itself must decide the issue, having regard to the Act and all relevant matters.

4. The principles set out by the Supreme Court include:

    a. mere variance from the Development Plan is not the test; it is a question of whether there is "…*an important or grave departure in either quantity or degree from the Development Plan*…"[1];(my underlining)

    b. the extent of variance is judged in the factual and historic context in which the project will be implemented[2]; and

    c. the assessment is likely to involve a judgement as to planning merit based on matters of fact and degree[3].

5. Although the Supreme Court was not dealing with SAV in the decision of the Full Court of the South Australian Supreme Court in the matter of *DAC v A&V Contractors*, Justice Kourakis (as he then was), who delivered the leading judgment, said:

    "… planning authorities do not apply the objectives and principles of development plans in a vacuum. First, as I earlier observed, there will often be tension between those objectives and principles. Most of the objectives and principles, as a matter of construction, apply as general rules and not as inviolable prescriptions; they are guidelines within which an expert planning judgment must be made. Most obviously, the particular factual circumstances of a proposed development will inform that planning judgment, and, in particular, affect which of the principles and objectives will predominate. The fact that the subject land in Paradise Developments was not arable but ideally located for tourist accommodation explains the planning judgment made by Jacobs J in that case. The passage in which Jacobs J referred to the Development Plan not speaking to the land was concerned with the factual planning judgment and not a question of principle. Ultimately, an exercise of planning judgment within the ambit scope and purpose of the Act, Regulations and the applicable development plan is required."[4]

    (emphasis added)

GLP and the Development Plan

GLP make reference to various provisions of the Development Plan and also referred to passages from the MOL letter. GLP make a number of submissions and I do not propose to deal with all of them. However, I comment in relation to several of the points:

1. GLP assert that there is a "clear and obvious disconnect between the policy intent of the Council's Development Plan, the intent of the Mixed-Use Xone and the land use proposal".

    With respect, I disagree. The objectives specifically talk about commercial activities in the Zone together with reference to small-scale shops.

[1] *Courtney Hill Pty Ltd v SAPC* (1990) 59 SASR 259 at p261; *Mar Mina (SA) Pty Ltd v City of Marion & Others* (2008) 163 LGERA 24 at [33].
[2] *Courtney Hill Pty Ltd v SAPC* (1990) 59 SASR 259 at p263.
[3] *City of Kensington & Norwood v DAC & Boscaini Investments PL* (1998) 70 SASR 471 at p480.
[4] [2011] SASCFC at [77]

GLP asserts that because of the size of the shop it cannot be properly regarded to be small-scale.

There is no specific text to identify what is meant by "small – scale". It is a question of fact and degree. Whilst the Development Plan provides that a shop of more than 250m² is non-complying shop, that does not mean that a larger shop cannot be approved. Indeed, the courts have made it clear that the fact that the development is non-complying does not alter the approach to the development. It is still to be assessed against the relevant provisions on its merits[5]. As noted, a shop is a desired use in the Zone.

2. GLP then state the proposal is in conflict with the range of light and service industry activities as is discussed in Desired Character . However, the whole of the Desired Character makes broader reference to a "ongoing opportunities for local employment,… and commercial ventures for local needs and passing traffic. A supermarket provides employment and serves local needs!

   Further the Character Statement is somewhat confusing in that it goes on to say:

   > Retailing in the zone will be limited to that which is ancillary to the activity on site, and will not displace retailing of the traditional main streets of Nairne and Meadows.

   The simple fact is that Mawson Road and Battunga roads are the main streets in Meadows. That statement makes it clear where the retailing is to take place in Meadows – in the traditional main street. The proposal is consistent with that very clear intent as expressed in the Development Plan!

3. The supermarket is not overly large. It is obviously a *small-scale supermarket* in comparison to many supermarkets in Metropolitan Adelaide which have 3000 – 4000 m² of footprint, sometimes even larger.

4. The nature of the development is one where the supermarket will service the local needs and passing traffic. Currently, there is a very small mini-mart with limited hours and a very limited floor area. It is difficult for "locals" to do a *complete weekly shop* at the mini-mart. It serves more as an emergency type situation, often found in "service stations" in Metro Adelaide. The size simply provides for a better range of goods and products for the local community.

5. GLP then make further reference to industrial type activities emphasising those references wherever found in the Development Plan. However, that is a false approach because the Development Plan also clearly supports development of the type contemplated. This is highlighted in the Desired Character as discussed above and also in PDC 2 under the heading of “land use” where again express reference is made to *shop* and retail development not hindering the function of the main road of Meadows.

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5 It is well-established that, although a non-complying development is subject to a number of particular procedural requirements, in other respects it needs to be assessed on its merits as a matter of planning judgment - PACZEK & ANOR v CITY OF CHARLES STURT & ANOR [2012] SAERDC 42 (24 July 2012) citing the Full Supreme Court in Klein v DC Mt Barker

It is noted that that principle is qualified. However, with respect to the author the qualification makes no sense given the clear desire for *shopping* to be established in the Main Street of Meadow , there being two references in the Development Plan with shops being located in and therefore an appropriate use on the main street. Typically that occurs in virtually all small country towns.

6. GLP next make reference to the list of non-complying development and on the basis that a shop with a gross leasable area is non-complying where it is more than 250 m² in area, it stands that the development is inappropriate. That is not the correct approach. I refer to footnote 5 above.

7. GLP make reference to the extended hours of the supermarket being contrary with PDC 15 and that the proposal will have a detrimental effect on the amenity. With respect, the approach taken is too narrow. The development as a whole must be considered in the context of the Development Plan as a whole and the locality conditions. There is a clear desire for non-residential uses to be established in this Zone – the name itself makes that clear – a Mixed-Use Zone. Further shops are specifically sought. The hours are basically 'day-time hours' for the purposes of the EPA Noise Policy – day = 7am to 10pm and night = 10pm to 7am.

8. Whilst GLP make comment about the proposal having a detrimental effect on amenity, there is no specific discussion about that. Rather, the report considers a number of other matters including advertising centres, development, orderly and sustainable development, significant trees etc and simply asserts that the proposal is not consistent with those provisions. That is a matter for the planning authority to determine as a matter of planning judgement.

   It is clear that the assertion the proposal will have at any adverse, or detrimental, impact on the amenity is not made out. There is a report from Sonus, acoustic engineer, that the proposal complies with the relevant provisions of the EPA Noise Control Policy (and the Development Plan) and there is a detailed report from a traffic engineer. Whilst MIT have submitted a traffic report from Stantec, its approach is to "nit-pick" the report of Mr Siow without making it clear why the proposal cannot be established. Clearly safe and convenient access is available and an adequate number of car parks are proposed. The turning circles prepared by Mr Siow show that vehicles including service vehicles are able to service the supermarket building.

   Access points are available from both Mawson Road and Battunga Road. If slight changes are required in that respect, they can readily be accommodated.

   Properly understood, the report from Stantec does not set out any proper basis for the refusal of that application. At best – and this is not conceded – the proposal can be modified with slight alterations so as to satisfy the issues raised by Stantec. In short the Stantec report does not state the proposal is fundamentally bad and must be refused on 'traffic grounds'.

9. GLP also make reference to the opinion from MOL that the proposal is SAV.

Is the proposal seriously at variance?

The MOL letter makes reference to the proposed development and addresses the question of whether or not the proposed development is seriously at variance with the

Development Plan. There is then a discussion as to what is meant by *seriously at variance* and whether the proposal is seriously at variance. I have set out above the issues that need to be considered (generally as set out by MOL) and the approach to the question whether a proposal is SAV.

For the reasons that follow, I disagree with the opinion put forward by MOL.

First it is noted that MOL do not make reference to the most recent authority on the question of *seriously at variance* being the decision of Justice Parker in *Khabbaz & Anor v the State Planning Commission & Ors. [2022] SASC11*.

In that case, there was a challenge to an approval issued by the State Planning Commission and a subsequent decision following an amendment to the Development plan. Amongst a range of complaints Mr Khabbbaz and his neighbours contended that the proposed development was seriously at variance with the Development Plan. That issue was considered by Justice Parker. In commencing his discussion about that topic, His Honour said:

> *235 It was necessary for SCAP to take two steps in determining whether it should grant DPC. The first step was to assess whether the development was seriously at variance with the DP as required by section 35 (2) of the Development Act. The second step was to assess the development against the DP and to decide whether there was sufficient planning merit to warrant the grant of DPC in accordance with section 33 (1) (a).*
>
> 236 *The Court is not entitled to substitute its own view as to whether the proposed was seriously at variance with the DP. The task of the Court in conducting a judicial review is to examine the assessment conducted by SCAP that led to its decision that the development was not seriously at variance with the DP. In order for RJK to establish that the variance decision was illegally unreasonable, the Court must be satisfied that a reasonable planning authority acting reasonably could only have found that the proposed development was seriously at variance with the DPA*

That discussion is most important as to the approach to the question of whether a development is seriously at variance. The test is simple is

Can a reasonable planning authority acting reasonably only but conclude that the development is seriously at variance?

In this instance, for the reasons above and for the reasons that follow, given the land use is desired in the Zone with in particular shopping development sought on the *main street* of Meadows, it is beyond comprehension to take the view that no reasonable planning authority acting reasonably could not grant consent to the proposed development. Put another way it cannot be said that a reasonable planning authority acting properly and reasonably in accordance with the law *must* conclude the development as seriously at variance.

The MOL letter makes specific reference to the decision of the Supreme Court in *Mar Mina (SA) Pty v the City of Marion* and then goes on to say that two grounds arise upon which this proposal can be said to be seriously at variance. They are:

1. *The numerous departures from the Development Plan such that the proposal is contrary to the Development Plan as a whole and that that constitutes an important or great departure; and*

2. *There is a single or a few departures which are so contrary to the Development Plan that the result is an important or grave departure from the Development Plan*.

That discussion appears after reference has been made in the MOL letter to the decision of the Full Supreme Court in *Upham v Grand Hotel (SA) Pty Ltd*.

Justice Parker made reference to the *Mar Mina* decision and also the *Upham* decision. In particular, as to the *Upham* decision, His Honour reminded all of the following:

> 261 *The Full Court observed in Upham that the Court has a limited role in reviewing the exercise of a planning discretion. That principle must be constantly borne in mind. It is not the role of the Court to substitute its own decision for that of the planning authority by exercising the discretion which the legislature has conferred upon the authority. A decision made by a planning authority under what later became s35(2) of the Development Act involved consideration of matters of fact and the exercise of a substantial element of judgment. Care must be taken to avoid drifting into a consideration of the merits of the decision rather than the process by which the decision was reached.* (my emphasis)

With respect, the approach taken in the MOL letter is to refer to provisions of the Development Plan with which the proposal may be seen to be in conflict with or not fully consistent with. That approach is expressly contrary to what the Supreme Court said in the most recent authority on the question of SAV as set out above.

In short, the correct approach is to consider the development as a whole having regard to the whole of the Development Plan, how the proposed will sit within the locality and the conditions in the locality and to be judged in the factual and historic context in which the project will be implemented. It is not for the lawyers to express their view about that matter. Rather it is for the planning authority to determine acting reasonably and properly whether a proposal is SAV.

In my clear view having regard to the proposal and the Development Plan a reasonable planning authority can reasonably and properly conclude that that the proposal is not one that must be refused because it is SAV. Indeed, Justice Parker in the *Khabbaz* matter at [402] in considering the SCAP assessment of the development based on the agenda report before it His Honour said:

> *First, SCAP had the benefit of the reports provided by Future Urban [for the applicant] and by MasterPlan [for the neighbour Mr Khabbaz]. Furthermore, the matters to be considered by SCAP were not confined to the seriously at variance" question on a particular issue but involved a wide range of discretionary judgments in relation to multiple provisions of the DP, some of which tended to have a countervailing effect. In other words, it was necessary for SCAP to make a carefully considered evaluative planning policy judgment after weighing a series of "pros" and "cons".*

That passage sums up the correct approach that needs to be taken. Again, with respect the MIT bundle is not in accordance with that approach.

MOL letter and consideration of the Development Plan

The MOL letter makes reference to the Development Plan being a document that cannot be ignored. There is no issue with that. Indeed, as quoted above, that is very clear from the passage in [402].

Respectfully, in my opinion, there are clearly provisions in the Development Plan which support the use proposed noting that there is already a shop within the Zone, and indeed other shops within the Zone. The Zone 'seeks' shopping in the main street of Meadows.

Further it might be said the opinion from MOL and from GLP are seeking to treat the Development Plan as a *mandatory document* which requires a full compliance. The courts make that clear – the Development Plan is a flexible document being a planners document and is not to be interpreted as a statute.

Conclusion as to seriously at variance

Thus, it is my conclusion on the question of

1. seriously at variance; and

2. consideration of the Development Plan

that a proper consideration of the Development Plan reasonably and properly entitles the planning authority to form the opinion that the proposed development is one which can be granted consent. A reasonable planning authority acting reasonably can properly form the opinion that the development is one that can be approved – and is not one that must be refused.

It is not a case of for example an industry being established in a residential Zone or vice versa. The development is for a shop in a Mixed-Use Zone. The circumstances of the locality are relevant. The circumstances of this locality are that shops are appropriate. The Development Plan seeks that goal. The size of the supermarket does not of its own mean the application must be refused. It is a question of a full consideration of the Development Plan.

The seriously at variance issue is a matter for the relevant authority to determine.

The matters recited above can be taken into account by the relevant authority to properly conclude that the proposal is not one that must be refused.

Stantec report

I have already made comment in relation to the Stantec report. I do not propose to make any further comments in relation to same.

Regulated Trees

Both GLP and MOL make reference to the removal of *regulated trees*.

That is a matter that falls within the planning judgement to be exercised by the planning authority. It is clear that a balance is to be drawn between appropriate or reasonable development as anticipated by the development plan and the retention of native vegetation and regulated trees. Perhaps the most relevant and important decision is that

of then Senior Judge Trenorden in *Summers v City of Unley* [2002] SAERDC 113. Her Honour made it clear of the *balance* sought by the Development Plan. Her Honour said:

> *It could not be the intended consequence of the Development Plan provisions that every tree, regardless of species, characteristics, benefit provided, contribution to amenity, should be retained, unless it is diseased and will die, presents a safety risk to persons, buildings or valued structures…that cannot be the intended consequence of the Development Plan provisions; one can readily imagine examples to show how ridiculous such a result would be, and it would fly in the face of the objects of Development Plans.* at [32]

Reference to the Planning and Design Code

It is noted that in your Statement of Effect, you made reference to the Planning and Design Code. MOL have stated that the Code has no relevance to the assessment of the proposed development. I agree.

However, the reference to the Code does not detract from your assessment of the development against the relevant provisions of the Development Plan as is required for a Statement of Effect in accordance with the Development Regulations for a non-complying development.

The relevant planning authority should not take into account those references and indeed properly understood, there is no need to do so because the proposal is one which can be granted planning consent after exercising a planning judgement having regard to the relevant provisions of the Development Plan.

I understand that you propose to provide this letter to the planning authority as part of a response to representations. I have no objection to you doing so.

Yours faithfully

George Manos
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BOTTEN LEVINSON Lawyers

Our ref: GM/222232

22 July 2022

Mr Craig Rowe
CL Rowe & Associates Pty Ltd
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By email: clrowe@internode.on.net

Dear Craig

DA 580/514/21 – Proposed supermarket at 33 Mawson Road and 5 Battunga Road, Meadows – Trade competition raised by representors

A number of representors have expressed concern that the proposed supermarket will have a detrimental impact upon the viability of small businesses in the town (e.g. the mini-mart, bakery and butcher. The representors have raised the issue of trade competition.

In essence, you have asked whether or not the SA planning system accommodate objections based on fears of trade competitors?

The issue of trade competition has been considered by the High Court in the *Kentucky Fried Chicken Pty Limited v Gantidis.* That decision has been applied in South Australia. Based on the decision essentially the Courts have adopted the position that trade competition is not part of the SA planning system.

I provide some examples. The first case I refer to related to a new motel at Coober Pedy. The ERD Court said:

> *Stated simply, the proposed motel, should it proceed, will be a trade competitor with the appellant. It has been long recognized that trade competitors have the same rights to object to proposed developments as do other citizens, and, should the need arise, to appeal against any approval granted with respect to such development. However, it has been equally long recognized that any such objection or appeal should be based on proper planning grounds rather than upon grounds of trade competition. This was well expressed by Stephen J in the matter of Kentucky Fried Chicken Pty Limited v Gantidis [1979] HCA 20; (1978) 140 CLR 675 at 687 wherein His Honour said:-*

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> *"If the shopping facilities presently enjoyed by a community or planned for it in the future are put in jeopardy by some proposed development, whether that jeopardy be due to physical or financial causes, and if the resulting community detriment will not be made good by the proposed development itself, that appears to me to be a consideration proper to be taken into account as a matter of town planning. It does not cease to be so because the profitability of individual existing businesses are at one and the same time also threatened by the new competition afforded by the new development. However, the mere threat of competition to existing businesses, if not accompanied by a prospect of a resultant overall adverse effect upon the extent and adequacy of facilities available to the local community if the development be proceeded with, will not be a relevant town planning consideration".*

Here it is being said that the mini-mart and the bakery may have to close down if the proposal was approved. If those services were not replaced that would result in a loss of facilities available to the community. However the new supermarket would in effect replace those services so that overall there will be no loss to the community.

The next case I refer to concerned a dam. At issue was whether or not namely the planning system was intended to and, conferred protection for existing users. The Court in *Villiers and The Barossa Council* said of the planning system, referring to the *Kentucky Fried Chicken* case said

Its purpose is not to protect people who have made investments which, later in time, may appear to be either unwise or overly ambitious, particularly where the threat to such investment comes from a neighbour whose proposed use of land is not challengeable on ordinary planning grounds.

…

Stated succinctly, the purpose of the planning system is to ensure that development within the State proceeds in an orderly, safe and economic manner, and in a manner which is consistent with the principles of good planning, the provisions of the Development Plan and the law generally. The achievement of these objectives is the reason why citizens are required to seek development approval prior to proceeding with their developments. The extent to which a developer is required to exercise restraint in the interests of either his neighbours or the community generally is prescribed by the planning system itself. Such restraints include matters such as the preservation of the amenity of the locality, overlooking, noise omission , pollution and appearance. However, we do not think that such restraints extend to the point where a land owner is precluded from using his or her land for a purpose envisaged by the Development Plan solely on the ground that such use may have a detrimental impact on the potential for development or the economic plans or aspirations of a near neighbour.

The Court went on to say:

> *By way of analogy, we refer to arguments, sometimes advanced, that a particular development should not proceed because it will have an undesirable impact upon the business of a trade or commercial competitor. Take, for example, a person who desires to open a small shop in a country town - perhaps a delicatessen. The person assesses the potential of the delicatessen, comes to the conclusion that trade will be good, applies to the Council and is granted development approval to build the shop and open the delicatessen. The capital invested may be substantial. Two years later, along comes another person and decides, also, to open a delicatessen. An application is made to the Council for consent so to do. Whilst the operator of the first delicatessen may have real and justifiable concerns with respect to the impact which the second delicatessen will have upon the trade and business viability of his delicatessen, he has no right to object simply on the basis of trade or competition grounds. He may object on planning grounds. He may object on the grounds that, if there are two delicatessens in the town, both will go broke and the town will be left without a delicatessen - ie, the community will be worse off if the second delicatessen proceeds. However, he cannot object on the basis that he was there first or that a second delicatessen will send him broke and thus reduce the value of his investment.*

Finally, I refer to a challenge to a child care centre by a competitor. The ERD Court struck out the appeal as the Court found appeal was filed for an improper purpose. The Court said:

> *On the basis of the appellant's representation, its notice of appeal, the documents tendered on its behalf and Mr Cole's argument, I am satisfied that this appeal has been instituted solely for an improper purpose, namely the delay or prevention of the establishment of a child care centre which will compete for business with the appellant's existing, and expanding, child care centre. Mr Cole pressed for an opportunity to seek out and obtain evidence to adduce at a full hearing on the merits. It seems to me that to afford him that opportunity would put the parties to considerable wasted expense. It would also partially achieve the appellant's purpose in delaying the proposed development. No proper planning basis for an appeal is apparent on the material before me. Mr Cole has not been able to show that the appellant is motivated by any proper purpose in the institution of this appeal. In all of the circumstances, I am satisfied that it is appropriate to exercise the power conferred by* s.17(4)(a)(ii). *Pursuant to* s.17(4)(a)(ii) *the appeal will be dismissed.*

(See ABC Developmental Learning Centres Pty Ltd v City of Tea Tree Gully 2004).

Conclusion

In short the South Australian planning system does not allow for objections based on trade competition if there will be no resultant loss to the community. In this instance if a business of a ‘trade competitor’ were to close don the supermarket will provide ‘replacement facilities’ meaning there will ‘be no resultant detriment to the community’.

The objectors can of course object on ’planning grounds’. I have advised that having considered the Development Plan the proposal is appropriately located in seeking retail shopping in the main street(s) of Meadows.

Yours faithfully

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25 July 2022

Mr Craig Rowe
C L Rowe & Associates
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Dear Mr Rowe,

3-5 BATTUNGA ROAD & 33 MAWSON ROAD, MEADOWS
PROPOSED RETAIL DEVELOPMENT
RESPONSE TO REPRESENTATIONS

As requested, we have reviewed the representation received following public notification of the proposed development by Council. We respond to the traffic and parking matters raised in the representation by Stantec consultants below. For convenience, we have provided our responses based on the subject matter headings and numbered points in the Stantec report.

Some amendments to the car park layout have been proposed to address several of the concerns raised in the representation.

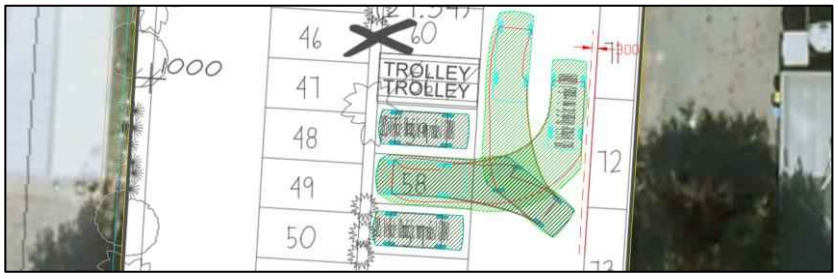
Proposed Development

- We note that Stantec agrees that the parking provision will meet the requirements of the Development Plan.
- We note that our directional split of traffic generated is considered by Stantec to be a reasonable assumption for the assessment.

Car Park

1. We can confirm that the car park would be designed to User Class 3A, ie minimum 6.2m aisleway with 2.7m by 5.4m spaces (right angled spaces).

2. The parallel parking spaces would be 2.1m wide by 5.4m long (unobstructed end spaces) and 6.1m (intermediate spaces) which would be consistent with AS/NZS 2890.1:2004. The 7 parallel spaces are proposed to be allocated to staff parking only. Minimal parking turnover would occur from these parallel spaces. While we consider the aisleway dimension of 6.2m to be acceptable for access to the parking spaces (see swept path diagram below), the aisleway has now been widened to 6.7m in accordance with AS/NZS 2890.1:2004.



3. The parallel parking space has a 0.3m clearance to the boundary for door opening purpose, consistent with Clause 2.4.1 b (ii) of AS/NZS 2890.1:2004.

4. The subject site is of an irregular shape. The proposed development is a relatively small supermarket. The proposed aisleways are not excessive in length. Speeds would be expected to be relatively low. Separate pedestrian footpaths are not typically provided within shopping centre car parks. The use of aisleways to travel between parked cars and the building is not an uncommon arrangement. Disabled parking is accommodated in front of the building. Some of the parking spaces in front of the building could be allocated for use by 'parents with children' to improve convenience for such users. This would be a management issue by the supermarket.

5. Off-street car parks are typically signposted with speed limits of 10 km/hr to 20 km/hr. It is proposed that Give Way signs/lines would be provided on the Battunga Road aisleway and the aisleway leading from the loading dock at the 4-way intersection proposed. The sight distance between the Battunga Road approach vehicle and the Mawson Road approach would be approximately 15m, which would exceed the stopping sight distance calculated with reference to Figure 3.2 of AS/NZS 2890.1-2004 (estimated at 12.7m for a speed limit of 20 km/hr).

6. Sight distance addressed as per (5) above.

7. Within car parks, drivers typically give way to other traffic when turning within car park aisleways.

Loading Dock & Heavy Vehicle Access

8. The proposed development is a relatively small supermarket. Based on advice provided by the Applicant, the service vehicles anticipated for the development are listed in the Table below.

Large rigid truck (chiller or normal)	4 times per week
Large rigid truck (general goods)	6 times per week
Small to medium truck (milk)	3 times per week
Small to medium truck (local milk)	2 times per week
Small to medium truck (bread)	2-3 times per day
Small truck (refrigerated mixed goods)	3 times per week
Small truck (fruit and veg)	6 times per week
Utes (small goods)	3 times per week
Medium truck (rubbish removal)	2-3 times per week

9. The predominant service vehicle envisaged are small to medium trucks. The servicing is of an infrequent nature given the relatively small size of the supermarket. The daily average (over 7 days) of service vehicles would only be approximately 6 to 7 vehicles per day, many of which would be small service vehicles. The large rigid trucks would only service the site 10 times per week. Service vehicles would be appropriately managed by the supermarket to arrive outside of peak hour periods. 6 to 7 service vehicles per day would be barely noticeable.

10. The minimum width of two-way aisleways within car parks is 5.5m as per AS/NZS 2890.1:2004. While we are satisfied that the proposed aisleway of 6.2m would suitably accommodate the infrequent service vehicle movements, the proposed aisleways which would be used by service vehicles have now been widened to 6.5m, which would satisfy AS 2890.2:2018.

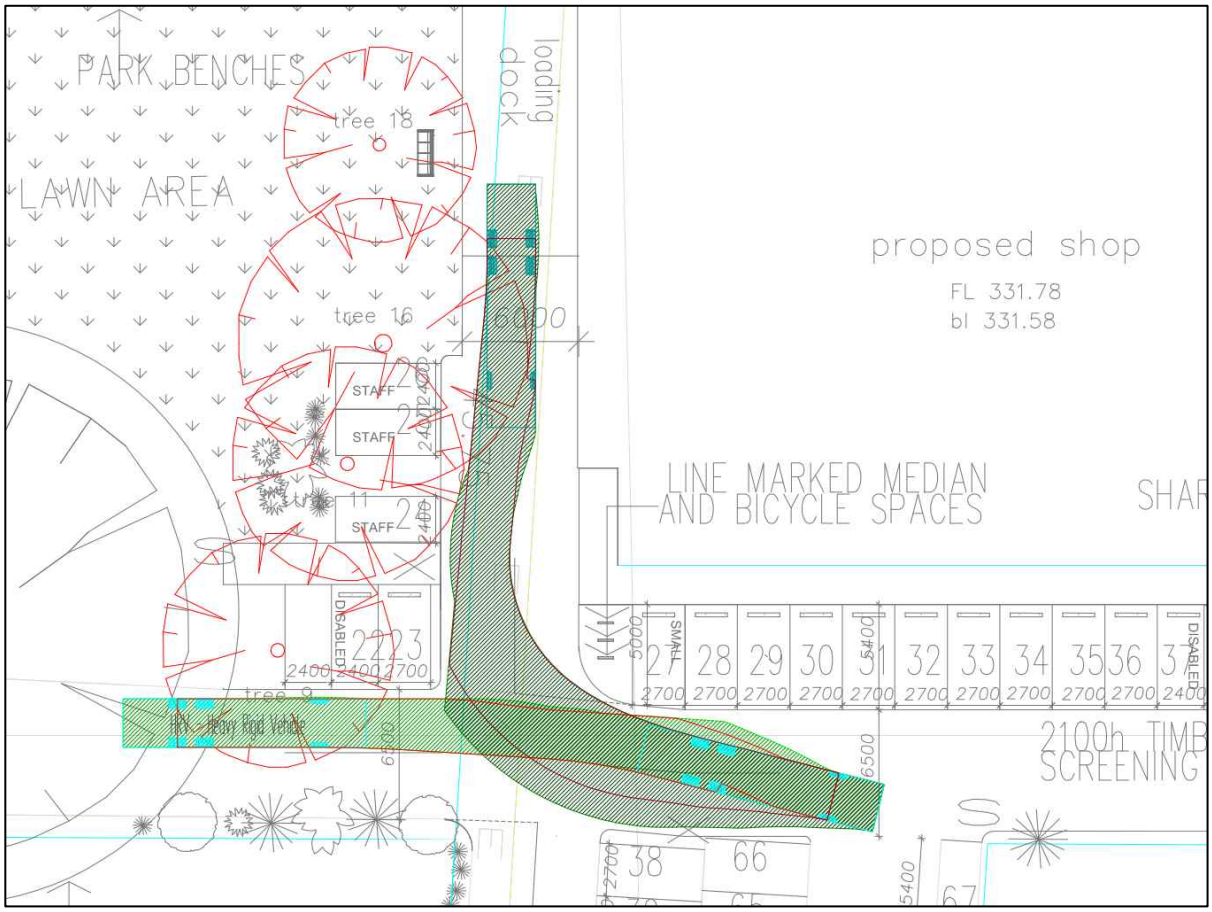
11. There is no requirement for 7.0m wide aisleways to be provided, even though some supermarket sites may choose to do so.

12. We have previously provided an assessment of the service vehicle requirements in Section 3.0 of our traffic report of 23 May 2022, with swept path diagrams included, in which we expressed our opinion

that servicing and fire access requirements would be satisfactorily accommodated by the proposed layout. We maintain our opinion.

13. The sight distance issue has been addressed in point (5).

14. The swept path diagrams shown for the HRV truck would be clear of all kerbs. Sufficient manoeuvring clearances could also be provided (minimum of 0.3m as per AS2890.2:2018).



15. The reverse movement of the truck would involve a simple manoeuvre whereby the truck driver would easily be able to position the truck into the position of the loading area, unlike the description provided in the Stantec report.

16. There is no requirement for bicycle parking to be provided for the development. The bicycle rail closest to the aisleway could simply be removed. In any event, the site can readily accommodate a bicycle parking area.

Access Points

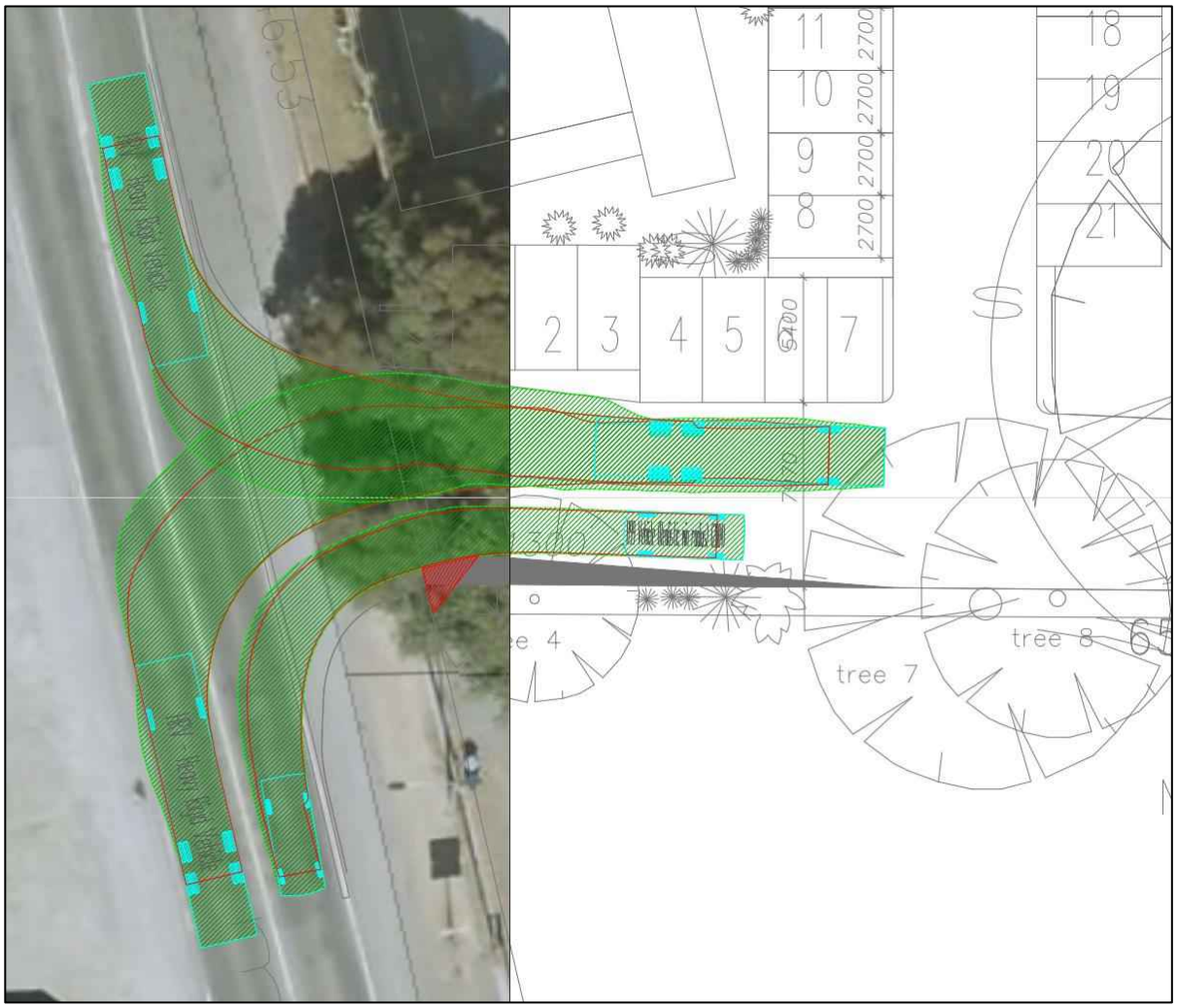
17. Our SIDRA analysis for the proposed access points was included in our traffic report of 23 May 2022.

18. We have detailed our initial consultation with the Department for Infrastructure and Transport (DIT) in Section 5.0 of our traffic report of 23 May 2022. We have also detailed our SIDRA analysis and our assessment against the site conditions and requirements from the relevant Austroads guidelines for DIT consideration, given that Battunga Road and Mawson Road are DIT roads. We maintain our position.

19. See point (18) above.

Mawson Road Access Point

20. The HRV truck would only access the site infrequently - see point (8) above. The Mawson Road driveway entrance would be appropriately splayed and line-marked to accommodate the HRV truck manoeuvres. The minimum manoeuvring clearance of 0.3m each side would be provided for the truck entering from Mawson Road.



21. The proposed Mawson Road driveway entrance is not excessive in width.

22. We note that there is currently no footpath on Mawson Road adjacent to the proposed driveway. However, conservatively assuming that a footpath would be located abutting the boundary, the exit alignment has been adjusted to enable the 2.0m by 2.5m pedestrian sight triangle to be satisfied – see diagram in point (20).

23. The adjusted swept paths with the clearance distances indicated is shown in point (20).

24. Adequate separation distance would be provided to the existing driveway to the east.

25. The edge line on Mawson Road is located in excess of 5m from the boundary. This would provide additional distance for the exit driver to manoeuvre out to view on-coming traffic prior to joining the main road. As is the case with many new developments, in the event that parked vehicles were to cause obstruction to car park access, Council could implement parking controls to satisfactorily manage such an issue if it arises.

Battunga Road Access Point

26. Adequate clearance is provided between the HRV truck exiting and incoming vehicles.

27. The HRV truck left turn exit movement does not cross the centreline.

28. One parking space would be deleted to widen the driveway slightly to allow the entering and exiting swept paths to be accommodated. Sufficient carparking would remain.

29. There is no pedestrian footpath on the side of the development. The Council's footpath is located on the opposite side.

30. The proposed layout of the Battunga Road access point is appropriate and would cater for the traffic movements anticipated.

31. The adjusted swept paths with the clearance distances indicated is shown in point (26).

32. The property on the southern side is separated by several metres from the development boundary by trees and stormwater culvert pipe present. The site also appears to have large manoeuvring areas within

its land. There would be adequate separation distance between the driveways to enable satisfactory access to be maintained for this property.

33. The edge line on Battunga Road is located in excess of 6.5m from the property boundary. This would provide more than needed distance for the exit driver to manoeuvre out to view on-coming traffic prior to joining the main road. As is the case with many developments, in the event that parked vehicles were to cause obstruction to car park access, Council could implement parking controls to satisfactorily manage such an issue if it arises.

Possible Intersection Change

34. We recently reviewed the Council concept for the intersection upgrade on 14/6/2022 and provided comments to the Applicant. We noted that the proposed Battunga Road access point would not be affected by the Council proposal. We also noted that the painted island proposal on Mawson Road would be a beneficial outcome for the proposed access point as it could potentially accommodate a right turn lane into the development with minor amendment to the line marking. We understand that the intersection upgrade is conceptual only at this stage and the Applicant would work closely with Council to ensure that the proposed development would integrate appropriately with the future intersection layout if it were to occur.

35. We have noted a 'hand sketch' pedestrian crossing ramp close to the proposed Mawson Road access point, which we suggested be relocated further west.

In summary, we are of the opinion that our responses above have satisfactorily addressed the traffic and parking matters raised in the representations.

Overall, we are satisfied that there are no traffic or carparking issues that prevent the application from being approved.

Yours sincerely,

Frank Siow

FRANK SIOW
Principal Consultant

Government of South Australia
Department for Environment and Water

Coast and Marine Branch
81-95 Waymouth Street
Adelaide SA 5000
GPO Box 1047
Adelaide SA 5001
Australia
Ph: +61 8 8463 6850
www.environment.sa.gov.au

DEW-D0017860

5 July 2022

Michael Dickson
Senior Planner – City Development
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Michael

Development Application No:	580/514/21
Applicant:	Kevjohn Pty Ltd
Proposal:	Construction of a shop (supermarket) and car parking, including removal of three (3) significant trees (1 x manna gum, 1 x flooded gum, 1 x Tasmanian blue gum) and six (6) regulated trees (1 x flooded gum, 3 x manna gums, 2 x river red gums), and associated fencing, two (2) pylon signs, building signage, water storage tanks, landscaping and infrastructure (non-complying development)
Location:	5 Battunga Road & 33 Mawson Road, Meadows, CT 5067/654, F18522 A537 & CT 5222/619, F5444 A529
Relevant Authority:	Mount Barker District Council
Date received by DEW:	10 June 2022

Thank you for referring the above mentioned development application to the Minister for the time being administering the *River Murray Act 2003* in accordance with Section 37 of the *Development Act 1993* and Schedule 8, Item 20 of the *Development Regulations 2008*.

The proposed development is within a River Murray Protection Area and has been assessed against the Objects of the *River Murray Act 2003* and its Objectives for a Healthy River Murray. These Objects and Objectives include consideration of potential impacts on river health, environmental flows, water quality and the human dimensions of the River Murray system.

ASSESSMENT

River Health
The 'river health' Objective for a Healthy River Murray seeks to maintain, protect and restore the key habitat features of the River Murray system in order to enhance ecological processes, and to avoid or overcome barriers to the migration of native fauna. A fundamental element in achieving this objective is the conservation of remnant native vegetation, which is provided for through the administration of the *Native Vegetation Act 1991* (a 'related operational Act' under Section 5 of the River Murray Act). The Mount Barker District Council Development Plan similarly encourages the retention of native vegetation in association with new development.

The development application proposes the removal and/or trimming of native vegetation (i.e. naturally sown and indigenous to the region, or planted as a requirement of a Significant Environmental Benefit) to facilitate the proposal. The applicant will therefore be required to submit an application to the Native

Vegetation Council for the clearance of native vegetation associated with the development, pursuant to the *Native Vegetation Act 1991* and its Regulations. This relates to any trees that will be impacted for the construction of the proposed buildings and associated development (including carparks, reserve areas, etc), as well as any native vegetation that would be within 20 metres of the development. The clearance application will be considered under *Native Vegetation Regulation 12; Schedule 1 Clause 33 – 'Dwellings and Buildings'*. Further, it is likely that a data report prepared by an accredited consultant report would be required. A note to this effect is recommended.

The use of locally indigenous species in any landscaping, screen planting or revegetation activities associated with the development would assist in the stabilisation of soils, provision of habitat for native fauna and the enhancement of the natural character of the locality.

Environmental Flows
It is considered that the proposal is unlikely to adversely impact on the natural flow regime of the River Murray system in the event of a flood. However, it should also be ensured that the development does not impede the flow of any natural drainage lines that run toward the river system.

Water Quality
Provided that the potential for erosion, sedimentation and uncontrolled stormwater runoff is managed appropriately during and post construction, the proposed development is unlikely to adversely impact water quality. The connection of any new roof areas to a water storage tank or tanks would assist in the management of stormwater on site.

Human Dimension
The River Murray and its tributary and overflow areas have abundant evidence of Aboriginal occupation. The subject land may therefore contain Aboriginal sites, objects or remains given its proximity to the River Murray system. The applicant should be advised of relevant obligations under the *Aboriginal Heritage Act 1988*.

RESPONSE

The Planning Authority is advised that the Minister for the time being administering the *River Murray Act 2003* has no objections to the application, subject to the applicant fulfilling the requirements of the Native Vegetation Act prior to the clearance of any native vegetation on the site.

In accordance with section 37(4)(b) of the *Development Act 1993* and Schedule 8, Item 20 of the *Development Regulations 2008*, the Relevant Authority is directed to attach the following condition to any approval:

Conditions

1. During any works or construction activities associated with the development, the subject land must be managed to prevent erosion and pollution of the site and the environment, including keeping the area in a tidy state and ensuring any waste materials are appropriately contained, to ensure no pollutants (including excavation or fill material) enter the River Murray system.

It is recommended that the following notes be attached to any approval:

Notes

1. All native vegetation on the site is protected under the *Native Vegetation Act 1991* and *Native Vegetation Regulations 2017*. Accordingly, the applicant is required to submit an application to the Native Vegetation Council for the clearance of any native vegetation that will be impacted by the construction of the development (including building(s), carparks, reserve areas, etc), as well as any

native vegetation within 20 metres of that building or other buildings. Such an application would be considered under *Native Vegetation Regulation 12; Schedule 1 Clause 33 – Dwellings and buildings*. A requirement of this regulation is that clearance is avoided and minimised as far as practicable. For further information, please contact the Native Vegetation Council on telephone 8303 9777 or visit: http://www.nvc.sa.gov.au.

2. The applicant is encouraged to incorporate locally indigenous plant species into any landscaping, screen planting or revegetation activities at the site to enhance the natural character of the locality, stabilise soils and provide habitat for native species. For information on appropriate species to be planted, please contact State Flora at Bremer Road, Murray Bridge on telephone 8539 2105, or within Belair National Park on telephone 8278 7777 or visit: http://www.stateflora.sa.gov.au.

3. The River Murray and many of its tributaries and overflow areas have abundant evidence of Aboriginal occupation and Aboriginal sites, objects or remains may be present on the subject land. Under section 20 of the *Aboriginal Heritage Act 1988* (the Act), an owner or occupier of private land, or an employee or agent of such an owner or occupier, must report the discovery on the land of any Aboriginal sites, objects and remains to the Minister responsible for the administration of the Act, as soon as practicable, giving the particulars of the nature and location of the Aboriginal sites, objects or remains. It is an offence to damage, disturb or interfere with any Aboriginal site or damage any Aboriginal object (registered or not) without the authority of the Minister for Aboriginal Affairs and Reconciliation (the Minister). If the planned activity is likely to damage, disturb or interfere with a site or object, authorisation of the activity must be first obtained from the Minister under Section 23 of the Act. Penalties may apply for failure to comply with the Act. For further information visit: http://taawika.sa.gov.au.

4. The applicant is advised of their general duty of care to take all reasonable measures to prevent any harm to the River Murray through his or her actions or activities.

In determining this response I have had regard to, and have sought to further, the Objects and Objectives of the *River Murray Act 2003*.

These conditions and notes include consideration of social and cultural issues and they are applied in order to help achieve the balance between the economic and environmental sustainability of the regions that include the River Murray system.

Any comments or queries relating to the contents of this correspondence, and a copy of the decision notification form, may be directed to: DEW.RiverMurrayReferrals@sa.gov.au.

Yours sincerely

Daniel Walton
Coast and River Planner, Coast and Marine Branch
Delegate for the
Minister for the time being administering the *River Murray Act 2003*

In reply please quote: 2022/02412, ID: 452
Enquiries to: Reece Loughron
Telephone: 08 7109 7876
E-mail: landusecoordination@sa.gov.au

Government of South Australia
Department for Infrastructure and Transport

TRANSPORT PLANNING AND PROGRAM DEVELOPMENT

Transport Assessment

GPO Box 1533
ADELAIDE SA 5001

ABN 92 366 288 135

16 August 2022

Mr Andrew Houlihan
District Council of Mount Barker
PO Box 54
MOUNT BARKER SA 5251
ahoulihan@mountbarker.sa.gov.au

Dear Mr Houlihan,

SCHEDULE 8 - REFERRAL RESPONSE

Development No.	580/514/21
Applicant	Kevjohn Pty Ltd
Location	Lot 537 in FP 18522, 3-5 Battunga Road and 33 Mawson Road, Meadows (CT 5067/654)
Proposal	Construction of a supermarket, removal of regulated trees and construction of car parking, fencing, two (2) pylon signs, signage, water storage tanks, landscaping and infrastructure

I refer to the above development application forwarded to the Commissioner of Highways (CoH) in accordance with Section 37 of the *Development Act 1993*. The proposed development involves development adjacent a main road as described above.

The following response is provided in accordance with Section 37(4)(b) of the *Development Act 1993* and Schedule 8 of the *Development Regulations 2008*.

CONSIDERATION

The subject site abuts Battunga Road and Mawson Road which are both arterial roads under the care, control and management of the CoH. Both roads are identified as a Major Regional Cycling Route under the Department for Infrastructure and Transport' s (DIT) *'A Functional Hierarchy for South Australia' s Land Transport Network'.* At this location, Battunga Road and Mawson Road carry approximately 4,800 and 7,500 vehicles per day (11.5% commercial vehicles) respectively. Both roads have a posted speed limit of 50km/h.

Access and Road Safety

The subject site is currently developed as a small retail shop and residence within an existing building that has frontage to Mawson Road. The subject site has existing access points to both arterial roads, however there is no dedicated on-site parking for the existing retail shop. All parking is currently accommodated within the road reserve.

The proposed development will retain the existing building fronting Mawson Road and construct a new retail tenancy with 1,470m2 retail floor area towards the rear of the site along with car parking for 86 spaces. The development proposes two-way access points to both Mawson Road and Battunga Road. The access points are located approximately 50 metres and 60 metres from the intersection, respectively. DIT has reviewed the Frank Siow & Associates, Traffic & Parking

Assessment that was provided in support of the development. Overall, DIT considers that the report has satisfactorily addressed the traffic related matters associated with the development and that the proposed access layout is acceptable.

The report identifies that access points will be suitably designed for the largest vehicle expected on site (refer Appendix 1 - 12.5 metre Heavy Rigid Vehicle) and the car parking provision adequately caters for the likely demands. As stated in the Traffic Report, in order to limit conflict with the free flow of vehicles entering from the Mawson Road access point the first two car parking spaces should be dedicated to staff parking only.

The Traffic Report also assesses the likely demand for right turning vehicles to enter from Mawson Road and while there is expected to be a reasonable demand in the PM peak (25 right turn movements) the existing wide road seal is currently unkerbed and would facilitate these movements. However, DIT advises that the existing bottle shop located opposite this access would also generate peak right turns and there is potential for these movements to conflict without the provision of dedicated road space (i.e. painted median) to accommodate these movements.

While DIT acknowledges the outcomes of the Frank Siow Report, there is also a desire to ensure consistency with the proposed Council upgrade to Mawson Road/Battunga Road intersection (100% design stage). DIT provided a review of the development and the upgrade design via email (to Mr Michael Dickson) on 31 May 2022.

As part of this proposed road upgrade, the abutting roads have kerb and gutter installed, parallel parking, pedestrian facilities (including crossing points) and a 2.2 metre wide painted median along on Mawson Road which extends west from the intersection to a point beyond the subject site (refer Issue for Approval, Drawing 3026, Sheet 11, Amendment C, dated 11 April 2022). DIT considers that the proposed painted median design (2.2 metre wide) does not provide sufficient on road storage space to accommodate right turns into the proposed development. The width of any painted median could be modified to accommodate right turning vehicles and this would alleviate potential restrictions to the free flow of traffic and compliment the proposed road upgrade. DIT also considers that the proposed design should be fully reviewed to ensure consistency with the access design and swept paths shown in the Traffic Report (and Appendix 1).

ADVICE

The Department for Infrastructure and Transport supports the proposed development and recommends that the following conditions to be applied:

1. The access to Mawson Road and Battunga Road shall be consistent with JB Design, Site Plan, Proposed Shops, Sheet 5 of 8, dated 15 March 2022 and Frank Siow & Associates Traffic and Parking Assessment, dated 8 February 2022.

2. All vehicles shall enter and exit the site in a forward direction.

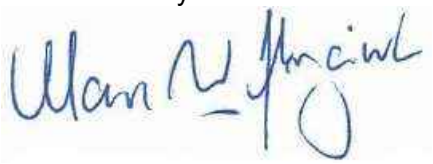
3. The largest vehicle permitted on site shall be restricted to a 12.5m Heavy Rigid Vehicle with all commercial vehicle facilities designed in accordance with *AS 2890.2:2018*.

4. The two closest car parking spaces to the Mawson Road access point shall be dedicated to staff parking only. Suitable signage and line marking shall be installed to achieve this outcome.

5. The pylon sign adjacent the Mawson Road access point shall be located to achieve clear sightlines, as shown in Figure 3.3 ‘Minimum Sight Lines for Pedestrian Safety’ in AS/NZS 2890.1:2004 and ensure adequate visibility between vehicles leaving the site and pedestrians on the adjacent footpath.

6. Stormwater run-off shall be collected on-site and discharged without jeopardising the safety and integrity of the road network. Any alterations to the road drainage infrastructure required to facilitate this shall be at the applicant's expense.

Yours sincerely



A/MANAGER, TRANSPORT ASSESSMENT
for **COMMISSIONER OF HIGHWAYS**

A copy of the decision notification form should be forwarded to dit.landusecoordination@sa.gov.au

5.1.2 CATEGORY 3 APPLICATIONS

Nil

5.1.3 CATEGORY 2 APPLICATIONS

Nil

5.1.4 CATEGORY 1 APPLICATIONS

Nil

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5.2. PLANNING, DEVELOPMENT AND INFRASTRUCTURE ACT APPLICATIONS

5.2.1. 22025784 – ADELAIDE HILLS TOYOTA

Application ID	22025784
Applicant	Adelaide Hills Toyota
Subject Land	55-59 Adelaide Road, Mount Barker; 2 Hawthorn Road, Mount Barker; and 2 Cherington Street, Mount Barker
Nature of Development	Alterations and additions to existing service trade premises (car dealership) and automotive collision repair - new building comprising of a paint shop and ancillary offices, addition to carwash bay, alterations to existing vehicle service building and alteration to carparking and vehicular access areas
Lodgement Date	30 September 2022
Relevant Authority	Assessment Panel at Mount Barker District Council
Zone	Neighbourhood
Planning and Design Code Version Number	2022.15 – 29 September 2022
Categorisation	Code Assessed - Performance Assessed
Notification	Yes
Representations	2
Persons to be heard	2
Referrals - Statutory	None applicable
Referrals – Non-Statutory	Council's Development Engineering Officer Council's Environmental Health Officer
Responsible Officer	Derek Henderson - Senior Planner
Recommendation	Planning Consent

APPENDIX 1:	Relevant Planning and Design Code Policies
ATTACHMENT 1:	Application Documents
ATTACHMENT 2:	Site Photos
ATTACHMENT 3:	Representations
ATTACHMENT 4:	Response to Representations

1. PROPOSAL

The proposal is best described as follows:

Alterations and additions to existing service trade premises (car dealership) and automotive collision repair - new building comprising of a paint shop and ancillary offices, addition to carwash bay, alterations to existing vehicle service building and alteration to carparking and vehicular access areas

The proposal comprises the following attributes:

- Decommissioning of the existing paint booths located in a building adjacent to the southern boundary of Cherington Street and construction of replacement spray paint shop booths located within a new building located more centrally on the land.
- The spray booths designed and constructed to satisfy current industry standards (Australian Standard/New Zealand Standard 414-2020 414-2020 Spray painting booths, designated spray painting areas and paint mixing rooms) that specifies requirements that result in mitigating environmental harm (through emission control), including to adjacent residents.
- The new 479sqm paint shop building incorporating an ancillary reception area and administrative offices on the southern side totalling approximately 60sqm as an upgrade and replacement for the existing administrative building (a transportable building) currently sited in approximately the same location.
- A 42sqm extension to the existing wash bay ancillary to the crash repair business.
- The removal of the existing spray booths facilitating an improved configuration to the service bays in the existing building.
- Removal of 7 car parking bays (currently used for cars awaiting servicing or repairs), but replacing with 6 parking bays within the new paint shop building.
- Undertaken in stages, with works associated with each stage not determined at this time.

Refer to **ATTACHMENT 1** for details of the application documents.

2. BACKGROUND

The existing businesses, Adelaide Hills Toyota and Gilbert Crash Repairs, are the current iteration of a motor repair station/car dealership that has been established on the land at 55-59 Adelaide Road for approximately 100 years. Most recently, development approval was granted for Development Application 580/978/18 on 4 March 2021 that included:

- Change in use of land at 2 Cherington Street to a sealed and line-marked carpark for customer and staff use in association with the businesses, and associated stormwater infrastructure, fencing and landscaping.
- Removal of carparking from the land at 56 Adelaide Road (on the opposite side of Adelaide Road) to improve safety for staff.
- Retrospective approval for use of land at 2 Hawthorn Road as an area for the storage of motor vehicles, including new and used vehicles and bus parking. This use had evolved over several years under previous business ownership.
- Sealing, line-marking, stormwater infrastructure, fencing and landscaping associated with the change in use of land at 2 Hawthorn Road.

The change in use of the above has occurred; however there are still outstanding works in relation to:

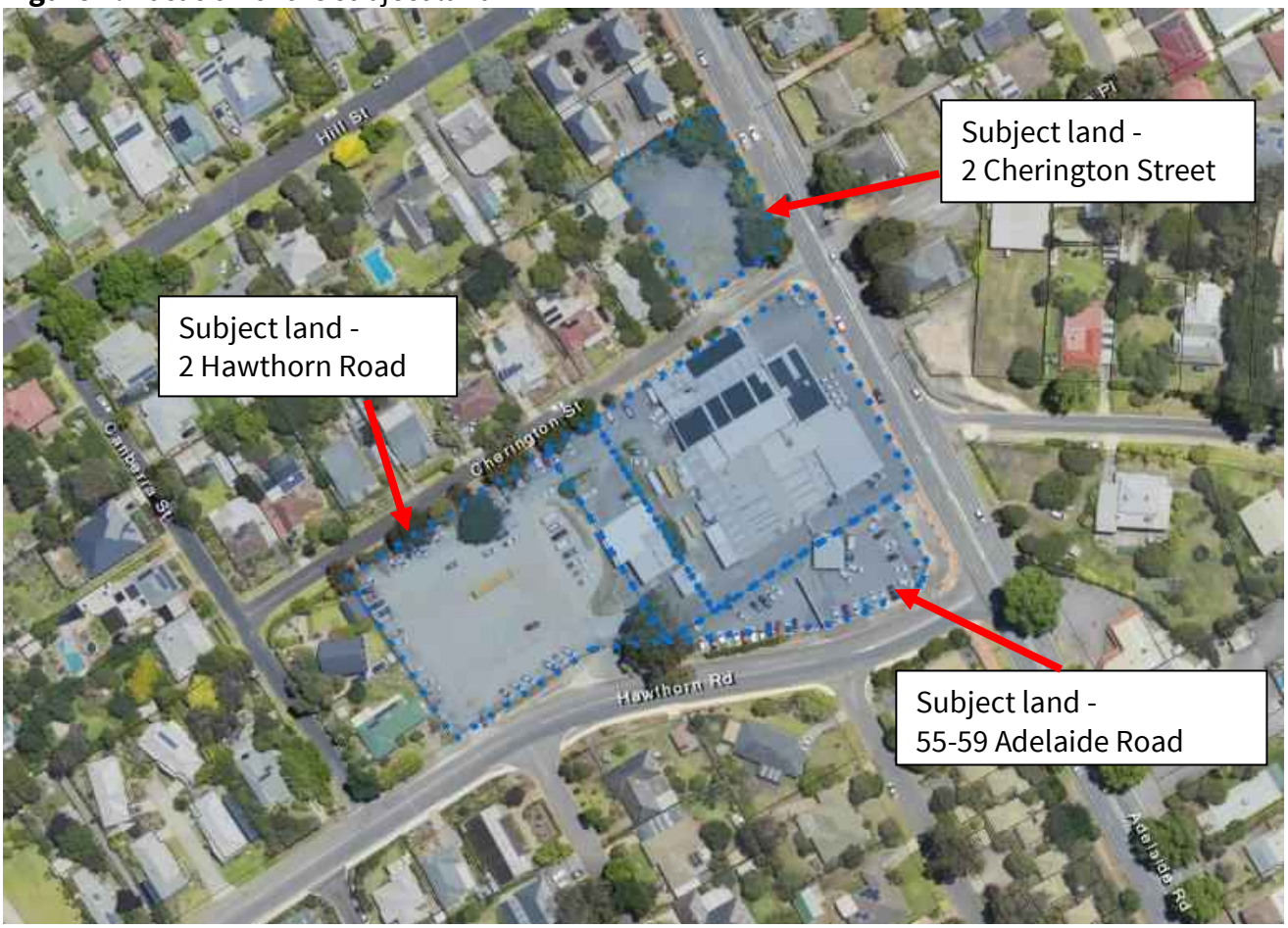
- Line-marking, fencing and landscaping for the carpark at 2 Cherington Street.
- Sealing, line-marking, stormwater infrastructure, post-and-wire fencing and landscaping along the Cherington Street frontage for the vehicle storage area at 2 Hawthorn Road.

3. SUBJECT LAND

The businesses are integrated and operate over five allotments in total comprising of:

- Four allotments bound by Cherington Street to the north, Adelaide Road to the east, Hawthorn Road to the south and residences located at 2 Canberra Street and 4 Hawthorn Road to the west. All buildings are sited on the three eastern allotments at 55-59 Adelaide Road. The land falls in an easterly direction towards Adelaide Road.
- One allotment on the northern side of Cherington Street used solely for carparking associated with the businesses. A stormwater detention tank has been installed to regulated stormwater flow to the water table of Cherington Street.
- The subject land is primarily comprised of buildings and hard-surfaced or gravelled areas and associated fencing and established landscaping on portion of the property boundary.
- The subject land operates as a motor vehicle sales, display, servicing and crash repair business (operating as Adelaide Hills Toyota and Gilbert Crash Repairs), including buildings and parking (staff and customer), vehicle display (for new and used vehicles) and storage (for vehicles undergoing crash repairs, servicing and vehicles being delivered or awaiting dispatch).
- Scattering of landscaping; primarily at the boundaries of the site. There is a small area of landscaping including planted shrubs in the location where the new paint shop building is proposed. There are no regulated trees or native vegetation in this small area.

Figure 1. Location of the subject land



Refer to **ATTACHMENT 2** for site photos.

4. THE LOCALITY

The locality includes:

- The subject land is located centrally within a primarily residential precinct comprising a mix of dwelling types including detached dwellings with generous landscaped yards, group dwellings and strata title units. The exception to this are commercial businesses (lawn mower sales and service, tyre sales and service) located diagonally opposite the Hawthorn Road/Adelaide Road intersection.
- A Local Heritage Place, being a VR Pillar Box (Victorian Letterbox) – Heritage ID 18545 which is confirmed as being correctly located in the road reserve of the northwest corner of Hawthorn Road/Adelaide Road intersection adjacent to the subject site.
- The dual-laned Adelaide Road (a state-maintained arterial road) is a dominant feature of the locality and includes footpaths on both sides and connects to Hawthorn Road which acts as a collector from the western area of the Mount Barker township.
- Local streets including Canberra Street and Cherington Street which are sealed and kerbed but have no constructed footpaths.

4.1. Locality Plan

Figure 2. Locality Plan

4.2. Zoning

The subject land is wholly located within the Neighbourhood Zone, and is covered by the following overlays and technical and numerical variations (TNVs):

Overlays

- Affordable Housing
- Hazards (Bushfire - Medium Risk)
- Heritage Adjacency
- Hazards (Flooding - General)
- Murray-Darling Basin
- Native Vegetation
- Prescribed Water Resources Area
- River Murray Tributaries Protection Area
- Regulated and Significant Tree
- Traffic Generating Development
- Urban Transport Routes
- Water Resources

Technical and Numerical Variations (TNVs)

- Maximum Building Height (Metres) (Maximum building height is 9m)
- Maximum Building Height (Levels) (Maximum building height is 2 levels)
- Minimum Frontage (Minimum frontage for a detached dwelling is 15m; group dwelling is 15m)
- Minimum Site Area (Minimum site area for a detached dwelling is 600 sqm; group dwelling is 600 sqm)
- Concept Plan (Concept Plan 3 - Mount Barker and Littlehampton)

Figure 3. Zoning Plan:
N (Neighbourhood), HDN (Housing Diversity Neighbourhood), Ru (Rural), CF (Community Facilities)

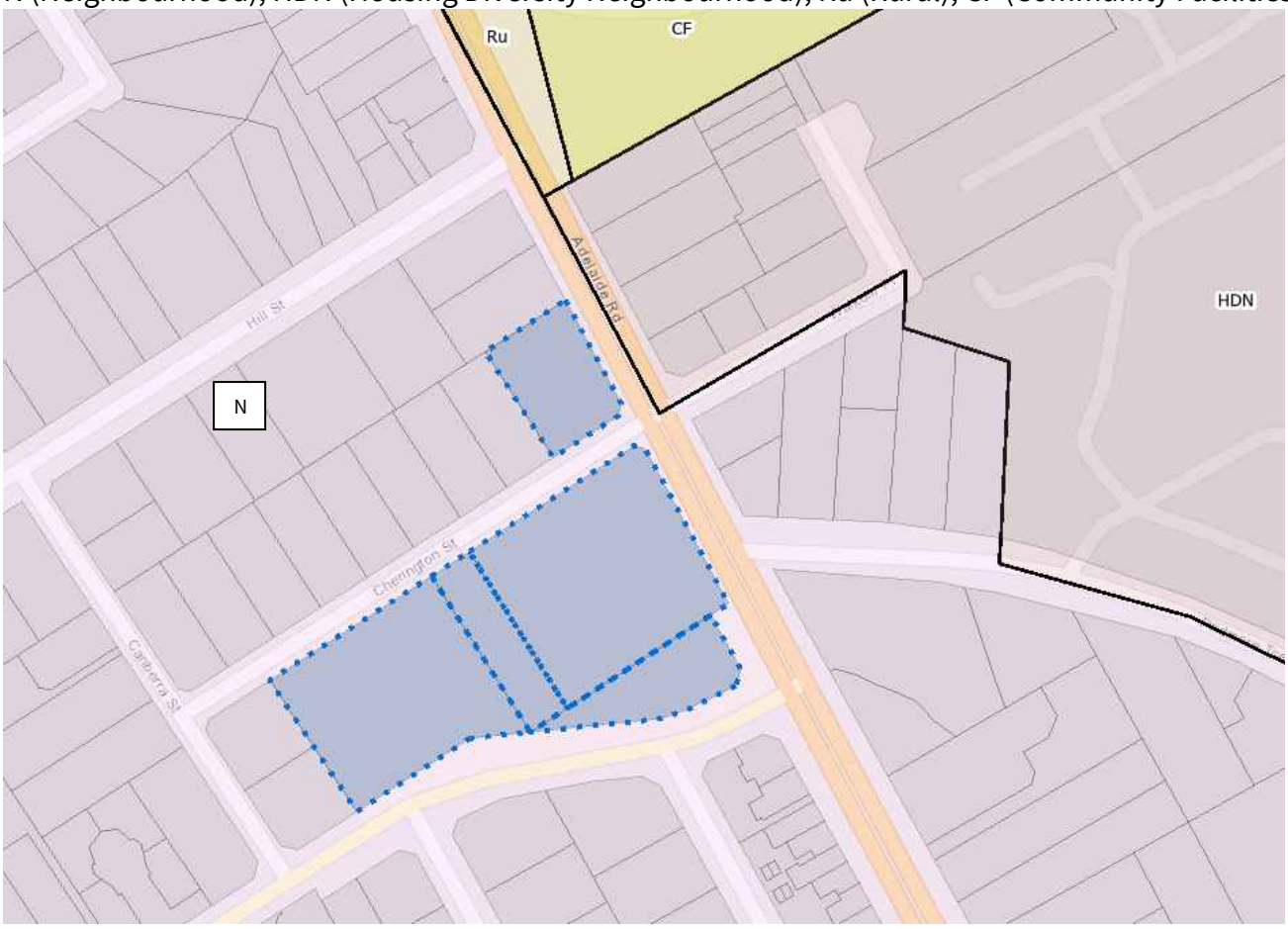
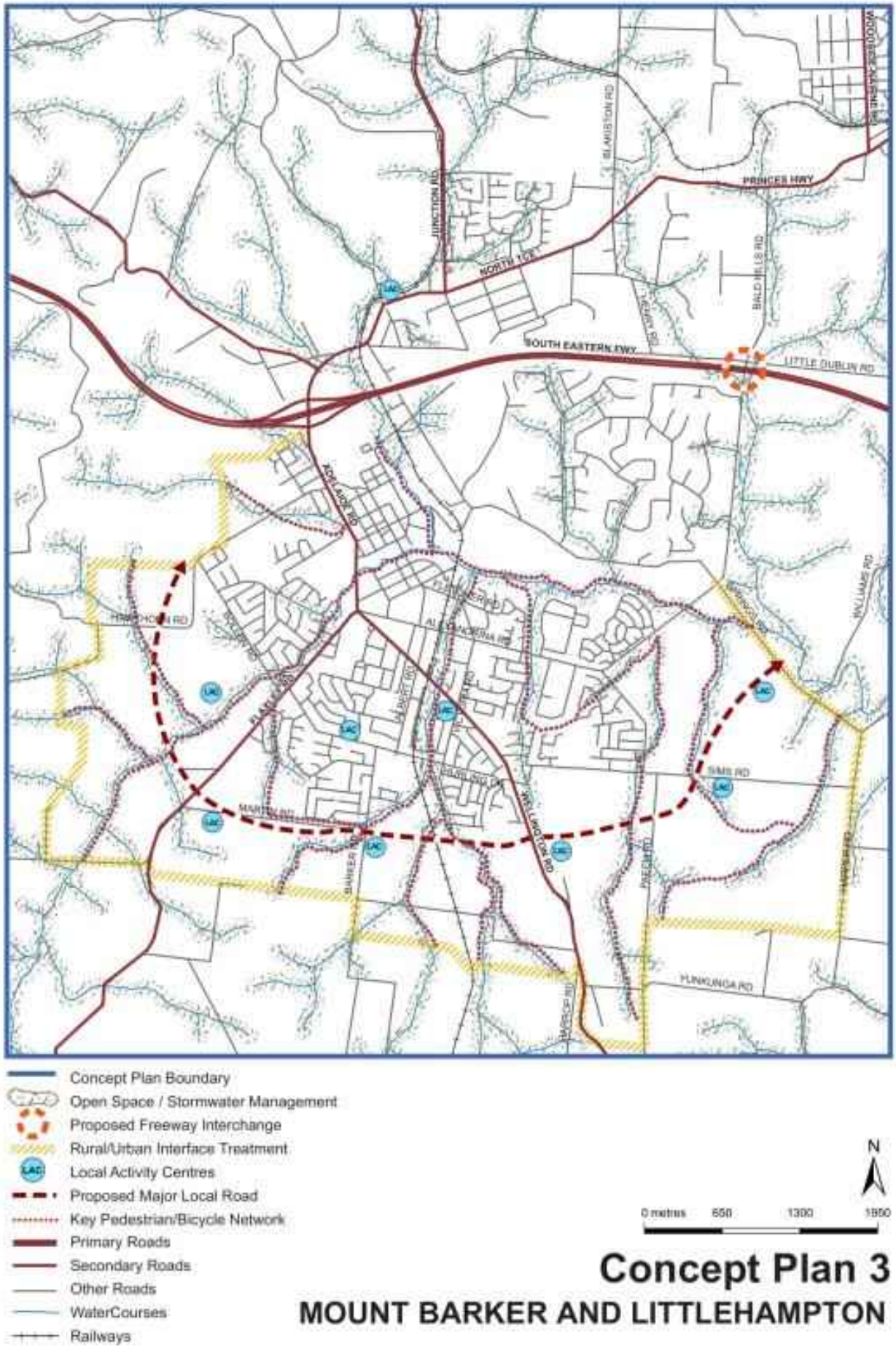


Figure 4. Planning and Design Code Concept Plan 3 – Mount Barker and Littlehampton



5. PROCEDURAL MATTERS

5.1. Categorisation

The proposed development is not categorised as an *accepted development*, *impact assessed development* or *code assessed development* (deemed-to-satisfy), and is therefore required to be assessed as a *code assessed development* (performance assessed) pursuant to Sections 105 and 107 of the *Planning, Development and Infrastructure Act 2016*.

5.2. Notification

All performance assessed development requires notification unless, pursuant to Section 107(6) of the *Planning Development and Infrastructure Act 2016*, the class of development is excluded from notification by virtue of Table 5 – Procedural Matters (PM) of the relevant Zone of the Planning and Design Code.

The proposed development is not identified as a class of development that is excluded from the requirement of notification in the Neighbourhood Zone.

Notification of the application was undertaken in accordance with 107(3) of the *Planning, Development and Infrastructure Act 2016* and Section 47 *Planning, Development and Infrastructure (General) Regulations 2017.*

5.2.1. Representations

Two (2) representations were received as a result of the public notification, and are summarised as follows.

	Representor	Summary of Issues	Request to be heard
1	Kim Stapleton 2 Canberra Street, Mount Barker	Opposes the development due to: • Not a suitable land use in the zone as not being envisaged housing nor services or community facilities that do not compromise the residential amenity or character of the neighbourhood. • No environmental impact study of potential harm from the spray booths and bake ovens. • Inadequate landscaping. • Visual impact on character of neighbourhood by constructing an additional building.	Yes

2	Melanie Welsh ***** 8 Cherington Street, Mount Barker	Support the development, noting the benefits of local business but conditional on concerns as detailed below being satisfactorily addressed: • Impact of light, noise and paint fumes on adjacent residences. • Traffic and pedestrian impacts on Cherington Street due to relocation of the paint shop. • Request the following to occur in Cherington Street: o Additional landscaping of the road verge on the southern side of Cherington Street adjacent the subject land for noise and light pollution benefit. o Construct a new 2.2 metre sound dampening fence along the Cherington Street frontage for amenity, noise and light pollution benefit. o Construct a new footpath on Cherington Street. o Speed reduction and other speed reducing interventions in Cherington Street. • Traffic to enter the spray booths from the Hawthorn Road entrance. • Ensure new paint booth is compliant so residents are not exposed to toxic fumes.	Yes

***** It is noted that the representation submitted by Melanie Welsh was on behalf of the following residents of Cherington Street:

- Darren and Melanie Welsh, 8 Cherington Street, Mount Barker;
- Heather Daniel - 18 Cherington Street, Mount Barker;
- Briston Talbot – 16 Cherington Street, Mount Barker;
- Sam Hewitt – 6 Cherington Street, Mount Barker;
- Judith McAtee – 14 Cherington Street, Mount Barker;
- Dave Farr – 4 Cherington Street, Mount Barker;
- Thomas Kenny – 12 Cherington Street, Mount Barker and
- Ruth Tohl – 10 Cherington Street, Mount Barker.

5.2.2. Map of Representors

Figure 5. Map of Representors, with numbers corresponding with the Representor number identified in the Table in section 5.2.1 above.

Refer to **ATTACHMENT 3** for a copy of the representations received.

5.2.2. Response to Representations

The applicant's planning consultant has provided a response to representations. The applicant held a meeting with several of the representors and reference to these discussions are included in the response. Engagement by residents of Cherington Street and Adelaide Hills Toyota with the Mount Barker District Council was encouraged to explore opportunities to improve any amenity and traffic impacts within Cherington Street. This process would occur independently of the development application.

Refer to **ATTACHMENT 4** for a copy of the applicant's response to the representations.

6. REFERRALS - STATUTORY

None applicable.

It is noted that Part 9.1 of the Code identifies classes of development/activity that require referral to the Environment Protection Authority (EPA) to provide expert technical assessment and direction to the relevant authority. Surface coating in the form of works for spray painting or powder coating is referred to the EPA if these works have a capacity to use more than 100 litres per day of paint or 10kg per day of dry powder. These works would then require an EPA licence to operate.

The proposed development does not meet the threshold for an EPA referral.

7. REFERRALS – NON-STATUTORY

7.1. Council's Development Engineering Officer

The new buildings can be connected to the existing stormwater infrastructure. This can be conditioned. Car parking should be conditioned to comply with relevant Australian Standards. Use of existing access points is appropriate.

7.2. Council's Environmental Health Officer

Council's Environmental Health Officer has confirmed that *AS/NZS 414-2020 Spray painting booths, designated spray painting areas and paint mixing rooms* reflects the requirements of the Environment Protection Authority in regard to mitigating environmental harm associated with the operation of a paint shop. Provided that the appropriate certification of the booths is achieved then the operation would not result in environmental harm occurring (including through emissions).

8. KEY ISSUES

The following matters are considered pertinent in reaching a recommendation for this proposal and are discussed within detail in section 9 of this report:

- Land Use and Intensity
- Building Design and Siting
- Transport, Access and Parking
- Interface between Land Uses

9. ASSESSMENT

All provisions of the Planning and Design Code applicable to the proposal are specified in **APPENDIX 1**. The most relevant provisions are discussed in detail below.

Refer to **APPENDIX 1** for a copy of Planning and Design Code policy extract.

Land Use and Intensity

The subject land is an existing commercial use. No change in land use is proposed by this application, with a paint shop and administration offices associated with the crash repair business and service bays associated with the service department of the Adelaide Hills Toyota dealership being authorised uses on the subject land. As such, whilst the proposal is located within the Neighbourhood Zone which anticipates predominately residential development, as there are no changes to current uses then these remain as acceptable land uses on the subject land.

In regard to the land use intensity it considered that there is:

- No change to the capacity of the crash repair business; with the new building providing updated facilities for staff and customers and capacity to operate the paint shop in accordance with latest industry standards, including environmental requirements.
- No effective change to the capacity of the service department, with the area vacated in the existing building providing an opportunity to provide a more functional service bay design.

The overall floor area of buildings on the subject land is increased by this proposal, however this enables more activities to occur within buildings (e.g. parking of vehicles awaiting painting) and more space for servicing of vehicles (through removal of existing spray booths). As such, and in the context of the overall business operation, it is considered that the proposal does not result in any meaningful alteration to the intensity of the existing land uses.

It is considered that the proposal is appropriate in regard to Planning and Design Code provisions relating to land use and intensity.

Building Design and Siting

The new paint shop building, with associated administration offices and reception area is located centrally on the site in the approximate location of the existing, transportable office building, small outbuildings and parking bays used in association with the crash repair business. The new building is to be located on an area that is predominately hard-surfaced (either with paving or buildings), with only a small area with a few planted shrubs the exception. The car wash extension is adjacent to the existing bay.

PO1.4 of the Neighbourhood Zone anticipates non-residential development to be sited and designed to complement the residential character and amenity of the neighbourhood. It is considered that the new building (most notably the paint shop/administration building):

- Has been sited to minimise the impacts on the character of the surrounding residential precinct, being:
    - located in between existing buildings on the land (rather than encroaching closer to adjoining residences), and
    - having large setbacks from adjacent road frontages (at least 17 metres from the Hawthorn Road frontage and 23.5 metres from the Cherington Street frontage).
- Has bulk and height that is complementary with adjoining buildings on the land through:
    - Being set lower that the adjoining building on the western side and of similar height to the primary building on the site (the Adelaide Hills Toyota dealership and service complex), albeit the three stacks are slightly higher (being approximately 7.65 metres above floor level).
    - Northern elevation of basic design (gabled end shed with central roller door), but consistent with existing built form.
    - Southern elevation having a shop-front form with glazing across the full frontage and parapet.
    - Sheeting in Colorbond Woodland Grey which a darker, recessive grey colour that is prevalent for outbuildings and fencing within residential precincts.

Overall, whilst the building design is consistent with a commercial built form (simple form, with pre-coloured metal sheeting), it is considered that this is appropriate in the context of the existing buildings on the land, siting between the existing buildings and generous setbacks from the street frontages.

Transport, Access and Parking

It is determined that there is negligible change to the carparking provision and traffic numbers associated with the current businesses on the land resulting from the proposed development.

In relation to traffic movements, removal of a driveway link in the location between the current transportable office building and the detailing shop/carwash bay is required due to the siting of the new paint shop building.

Customers access the crash repair business either from the southern entrance off Adelaide Road or from Hawthorn Road and this will continue to be the situation for this proposal. Internal traffic movements between the southern and northern areas of the site can still be conveniently achieved however through existing links within the vehicle storage area in the western portion of the subject land. It is noted that painting occurs after panel work is done so there is no direct delivery of cars to the paint shop from outside of the subject land (e.g. from Cherington Street).

The representors have identified limitations of the existing street network in regard to traffic and pedestrian movements. Council's Strategic Infrastructure Team confirm that opportunities for improvements are part of considerations by Council as part of future upgrades to Hawthorn Road by Council and Adelaide Road/Hawthorn Road intersection upgrade by the State Government. The proposal in itself is neutral in regard to the existing function of these roads and does not result in any required interventions.

Interface between Land Uses

The Interfaces between Land Uses General Development Policies module in the Code specifies that non-residential development should not unreasonably impact on the amenity of sensitive receivers (in this instance adjoining residences) having regard to matters including noise and air quality.

The proposal seeks to improve the existing paint shop operation and administrative offices associated with the crash repair business. It is noted that this application does not involve a change to current repair works (panel beating, replacement and general repair work) associated with the business. The spray booths are confined to operation within the new building in a location that is setback further from the property boundaries than the currently operation. This, combined with no fundamental change to traffic movements, results in the proposal considered to being at least neutral in regard to noise emanating from the current business.

In regard to air quality associated with potential emissions from the spray booths, the applicant has provided details of how the new booths are designed, constructed and certified to the current industry standard - *AS/NZS 414-2020 Spray painting booths, designated spray painting areas and paint mixing rooms* to mitigate environmental harm. It is noted that the capacity of the spray booth is of a level that does not trigger a referral to the EPA to undertake an assessment of emissions and an environmental impact study is not warranted for the assessment. This is confirmed by Council's Environmental Health Officer who has stated that if constructed in accordance with the Standard, then this would result in acceptable emission mitigation being achieved. It is noted that the upgrade would improve the environmental performance of the booths in comparison with the existing ones. The siting of the booth chimney stacks is central on the subject site and includes treatment technology to ensure that the air quality of emissions would prevent harm to human health and not unreasonably impact on the amenity of adjoining residences in this primarily residential precinct.

In consideration of the above, including neutrality in regard to current traffic, environment and amenity impacts; it is determined that the proposal development is suitable within the locality.

Stormwater

The proposal can be suitably connected to existing stormwater infrastructure that services the current buildings without causing undue impact on adjoining land uses or street infrastructure, with 3kL of stormwater detention provided to limit release to pre-development flow (in consideration of the small existing permeable area that is now proposed to be built on). Any wastewater from the extended wash bay will be required to be treated prior to release to Council's stormwater infrastructure.

Advertising

No additional signage is proposed. Any signage that would be determined to be development would be subject to a subsequent development assessment. Existing signage identifies the authorised businesses on the land (including Gilbert Crash Repairs).

10. CONCLUSION

The subject land has a long-standing use associated with motor vehicle repairs, sales and crash repairs, and has been upgraded and expanded as the businesses have been adapted to cater for evolving and improved business practices. This proposal is a continuation of this adaption and improvement through the construction of a new building, located centrally on the subject land, that would enable upgrading of administrative offices for staff (including reception area for customers of Gilbert Crash Repairs) and replacement of outdated technology of the existing paint booths, including having undercover storage areas for cars awaiting painting or completed painting, that can satisfactorily achieve air quality requirements to mitigate potential harm to adjoining sensitive users and staff.

The siting and design of the proposed new building, including extended wash bay, is compatible with the existing commercial buildings on the subject land and is considered not to result in an unreasonable amenity impact on adjoining residences.

The representors have identified items of concern in regard to road verge landscaping, traffic congestion etc. which are matters not subject to deliberation of this proposal.

Overall, the performance assessment of the proposal has resulted in a determination that it is not seriously at variance with the provisions of the Planning and Design Code. Furthermore, the proposal is considered to have sufficient merit to warrant issuing of Planning Consent.

11. RECOMMENDATION

It is recommended that the Council Assessment Panel:

DETERMINE that the proposed development is not seriously at variance with the provisions of the Planning and Design Code.

GRANT Planning Consent to the application by Adelaide Hills Toyota for alterations and additions to existing service trade premises (car dealership) and automotive collision repair - new building comprising of a paint shop and ancillary offices, addition to carwash bay, alterations to existing vehicle service building and alteration to carparking and vehicular access areas at 55-59 Adelaide Road, 2 Hawthorn Road and 2 Cherington Street, Mount Barker as detailed in Application ID: 22025784 subject to the following conditions and advisory notes:

CONDITIONS

1. The development herein approved shall be carried out in accordance with the stamped plans and details accompanying this application, except where amended by the following condition(s), including:
    - Planning Report by Planning Studio dated 28 July 2022;
    - Response to request for documentation by Planning Studio dated 12 August 2022;
    - Plans prepared by Designing Places Ref: PA01, PA02, PA03, PA04, PA04a, PA05, PA06 and PA07;
    - Stormwater Management Plan by DBN Consulting Engineers Pty Ltd dated 30 June 2022 and associated plan dated 27 June 2022, including Figure 01;
    - Information provided by PAN Spraybooths Australia regarding compliance with *AS/NZS 4114-2020 Spray painting booths, designated spray painting areas and paint mixing rooms*.
    - Email from Planning Studio dated 6 December 2022 including proposed certificate of compliance by PAN Spraybooths Australia.

2. All stormwater captured by roofing materials and hard sealed paving areas shall be discharged in a controlled manner in accordance with the stamped Stormwater Management Plan by DBN Consulting Engineers so it does not impact upon adjoining properties or, in the opinion of Council, has the potential to cause nuisance or destabilise adjoining land.

3. All vehicle car parks, driveways, vehicle entry and manoeuvring areas must be designed, constructed and maintained in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6.2009).

4. All external lighting must be designed and constructed according to conform to Australian Standard (AS 4282-1997).

5. The spray painting booths be designed, manufactured, installed and operated in accordance with *AS/NZS 4114-2020 Spray painting booths, designated spray painting areas and pain mixing rooms*.

6. Areas for activities including loading and unloading, storage of waste refuse bins in or wash-down areas used for the cleaning of vehicles, vessels, plant or equipment must be:
    i. Designed to contain all wastewater within a bunded and roofed area to exclude the entry of external surface stormwater run-off.
    ii. Paved with an impervious material.
    iii. Designed to drain wastewater to either:
        - 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
        - A holding tank and its subsequent removal off-site on a regular basis.
    iv. Appropriately contained, stored, managed and screened from public view to not cause a visual impact or odour impact.

ADVISORY NOTES

1. No work can commence on this development unless a Development Approval has been obtained. If one or more consents have been granted on this Decision Notification Form, you must not start any site works or building work or change of use of the land until you have received notification that Development Approval has been granted.

2. The applicant has a right of appeal against the conditions which have been imposed on this Planning Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0289).

3. This consent or approval will lapse at the expiration of 2 years from its operative date, subject to the below or subject to an extension having been granted by the relevant authority.

4. For any queries on alterations to underfloor plumbing or trade waste, please contact Mount Barker District Council Environmental Health Team on 8391 7200.

5. Any person proposing to undertake building work within the Mount Barker District Council is reminded of their obligation to take all reasonable measures to protect Council infrastructure. Any incidental damage to the infrastructure - pipes, footpath, verge, street trees etc., must be reinstated to a standard acceptable to Council at the applicants' expense. If you have any queries please contact Council on 8391 7200.

6. The applicant is reminded of their general environmental duty, as required by Section 25 of the Environment Protection Act, to take all reasonable and practical measures to ensure that any activities on the site do not pollute the environment.

7. The applicant is reminded of relevant obligations under the *Local Nuisance and Litter Control Act 2016.*

55-59 ADELAIDE RD MOUNT BARKER SA 5251

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)*
Minimum Frontage *(Minimum frontage for a detached dwelling is 15m; group dwelling is 15m)*
Minimum Site Area *(Minimum site area for a detached dwelling is 600 sqm; group dwelling is 600 sqm)*
Concept Plan *(Concept Plan 3 - Mount Barker and Littlehampton)*
Maximum Building Height (Levels) *(Maximum building height is 2 levels)*

Overlay

Affordable Housing
Hazards (Bushfire - Medium Risk)
Heritage Adjacency
Hazards (Flooding - General)
Murray-Darling Basin
Native Vegetation
Prescribed Water Resources Area
River Murray Tributaries Protection Area
Regulated and Significant Tree
Traffic Generating Development
Urban Transport Routes
Water Resources

Zone

Neighbourhood

Development Pathways

- Neighbourhood

1. Accepted Development
   Means that the development type does not require planning consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

   - Air handling unit, air conditioning system or exhaust fan
   - Brush fence
   - Building work on railway land

- Carport
- Internal building work
- Outbuilding
- Partial demolition of a building or structure
- Private bushfire shelter
- Shade sail
- Solar photovoltaic panels (roof mounted)
- Swimming pool or spa pool
- Verandah
- Water tank (above ground)
- Water tank (underground)

2. Code Assessed - Deemed to Satisfy
   Means that the development type requires consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

   - Carport
   - Land division
   - Outbuilding
   - Temporary accommodation in an area affected by bushfire
   - Verandah

3. Code Assessed - Performance Assessed
   Performance Assessed development types listed below are those for which the Code identifies relevant policies. Additional development types that are not listed as Accepted, Deemed to Satisfy or Restricted default to a Performance assessed Pathway. Please contact your local council for more information.

   - Ancillary accommodation
   - Carport
   - Demolition
   - Detached dwelling
   - Dwelling addition
   - Dwelling or residential flat building undertaken by:
     (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.
   - Fence
   - Group dwelling
   - Land division
   - Outbuilding
   - Residential flat building
   - Retaining wall
   - Row dwelling
   - Semi-detached dwelling
   - Tree-damaging activity
   - Verandah

4. Impact Assessed - Restricted
   Means that the development type requires approval. Classes of development that are classified as Restricted are listed in Table 4 of the relevant Zones.

Property Policy Information for above selection

Part 2 - Zones and Sub Zones

Neighbourhood Zone

Assessment Provisions (AP)

Desired Outcome	
DO 1	Housing supports a range of needs and complements the existing local context. Services and community facilities contribute to making a convenient place to live without compromising the residential amenity and character of the neighbourhood.

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 Predominantly residential development with complementary non-residential uses that support an active, convenient, and walkable neighbourhood.	DTS/DPF 1.1 Development comprises one or more of the following: (a) Ancillary accommodation (b) Community facility (c) Consulting room (d) Dwelling (e) Educational establishment (f) Office (g) Outbuilding (h) Pre-school (i) Recreation area (j) Retirement facility (k) Shop (l) Supported accommodation.
PO 1.2 Commercial activities improve community access to services are of a scale and type to maintain residential amenity.	DTS/DPF 1.2 A shop, consulting room or office (or any combination thereof) satisfies any one of the following: (a) it is located on the same allotment and in conjunction with a dwelling where all the following are satisfied: (i) does not exceed 50m^2 gross leasable floor area (ii) does not involve the display of goods in a window or about the dwelling or its curtilage (b) it reinstates a former shop, consulting room or office in an existing building (or portion of a building) and satisfies one of the following: (i) the building is a State or Local Heritage Place (ii) is in conjunction with a dwelling and there is no increase in the gross leasable floor area previously used for non-residential purposes.
PO 1.3 Non-residential development is located and designed to improve community accessibility to services, primarily in the form of:	DTS/DPF 1.3 None are applicable.

(a) small-scale commercial uses such as offices, shops and consulting rooms (b) community services such as educational establishments, community centres, places of worship, pre-schools and other health and welfare services (c) services and facilities ancillary to the function or operation of supported accommodation or retirement facilities (d) open space and recreation facilities.	
PO 1.4 Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.	DTS/DPF 1.4 None are applicable.
PO 1.5 Expansion of existing community services such as educational establishments, community facilities and pre-schools in a manner which complements the scale of development envisaged by the desired outcome for the neighbourhood.	DTS/DPF 1.5 Alteration of or addition to existing educational establishments, community facilities or pre-schools where all the following are satisfied: (a) set back at least 3m from any boundary shared with a residential land use (b) building height not exceeding 1 building level (c) the total floor area of the building not exceeding 150% of the total floor area prior to the addition/alteration (d) off-street vehicular parking exists or will be provided 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.
Site Dimensions and Land Division	
PO 2.1 Allotments/sites created for residential purposes are consistent with the density and dimensions expressed in any relevant *Minimum Site Area Technical and Numeric Variation* and *Minimum Frontage Technical and Numeric Variation*, or are otherwise generally consistent with the prevailing pattern of development in the locality and suitable for their intended use.	DTS/DPF 2.1 Development will not result in more than 1 dwelling on an existing allotment or Allotments/sites for residential purposes accord with the following: (a) where allotments/sites are connected to mains sewer or a Community Wastewater Management System: (i) site areas (or allotment areas in the case of land division) are not less than the following (average site area per dwelling, including common areas, applies for group dwellings or dwellings within a residential flat building): **Minimum Site Area** Minimum site area for a detached dwelling is 600 sqm; group dwelling is 600 sqm (ii) site frontages are not less than: **Minimum Frontage** Minimum frontage for a detached dwelling is 15m; group dwelling is 15m

	(b) where allotments/sites are not connected to mains sewer or an approved common waste water disposal service: (i) site areas are not less than the greater of: A. 1200m^2 B. the following: **Minimum Site Area** Minimum site area for a detached dwelling is 600 sqm; group dwelling is 600 sqm (ii) site frontages are not less than the greater of: A. 20m B. the following: **Minimum Frontage** Minimum frontage for a detached dwelling is 15m; group dwelling is 15m In relation to DTS/DPF 2.1, in instances where: (c) more than one value is returned in the same field, refer to the *Minimum Frontage Technical and Numeric Variation* layer or *Minimum Site Area Technical and Numeric Variation* layer in the SA planning database to determine the applicable value relevant to the site of the proposed development (d) no value is returned for DTS/DPF 2.1(a)(i) and/or (ii) (i.e. there is a blank field), then none are applicable and the relevant development cannot be classified as deemed-to-satisfy (e) no value is returned for DTS/DPF 2.1(b)(i)(B) and/or 2.1(b)(ii)(B), the value for DTS/DPF 2.1(b)(i)(B) and/or 2.1(b)(ii)(B) is zero.
PO 2.2 Development results in sites suitable for their intended purpose.	DTS/DPF 2.2 Where the site of a dwelling does not comprise an entire allotment: (a) The balance of the allotment accords with site area and frontage requirements specified in DTS/DPF 2.1 (b) If there is an existing dwelling on the allotment that will remain on the allotment after completion of the development it will not contravene: (i) Private open space requirements specified in Design Table 1 - Private Open Space (ii) Car parking requirements 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.
Site coverage	
PO 3.1 Building footprints are generally consistent with the prevailing pattern of development and retain sufficient space around buildings to limit visual impact and enable attractive outlook and access to light and ventilation.	DTS/DPF 3.1 The development does not result in site coverage exceeding 60% of the site area.

Building Height	
PO 4.1 Building height is consistent with the maximum height expressed in any relevant *Building Height Technical and Numeric Variation,* or are generally consistent with the prevailing character of the locality and complement the height of nearby buildings.	DTS/DPF 4.1 Building height (excluding garages, carports and outbuildings) is no greater than: (a) the following: **Maximum Building Height (Metres)** Maximum building height is 9m **Maximum Building Height (Levels)** Maximum building height is 2 levels (b) in all other cases (i.e. there are blank fields for both maximum building height (metres) and maximum building height (levels)) - 2 building levels up to a height of 9m. In relation to DTS/DPF 4.1, in instances where: (a) more than one value is returned in the same field, refer to the *Maximum Building Height (Levels) Technical and Numeric Variation* layer or *Maximum Building Height (Meters) Technical and Numeric Variation* layer in the SA planning database to determine the applicable value relevant to the site of the proposed development. (b) only one value is returned for DTS/DPF 4.1(a) (i.e. there is one blank field), then the relevant height in metres or building levels applies with no criteria for the other.
Primary Street Setback	
PO 5.1 Buildings are set back from primary street boundaries consistent with the existing streetscape.	DTS/DPF 5.1 The building line of a building set back from the primary street boundary: (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.
Secondary Street Setback	
PO 6.1 Buildings are set back from secondary street boundaries to maintain a pattern of separation between buildings and public streets and reinforce a consistent streetscape character.	DTS/DPF 6.1 Building walls are set back at least 900mm from the boundary of the allotment with the secondary street frontage.
Boundary Walls	
PO 7.1 Dwelling boundary walls are limited in height and length to manage	DTS/DPF 7.1 Except where the dwelling is located on a central site within a row

visual and overshadowing impacts on adjoining properties.	dwelling or terrace arrangement, side boundary walls occur only on side boundary and satisfy (a) or (b) below: (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: (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 length equal to 45% of the length of the boundary (iv) encroach within 3m of any other existing or proposed boundary walls on the subject land.
PO 7.2 Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a low density streetscape character.	DTS/DPF 7.2 Dwelling walls in a semi-detached, row or terrace arrangement are set back from side boundaries shared with allotments outside the development site at least 900mm.
Side Boundary Setback	
PO 8.1 Buildings are set back from side boundaries to provide: (a) separation between dwellings in a way that complements the character of the locality (b) access to natural light and ventilation for neighbours.	DTS/DPF 8.1 Building walls are set back from the side boundary at least: (a) On sites greater than 800m^2: (i) Other than a wall facing a southern boundary 1900mm from both side boundaries (ii) At least 1900mm plus 1/3 of the wall height above 3m for walls facing a southern boundary (b) On sites 800m^2 or less, and other than walls located on a side boundary: (i) at least 900mm where the wall is up to 3m (ii) other than for a wall facing a southern side boundary, at least 900mm plus 1/3 of the wall height above 3m (iii) at least 1900mm plus 1/3 of the wall height above 3m for walls facing a southern side boundary.
Rear Boundary Setback	
PO 9.1 Buildings are set back from rear boundaries to provide: (a) separation between dwellings in a way that complements the character of the locality (b) access to natural light and ventilation for neighbours (c) private open space (d) space for landscaping and vegetation.	DTS/DPF 9.1 Dwelling walls are set back from the rear boundary at least: (a) if the size of the site is less than 301m^2— (i) 3m in relation to the ground floor of the dwelling (ii) 5m in relation to any second building level of the dwelling (iii) 5m plus an additional 1m setback added for every 1m height increase above a wall height of 7m. (b) if the size of the site is 301m^2 or more— (i) 4m in relation to the ground floor of the dwelling (ii) 6m in relation to any second building level of the dwelling (iii) 6m plus an additional 1m setback added for every

	1m height increase above a wall height of 7m.
Ancillary Buildings and Structures	
PO 10.1 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.	DTS/DPF 10.1 Ancillary buildings and structures: (a) are ancillary to a dwelling erected on the site (b) have a floor area not exceeding: (i) 60m^2 on sites less than 800m^2 (ii) 80m^2 on sites 800m^2 or more (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 (ii) within 5.5m from the boundary of the primary street (iii) within 900mm of a boundary of the allotment with a secondary street (d) in the case of a garage or carport, do not exceed 7m or 50% of the site frontage (whichever is the lesser) when facing a primary street or secondary street (e) if situated on a boundary (not being a boundary with a primary street or secondary street) do not exceed 11m unless: (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary (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 do 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 abut the proposed wall or structure (h) have a wall height or post height not exceeding 3m above natural ground level (and not including a gable end) (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, are 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.
PO 10.2 Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements and do not result in over-development of the site.	DTS/DPF 10.2 Ancillary buildings and structures do not result in: (a) less private open space than specified in Design Table 1 - Private Open Space (b) less 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 to the nearest whole number (c) site coverage exceeding 60%.
Concept Plans	
PO 11.1 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.	DTS/DPF 11.1 The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant: **Description** Concept Plan 3 - Mount Barker and Littlehampton In relation to DTS/DPF 11.1, in instances where: (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. (b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 11.1 is met.
Advertisements	
PO 12.1 Advertisements identify the associated business activity, and do not detract from the residential character of the locality.	DTS/DPF 12.1 Advertisements relating to a lawful business activity associated with a residential use do not exceed 0.3m2 and mounted flush with a wall or fence.

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

Notification tables exclude the classes of development listed in Column A from notification provided that they do not fall within a corresponding exclusion prescribed in Column B.

Where a development or an element of a development falls within more than one class of development listed in Column A, it will be excluded from notification if it is excluded (in its entirety) under any of those classes of development. It need not be excluded under all applicable classes of development.

Where a development involves multiple performance assessed elements, all performance assessed elements will require notification (regardless of whether one or more elements are excluded in the applicable notification table) unless every performance assessed element of the application is excluded in the applicable notification table, in which case the application will not require notification.

Class of Development (Column A)	Exceptions (Column B)
1. 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: (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: 1. residential flat building(s) of 3 storeys or greater 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): (a) air handling unit, air conditioning system or exhaust fan (b) ancillary accommodation (c) building work on railway land (d) carport (e) deck (f) dwelling (g) dwelling addition (h) fence (i) jetty, pontoon or boat berth (or any combination thereof) within the *Waterfront Subzone* (j) outbuilding (k) pergola (l) private bushfire shelter (m) residential flat building (n) retaining wall (o) shade sail (p) solar photovoltaic panels (roof mounted) (q) swimming pool or spa pool (r) tree damaging activity (s) verandah (t) water tank.	Except development that: 1. exceeds the maximum building height specified in Neighbourhood Zone DTS/DPF 4.1 or 2. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: (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):	Except development that:

(a) consulting room (b) office (c) shop.	1. exceeds the maximum building height specified in Neighbourhood Zone DTS/DPF 4.1 or 2. does not satisfy Neighbourhood Zone DTS/DPF 1.2 or 3. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: (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).
5. Any development involving any of the following (or of any combination of any of the following): (a) internal building works (b) land division (c) recreation area (d) replacement building (e) temporary accommodation in an area affected by bushfire (f) tree damaging activity.	None specified.
6. Demolition.	Except any of the following: 1. the demolition of a State or Local Heritage Place 2. the demolition of a building (except an ancillary building) in a Historic Area Overlay.
Placement of Notices - Exemptions for Performance Assessed Development	
None specified.	
Placement of Notices - Exemptions for Restricted Development	
None specified.	

Part 3 - Overlays

Affordable Housing Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Affordable housing is integrated with residential and mixed use development.
DO 2	Affordable housing caters for a variety of household structures.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Division	
PO 1.1 Development comprising 20 or more dwellings / allotments incorporates affordable housing.	DTS/DPF 1.1 Development results in 0-19 additional allotments / dwellings.
PO 1.2 Development comprising 20 or more dwellings or residential allotments provides housing suited to a range of incomes including households with low to moderate incomes.	DTS/DPF 1.2 Development comprising 20 or more dwellings / or residential allotments includes a minimum of 15% affordable housing except where: (a) it can be demonstrated that any shortfall in affordable housing has been provided in a previous stage of development or (b) it can be demonstrated that any shortfall in affordable housing will be accommodated in a subsequent stage or stages of development.
PO 1.3 Affordable housing is distributed throughout the development to avoid an overconcentration.	DTS/DPF 1.3 None are applicable.
Built Form and Character	
PO 2.1 Affordable housing is designed to complement the design and character of residential development within the locality.	DTS/DPF 2.1 None are applicable.
Affordable Housing Incentives	
PO 3.1 To support the provision of affordable housing, minimum allotment sizes may be reduced below the minimum allotment size specified in a zone while providing allotments of a suitable size and dimension to accommodate dwellings with a high standard of occupant amenity.	DTS/DPF 3.1 The minimum site area specified for a dwelling can be reduced by up to 20%, or the maximum density per hectare increased by up to 20%, where it is to be used to accommodate affordable housing except where the development is located within the Character Area Overlay or Historic Area Overlay.
PO 3.2 To support the provision of affordable housing, building heights may	DTS/DPF 3.2 Where a building incorporates dwellings above ground level and

be increased above the maximum specified in a zone.	includes at least 15% affordable housing, the maximum building height specified in any relevant zone policy can be increased by 1 building level in the: (a) Business Neighbourhood Zone (b) City Living Zone (c) Established Neighbourhood Zone (d) General Neighbourhood Zone (e) Hills Neighbourhood Zone (f) Housing Diversity Neighbourhood Zone (g) Neighbourhood Zone (h) Master Planned Neighbourhood Zone (i) Master Planned Renewal Zone (j) Master Planned Township Zone (k) Rural Neighbourhood Zone (l) Suburban Business Zone (m) Suburban Neighbourhood Zone (n) Township Neighbourhood Zone (o) Township Zone (p) Urban Renewal Neighbourhood Zone (q) Waterfront Neighbourhood Zone and up to 30% in any other zone, except where: (a) the development is located within the Character Area Overlay or Historic Area Overlay or (b) other height incentives already apply to the development.
Movement and Car Parking	
PO 4.1 Sufficient car parking is provided to meet the needs of occupants of affordable housing.	DTS/DPF 4.1 Dwellings constituting affordable housing are provided with car parking in accordance with the following: (a) 0.3 carparks per dwelling within a building which incorporates dwellings located above ground level within either: (i) 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service(2) (ii) is within 400 metres of a bus interchange(1) (iii) is within 400 metres of an O-Bahn interchange(1) (iv) is within 400 metres of a passenger rail station(1) (v) is within 400 metres of a passenger tram station(1) (vi) is within 400 metres of the Adelaide Parklands. or (b) 1 carpark per dwelling for any other dwelling. [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.]

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
Development for the purposes of the provision of affordable housing (applying the criteria determined under regulation 4 of the *South Australian Housing Trust Regulations 2010*).	Minister responsible for administering the *South Australian Housing Trust Act 1995.*	To provide direction on the conditions required to secure the provision of dwellings or allotments for affordable housing.	Development of a class to which Schedule 9 clause 3 item 20 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Hazards (Bushfire - Medium Risk) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.

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 Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type,	DTS/DPF 1.1 None are applicable.

and terrain.	
Built Form	
PO 2.1 Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and buildings on stilts.	DTS/DPF 2.1 None are applicable.
PO 2.2 Extensions to buildings, outbuildings and other ancillary structures are sited and constructed using materials to minimise the threat of fire spread to residential and tourist accommodation (including boarding houses, hostels, dormitory style accommodation, student accommodation and Workers' accommodation) in the event of bushfire.	DTS/DPF 2.2 Outbuildings and other ancillary structures are sited no closer than 6m from the habitable building.
Habitable Buildings	
PO 3.1 To minimise the threat, impact and potential exposure to bushfires on life and property, residential and tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited on the flatter portion of allotments away from steep slopes.	DTS/DPF 3.1 None are applicable.
PO 3.2 Residential, tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited away from vegetated areas that pose an unacceptable bushfire risk.	DTS/DPF 3.2 Residential, tourist accommodation and habitable buildings for vulnerable communities are provided with asset protection zone(s) in accordance with (a) and (b): (a) the asset protection zone has a minimum width of at least: (i) 50 metres to unmanaged grasslands (ii) 100 metres to hazardous bushland vegetation (b) the asset protection zone is contained wholly within the allotment of the development.
PO 3.3 Residential, tourist accommodation and habitable buildings for vulnerable communities, (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation), has a dedicated area available that is capable of accommodating a bushfire protection system comprising firefighting equipment and water supply in accordance with *Ministerial Building Standard MBS 008 - Designated bushfire prone areas - additional requirements*.	DTS/DPF 3.3 None are applicable.
Land Division	
PO 4.1 Land division is designed and incorporates measures to minimise the danger of fire hazard to residents and occupants of buildings, and to protect buildings and property from physical damage in the	DTS/DPF 4.1 None are applicable.

event of a bushfire.	
PO 4.2 Land division is designed to provide a continuous street pattern to facilitate the safe movement and evacuation of emergency vehicles, residents, occupants and visitors.	DTS/DPF 4.2 None are applicable.
PO 4.3 Where 10 or more new allotments are proposed, land division includes at least two separate and safe exit points to enable multiple avenues of evacuation in the event of a bushfire.	DTS/DPF 4.3 None are applicable.
PO 4.4 Land division incorporates perimeter roads of adequate design in conjunction with bushfire buffer zones to achieve adequate separation between residential allotments and areas of unacceptable bushfire risk and to support safe access for the purposes of fire-fighting.	DTS/DPF 4.4 None are applicable.
Vehicle Access - Roads, Driveways and Fire Tracks	
PO 5.1 Roads are designed and constructed to facilitate the safe and effective: (a) access, operation and evacuation of fire-fighting vehicles and emergency personnel (b) evacuation of residents, occupants and visitors.	DTS/DPF 5.1 Roads: (a) are constructed with a formed, all-weather surface (b) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the road (c) have a cross fall of not more than 6 degrees (1-in-9.5) at any point along the road (d) have a minimum formed road width of 6m (e) provide overhead clearance of not less than 4.0m between the road surface and overhanging branches or other obstructions including buildings and/or structures (Figure 1) (f) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around road curves by constructing the curves with a minimum external radius of 12.5m (Figure 2) (g) incorporating cul-de-sac endings or dead end roads do not exceed 200m in length and the end of the road has either: (i) a turning area with a minimum formed surface radius of 12.5m (Figure 3) or (ii) a 'T' or 'Y' shaped turning area with a minimum formed surface length of 11m and minimum internal radii of 9.5m (Figure 4) (h) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 5.2 Access to habitable buildings is designed and constructed to facilitate the safe and effective: (a) access, operation and evacuation of fire-fighting vehicles and emergency personnel	DTS/DPF 5.2 Access is in accordance with (a) or (b): (a) a clear and unobstructed vehicle or pedestrian pathway of not greater than 60 metres in length is available between the most distant part of the habitable building and the nearest part of a formed public access road

(b) evacuation of residents, occupants and visitors.	(b) driveways: (i) do not exceed 600m in length (ii) are constructed with a formed, all-weather surface (iii) are connected to a formed, all-weather public road with the transition area between the road and driveway having a gradient of not more than 7 degrees (1-in-8) (iv) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the driveway (v) have a crossfall of not more than 6 degrees (1-in-9.5) at any point along the driveway (vi) have a minimum formed width of 3m (4m where the gradient of the driveway is steeper than 12 degrees (1-in-4.5)) plus 0.5 metres clearance either side of the driveway from overhanging branches or other obstructions, including buildings and/or structures (Figure 1) (vii) incorporate passing bays with a minimum width of 6m and length of 17m every 200m (Figure 5) (viii) provide overhead clearance of not less than 4.0m between the driveway surface and overhanging branches or other obstructions, including buildings and/or structures (Figure 1) (ix) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around driveway curves by constructing the curves with a minimum external radius of 12.5m (Figure 2) (x) allow fire-fighting vehicles to safely enter and exit an allotment in a forward direction by using a 'U' shaped drive through design or by incorporating at the end of the driveway either: A. a loop road around the building or B. a turning area with a minimum radius of 12.5m (Figure 3) or C. a 'T' or 'Y' shaped turning area with a minimum formed length of 11m and minimum internal radii of 9.5m (Figure 4) (xi) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 5.3 Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.	DTS/DPF 5.3 None are applicable.

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.

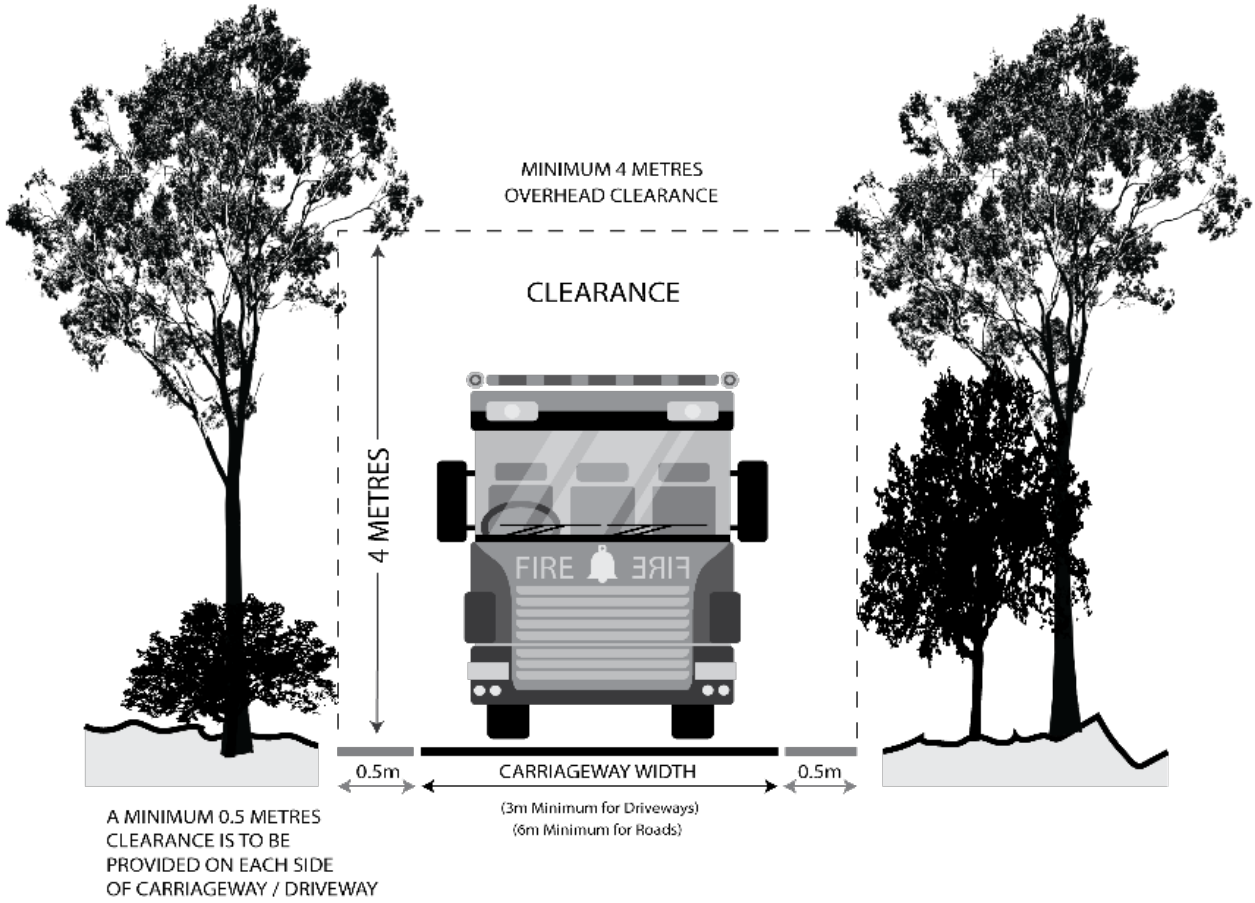
Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference

None	None	None	None

Figures and Diagrams

Fire Engine and Appliance Clearances

Figure 1 - Overhead and Side Clearances



Roads and Driveway Design

Figure 2 - Road and Driveway Curves

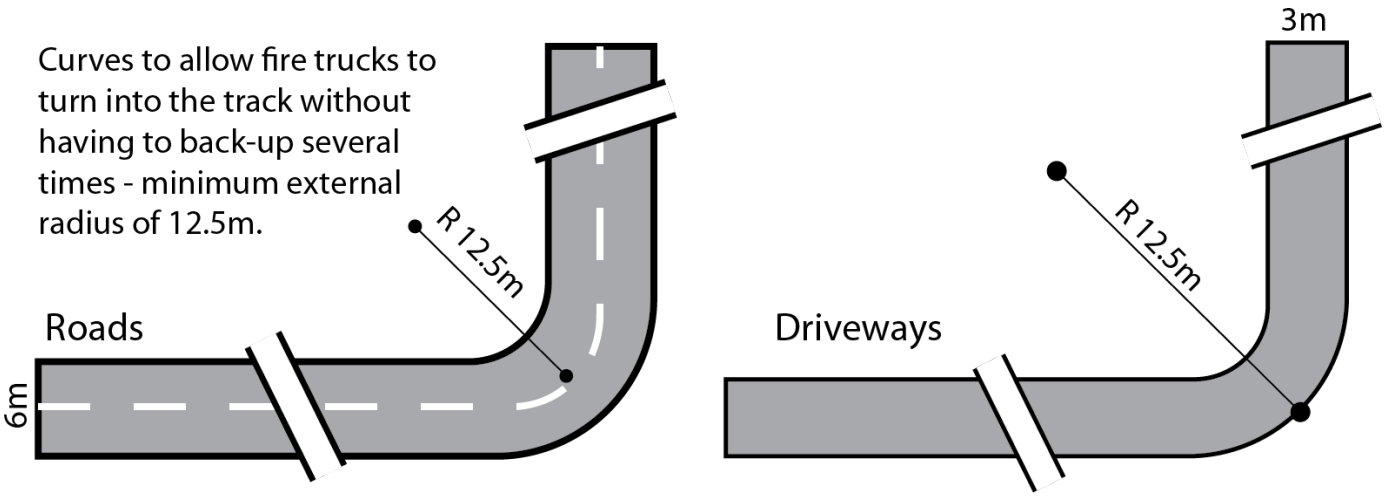


Figure 3 - Full Circle Turning Area

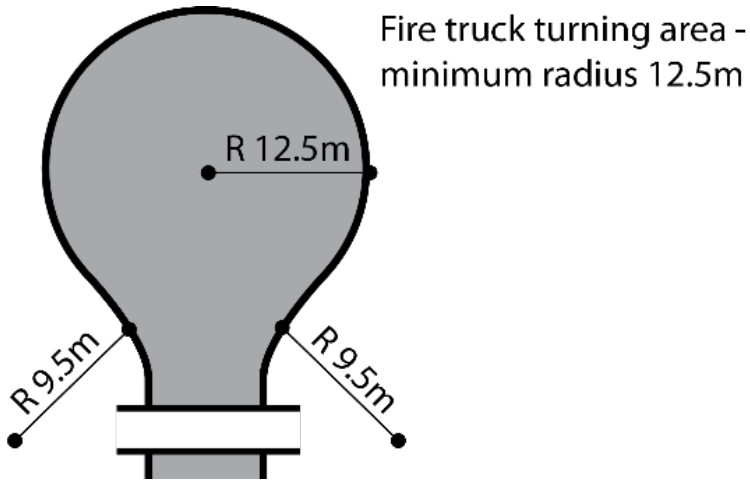
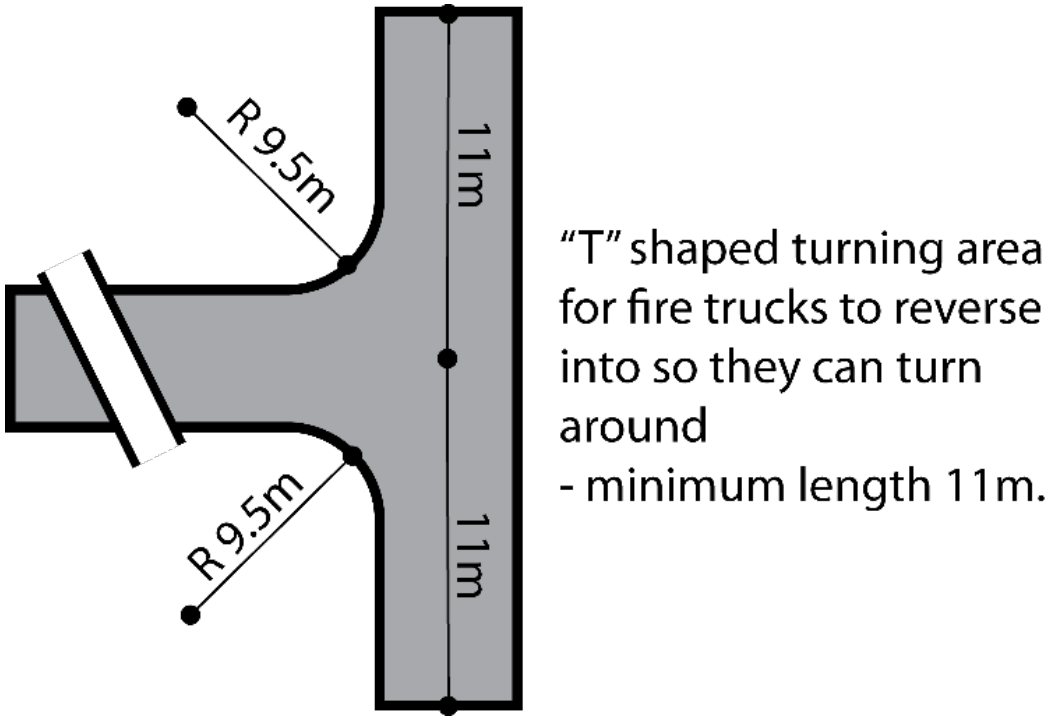


Figure 4 - 'T' or 'Y' Shaped Turning Head



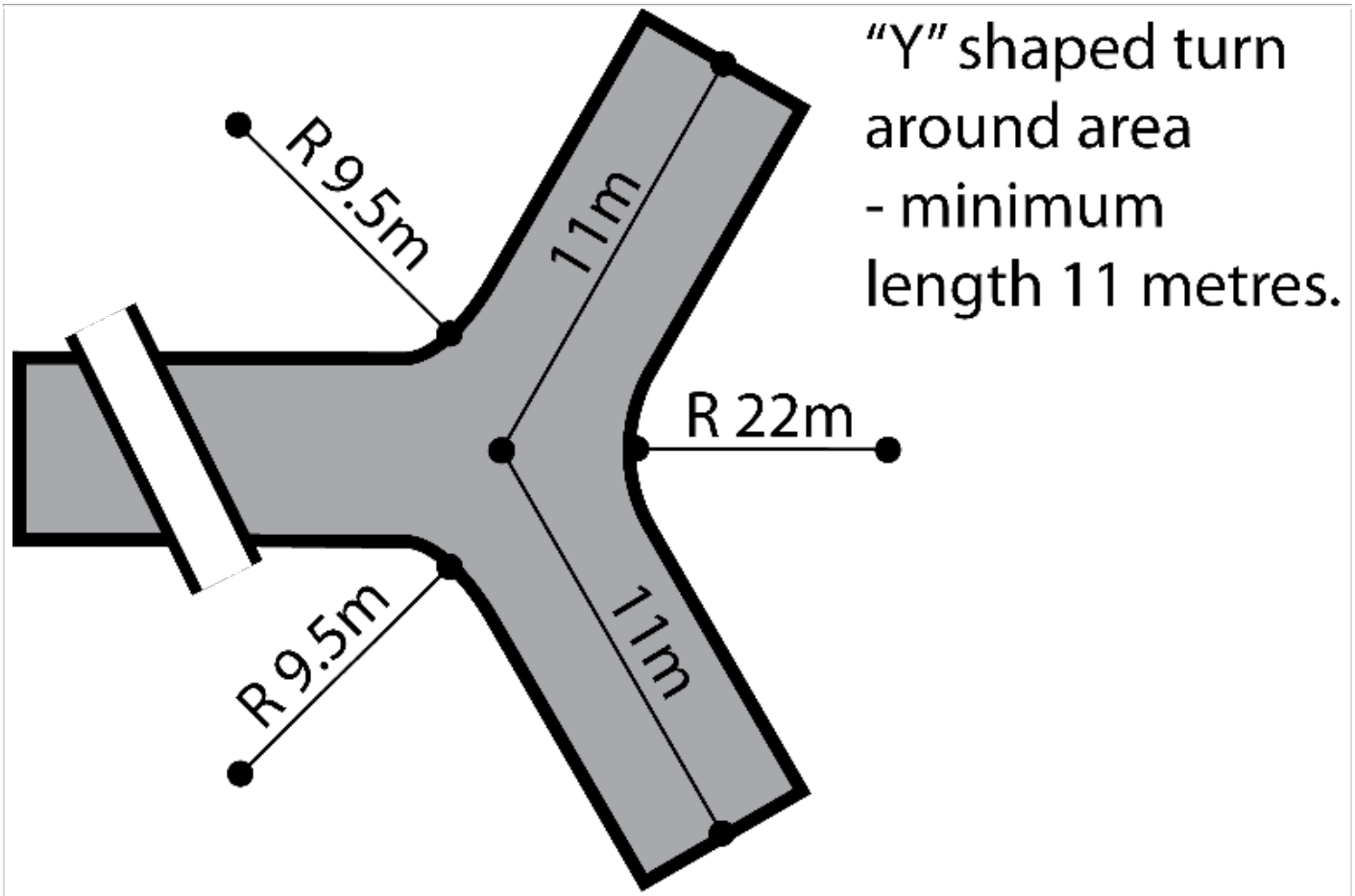
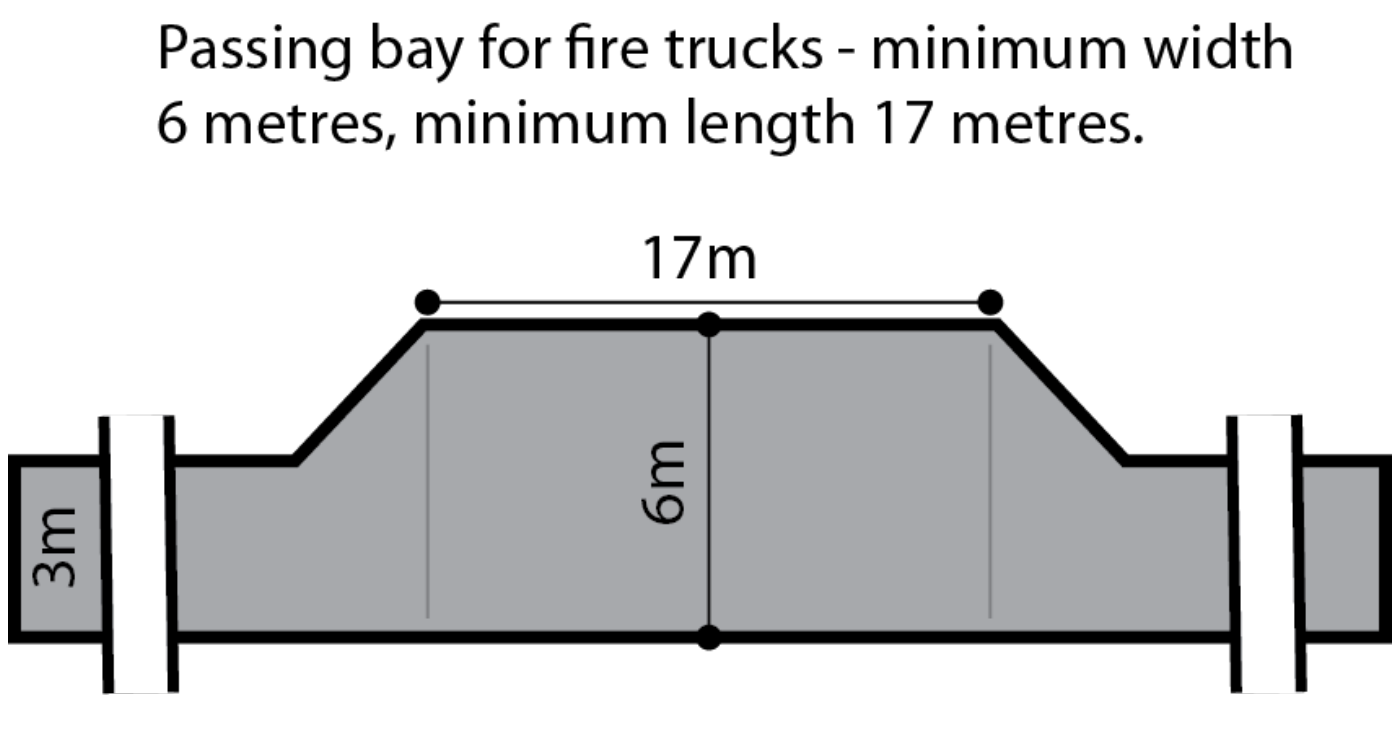


Figure 5 - Driveway Passing Bays



Hazards (Flooding – General) Overlay

Assessment Provisions (AP)

Desired Outcome

DO 1	Impacts on people, property, infrastructure and the environment from general flood risk are minimised through the appropriate siting and design of development.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use	
PO 1.1 Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services are sited away from flood areas enable uninterrupted operation of services and reduce likelihood of entrapment.	DTS/DPF 1.1 Pre-schools, educational establishments, retirement and supported accommodation, emergency services facilities, hospitals and prisons located outside the 1% AEP flood event.
Flood Resilience	
PO 2.1 Development is sited, designed and constructed to prevent the entry of floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.	DTS/DPF 2.1 Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than: In instances where no finished floor level value is specified, a building incorporates a finished floor level at least 300mm above the height of a 1% AEP flood event.
Environmental Protection	
PO 3.1 Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during a 1% AEP flood event to avoid potential environmental harm.	DTS/DPF 3.1 Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.

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

Heritage Adjacency Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development adjacent to State and Local Heritage Places maintains the heritage and cultural values of those Places.

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 Development adjacent to a State or Local Heritage Place does not dominate, encroach on or unduly impact on the setting of the Place.	DTS/DPF 1.1 None are applicable.
Land Division	
PO 2.1 Land division adjacent to a State or Local Heritage Place creates allotments that are of a size and dimension that enables the siting and setbacks of new buildings from allotment boundaries so that they do not dominate, encroach or unduly impact on the setting of the Place.	DTS/DPF 2.1 None are applicable.

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
Development that may materially affect the context of a State Heritage Place.	Minister responsible for the administration of the *Heritage Places Act 1993*.	To provide expert assessment and direction to the relevant authority on the potential impacts of development adjacent State Heritage Places.	Development of a class to which Schedule 9 clause 3 item 17 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Murray-Darling Basin Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in the Murray-Darling Basin area.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 All development, but in particular development involving: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) horse keeping (g) commercial forestry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in the Murray-Darling Basin.	DTS/DPF 1.1 None are applicable.

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 that require, or may require water to be taken from the River Murray within the meaning of the *River Murray Act 2003* under a water licence required under the *Landscape South Australia Act 2019*: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) horse keeping (g) commercial forestry.	Minister responsible for the administration of the *River Murray Act 2003.*	To provide expert technical assessment and direction to the relevant authority on matters regarding the taking of water, to ensure development is undertaken sustainably in the Murray-Darling Basin.	Development of a class to which Schedule 9 clause 3 item 10 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Native Vegetation Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Environmental Protection	
PO 1.1 Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.	DTS/DPF 1.1 An application is accompanied by: (a) a declaration stating that the proposal will not, or would not, involve clearance of native vegetation under the Native Vegetation Act 1991, including any clearance that may occur: (i) in connection with a relevant access point and / or driveway (ii) within 10m of a building (other than a residential building or tourist accommodation) (iii) within 20m of a dwelling or addition to an existing dwelling for fire prevention and control (iv) within 50m of residential or tourist accommodation in connection with a requirement under a relevant overlay to establish an asset protection zone in a bushfire prone area or (b) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the clearance is categorised as 'Level 1 clearance'.
PO 1.2 Native vegetation clearance in association with development avoids the following: (a) significant wildlife habitat and movement corridors (b) rare, vulnerable or endangered plants species (c) native vegetation that is significant because it is located in an area which has been extensively cleared (d) native vegetation that is growing in, or in association with, a wetland environment.	DTS/DPF 1.2 None are applicable.
PO 1.3 Intensive animal husbandry and agricultural activities are sited, set back and designed to minimise impacts on native vegetation,	DTS/DPF 1.3 Development within 500 metres of a boundary of a State Significant Native Vegetation Area does not involve any of the following:

including impacts on native vegetation in an adjacent State Significant Native Vegetation Area, from: (a) the spread of pest plants and phytophthora (b) the spread of non-indigenous plants species (c) excessive nutrient loading of the soil or loading arising from surface water runoff (d) soil compaction (e) chemical spray drift.	(a) horticulture (b) intensive animal husbandry (c) dairy (d) commercial forestry (e) aquaculture.
PO 1.4 Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.	DTS/DPF 1.4 None are applicable.
Land division	
PO 2.1 Land division does not result in the fragmentation of land containing native vegetation, or necessitate the clearance of native vegetation, unless such clearance is considered minor, taking into account the location of allotment boundaries, access ways, fire breaks, boundary fencing and potential building siting or the like.	DTS/DPF 2.1 Land division where: (a) an application is accompanied by one of the following: (i) a declaration stating that none of the allotments in the proposed plan of division contain native vegetation under the *Native Vegetation Act 1991* (ii) a declaration stating that no native vegetation clearance under the *Native Vegetation Act 1991* will be required as a result of the division of land (iii) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the vegetation to be cleared is categorised as 'Level 1 clearance' or (b) an application for land division which is being considered concurrently with a proposal to develop each allotment which will satisfy, or would satisfy, the requirements of DTS/DPF 1.1, including any clearance that may occur or (c) the division is to support a Heritage Agreement under the Native Vegetation Act 1991 or the *Heritage Places Act 1993*.

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
Development that is the subject of a report prepared in accordance with Regulation 18(2)(a) of the *Native Vegetation Regulations 2017* that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.	Native Vegetation Council	To provide expert assessment and direction to the relevant authority on the potential impacts of development on native vegetation.	Development of a class to which Schedule 9 clause 3 item 11 of the Planning,

			Development and Infrastructure (General) Regulations 2017 applies.

Prescribed Water Resources Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in prescribed surface water resources areas maintains the health and natural flow paths of water courses.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 All development, but in particular development involving any of the following: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed surface water areas.	DTS/DPF 1.1 Development satisfies either of the following: (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 *Landscape South Australia Act 2019*.
PO 1.2 Development comprising the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment as well as downstream users.	DTS/DPF 1.2 None are applicable.

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
Development that comprises the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert, or collects or diverts surface water flowing over land.	Relevant authority under the *Landscape South Australia Act 2019* that would, if it were not for the operation of section 106(1)(e) of that Act, have the authority under that Act to grant or refuse a permit to undertake the subject development.	To provide expert assessment and direction to the relevant authority on potential impacts from development on the health, sustainability and/or natural flow paths of water resources in accordance with the provisions of the relevant water allocation plan or regional landscape plan or equivalent.	Development of a class to which Schedule 9 clause 3 item 12 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Any of the following classes of development: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry	The Chief Executive of the Department of the Minister responsible for the administration of the *Landscape South Australia Act 2019*.	To provide expert technical assessment and direction to the relevant authority on the taking of water to ensure development is undertaken sustainably and maintains the health and natural flow paths of water resources.	Development of a class to which Schedule 9 clause 3 item 13 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Commercial forestry that requires a forest water licence under Part 8 Division 6 of the *Landscape South Australia Act 2019.*			

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	
PO 1.1 Regulated trees are retained where they:	DTS/DPF 1.1 None are applicable.

(a) make an important visual contribution to local character and amenity (b) are indigenous to the local area and listed under the *National Parks and Wildlife Act 1972* as a rare or endangered native species and / or (c) provide an important habitat for native fauna.	
PO 1.2 Significant trees are retained where they: (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 *National Parks and Wildlife Act 1972* 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.	DTS/DPF 1.2 None are applicable.
PO 1.3 A tree damaging activity not in connection with other development satisfies (a) and (b): (a) tree damaging activity is only undertaken to: (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: A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire (v) treat disease or otherwise in the general interests of the health of the tree and / or (vi) maintain the aesthetic appearance and structural integrity of the tree (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.	DTS/DPF 1.3 None are applicable.
PO 1.4	DTS/DPF 1.4

A tree-damaging activity in connection with other development satisfies all the following: (a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible (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.	None are applicable.
Ground work affecting trees	
PO 2.1 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.	DTS/DPF 2.1 None are applicable.
Land Division	
PO 3.1 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.	DTS/DPF 3.1 Land division where: (a) there are no regulated or significant trees located within or adjacent to the plan of division or (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.

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

River Murray Tributaries Protection Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use and conservation of riverine environments within the River Murray Tributaries 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	
PO 1.1 Development comprising the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment and downstream users.	DTS/DPF 1.1 None are applicable.
PO 1.2 All development, but in particular development involving any of the following: (a) activities requiring irrigation (b) aquaculture (c) commercial forestry (d) horticulture (e) industry (f) intensive animal husbandry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed surface water areas.	DTS/DPF 1.2 None are applicable.
Land Division	
PO 2.1 Land division does not lead to the intensification of development to a level that would have a negative impact on the health or natural flow paths of the River Murray Tributaries.	DTS/DPF 2.1 None are applicable.
PO 2.2 Land division, including boundary realignment, preserves the integrity of the public waterfront of the River Murray system by limiting the number of allotments having a frontage (or extent of frontage) to that system.	DTS/DPF 2.2 Land division does not result in any of the following: (a) an increase in allotments having a frontage to a part of the River Murray system (b) an increase in the frontage of an allotment or allotments to a part of the River Murray system.

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, except	Minister responsible for the	To provide expert assessment	Development

where the development is, in the opinion of the relevant authority, minor in nature and would not warrant a referral when considering the purpose of the referral: (a) development that comprises the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert, or collects or diverts water flowing in a watercourse or surface water flowing over land (b) horticulture (c) activities requiring irrigation, other than irrigation used for domestic purposes (d) aquaculture (e) intensive animal husbandry (f) horse keeping (g) commercial forestry (h) land division classified as *restricted* by the Planning and Design Code (i) land division that results in: (i) 4 or more additional allotments or (ii) 4 or more additional grants of occupancy (by the conferral or exercise of a right to occupy part only of an allotment) or (iii) a mix of 4 or more additional allotments and separate grants of occupancy (j) land division that involves the creation of a new allotment or grant of occupancy where any part of the boundary of the new allotment or occupancy will have a frontage to a part of the River Murray system (k) alteration of the boundaries of an existing allotment so as to result in: (i) the allotment having a frontage to a part of the River Murray system or (ii) the allotment having an increase in its frontage to a part of the River Murray system.	administration of the *River Murray Act 2003.*	and direction to the relevant authority on potential impacts from development on the health of the River Murray system, its natural flow regime (including floodwaters), water quality and cultural heritage.	of a class to which Schedule 9 clause 3 item 16 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Traffic Generating Development Overlay

Assessment Provisions (AP)

Desired Outcome	
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.

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	
PO 1.1 Development designed to minimise its potential impact on the safety, efficiency and functional performance of the State Maintained Road network.	DTS/DPF 1.1 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (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.
PO 1.2 Access points sited and designed to accommodate the type and volume of traffic likely to be generated by development.	DTS/DPF 1.2 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (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.
PO 1.3 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.	DTS/DPF 1.3 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (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: (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m^2 or more (c) retail development with a gross floor area of 2,000m^2 or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m^2 or more (e) industry with a gross floor area of 20,000m^2 or more (f) educational facilities with a capacity of 250 students or more.	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 7 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Urban Transport Routes Overlay

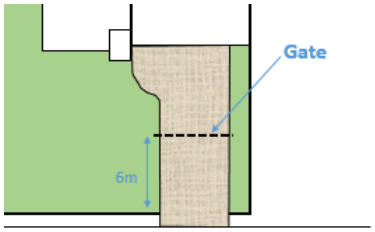
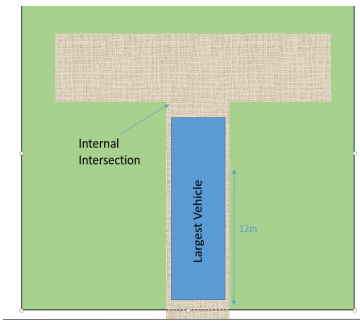
Assessment Provisions (AP)

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

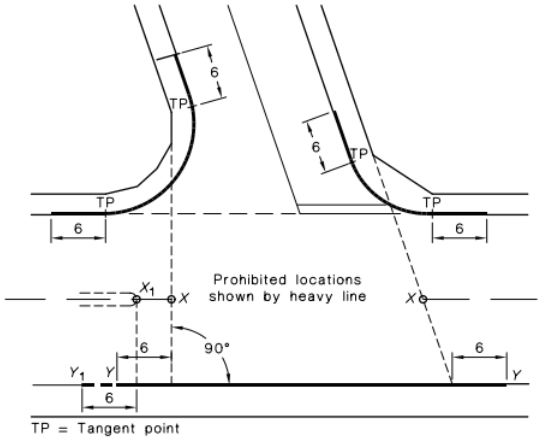
Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

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	DTS/DPF 1.1 An access point satisfies (a), (b) or (c):

development and minimise traffic flow interference associated with access movements along adjacent State maintained roads.	(a) where servicing a single (1) dwelling / residential allotment: (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) it will 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: (i) (i) it will not result in more than one access point servicing the development site (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) it will 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) (c) where the development will result in 7 or more dwellings, or is a non-residential land use: (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) it will 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) it will 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) it will 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: 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 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.
Access - On-Site Queuing	
PO 2.1 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 on the functional	DTS/DPF 2.1 An access point in accordance with one of the following: (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:

performance of the road and maintain safe vehicle movements.	 (b) will service, or is intended to service, development that will generate less than 60 vehicle movements per day, and: (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) (c) will service, or is intended to service, development that will generate less than 60 vehicle movements per day, and: (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 longest vehicle expected on site from the access (measured from the site boundary into the site) as shown in the following diagram: 
Access - (Location Spacing) - Existing Access Point	
PO 3.1 Existing access points are 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 (b) a larger class of vehicle expected to access the site using the existing access (c) is not located on a Controlled Access Road and development constitutes: (i) a change of use between an office <500m² gross leasable floor area

	and a consulting room <500m² gross leasable floor area or vice versa (ii) a change in use from a shop to an office, consulting room or personal or domestic services establishment (iii) a change of use from a consulting room or office <250m² gross leasable floor area to shop <250m² gross leasable floor area (iv) a change of use from a shop <500m² gross leasable floor area to a warehouse <500m² gross leasable floor area (v) an office or consulting room with a <500m² gross leasable floor area.
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 X_1 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 Y_1.

(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	30m	73m
70 km/h	40m	92m
80 km/h	50m	114m
90 km/h	65m	139m

100 km/h	80m	165m
110 km/h	100m	193m

Access - Location (Sight Lines)

PO 5.1

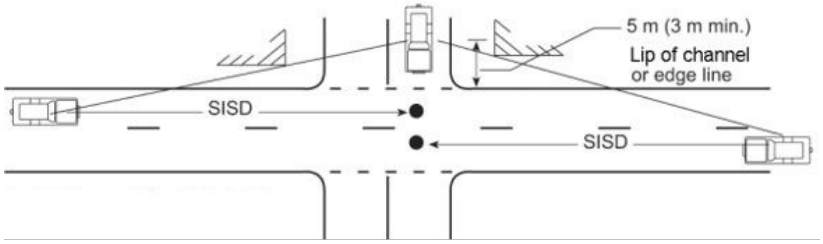
Access points are located and designed to accommodate sight lines that enable drivers and pedestrians to navigate potential conflict points with roads in a controlled and safe manner.

DTS/DPF 5.1

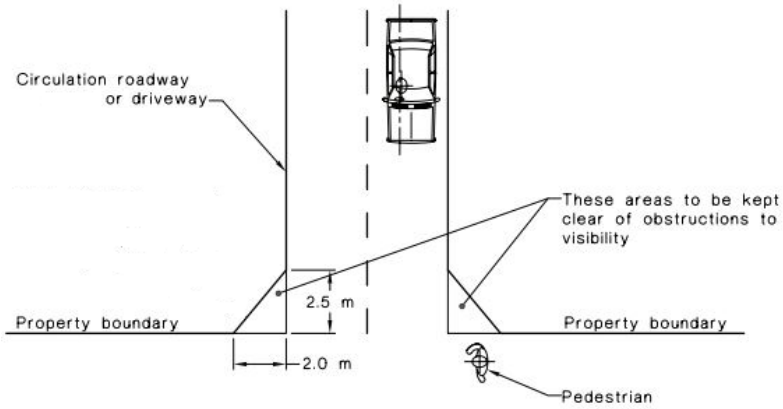
An access point satisfies (a) or (b):

(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:



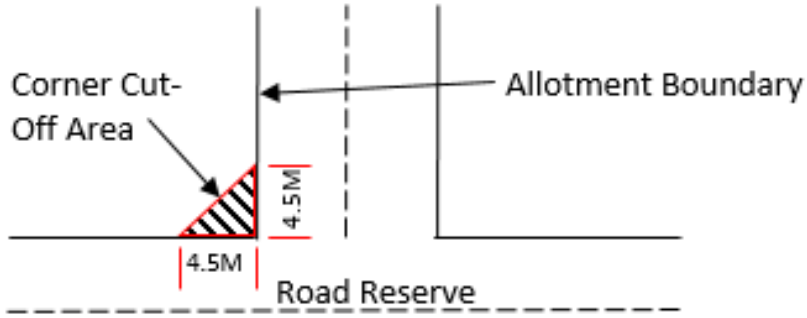
Access – Mud and Debris

PO 6.1

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

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

the road to ensure safe road operating conditions.	boundary (whichever is closer).
Access - Stormwater	
PO 7.1 Access points are 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 through an existing drainage point and system.
Building on Road Reserve	
PO 8.1 Buildings or structures that encroach onto, above or below road reserves are designed and sited to minimise impact on safe movements by all road users.	DTS/DPF 8.1 Buildings or structures are not located on, above or below the road reserve.
Public Road Junctions	
PO 9.1 New junctions with a public road (including the opening of unmade public road junctions) or modifications to existing road junctions are located and designed to ensure safe 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 (b) alterations to an existing access or public road junction (except where deemed to be minor in the opinion of the relevant authority) (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).	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 7 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Water Resources Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Protection of the quality of surface waters considering adverse water quality impacts associated with projected reductions in rainfall and warmer air temperatures as a result of climate change.
DO 2	Maintain the conveyance function and natural flow paths of watercourses to assist in the management of flood waters and stormwater runoff.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Water Catchment	
PO 1.1 Watercourses and their beds, banks, wetlands and floodplains (1% AEP flood extent) are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development avoids interfering with the existing hydrology or water regime of swamps and wetlands other than to improve the existing conditions to enhance environmental values.	DTS/DPF 1.2 None are applicable.

PO 1.3 Wetlands and low-lying areas providing habitat for native flora and fauna are not drained, except temporarily for essential management purposes to enhance environmental values.	DTS/DPF 1.3 None are applicable.
PO 1.4 Watercourses, areas of remnant native vegetation, or areas prone to erosion that are capable of natural regeneration are fenced off to limit stock access.	DTS/DPF 1.4 None are applicable.
PO 1.5 Development that increases surface water run-off includes a suitably sized strip of vegetated land on each side of a watercourse to filter runoff to: (a) reduce the impacts on native aquatic ecosystems (b) minimise soil loss eroding into the watercourse.	DTS/DPF 1.5 A strip of land 20m or more wide measured from the top of existing banks on each side of the watercourse is free from development, livestock use and revegetated with locally indigenous vegetation.
PO 1.6 Development resulting in the depositing or placing of an object or solid material in a watercourse or lake occurs only where it involves any of the following: (a) the construction of an erosion control structure (b) devices or structures used to extract or regulate water flowing in a watercourse (c) devices used for scientific purposes (d) the rehabilitation of watercourses.	DTS/DPF 1.6 None are applicable.
PO 1.7 Watercourses, floodplains (1% AEP flood extent) and wetlands protected and enhanced by retaining and protecting existing native vegetation.	DTS/DPF 1.7 None are applicable.
PO 1.8 Watercourses, floodplains (1% AEP flood extent) and wetlands are protected and enhanced by stabilising watercourse banks and reducing sediments and nutrients entering the watercourse.	DTS/DPF 1.8 None are applicable.
PO 1.9 Dams, water tanks and diversion drains are located and constructed to maintain the quality and quantity of flows required to meet environmental and downstream needs.	DTS/DPF 1.9 None are applicable.

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

Part 4 - General Development Policies

Advertisements

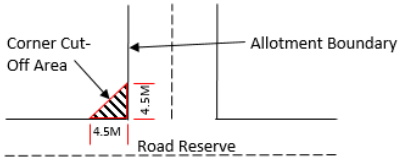
Assessment Provisions (AP)

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	
PO 1.1 Advertisements are compatible and integrated with the design of the building and/or land they are located on.	DTS/DPF 1.1 Advertisements attached to a building satisfy all of the following: (a) are not located in a Neighbourhood-type zone (b) where they are flush with a wall: (i) if located at canopy level, are in the form of a fascia sign (ii) if located above canopy level: 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: (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: 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 (e) if located at canopy level, are in the form of a fascia sign (f) if located above a canopy: (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.
PO 1.2 Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.	DTS/DPF 1.2 Where development comprises an advertising hoarding, the supporting structure is: (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.
PO 1.3 Advertising does not encroach on public land or the land of an adjacent allotment.	DTS/DPF 1.3 Advertisements and/or advertising hoardings are contained within the boundaries of the site.
PO 1.4 Where possible, advertisements on public land are integrated with existing structures and infrastructure.	DTS/DPF 1.4 Advertisements on public land that meet at least one of the following: (a) achieves Advertisements DTS/DPF 1.1 (b) are integrated with a bus shelter.
PO 1.5 Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.	DTS/DPF 1.5 None are applicable.
Proliferation of Advertisements	
PO 2.1 Proliferation of advertisements is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.1 No more than one freestanding advertisement is displayed per occupancy.
PO 2.2 Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.	DTS/DPF 2.2 Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.
PO 2.3 Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.3 Advertisements satisfy all of the following:

	(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	
PO 3.1 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 activities on the land and avoid unrelated content that contributes to visual clutter and untidiness.	DTS/DPF 3.1 Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.
Amenity Impacts	
PO 4.1 Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.	DTS/DPF 4.1 Advertisements do not incorporate any illumination.
Safety	
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.	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.
PO 5.2 Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.	DTS/DPF 5.2 No advertisement illumination is proposed.
PO 5.3 Advertisements and/or advertising hoardings do not create a hazard to drivers by: (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.	DTS/DPF 5.3 Advertisements satisfy all of the following: (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 
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.	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.
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.	DTS/DPF 5.5 Where the advertisement or advertising hoarding is: (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: (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.
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.	DTS/DPF 5.6 Advertising: (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 Kennel flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 3.1 The floors of kennels satisfy all of the following: (a) are constructed of impervious concrete (b) are designed to be self-draining when washed down.
PO 3.2 Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as: (a) adopting appropriate separation distances (b) orientating openings away from sensitive receivers.	DTS/DPF 3.2 Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.
PO 3.3 Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.	DTS/DPF 3.3 Kennels are sited in association with a permanent dwelling on the land.
Wastes	
PO 4.1 Storage of manure, used litter and other wastes (other than wastewater lagoons) is designed, constructed and managed to minimise attracting and harbouring vermin.	DTS/DPF 4.1 None are applicable.

PO 4.2 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.	DTS/DPF 4.2 Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.

Aquaculture

Assessment Provisions (AP)

Desired Outcome	
DO 1	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.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land-based Aquaculture	
PO 1.1 Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.	DTS/DPF 1.1 Land-based aquaculture and associated components are located to satisfy all of the following: (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.
PO 1.2 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.	DTS/DPF 1.2 None are applicable.
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	DTS/DPF 1.5 None are applicable.

intake and discharge pipes, are designed to minimise the need to traverse sensitive areas to minimise impact on the natural environment.	
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 Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine	DTS/DPF 2.6 None are applicable.

environment.	
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 *National Parks and Wildlife Act 1972*.	DTS/DPF 2.10 Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the *National Parks and Wildlife Act 1972*.
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 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.	DTS/DPF 4.2 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 Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.1 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	DTS/DPF 3.3 None are applicable.

(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.	

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 / 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 *Electricity Act 1996* (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	Development is: (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 (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.	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 realm and negative impacts on residential amenity by: (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	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.

adjacent sensitive land uses.	
PO 1.5 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.	DTS/DPF 1.5 None are applicable.
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 is 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 (e) contribute to biodiversity.	DTS/DPF 3.1 None are applicable.
PO 3.2 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.	DTS/DPF 3.2 None are applicable.
Environmental Performance	
PO 4.1 Buildings are sited, oriented and designed to maximise natural	DTS/DPF 4.1 None are applicable.

sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.	
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 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 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 landslip nor increases 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 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)	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following: (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.
PO 10.2 Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.	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% transparency/openings fixed to a minimum height of: (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
All Residential development	

Front elevations and passive surveillance	
PO 11.1 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 11.1 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street.
PO 11.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 11.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and amenity	
PO 12.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 12.1 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.
PO 12.2 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.	DTS/DPF 12.2 None are applicable.
Ancillary Development	
PO 13.1 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.	DTS/DPF 13.1 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 (and not including a gable end) (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.
PO 13.2 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.	DTS/DPF 13.2 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 2 - Off-Street Car Parking Requirements in Designated Areas.
PO 13.3 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.	DTS/DPF 13.3 The pump and/or filtration system is ancillary to a dwelling erected on the same site and is: (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.
Garage appearance	
PO 14.1 Garaging is designed to not detract from the streetscape or appearance of a dwelling.	DTS/DPF 14.1 Garages and carports facing a street: (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.
Massing	
PO 15.1 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 15.1 None are applicable
Dwelling additions	
PO 16.1 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.	DTS / DPF 16.1 Dwelling additions: (a) are not constructed, added to or altered so that any part is situated closer to a public street (b) do not result in: (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: 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 or C. incorporate screening to a height of 1.5m above finished floor level (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: 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 B. 1.7m above finished floor level in all other cases.
Private Open Space	
PO 17.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 17.1 Private open space is provided in accordance with Design Table 1 - Private Open Space.
Water Sensitive Design	
PO 18.1 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.	DTS/DPF 18.1 Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes: (a) 80 per cent reduction in average annual total suspended solids (b) 60 per cent reduction in average annual total phosphorus (c) 45 per cent reduction in average annual total nitrogen.
PO 18.2 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 18.2 Development creating a common driveway / access that services 5 or more dwellings: (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 (b) manages site generated stormwater runoff up to and including the 1% AEP flood event to avoid flooding of buildings.
Car parking, access and manoeuvrability	
PO 19.1 Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area): (a) single width car parking spaces: (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 (b) double width car parking spaces (side by side):

	(i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 19.2 Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.2 Uncovered car parking spaces have: (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 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.	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.
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.	DTS/DPF 19.4 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: (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.
PO 19.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 19.5 Driveways are designed and sited so that: (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
PO 19.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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: (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.
Waste storage	
PO 20.1 Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.	DTS/DPF 20.1 None are applicable.
Design of Transportable Dwellings	
PO 21.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 21.1 Buildings satisfy (a) or (b): (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.
Group dwelling, residential flat buildings and battle-axe development	
Amenity	
PO 22.1 Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.	DTS/DPF 22.1 Dwellings have a minimum internal floor area in accordance with the following 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
PO 22.2 The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	DTS/DPF 22.2 None are applicable.
PO 22.3 Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	DTS/DPF 22.3 None are applicable.
PO 22.4	DTS/DPF 22.4

Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	Dwelling sites/allotments are not in the form of a battle-axe arrangement.
Communal Open Space	
PO 23.1 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 23.1 None are applicable.
PO 23.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 23.2 Communal open space incorporates a minimum dimension of 5 metres.
PO 23.3 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 23.3 None are applicable.
PO 23.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 23.4 None are applicable.
PO 23.5 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 23.5 None are applicable.
Carparking, access and manoeuvrability	
PO 24.1 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 24.1 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 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.
PO 24.2 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 24.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 24.3 Residential driveways that service more than one dwelling are	DTS/DPF 24.3 Driveways that service more than 1 dwelling or a dwelling on a

designed to allow safe and convenient movement.	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 24.4 Residential driveways in a battle-axe configuration are designed to allow safe and convenient movement.	DTS/DPF 24.4 Where in a battle-axe configuration, a driveway servicing one dwelling has a minimum width of 3m.
PO 24.5 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.	DTS/DPF 24.5 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 24.6 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 24.6 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 25.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	DTS/DPF 25.1 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.
PO 25.2 Soft landscaping is provided that improves the appearance of common driveways.	DTS/DPF 25.2 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 comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 29.1 None are applicable.
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:	DTS/DPF 29.4 None are applicable.

(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	
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	
PO 31.1	DTS/DPF 31.1

Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.	None are applicable.
PO 31.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 31.2 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 32.1 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: (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: (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.	DTS/DPF 32.1 None are applicable.

Table 1 - Private Open Space

Dwelling Type	Minimum Rate
Dwelling (at ground level)	Total private open space area: (a) Site area <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line. Minimum directly accessible from a living room: 16m2 / with a minimum dimension 3m.
Dwelling (above ground level)	Studio (no separate bedroom): 4m^2 with a minimum dimension 1.8m One bedroom: 8m^2 with a minimum dimension 2.1m Two bedroom dwelling: 11m^2 with a minimum dimension 2.4m Three + bedroom dwelling: 15m^2 with a minimum dimension 2.6m
Cabin or caravan (permanently fixed to the	Total area: 16m^2, which may be used as second car parking space, provided on each site intended for residential occupation.

ground) in a residential park or a caravan and tourist park	

Design in Urban Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	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.

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 (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.	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 are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.

(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 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.	DTS/DPF 1.5 None are applicable.
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	
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 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.
Car parking appearance	
PO 7.1 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: (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 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	DTS/DPF 7.3 None are applicable.

provided between parking areas and the development.	
PO 7.4 Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.	DTS/DPF 7.4 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 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 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 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 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% transparency/openings fixed to a minimum height of: (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)	
PO 11.1 Development provides a dedicated area for on-site collection and	DTS/DPF 11.1 None are applicable.

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 Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.	DTS/DPF 11.2 None are applicable.
PO 11.3 Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.	DTS/DPF 11.3 None are applicable.
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.	DTS/DPF 11.4 None are applicable.
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.	DTS/DPF 11.5 None are applicable.
All Development - Medium and High Rise	
External Appearance	
PO 12.1 Buildings positively contribute to the character of the local area by responding to local context.	DTS/DPF 12.1 None are applicable.
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.	DTS/DPF 12.2 None are applicable.
PO 12.3 Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.	DTS/DPF 12.3 None are applicable.
PO 12.4 Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.	DTS/DPF 12.4 None are applicable.
PO 12.5 External materials and finishes are durable and age well to minimise ongoing maintenance requirements.	DTS/DPF 12.5 Buildings utilise a combination of the following external materials and finishes: (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.
PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.	DTS/DPF 12.6 Building street frontages incorporate: (a) active uses such as shops or offices (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.
PO 12.7 Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.	DTS/DPF 12.7 Entrances to multi-storey buildings are: (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.
PO 12.8 Building services, plant and mechanical equipment are screened from the public realm.	DTS/DPF 12.8 None are applicable.
Landscaping	
PO 13.1 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.	DTS/DPF 13.1 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.
PO 13.2 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.	DTS/DPF 13.2 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.

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
Tree size and site area definitions			
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
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 rooms or areas with those of other buildings so that views are oblique rather than direct to avoid direct line of sight (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 (d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.	DTS/DPF 16.1 None are applicable.
All residential development	
Front elevations and passive surveillance	
PO 17.1 Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 17.1 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street.
PO 17.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 17.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and Amenity	
PO 18.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 18.1 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.
PO 18.2 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.	DTS/DPF 18.2 None are applicable.
Ancillary Development	
PO 19.1	DTS/DPF 19.1

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.	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 (and not including a gable end) (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.
PO 19.2 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 19.2 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 2 - Off-Street Car Parking Requirements in Designated Areas.
PO 19.3 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.	DTS/DPF 19.3 The pump and/or filtration system is ancillary to a dwelling erected on the same site and is: (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	
PO 20.1 Garaging is designed to not detract from the streetscape or appearance of a dwelling.	DTS/DPF 20.1 Garages and carports facing a street: (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.
PO 20.2 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.	DTS/DPF 20.2 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:

	(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.
PO 20.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 20.3 None are applicable
Private Open Space	
PO 21.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 21.1 Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
PO 21.2 Private open space is positioned to provide convenient access from internal living areas.	DTS/DPF 21.2 Private open space is directly accessible from a habitable room.
Landscaping	
PO 22.1 Soft landscaping is incorporated into development to: (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.	DTS/DPF 22.1 Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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%
>200-450	20%
>450	25%

	(b) at least 30% of any land between the primary street boundary and the primary building line.
Car parking, access and manoeuvrability	
PO 23.1 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area): (a) single width car parking spaces: (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 (b) double width car parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 23.2 Uncovered car parking space are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.2 Uncovered car parking spaces have: (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 23.3 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.	DTS/DPF 23.3 Driveways and access points satisfy (a) or (b): (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: (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.
PO 23.4 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 23.4 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 23.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 23.5 Driveways are designed and sited so that: (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 or way is at least 6.2m wide along the boundary of the allotment / site
PO 23.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 23.6 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: (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.
Waste storage	
PO 24.1 Provision is made for the convenient storage of waste bins in a location screened from public view.	DTS/DPF 24.1 Where dwellings abut both side boundaries a waste bin storage area is provided behind the building line of each dwelling 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.
Design of Transportable Buildings	
PO 25.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 25.1 Buildings satisfy (a) or (b): (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.

Residential Development - Medium and High Rise (including serviced apartments)	
Outlook and Visual Privacy	
PO 26.1 Ground level dwellings have a satisfactory short range visual outlook to public, communal or private open space.	DTS/DPF 26.1 Buildings: (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	
PO 29.1 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.	DTS/DPF 29.1 Buildings containing in excess of 10 dwellings provide at least one of each of the following: (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least $50m^2$ (c) 2 bedroom dwelling / apartment with a floor area of at least $65m^2$ (d) 3+ bedroom dwelling / apartment with a floor area of at least $80m^2$, and any dwelling over 3 bedrooms provides an additional $15m^2$ for every additional bedroom.
PO 29.2 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.	DTS/DPF 29.2 None are applicable.
Common Areas	
PO 30.1 The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.	DTS/DPF 30.1 Common corridor or circulation areas: (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	
PO 31.1 Dwellings are of a suitable size to provide a high standard of	DTS/DPF 31.1 Dwellings have a minimum internal floor area in accordance with

<table>
<tr><td>amenity for occupants.</td><td>the following table:
<table><tr><th>Number of bedrooms</th><th>Minimum internal floor area</th></tr><tr><td>Studio</td><td>35m^2</td></tr><tr><td>1 bedroom</td><td>50m^2</td></tr><tr><td>2 bedroom</td><td>65m^2</td></tr><tr><td>3+ bedrooms</td><td>80m^2 and any dwelling over 3 bedrooms provides an additional 15m^2 for every additional bedroom</td></tr></table></td></tr>
<tr><td>PO 31.2

The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.</td><td>DTS/DPF 31.2

None are applicable.</td></tr>
<tr><td>PO 31.3

Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.</td><td>DTS/DPF 31.3

None are applicable.</td></tr>
<tr><td>PO 31.4

Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.</td><td>DTS/DPF 31.4

Dwelling sites/allotments are not in the form of a battle-axe arrangement.</td></tr>
<tr><td colspan="2">Communal Open Space</td></tr>
<tr><td>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.</td><td>DTS/DPF 32.1

None are applicable.</td></tr>
<tr><td>PO 32.2

Communal open space is of sufficient size and dimensions to cater for group recreation.</td><td>DTS/DPF 32.2

Communal open space incorporates a minimum dimension of 5 metres.</td></tr>
<tr><td>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.</td><td>DTS/DPF 32.3

None are applicable.</td></tr>
<tr><td>PO 32.4

Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.</td><td>DTS/DPF 32.4

None are applicable.</td></tr>
<tr><td>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</td><td>DTS/DPF 32.5

None are applicable.</td></tr>
</table>

(b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	
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 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.	DTS/DPF 33.4 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	DTS/DPF 34.2

Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	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 sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 36.1 None are applicable.
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	DTS/DPF 36.2 None are applicable.

increase the peak flows in downstream systems.	
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.
PO 39.6	DTS/DPF 39.6

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.	None are applicable.
Site Facilities / Waste Storage	
PO 40.1 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 40.1 None are applicable.
PO 40.2 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 40.2 None are applicable.
PO 40.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 40.3 None are applicable.
PO 40.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.	DTS/DPF 40.4 None are applicable.
PO 40.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 40.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 40.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 40.6 None are applicable.
PO 40.7 Services, including gas and water meters, are conveniently located and screened from public view.	DTS/DPF 40.7 None are applicable.
Student Accommodation	
PO 41.1 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.	DTS/DPF 41.1 Student accommodation provides: (a) a range of living options to meet a variety of accommodation needs, such as one-bedroom, two-bedroom and disability access units (b) common or shared facilities to enable a more efficient use of space, including: (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 $8m^3$ 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.
PO 41.2 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.	DTS/DPF 41.2 None are applicable.
All non-residential development	
Water Sensitive Design	
PO 42.1 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.	DTS/DPF 42.1 None are applicable.
PO 42.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 42.2 None are applicable.
PO 42.3 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.	DTS/DPF 42.3 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 43.1 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: (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: (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	DTS/DPF 43.1 None are applicable.

(ii) a holding tank and its subsequent removal off-site on a regular basis.	
Laneway Development	
Infrastructure and Access	
PO 44.1 Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where: (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 intensity and orderly development of land fronting minor thoroughfares.	DTS/DPF 44.1 Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.

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 <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line. Minimum directly accessible from a living room: 16m2 / 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 rural landscape.	DTS/DPF 1.1 None are applicable.
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 *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992* 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 *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992*.
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).
PO 2.2 Medium or high rise residential flat buildings located within or at the interface with zones which restrict heights to a maximum of 2	DTS/DPF 2.2 None are applicable.

building levels transition down in scale and height towards the boundary of that zone, other than where it is a street boundary.	
Primary Street Setback	
PO 3.1 Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.	DTS/DPF 3.1 Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.
Secondary Street Setback	
PO 4.1 Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.	DTS/DPF 4.1 Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.
Boundary Walls	
PO 5.1 Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.	DTS/DPF 5.1 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): (a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height (b) do not: (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.
PO 5.2 Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.	DTS/DPF 5.2 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.
Side Boundary Setback	
PO 6.1 Buildings are set back from side boundaries to provide: (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours.	DTS/DPF 6.1 Other than walls located on a side boundary, buildings are set back from side boundaries: (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.
Rear Boundary Setback	
PO 7.1 Buildings are set back from rear boundaries to provide:	DTS/DPF 7.1 Dwellings are set back from the rear boundary:

(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 (d) space for landscaping and vegetation.	(a) 3m or more for the first building level (b) 5m or more for any subsequent building level.
Buildings elevation design	
PO 8.1 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.	DTS/DPF 8.1 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: (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.
PO 8.2 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 8.2 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street
PO 8.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 8.3 None are applicable.
PO 8.4 Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.	DTS/DPF 8.4 None are applicable.
PO 8.5 Entrances to multi-storey buildings are: (a) oriented towards the street (b) visible and easily identifiable from the street (c) designed to include a common mail box structure.	DTS/DPF 8.5 None are applicable.
Outlook and amenity	

PO 9.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 9.1 A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.
PO 9.2 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.	DTS/DPF 9.2 None are applicable.
Private Open Space	
PO 10.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 10.1 Private open space is provided in accordance with the following 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

PO 10.2 Private open space positioned to provide convenient access from internal living areas.	DTS/DPF 10.2 At least 50% of the required area of private open space is accessible from a habitable room.
PO 10.3 Private open space is positioned and designed to: (a) provide useable outdoor space that suits the needs of occupants; (b) take advantage of desirable orientation and vistas; and (c) adequately define public and private space.	DTS/DPF 10.3 None are applicable.
Visual privacy	

PO 11.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 11.1 Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following: (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 1.5m above the finished floor.
PO 11.2 Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.	DTS/DPF 11.2 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% transparency/openings fixed to a minimum height of: (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
Landscaping	
PO 12.1 Soft landscaping is incorporated into development to: (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.	DTS/DPF 12.1 Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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% <200 — 15% 200-450 — 20% >450 — 25% (b) at least 30% of land between the road boundary and the building line.
Water Sensitive Design	
PO 13.1 Residential development is designed to capture and use stormwater to: (a) maximise efficient use of water resources	DTS/DPF 13.1 None are applicable.

(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.	
Car Parking	
PO 14.1 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.	DTS/DPF 14.1 On-site car parking is provided at the following rates per dwelling: (a) 2 or fewer bedrooms - 1 car parking space (b) 3 or more bedrooms - 2 car parking spaces.
PO 14.2 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.2 Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area): (a) single parking spaces: (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): (i) a minimum length of 5.4m (ii) a minimum width of 5.5m (iii) minimum garage door width of 2.4m per space.
PO 14.3 Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.3 Uncovered car parking spaces have: (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.
PO 17.3 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 17.3 Driveways are designed and sited so that: (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 or way is at least 6.2m wide along the boundary of the allotment / site.
PO 17.4 Driveways and access points are designed and distributed to optimise the provision of on-street parking.	DTS/DPF 17.4 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: 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.
PO 17.5 Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.	DTS/DPF 17.5 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: (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.
PO 17.6 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.	DTS/DPF 17.6 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 17.7 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 17.7 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.
Storage	
PO 18.1 Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.	DTS/DPF 18.1 Dwellings are provided with storage at the following rates and 50% or more of the storage volume is 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 $12m^3$.
Earthworks	
PO 19.1	DTS/DPF 19.1

Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	The development does not involve: (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.
Service connections and infrastructure	
PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.	DTS/DPF 20.1 The site and building: (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 *South Australian Public Health Act 2011* (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 *Electricity Act 1996*.
Site contamination	
PO 21.1 Land that is suitable for sensitive land uses to provide a safe environment.	DTS/DPF 21.1 Development satisfies (a), (b), (c) or (d): (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 does not 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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that 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).

Infrastructure and Renewable Energy Facilities

Assessment Provisions (AP)

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.

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 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.	DTS/DPF 4.1 None are applicable.
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.	DTS/DPF 4.2 None are applicable.
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.	DTS/DPF 4.3 None are applicable.
Electricity Infrastructure and Battery Storage Facilities	
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	DTS/DPF 5.1 None are applicable.

(b) grouping utility buildings and structures with non-residential development, where practicable.	
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.	DTS/DPF 5.2 None are applicable.
PO 5.3 Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.	DTS/DPF 5.3 None are applicable.
Telecommunication Facilities	
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.	DTS/DPF 6.1 None are applicable.
PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.	DTS/DPF 6.2 None are applicable.
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 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 (c) using materials and finishes that complement the environment (d) screening using landscaping and vegetation, particularly for equipment shelters and huts.	DTS/DPF 6.3 None are applicable.
Renewable Energy Facilities	
PO 7.1 Renewable energy facilities are located as close as practicable to existing transmission infrastructure to facilitate connections and minimise environmental impacts	DTS/DPF 7.1 None are applicable.

as a result of extending transmission infrastructure.	
Renewable Energy Facilities (Wind Farm)	
PO 8.1 Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.	DTS/DPF 8.1 Wind turbine generators are: (a) set back at least 2000m from the base of a turbine to any of the following zones: (i) Rural Settlement Zone (ii) Township Zone (iii) Rural Living Zone (iv) Rural Neighbourhood Zone with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine). (b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation
PO 8.2 The visual impact of wind turbine generators on natural landscapes is managed by: (a) designing wind turbine generators to be uniform in colour, size and shape (b) coordinating blade rotation and direction (c) mounting wind turbine generators on tubular towers as opposed to lattice towers.	DTS/DPF 8.2 None are applicable.
PO 8.3 Wind turbine generators and ancillary development minimise potential for bird and bat strike.	DTS/DPF 8.3 None are applicable.
PO 8.4 Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.	DTS/DPF 8.4 No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.
PO 8.5 Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.	DTS/DPF 8.5 None are applicable.
Renewable Energy Facilities (Solar Power)	
PO 9.1 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.	DTS/DPF 9.1 None are applicable.
PO 9.2 Ground mounted solar power facilities allow for movement of wildlife by: (a) incorporating wildlife corridors and habitat	DTS/DPF 9.2 None are applicable.

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.	
PO 9.3 Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.	DTS/DPF 9.3 Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria: **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 Notes: 1. Does not apply when the site of the proposed ground mounted solar power facility is located within one of these zones.
PO 9.4 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.	DTS/DPF 9.4 None are applicable.
Hydropower / Pumped Hydropower Facilities	
PO 10.1 Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.	DTS/DPF 10.1 None are applicable.

PO 10.2 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.	DTS/DPF 10.2 None are applicable.
PO 10.3 Hydropower / pumped hydropower facilities on existing or former mine sites minimise environmental impacts from site contamination, including from mine operations or water sources subject to such processes, now or in the future.	DTS/DPF 10.3 None are applicable.
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	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.

waste systems and minimise risks to human health and the environment.	
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.

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	DTS/DPF 1.3 None are applicable.

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.	
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.
PO 3.2 Intensive animal husbandry operations and dairies incorporate appropriately designed effluent and run-off facilities that: (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.	DTS/DPF 3.2 None are applicable.

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	
PO 1.1 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.	DTS/DPF 1.1 None are applicable.
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.
Hours of Operation	
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: (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.	DTS/DPF 2.1 Development operating within the following hours:

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

Overshadowing	
PO 3.1 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 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 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 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 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.	DTS/DPF 3.3 None are applicable.
PO 3.4 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.	DTS/DPF 3.4 None are applicable.
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	DTS/DPF 4.2 None are applicable.

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.	
PO 4.3 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).	DTS/DPF 4.3 The pump and/or filtration system ancillary to a dwelling erected on the same site is: (a) enclosed in a solid acoustic structure 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.
PO 4.4 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.	DTS/DPF 4.4 Adjacent land is used for residential purposes.
PO 4.5 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).	DTS/DPF 4.5 None are applicable.
PO 4.6 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.	DTS/DPF 4.6 Development incorporating music includes noise attenuation measures that will achieve the following noise levels: **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 (LOCT10,15 < LOCT90,15 + 8dB)
Air Quality	
PO 5.1 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	DTS/DPF 5.1 None are applicable.

accommodate sensitive receivers.	
PO 5.2 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: (a) incorporating appropriate treatment technology before exhaust emissions are released (b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.	DTS/DPF 5.2 None are applicable.
Light Spill	
PO 6.1 External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 6.1 None are applicable.
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	DTS/DPF 9.2 None are applicable.

and do not prejudice the continued operation of these activities.	
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 on-site storage capacity not exceeding 1000 cubic metres (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 (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.
PO 9.6 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.	DTS/DPF 9.6 None are applicable.
PO 9.7 Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.	DTS/DPF 9.7 None are applicable.
Interface with Mines and Quarries (Rural and Remote Areas)	
PO 10.1 Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.	DTS/DPF 10.1 Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the *Mining Act 1971.*

Land Division

Assessment Provisions (AP)

Desired Outcome	
DO 1	Land division: (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	
PO 1.1 Land division creates allotments suitable for their intended use.	DTS/DPF 1.1 Division of land satisfies (a) or (b): (a) reflects the site boundaries illustrated and approved in an operative or existing development authorisation for residential development under the *Development Act 1993* or *Planning, Development and Infrastructure Act 2016* 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.
PO 1.2 Land division considers the physical characteristics of the land, preservation of environmental and cultural features of value and the prevailing context of the locality.	DTS/DPF 1.2 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 infrastructure, street tree planting, landscaping and street furniture.	DTS/DPF 3.5 None are applicable.
PO 3.6 Road reserves accommodate stormwater drainage and public	DTS/DPF 3.6 None are applicable.

utilities.	
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 feature.	DTS/DPF 4.6 None are applicable.
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 Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	DTS/DPF 9.2 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 indigenous plant species and large trees.	DTS/DPF 1.2 None are applicable.
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;	DTS/DPF 3.1 None are applicable.

(b) safe crossing points where pedestrian routes intersect the road network; (c) easily identified access points.	
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 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.	DTS/DPF 6.1 None are applicable.
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	DTS/DPF 7.3

Development in open space is constructed to minimise the extent of impervious surfaces.	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.	DTS/DPF 7.4 None are applicable.
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.

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 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	DTS/DPF 1.1 None are applicable.

that supports equitable community access to services and facilities.	
PO 1.2 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 underserviced 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.	DTS/DPF 1.2 None are applicable.

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	
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.	DTS/DPF 1.1 None are applicable.
PO 1.2 Resource extraction activities avoid damage to cultural sites or artefacts.	DTS/DPF 1.2 None are applicable.
Water Quality	
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.	DTS/DPF 2.1 None are applicable.

Separation Treatments, Buffers and Landscaping	
PO 3.1 Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.	DTS/DPF 3.1 None are applicable.
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.

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): (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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that- 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.

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: (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	DTS/DPF 2.2

Occupants are provided privacy and amenity through landscaping and fencing.	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 vegetation lost through bushfire).	DTS/DPF 3.1 None are applicable.
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	DTS/DPF 2.2 None are applicable.

sites are designed to provide adequate sightlines between vehicles and pedestrians.	
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 parking is appropriate).	DTS/DPF 3.6 Driveways and access points: (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: (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.
PO 3.7 Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.	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: (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.
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.	DTS/DPF 3.8 None are applicable.
PO 3.9 Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.	DTS/DPF 3.9 None are applicable.
Access for People with Disabilities	
PO 4.1 Development is sited and designed to provide safe, dignified and convenient access for people with a disability.	DTS/DPF 4.1 None are applicable.
Vehicle Parking Rates	
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: (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.	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: (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.
Vehicle Parking Areas	
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.	DTS/DPF 6.1 Movement between vehicle parking areas within the site can occur without the need to use a public road.
PO 6.2 Vehicle parking areas are appropriately located, designed and	DTS/DPF 6.2 None are applicable.

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 6.3 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.	DTS/DPF 6.3 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	DTS/DPF 9.2 None are applicable.

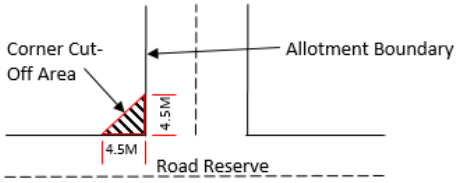
cyclists and deters property theft.	
PO 9.3 Non-residential development incorporates end-of-journey facilities for employees such as showers, changing facilities and secure lockers, and signage indicating the location of the facilities to encourage cycling as a mode of journey-to-work transport.	DTS/DPF 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) - 2 spaces per dwelling. 0.2 spaces per dwelling for visitor parking.
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	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. 0.2 spaces per dwelling for visitor parking.
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	Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation. Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation. A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.
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	2.5 spaces per 100m^2 of gross leasable floor area 1 space per 100m^2 of outdoor area used for display purposes.
Shop (no commercial kitchen)	5.5 spaces per 100m^2 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. 5 spaces per 100m^2 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 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 100m2 of gross leasable floor area.
Shop (in the form of a restaurant or involving a commercial kitchen)	Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat. Premises with take-away service but with no seats - 12 spaces per 100m^2 of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point. 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.
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	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. 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. For a tertiary institution - 0.4 per student based on the maximum number of students on the site at any time.
Health Related Uses	
Hospital	4.5 spaces per bed for a public hospital. 1.5 spaces per bed for a private hospital.
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** **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.**		**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 3 spaces for each dwelling with a total floor area greater than 150 square metres. Residential flat building or	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 Precinct Subzone of the Community Facilities Zone

		Residential component of a multi-storey building: 1 visitor space for each 6 dwellings.	
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.	City Living Zone Urban Corridor (Boulevard) Zone Urban Corridor (Business) Zone Urban Corridor (Living) Zone Urban Corridor (Main Street) Zone Urban Neighbourhood Zone
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.	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Business Neighbourhood Zone Suburban Main Street Zone Urban Activity Centre Zone
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	City Living 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
Residential development			
Residential component of a multi-storey building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 2 bedroom dwelling - 1 space per dwelling 3 or more bedroom dwelling - 1.25 spaces per dwelling 0.25 spaces per dwelling for visitor parking.	None specified.	City Living Zone Strategic Innovation 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

Residential flat building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 2 bedroom dwelling - 1 space per dwelling 3 or more bedroom dwelling - 1.25 spaces per dwelling 0.25 spaces per dwelling for visitor parking.	None specified.	City Living 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

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
The designated area is wholly located within Metropolitan Adelaide and any part of the development site satisfies one or more of the following: (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) (b) is within 400 metres of a bus interchange(1) (c) is within 400 metres of an O-Bahn interchange(1) (d) is within 400 metres of a passenger rail station(1) (e) is within 400 metres of a passenger tram station(1) (f) is within 400 metres of the Adelaide Parklands.	(a) All zones in the City of Adelaide (b) Strategic Innovation Zone in the following locations: (i) City of Burnside (ii) City of Marion (iii) City of Mitcham (c) Urban Corridor (Boulevard) Zone (d) Urban Corridor (Business) Zone (e) Urban Corridor (Living) Zone (f) Urban Corridor (Main Street) Zone (g) Urban Neighbourhood Zone

[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 **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.**

Consulting Room	1 space per 20 employees plus 1 space per 20 consulting rooms for customers.
Educational establishment	For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for visitors. For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.
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:	DTS/DPF 2.1 None are applicable.

(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.	
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: (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	DTS/DPF 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.	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.

PLANNING STUDIO
URBAN & REGIONAL PLANNING

12 August 2022

Our ref: P0237

Derek Henderson
Senior Planner
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Derek,

RE: RESPONSE TO REQUEST FOR DOCUMENTATION – ALTERATIONS AND ADDITIONS TO EXISTING SERVICE TRADE PREMISES AND AUTOMOTIVE COLLISION REPAIR AT 55-59 ADELAIDE ROAD, MOUNT BARKER – da 22025784

Thank you for your letter dated 5 August 2022 which requested mandatory documentation to enable the application to be verified.

As requested, we have enclosed a floor plan of the existing building in which the spray booths are currently located. As mentioned in our letter dated 28 July 2022, these spray booths will be removed from the site and replaced with new spray booths within a purpose-built facility that complies with Australian Standard AS/NZS 4114-2020.

We can confirm that the building in which the existing spray booths are located will continue to be used in accordance with the overall approved use of the site as Service Trade Premises which includes the servicing and repair of motor vehicles (see Figures 1 and 2). More specifically, once the existing spray booths have been removed, the building will accommodate five bays for the servicing of vehicles. No external modifications to the building will be required and no modifications to internal walls or doorways will be required.

Figure 1 *| Existing 'Paint Shop' to be used for servicing vehicles (viewed from Cherington Street)*

Figure 2 | *Existing 'Paint Shop' – note vehicles being prepared for spray painting*

In terms of the other matters raised in your letter, we can advise that we have nominated a number of Building Consent Stages based on generic advice received from the Private Certifier. More specifically, the Private Certifier has advised applicants to include a number of Building Consent Stages to avoid potential issues with the Planning Portal. Apparently, it is quite difficult to introduce additional Building Consent Stages once an application has been lodged. The Private Certifier has further advised that these Stages can be refined and/or combined once the Building Consent process has been initiated.

Notwithstanding the above, we anticipate that a relatively modest building of the type proposed is likely to be assessed by the Private Certifier within a single Building Consent Stage. However, given the advice that we've received, we'd prefer to leave a number of Stages nominated under the Building Consent.

Finally, we have no objection to the Council 'expanding' the subject land to include 2 Cherington Street and 2 Hawthorn Road. However, we note that no building work or change to the use of these parcels of land are proposed by the current application.

We trust that sufficient information has been provided to enable the Council to verify the Development Application. However, if additional information is required, please do not hesitate to contact the undersigned on 0438 741 747 or kieron@planningstudio.com.au.

Yours sincerely

Kieron Barnes | RPIA | **Director**

Cc T Gilbert (via email)

Appendix A

Floor Plan – Existing 'Paint Shop'

CHERINGTON STREET

Apprx 31460

FOOTPATH

ALLOTMENT BOUNDARY

EXISTING SLIDING DOOR

DEMOLISH EXISTING CAR SPRAY BOOTHS

EXISTING PAINT SHOP
convert to
WORKSHOP -CAR HOIST BAYS
FFL Apprx 335.86

UPPER LEVEL CAR PARKING

Apprx 12520

EXISTING SLIDING DOOR

CAR YARD & PARKING

EXISTING SLIDING DOOR

Deck

EXISTING
WORKSHOP
(Multiple Floor Levels)

Ramp
Down

EXISTING
WORKSHOP
(FFL 335.86)

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
WORKSHOP FLOOR PLAN

Date:	Drawn:	Rev:
11-08-2022	PL	
Scale:	Dwg No:	PA04a
1 : 100	1 of 1	

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

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PLANNING STUDIO
URBAN & REGIONAL PLANNING

28 July 2022

Our ref: P0333

Assessment Manager
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Sir/Madam,

RE: DEVELOPMENT APPLICATION FOR ALTERATIONS AND ADDITIONS TO EXISTING SERVICE TRADE PREMISES AND AUTOMOTIVE COLLISION REPAIR AT 55-59 ADELAIDE ROAD, MOUNT BARKER

1.0 Background

Planning Studio has been engaged by Adelaide Hills Toyota to provide planning advice in relation to the proposed replacement of the existing spray booths associated with the Automotive Collision Repair element of the overall business with a new, purpose-built facility to be constructed behind the main dealership. The replacement spray booths will be built in accordance with Australian Standard AS/NZS 4114-2020 and will be located an increased distance from nearby residential development than the existing spray booths.

The purpose of this letter is to provide information in relation to the proposed development and the subject land as well as providing an assessment against the relevant provisions of the Planning and Design Code. Accordingly, please find attached:

- A copy of the Certificates of Title;
- Plans and Elevations prepared by Designing Places;
- A Stormwater Management Plan prepared by DBN Consulting Engineers; and
- Detailed specifications of the Spray Booths provided by the installer – Pan Spraybooths Australia.

In providing this advice, we have inspected the site, reviewed the plans and documents listed above and reviewed the relevant provisions of the Planning and Design Code.

Adelaide Hills Toyota

Owned by the Gilbert family since 1926, Adelaide Hills Toyota is one of Australia's oldest continually operating motor car dealers. Prior to the relocation of the Toyota dealership to the current site at 57 Adelaide Road, the Gilbert family also owned and operated a Holden dealership on the site for approximately 50 years. Before this, Gierke's Garage was located on the site which dated back to the early 1920's. Therefore, the site has continuously been used for a car dealership for close to 100 years.

A substantial upgrade of the dealership was completed in 2007 which has assisted the business to respond to the changing needs of the car industry while also meeting current Work Health and Safety standards. In addition, approval was granted in 2021 to create additional on-site parking facilities for customers and staff as well as for new cars awaiting delivery.

Adelaide Hills Toyota is one of the major employers within Mount Barker and currently employs 60 staff – most of whom live in the Adelaide Hills. The business provides a wide range of services to the Mount Barker community including:

- Sales of new cars to the private and Government sectors;
- Sales of used cars;
- Sales of spare parts;
- Full range of servicing for cars and commercial vehicles;
- Collision repair service for cars (including spray painting) under the banner of the associated business 'Gilbert Crash Repairs'; and
- Roadside assistance as an authorised representative of the RAA.

The current application continues the ongoing significant improvements that have been made to Adelaide Hills Toyota over recent years through the provision a purpose-built, modern facility to accommodate the replacement spray booths while also providing appropriate office space for staff working within the Gilbert Crash Repairs arm of the overall business.

2.0 Subject Land and Locality

Subject Land

The overall Adelaide Hills Toyota business is located across a number of allotments. However, the proposed development will be located wholly on the two 'central' allotments which contain the main dealership building and the detailing bays. The subject land is identified as 55-59 Adelaide Road, Mount Barker and is more specifically described as Allotments 100 and 101 in Filed Plan 12222 within Certificates of Title Volume 5450 and Folios 664 (Lot 100) and 946 (lot 101). Copies of the Certificates of Title are contained in Appendix A.

The subject land is rectangular in shape with an area of approximately 5,900m^2, a primary frontage of 63.88 metres to Adelaide Road and a secondary frontage of 87.5 metres to Cherington Street.

As mentioned, the subject land contains the main dealership building including car showroom and office accommodation along with associated facilities for the servicing of vehicles. The existing spray-painting facilities are located within a shed attached to the main building to the north. In addition, a relatively modest office and reception area which accommodates the administration functions of Gilbert Crash Repairs is attached to the south-west corner of the main building. The subject land also includes the detailing bays (on Lot 101) where cars that have been serviced within the main building are taken for cleaning.

Vehicular access to the subject land is provided from a number of existing crossovers located on both Adelaide Road and Cherington Street. While a number of car parking spaces are provided on the subject land, the majority of car parks for staff and customers are located to the north on the opposite side of Cherington Street. An additional car parking area is located to the west of the subject land on Lot 102 which is generally used for the parking of new vehicle stock.

There are no Regulated or Significant Trees on the subject land and vegetation is limited to minor patches of landscaping scattered around the buildings. The subject land generally slopes up from east to west.

There are no Heritage Places or Representative Buildings located on the subject land. A Local Heritage Place described as a 'Victorian Letterbox' appears to be located on the opposite side of Adelaide Road. However, it is suspected that this may be an error and the letter box may in fact be located on the footpath on the corner of Hawthorn Road and Adelaide Road. In any event, the proposed development will not affect the Local Heritage Place.

Figure 1 | *Subject Land*

Photographs of the subject land are provided in the Figures on the following page.

Figure 2 | *Location of proposed new building (looking towards the south)*

Figure 3 | *Existing office and reception building to be demolished and replaced*

Figure 4 | *Existing spray booth building as viewed from Cherington Street*

The Locality

While the locality contains a mixture of land uses, the adjacent properties to the north, west and south generally contain single-storey detached dwellings. The exception is the existing car park directly to the north of the subject land on Cherington Street which provides parking for staff and customers of Adelaide Hills Toyota.

The eastern side of Adelaide Road features a wider range of land uses including Cornerstone College to the north-east and a lawn mower sales business (services trade premises) to the south-east.

Adelaide Road is a four-lane State Maintained Road, carrying approximately 26,900 vehicles per day. Cherington Street and Hawthorn Road which adjoin the subject land to the north and south respectively, are local roads under the care and control of the Mount Barker District Council.

Figure 5 | *Locality and Zoning (Source: SA Property and Planning Atlas)*

3.0 Proposed Development

As illustrated in the plans and elevations prepared by Designing Places (Appendix B), The proposed development seeks the construction of a new building at the rear (west) of the main dealership to facilitate the replacement and relocation of the existing spray booths which are currently located within a shed to the north of the main dealership. The new building will also replace the outdated existing office accommodation and reception area for Gilbert Crash Repairs.

The proposed building will be located between the existing main dealership and the detailing bays on a flat portion of the site which is currently used for the parking of vehicles awaiting service or repair. At its closest point, the new building will be sited 600mm from the main dealership and will abut the detailing bays with the inclusion of a new fire rated wall.

The proposed building will have a floor area of approximately 481m^2 and will be 32.86 metres long and 14.6 metres wide. While the building will have a height of approximately 4.8 metres, a number of chimney stacks associated with the exhaust system for the spray booths will extend above the roofline.

The building will be setback approximately 23.3 metres from Cherington Street and approximately 16.96 metres from Hawthorn Road.

The building will generally be constructed of Colorbond steel sheeting coloured Woodland Grey. The exception to this is a feature panel located above the office element which will feature painted sheet cladding coloured Surfmist or similar.

In terms of the layout, a modest office and reception area of approximately 58m^2 will be located at the southern portion of the building, while the remaining portions of the building will contain two spray booths and an area where cars will be prepared before entering the spray booths. A large roller door will be located on the northern elevation of the building along with a personal access door.

The proposed development also includes a minor extension to the existing wash bay to the west of the new building.

The proposed development does not seek to alter the existing hours of operation of Adelaide Hills Toyota which will remain 7:00am to 6:00pm from Monday to Friday and 8:00am to 4:30pm on Saturdays (as per Condition 3 of DA 580/978/18).

Description of Development

It is noted that the existing and approved use of the land by Adelaide Hills Toyota can be formally defined as a 'service trade premises' and 'automotive collision repair' (see definitions below):

Service trade premises *– means premises used primarily for the sale, rental or display of any of the following:*

(g) motor vehicles; or

---

or similar articles or merchandise.

The use may also include the servicing and repair of any of the listed items (but not vehicle panel beating or spray painting).

Automotive collision repair *– means repairs to motor vehicles involving structural repairs, panel beating, replacement of vehicle body parts or spray painting.*

On this basis, it is considered that the proposed development involves alterations and additions to an existing service trade premises and automotive collision repair premises.

4.0 Key Planning Considerations

Assessment Process and Procedural Matters

In terms of the assessment process, we note that service trade premises and automotive collision repair follow the 'Performance Assessed' pathway in the Neighbourhood Zone and must be assessed against the relevant provisions of the Planning and Design Code.

In terms of notification, we note that the proposed development is not excluded from notification by Table 5 of the Neighbourhood Zone. Therefore, the proposed development requires notification.

While the subject land fronts a State Maintained Road and is subject to the Traffic Generating Development and Urban Transport Routes Overlays, the development does not require referral to the Commissioner of Highways as it does not create or alter an access, or change the nature or frequency of vehicular movements through an existing access.

We also note that the proposed development does not trigger a referral to the Environment Protection Authority under Part 9 of the Planning and Design Code as it does not involve "*works*

for spray painting or powder coating with a capacity to use more than 100 litres per day of paint or 10kg per day of dry powder (EPA Licence)". To this end, we have been advised by the supplier of the spray booths that paint consumption will be approximately 1-3 litres per job, and the booth has a capacity to complete 5-6 jobs per day. This is well under the 100 litre per day referral trigger.

Planning Considerations

The South Australian Planning and Property Atlas (SAPPA) indicates that the following policy sections of the Planning and Design Code apply to the assessment of the proposed development:

Zone

- Neighbourhood Zone

Local Variation (TNV)

- Maximum Building Height (Metres) (Maximum building height is 9m)
- Minimum Frontage (Minimum frontage for a detached dwelling is 15m; group dwelling is 15m)
- Minimum Site Area (Minimum site area for a detached dwelling is 600 sqm; group dwelling is 600 sqm)
- Concept Plan (Concept Plan 3 - Mount Barker and Littlehampton)
- Maximum Building Height (Levels) (Maximum building height is 2 levels)

Overlays

- Affordable Housing
- Hazards (Bushfire - Medium Risk)
- Heritage Adjacency
- Hazards (Flooding - General)
- Murray-Darling Basin
- Native Vegetation
- Prescribed Water Resources Area
- River Murray Tributaries Protection Area
- Regulated and Significant Tree
- Traffic Generating Development
- Urban Transport Routes
- Water Resources

We note that the proposed development is consistent with the relevant Technical and Numerical Variations as it does not exceed 9 metres in height nor does it exceed two building levels. Accordingly, we have provided an assessment of the proposed development against the provisions of the Neighbourhood Zone as well as the relevant Overlays and General Development Policies. This assessment is set out on the following pages under a series of headings which reflect the relevant assessment 'themes'.

Land Use

From a land use perspective, the Neighbourhood Zone does not specifically contemplate service trade premises or automotive collision repair premises. However, it is noted that a car dealership and service centre of some shape or form has been located on the subject land for nearly 100 years. In addition, it is noted that significant additions and alterations to Adelaide Hills Toyota were approved by the Council in 2007 with a further approval issued in 2021 for additional on-site parking facilities. Therefore, the proposed alterations and additions will support an existing longstanding, approved land use which provides a valuable service to the Mount Barker community.

Despite the long-standing non-residential use of the site, it sits within the Neighbourhood Zone which generally seeks residential forms of development. While the Zone does not specifically envisage the proposed development, we note that the Desired Outcome anticipates non-residential development which does not compromise the residential amenity and character of the neighbourhood.

DO 1 Housing supports a range of needs and complements the existing local context. Services and community facilities contribute to making a convenient place to live without compromising the residential amenity and character of the neighbourhood.

The Desired Outcome is reinforced by Performance Outcome 4.1 of the Zone which indicates that non-residential development may be appropriate where it complements the residential character and amenity of the neighbourhood.

PO 1.4 Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.

Given the longstanding non-residential use of the land and given that the proposed development will facilitate the replacement and relocation of the existing spray booths to a purpose built, modern facility, the proposal is acceptable from a land use perspective. Further, the building will not be highly visible from surrounding properties and the proposed development will facilitate the replacement and relocation of the existing spray booths to a portion of the site that is further away from nearby residential development. On this basis, the proposal will not detrimentally affect the character and amenity of the neighbourhood

Building Siting, Design and Appearance

The proposed new building will feature a similar design and similar materials as the existing buildings comprising the broader Adelaide Hills Toyota facility. The floor area of the building will be of a compatible scale to the existing buildings and will be located on a central portion of the site which is not clearly visible from the surrounding streets or nearby residential properties. In addition, the substantial setbacks to Cherington Street (23.3m) and Hawthorn Road (16.96m), combined with the modest height of the building (4.8m) will mean that the proposed development will blend in with the existing buildings and structures on the subject land.

For the above reasons, the proposed development satisfies the following key provisions relating to siting, design and appearance:

Neighbourhood Zone

PO 5.1 Buildings are set back from primary street boundaries consistent with the existing streetscape.

PO 6.1 Buildings are set back from secondary street boundaries to maintain a pattern of separation between buildings and public streets and reinforce a consistent streetscape character.

General Development Policies – Design

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.

PO 1.4 Plant, exhaust and intake vents and other technical equipment is integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:

(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.

Transport, Access and Parking

The proposed development will not alter the existing access arrangements from the surrounding streets. While approximately six car parking spaces will be removed to accommodate the new building, these spaces are currently used for cars awaiting service or repair and will be accommodated within the new building. In addition, an appropriate supply of parking for the overall business will continue to be provided around the site.

For the above reasons, the proposed development satisfies the relevant Transport, Access and Parking provisions of the Planning and Design Code as contained in the Traffic Generating Development Overlay, the Urban Transport Routes Overlay and General Development Policies.

Environmental Performance

A key objective of the proposed development is to replace the existing spray booths with a modern facility which meets current environmental standards and which will be located in a purpose-built facility. Accordingly, the supplier of the new spray booths has indicated that the facility will be designed, manufactured and installed in accordance with Australian Standard AS/NZS 4114 -2020. Further details and specifications are contained in Appendix D.

Interface Between Land Uses

As mentioned previously, despite its 'residential zoning', the subject site has been used as a car dealership and garage in one form or another for close to 100 years. Further to this, it is understood that Adelaide Hills Toyota has established good relationships with its residential neighbours and is keen to maintain this situation moving forward. On this basis, the proposed development will assist to reduce any interface issues by replacing the existing spray booths and relocating the facility to the centre of the site where greater setbacks to nearby residential development will be achieved. In addition, the spray booths will be located within a purpose-built facility which will comply with current environmental standards as expressed in AS/NZS 4114 -2020.

For the above reasons, the proposed development is likely to improve the amenity of nearby residential uses, thereby addressing the following Interface between Land Uses provisions of the Planning and Design Code:

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

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.

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:

(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.

PO 4.1 Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).

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:

(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.

PO 5.1 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.

PO 5.2 *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:*

(a) incorporating appropriate treatment technology before exhaust emissions are released

(b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.

Stormwater Management

A Stormwater Management Plan has been prepared by DBN Consulting Engineers (Appendix C) which proposes the following arrangements to manage stormwater from the proposed development:

- Stormwater runoff from the northern half of the proposed paint shop shed will be conveyed to a 3 kL Maxiplas thin detention tank or similar. The downpipe collection system will be designed to convey the 1% Annual Exceedance Probability (AEP) peak flow rate to the detention tank. Downpipes from the southern end of the shed will be connected directly to the existing downpipe in the south west corner of the existing paint workshop.
- The detention tank will have a DN35 mm orifice at the invert of the tank and a DN100 mm overflow pipe at the top of the tank. There will be no retention storage in the detention tank.
- The low and high flow discharge from the detention tank will be directed along the north and east sides of the proposed paint shed and connect to the existing downpipe in the south west corner of the existing paint workshop.

In this way and given that the extent of impervious surface on the site will not be increased, the proposed development will introduce improved measures to manage stormwater generated by the site, thereby satisfying the following General Development Policy of the Planning and Design relating to water sensitive design:

PO 42.3 *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.*

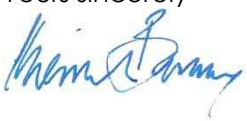
5.0 Summary

Adelaide Hills Toyota is seeking Consent to construct a new, purpose-built facility to facilitate the replacement and relocation of the existing spray booths. The new building will be located behind the main dealership which will mean that the spray booths will be further away from nearby residential development than is currently the case. In addition, the spray booths will be designed, constructed and installed in accordance with the requirements of Australian Standard AS/NZS 4114 -2020. This will assist to reduce any interface impacts with nearby residential development and will ensure that the new facility operates to the latest environmental standards.

For the reasons outlined in this letter, the proposed development is closely aligned with the relevant provisions of the Planning and Design Code and warrants Planning Consent.

We trust that sufficient information has been provided to enable the Council to process the Development Application. However, if additional information is required, please do not hesitate to contact the undersigned on 0438 741 747 or kieron@planningstudio.com.au.

Yours sincerely



Kieron Barnes | RPIA | **Director**

Cc T Gilbert (via email)

Appendix A

Certificates of Title

Product	Register Search (CT 5450/664)
Date/Time	27/07/2022 12:38PM
Customer Reference	P0237 A Hills Toyota
Order ID	20220727004375

REAL PROPERTY ACT, 1886
South Australia

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

Certificate of Title - Volume 5450 Folio 664

Parent Title(s) CT 4299/309

Creating Dealing(s) CONVERTED TITLE

Title Issued 18/09/1997 **Edition** 6 **Edition Issued** 26/02/2018

Estate Type

FEE SIMPLE

Registered Proprietor

T & S GILBERT PROPERTIES PTY. LTD. (ACN: 622 731 051)
OF 57 ADELAIDE ROAD MOUNT BARKER SA 5251

Description of Land

ALLOTMENT 100 FILED PLAN 12222
IN THE AREA NAMED MOUNT BARKER
HUNDRED OF MACCLESFIELD

Easements

NIL

Schedule of Dealings

Dealing Number	Description
12877762	MORTGAGE TO TOYOTA FINANCE AUSTRALIA LTD. (ACN: 002 435 181)

Notations

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

CONTROLLED ACCESS ROAD VIDE PLAN 18

Administrative Interests NIL

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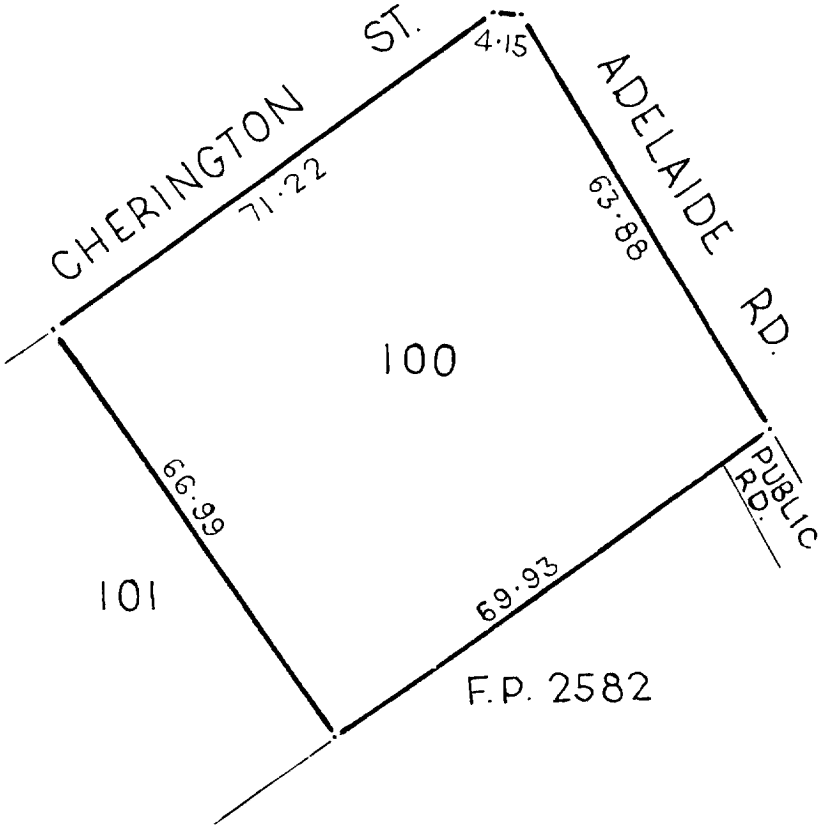
Product	Register Search (CT 5450/664)
Date/Time	27/07/2022 12:38PM
Customer Reference	P0237 A Hills Toyota
Order ID	20220727004375



0 10 20 30 40 Metres

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Product	Register Search (CT 5450/946)
Date/Time	28/07/2022 10:58AM
Customer Reference	P0237 A Hills Toyota
Order ID	20220728002881

REAL PROPERTY ACT, 1886
South Australia

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

Certificate of Title - Volume 5450 Folio 946

Parent Title(s)	CT 4299/310				
Creating Dealing(s)	CONVERTED TITLE				
Title Issued	18/09/1997	**Edition**	6	**Edition Issued**	26/02/2018

Estate Type

FEE SIMPLE

Registered Proprietor

T & S GILBERT PROPERTIES PTY. LTD. (ACN: 622 731 051)
OF 57 ADELAIDE ROAD MOUNT BARKER SA 5251

Description of Land

ALLOTMENT 101 FILED PLAN 12222
IN THE AREA NAMED MOUNT BARKER
HUNDRED OF MACCLESFIELD

Easements

NIL

Schedule of Dealings

Dealing Number	Description
12877762	MORTGAGE TO TOYOTA FINANCE AUSTRALIA LTD. (ACN: 002 435 181)

Notations

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

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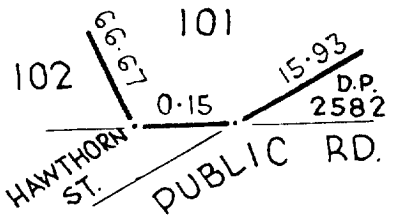
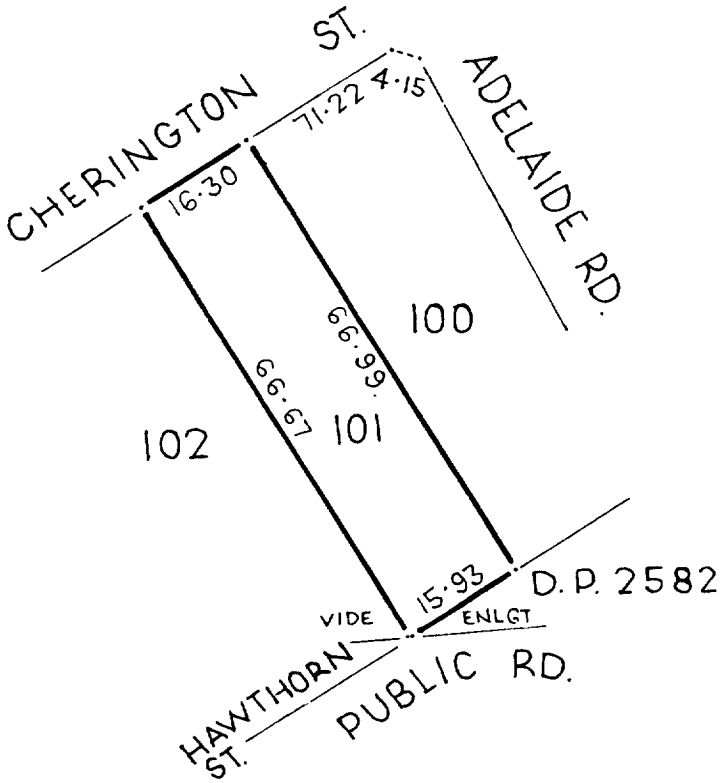
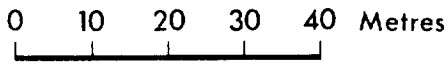
Product	Register Search (CT 5450/946)
Date/Time	28/07/2022 10:58AM
Customer Reference	P0237 A Hills Toyota
Order ID	20220728002881

548

ENLGT.
(not to scale)







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Appendix B

Plans and Elevations

BLANK PAGE

CHERINGTON STREET

DRIVEWAY &EXISTING CROSSOVER

DRIVEWAY &EXISTING CROSSOVER

70.03

16.30

71.22

4.15

CAR PARKING

Ramp Down

Ramp Down

Ramp Down

Footpath

CAR PARKING

LOT 101
CT 5450/946

LOT 102
CT 5450/711
CAR PARKING

LOT 100
CT 5450/664

EXISTING BUILDING
(Multiple Floor Levels)

EXISTING BUILDING
(FFL 339.39)

EXISTING DWELLING

57.22

66.97

66.99

63.88

DRIVEWAY &EXISTING CROSSOVER

ROAD

Footpath

PROPOSED PAINT SHOP
FFL Apprx337.36

MODIFY (EXTEND)
Extng.CAR WASH BAY

EXISTING DWELLING

Ramp Down

Fenceline

49.04

DRIVEWAY &EXISTING CROSSOVER

21.99

0.15

15.93

CAR PARKING

69.93

(7.88)

DRIVEWAY &EXISTING CROSSOVER

HAWTHORN

EXISTING BUILDING

CAR PARKING

DRIVEWAY &EXISTING CROSSOVER

Fenceline

47.70

LOT 1
CT 5507/434

CAR YARD

22.58

Pavement

Footpath

ADELAIDE

10.30

Fenceline

19.53

6.19

ROAD

DRIVEWAY &EXISTING CROSSOVER

LOCATION PLAN

1 : 400

0 1 2 4 8

PLANNING DRAWINGS

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
LOCATION PLAN

Date:	Drawn:	Rev:	
21-06-2022	PL		PA01
Scale:	Dwg No:		
1 : 400	1 of 7		

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2

CHERINGTON STREET

DRIVEWAY &EXISTING CROSSOVER

DRIVEWAY &EXISTING CROSSOVER

CAR PARKING

Ramp Down

Ramp Down

Ramp Down

Footpath

CAR PARKING

EXISTING DWELLING

CAR PARKING

SMALL SHEDS

EXISTING BUILDING (Multiple Floor Levels)

DRIVEWAY &EXISTING CROSSOVER

CAR PARKING

ROAD

EXISTING BUILDING (FFL 339.39)

Footpath

EXISTING DWELLING

DEMOUNTABLE OFFICES

WASHDOWN BAY

Ramp Down

Fenceline

DRIVEWAY &EXISTING CROSSOVER

CAR PARKING

DRIVEWAY &EXISTING CROSSOVER

HAWTHORN

CAR PARKING

EXISTING BUILDING

CAR PARKING

Footpath

ADELAIDE

DRIVEWAY &EXISTING CROSSOVER

Fenceline

CAR YARD

Pavement

Fenceline

ROAD

DRIVEWAY &EXISTING CROSSOVER

EXISTING PLAN

1 : 400

0 1 2 4 8

PLANNING DRAWINGS

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
EXISTING CONDITIONS &CARPARKING

Date:	Drawn:	Rev:	
21-06-2022	PL		PA02
Scale: 1 : 400	Dwg No: 2 of 7		

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2

553

PROPOSED PAINT SHOP
FFL Apprx337.36

EXTEND EXISTING CARWASH BAY FFL337.86

STORMWATER NOTES

ALL STORMWATER TO BE RETAINED ONSITE OR DISPOSED OF TO APPROVED COUNCIL PROVISIONS STORMWATER VIA uPVC PIPE TO BE CONSTRUCTED TO AS3500.3.2003 OR CURRENT AUST. STANDARDS

STORMWATER AND HARD SURFACE RUN-OFF TO ONSITE DETENTION AS PER ENGINEER

CAR PARKING
CAR PARKING
CAR PARKING
CAR PARKING
CAR PARKING
CAR PARKING
CAR PARKING
CAR PARKING

Ramp Down
Ramp Down
Ramp Down
Ramp Down
Ramp Down
Ramp Down

RL 337.790
RL 337.875
RL 337.623
RL 337.900
RL 339.153
RL 337.430
RL 337.560
RL 335.990
RL 337.110
RL 339.170
RL 339.205
RL 337.360
RL 339.330

DRIVEWAY &EXISTING CROSSOVER

Apprx 23300 Setback

5500

CONTINUATION OF RETAINING WALL CONC. FILLED 190BLOCK WALL

tow. 339.360
bot. 337.360

3000L RWTank AS PER STORMWATER MANAGEMENT REPORT

3000 L

SHORT-TERM CAR PARKING

Deck

EXISTING WORKSHOP (Multiple Floor Levels)

EXISTING WORKSHOP (Multiple Floor Levels)

EXISTING BUILDING (Multiple Floor Levels)

EXISTING BUILDING (Multiple Floor Levels)

EXISTING BUILDING (Multiple Floor Levels)

EXISTING WORKSHOP (FFL 335.86)

CARPORT

EXISTING DETAILING BAY (FFL 339.39)

SHED

SHED

SEPARATE FIRE COMPARTMENT (APPROX 306m2)

FIRE COMPARTMENT APPROX 481m2

FIRE WALL

FIRE WALL

EXISTING FIRE COMPARTMENT

Footpath

FENCELINE

7140 Extng. depth

RELOCATED IN-GROUND GREASE ARRESTOR (OIL/WATER SEPARATOR) -PLUMB BACK TO EXISTING SERVICES

1380

STEPS DOWN

PROPOSED DA. RAMP

Apprx line of EXISTING KERB/SPOONDRAIN

Apprx line of EXISTING SPOONDRAIN

Apprx 10800 Setback

Apprx 16980 Setback

342.0 341.0 340.0 339.0 338.0 337.0 336.0 335.0

SITE PLAN

1 : 200

0 1 2 4 8

PLANNING DRAWINGS

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
SITE PLAN

Date:	Drawn:	Rev:
21-06-2022	PL	
Scale:	Dwg No:	PA03
1 : 200	3 of 7	

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2

MOUNT BARKER DISTRICT COUNCIL
COUNCIL ASSESSMENT PANEL WEDNESDAY 21 DECEMBER 2022

SHORT-TERM
CAR PARKING

14600

190

Extng.Deck

EXISTING WORKSHOP
FFL 335.86 (and lower)

5520 Approx

CONTINUATION OF RETAINING WALL
-CONC. FILLED 190BLOCK WALL

Ramp
Down

1580mm GAP

150

DELUGE SPRINKLER AREA
-FOR 3m ADJACENCY TO HIGHER BUILDING

100

NOMINAL 100mm

FIRE WALL EXTENDED UP TO
COVER FULL/TOTAL END OF
DETAIL BAY SHED

EXISTING
DETAILING BAYS
(FFL 339.39)

**PROPOSED
PAINT SHOP**

*FIRE COMPARTMENT
APPROX 481m2*

EXISTING WORKSHOP
FFL 335.86

EXISTING FIRE COMPARTMENT

*SEPARATE FIRE COMPARTMENT
(APPROX 306m2)*

NOTE:
COLUMN 'IN PLANE' WITH WALL GIRTS
ACCESS GAP BETWEEN BOOTH AND COLUMNS

NOTE:
LOCATION OF COLUMN
ACCESS GAP BETWEEN BOOTH AND COLUMN

14260

28530

32860

EXISTING
DETAILING BAYS
(FFL 339.39)

sk
PA07

1100

12200

960

10010

EXISTING WINDOW
-TO BE BLOCKED

DELUGE SPRINKLER AREA
-FOR 3m ADJACENCY TO HIGHER BUILDING

900

90

4000

90

7140

Extng. depth

1920

EXISTING
(EXTENDED)
WASH BAY
FFL 337.76

CONTINUATION OF RETAINING WALL
-CONC. FILLED 190BLOCK WALL

MANAGERS
OFFICE

OFFICE

ENTRY

1500

*FLAT
TRANSITION*

*WHEELCHAIR RAMP
1:14*

300

CLEAR GAP
600mm

BLOCK RETAINING WALL

RELOCATED IN-GROUND
GREASE ARRESTOR
(OIL/WATER SEPARATOR)
-PLUMB BACK TO EXISTING SERVICES

ADDITIONAL CONC.
FLOOR SLAB
-TO FALLS

190 1190

1380

6000

190 3600 90 10570 150

14600

FLOOR PLAN
1 : 100

0 1 2 4 8

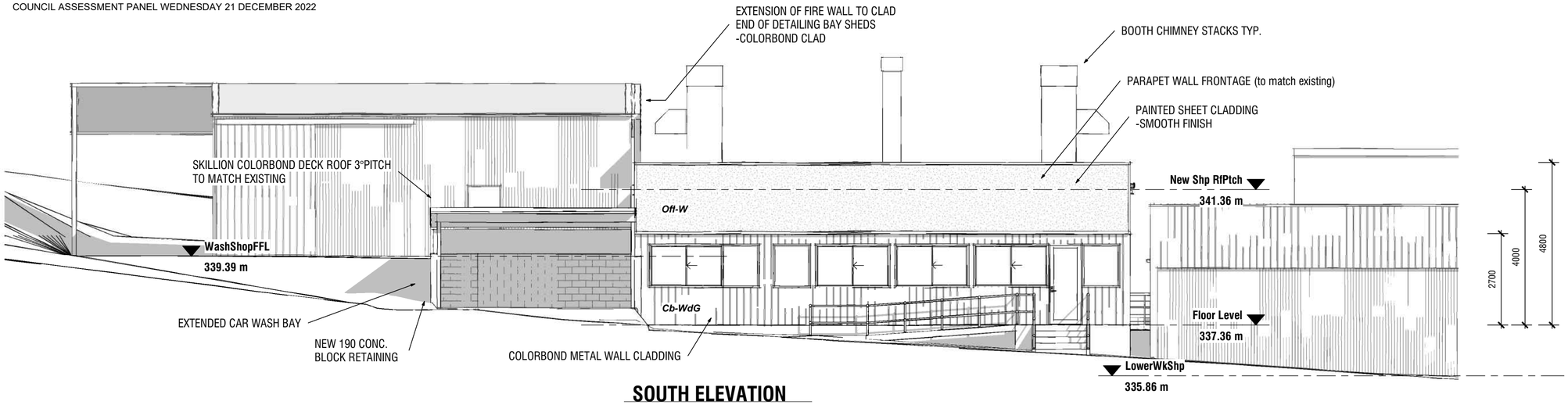
PLANNING DRAWINGS

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
FLOOR PLAN

Date:	Drawn:	Rev:	
21-06-2022	PL		PA04
Scale:	Dwg No:		
1 : 100	4 of 7		

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

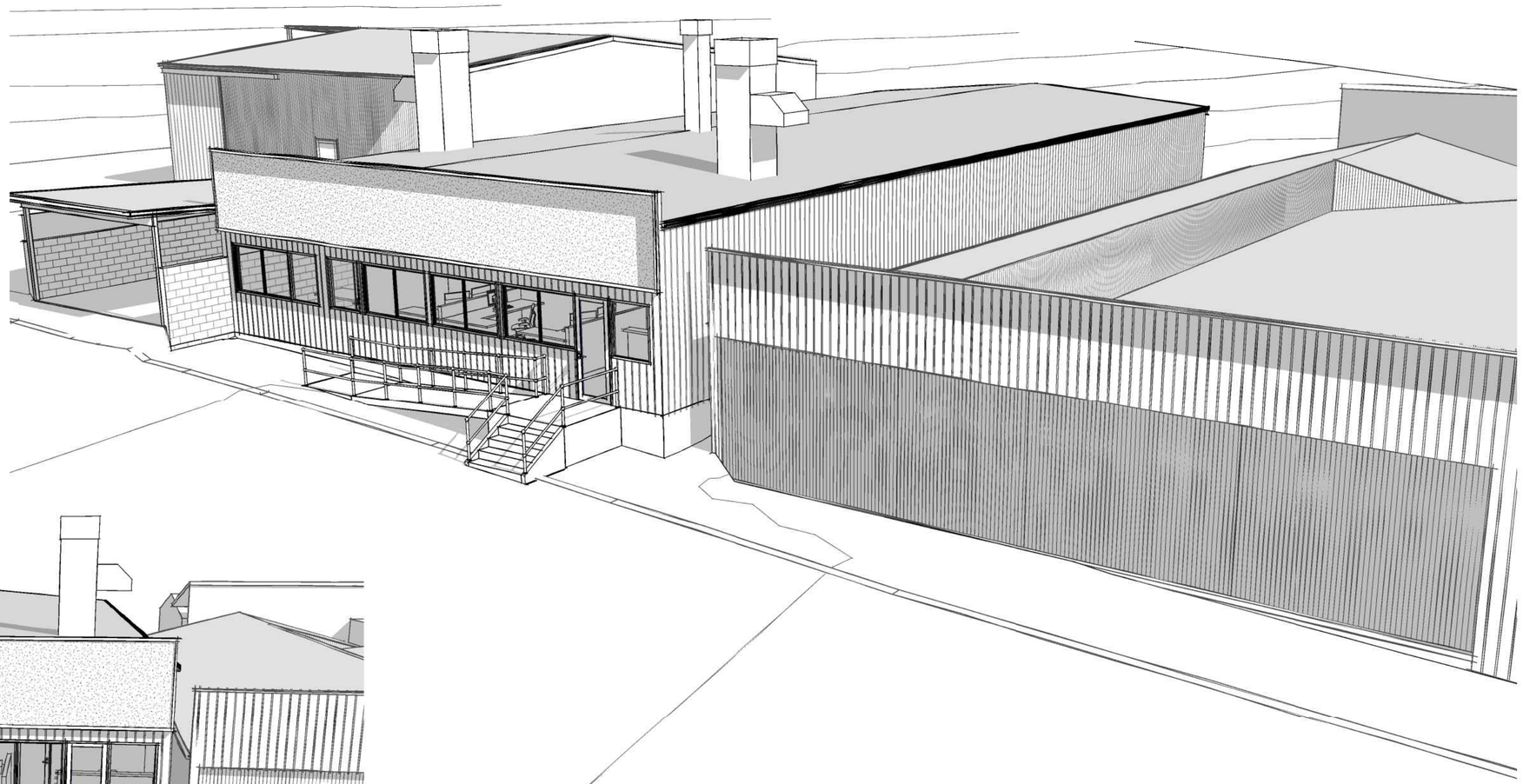
ORIGINAL SHEET SIZE A2

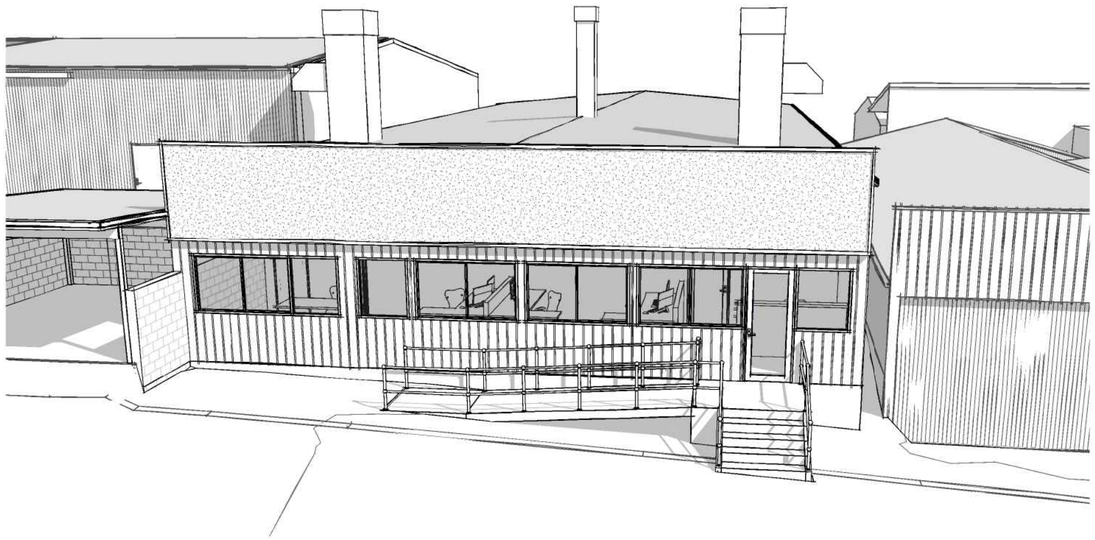


SOUTH ELEVATION

1 : 100

Finishes Schedule	
Code	Description
Cb-WdG	Colorbond Steel shed wall cladding WOODLAND GREY
CbR-WdG	Colorbond Metal deck roof WOODLAND GREY
Conc-Bk	Single leaf face concrete block wall. CONCRETE GREY
Off-W	Painted sheet cladding Smooth Finish SURFMIST / OFF-WHITE or similar





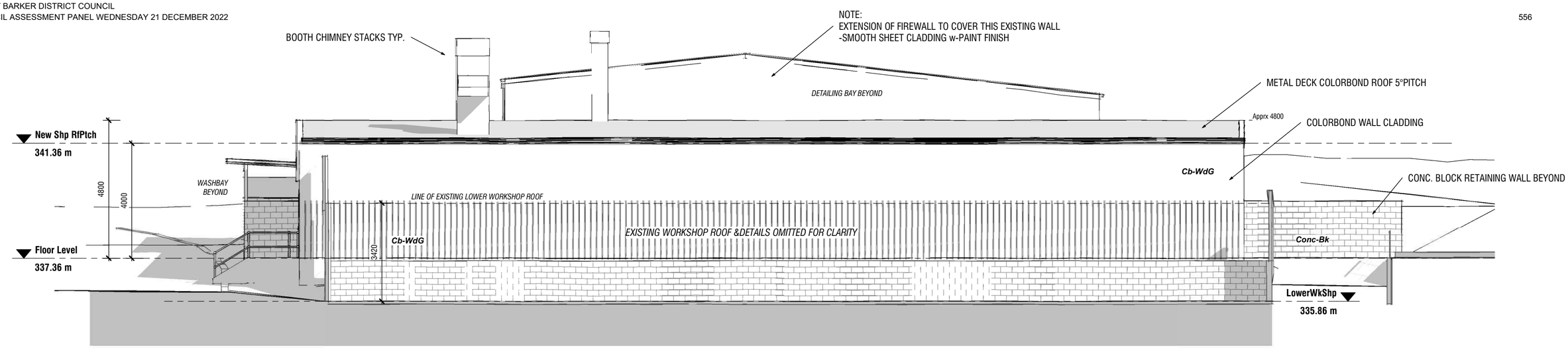
PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
ELEVATIONS

PLANNING DRAWINGS

Date:	Drawn:	Rev:	
21-06-2022	PL		PA05
Scale:	Dwg No:		
1 : 100	5 of 7		

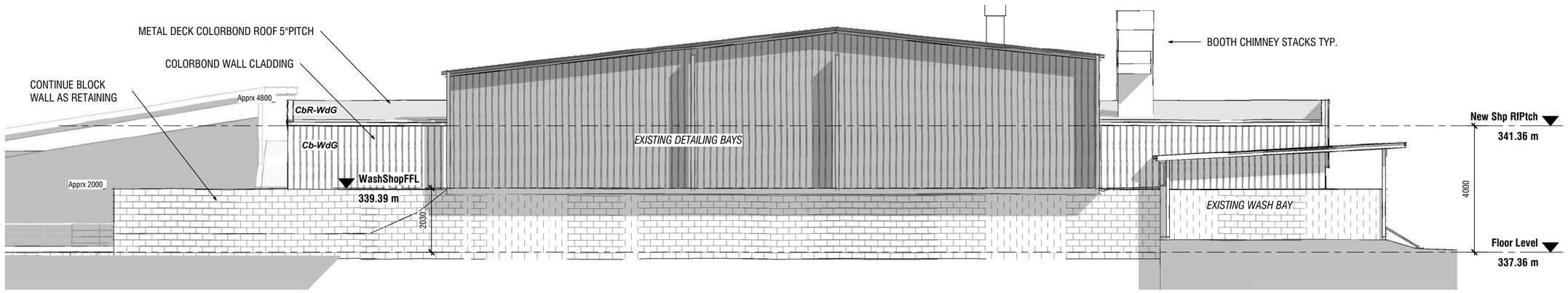
DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2



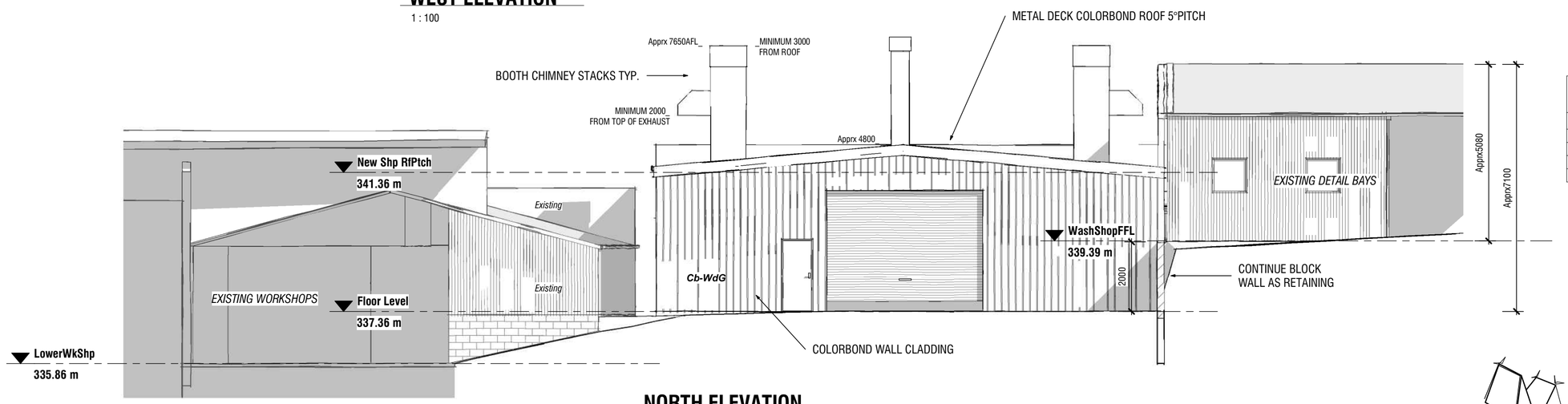
EAST ELEVATION

1 : 100



WEST ELEVATION

1 : 100



NORTH ELEVATION

1 : 100

Finishes Schedule

Code	Description
Cb-WdG	Colorbond Steel shed wall cladding WOODLAND GREY
CbR-WdG	Colorbond Metal deck roof WOODLAND GREY
Conc-Bk	Single leaf face concrete block wall. CONCRETE GREY
Off-W	Painted sheet cladding Smooth Finish SURFMIST / OFF-WHITE or similar

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
ELEVATIONS

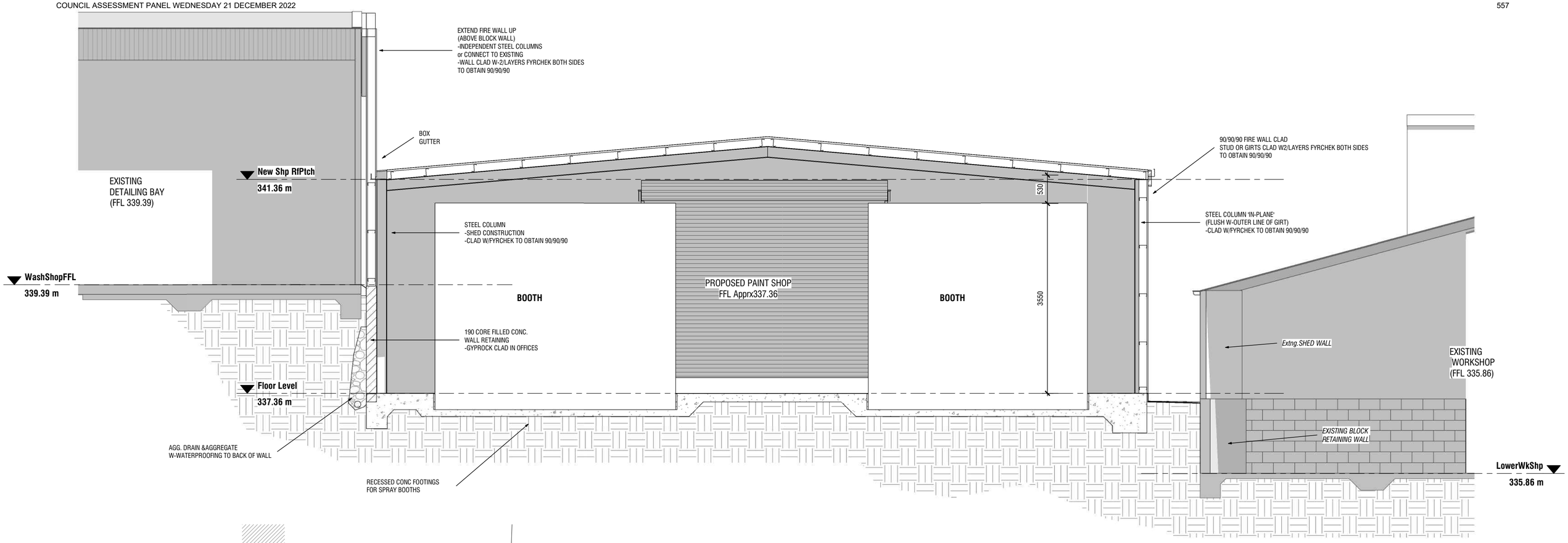
PLANNING DRAWINGS

Date: 21-06-2022 | Drawn: PL | Rev:
Scale: 1 : 100 | Dwg No: 6 of 7

PA06

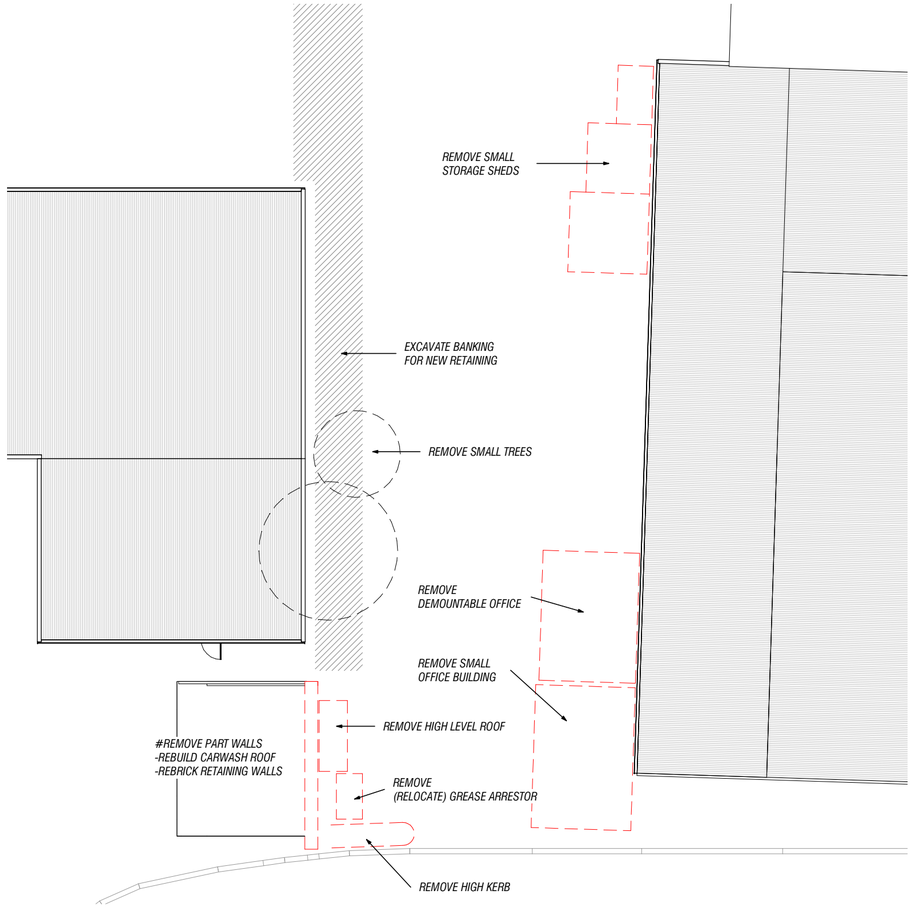
DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2



Sketch SECTION

1 : 50



DEMOLITION PLAN

1 : 200

PROPOSED PAINT SHOP for Adelaide Hills Toyota
57 Adelaide Rd. MOUNT BARKER
DEMOLITION &DETAILS

PLANNING DRAWINGS

Date:	Drawn:	Rev:	
21-06-2022	PL		PA07
Scale:	Dwg No:		
As indicated	7 of 7		

DESIGNING PLACES
19 POST OFFICE ROAD LOBETHAL
ABN 50 643 428 118
Ph 0424 364436

ORIGINAL SHEET SIZE A2

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Appendix C

Stormwater Management Plan

DBN Consulting Engineers Pty Ltd

30 June 2022

Mr Tom Gilbert
Adelaide Hills Toyota
57 Adelaide Road
Mount Barker SA 5251
E-mail: tomgilbert@ahtoyota.com.au

Our ref: Adelaide Hills Toyota Paint Shop Stormwater Management Plan
Revision: 0

Adelaide Hills Toyota Paint Shop, Mount Barker - Stormwater Management Plan

1 Introduction

This Stormwater Management Plan (SMP) summarises the proposed stormwater management strategy for the proposed paint shop shed at Adelaide Hills Toyota, Mount Barker. The existing site is shown in Image 1 and the proposed paint shop is shown in Figure 1, Appendix A. The proposed 481 m^2 paint shop will be located between the existing detailing bay and existing paint workshop. The area to be occupied by the proposed paint shed is at least 90% paved and falls to the north and south of the existing paint workshop.

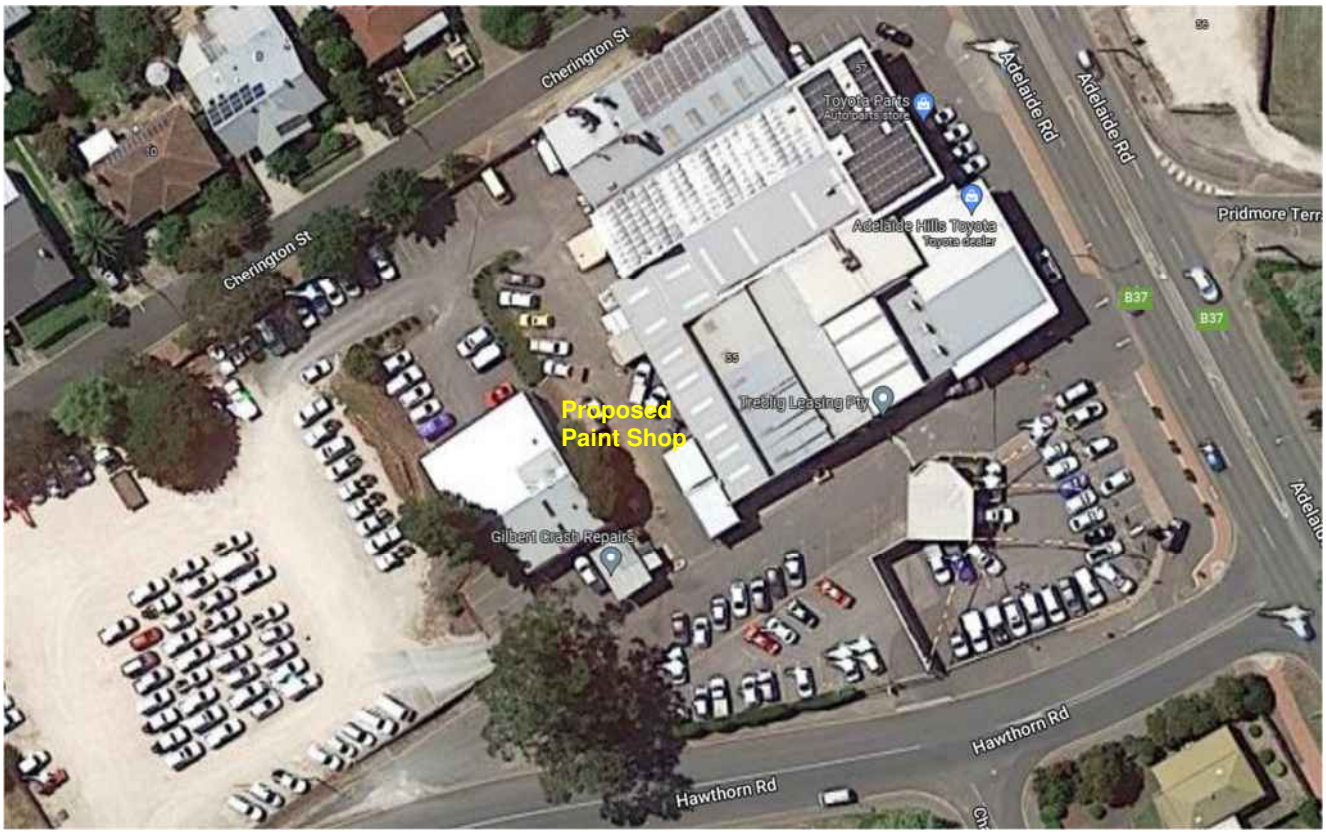

Image 1 – Existing site

2 Existing Site Stormwater System

The existing site stormwater system surrounding the proposed paint shop is shown in Figure 1, Appendix A. The existing detailing bay shed has downpipes on the eastern side of the shed that discharge to the paved area where the proposed paint shop is to be located. The northern downpipe will be redirected to discharge to the car park on the northern side of the shed. And the southern downpipe will be directed to the kerb on the southern side of the proposed wash bay.

There is a downpipe in the south west corner of the existing pain workshop, as shown in Image 2 that would appear to discharge to the existing grated inlet pit on the southern side of the existing paint workshop.

Image 2 – Downpipe in the south west corner of the existing paint workshop.

3 Proposed Stormwater Management Strategy

The proposed stormwater management strategy is shown in Figure 1, Appendix A and includes:

- Stormwater runoff from the northern half of the proposed paint shop shed will be conveyed to a 3 kL Maxiplas thin detention tank or similar. The downpipe collection system will be designed to convey the 1% Annual Exceedance Probability (AEP) peak flow rate to the detention tank. Downpipes from the southern end of the shed will be connected directly to the existing downpipe in the south west corner of the existing paint workshop, as shown in Image 2.
- The detention tank will have a DN35 mm orifice at the invert of the tank and a DN100 mm overflow pipe at the top of the tank. The orifice and overflow arrangement are shown in Image 2. There will be no retention storage in the detention tank.

- The low and high flow discharge from the detention tank will be directed along the north and east sides of the proposed paint shed and connect to the existing downpipe in the south west corner of the existing paint workshop.

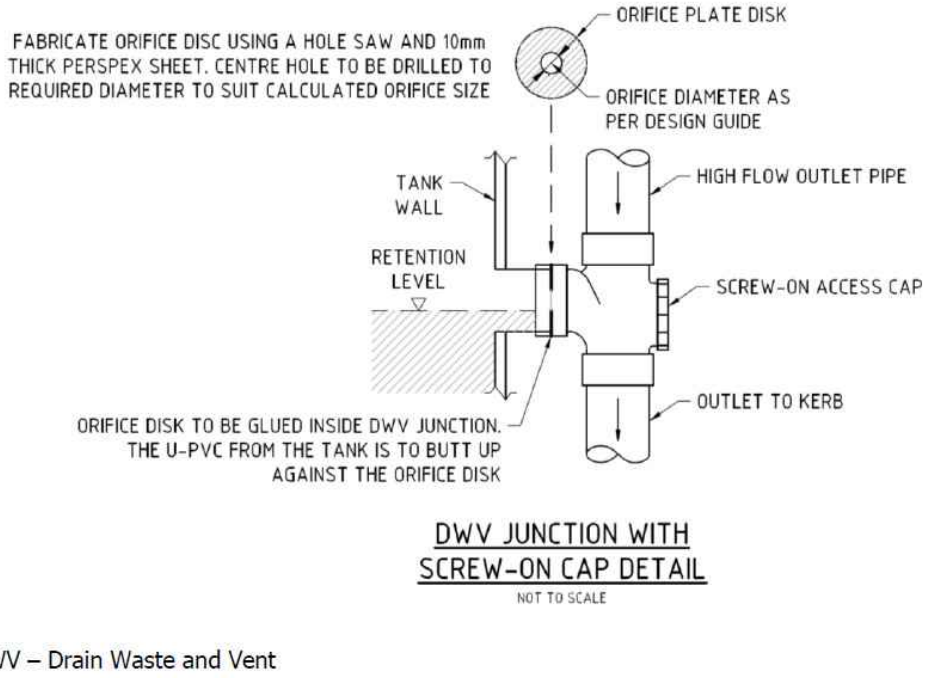

Image 2 – Detention tank orifice and overflow arrangement.

4 Hydrology and Hydraulics

4.1 DRAINS Modelling

A DRAINS model (hydrologic and hydraulic modelling software) was established to calculate the 1% Annual Exceedance Probability (AEP) and 0.2EY existing and post development peak flow rates from the area to be occupied by the proposed paint shop. The following data was input and assumptions made to establish the existing and post development conditions DRAINS model:

- Paved and landscaped area depression storages equal 1 mm and 5 mm respectively.
- Soil type equals 3.
- Antecedent moisture condition equals 3.
- The area to be occupied by the proposed paint shop is 481 m^2. The existing area is 90% impervious and the proposed development is 100% impervious.
- A 3 kL Maxiplas Thin Tank was assumed in the calculations.

4.1.1 DRAINS Modelling Results

The 1% and 0.2EY existing and post development flow rates were calculated using DRAINS. The DRAINS model was simulated for a range of storm durations for the 1% AEP and 0.2EY storm events,

using the latest Australian Rainfall and Runoff, Temporal Patters and Bureau of Meteorology, Intensity Frequency Duration data.

A summary of the 1% and 0.2EY existing and post development flow rates from the proposed 481 m^2 shed footprint are shown in Table 2.

Table 2 – 1% AEP and 0.2EY DRAINS Modelling Results Summary

Scenario	1% AEP Flow Rate (L/s)	0.2EY Flow Rate (L/s)
Existing area where the proposed paint shop is to be located.	18	8
Proposed paint shop roof area with 3 kL detention storage.	12	6

The DRAINS model configuration, 1% AEP and 0.2EY existing and post development DRAINS modelling results are shown in Appendix B.

The DRAINS modelling results show that the 1% AEP post development flow rate from the proposed shed roof area is 6 L/s less than the existing conditions 1% AEP flow rate from the same area. The 0.2EY post development flow rate from the proposed shed roof is 2 L/s less than the existing conditions 0.2EY flow rate from the same area. Therefore, there will be a reduction in the peak 1% AEP and 0.2EY flow rates from the proposed paint shop development compared to existing conditions.

5 Maintenance

The following inspection and maintenance measures are recommended to maintain the integrity of the stormwater system:

- Check the orifice on the tank to ensure that it is not blocked.
- Check that gutters and downpipes are not blocked with leaf litter and that the roof water collection system is operating as per the design intent. The roof water collection system will be designed to convey the 1% AEP peak flow rate to the detention tank. Any overflows from the proposed gutter and downpipe collection system could result in water ingress into adjacent buildings.

Routine maintenance inspections should be undertaken every month, for the first year to establish a cleaning regime and/or after rainfall events totalling 20 mm or more.

6 Conclusion

A stormwater management strategy, as shown in Figure 1, Appendix A has been developed for the proposed paint shop development at Adelaide Hills Toyota, Mount Barker. The proposed stormwater management strategy includes detaining stormwater runoff from the northern half of the proposed paint shop shed roof area using a 3 kL thin tank with a DN35mm orifice at the invert of the tank.

The proposed detention tank will reduce the 1% AEP and 0.2EY peak flows to less than the equivalent peak flows from the existing area to be occupied by the proposed paint shop shed.

If you have any queries regarding this report, please contact the undersigned on 0422 150 775.

Yours faithfully
DBN Consulting Engineers Pty Ltd

Dean Nobbs
Director
0422 150 775

Appendix A – Figures

Figure 1 – Stormwater Management Plan

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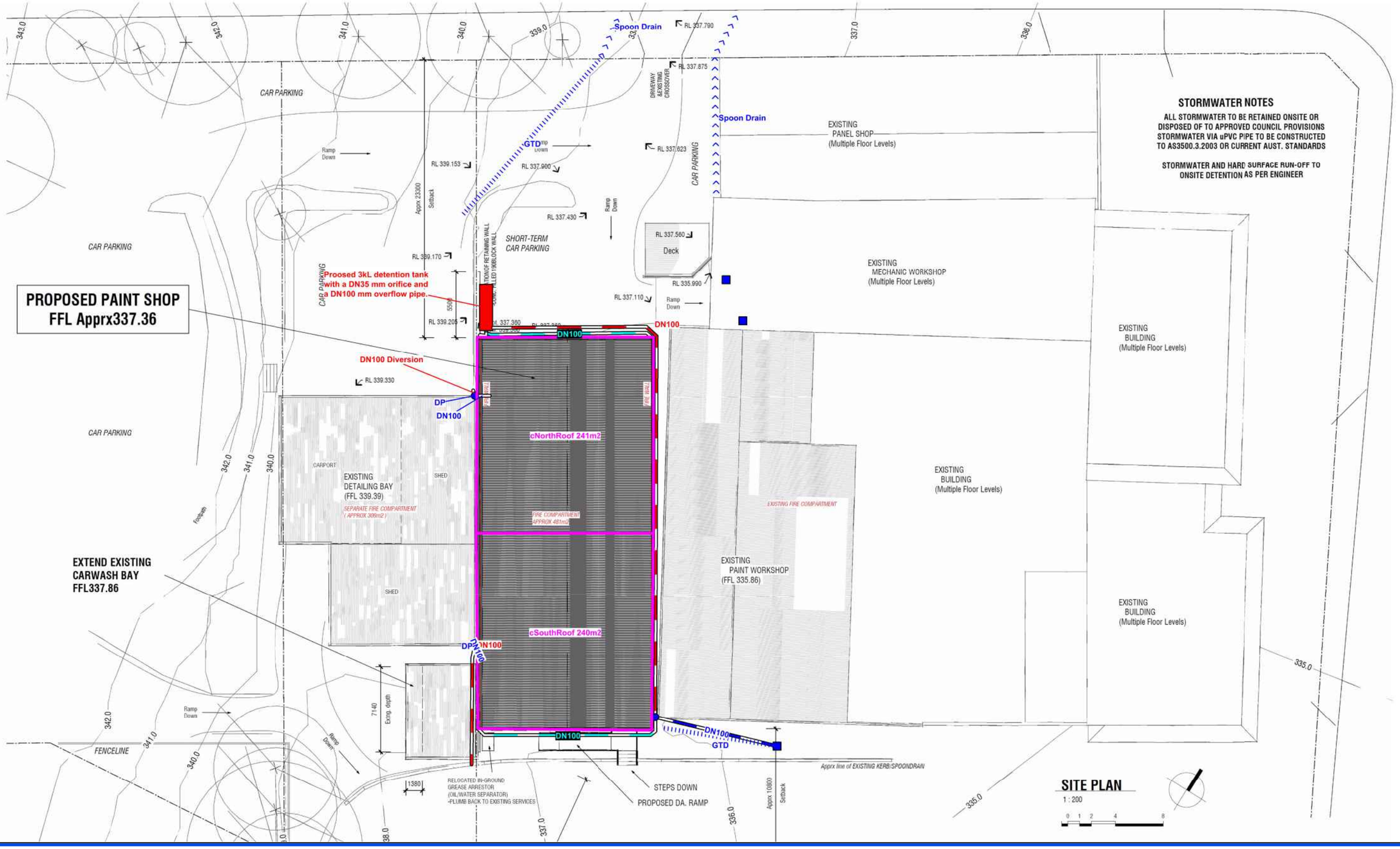

1:NTS

Map projection: Universal Transverse Mercator
Horizontal datum: Geocentric Datum of Australia 1994
Grid: Map Grid of Australia, Zone 54

GRID N

LEGEND

Catchments | Existing Downpipe | Existing Spoon Drain | Existing GTD | Proposed Detention Tank

Existing SW Pipe | Proposed SW Pipe | Existing SW Pit | Proposed Roof Drainage

DBN Consulting Engineers Pty Ltd
M 0422 150 775 E deannobbs@internode.on.net

Adelaide Hills Toyota
Proposed Paint Shop
Stormwater Management Plan

27 | June 2022

job no. ADL0347
rev no. B

Figure 01

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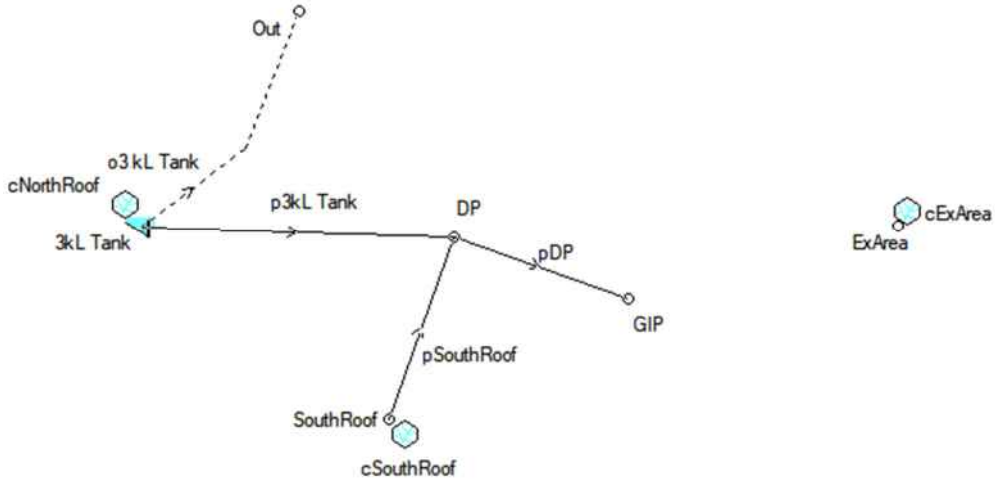
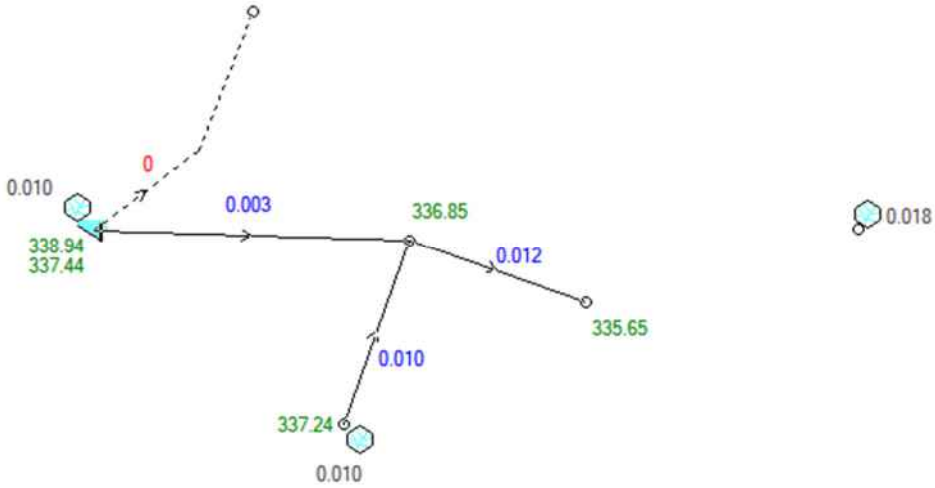
Appendix B –DRAINS Model Results

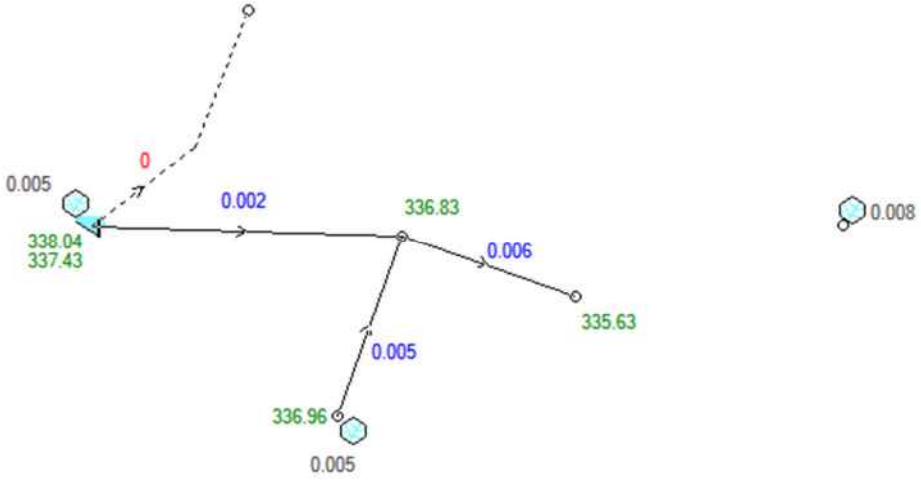
DRAINS Model Setup



1% AEP DRAINS Model Results



0.2EY DRAINS Model Results



Appendix D

Details and Specifications of the Spray Booths

PAN
SPRAYBOOTHS AUSTRALIA

A.C.N. 001 703 242 A.B.N. 32 001 703 242
Unit 2/7 Smeaton Grange Rd, NSW 2567
P.O. BOX 251, CAMDEN, N.S.W. 2570 email: office@pangroup.com.au
PH: 61-2 4647 5936 Fax: 61-2 4647 5455

PROPOSED CERTIFICATE OF COMPLIANCE

Adelaide Hills Toyota REF: 6492
57 Adelaide Road
Mount Barker S.A. 5251

20th June 2022

Dear Tom,

This letter is to confirm that the **Pan "ULTIMATE SERIES 7" FDD** spray booths, Serial numbers 6492 -1, 6492 -2 & paint mix room 6492 - 3 proposed for installation at the above address shall be designed, manufactured, and installed to comply with the Australian standard AS/NZS 4114 -2020, with all equipment specifications as per quotation.
The exhaust ducting shall terminate three metres above the roof line via a vertical discharge cowl.
The inlet ducting shall introduce fresh air from above the roofline.
The equipment shall be tested and commissioned at the conclusion of installation with data information recorded and inserted into the operations manual.
All warranty, electrical, gas and relevant data shall be included in the hard cover manual supplied to you at the conclusion of commissioning.
The equipment shall be installed in workshop nominated by yourself.

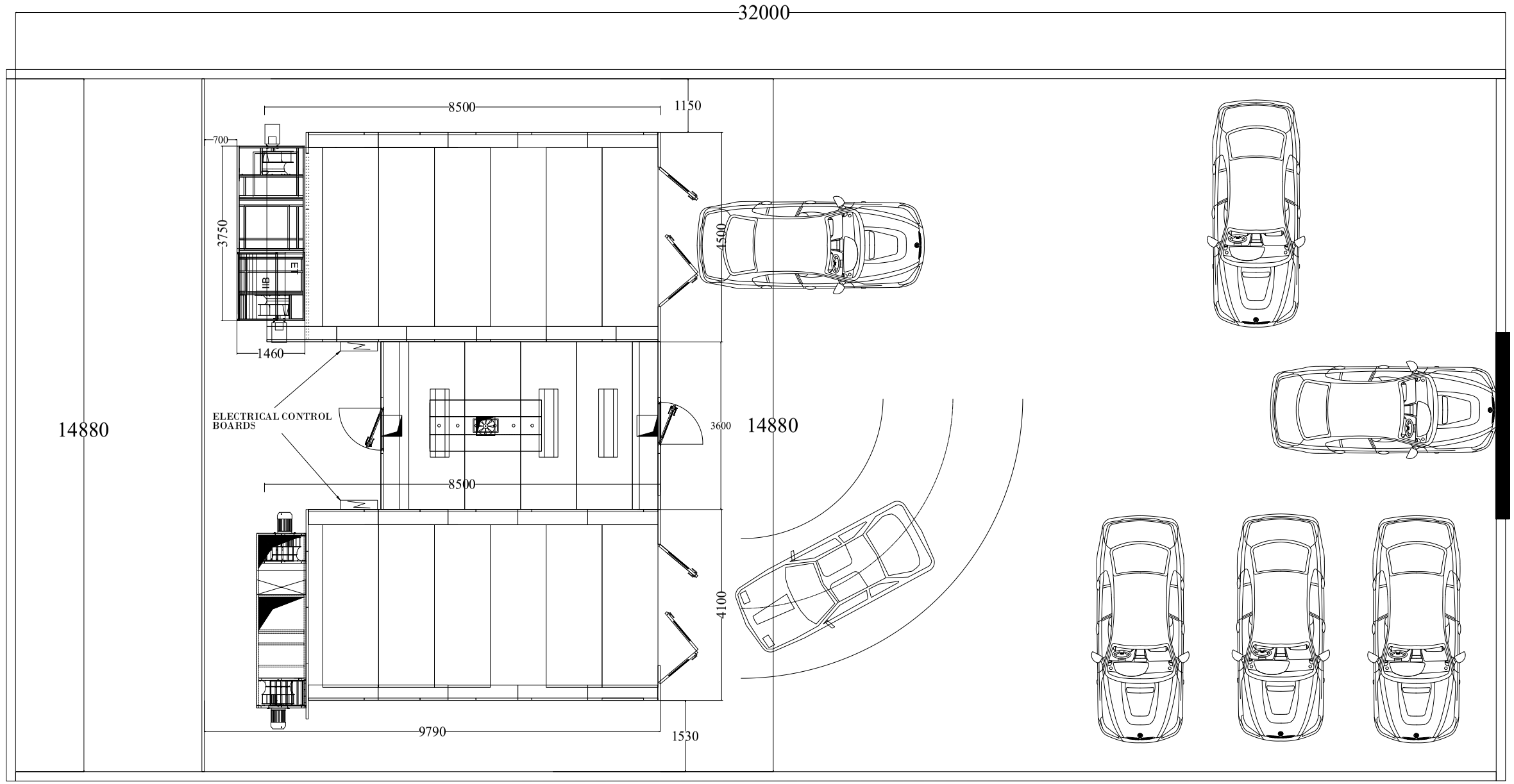
Should any further information be required please do not hesitate to contact Pan Spraybooths Australia at any time. `
We trust that this meets with your requirements and assure you of our best service at all times

Yours faithfully

David J. Moraghan
Manager 0409 569 225

PAN
SPRAYBOOTHS AUSTRALIA

PAN SPRAYBOOTHS/ BAKE OVENS
MANUFACTURED TO AS/NZS4114. 2020 STANDARDS



DECLARATION OF ACCEPTANCE OF DRAWINGS
I DECLARE THAT THESE DRAWINGS PRESENT THE PROPOSED INSTALLATION TO MY SATISFACTION

NAME:

SIGN:

DATE:

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Amendment	Date	Description
A	XX/XX/XX	XX

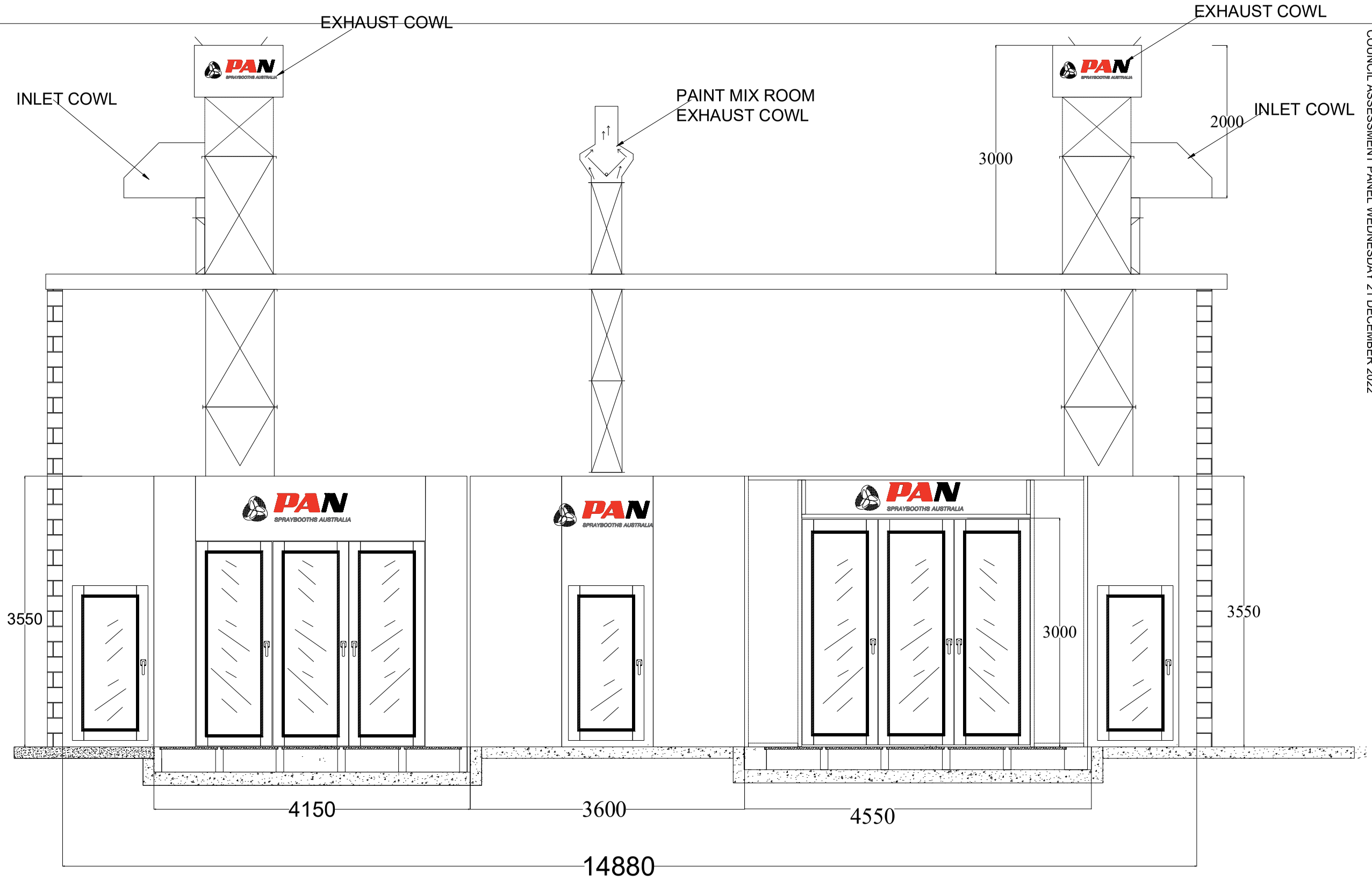
GILBERT

TITLE1
TITLE2
TITLE3

Job No. 6492 | DWG No. 6492-001 | Amdt X | No. in set X

Drawn: DRAFTER
Scale: SCALE
CAD Ref: CAD
Q Chk Sign:
Designed: D.MORAGHAN
Approve sign:

PAN SPRAYBOOTHS AUSTRALIA
572
NARELLAN NSW
Ph: (02) 4647 5936 Mob: 0409 569 225
Web: www.pangroup.com.au



MOUNT BARKER DISTRICT COUNCIL
COUNCIL ASSESSMENT PANEL WEDNESDAY 21 DECEMBER 2022

DECLARATION OF ACCEPTANCE OF DRAWINGS
I DECLARE THAT THESE DRAWINGS PRESENT THE PROPOSED INSTALLATION TO MY SATISFACTION

NAME:

SIGN:

DATE:

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Amendment	Date	Description
A	05/05/22	ORIGINAL ISSUE

GIBERT TOYOTA

FRONT ELEVATION

Job No. 6492 | DWG No. | Amdt A | No. in set

Drawn: DM
Scale: N.T.S.
CAD Ref:
Q Chk Sign:
Designed: D.MORAGHAN
Approve sign:

PAN SPRAYBOOTHS AUSTRALIA
NARELLAN NSW
Ph: (02) 4647 5936 Mob: 0409 569 225
Web: www.pangroup.com.au

573

PAN
SPRAYBOOTHS AUSTRALIA

The Pan Ultimate Series 7" 11Kw. 9 metre Australian made

Combination Spray Booth & Baking Oven

The PAN 'Ultimate Series "7" is arguably the most cost-effective efficient spray booth ever manufactured for the refinish industry in Australia.

Using the very latest in technology coupled with 45-year experience, the PAN Series "7" achieves consistent laminar air flow, even heat distribution, maximum levels of light reflection and very low noise levels during operation, whilst requiring minimum use of power and fuel.

The Series 7" model spray booth is a full down draft spray booth delivering clean inlet heated air through a uniquely designed air handling unit using direct drive backward curve **Italian** manufactured turbine inlet & exhaust fans.

The turbine fan assemblies are the largest (900mm dia.) provided in Australian standard size automotive spray booth cabins
Both inlet and exhaust turbine fans are intrinsically safe with a fixed copper band between impeller and scroll
Electrical control operation is by means of a fully automatic "PLC" touch screen control board
Powered by Omron components

All motors supplied with the spray booth are coupled to variable speed drives allowing for soft start up and continuing control of cabin pressure, greatly reducing power costs and minimising turbulence.

The direct fired gas burner @ 1000 megajoules is 100% efficient allowing a temperature rise of

25 degrees C TO 65 degrees C within three minutes greatly reducing fuel consumption.

Lighting is uniquely designed **Australian** made "LED" units consisting of four x 18watt tubes colour 6000k set behind 6.38mm laminated glass.
Creating excellent reflection and lighting levels in the cabin area
Increasing operator comfort at reduced power consumption.

The optimum aim for this equipment is to minimize turbulence, dust contamination, speed up the drying process and provide a safe and healthy work area.

Inlet air is filtered through 630G acrylic media coated with a special adhesive to prevent migration of dust particles and fibres
Exhaust air is filtered through the unique "CellPocket" filter during the spray- painting process:
During spray cycle the temperature and cabin pressure are controlled.
"Flash off" cycle increases the heat and air delivery to allow curing of water borne basecoat
Baking cycle is a recirculated direct fired gas system at a reduced air speed to accelerate the paint drying process. No air to spray regulator is available in this cycle
Inlet fan Direct drive 11kw 6 pole motor
Exhaust fan direct drive 11Kw 6 pole motor
The 'Ultimate' has triple Aluminium manufactured front doors two of which are bi-fold,

All doors have built in large 6.38 laminated glass viewing windows,

Cabin size 9000mm x 4000mm x 2800mm

A separate entry door on the side,

Drive in reverse out or drive through configurations can be installed.

PAN ULTIMATE SERIES 7”	BOOTH B
AUSTRALIAN MADE	YES
BACKWARD CURVE TURBINE FANS	YES
ANTI SPARK IMPELLERS	YES
DIRECT DRIVE MOTORS	YES
MEPS APPROVED ELECTRIC MOTORS	YES
VARIABLE SPEED DRIVES	YES
POWER CONSUMPTION LESS THAN 20 AMPS	YES
DIRECT FIRED GAS 1000 MEGAJOULE BURNER	YES
PLC CONTROL BOARD	YES
LED LIGHTING	YES
LUMENS ABOVE 1500	YES
NOISE LEVELS LESS THAN 75DBA (@3m)	YES

PAN SPRAYBOOTHS/ BAKE OVENS MANUFACTURED TO AS4114. 2020 STANDARDS

PAN
SPRAYBOOTHS AUSTRALIA

The Pan Ultimate Series 7" Australian made

Combination Spray Booth & Baking Oven

The PAN 'Ultimate Series "7" is arguably the most cost-effective efficient spray booth ever manufactured for the refinish industry in Australia.

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The Series 7" model spray booth is a slightly positively pressurised spray booth achieved by using backward curve direct drive **Italian** manufactured turbine inlet & exhaust fans.

Electrical control operation is by means of a fully automatic "PLC" touch screen control board Powered by Omron components

All motors supplied with the spray booth are coupled to variable speed drives allowing for soft start up and continuing control of cabin pressure, greatly reducing power costs and minimising turbulence.

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During spray cycle the temperature and cabin pressure are controlled.
Baking cycle is a recirculated direct fired gas system at a reduced air speed to accelerate the paint drying process. No air to spray regulator is available in this cycle
Inlet fan Direct drive 7.5kw 6 pole motor
Exhaust fan direct drive 7.5Kw 6 pole motor
The 'Ultimate' has triple Aluminium manufactured front doors two of which are bi-fold,
All doors have built in large 6.38 laminated glass viewing windows,
Cabin sizes available internal 7500mm x 4000mm x 2800mm
9000mm x 4000mm x 2800mm

A separate entry door on the side,
Drive in reverse out or drive through configurations can be installed.

PAN ULTIMATE SERIES 7”	BOOTH B
AUSTRALIAN MADE	YES
BACKWARD CURVE TURBINE FANS	YES
ANTI SPARK IMPELLERS	YES
DIRECT DRIVE MOTORS	YES
MEPS APPROVED ELECTRIC MOTORS	YES
VARIABLE SPEED DRIVES	YES
POWER CONSUMPTION LESS THAN 15 AMPS	YES
DIRECT FIRED GAS 800 MEGAJOULE BURNER	YES
PLC CONTROL BOARD	YES
LED LIGHTING	YES
LUMENS ABOVE 1500	YES
NOISE LEVELS LESS THAN 75DBA (@3m)	YES

PAN SPRAYBOOTHS/ BAKE OVENS MANUFACTURED TO AS4114. 2020 STANDARDS

PAN SPRAYBOOTHS AUSTRALIA P/L

Inlet filter Pan- 630G

The primary function of spray booth ceiling media is to arrest dust particles from entering into the spray booth cabin area whilst in the spray-painting procedure.
The Pan 630G inlet filter has the following features:

- Specifically designed for use in modern day spray booths.
- Ensures uniform air distribution.
- Impregnated in full depth with a special adhesive coating to prevent the release of fibres and migration of paint-damaging particles of larger than 5 microns.
- Conforms to all European Union and U.S. fire classification stands (e.g., DIN 53438F1 and UL 900- class 1) and is self-extinguishing.
- Is resistant to evaporated solvents and is 100% silicone free.
- Constant quality is ensured by independent quality control testing according to EN-779.
- Has published the results of a migration test, and has an RO rating, thus demonstration that the media does not allow significant migration if dust under normal operating conditions.
- Has published a particle size efficiency chart with a minimum ~ 100% efficiency to 8-micron particles, but preferably a ~ 100% efficiency to 5-micron particles.
- Is recommended and used by most major car manufacturers.

"TECHNICAL DATA "ARESTERS"

"Arresters"	Pan-630G
Avg. arrestance (acc. En 779)	98.5%
Initial efficiency (dust spot)	22%
Average efficiency (dust spot)	55%
Air Velocity	0.3m/s
Rated Air Flow (m3/h/m2)	900
Initial pressure drop	25 pa
Final pressure drop	450 pa
Dust holding at tested final	490g/m2
Inlet filter migration class	RO
Class according to EN 779	F5

PAN
SPRAYBOOTHS AUSTRALIA

A.C.N. 001 703 242 A.B.N. 32 001 703 242
Unit 2 / 7 Smeaton Grange Road Smeaton Grange NSW 2567
P.O. BOX 251, CAMDEN, N.S.W. 2570 email: office@pangroup.com.au
PH: 61-2 4647 5936 Fax: 61-2 4647 5455

CELL POCKET FILTERS

It is designed using an intricate polyester fiber structure combined with diamond shaped pockets on the air entering side. This design results in the capture and retention of high quantities of over spray, permitting fewer filter changes, less downtime, and extended productivity. They are available in pads and rolls.

- **High loft, multi-ply polyester pads or blankets;**
- **Superior holding capacity-long life, less production downtime;**
- **Efficiency 99.84%.**

Specifications

Overall Arrestance Efficiency:	99.84%
Fractional Arrestance Efficiency	
20 microns	100.0%
10 microns	99.8%
5 microns	84.5%
2.5 microns	4.2%
Holding Capacity	Up to 29kg/m2
Maximum Tested Air Velocity	3 metres per second
Initial Pressure Drop (@ 0.5M/S	15 Pa.
Maximum Pressure Drop	250Pa.

Flammability Rating	UL Class II
Filter Construction	High Loft, Multi-Ply, Non-woven Polyester

Arrests Virtually All Overspray

Independent laboratory test reports confirm Cell Pocket filters excels at capturing the very small 2.5 to 10-micron particles that typify overspray produced in most spray finishing operations. The arrestor effectively captures and retains these particles, preventing them from contaminating downstream equipment***. Cell Pockets removes far more particles from the booth exhaust than any other high performance, single-stage overspray arrestor.***

Its 99.84% arrestance efficiency means only 0.16% of the overspray penetrates the arrestor. At first glance, Filter X, a competitive arrestor, with a 99.5% overall arrestance efficiency might seem comparable. In reality though, three times as much overspray penetrates Filter X.

More importantly, Cell Pockets captures more of the smaller particulates than any other single-stage arrestor. The Fractional Arrestance Efficiency chart shows Cell Pockets arrests smaller overspray particulates that penetrate other arrestors.

P: 02 4647 5936 M: 0409 569 225 W: www.pangroup.com.au

PAN SPRAYBOOTHS/ BAKE OVENS

MANUFACTURED TO AS/NZS 4114.1 2003 STANDARDS

Derek Henderson

From: Kieron Barnes <kieron@planningstudio.com.au>
Sent: Tuesday, 6 December 2022 5:39 PM
To: Derek Henderson
Cc: Tom Gilbert
Subject: Adelaide Hills Toyota Relocated Spray Booths - Proposed Certificate of Compliance
Attachments: proposed letter of compliance JUNE 2022.pdf

Hi Derek,

Further to our phone discussion yesterday, I've attached the proposed Certificate of Compliance which confirms that the new Spray Booths at Adelaide Hills Toyota will be designed, manufactured, installed and operated in accordance with Australian Standard *AS/NZS 4114-2020 Spray painting booths, designated spray painting areas and paint mixing rooms*.

Detailed specifications were provided in Appendix D of our Planning Statement.

It is our understanding that the existing Spray Booths were install many years ago and, for this reason, would not meet current environmental standards. As you know, there is no legislative requirement to bring outdated equipment and machinery such as this up to current standards. However, Adelaide Hills Toyota is taking a proactive approach by seeking to improve its environmental performance by installing new spray booths in a purpose-built facility. Importantly, the new facility will be tucked behind the main dealership within the centre of the site – farther away from residential properties than the existing facility.

We have no doubt that the new facility will result in substantial environmental improvements for both Adelaide Hills Toyota and the adjoining residents and look forward to discussing this in more detail at the CAP meeting on 21 December 2022.

Kind regards

Kieron

PLANNING STUDIO
URBAN & REGIONAL PLANNING

Kieron Barnes | Director
kieron@planningstudio.com.au | 0438 741 747 | www.planningstudio.com.au | 347 Unley Road, Malvern | PO Box 32 Bridgewater SA 5155

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PROPOSED CERTIFICATE OF COMPLIANCE

Adelaide Hills Toyota REF: 6492
57 Adelaide Road
Mount Barker S.A. 5251

20th June 2022

Dear Tom,

This letter is to confirm that the **Pan "ULTIMATE SERIES 7" FDD** spray booths, Serial numbers 6492 -1, 6492 -2 & paint mix room 6492 - 3 proposed for installation at the above address shall be designed, manufactured, and installed to comply with the Australian standard AS/NZS 4114 -2020, with all equipment specifications as per quotation.
The exhaust ducting shall terminate three metres above the roof line via a vertical discharge cowl.
The inlet ducting shall introduce fresh air from above the roofline.
The equipment shall be tested and commissioned at the conclusion of installation with data information recorded and inserted into the operations manual.
All warranty, electrical, gas and relevant data shall be included in the hard cover manual supplied to you at the conclusion of commissioning.
The equipment shall be installed in workshop nominated by yourself.

Should any further information be required please do not hesitate to contact Pan Spraybooths Australia at any time. `
We trust that this meets with your requirements and assure you of our best service at all times

Yours faithfully

David J. Moraghan
Manager 0409 569 225

PAN SPRAYBOOTHS AUSTRALIA

PAN SPRAYBOOTHS/ BAKE OVENS
MANUFACTURED TO AS/NZS4114. 2020 STANDARDS

ATTACHMENT 2 – Site photos

Photo 1
View to proposed new building site from the main entrance to Gilbert Crash Repairs on Hawthorn Road (the southern boundary of the subject land).

The existing administration office/reception transportable building is in the background (central to the photo with advertising on the parapet) and the existing wash bay to the left of this.

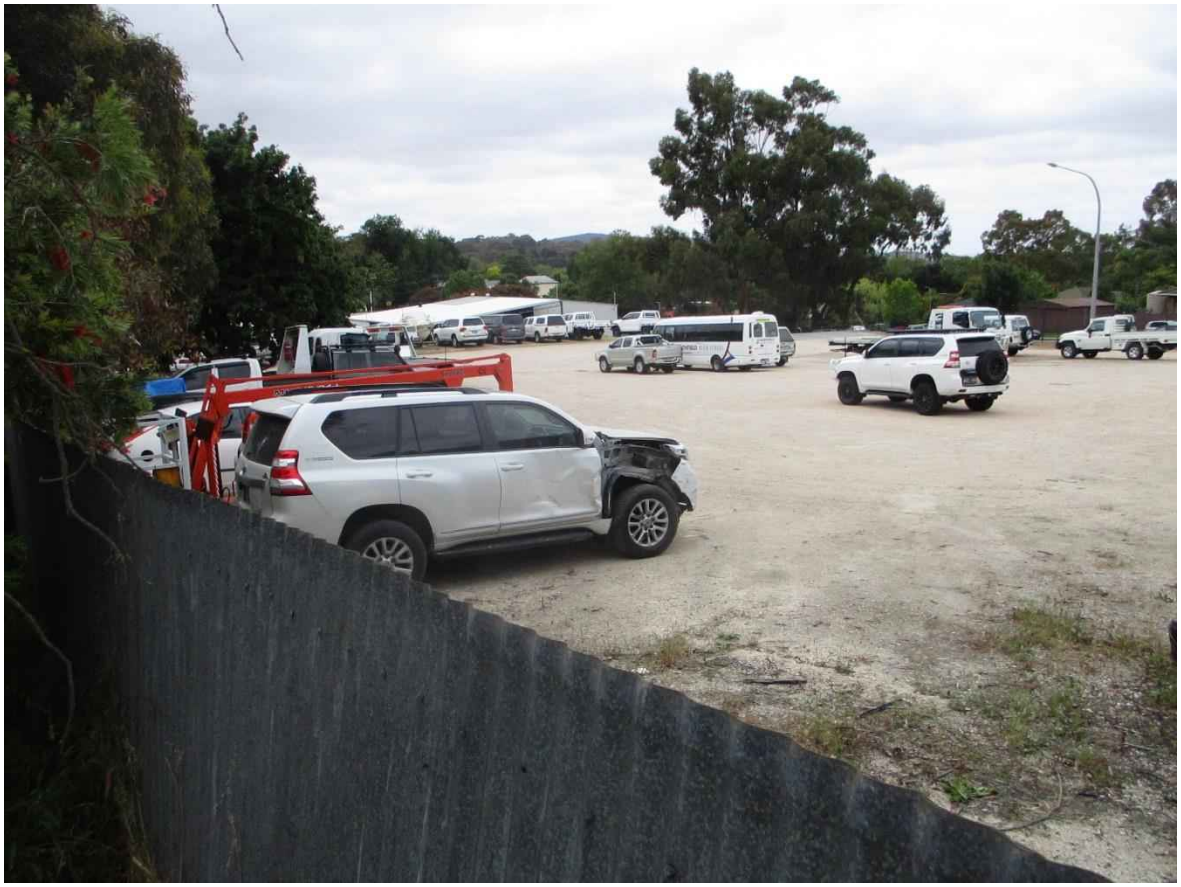
Photos 2 and 3
View into the subject land from the Cherington Road entrance.

The building containing the existing spray booths is located on the left side of the entrance. The “laneway” in the centre of the photos is the proposed location of the new paint shop building.

Photo 3

View across the vehicle storage area at 2 Hawthorn Road from the Cherington Road verge adjacent to the northwest corner of the subject land.

The panel shop is in the background. The proposed new paint shop building is located behind this.



Details of Representations

Application Summary

Application ID	22025784
Proposal	Alterations and additions to existing service trade premises (car dealership) and automotive collision repair - new building comprising of a paint shop and ancillary offices, addition to carwash bay, alterations to existing vehicle service building and alteration to carparking and vehicular access areas
Location	55-59 ADELAIDE RD MOUNT BARKER SA 5251, 55-59 ADELAIDE RD MOUNT BARKER SA 5251, 2 CHERINGTON ST MO..

Representations

Representor 1 - Kim Stapleton

Name	Kim Stapleton
Address	2 Canberra Street MT BARKER SA, 5251 Australia
Submission Date	31/10/2022 11:44 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

Objection to Planning Application 22025784 55-59 Adelaide Road, Mount Barker SA 5251 & 2 Cherington Street, Mount Barker SA 5251 Kim Stapleton 2 Canberra Street Mount Barker SA 5251 Grounds for Objection 1. The proposal is not an acceptable land use in the zone. The proposed alterations and additions including an expanded paint shop with associated spray booths & bake ovens is indeed in direct contradiction of; DO 1 Housing supports a range of needs and complements the existing local context. Services and community facilities contribute to making a convenient place to live without compromising the residential amenity and character of the neighbourhood. PO 1.4 Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood. I believe the proposed development does not meet local design and planning considerations in that it does not respect neighbourhood character and local amenity at all. Further to this, I would in fact state that the dealership in its current condition does not appropriately complement the residential character or amenity of the neighbourhood. The proposal even makes the admission that its land use is in fact in contravention to its zone and has been for quite some time. Further cementing inappropriate land use through approval of this proposed alteration and addition is entirely unacceptable. 2. No adequate environmental impact study included to properly asses the impact of the potential harm of the spray booths & bake ovens to the surrounding dwellings. 3. The proposed alterations and additions appear to have inadequate landscaping, further degrading the natural environment of the area. 4. No visual amenity photo-montages supplied to show how the proposal will look within the neighbourhood context with respect to appropriate scale and materiality. To suggest the proposed development is ‘likely to improve the amenity of nearby residential uses’ is extremely ambitious and disingenuous. This proposal does not consider the surrounding neighbourhood character & fabric at all, and will only further add to the eyesore

that is the dealership and associated outhouse buildings & sheds.

Attached Documents

REPRESENTATION ON APPLICATION – PERFORMANCE ASSESSED DEVELOPMENT

Planning, Development and Infrastructure Act 2016

Applicant: Adelaide Hills Toyota

Development Number: 22025784

Nature of Development: Automotive collision repair & Service trade premises -Alterations and additions to existing service trade premises

Zone/Sub-zone/Overlay: Mount Barker SA 5251

Subject Land: 55-59 Adelaide Road Mount Barker SA 5251
2 Cherington Street Mount Barker SA 5251

CT5450/664 F12222AL100
CT5450/711 F12222AL102
CT5450/946 F12222AL101
CT5507/434 F2582AL1
CT6255/705 D74798AL331

RECEIVED
MOUNT BARKER DISTRICT COUNCIL
31 OCT 2022
FOL/22/485

Contact Officer: Assessment Manager Mount Barker District Council

Phone Number: 0883917220

Close Date: Monday, 31 October 2022 at 11:59 pm Australia/Adelaide

My name*: Melanie Welsh

My phone number: 0427799388

My postal address*: 8 Cherington Street, Mount Barker SA 5251

My email: darrenandmelanie@bigpond.com

** Indicates mandatory information*

My position is:

- ☐ I support the development
- ☒ I support the development with some concerns (detail below)
- ☐ I oppose the development

The specific reasons I believe that planning consent should be granted/refused are:
Letter from Cherington Street residents attached

[attach additional pages as needed]

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*

Signature: Date: 30/10/2022

Return Address: 8 Cherington Street Mount Barker SA 5251 or

Email: darrenandmelanie@bigpond.com or

Complete online submission: planninganddesigncode.plan.sa.gov.au/haveyoursay/

Mount Barker District Council

Assessment Panel

PO Box 54

Mount Barker SA 5251

30 October 2022

Residents of Cherington Street, Mount Barker SA 5251

Re: Proposed development – Adelaide Hills Toyota [22025784]

To Members of the Assessment Panel,

The notice of the development application (applicant Adelaide Hills Toyota) has been received by residents of Cherington Street with some concerns and anxiety. Residents' primary concerns are:

1. The relocation of the spray booth into closer proximity to residential dwellings. Concern of light, noise and paint fume disturbance.
2. The relocation of the spray booth concern of increased traffic to driveway opposite residential dwellings and increased traffic to Cherington Street.
    a. There is already at times dangerous traffic congestion, with on street parking Cherington Street becomes restricted to one lane to be shared with pedestrians
    b. There is no available foot path for frequent pedestrian traffic including prams, elderly, and residents with physical disability using public transport from Adelaide road. Pedestrians are forced to share the road with commercial vehicles. An increase in commercial vehicles and general traffic from Adelaide Hills Toyota is causing much anxiety.
    c. Increased congestion and delays turning onto Adelaide road.

The residents are grateful to have a local business seeking to grow and support the Mount Barker and surrounding communities. We are hopeful of working together with the Assessment Panel and Adelaide Hills Toyota for a solution which will allow residents to enjoy quiet occupancy of their properties and respected lifestyles. At the same time allowing Adelaide Hills Toyota to improve their premises and strengthen their business. Residents propose:

1. A 3m wide natural vegetation plantation on the land of Adelaide Hills Toyota parallel to the Cherington Street fence to be planted and maintained with appropriate native vegetation prior to building works to reduce noise and light pollution from the commercial premises otherwise interfering with residential lifestyle. WITH NIL REMOVAL OF EXISTING TREES.

2. Construction of an aesthetically appealing 2.2 metre high sound dampening fence in place of the existing fence of poor maintanance, prior to building works to reduce noise and light pollution from the commercial premises otherwise interfering with residential lifestyle.
3. The construction of an all accessible footpath on the existing nature strip between Adelaide Hills Toyota and Cherington Street.
4. A speed reduction on Cherington Street to 40km per hour with the inclusion of multiple speed reduction methods. Implementing design features and strategies designed to reduce traffic speed and volume, minimise the risks posed by vehicles and will improve safety to local residents and pedestrians.
5. Traffic entering and exiting the spray booth and Adelaide Hills Toyota premises to be via the entrance on Hawthorn Road. Hawthorn Road is of appropriate design to provide safety to motorists and pedestrians in this instance and will;
   Alleviate some traffic concerns
   Compliment the future traffic plans of traffic lights at the Adelaide Road and Hawthorn Road intersection
6. Measures taken to prevent paint fumes interfering with residents. At times the fumes from the existing paint booth is a health safety problem. The construction of a new and larger paint booth needs to compliant to ensure residents are not exposed to toxic fumes.

With these representations incorporated into the development application, the residents of Cherington Street as detailed do not oppose the development. Should the applicant fail to consider the representations and ignore the need for residents to be able to enjoy a quiet lifestyle and provide road safety solutions, the residents as detailed oppose the development as it currently is presented.

Regards,

The Residents of Cherington Street

Application on behalf of:

Resident Name: Darren and Melanie Welsh

Resident Address: 8 Cherington Street Mount Barker SA 5251

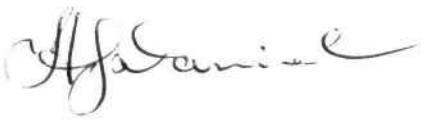
Postal Address: as above

Signed: Date: 30/10/2022

Resident Name: HEATHER DANIEL

Resident Address: 15 CHERINGTON ST MT BARKER.

Postal Address: AS ABOVE

Signed:  Date: 30.10.2022.

Resident Name: Briston Talbot

Resident Address: 16 Cherington Street Mt. Barker.

Postal Address: As Above

Signed: Date: 30/10/2022

Resident Name: Sam Hewitt

Resident Address: 6 Cherington St Mt Barker

Postal Address: as above

Signed: Date: 30/10/2022

Resident Name: Judith McAtee.

Resident Address: 14 Cherington St Mt Barker.

Postal Address: As Above.

Signed: J McAtee Date: 31/10/2022.

Resident Name: DAVE FAIRE.

Resident Address: 4 cherington st

Postal Address:

Signed: Date: 30/10/2022

Resident Name: Thomas KENNY - 0425119838

Resident Address: 12 Cherington Street, Mount Barker

Postal Address: As above.

Signed: Date: 30/10/2022

Resident Name: Ruth Tohl.

Resident Address: 10 Cherington St Mount Barker.

Postal Address: 10 Cherington St Mount Barker.

Signed: R Jdl Date: 31/10/22.

PLANNING STUDIO
URBAN & REGIONAL PLANNING

17 November 2022

Our ref: P0237

Derek Henderson
Senior Planner
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Derek,

RE: RESPONSE TO REPRESENTATIONS – ALTERATIONS AND ADDITIONS TO EXISTING SERVICE TRADE PREMISES AND AUTOMOTIVE COLLISION REPAIR AT 55-59 ADELAIDE ROAD, MOUNT BARKER – DA 22025784

We refer to the representations received during the statutory notification period for Development Application 22025784. As you know, Planning Studio provides planning advice to Adelaide Hills Toyota (the Applicant). Accordingly, we provide the following response to the concerns raised by the representor.

Background

At the outset, we note that the subject land has been used continuously as a service trade premises (involving the sale and servicing of motor vehicles) for around 100 years. Similarly, the Gilbert Crash Repair business has been operating on the subject land for many decades. Importantly, the two businesses (which are under the same ownership) currently employ approximately 60 staff with around 20 of these staff directly associated with the crash repair business.

As outlined in the documents accompanying the Development Application, the proposal forms part of a range of significant improvements that the current owners have been implementing over recent years. More specifically, the proposal seeks to replace the existing out-dated spray booths with a purpose-built, modern facility while also providing appropriate office space for staff working within the Gilbert Crash Repairs arm of the overall business.

Simply put, the replacement spray booths and associated office are necessary to bring the facility up to current environmental standards while also meeting work, health and safety requirements.

Representation from Melanie and Darren Welsh

We note the representation from Melanie and Darren Welsh (which has also been signed by a number of other residents of Cherington Street), provides support for the proposed development subject to a number of concerns. Following receipt of the representation, a meeting was held on 16 November at Adelaide Hills Toyota with some of the residents to discuss the concerns raised in the representation. Based on this meeting, it was agreed that the residents and Adelaide Hills Toyota would work together with the Mount Barker District Council to explore opportunities to improve the amenity of Cherington Street. This could include additional landscaping along the street verge, improved facilities for pedestrians as well as an upgrade of the existing fence.

It was also agreed that Adelaide Hills Toyota and the residents would discuss potential traffic calming measures with the Mount Barker District Council. This could include a reduction in the speed limit for Cherington Street to 40km/h. These discussions reflect residents' concerns about the potential increase in traffic along Canberra Street and Cherington Street once Hawthorn Road is upgraded to create a signalised intersection with Adelaide Road. Specifically, residents are concerned that vehicles will seek to avoid the new traffic lights by using Canberra Street and Cherington Street.

In terms of the proposed development, it is noted that the relocation of the spray booths will not increase the amount of traffic on Cherington Street. Rather, it is anticipated that the relocation of the spray booths will mean that a higher proportion of vehicle movements will be contained within the site due to the proximity of the 'panel shop' to the relocated spray booths.

Representation from Kim Stapleton

In response to the representor's concern that the proposal is not an acceptable use in the Zone, we reiterate that a service trade premises has been operating on the land for around 100 years – long before the introduction of planning zones and development controls. Also, the appropriateness of the existing use has been confirmed and reinforced through various approvals issued by the Council over the years. This has included a significant upgrade of the dealership in 2007 as well as the approval of additional on-site parking facilities in 2021. Therefore, the existing use is lawful, and the business is operating in accordance with the existing approvals issued by the Council.

Further, we note that the Neighbourhood Zone (in particular Performance Outcome 4.1), contemplates non-residential development where it complements the residential character and amenity of the neighbourhood.

PO 1.4 Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.

In our view, the proposed relocation of the spray booths to a new, purpose-built facility will improve the amenity of the neighbourhood as the new building will be located on a portion of the site that is further away from nearby residential development. On this basis, the proposal will not detrimentally affect the character and amenity of the neighbourhood

With the above in mind, the proposed relocation of the spray booths will support an existing longstanding, approved land use which provides a valuable service to the Mount Barker community.

Environmental Impact

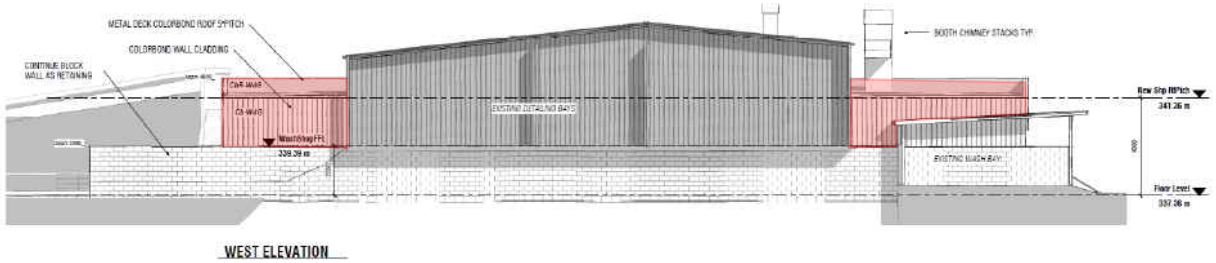
While the representor's concerns in relation to the environmental impact of the proposal are noted, we reiterate that the Applicant is actually seeking to replace the existing, out-dated spray booths with a modern, purpose-built facility in order to meet current environmental standards. In addition, the supplier of the new spray booths has confirmed that the facility will be designed, manufactured and installed in accordance with Australian Standard AS/NZS 4114 -2020. On this basis, the proposed development will actually improve the environmental performance of the facility while also locating the spray booths further away from nearby residential development.

Landscaping and Visual Appearance

We note that the representor has raised concerns in relation to the visual appearance of the proposed building and has suggested that landscaping will be insufficient. In response, we note that the new building will be tucked neatly between two existing buildings on an existing

hardstand area at the rear of the main dealership. Therefore, the building will not be visible from Adelaide Road to the east. In addition, only a small portion of the new building will be visible from the representor's property as it will generally be obscured by the existing detailing bays (see Figure 1).

Figure 1 | *Western elevation with the new building highlighted in red*



From the south, the new building will effectively be screened by the existing landscaping along Hawthorn Road (see Figure 2). While some views of the building will be available from Cherington Street to the north (see Figure 3), the building will be setback approximately 23.3 metres from this boundary which will reduce the visual impact of the single-storey facility.

Figure 2 | *View of proposed building from Hawthorn Road to the South (Source: Google Maps)*

Figure 3 | *View of proposed building from Cherington Street to the North (Source: Google Maps)*

Further to the above, the application was accompanied by professionally prepared plans and elevations which appropriately illustrate the proposed development as well as its relationship with the existing buildings on the site and the broader locality.

The plans and elevations demonstrate that the proposed new building will feature a similar design and similar materials as the existing buildings comprising the broader Adelaide Hills Toyota facility. The floor area of the building will be of a compatible scale to the existing buildings and will be located on a central portion of the site which is not clearly visible from the surrounding streets or from nearby residential properties. In addition, the substantial setbacks to Cherington Street (23.3m) and Hawthorn Road (16.96m), combined with the modest height of the building (4.8m) will mean that the proposed development will blend in with the existing buildings and structures on the subject land.

The proposed building will also replace the existing outdated office building as well as a number of temporary storage structures on this portion of the site with a modern, high-quality building (see Figures 4 and 5). For these reasons, we maintain our view that the proposed development will improve the amenity of the locality.

Figure 4 | *Existing office and temporary storage structure to be replaced*

Figure 5 | *View of the proposed building from the south-east (Source: Designing Places)*

Summary

Following a review of the representations, we maintain our opinion that the proposed development warrants Planning Consent. Importantly, the application seeks the construction of a new, purpose-built facility to facilitate the replacement and relocation of the existing spray booths. The new building will site the spray booths further away from nearby residential development while also ensuring that the new facility operates to the latest environmental standards as required by AS/NZS 4114 -2020.

We can also advise that Adelaide Hills Toyota is more than happy to work with the residents of Cherington Street and the Mount Barker District Council to look at opportunities to improve the public realm along Cherington Street while also introducing traffic calming measures.

We trust that sufficient information has been provided to enable the application to be presented to the next meeting of the Council Assessment Panel and confirm that we will attend the meeting to respond to any further concerns raised by the representors.

Yours sincerely

Kieron Barnes | RPIA | **Director**

Cc T Gilbert (via email)

5.2.2. 22035317 – MOUNT BARKER DISTRICT COUNCIL AND PLANNING STUDIO PTY LTD

Application ID	22035317
Applicant	Mount Barker District Council and Planning Studio Pty Ltd
Subject Land	304 Springs Road, Mount Barker
Nature of Development	Regional aquatic and leisure centre (indoor recreation facility) with associated car parking and landscaping
Lodgement Date	2 November 2022
Relevant Authority	Assessment Panel at Mount Barker District Council
Zone	Master Planned Neighbourhood
Sub Zone	N/A
Planning and Design Code Version Number	2022.20 – 27 October 2022
Categorisation	Code Assessed (Performance Assessed)
Notification	N/A
Representations	N/A
Persons to be heard	N/A
Referrals - Statutory	N/A
Referrals – Non-Statutory	• Council's Infrastructure Planning Manager • Council's Development Engineer • Council's Urban Forest Officer • Council's Heritage Advisor • Council's Senior Strategic Planner • Council's Landscape Development Officer • Council's Wastewater Engineer • Council's Environmental Health Team Leader
Responsible Officer	Michael Dickson – Senior Planner
Recommendation	GRANT Planning Consent

APPENDIX 1:	Relevant Planning and Design Code Policies
ATTACHMENT 1:	Application Documents
ATTACHMENT 2:	Site Photos

1. PROPOSAL

The proposal is best described as follows;

"Regional aquatic and leisure centre (indoor recreation facility) with associated car parking and landscaping".

The proposal comprises the following attributes;

- Construction of a two-storey building for use as a regional aquatic and leisure centre (indoor recreation facility). The ground floor provides a competition capable 25 metre/10 lane lap pool, a learn to swim/splash pad pool and a warm water therapy pool as well as all associated and ancillary components including 'grandstand' seating, change room and sanitary amenities, café and kitchen, three consult rooms, a multi-purpose space that could be used for a crèche, meeting rooms or community use, and staff administration areas. The upper level comprises a fitness centre with a weights and cardio room and flexible space for program and spin activities, as well as associated change room and sanitary amenities and a small reception area.
- Car parking comprising a total of 176 spaces, eight of these being accessible spaces, and incorporates a dedicated drop off/pick up zone adjacent the building's entry. The car park will be accessed via a new driveway and access from Bald Hills Road. An overflow car parking area with capacity for 60 vehicles and four buses is also provided to the south of the main car park.
- Bin storage and loading areas are located on the south-eastern side of the building and accessed via the main car park.
- Landscaping comprising a mixture of tree and shrub species around the building, within the car park and along the driveway. This also includes water sensitive urban design (**WSUD**) provisions and construction of a shared walking/cycling trail to link the development to the existing Laratinga trail.

The proposal is to be undertaken in six stages, as follows:

- Civil earthworks
- Sub structure
- Superstructure
- Main building & internal fitout
- Car park, access roadway & Bald Hills Road junction works
- Landscaping

The proposal does not seek to remove, or impact, any existing regulated trees or native vegetation on the site.

No advertising signage is proposed and will be subject to a separate development application if required.

Refer to **Attachment 1** for details of the application documents.

2. SUBJECT LAND

The subject land (**the Land**) is allotment 50 in Deposited Plan 123843 held in Certificate of Title Volume 6260 Folio 699, or otherwise known as 304 Springs Road, Mount Barker.

The land is an irregular-shaped allotment with an area of 36.6 hectares and has frontages to Bald Hills Road, Springs Road and Heysen Boulevard. It is under the ownership of the Mount Barker District Council and has been partially developed on the south-eastern side for the Summit Sport and Recreation Park (**SSRP**). Stage 1 of the SSRP is complete and comprises two synthetic soccer (football) pitches, one Australian Rules/cricket oval, practice cricket nets and associated clubrooms, amenities and car parking accessed via Springs Road. The Laratinga walking/cycling trail has been constructed from Heysen Boulevard and around the SSRP to the trail underpass at Bald Hills Road through to the Laratinga wetlands.

At the northern part of the land are three barns which form part of the Clearfield Farm listing as a Local Heritage Place. The barns are located on the land, whilst the former farmhouse is sited on adjoining land in private ownership to the north-east at 361 Springs Road.

There are scattered clusters of mature vegetation on the land which comprises a mix of regulated and significant trees, some of which native and others planted.

A watercourse traverses the land, generally in an east-west direction, towards the north of the land. The land slopes in a general south to north direction towards this watercourse, and has a distinct valley in the middle where there is a lower order watercourse which runs in a general north-south direction.

The proposed development occupies a portion of the land to the north-west (**the Site**). The site is defined as the curtilage of the building, car parking, driveway and trail.

The area of the site for the proposed building and car park has a general slope of approximately 4 metres from south to north.

Refer to **Attachment 2** for site photos.

Figure 1 Location of the site and subject land

3. THE LOCALITY

The locality is mixed in nature, with various land uses and allotment sizes. It comprises an undulating landscape with a major watercourse running through it towards the Laratinga Wetlands. Remnant mature vegetation lines the watercourse and is also scattered throughout the locality.

Immediately to the south-east and north-west of the land, fronting Bald Hills Road, are two rural residential allotments each comprising a dwelling and ancillary buildings.

To the west of the land, opposite Bald Hills Road, is an established residential area comprising traditional detached dwellings on low-density allotments. North of the land, also opposite Bald Hills Road, is the Laratinga Wetlands.

Bordering the land to the south is the Aston Hills Golf Course. Beyond this to the south and east are the Emerald Way and Aston Hills developments respectively which are newer subdivisions at various stages of development comprising undeveloped land, vacant residential allotments and established residential development.

To the north-east of the land, there are larger land holdings within a rural-type zone which comprise minor agriculture and grazing activities.

Refer to **Figure 2** below for a map of the land and locality.

Figure 2 Locality Plan

3.1. Zoning

The subject land is wholly located within the Master Planned Neighbourhood Zone (**the Zone**) and the Emerging Activity Centre Subzone (**the Subzone**), and is covered by the following overlays and technical and numerical variations (TNVs):

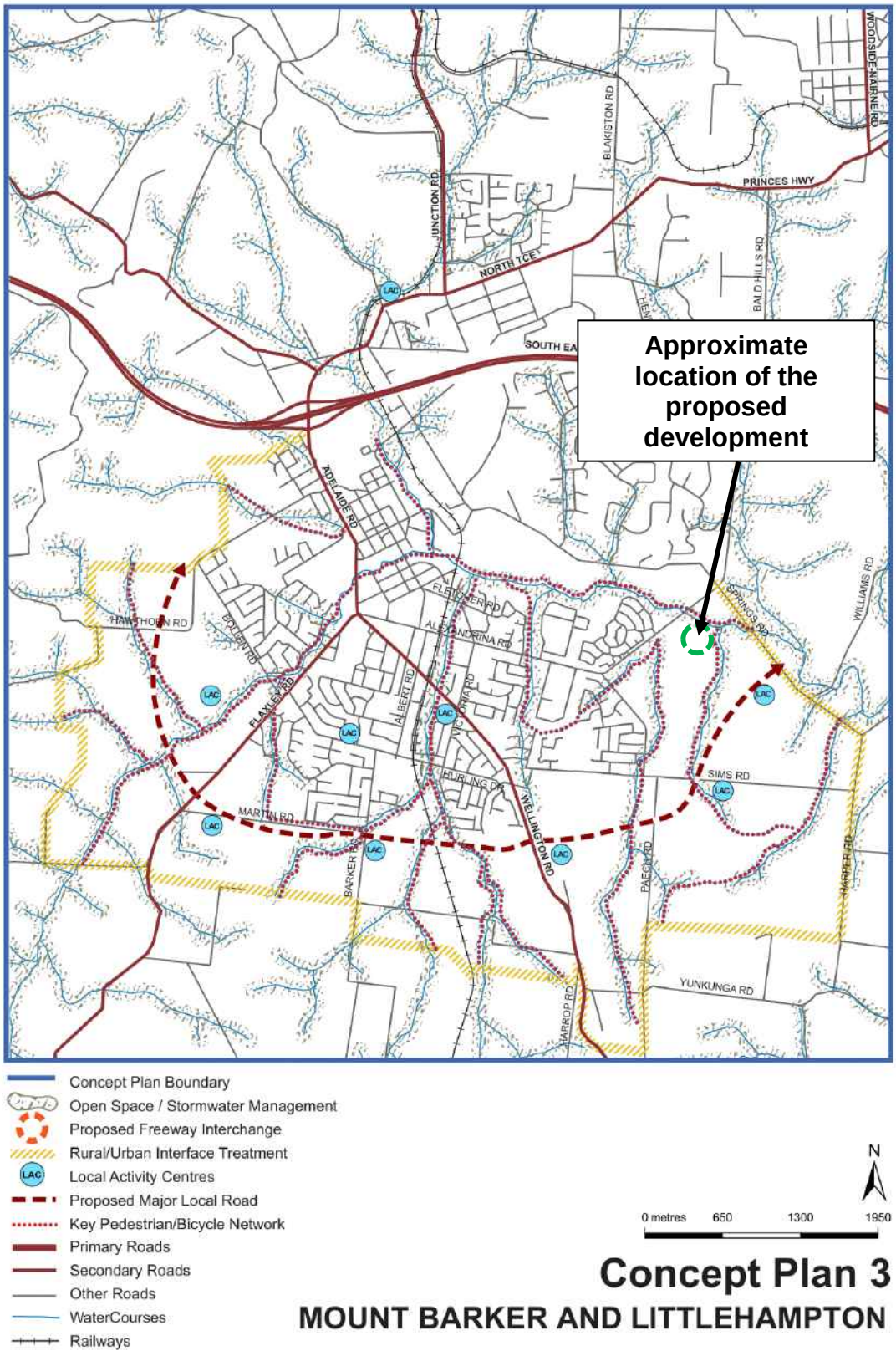
Overlays

- Affordable Housing
- Hazards (Flooding)
- Hazards (Flooding - General)
- Hazards (Bushfire - Medium Risk)
- Heritage Adjacency
- Local Heritage Place (16144)
- Murray-Darling Basin
- Native Vegetation
- Prescribed Water Resources Area
- Regulated and Significant Tree
- River Murray Tributaries Protection Area
- Water Resources

Technical and Numerical Variations (TNVs)

- Concept Plan (Concept Plan 3 - Mount Barker and Littlehampton)

Figure 3 Concept Plan 3: Mount Barker and Littlehampton



4. PROCEDURAL MATTERS

4.1. Relevant authority

Section 94(1)(g) and (h) of the *Planning, Development and Infrastructure Act 2016* (**the Act**) allows the State Planning Commission (**the Commission**) to act as the relevant authority where the development is of significance to the State because it is of major social, economic, or environmental importance or it is otherwise necessary or appropriate for the proper assessment of the proposed development.

Council staff wrote to the Minister for Planning (**the Minister**) to consider whether the Commission shall act as the relevant authority for the proposed development. The Minister declined to call-in the application for assessment by the Commission noting that there are reasonable alternatives available to Council for the statutory assessment and determination of the application, should Council consider there to be a conflict of interest (perceived or otherwise) for the Assessment Manager at the Council to determine the application. This includes determination of the application by the Council Assessment Panel (**the CAP**). It was further noted that having regard to the nature of the proposal, the CAP is independent of Council and is well placed to appropriately consider and determine the merits of the proposal, in accordance with the requirements of the Act and the *Planning, Development and Infrastructure (General) Regulations 2017* (**the Regulations**).

As per Section 100 of the Act, the power pursuant to 102(1)(a) has been delegated to the CAP for this application only.

4.2. Nature of Development

An indoor recreation facility is defined within Part 7 of the Planning and Design Code (**the Code**) as *'a building designed or adapted primarily for recreation or fitness pursuits'* and may include the following:

- *Bowling alley;*
- *Squash courts;*
- *Fitness centre;*
- *Gymnasium;*
- *Pilates studio;*
- *Yoga studio;*
- *Dance studio;*
- *Indoor swimming centre;*
- *Indoor trampoline centre;*
- *Indoor rock climbing centre;*
- *Indoor children's play centre;*
- *Indoor skating rink.*

The proposal is primarily an indoor swimming centre but also comprises elements such as a fitness centre, gymnasium, pilates studio and yoga studio, all of which are included in the definition of an indoor recreation facility.

The proposal also includes other land use elements, such as:

- Office
- Café (shop)
- Crèche
- Consult rooms

Part 7 of the Code contemplates uses that are ancillary and subordinate to the defined land use, and provides that defined land uses "*include a use which is ancillary and subordinate to that defined use".*

The office, café, crèche and consult room uses in the proposed development are very much ancillary and subordinate to the indoor recreation facility and are not constituted as a separate element or land use in their own right, for the following reasons:

- The office provides administrational support to the ongoing daily function of the indoor recreation facility. It is not a separate office in its own right and is not operated by a third-party;
- The café is designed to cater for the users of the indoor recreation facility and is not a destination point in its own right. It will be run by the operators of the indoor recreation facility and will provide refreshments to the indoor recreation facility patrons;
- The crèche will provide short-term child-minding services to patrons of the indoor recreation facility. It will not operate as a standalone 'pre-school' and will only be used by the patrons of the indoor recreation facility on occasion and for short periods of time;
- There are three (3) consult rooms, each with an area of 10m^2, and will be used by allied health professionals in association with the indoor recreation facility. These consult rooms are integrated with the development, do not have a separate reception or waiting area and will not operate separate to the indoor recreation facility.

These uses are all integrated into the design of the proposed development, are directly connected to the use and occupy small floor areas, and therefore are considered to be ancillary and subordinate also from a size and scale perspective.

For the reasons outlined above, it is considered that the indoor recreation facility is the dominant land use and that the office, café, crèche and consult room elements are subordinate. The nature of the proposed development is therefore determined to be an indoor recreation facility.

This position is supported by case law in *Foodbarn Pty Ltd v Solicitor-General (1975) 32 LGRA 157* (**Foodbarn**), where it was held that where all or part of a premises is used for a subordinate purpose, the land will be treated as being used only for the dominant purpose. However, where there are two separate uses, and neither is subordinate to the other, the premises will be treated as being used for both purposes, even if, for example, one use is overshadowed by the other in some way.

The Foodbarn principles for determining what constitutes an ancillary use have been held to apply in the context of the *Planning, Development and Infrastructure Act 2016* in the judgement of *Henderson v Brown Hill & Keswick Creek Stormwater Board [2021] SAERDC 31*.

4.3. Categorisation

The proposed development is not categorised as an *accepted development*, *impact assessed development* or *code assessed development* (deemed-to-satisfy), and is therefore required to be assessed as a *code assessed development* (performance assessed) pursuant to Sections 105 and 107 of the *Planning, Development and Infrastructure Act 2016* (**the Act**).

4.4. Notification

All Performance Assessed development requires notification unless, pursuant to Section 107(6) of the Act, whereby classes of development can be excluded from notification by virtue of Table 5 – Procedural Matters (PM) of the relevant Zone within the Planning and Design Code (**the Code**).

Table 5 – Procedural Matters (PM) of the Master Planned Neighbourhood Zone lists the following classes of development as being exempt from notification:

*Any development involving any of the following (or of any combination of any of the following) where **not** located in an activity centre within the Emerging Activity Centre Subzone:*

…

(l) indoor recreation facility

…

Except development that:

1. *does not satisfy Master Planned Neighbourhood Zone DTS/DPF 5.1*
   or
2. *involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and:*
   (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where in accordance with a building envelope plan or 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 3m measured from the top of footings (other than where in accordance with a building envelope plan or where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).

The Code defines an Activity Centre as land:

"in relation to the Emerging Activity Centre Subzone in the Master Planned Neighbourhood Zone… either:

(a) land identified for the purposes of an activity centre on a building envelope plan

(b) an activity centre nominated on a Concept Plan in Part 12 of the Code".

There is no applicable building envelope plan approved with land identified for the purposes of an Activity Centre, therefore the designation of an Activity Centre defaults to (b).

Concept Plan 3: Mount Barker and Littlehampton in Part 12 of the Code (**the Concept Plan**) is shown in **Figure 3**. It is clear that the proposed development is not located within an Activity Centre nominated on the Concept Plan.

In regards to Clause 1, Master Planned Neighbourhood Zone DTS/DPF 5.1 states the following:

Residential buildings (excluding garages, carports and outbuildings) do not exceed the maximum building height nominated on a Building Envelope Plan, or where none exists:

(a) a maximum height of 3 building levels or 12m
and

(b) a maximum wall height of 10m (except where a gable end).

The proposed indoor recreation facility is not a residential building and therefore DTS/DPF 5.1 is not applicable.

In regards to Clause 2, the proposed indoor recreation facility does not involve a building wall (or structure) situated on (or abutting) an allotment boundary, therefore Clause 2 is not applicable.

It is therefore determined that the proposed indoor recreation facility is exempt from requiring notification.

5. REFERRALS – STATUTORY

No statutory referrals apply to the proposed development.

6. REFERRALS – NON-STATUTORY

6.1. Council's Infrastructure Planning Manager

Stormwater and Flooding

The Southfront report is a contemporary assessment of the flood inundation patterns and it is demonstrated that the siting of the building is on high enough ground and away from the inundation lines of the 1% AEP event.

The Water Sensitive MUSIC Model has results falling short of phosphorus and nitrogen quality targets and shall be explored as an improvement in detailed design. It is noted that initial discussions on the project included a strong emphasis on WSUD principles with no heavy reliance on detention storage. Further details regarding WSUD and stormwater will be reviewed by Council's Development Engineers.

Access

The intersection treatment indicated for Bald Hills Road is in line with expectations of traffic demand for the aquatic facility alone. As the overall precinct grows in usage and activity, the nature of the intersection will need to upgrade. It is therefore important that in considering the uncontrolled junction, that the footprint of the future upgrades of the junction are catered for. That is, the aquatic facility access road should be aligned such that the ultimate intersection treatment for full site development (e.g. traffic signals) can be accommodated within the current land area and Bald Hills Road road reserve. MFY reporting shows that the indicative footprint of the signal treatment can be accommodated.

6.2. Council's Development Engineer

Council's Development Engineers have reviewed the proposal with respect to stormwater management, car parking and access. The majority of the matters raised are of a technical nature and the applicant has committed to addressing these during detailed design.

Stormwater Management

Additional technical detail was requested from the applicant, including invert levels of pipes, pipe class, adding scour protection at all headwalls, clarification of WSUD targets being achieved, and providing some cross-section detail.

It is however noted that the overall stormwater collection, management, treatment and discharge is supported by Council's Development Engineers, subject to the review of some minor technical detail. The applicant has committed to addressing these matters during detailed design, which can be further reviewed by Council's Development Engineers at that stage. A condition to this effect is recommended should the application be granted consent.

Access and Car Parking

The overall car parking layout and design generally accords (or is capable of) with the relevant Australian Standards, which has also been confirmed by the applicant's traffic engineers, MFY.

All turn path manoeuvres for the largest vehicle accessing the site have been demonstrated to be accommodated within the design. This includes appropriate turn paths for the loading dock/waste storage area as well as buses circling around the car park.

It was noted that the swept paths for 8.8 MRV show both vehicle clashing, however it would be a rare occasion that simultaneous movements of these vehicles would occur, and is therefore considered acceptable.

Some suggestions were made in regards to pedestrian movement within the car park, which the applicant has satisfactorily responded to and clarified.

Minor technical details such as the provision of kerb ramps, wheel stops, paving design and kerbing type were highlighted as not being detailed on the plans, but the applicant has committed to resolving this in detailed design. Again, these matters can be further reviewed by Council's Development Engineers during detailed design. A condition to this effect is recommended should the application be granted consent.

Summary

Overall, Council's Development Engineers are satisfied that the proposed development can function appropriately with respect to stormwater management, access and car parking. Whilst some technical detail is required, this will not significantly alter the proposal in any way and can be readily accommodated through a review as the project advances to detailed design. Conditions to this effect are recommended should the application be granted planning consent.

6.3. Council's Urban Forest Officer

The information and most of the recommendations presented in the Adelaide ARB report are generally concurred with and it is noted that the information within this report is consistent with Australian Standard AS 4970 *'Protection of trees on development sites'.*

For the purpose of this development application, only a small number of trees from the 21 surveyed associated with the proposal are impacted upon. Additionally, the trees most impacted on (1, 3 and 14) are not impacted upon above the 10% minor encroachment limit set by AS4970, however given the age of the trees and the public nature of the site, some minor design changes were recommended adjacent these trees.

In regards to Tree 1, with 14.7 % encroachment including SRZ encroachment, it was recommended that the pedestrian path be relocated outside the TPZ (preferred and recommended) or the path is built to a tree-sensitive standard. It is noted that the proposal has now been amended to delete the path altogether, and therefore the extent of earthworks and construction within the TPZ has reduced to 12.6% and is now supported.

Similarly for Tree 3, with 11.6% encroachment (road and path), it appears the path can and should be wholly located outside the TPZ so that it can be of standard civil composition. The road should still remain tree sensitive as per the Adelaide Arb report. It is again noted that the proposal has been amended to delete the path altogether, and therefore the extent of earthworks and construction within the TPZ is supported.

As recommended in the Adelaide ARB report, Trees 1 and 3 should have a tree-sensitive road construction within the TPZ's and it is likely to be beneficial to the project constructability and any new trees planted adjacent to the entry road to have the tree sensitive section extended between the two TPZ's also.

The Adelaide ARB report suggests one way of constructing this in a tree-sensitive manner, however an alternative specification that has been adopted by the Council previously is preferred. This has been conveyed to the applicant and is appropriate to be reviewed by the Council's Urban Forest Officer at detailed design, via a condition, should the application be granted a planning consent.

In addition to this, there is a row of trees (Trees 14, 15, 18-21) which in the original proposal were impacted by a proposed swale showing in the civil design. The civil design has subsequently been amended and further assessment of these trees has been provided by Adelaide ARB Consultants. The amended design results in the greatest impact to Tree 14 with 10.7% of encroachment into the TPZ. The encroachment of works into the TPZ of Tree 14 is however only marginally above 10% and within the tolerable limits of the tree i.e. the tree will not be unduly impacted by the proposed works.

With encroachments below 10% for all the remaining trees, no tree-sensitive treatment within their respective TPZs is required. The Adelaide ARB report (dated 12th October 2022) should be a key document for further detailed civil design and management of TPZs during the construction phase of the project.

All recommendations within report shall be implemented during the construction of the development (including associated earth works) except where otherwise approved in consultation with Council's Urban Forest Officer. It is recommended that the final detailed civil design of driveway through TPZs must be approved by Councils Urban Forest Officer prior to construction.

In conclusion, Council's Urban Forest Officer does not object to the proposal and notes that the trees can be readily accommodated with minimal impacts through detailed design.

6.4. Council's Heritage Advisor

The application was referred to Council's Heritage Advisor as the land is within a Local Heritage Place Overlay, who has undertaken an assessment of the proposed development with respect to the Local Heritage Place, and advises the following:

Heritage Listing:
Local Heritage Place (16144) - Clearfield Farm (house, former farmhouse and three barns) - the barns are located nearby the development site, with the house and other structures at some distance away)
Extent of listing: all facades, roof and walls supporting the roof
Heritage Adjacency: multiple places

Heritage Value Assessment:
This (c1840-1850) complex of farm buildings began with Friend Cleggett, an early pioneer of the district and contemporary of John Dunn, the Frame family and other early prominent land holders. Most important is the hay barn with its vaulted base of gauged bricks to keep flooring clear of floods. House of freestone with paned windows; original slate roof has been rebuilt.
(Mount Barker Heritage Study Stage 1, 1983).

Assessment:
The proposed facility is a large scale building, necessary to provide the required facilities and amenities. However it has been sited to allow views to the Local Heritage listed barns from pedestrian routes through the site, and from various points on the site, recognising the topography of the site relative to the creek and entry from the public road.

It is purposely scaled down at the point closest to the barns, which are some 22 metres from the new building. The facades are well articulated and utilise material selections to assist in breaking down the apparent bulk of the building.

Materials are largely based on a natural palette, incorporating feature stonework referencing the construction material of the barns, along with coloured brickwork, timber canopy, and metal cladding and shading/screening panels, which are proposed in a non-reflective finish and in warm/brown tones, which respond well to the materiality of the barns.

Overall the design of the new building responds well to the context and has considered view lines to the barns, as well as using a material palette that is complementary to the adjacent Local Heritage listed structures.

The proposed development does not visually dominate the setting of the barns, and there is no physical impact on the fabric of the barns as a result of the development.

The Clearfield Farmhouse is located at some further distance from the proposed development, as are a number of other Local Heritage Places, including 'Greengables' house, dairy, bakehouse, barn and shed (Lot 3, Springs Road, Mount Barker) and 'Lester Farm' (Springs Road, Mount Barker). These are distant enough that the development is not considered to have any impact on the setting of these places.

6.5. Council's Senior Strategic Planner

The Community Planning and Wellbeing department has reviewed the development for the Regional Indoor Aquatic & Leisure Facility. The subject land is located near the eastern edge of the Mount Barker township, within the masterplanned sports precinct. The land sits within the Master Planned Neighbourhood Zone and the Emerging Activity Centre Subzone, although it is noted the subject land has not been identified as an activity centre on a building envelope plan or on a Concept Plan.

Trails and pedestrian access

Connection to the current Laratinga Trail is supported. This is considered as a secondary trail (as per the guidelines in the Mount Barker, Littlehampton and Nairne Trails Plan) and should therefore be constructed in line with the guideline of:

- 3.0m width (2.4m minimum where site constraints exist); and
- Hotmix (AC7) surface and line marking to AS; and
- Edge constraints consistent with the linear trail it's connecting to.

It is noted that the proposed trail is to be sealed and maintains a 2.4m width adjacent the building and widens to 3.0m elsewhere, which is in line with the trail design requirements. The applicant has also noted that wayfinding signage will be designed and implemented following further consultation with the Community Planning and Wellbeing team.

Cultural heritage

It is understood that prior to the development of the Summit Sports and Recreation Park an Aboriginal heritage report was undertaken. Since that time the Peramangk people have begun the process to form a singular voice for their people. As the proposed site of the aquatic centre is located near waterways (which are typically areas in which artefacts and sites are located) it is prudent to undertake additional consultation specifically with the Peramangk people. Whilst this sits outside of the development assessment considerations of the Planning and Design Code, it is noted that the applicant has responsibilities under the *Aboriginal Heritage Act 1988* and it is therefore recommended that the applicant be reminded of this via an advisory note should the application be granted a planning consent.

Council's Community Planning and Wellbeing department do not have any objections to the proposal.

6.6. Council's Landscape Development Officer

Council's Landscape Development Officer has reviewed the proposal, including the landscaping concept by Clover Green Space. The overall methodology guiding the design from a landscaping perspective is supported, and incorporates an appropriate mix of native grasses, sedges, shrubs, trees and groundcovers that are endemic to the region, suitable for the environment and contribute to the biodiversity of the corridor. The pedestrian connection to the Laratinga trail is also supported and is a positive inclusion into the proposal.

Council's Landscape Development Officer does not object to the proposal from a landscaping perspective.

6.7. Council's Wastewater Engineer

The development can be connected to the Mount Barker sewer and recycled water services, which are correctly identified in the planning report and site services report. Wastewater and recycled water connections fees are yet to be determined.

Additional information is required by the Council's Wastewater department as follows, however does not need to be resolved prior to the issue of a decision:

- A high level wastewater/recycled water masterplan for the entire site. This will reduce the duplication of wastewater and recycled water assets in the future.
- Wastewater loading details for the proposed development (peak and average). This will assist in determining the relevant fees and charges.
- Recycled water demand for the proposed development (peak and annual). This will assist in determining an appropriate connection size.

6.8. Council's Environmental Health Team Leader

Further information in regards to calculations for the number of people using the facility are required to determine who the relevant authority is/will be to assess the wastewater works application. Any number above 40 people a day will be assessed by the wastewater team in SA Health, instead of Council's Environmental Health Officers. A Trade Waste application is also required for the café and the swimming pools, as well as notification of a food business for the café.

These matters do not need to be resolved prior to a decision being issued, however the applicant shall be advised that a wastewater application and approval (either from Council or SA Health – whichever is relevant) is required prior to commencing any building works. An advisory note to this effect is recommended should the application be granted a planning consent.

7. KEY ISSUES

The key issues of the proposal are summarised below and are discussed in detail within section 8 of this report:

- Land use and its suitability within the Zone
- Transport, access and parking
- Trees, native vegetation and landscaping
- Interface between land uses
- Flooding
- Heritage
- Design, appearance and siting
- Stormwater, waste and wastewater

8. ASSESSMENT

All provisions of the Planning and Design Code applicable to the proposal are specified in **Appendix 1**. The most relevant provisions are discussed in detail below.

Refer to **Appendix 1** for a copy of the Planning and Design Code policy extract.

8.1. Land use and its suitability within the Zone

The Desired Outcome and relevant Performance Outcomes for the Zone are identified as follows:

DO 1 ***A new or expanding community with a diverse range of housing that supports a range of needs and lifestyles located within easy reach of a diversity of services, facilities and open space.***

PO 1.1 ***Diverse housing choices and a wide range of complementary recreational, community services and other activities to support a growing community and create a pleasant place to live.***	***DTS/DPF 1.1*** ***Development comprises one or more of the following:*** ***…*** ***(c) Consulting room*** ***…*** ***(g) Indoor recreation facility*** ***(h) Office*** ***…*** ***(m) Shop***

PO 3.1 ***Community facilities such as schools, community centres, recreation centres and public open space are co-located within activity centres or co-located with complementary uses to reinforce their role as a focal point for community.***

PO 3.2 ***Community facilities are located and designed to maximise accessibility by public transport, walking and cycling.***

PO 1.1 of the Zone seeks to provide a wide range of complementary recreational and community services to support the growing community and create a pleasant place to live. An indoor recreation facility is listed within DPF 1.1 as being a typical land use which would support this PO. Further to this, the ancillary uses within the facility such as the consult rooms and shop are also listed as envisaged land uses.

The proposed regional aquatic and leisure centre (**the Aquatic Centre**) is appropriately co-located on the same allotment as the Summit Sport and Recreation Park, and will contribute to this precinct as being a key focal point for the community as envisaged in Zone PO 3.1. This also satisfies DO 1 of the Zone by making this facility convenient, accessible and within easy reach for the expanding community.

Access to the Aquatic Centre is maximised for walking and cycling with the proposed extension of the Laratinga walking/cycling trail, as envisaged in Zone PO 3.2.

Overall, the proposed Aquatic Centre is an envisaged use within the Zone and is appropriately co-located with the SSRP to provide an accessible and convenient recreational precinct for the expanding community.

8.2. Transport, access and parking

The following provisions of the Transport, Access and Parking section of the Code seek to ensure that the site can safely accommodate the anticipated type and volume of traffic expected.

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.

PO 3.1 Safe and convenient access minimises impact or interruption on the operation of public roads.

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.

PO 3.9 Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads

PO 4.1 Development is sited and designed to provide safe, dignified and convenient access for people with a disability.

Access

All vehicular access to the site is proposed via a new driveway and access from Bald Hills Road. Some minor modifications are proposed for this new access, including linemarking to provide a channelized right-turn lane. The access has been designed to accommodate a 12.5m heavy rigid vehicle (HRV) which will account for standard passenger vehicles, all service and delivery vehicles as well as buses. Simultaneous movements of a HRV and a B99 car at the Bald Hills Road access have been demonstrated with turn paths provided by the applicant's traffic engineer, MFY. Simultaneous movements of two B99 cars at both car park accesses from the driveway have also been demonstrated.

Whilst the external footpath network is limited, an extension of the shared walking/cycling path to the Laratinga trail is proposed to provide suitable access for pedestrians and cyclists. If a footpath along Bald Hills Road is constructed by Council in the future, then there will be opportunity to further extend this shared path along the driveway to Bald Hills Road.

Traffic movement

All deliveries and refuse collection will occur within the service bay on the south-eastern side of the building, which is accessed via a separate delivery vehicle access around the car park to minimise vehicle conflict. MFY have provided turn paths to demonstrate that the service vehicles, up to 8.8m in length, can access the service bay and manoeuvre to enter and exit the land in a forward direction.

The proposal also caters for buses which will transport visitors (e.g. school groups) to and from the site. The car park has been designed to cater for these larger vehicles (12.5m HRV) with a pick-up/set-down facility adjacent the entrance to the building and wider aisles. Whilst this will result in larger vehicles mixing with domestic vehicles, it provides the most safe and convenient means of access for the passengers, who are dropped off and picked up at the doorstep of the facility. Nonetheless,

the car park is a low speed environment and is unlikely to result in an unreasonable degree of conflict between the two vehicle types.

On-site car parking

The Code seeks to ensure that development provides for sufficient on site car parking, as follows:

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:*** ***(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.***	***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:*** ***(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.***

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.***
Indoor recreation facility	***6.5 spaces per 100m² of total floor area for a Fitness Centre*** ***4.5 spaces per 100m² of total floor area for all other Indoor recreation facilities.***

The proposal provides 175 on-site car parking spaces within the sealed car parking area, and an additional overflow parking area which can accommodate 60 vehicles and four buses.

The ground floor, which predominantly comprises the aquatic activities, has an area of 4,260m² and the upper floor which is predominantly a fitness centre has an area of 1,100m². Based on these floor areas, *Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements* of the Code envisages 192 parking spaces for the aquatic activities and 72 parking spaces for the fitness centre component, resulting in a total car parking demand of 264 car parking spaces. This number is however somewhat skewed given that this is a multi-use building and includes common areas and facilities for both uses.

Notwithstanding, MFY have commented that the parking rate within the Code for "all other Indoor recreation facilities" is a higher parking provision than what would typically be attributed to aquatic activities as the density of people using such facilities will be significantly lower than other indoor

recreation facilities. Instead, MFY have derived a parking demand calculation based on the capacity of each of the swimming pools and the number of staff working at any one time, being 115 people. A vehicle occupancy rate of 1.2 persons per vehicle has been applied, resulting in a peak demand of 96 parking spaces for the aquatic activities.

MFY commented that based on their own surveys of 24-hour fitness gyms, the parking rate within the Code for the fitness centre component is generally reflective of actual visitation.

On this basis, MFY have calculated that the peak parking demand for the proposed development is 166 parking spaces which will be readily accommodated within the proposed car park area which has 175 spaces.

In addition to the above, MFY note that the proposed development will generate a higher parking demand during periods of high visitation, and based on similar facilities there could be a potential demand of approximately 220 spaces at these times. This however will be infrequent, and the additional parking will be catered for in the overflow parking area.

It is considered reasonable to apply a reduced on-site car parking demand having regard to the way in which the development will operate, in order to ensure that adequate parking is provided without providing excessive amounts of parking which would be underutilised. This approach is widely adopted in development assessment.

It is therefore considered that the proposed car park with 175 spaces, plus the overflow parking area with capacity for 60 additional cars and four buses, is adequate and satisfies the intent of PO 5.1.

The proposal provides 18 bicycle parking spaces, as recommended by MFY, and can accommodate additional spaces in the future if there is demand.

Given the above, and support from Council's Development Engineer, the proposal is considered to adequately achieve the relevant Transport, Access and parking provisions within the General section of the Code.

8.3. Trees, native vegetation and landscaping

The following provisions of the Regulated and Significant Tree Overlay (R&ST) and the Native Vegetation Overlay (NV) are considered to be relevant:

R&ST DO 1 ***Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.***

R&ST PO 1.1 ***Regulated trees are retained where they:***

(a) make an important visual contribution to local character and amenity

(b) are indigenous to the local area and listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species
and / or

(c) provide an important habitat for native fauna.

R&ST PO 1.2 Significant trees are retained where they:

- ***(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 National Parks and Wildlife Act 1972 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.***

R&ST PO 2.1 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.

NV DO 1 Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

NV PO 1.1 Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.

There are 21 significant and regulated trees within the scope of the proposal site, all of which are River Red Gums. The trees display variable health and structure, and are all suitable for retention in the context of the development and R&ST Overlay POs 1.1 and 1.2.

The proposal does not seek to remove, nor impact, any of the regulated and significant trees on the site.

The applicant's arborist report identifies two trees (trees 1 and 3) at the entrance of the site, where the proposed driveway encroached into the tree protection zones by up to 14.7%. A number of recommendations have been made to reduce the impact to these trees, which includes tree-sensitive driveway construction, and have been adopted by the applicant to reduce the level of encroachment to a more acceptable level.

A further stand of trees, identified as Trees 14, 15 and 18-21, are adjacent the car park. There is a swale along the edge of this car park which is included as part of the stormwater management for the proposed development, and is crucial to achieving necessary WSUD principles. The original design indicated a large level of encroachment within the TPZ of the trees, which would not considered appropriate. This has since been amended to significantly reduce the encroachment of the TPZs and the applicant has provided a response from Adelaide ARB Consultants which assesses this as minor encroachment which will have a negligible impact on the trees.

Council's Urban Forest Officer generally concurs with the assessment and recommendations of the applicant's arborist report and does not object to proposal. A number of conditions are recommended in order to protect the trees during construction should the application be granted a planning consent.

Landscaping

Design PO 3.1 Soft landscaping and tree planting is 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 contribute to biodiversity

A detailed landscaping concept plan has been prepared for the development. This includes a mix of native grasses, sedges, shrubs, trees and groundcovers that are endemic to the region, suitable for the environment and contribute to the biodiversity of the corridor. It has also had regard to the cultural heritage of the site and providing appropriate linkages. Council's Landscape Development Officer has reviewed the concept plan and does not object to the proposal from a landscaping perspective.

8.4. Interface between land uses

The Interface between Land Uses section of the Code seeks to ensure that development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

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

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.

The key interface impact, or potential for impact, associated with the proposed development are considered to be noise and light spill. There are not considered to be any bulk, scale or overshadowing impacts of the proposed development given the large setbacks from the boundaries of the land and the separation distance to the nearest residences.

Noise

PO 4.1 Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).

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:
(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.

The applicant has provided an Environmental Noise Assessment (**ENA**) from Sonus that assesses the impact of the proposed development on nearby sensitive receivers (residences).

The ENA has considered all noise sources from the proposed development, including:

- typical air conditioning and pool water heating plant as required for similar sized facilities; and
- 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 parked position; and
- vehicle movements on site.

It has also included consideration of mechanical plant units based on a typical selection.

The ENA concludes that the noise levels from the proposed development are predicted to achieve the requirements of the *Environment Protection (Noise) Policy 2007* at the nearest sensitive receivers, and that no acoustic treatments are required to achieve the noise criteria.

It is therefore considered that the proposed development satisfies the applicable provisions of the Code relating to noise and will not unreasonably impact the amenity of nearby sensitive receivers.

Light spill

PO 6.1 External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).

The extent of lighting for such developments is usually determined detailed design once a planning consent has been issued. It is considered that the proposed development is capable of siting and directing lighting away from adjacent sensitive receivers to not cause an unreasonable light spill impact. This can reasonably be conditioned should the application be granted planning consent in order to satisfy PO 6.1.

Overall, it is considered that the relevant nuisance impacts can be appropriately mitigated in the to not cause unreasonable impact to nearby residences, and that the proposed development generally satisfies the relevant Interface between Land Uses provisions.

8.5. Flooding

The Hazards (Flooding) Overlay section of the Code seeks to minimise impacts on people, property, infrastructure and the environment from high flood risk.

DO 1 Impacts on people, property, infrastructure and the environment from high flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.

PO 2.1 Development sited and designed to minimise exposure of people and property to unacceptable flood risk.

PO 3.2 Development does not cause unacceptable impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.

PO 3.5 Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1% AEP flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.

DPF 3.5 Buildings comprise one of the following:

…

(e) building with a finished floor level that is at least 300mm above the height of a 1% AEP flood event.

The Mount Barker Creek runs through the land and portions of the land are subject to flood inundation.

Flood mapping of the site was undertaken for the 100 year, 50 year, 20 year and 10 year ARI rainfall events, and the data includes flood height contours for the extent of flooding. The site of the proposed building is not subject to inundation. Further, the proposed building has a finished floor level of 308.10mAHD, which provides >300mm freeboard from the adjacent flood levels of ~307.5-307.76mAHD in the 1% AEP flood estimations. Council's Infrastructure Planning Manager has confirmed that the proposed floor level of the building is sufficient and that it is sited appropriately away from the inundation lines of the 1% AEP flood event.

The proposed development is appropriately sited to minimise the impacts associated with flood risk and generally accords with the provisions of the Hazards (Flooding) Overlay.

8.6. Heritage

The Local Heritage Place Overlay section of the Code seeks to ensure that development does not materially affect the context of a Local Heritage Place.

DO 1 Development maintains the heritage and cultural values of Local Heritage Places through conservation, ongoing use and adaptive reuse.

PO 1.1 The form of new buildings and structures maintains the heritage values of the Local Heritage Place.

PO 1.2 Massing, scale and siting of development maintains the heritage values of the Local Heritage Place.

PO 1.5 Materials and colours are either consistent with or complement the heritage values of the Local Heritage Place.

PO 1.6 New buildings and structures are not placed or erected between the primary or secondary street boundaries and the façade of a Local Heritage Place.

The Local Heritage Place Overlay applies to the land in respect to the listing of Clearfield Farm (house, former farmhouse and three barns). The barns are located nearby the proposed development with the house and other structures some distance away on the adjoining land to the north-east (361 Bald Hills Road).

Council's Heritage Advisor has assessed the proposal and notes that although the proposed development is a large-scale building, it has been sited to allow views to the Local Heritage listed barns from pedestrian routes through the site and from various points on the site, as well as being purposely scaled down at the point closest to the barns. The massing, scale and siting of the building is considered to maintain the heritage values of the Local Heritage Place and therefore accords with PO 1.2.

The facades are well articulated and utilise material selections to assist in breaking down the apparent bulk of the building, as envisaged by PO 1.1.

The building incorporates a mix of materials including feature stonework referencing the construction material of the barns, along with coloured brickwork, timber canopy, and metal cladding and shading/screening panels. The building has a natural palette which is considered to complement the materiality of the barns, as envisaged in PO 1.5.

Council's Heritage Advisor does not object to the proposal.

Overall it is considered that the development maintains the heritage and cultural values of the Local Heritage Place, does not materially affect the context of the Local heritage Place, and generally accords with the relevant Local Heritage Place Overlay policies.

8.7. Design, appearance and siting

The Design section of the Code seeks to ensure that development is appropriately designed and sited within the context of a site.

Design DO 1 ***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.

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

Design 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.***

Design PO 1.5 ***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.***

Zone PO 16.1 ***Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.***

The development is contextual to the constraints of the site by locating the building 162m from the front boundary, which avoids the removal of regulated and significant trees and where earthworks are minimised. The siting of the building also maintains a generous separation distance from the nearby residential land uses to mitigate visual impact.

The building is contemporary in design, with articulated facades to provide an appropriate presentation (Design PO 1.3). The building incorporates a mix of materials, finishes and colours to reduce its overall bulk and scale and positively contribute to the character of the locality, including: light and dark coloured brickwork; local stonework feature walling; light metal cladding; timber accents; metal screen/shading panels; and glazing.

The proposal includes approximately 1.8m of cut and 1.2m of fill, which is not considered unreasonable given the footprint of the development. The nature of development and the requirement to achieve appropriate car parking grades require a levelled site and the extent of earthworks proposed is not uncommon in the locality (in reference to the SSRP). The proposed site is generally a flatter area on the entire land and is considered to have been carefully selected in the context of heritage, proximity to nearest residences and existing natural features such as the watercourses and trees. The siting of the building and car parking area allows the earthworks to be appropriately graded back to match into the natural landform (without the need for retaining walls) and will be landscaped. The extent of earthworks proposed are therefore considered to be appropriate in the context of the development.

The waste storage and loading dock area is located on the south-eastern side of the building, sited well away from the boundaries of the land. The bins will be enclosed in fencing which will sufficiently screen them from public view, which satisfies Design PO 1.5.

The development will not impact the regulated and significant trees on the land, which will maintain the natural character and amenity, and the proposed landscaping will further enhance these aspects.

8.8. Stormwater, waste and wastewater

<u>Stormwater</u>

A stormwater management plan has been provided by the applicant and reviewed by Council's Development Engineer. Stormwater from the proposed development is capable of being appropriately collected, managed and discharged to the watercourse, without the need for any on-site detention.

Stormwater quality is capable of being appropriately addressed with the implementation of WSUD principles via the proposed swales within and adjacent the car parking area which will reduce pollutants to acceptable levels prior to entering the watercourse.

Waste

Waste bins will be stored and collected within the loading dock on the south-eastern side of the building. The MFY report demonstrates that the applicable swept paths of the vehicle can be accommodated within the design.

Wastewater

Wastewater from the proposed development is capable of being discharged to the sewer network, as confirmed by Council's Wastewater Engineer.

9. CONCLUSION

The proposed regional aquatic and leisure centre accords with the overall intent of the Zone which seeks to provide a wide range of complementary recreational and community services and it is appropriately co-located on the same allotment as the Summit Sport and Recreation Park. Overall, this co-location will provide an accessible and convenient recreational precinct for the growing community.

All access to/from the site and manoeuvrability within the site has been appropriately considered by the applicant's traffic engineer and reviewed by Council's Development Engineers, confirming that the access and car park has been designed with regard to the relevant Australian Standards. The proposal also incorporates appropriate pedestrian access with the extension of the Laratinga walking and cycling trail. Sufficient on-site vehicle parking has also been accommodated, which includes contingency within the overflow parking area for rare occasions.

The building is a contemporary design incorporating a mix of materials, colours and finishes which takes cues from the heritage barns and provides articulation to reduce its overall bulk and scale. The proposal has been appropriately designed and sited with regard to heritage and flooding as well as proximity to nearby residences in order to minimise the level of impact with respect to noise and light spill. The design and siting has also accommodated all of the significant and regulated trees on the land, by appropriately minimising the extent of any encroachment into the TPZs, and allowing the building to sympathetically sit within the existing natural vegetated surrounds.

Overall, the proposed development is considered to be compatible with the intent of the Zone and all relevant planning matters have been appropriately addressed. The proposal is not considered to be seriously at variance with the provisions of the Planning and Design Code and is considered to have sufficient merit to warrant planning consent.

10. RECOMMENDATION

It is recommended that the Council Assessment Panel resolves to:

DETERMINE that the proposed development is not seriously at variance with the provisions of the Planning and Design Code.

GRANT Planning Consent to the application by Mount Barker District Council and Planning Studio Pty Ltd for the Regional aquatic and leisure centre (indoor recreation facility) with associated car parking and landscaping at 304 Springs Road, Mount Barker, as detailed in Development Application ID 22035317, subject to the following conditions and advisory notes:

Council conditions:

1. The development herein approved to be carried out in accordance with the stamped plans and details accompanying this application, except where amended by the following conditions, including:
   - Planning Assessment Report by Planning Studio (Date: 17/10/2022) and subsequent correspondence, including: Response to Request for Information (Date: 28/11/2022 and 03/12/2022); and
   - Architectural plans by DesignInc, including: Cover Sheet & Location (Drawing: PL-000, Revision: P2, Date: 02/12/2022), Site Plan & Landscape Plan (Drawing: PL-100, Revision: P2, Date: 02/12/2022), General Arrangement Plan – Ground Floor (Drawing: PL-201, Revision: P1, Date: 12/10/2022), General Arrangement Plan – First Floor (Drawing: PL-202, Revision: P1, Date: 12/10/2022), Roof Plan (Drawing: PL-203, Revision: P1, Date: 12/10/2022), Elevations (Drawing: PL-301, Revision: P1, Date: 12/10/2022) and External Perspectives (Drawing: PL-901, Revision: P1, Date: 12/10/2022); and
   - Landscape Architecture Planning Submission by Clover Green Space (Revision: B, Date: December 2022); and
   - Stormwater Management Report by FMG Engineering (Reference: S59466 – 281352, Revision: 3, Date: 02/12/2022); and
   - Preliminary Site Services Infrastructure Summary by Lucid Consulting Australia (Reference: LCE23132-005a, Date: 13/10/2022); and
   - Traffic Impact Assessment by MFY (Reference: 22-0089, Date: 07/10/2022), including Short Term – CHR Treatment plan (Drawing: MFY_220089_02_SH03, Revision: D, Date: 22/11/2022); and
   - Environmental Noise Assessment by Sonus (Reference: S7314C2, Date: October 2022); and
   - Arboricultural Impact Assessment Report by Adelaide ARB Consultants (Reference: RJ000237-MtBarPoolAIA, Date: 12/10/2022) and additional correspondence (Reference: RJ000237-MtBarPoolAIA_ADD, Date: 27/11/2022).

2. The final detailed design of all civil works, as noted in correspondence from Planning Studio (Date: 28/11/2022), including but not limited to the access, driveway, car parking, stormwater management, and water sensitive urban design provisions, must be approved by Council's Development Engineers prior to the commencement of construction of these works in Stage 5 of the development (car park, access roadway & Bald Hills Road junction works).

3. The development shall not commence operation until the completion of Stage 5 of the development (car park, access roadway & Bald Hills Road junction works).

4. All regulated and significant trees as identified within the Arboricultural Impact Assessment Report by Adelaide ARB Consultants (Reference: RJ000237-MtBarPoolAIA, Date: 12/10/2022) shall be retained. Furthermore, no 'Tree Damaging Activity' shall be caused including the killing, destruction, removal, ringbarking, topping, lopping, severing of branches, limbs, stems or trunk, or any other substantial damage unless otherwise approved in writing by Council.

5. All recommendations within the Arboricultural Impact Assessment Report by Adelaide ARB Consultants (Reference: RJ000237-MtBarPoolAIA, Date: 12/10/2022) and additional correspondence (Reference: RJ000237-MtBarPoolAIA_ADD, Date: 27/11/2022) shall be implemented during the construction of the development (including associated earthworks) except where otherwise approved in consultation with Council's Urban Forest Officer.

6. All driveway and civil works within the Tree Protection Zones (TPZs) of the regulated and significant trees shall be of tree-sensitive design and construction consistent with the "Surface Design for Public Road/Driveway Trafficable Crossing Zone over Tree Root Protection Zone" specification (October 2019) by Mount Barker District Council, unless otherwise approved by Council's Urban Forest Officer. The final design and detail of this must be approved by Council's Urban Forest Officer prior to the commencement of construction.

7. All requirements in regard to the construction of driveways, carparks and access are to be met prior to operation of the development to the satisfaction of Council, including:
   - All works within the Bald Hills Road road reserve required for the new access, as detailed within the Traffic Impact Assessment by MFY (Reference: 22-0089, Date: 07/10/2022), including but not limited to the modification of the existing channelised right turn lane for access to the Laratinga Wetlands car park, installation of the new channelised right turn lane for the proposed development, modification of the barrier to accommodate the left turn movement to the site, and closing of the western access of the Laratinga Wetlands car park.
   - The driveway crossover at Bald Hills Road shall be designed, drained, constructed and sealed with asphalt, pavers, or concrete suitable for commercial traffic providing both structural integrity and traction in both wet and dry conditions and include adequate stormwater drainage. The use of unbound materials (gravel, or quarry rubble) is not acceptable.
   - The driveway crossover between the back of kerb and the boundary shall be shaped to provide a verge slope no greater than 2.5 per cent fall towards the road where a footpath is present and a maximum 5% where no footpath is present, suitable for pedestrian traffic and in accordance with Councils current standards.
   - All vehicle car parks, driveways, vehicle entry and manoeuvring areas must be designed, constructed, line marked and maintained in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6.2009), including being paved, surfaced and drained to provide structural integrity and traction in both wet and dry conditions in accordance with accepted engineering standards, and shall be maintained in good condition at all times.
   - All car parks and traffic control devices shall be designed and constructed in accordance with AS 2890 – Off-Street Car parking, AS 1742 Manual of Uniform Traffic Control Devices and the Notice to Council (Part 1 and 2) under the Road Traffic Act 1961 from the Minister for Transport and Urban Planning (December 1999).

8. All requirements in regard to stormwater are to be met prior to operation of the development to the satisfaction of Council, including:
   - Management of stormwater shall occur generally in accordance with the Stormwater Management Report by FMG Engineering (Reference: S59466 – 281352, Revision: 3, Date: 02/12/2022); and

- All stormwater captured by roofing materials and hard sealed paving areas shall be discharged in a controlled manner so it does not impact upon adjoining properties or, in the opinion of Council, has the potential to cause nuisance or destabilise adjoining land.

9. The Environmental Noise Assessment by Sonus (Reference: S7314C2, Date: October 2022) shall be updated if the noise from the mechanical plant and equipment, or the number of units, is different to what is assumed in the assessment. Any recommendations of the subsequent assessment shall be implemented prior to the operation of the development and maintained thereafter.

10. All service and delivery vehicles required to enter and exit the subject land shall be scheduled to occur outside of peak usage periods for the approved development.

11. All landscaping and vegetation as detailed within the Landscape Architecture Planning Submission by Clover Green Space (Revision: B, Date: December 2022) shall planted within the first available planting season following the commencement of operation of the development. The vegetation shall be nurtured and maintained in good health and condition at all times with any diseased or dying plants replaced to the reasonable satisfaction of the Council.

12. All external lighting must be designed and constructed accordingly to conform to Australian Standards (AS 4282-1997).

13. The development must be connected to an operational wastewater service for the drainage of wastewater, prior to the commencement of operation. All financial and augmentation requirements of the Water Industry Entity shall be met in regard to the connection to and construction of any wastewater connections, drains and services.

14. Waste and rubbish shall not cause nuisance to nearby residential properties or detract from the amenity of the locality, to the reasonable satisfaction of Council, by:
    - Being appropriately contained, stored, managed and screened from public view to not cause odour impact, visual impact or unsanitary conditions; and
    - Bins stored within the designated enclosed/fenced area at all times except where removed for waste collection.

15. Effective soil erosion and drainage control measures shall be implemented during the construction of the development in accordance with this consent to:
    - Prevent silt run-off from the land to adjoining properties, roads and drains; and
    - Control dust arising from the construction and other activities, so as not to, in the opinion of Council, be a nuisance to residents or occupiers on adjacent or nearby land; and
    - Ensure that soil or mud is not transferred onto the adjacent roadways by vehicles leaving the site; and
    - Ensure that all litter and building waste is contained on the subject site in a suitable bin or enclosure; and
    - Ensure that no sound is emitted from any device, plant or equipment or from any source or activity to become an unreasonable nuisance, in the opinion of Council, to the occupiers of adjacent land; and
    - Ensure all disturbed land is managed to prevent silt runoff and dust.

Advisory notes imposed by Council:

1. An On-site Wastewater Works Application (including payment of applicable augmentation/sewer infrastructure fees to Council) and a Trade Waste Application, must be approved by Council and or SA Health prior to the commencement of building work for the approved development.

2. Notification as a food business shall be provided to Council prior to operation of the development. For further information, please refer to Council's website: https://www.mountbarker.sa.gov.au/community/foodsafety/infoforfoodpremises.

3. The applicant is reminded of the relevant obligations under the *Local Nuisance and Litter Control Act 2016.*

4. The development is approved to be undertaken in stages, as follows:
   - Stage 1: Civil earthworks
   - Stage 2: Sub structure
   - Stage 3: Superstructure
   - Stage 4: Main building & internal fitout
   - Stage 5: Car park, access roadway & Bald Hills Road junction works
   - Stage 6: Landscaping

5. Signage has not been included in the application. Should advertising signage be proposed, a separate development approval must be granted unless the signage is excluded from the definition of development pursuant to the *Planning, Development and Infrastructure (General) Regulations 2017.*

6. If any works impact or require the usage of a public road, a hoarding permit may be required. For more information please refer to the 'Public Space Occupation (Hoarding)' permit information on Council's website at www.mountbarker.sa.gov.au.

7. If Aboriginal sites, objects or remains are discovered during excavation works, the Aboriginal Heritage Branch of the Aboriginal Affairs and Reconciliation Division of the Department of the Premier and Cabinet (as delegate of the Minister) is to be notified under Section 20 of the *Aboriginal Heritage Act 1988*.

8. Any person proposing to undertake building work within the District of Mount Barker is reminded of their obligation to take all reasonable measures to protect Council infrastructure. Any incidental damage to the infrastructure - pipes, footpath, verge, street trees etc, must be reinstated to a standard acceptable to Council at the applicants' expense. If you have any queries please contact Council on 8391 7200.

9. No work can commence on this development unless a Development Approval has been obtained. If one or more consents have been granted on this Decision Notification Form, you must not start any site works or building work or change of use of the land until you have received notification that Development Approval has been granted.

10. The applicant has a right of appeal against the conditions which have been imposed on this Planning Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0289).

11. This consent or approval will lapse at the expiration of 2 years from its operative date, subject to the below or subject to an extension having been granted by the relevant authority.
    Where an approved development has been substantially commenced within 2 years from the operative date of approval, the approval will then lapse 3 years from the operative date of the approval (unless the development has been substantially or fully completed within those 3 years, in which case the approval will not lapse).

Address: **304 SPRINGS RD MOUNT BARKER SA 5251**

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)
Concept Plan *(Concept Plan 3 - Mount Barker and Littlehampton)*
Overlay
Affordable Housing
Hazards (Flooding)
Hazards (Bushfire - Medium Risk)
Heritage Adjacency
Hazards (Flooding - General)
Local Heritage Place *(16144)*
Murray-Darling Basin
Native Vegetation
Prescribed Water Resources Area
River Murray Tributaries Protection Area
Regulated and Significant Tree
Water Resources
Subzone
Emerging Activity Centre
Zone
Master Planned Neighbourhood

Development Pathways

- Master Planned Neighbourhood

1. Accepted Development
   Means that the development type does not require planning consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

   - Air handling unit, air conditioning system or exhaust fan
   - Building work on railway land
   - Carport
   - Internal building work
   - Partial demolition of a building or structure

- Shade sail
- Solar photovoltaic panels (roof mounted)
- Verandah
- Water tank (above ground)
- Water tank (underground)

2. Code Assessed - Deemed to Satisfy
   Means that the development type requires consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

   - Carport
   - Temporary accommodation in an area affected by bushfire
   - Verandah

3. Code Assessed - Performance Assessed
   Performance Assessed development types listed below are those for which the Code identifies relevant policies. Additional development types that are not listed as Accepted, Deemed to Satisfy or Restricted default to a Performance assessed Pathway. Please contact your local council for more information.

   - Ancillary accommodation
   - Carport
   - Demolition
   - Detached dwelling
   - Dwelling addition
   - Dwelling or residential flat building undertaken by:
     (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.
   - Fence
   - Group dwelling
   - Land division
   - Outbuilding
   - Residential flat building
   - Retaining wall
   - Row dwelling
   - Semi-detached dwelling
   - Tree-damaging activity
   - Verandah

4. Impact Assessed - Restricted
   Means that the development type requires approval. Classes of development that are classified as Restricted are listed in Table 4 of the relevant Zones.

Property Policy Information for above selection

Part 2 - Zones and Sub Zones

Master Planned Neighbourhood Zone

Assessment Provisions (AP)

Desired Outcome	
DO 1	A new or expanding community with a diverse range of housing that supports a range of needs and lifestyles located within easy reach of a diversity of services, facilities and open space.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Diverse housing choices and a wide range of complementary recreational, community services and other activities to support a growing community and create a pleasant place to live.	DTS/DPF 1.1 Development comprises one or more of the following: (a) Ancillary accommodation (b) Community facility (c) Consulting room (d) Display home (e) Dwelling (f) Educational establishment (g) Indoor recreation facility (h) Office (i) Pre-school (j) Recreation area (k) Residential flat building (l) Retirement facility (m) Shop (n) Supported accommodation.
PO 1.2 Land division results in a low-to-medium density neighbourhood that contains a diverse range of housing types and allotment sizes.	DTS/DPF 1.2 None are applicable.
PO 1.3 Residential development at increased densities close to open space, public transport, activity centres and community facilities to enhance community access to community services.	DTS/DPF 1.3 Medium and high density residential development located where any one of the following is satisfied: (a) within 200m of an activity centre (b) within 200m of a high frequency public transit service (c) adjoining public open space greater than 2000m^2 (including where the site would adjoin if not separated by a public road).
PO 1.4 Commercial activities outside activity centres improve community access to services are of a scale and type to maintain residential amenity.	DTS/DPF 1.4 A shop, consulting room or office (or any combination thereof) satisfies any one of the following: (a) it is located on the same allotment and in conjunction with a dwelling where all the following are satisfied: (i) does not exceed 50m^2 gross leasable floor area (ii) does not involve the display of goods in a window or about the dwelling or its curtilage

	(b) where located outside of an Activity Centre, does not exceed 150m^2 in gross leasable floor area.
Coordinated and Orderly Development	
PO 2.1 Land division and infrastructure occur in a coordinated manner and orderly sequence.	DTS/DPF 2.1 None are applicable.
PO 2.2 Development and infrastructure are staged and provided in a manner that supports the orderly expansion of urban areas and the economic provision of infrastructure and services.	DTS/DPF 2.2 None are applicable.
Community Facilities	
PO 3.1 Community facilities such as schools, community centres, recreation centres and public open space are co-located within activity centres or co-located with complementary uses to reinforce their role as a focal point for community.	DTS/DPF 3.1 None are applicable.
PO 3.2 Community facilities are located and designed to maximise accessibility by public transport, walking and cycling.	DTS/DPF 3.2 None are applicable.
Open Space	
PO 4.1 The size and distribution of open space encourages recreation and healthy lifestyles.	DTS/DPF 4.1 None are applicable.
PO 4.2 The quality of open space encourages recreation and healthy lifestyles by including a variety of attractive features such as walking and cycling trails, play spaces, water features, irrigated recreation spaces, sporting infrastructure or public art.	DTS/DPF 4.2 None are applicable.
Building Height	
PO 5.1 Residential buildings establish a low-medium rise residential character with development above 3 building levels located close to activity centres, open space and/or public transport.	DTS/DPF 5.1 Residential buildings (excluding garages, carports and outbuildings) do not exceed the maximum building height nominated on a Building Envelope Plan, or where none exists: (a) a maximum height of 3 building levels or 12m and (b) a maximum wall height of 10m (except where a gable end).
Primary Street Setback	
PO 6.1 Buildings are setback from primary street boundaries to contribute to the existing/emerging pattern of street setbacks in	DTS/DPF 6.1 The building line of buildings set back from the primary street boundary consistent with a building envelope plan, or where no

the streetscape and integrate development with public open space.	building envelope plan exists: (a) not less than 1.5m where the allotment adjoins a public reserve greater than 2000m² (including where the allotment would adjoin a reserve if not separated by a public road), the dwelling faces that reserve and access is provided to the rear of the allotment or (b) not less than 3m in all other cases.
Secondary Street Setback	
PO 7.1 Buildings are setback from secondary street boundaries to maintain a pattern of separation between building walls and public thoroughfares and reinforce a streetscape character.	DTS/DPF 7.1 Dwelling walls are set back consistent with a building envelope plan, or where none exists at least 900mm from the boundary of the allotment with the secondary street frontage.
Boundary Walls	
PO 8.1 Boundary walls are limited in height and length to manage impacts on adjoining properties.	DTS/DPF 8.1 Dwelling walls on side boundaries are consistent with a building envelope plan, or satisfy (a) or (b): (a) adjoin or abut a boundary wall of a building on adjoining land for the same, or lesser length and height or (b) do not: (i) exceed 3m in height from the top of footings (ii) exceed 11.5m in length (iii) with respect to all boundary walls on the same boundary, exceed 45% of the total length of the boundary (iv) encroach within 3m of any other existing or proposed boundary walls on the subject land.
Side Boundary Setback	
PO 9.1 Buildings are set back from side boundaries to provide: (a) separation between dwellings in a way that complements the emerging character of the locality (b) access to natural light and ventilation for neighbours.	DTS/DPF 9.1 Building walls not sited on side boundaries set back from side boundaries consistent with a building envelope plan, or are set back: (a) 900mm for a wall height less than 3m and (b) 900mm plus 1/3 of the wall height above 3m.
Rear Boundary Setback	
PO 10.1 Buildings are set back from rear boundaries to provide: (a) separation between dwellings in a way that complements the emerging character of the locality (b) access to natural light and ventilation for	DTS/DPF 10.1 Building walls are set back from the rear boundary consistent with a building envelope plan, or at least: (a) 3m for the first building level or 0m where the rear boundary adjoins a laneway (b) 5m for any second building level or 0m where

neighbours (c) open space recreational opportunities (d) space for landscaping and vegetation.	the rear boundary adjoins a laneway (c) 5m plus any increase in wall height over 7m for buildings three building levels and above.
Site Dimensions and Land Division	
PO 11.1 Allotments created for residential purposes are of a suitable size and dimension and accommodate a diverse range of housing choices.	DTS/DFP 11.1 None are applicable.
PO 11.2 Allotments created for residential purposes are a suitable size and dimension to accommodate dwellings that are functional and provide a high standard of residential amenity for occupants.	DTS/DPF 11.2 None are applicable
PO 11.3 Sites for residential purposes are consistent with an authorised plan of division or master plan.	DTS/DPF 11.3 Development will not result in more than 1 dwelling on an existing allotment.
Land Division Pattern	
PO 12.1 Street patterns and pedestrian and cycle connections designed to reduce travel distances to open space, public transport, activity centres and community facilities and assist to create low speed environments in local streets.	DTS/DPF 12.1 None are applicable.
Tree Canopy	
PO 13.1 Tree planting provided on public streets and public open space to create a comfortable micro-climate and improve the amenity of the neighbourhood.	DTS/DPF 13.1 None are applicable.
Concept Plans	
PO 14.1 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, provision of infrastructure and the location of new activity centres.	DTS/DPF 14.1 The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant: **Description** Concept Plan 3 - Mount Barker and Littlehampton In relation to DTS/DPF 14.1, in instances where: (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. (b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 14.1 is met.
Advertising and display homes	
PO 15.1 Advertising is limited to temporary displays to promote the sale of land and buildings within the zone.	DTS/DPF 15.1 Advertisements: (a) are of a temporary nature and will be removed within 2 years from the date of installation

	(b) promote the sale of land or buildings within the zone.
PO 15.2 Display homes provide sufficient car parking.	DTS/DPF 15.2 None are applicable.
Earthworks and sloping land	
PO 16.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 16.1 Earthworks associated with development are consistent with a building envelope plan, or do not involve: (a) excavation exceeding a vertical height of 1.5m (b) filling exceeding a vertical height of 1.5m (c) a total combined excavation and filling vertical height of 3m or more.
Ancillary Structures and Buildings	
PO 17.1 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.	DTS/DPF 17.1 Ancillary buildings and structures: (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 (and not including a gable end) (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
PO 17.2 Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements and do not result in over-development of the site.	DTS/DPF 17.2 Ancillary buildings and structures do not result in: (a) less private open space than specified in Design Table 1 - Private Open Space (b) less 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 to the nearest whole number.
Private Open Space	
PO 18.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 18.1 Dwellings are provided with a minimum area of private open space nominated on a building envelope plan, or in accordance with Design in Urban Areas Table 1 - Private Open Space.

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

Notification tables exclude the classes of development listed in Column A from notification provided that they do not fall within a corresponding exclusion prescribed in Column B.

Where a development or an element of a development falls within more than one class of development listed in Column A, it will be excluded from notification if it is excluded (in its entirety) under any of those classes of development. It need not be excluded under all applicable classes of development.

Where a development involves multiple performance assessed elements, all performance assessed elements will require notification (regardless of whether one or more elements are excluded in the applicable notification table) unless every performance assessed element of the application is excluded in the applicable notification table, in which case the application will not require notification.

Class of Development **(Column A)**	**Exceptions** **(Column B)**
1. 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: (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 that involves any of the following: 1. residential flat building(s) of 3 or 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) where **not** located in an activity centre within the Emerging Activity Centre Subzone: (a) air handling unit, air conditioning system or exhaust fan (b) ancillary accommodation (c) building work on railway land (d) carport (e) community facility (f) deck (g) display home (h) dwelling (i) dwelling addition (j) educational establishment (k) fence (l) indoor recreation facility (m) outbuilding (n) pergola (o) pre-school (p) private bushfire shelter (q) residential flat building (r) retaining wall (s) retirement facility (t) shade sail (u) solar photovoltaic panels (roof mounted) (v) supported accommodation (w) swimming pool or spa pool (x) verandah (y) water tank.	Except development that: 1. does not satisfy Master Planned Neighbourhood Zone DTS/DPF 5.1 or 2. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where in accordance with a building envelope plan or 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 3m measured from the top of footings (other than where in accordance with a building envelope plan or where the proposed wall (or post) 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) where **not** located in an activity centre within the Emerging Activity Centre Subzone: (a) consulting room (b) office (c) shop.	Except development that: 1. does not satisfy any of the following: (a) Master Planned Neighbourhood Zone DTS/DPF 1.4 (b) Master Planned Neighbourhood Zone DTS/DPF 5.1 or 2. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: (a) the length of the proposed wall (or structure)

	exceeds 11.5m (other than where in accordance with a building envelope plan or 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 3m measured from the top of footings (other than where in accordance with a building envelope plan or where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).
5. Advertisement where **not** located in an activity centre within the Emerging Activity Centre Subzone.	Except advertisement that does not satisfy Master Planned Neighbourhood Zone DTS / DPF 15.1.
6. Any development involving any of the following (or of any combination of any of the following) where located in an activity centre within the Emerging Activity Centre Subzone: (a) advertisement (b) air handling unit, air conditioning system or exhaust fan (c) ancillary accommodation (d) building work on railway land (e) carport (f) cinema (g) community facility (h) consulting room (i) deck (j) display home (k) dwelling located above a non-residential building level (l) educational establishment (m) emergency services establishment (n) fence (o) health facility (p) hotel (q) indoor recreation facility (r) library (s) office (t) outbuilding (u) pergola (v) place of worship (w) pre-school (x) private bushfire shelter (y) public transport terminal (z) retaining wall (aa) retail fuel outlet (ab) service trade premises (ac) shade sail (ad) shop (ae) solar photovoltaic panels (roof mounted) (af) swimming pool or spa pool (ag) tourist accommodation (ah) verandah	Except development that exceeds the maximum building height specified in Emerging Activity Centre Subzone DTS/DPF 2.1 or does not satisfy any of the following: 1. Emerging Activity Centre Subzone DTS/DPF 2.2 2. Emerging Activity Centre Subzone DTS/DPF 2.3.

(ai) water tank.	
7. Any development involving any of the following (or of any combination of any of the following): (a) internal building works (b) land division (c) recreation area (d) replacement building (e) temporary accommodation in an area affected by bushfire (f) tree damaging activity.	None specified.
8. Demolition.	Except any of the following: 1. the demolition of a State or Local Heritage Place 2. the demolition of a building (except an ancillary building) in a Historic Area Overlay.

Placement of Notices - Exemptions for Performance Assessed Development
None specified.

Placement of Notices - Exemptions for Restricted Development
None specified.

Emerging Activity Centre Subzone

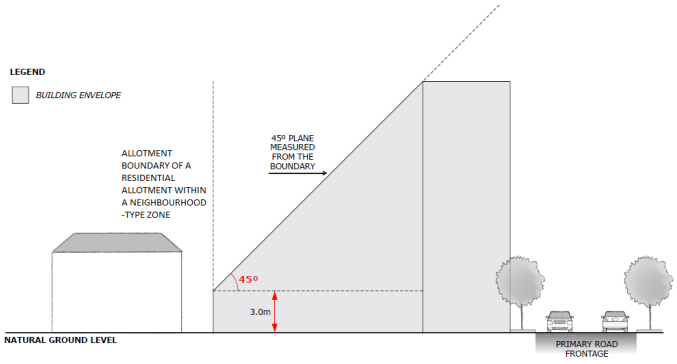
Assessment Provisions (AP)

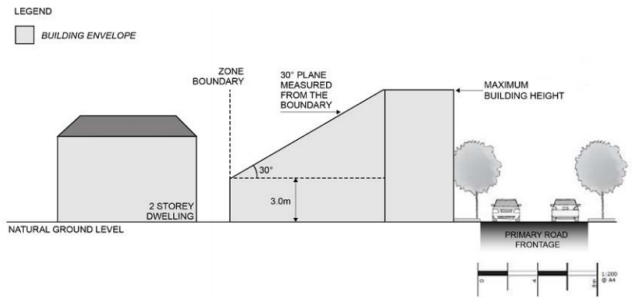
Desired Outcome	
DO 1	Activity centres, employment, and community services make neighbourhoods a healthy and convenient place to live.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Activity centres within master-planned communities include a range of land uses to provide services at the local and neighbourhood level.	DTS/DPF 1.1 Development comprises one or more of the following where located in an Activity Centre: (a) Cinema (b) Community facility (c) Consulting room

	(d) Dwelling located above non-residential development (e) Educational establishment (f) Emergency services facility (g) Hospital (h) Hotel (i) Indoor recreation facility (j) Library (k) Office (l) Place of worship (m) Pre-school (n) Public transport terminal (o) Retail fuel outlet (p) Service trade premises (q) Shop (r) Tourist accommodation. And in any other case, one or more of the following land uses: (s) Ancillary accommodation (t) Community facility (u) Consulting room (v) Display home (w) Dwelling (x) Educational establishment (y) Indoor recreation facility (z) Office (aa) Pre-school (ab) Recreation area (ac) Residential flat building (ad) Retirement facility (ae) Shop (af) Supported accommodation.
PO 1.2 Land division design designates land for activity centres that is: (a) distributed to maximise convenient access to shopping and services (b) of sufficient size to cater for the anticipated catchment and future population.	DTS/DPF 1.2 None are applicable.
PO 1.3 Land division design ensures activity centres are located to maximise accessibility by public transport, walking and cycling.	DTS/DPF 1.3 None are applicable.
PO 1.4 Land division design ensures activity centres are established in locations that improve accessibility and exposure such as: (a) at an intersection of higher order roads and main movement routes (b) locations that have the highest residential density and pedestrian catchment or	DTS/DPF 1.4 None are applicable.

(c) adjacent high frequency public transport.	
PO 1.5 Within Activity Centres, dwellings are developed only in conjunction with non-residential uses to support business, entertainment and recreational activities.	DTS/DPF 1.5 Within Activity Centres, dwellings are developed only in conjunction with non-residential uses and sited: (a) at upper levels of buildings with non-residential uses located at ground level or (b) behind non-residential uses on the same allotment.
PO 1.6 Activity Centres include a range of non-residential uses such as shops, offices, consulting rooms, educational establishments and community facilities of a scale to support the anticipated future growth of the surrounding neighbourhood.	DTS/DPF 1.6 None are applicable.
Built Form and Character	
PO 2.1 A range of low-to-medium rise buildings within Activity Centres, with the highest intensity of built form sited away from residential development, and lower scale development at the interface with residential development.	DTS/DPF 2.1 Buildings within Activity Centres not exceeding the following maximum building heights: (a) where the development is located on land adjacent to an allotment that will be used solely for residential purposes, 3 building levels or 12m (b) in all other cases 6 building levels or 22m.
PO 2.2 Buildings mitigate visual impacts of building massing on residential development within a neighbourhood-type zone	DTS/DPF 2.2 Buildings within Activity Centres constructed within a building envelope provided by a 45 degree plane, measured from a height of 3m above natural ground level at the boundary of an allotment used for residential purposes within a neighbourhood-type zone as shown in the following diagram (except where this boundary is a southern boundary or where this boundary is the primary street boundary): 
PO 2.3 Buildings mitigate overshadowing of residential development within a neighbourhood-type zone.	DTS/DPF 2.3 Buildings within Activity Centres on sites with a southern boundary adjoining an allotment used for residential purposes in

	a neighbourhood-type zone are constructed within a building envelope provided by a 30 degree plane grading north measured from a height of 3m above natural ground level at the southern boundary, as shown in the following diagram: 
Advertising	
PO 3.1 Advertisements are sited and designed to achieve an overall consistency and appearance along individual street frontages.	DTS/DPF 3.1 None are applicable.
PO 3.2 Freestanding advertisements: (a) identify the associated business(es) (b) are of a size that is commensurate with the scale of the centre and the street frontage (c) avoid visual clutter (d) positively respond to the context without dominating the locality.	DTS/DPF 3.2 Freestanding advertisements: (a) do not exceed 8m in height, the adjacent building wall height, or the zone's height allowance (whichever is the lesser) (b) do not have a sign face that exceeds $6m^2$ per side

Part 3 - Overlays

Affordable Housing Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Affordable housing is integrated with residential and mixed use development.
DO 2	Affordable housing caters for a variety of household structures.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance

	Feature
Land Division	
PO 1.1 Development comprising 20 or more dwellings / allotments incorporates affordable housing.	DTS/DPF 1.1 Development results in 0-19 additional allotments / dwellings.
PO 1.2 Development comprising 20 or more dwellings or residential allotments provides housing suited to a range of incomes including households with low to moderate incomes.	DTS/DPF 1.2 Development comprising 20 or more dwellings / or residential allotments includes a minimum of 15% affordable housing except where: (a) it can be demonstrated that any shortfall in affordable housing has been provided in a previous stage of development or (b) it can be demonstrated that any shortfall in affordable housing will be accommodated in a subsequent stage or stages of development.
PO 1.3 Affordable housing is distributed throughout the development to avoid an overconcentration.	DTS/DPF 1.3 None are applicable.
Built Form and Character	
PO 2.1 Affordable housing is designed to complement the design and character of residential development within the locality.	DTS/DPF 2.1 None are applicable.
Affordable Housing Incentives	
PO 3.1 To support the provision of affordable housing, minimum allotment sizes may be reduced below the minimum allotment size specified in a zone while providing allotments of a suitable size and dimension to accommodate dwellings with a high standard of occupant amenity.	DTS/DPF 3.1 The minimum site area specified for a dwelling can be reduced by up to 20%, or the maximum density per hectare increased by up to 20%, where it is to be used to accommodate affordable housing except where the development is located within the Character Area Overlay or Historic Area Overlay.
PO 3.2 To support the provision of affordable housing, building heights may be increased above the maximum specified in a zone.	DTS/DPF 3.2 Where a building incorporates dwellings above ground level and includes at least 15% affordable housing, the maximum building height specified in any relevant zone policy can be increased by 1 building level in the: (a) Business Neighbourhood Zone (b) City Living Zone (c) Established Neighbourhood Zone (d) General Neighbourhood Zone (e) Hills Neighbourhood Zone (f) Housing Diversity Neighbourhood Zone (g) Neighbourhood Zone (h) Master Planned Neighbourhood Zone (i) Master Planned Renewal Zone (j) Master Planned Township Zone (k) Rural Neighbourhood Zone

	(l) Suburban Business Zone (m) Suburban Neighbourhood Zone (n) Township Neighbourhood Zone (o) Township Zone (p) Urban Renewal Neighbourhood Zone (q) Waterfront Neighbourhood Zone and up to 30% in any other zone, except where: (a) the development is located within the Character Area Overlay or Historic Area Overlay or (b) other height incentives already apply to the development.
Movement and Car Parking	
PO 4.1 Sufficient car parking is provided to meet the needs of occupants of affordable housing.	DTS/DPF 4.1 Dwellings constituting affordable housing are provided with car parking in accordance with the following: (a) 0.3 carparks per dwelling within a building which incorporates dwellings located above ground level within either: (i) 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service(2) (ii) is within 400 metres of a bus interchange(1) (iii) is within 400 metres of an O-Bahn interchange(1) (iv) is within 400 metres of a passenger rail station(1) (v) is within 400 metres of a passenger tram station(1) (vi) is within 400 metres of the Adelaide Parklands. or (b) 1 carpark per dwelling for any other dwelling. [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.]

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
Development for the purposes of the provision of	Minister responsible for administering	To provide	Development

affordable housing (applying the criteria determined under regulation 4 of the *South Australian Housing Trust Regulations 2010*).	the *South Australian Housing Trust Act 1995*.	direction on the conditions required to secure the provision of dwellings or allotments for affordable housing.	of a class to which Schedule 9 clause 3 item 20 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Hazards (Bushfire - Medium Risk) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.

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 Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.	DTS/DPF 1.1 None are applicable.
Built Form	
PO 2.1 Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and buildings on stilts.	DTS/DPF 2.1 None are applicable.
PO 2.2	DTS/DPF 2.2

Extensions to buildings, outbuildings and other ancillary structures are sited and constructed using materials to minimise the threat of fire spread to residential and tourist accommodation (including boarding houses, hostels, dormitory style accommodation, student accommodation and Workers' accommodation) in the event of bushfire.	Outbuildings and other ancillary structures are sited no closer than 6m from the habitable building.
Habitable Buildings	
PO 3.1 To minimise the threat, impact and potential exposure to bushfires on life and property, residential and tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited on the flatter portion of allotments away from steep slopes.	DTS/DPF 3.1 None are applicable.
PO 3.2 Residential, tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited away from vegetated areas that pose an unacceptable bushfire risk.	DTS/DPF 3.2 Residential, tourist accommodation and habitable buildings for vulnerable communities are provided with asset protection zone(s) in accordance with (a) and (b): (a) the asset protection zone has a minimum width of at least: (i) 50 metres to unmanaged grasslands (ii) 100 metres to hazardous bushland vegetation (b) the asset protection zone is contained wholly within the allotment of the development.
PO 3.3 Residential, tourist accommodation and habitable buildings for vulnerable communities, (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation), has a dedicated area available that is capable of accommodating a bushfire protection system comprising firefighting equipment and water supply in accordance with *Ministerial Building Standard MBS 008 - Designated bushfire prone areas - additional requirements*.	DTS/DPF 3.3 None are applicable.
Land Division	
PO 4.1 Land division is designed and incorporates measures to minimise the danger of fire hazard to residents and occupants of buildings, and to protect buildings and property from physical damage in the event of a bushfire.	DTS/DPF 4.1 None are applicable.
PO 4.2 Land division is designed to provide a continuous street pattern to facilitate the safe movement and evacuation of emergency vehicles, residents, occupants and visitors.	DTS/DPF 4.2 None are applicable.
PO 4.3 Where 10 or more new allotments are proposed, land division	DTS/DPF 4.3 None are applicable.

includes at least two separate and safe exit points to enable multiple avenues of evacuation in the event of a bushfire.	
PO 4.4 Land division incorporates perimeter roads of adequate design in conjunction with bushfire buffer zones to achieve adequate separation between residential allotments and areas of unacceptable bushfire risk and to support safe access for the purposes of fire-fighting.	DTS/DPF 4.4 None are applicable.
Vehicle Access - Roads, Driveways and Fire Tracks	
PO 5.1 Roads are designed and constructed to facilitate the safe and effective: (a) access, operation and evacuation of fire-fighting vehicles and emergency personnel (b) evacuation of residents, occupants and visitors.	DTS/DPF 5.1 Roads: (a) are constructed with a formed, all-weather surface (b) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the road (c) have a cross fall of not more than 6 degrees (1-in-9.5) at any point along the road (d) have a minimum formed road width of 6m (e) provide overhead clearance of not less than 4.0m between the road surface and overhanging branches or other obstructions including buildings and/or structures (Figure 1) (f) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around road curves by constructing the curves with a minimum external radius of 12.5m (Figure 2) (g) incorporating cul-de-sac endings or dead end roads do not exceed 200m in length and the end of the road has either: (i) a turning area with a minimum formed surface radius of 12.5m (Figure 3) or (ii) a 'T' or 'Y' shaped turning area with a minimum formed surface length of 11m and minimum internal radii of 9.5m (Figure 4) (h) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 5.2 Access to habitable buildings is designed and constructed to facilitate the safe and effective: (a) access, operation and evacuation of fire-fighting vehicles and emergency personnel (b) evacuation of residents, occupants and visitors.	DTS/DPF 5.2 Access is in accordance with (a) or (b): (a) a clear and unobstructed vehicle or pedestrian pathway of not greater than 60 metres in length is available between the most distant part of the habitable building and the nearest part of a formed public access road (b) driveways: (i) do not exceed 600m in length (ii) are constructed with a formed, all-weather surface (iii) are connected to a formed, all-weather public road with the transition area between the road and driveway having a gradient of not more than 7 degrees (1-in-8) (iv) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the driveway (v) have a crossfall of not more than 6 degrees (1-

	in-9.5) at any point along the driveway (vi) have a minimum formed width of 3m (4m where the gradient of the driveway is steeper than 12 degrees (1-in-4.5)) plus 0.5 metres clearance either side of the driveway from overhanging branches or other obstructions, including buildings and/or structures (Figure 1) (vii) incorporate passing bays with a minimum width of 6m and length of 17m every 200m (Figure 5) (viii) provide overhead clearance of not less than 4.0m between the driveway surface and overhanging branches or other obstructions, including buildings and/or structures (Figure 1) (ix) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around driveway curves by constructing the curves with a minimum external radius of 12.5m (Figure 2) (x) allow fire-fighting vehicles to safely enter and exit an allotment in a forward direction by using a 'U' shaped drive through design or by incorporating at the end of the driveway either: A. a loop road around the building or B. a turning area with a minimum radius of 12.5m (Figure 3) or C. a 'T' or 'Y' shaped turning area with a minimum formed length of 11m and minimum internal radii of 9.5m (Figure 4) (xi) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 5.3 Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.	DTS/DPF 5.3 None are applicable.

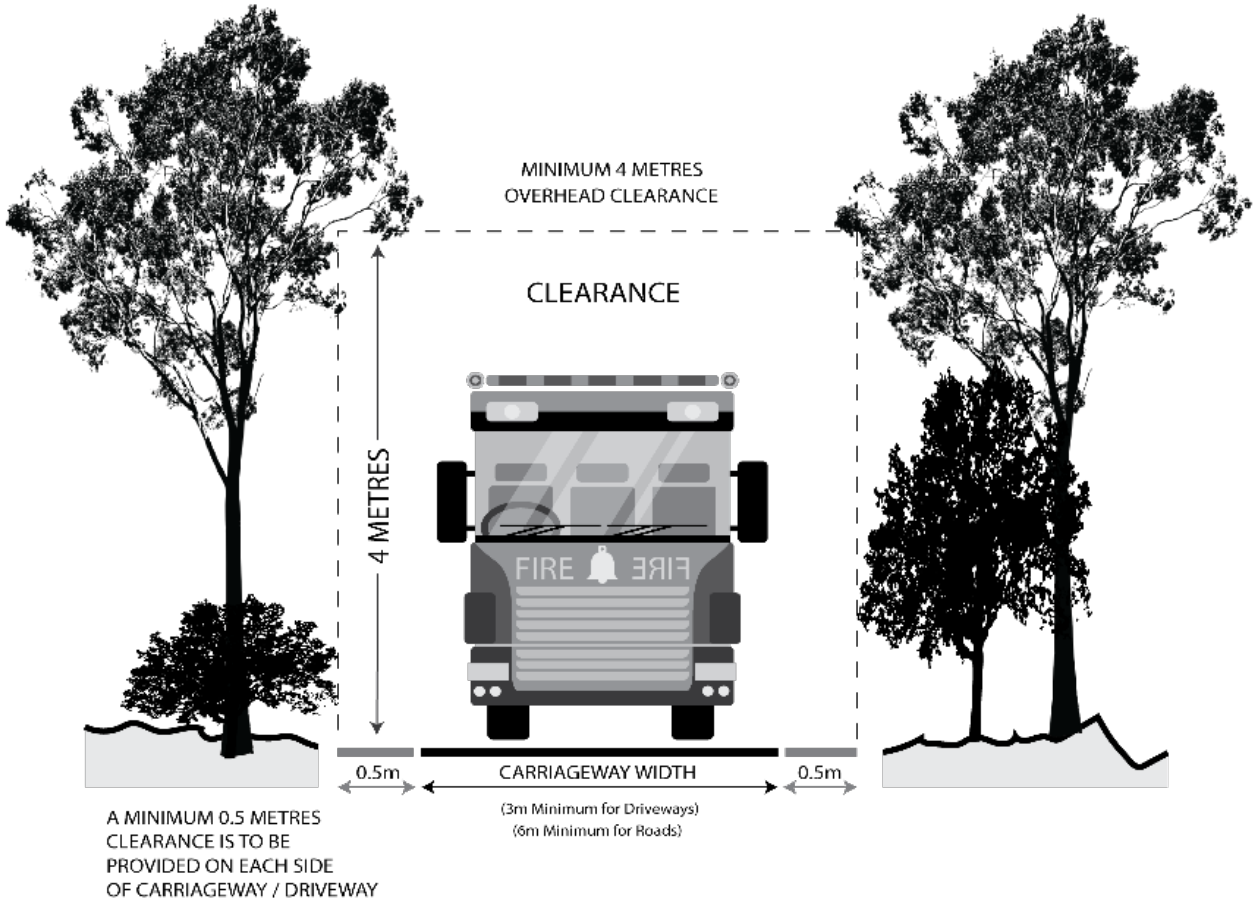
Procedural Matters (PM) - Referrals

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

Figures and Diagrams

Fire Engine and Appliance Clearances
Figure 1 - Overhead and Side Clearances



Roads and Driveway Design

Figure 2 - Road and Driveway Curves

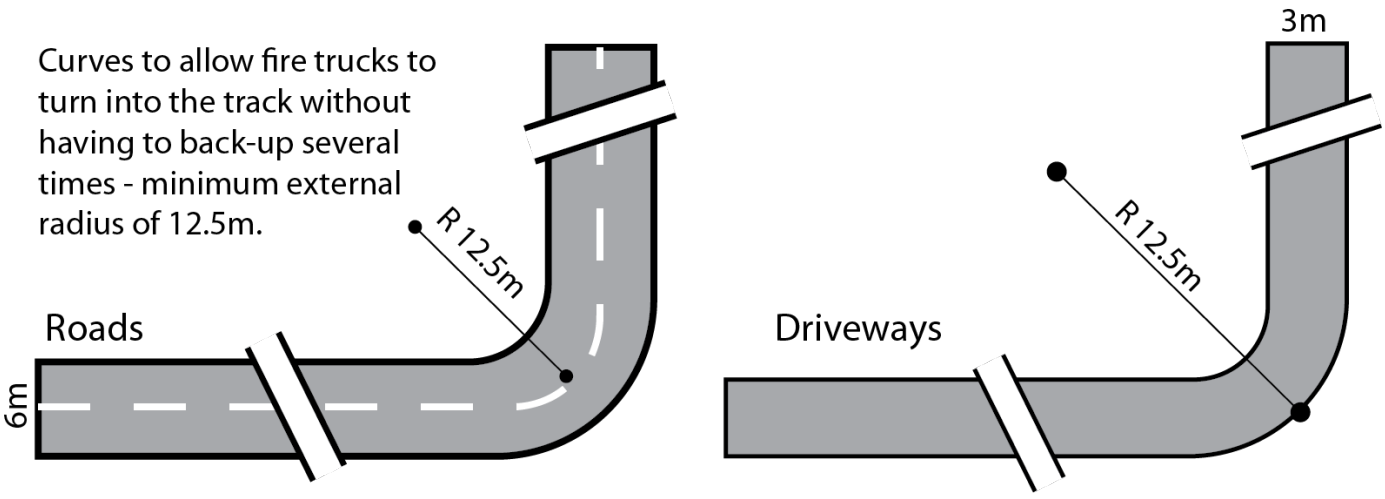


Figure 3 - Full Circle Turning Area

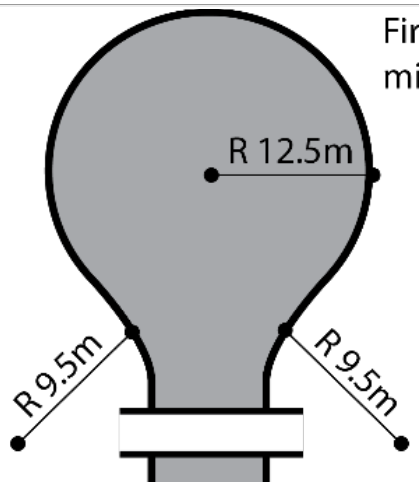
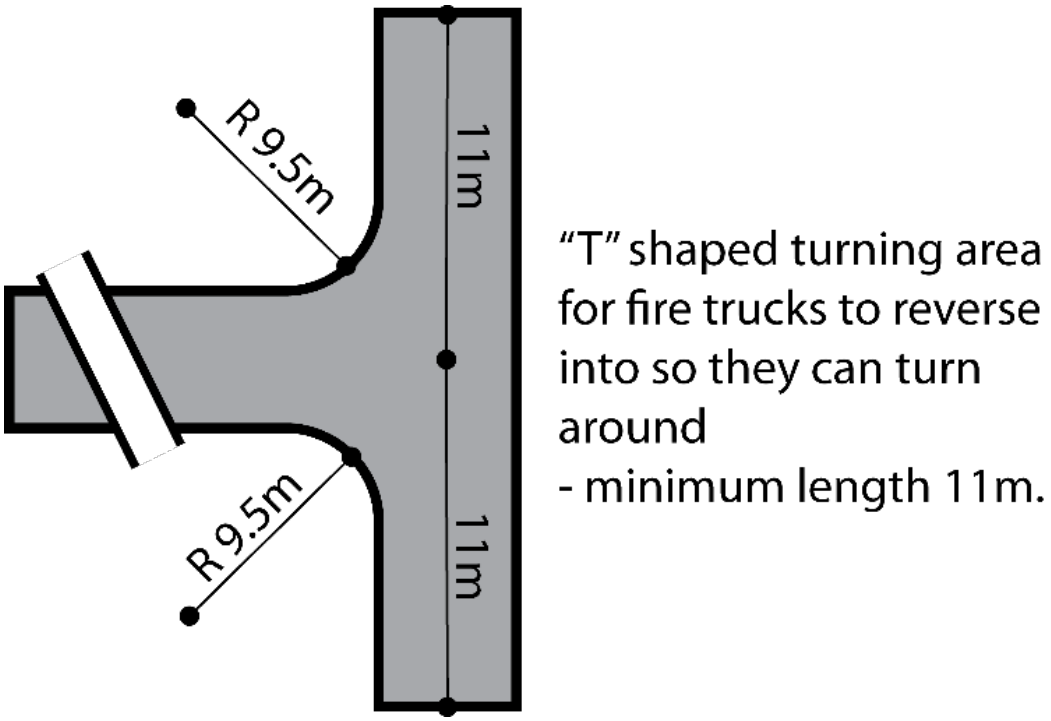


Figure 4 - 'T' or 'Y' Shaped Turning Head



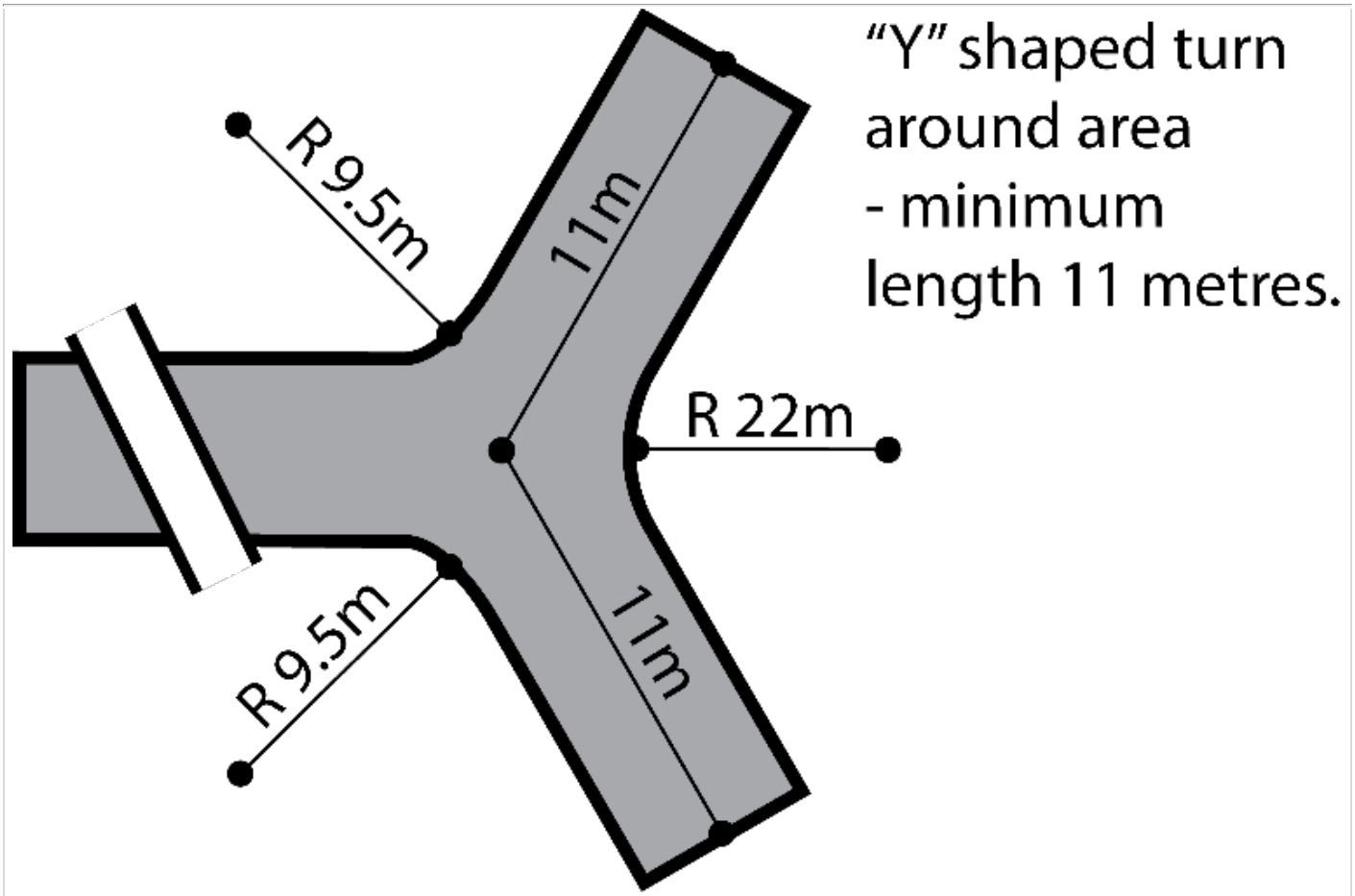
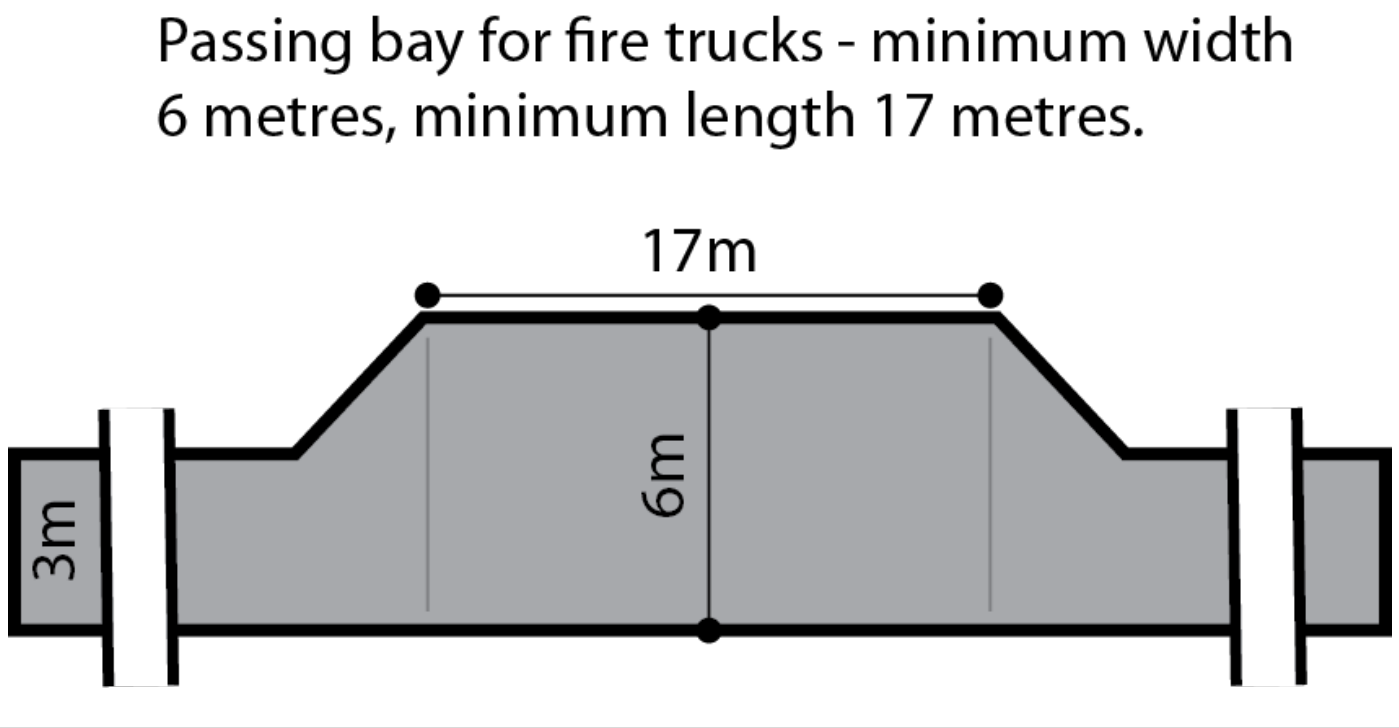


Figure 5 - Driveway Passing Bays



Hazards (Flooding) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Impacts on people, property, infrastructure and the environment from high flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Division	
PO 1.1 Land division is limited to areas where the consequences to buildings and safety are low and can be readily managed or overcome.	DTS/DPF 1.1 None are applicable.
Land Use	
PO 2.1 Development sited and designed to minimise exposure of people and property to unacceptable flood risk.	DTS/DPF 2.1 None are applicable.
PO 2.2 Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services are sited away from flood prone areas to enable uninterrupted operation of services and reduce likelihood of entrapment.	DTS/DPF 2.2 Pre-schools, educational establishments, retirement and supported accommodation, emergency services facilities, hospitals and prisons are not located within the Overlay area.
Flood Resilience	
PO 3.1 Development avoids the need for flood protection works.	DTS/DPF 3.1 None are applicable.
PO 3.2 Development does not cause unacceptable impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.	DTS/DPF 3.2 None are applicable.
PO 3.3 Development does not impede the flow of floodwaters through the allotment or the surrounding land, or cause an unacceptable loss of flood storage.	DTS/DPF 3.3 None are applicable.
PO 3.4 Development avoids frequently flooded or high velocity areas, other than where it is part of a flood mitigation scheme to reduce	DTS/DPF 3.4 Other than a recreation area, development is located outside of the 5% AEP principal flow path.

flood impact.	
PO 3.5 Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1% AEP flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.	DTS/DPF 3.5 Buildings comprise one of the following: (a) a porch or portico with at least 2 open sides (b) a verandah with at least 3 open sides (c) a carport or outbuilding with at least 2 open sides (whichever elevations face the direction of the flow) (d) any post construction with open sides (e) a building with a finished floor level that is at least 300mm above the height of a 1% AEP flood event.
PO 3.6 Fences do not unreasonably impede floodwaters.	DTS/DPF 3.6 A post and wire fence (other than a chain mesh fence).
Environmental Protection	
PO 4.1 Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during a 1% AEP flood event to avoid potential environmental harm.	DTS/DPF 4.1 Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.
PO 4.2 Development does not create or aggravate the potential for erosion or siltation or lead to the destruction of vegetation during a flood.	DTS/DPF 4.2 None are applicable.
Site Earthworks	
PO 5.1 The depth and extent of filling required to raise the finished floor level of a building does not cause unacceptable impact on any adjoining property by diversion of flood waters, an increase in flood velocity or flood level, or an unacceptable loss of flood storage.	DTS/DPF 5.1 None are applicable.
PO 5.2 Driveways, access tracks and parking areas are designed and constructed to minimise excavation and filling.	DTS/DPF 5.2 Filling for ancillary purposes: (a) does not exceed 300mm above existing ground level (b) is no more than 5m wide.
Access	
PO 6.1 Development does not occur on land: (a) from which evacuation to areas not vulnerable to flood risk is not possible during a 1% AEP flood event (b) which cannot be accessed by emergency services vehicles or essential utility service vehicles during a 1% AEP flood event.	DTS/DPF 6.1 None are applicable.
PO 6.2	DTS/DPF 6.2

Access driveways and tracks to significant development (i.e. dwellings, places of work, etc.) consist of a safe, all-weather trafficable surface that is accessible during a 1% AEP flood event.	None are applicable.

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

Hazards (Flooding – General) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Impacts on people, property, infrastructure and the environment from general flood risk are minimised through the appropriate siting and design of development.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use	
PO 1.1 Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services are sited away from flood areas enable uninterrupted operation of services and reduce likelihood of entrapment.	DTS/DPF 1.1 Pre-schools, educational establishments, retirement and supported accommodation, emergency services facilities, hospitals and prisons located outside the 1% AEP flood event.
Flood Resilience	
PO 2.1 Development is sited, designed and constructed to prevent the entry of floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.	DTS/DPF 2.1 Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than: In instances where no finished floor level value is specified, a building incorporates a finished floor level at least 300mm above the height of a 1% AEP flood event.
Environmental Protection	
PO 3.1 Buildings and structures used either partly or wholly to contain or	DTS/DPF 3.1 Development involving the storage or disposal of hazardous

store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during a 1% AEP flood event to avoid potential environmental harm.	materials is wholly located outside of the 1% AEP flood plain or flow path.

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

Heritage Adjacency Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development adjacent to State and Local Heritage Places maintains the heritage and cultural values of those Places.

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 Development adjacent to a State or Local Heritage Place does not dominate, encroach on or unduly impact on the setting of the Place.	DTS/DPF 1.1 None are applicable.
Land Division	
PO 2.1 Land division adjacent to a State or Local Heritage Place creates allotments that are of a size and dimension that enables the siting and setbacks of new buildings from allotment boundaries so that they do not dominate, encroach or unduly impact on the setting of the Place.	DTS/DPF 2.1 None are applicable.

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
Development that may materially affect the context of a State Heritage Place.	Minister responsible for the administration of the *Heritage Places Act 1993.*	To provide expert assessment and direction to the relevant authority on the potential impacts of development adjacent State Heritage Places.	Development of a class to which Schedule 9 clause 3 item 17 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Local Heritage Place Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development maintains the heritage and cultural values of Local Heritage Places through conservation, ongoing use and adaptive reuse.

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 The form of new buildings and structures maintains the heritage values of the Local Heritage Place.	DTS/DPF 1.1 None are applicable.
PO 1.2 Massing, scale and siting of development maintains the heritage values of the Local Heritage Place.	DTS/DPF 1.2 None are applicable.
PO 1.3 Design and architectural detailing (including but not limited to	DTS/DPF 1.3 None are applicable.

roof pitch and form, openings, chimneys and verandahs) maintains the heritage values of the Local Heritage Place.	
PO 1.4 Development is consistent with boundary setbacks and setting.	DTS/DPF 1.4 None are applicable.
PO 1.5 Materials and colours are either consistent with or complement the heritage values of the Local Heritage Place.	DTS/DPF 1.5 None are applicable.
PO 1.6 New buildings and structures are not placed or erected between the primary or secondary street boundaries and the façade of a Local Heritage Place.	DTS/DPF 1.6 None are applicable.
PO 1.7 Development of a Local Heritage Place retains features contributing to its heritage value.	DTS/DPF 1.7 None are applicable.
Alterations and Additions	
PO 2.1 Alterations and additions complement the subject building and are sited to be unobtrusive, not conceal or obstruct heritage elements and detailing, or dominate the Local Heritage Place or its setting.	DTS/DPF 2.1 None are applicable.
PO 2.2 Adaptive reuse and revitalisation of Local Heritage Places to support their retention in a manner that respects and references the original use of the Local Heritage Place.	DTS/DPF 2.2 None are applicable.
Ancillary Development	
PO 3.1 Ancillary development, including carports, outbuildings and garages, complements the heritage values of the Local Heritage Place.	DTS/DPF 3.1 None are applicable.
PO 3.2 Ancillary development, including carports, outbuildings and garages, is located behind the building line and does not dominate the Local Heritage Place or its setting.	DTS/DPF 3.2 None are applicable.
PO 3.3 Advertising and advertising hoardings are designed to complement the Local Heritage Place, be unobtrusive, be below the parapet line, not conceal or obstruct heritage elements and detailing, or dominate the building or its setting.	DTS/DPF 3.3 None are applicable.
PO 3.4 Fencing and gates closer to a street boundary (other than a laneway) than the street elevation of the associated building are consistent with the traditional period, style and form of the Local Heritage Place.	DTS/DPF 3.4 None are applicable.

Land Division	
PO 4.1 Land division creates allotments that: (a) maintain the heritage values of the Local Heritage Place, including setting (b) are of a dimension to accommodate new development that reinforces and is compatible with the heritage values of the Local Heritage Place.	DTS/DPF 4.1 None are applicable.
Landscape Context and Streetscape Amenity	
PO 5.1 Individually heritage listed trees, parks, historic gardens and memorial avenues are retained unless: (a) trees / plantings are, or have the potential to be, a danger to life or property or (b) trees / plantings are significantly diseased and their life expectancy is short.	DTS/DPF 5.1 None are applicable.
Demolition	
PO 6.1 Local Heritage Places are not demolished, destroyed or removed in total or in part unless: (a) the portion of the Local Heritage Place to be demolished, destroyed or removed is excluded from the extent of listing that is of heritage value or (b) the structural integrity or condition of the Local Heritage Place represents an unacceptable risk to public or private safety and is irredeemably beyond repair.	DTS/DPF 6.1 None are applicable.
PO 6.2 The demolition, destruction or removal of a building, portion of a building or other feature or attribute is appropriate where it does not contribute to the heritage values of the Local Heritage Place.	DTS/DPF 6.2 None are applicable.
Conservation Works	
PO 7.1 Conservation works to the exterior of a Local Heritage Place (and other features identified in the extent of listing) match original materials to be repaired and utilise traditional work methods.	DTS/DPF 7.1 None are applicable.

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

Murray-Darling Basin Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in the Murray-Darling Basin area.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 All development, but in particular development involving: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) horse keeping (g) commercial forestry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in the Murray-Darling Basin.	DTS/DPF 1.1 None are applicable.

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 that require, or may require water to be taken from the River Murray within the meaning of the *River Murray Act 2003* under a water licence required under the *Landscape South Australia Act 2019*: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry	Minister responsible for the administration of the *River Murray Act 2003*.	To provide expert technical assessment and direction to the relevant authority on matters regarding the taking of water, to ensure development is undertaken sustainably in the Murray-Darling Basin.	Development of a class to which Schedule 9 clause 3 item 10 of the Planning, Development and Infrastructure (General)

(f) horse keeping (g) commercial forestry.			Regulations 2017 applies.

Native Vegetation Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Environmental Protection	
PO 1.1 Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.	DTS/DPF 1.1 An application is accompanied by: (a) a declaration stating that the proposal will not, or would not, involve clearance of native vegetation under the Native Vegetation Act 1991, including any clearance that may occur: (i) in connection with a relevant access point and / or driveway (ii) within 10m of a building (other than a residential building or tourist accommodation) (iii) within 20m of a dwelling or addition to an existing dwelling for fire prevention and control (iv) within 50m of residential or tourist accommodation in connection with a requirement under a relevant overlay to establish an asset protection zone in a bushfire prone area or (b) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the clearance is categorised as 'Level 1 clearance'.
PO 1.2 Native vegetation clearance in association with development avoids the following: (a) significant wildlife habitat and movement corridors	DTS/DPF 1.2 None are applicable.

(b) rare, vulnerable or endangered plants species (c) native vegetation that is significant because it is located in an area which has been extensively cleared (d) native vegetation that is growing in, or in association with, a wetland environment.	
PO 1.3 Intensive animal husbandry and agricultural activities are sited, set back and designed to minimise impacts on native vegetation, including impacts on native vegetation in an adjacent State Significant Native Vegetation Area, from: (a) the spread of pest plants and phytophthora (b) the spread of non-indigenous plants species (c) excessive nutrient loading of the soil or loading arising from surface water runoff (d) soil compaction (e) chemical spray drift.	DTS/DPF 1.3 Development within 500 metres of a boundary of a State Significant Native Vegetation Area does not involve any of the following: (a) horticulture (b) intensive animal husbandry (c) dairy (d) commercial forestry (e) aquaculture.
PO 1.4 Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.	DTS/DPF 1.4 None are applicable.
Land division	
PO 2.1 Land division does not result in the fragmentation of land containing native vegetation, or necessitate the clearance of native vegetation, unless such clearance is considered minor, taking into account the location of allotment boundaries, access ways, fire breaks, boundary fencing and potential building siting or the like.	DTS/DPF 2.1 Land division where: (a) an application is accompanied by one of the following: (i) a declaration stating that none of the allotments in the proposed plan of division contain native vegetation under the *Native Vegetation Act 1991* (ii) a declaration stating that no native vegetation clearance under the *Native Vegetation Act 1991* will be required as a result of the division of land (iii) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the vegetation to be cleared is categorised as 'Level 1 clearance' or (b) an application for land division which is being considered concurrently with a proposal to develop each allotment which will satisfy, or would satisfy, the requirements of DTS/DPF 1.1, including any clearance that may occur or (c) the division is to support a Heritage Agreement under the Native Vegetation Act 1991 or the *Heritage Places Act 1993*.

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
Development that is the subject of a report prepared in accordance with Regulation 18(2)(a) of the *Native Vegetation Regulations 2017* that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.	Native Vegetation Council	To provide expert assessment and direction to the relevant authority on the potential impacts of development on native vegetation.	Development of a class to which Schedule 9 clause 3 item 11 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Prescribed Water Resources Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use in prescribed surface water resources areas maintains the health and natural flow paths of water courses.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 All development, but in particular development involving any of the following: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed surface water areas.	DTS/DPF 1.1 Development satisfies either of the following: (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 *Landscape South Australia Act 2019*.
PO 1.2 Development comprising the erection, construction, modification,	DTS/DPF 1.2 None are applicable.

enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment as well as downstream users.	

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
Development that comprises the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert, or collects or diverts surface water flowing over land.	Relevant authority under the *Landscape South Australia Act 2019* that would, if it were not for the operation of section 106(1)(e) of that Act, have the authority under that Act to grant or refuse a permit to undertake the subject development.	To provide expert assessment and direction to the relevant authority on potential impacts from development on the health, sustainability and/or natural flow paths of water resources in accordance with the provisions of the relevant water allocation plan or regional landscape plan or equivalent.	Development of a class to which Schedule 9 clause 3 item 12 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Any of the following classes of development: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry	The Chief Executive of the Department of the Minister responsible for the administration of the *Landscape South Australia Act 2019*.	To provide expert technical assessment and direction to the relevant authority on the taking of water to ensure development is undertaken sustainably and maintains the health and natural flow paths of water resources.	Development of a class to which Schedule 9 clause 3 item 13 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Commercial forestry that requires a forest water licence under Part 8 Division 6 of the *Landscape South Australia Act 2019*.			

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	
PO 1.1 Regulated trees are retained where they: (a) make an important visual contribution to local character and amenity (b) are indigenous to the local area and listed under the *National Parks and Wildlife Act 1972* as a rare or endangered native species and / or (c) provide an important habitat for native fauna.	DTS/DPF 1.1 None are applicable.
PO 1.2 Significant trees are retained where they: (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 *National Parks and Wildlife Act 1972* 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.	DTS/DPF 1.2 None are applicable.
PO 1.3 A tree damaging activity not in connection with other development satisfies (a) and (b): (a) tree damaging activity is only undertaken to: (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: A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential,	DTS/DPF 1.3 None are applicable.

tourist accommodation or other habitable building from bushfire (v) treat disease or otherwise in the general interests of the health of the tree and / or (vi) maintain the aesthetic appearance and structural integrity of the tree (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.	
PO 1.4 A tree-damaging activity in connection with other development satisfies all the following: (a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible (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.	DTS/DPF 1.4 None are applicable.
Ground work affecting trees	
PO 2.1 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.	DTS/DPF 2.1 None are applicable.
Land Division	
PO 3.1 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.	DTS/DPF 3.1 Land division where: (a) there are no regulated or significant trees located within or adjacent to the plan of division or (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.

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

River Murray Tributaries Protection Area Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Sustainable water use and conservation of riverine environments within the River Murray Tributaries 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	
PO 1.1 Development comprising the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment and downstream users.	DTS/DPF 1.1 None are applicable.
PO 1.2 All development, but in particular development involving any of the following: (a) activities requiring irrigation (b) aquaculture (c) commercial forestry (d) horticulture (e) industry (f) intensive animal husbandry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed surface water areas.	DTS/DPF 1.2 None are applicable.
Land Division	
PO 2.1 Land division does not lead to the intensification of development to a level that would have a negative impact on the health or natural flow paths of the River Murray Tributaries.	DTS/DPF 2.1 None are applicable.
PO 2.2 Land division, including boundary realignment, preserves the integrity of the public waterfront of the River Murray system by limiting the number of allotments having a frontage (or extent of frontage) to that system.	DTS/DPF 2.2 Land division does not result in any of the following: (a) an increase in allotments having a frontage to a part of the River Murray system

	(b) an increase in the frontage of an allotment or allotments to a part of the River Murray system.

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, except where the development is, in the opinion of the relevant authority, minor in nature and would not warrant a referral when considering the purpose of the referral: (a) development that comprises the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert, or collects or diverts water flowing in a watercourse or surface water flowing over land (b) horticulture (c) activities requiring irrigation, other than irrigation used for domestic purposes (d) aquaculture (e) intensive animal husbandry (f) horse keeping (g) commercial forestry (h) land division classified as *restricted* by the Planning and Design Code (i) land division that results in: (i) 4 or more additional allotments or (ii) 4 or more additional grants of occupancy (by the conferral or exercise of a right to occupy part only of an allotment) or (iii) a mix of 4 or more additional allotments and separate grants of occupancy (j) land division that involves the creation of a new allotment or grant of occupancy where any part of the boundary of the new allotment or occupancy will have a frontage to a part of the River Murray system (k) alteration of the boundaries of an existing allotment so as to result in: (i) the allotment having a frontage to a part of the River Murray system or (ii) the allotment having an increase in its frontage to a part of the River Murray system.	Minister responsible for the administration of the *River Murray Act 2003*.	To provide expert assessment and direction to the relevant authority on potential impacts from development on the health of the River Murray system, its natural flow regime (including floodwaters), water quality and cultural heritage.	Development of a class to which Schedule 9 clause 3 item 16 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Water Resources Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Protection of the quality of surface waters considering adverse water quality impacts associated with projected reductions in rainfall and warmer air temperatures as a result of climate change.
DO 2	Maintain the conveyance function and natural flow paths of watercourses to assist in the management of flood waters and stormwater runoff.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Water Catchment	
PO 1.1 Watercourses and their beds, banks, wetlands and floodplains (1% AEP flood extent) are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development avoids interfering with the existing hydrology or water regime of swamps and wetlands other than to improve the existing conditions to enhance environmental values.	DTS/DPF 1.2 None are applicable.
PO 1.3 Wetlands and low-lying areas providing habitat for native flora and fauna are not drained, except temporarily for essential management purposes to enhance environmental values.	DTS/DPF 1.3 None are applicable.
PO 1.4 Watercourses, areas of remnant native vegetation, or areas prone to erosion that are capable of natural regeneration are fenced off to limit stock access.	DTS/DPF 1.4 None are applicable.
PO 1.5 Development that increases surface water run-off includes a suitably sized strip of vegetated land on each side of a watercourse to filter runoff to: (a) reduce the impacts on native aquatic ecosystems	DTS/DPF 1.5 A strip of land 20m or more wide measured from the top of existing banks on each side of the watercourse is free from development, livestock use and revegetated with locally indigenous vegetation.

(b) minimise soil loss eroding into the watercourse.	
PO 1.6 Development resulting in the depositing or placing of an object or solid material in a watercourse or lake occurs only where it involves any of the following: (a) the construction of an erosion control structure (b) devices or structures used to extract or regulate water flowing in a watercourse (c) devices used for scientific purposes (d) the rehabilitation of watercourses.	DTS/DPF 1.6 None are applicable.
PO 1.7 Watercourses, floodplains (1% AEP flood extent) and wetlands protected and enhanced by retaining and protecting existing native vegetation.	DTS/DPF 1.7 None are applicable.
PO 1.8 Watercourses, floodplains (1% AEP flood extent) and wetlands are protected and enhanced by stabilising watercourse banks and reducing sediments and nutrients entering the watercourse.	DTS/DPF 1.8 None are applicable.
PO 1.9 Dams, water tanks and diversion drains are located and constructed to maintain the quality and quantity of flows required to meet environmental and downstream needs.	DTS/DPF 1.9 None are applicable.

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

Part 4 - General Development Policies

Advertisements

Assessment Provisions (AP)

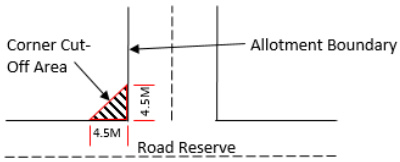
Desired Outcome	
DO 1	

	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	
PO 1.1 Advertisements are compatible and integrated with the design of the building and/or land they are located on.	DTS/DPF 1.1 Advertisements attached to a building satisfy all of the following: (a) are not located in a Neighbourhood-type zone (b) where they are flush with a wall: (i) if located at canopy level, are in the form of a fascia sign (ii) if located above canopy level: 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: (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: 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 (e) if located at canopy level, are in the form of a fascia sign (f) if located above a canopy: (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.

PO 1.2 Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.	DTS/DPF 1.2 Where development comprises an advertising hoarding, the supporting structure is: (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.
PO 1.3 Advertising does not encroach on public land or the land of an adjacent allotment.	DTS/DPF 1.3 Advertisements and/or advertising hoardings are contained within the boundaries of the site.
PO 1.4 Where possible, advertisements on public land are integrated with existing structures and infrastructure.	DTS/DPF 1.4 Advertisements on public land that meet at least one of the following: (a) achieves Advertisements DTS/DPF 1.1 (b) are integrated with a bus shelter.
PO 1.5 Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.	DTS/DPF 1.5 None are applicable.
Proliferation of Advertisements	
PO 2.1 Proliferation of advertisements is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.1 No more than one freestanding advertisement is displayed per occupancy.
PO 2.2 Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.	DTS/DPF 2.2 Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.
PO 2.3 Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.3 Advertisements satisfy all of the following: (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	
PO 3.1 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 activities on the land and avoid unrelated content that contributes to visual clutter and untidiness.	DTS/DPF 3.1 Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.

Amenity Impacts	
PO 4.1 Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.	DTS/DPF 4.1 Advertisements do not incorporate any illumination.
Safety	
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.	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.
PO 5.2 Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.	DTS/DPF 5.2 No advertisement illumination is proposed.
PO 5.3 Advertisements and/or advertising hoardings do not create a hazard to drivers by: (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.	DTS/DPF 5.3 Advertisements satisfy all of the following: (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 
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.	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.
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.	DTS/DPF 5.5 Where the advertisement or advertising hoarding is: (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: (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.
PO 5.6 Advertising near signalised intersections does not cause	DTS/DPF 5.6 Advertising:

unreasonable distraction to road users through illumination, flashing lights, or moving or changing displays or messages.	(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 Kennel flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 3.1 The floors of kennels satisfy all of the following: (a) are constructed of impervious concrete (b) are designed to be self-draining when washed down.
PO 3.2 Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as: (a) adopting appropriate separation distances (b) orientating openings away from sensitive receivers.	DTS/DPF 3.2 Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.
PO 3.3 Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.	DTS/DPF 3.3 Kennels are sited in association with a permanent dwelling on the land.
Wastes	
PO 4.1 Storage of manure, used litter and other wastes (other than wastewater lagoons) is designed, constructed and managed to minimise attracting and harbouring vermin.	DTS/DPF 4.1 None are applicable.
PO 4.2 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.	DTS/DPF 4.2 Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.

Aquaculture

Assessment Provisions (AP)

Desired Outcome	
DO 1	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.

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land-based Aquaculture	
PO 1.1 Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.	DTS/DPF 1.1 Land-based aquaculture and associated components are located to satisfy all of the following: (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.
PO 1.2 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.	DTS/DPF 1.2 None are applicable.
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	DTS/DPF 1.7 None are applicable.

with the use of the land and sited and designed to minimise their visual impact on the surrounding environment.	
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 Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine environment.	DTS/DPF 2.6 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	DTS/DPF 2.7 None are applicable.

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.	
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 *National Parks and Wildlife Act 1972*.	DTS/DPF 2.10 Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the *National Parks and Wildlife Act 1972*.
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 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.	DTS/DPF 4.2 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	DTS/DPF 1.3 None are applicable.

with these activities.	
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 Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.1 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	DTS/DPF 3.3 None are applicable.

(d) steeply sloping land (e) rocky or highly permeable soil overlaying an unconfined aquifer.	

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 / 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	DTS/DPF 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.	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 *Electricity Act 1996* (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	Development is: (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 (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.	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 realm and negative impacts on residential amenity by: (a) positioning plant and equipment in unobtrusive locations viewed from public roads and spaces (b) screening rooftop plant and equipment from view	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.

(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 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.	DTS/DPF 1.5 None are applicable.
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 is 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 (e) contribute to biodiversity.	DTS/DPF 3.1 None are applicable.
PO 3.2 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.	DTS/DPF 3.2 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	
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	DTS/DPF 7.1 None are applicable.

the building structure.	
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 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 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):	DTS/DPF 8.3 None are applicable.

(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.	
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 nor increases 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 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)	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following: (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.
PO 10.2 Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.	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% transparency/openings fixed to a

	minimum height of: (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
All Residential development	
Front elevations and passive surveillance	
PO 11.1 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 11.1 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street.
PO 11.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 11.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and amenity	
PO 12.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 12.1 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.
PO 12.2 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.	DTS/DPF 12.2 None are applicable.
Ancillary Development	
PO 13.1 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.	DTS/DPF 13.1 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 (and not including a gable end)

(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.

PO 13.2 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.	DTS/DPF 13.2 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 2 - Off-Street Car Parking Requirements in Designated Areas.
PO 13.3 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.	DTS/DPF 13.3 The pump and/or filtration system is ancillary to a dwelling erected on the same site and is: (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.
Garage appearance	
PO 14.1 Garaging is designed to not detract from the streetscape or appearance of a dwelling.	DTS/DPF 14.1 Garages and carports facing a street: (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.
Massing	
PO 15.1 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 15.1 None are applicable
Dwelling additions	
PO 16.1 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.	DTS / DPF 16.1 Dwelling additions: (a) are not constructed, added to or altered so that any part is situated closer to a public street (b) do not result in: (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: 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 or C. incorporate screening to a height of 1.5m above finished floor level (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: 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 B. 1.7m above finished floor level in all other cases.
Private Open Space	
PO 17.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 17.1 Private open space is provided in accordance with Design Table 1 - Private Open Space.
Water Sensitive Design	
PO 18.1 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.	DTS/DPF 18.1 Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes: (a) 80 per cent reduction in average annual total suspended solids (b) 60 per cent reduction in average annual total phosphorus (c) 45 per cent reduction in average annual total nitrogen.
PO 18.2 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 18.2 Development creating a common driveway / access that services 5 or more dwellings: (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 (b) manages site generated stormwater runoff up to and

	including the 1% AEP flood event to avoid flooding of buildings.
Car parking, access and manoeuvrability	
PO 19.1 Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area): (a) single width car parking spaces: (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 (b) double width car parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 19.2 Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.2 Uncovered car parking spaces have: (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 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.	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.
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.	DTS/DPF 19.4 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: (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.
PO 19.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 19.5 Driveways are designed and sited so that: (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
PO 19.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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: (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.
Waste storage	
PO 20.1 Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.	DTS/DPF 20.1 None are applicable.
Design of Transportable Dwellings	
PO 21.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 21.1 Buildings satisfy (a) or (b): (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.
Group dwelling, residential flat buildings and battle-axe development	
Amenity	
PO 22.1 Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.	DTS/DPF 22.1 Dwellings have a minimum internal floor area in accordance with the following 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
PO 22.2 The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	DTS/DPF 22.2 None are applicable.
PO 22.3 Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	DTS/DPF 22.3 None are applicable.
PO 22.4 Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	DTS/DPF 22.4 Dwelling sites/allotments are not in the form of a battle-axe arrangement.
Communal Open Space	
PO 23.1 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 23.1 None are applicable.
PO 23.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 23.2 Communal open space incorporates a minimum dimension of 5 metres.
PO 23.3 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 23.3 None are applicable.
PO 23.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 23.4 None are applicable.
PO 23.5 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 23.5 None are applicable.
Carparking, access and manoeuvrability	
PO 24.1	DTS/DPF 24.1

Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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 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.
PO 24.2 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 24.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 24.3 Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	DTS/DPF 24.3 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 24.4 Residential driveways in a battle-axe configuration are designed to allow safe and convenient movement.	DTS/DPF 24.4 Where in a battle-axe configuration, a driveway servicing one dwelling has a minimum width of 3m.
PO 24.5 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.	DTS/DPF 24.5 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 24.6 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 24.6 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 25.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	DTS/DPF 25.1 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.
PO 25.2 Soft landscaping is provided that improves the appearance of common driveways.	DTS/DPF 25.2 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	DTS/DPF 28.1 None are applicable.

(d) kerb ramps at pedestrian crossing points.	
Communal Open Space	
PO 29.1 Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 29.1 None are applicable.
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	DTS/DPF 28.3

Provision is made for suitable external clothes drying facilities.	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	
PO 31.1 Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.	DTS/DPF 31.1 None are applicable.
PO 31.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 31.2 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 32.1 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: (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: (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.	DTS/DPF 32.1 None are applicable.

Table 1 - Private Open Space

Dwelling Type	Minimum Rate
Dwelling (at ground level)	Total private open space area: (a) Site area <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line. Minimum directly accessible from a living room: 16m2 / with a minimum dimension 3m.
Dwelling (above ground level)	Studio (no separate bedroom): 4m^2 with a minimum dimension 1.8m One bedroom: 8m^2 with a minimum dimension 2.1m Two bedroom dwelling: 11m^2 with a minimum dimension 2.4m Three + bedroom dwelling: 15m^2 with a minimum dimension 2.6m
Cabin or caravan (permanently fixed to the ground) in a residential park or a caravan and tourist park	Total area: 16m^2, which may be used as second car parking space, provided on each site intended for residential occupation.

Design in Urban Areas

Assessment Provisions (AP)

Desired Outcome	
DO 1	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.

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 (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.	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 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.	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.
PO 1.5 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.	DTS/DPF 1.5 None are applicable.
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	
PO 6.1	DTS/DPF 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.	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 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.
Car parking appearance	
PO 7.1 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: (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 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, reduce solar heat absorption and reflection.	DTS/DPF 7.4 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 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 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 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	DTS/DPF 7.7 None are applicable.

porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.	
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 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	DTS/DPF 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.	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% transparency/openings fixed to a minimum height of: (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)	
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.	DTS/DPF 11.1 None are applicable.
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.	DTS/DPF 11.2 None are applicable.
PO 11.3 Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.	DTS/DPF 11.3 None are applicable.
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.	DTS/DPF 11.4 None are applicable.
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.	DTS/DPF 11.5 None are applicable.
All Development - Medium and High Rise	
External Appearance	
PO 12.1	DTS/DPF 12.1

Buildings positively contribute to the character of the local area by responding to local context.	None are applicable.
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.	DTS/DPF 12.2 None are applicable.
PO 12.3 Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.	DTS/DPF 12.3 None are applicable.
PO 12.4 Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.	DTS/DPF 12.4 None are applicable.
PO 12.5 External materials and finishes are durable and age well to minimise ongoing maintenance requirements.	DTS/DPF 12.5 Buildings utilise a combination of the following external materials and finishes: (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.
PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.	DTS/DPF 12.6 Building street frontages incorporate: (a) active uses such as shops or offices (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.
PO 12.7 Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.	DTS/DPF 12.7 Entrances to multi-storey buildings are: (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.
PO 12.8 Building services, plant and mechanical equipment are screened	DTS/DPF 12.8 None are applicable.

from the public realm.

Landscaping	
PO 13.1 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.	DTS/DPF 13.1 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.
PO 13.2 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.	DTS/DPF 13.2 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.

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

Tree size and site area definitions	
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

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 rooms or areas with those of other buildings so that views are oblique rather than direct to avoid direct line of sight	DTS/DPF 16.1 None are applicable.

(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 (d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.	
All residential development	
Front elevations and passive surveillance	
PO 17.1 Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 17.1 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street.
PO 17.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 17.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and Amenity	
PO 18.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 18.1 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.
PO 18.2 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.	DTS/DPF 18.2 None are applicable.
Ancillary Development	
PO 19.1 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.	DTS/DPF 19.1 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 (and not including a gable end) (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.
PO 19.2	DTS/DPF 19.2

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.	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 2 - Off-Street Car Parking Requirements in Designated Areas.
PO 19.3 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.	DTS/DPF 19.3 The pump and/or filtration system is ancillary to a dwelling erected on the same site and is: (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	
PO 20.1 Garaging is designed to not detract from the streetscape or appearance of a dwelling.	DTS/DPF 20.1 Garages and carports facing a street: (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.
PO 20.2 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.	DTS/DPF 20.2 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: (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.

PO 20.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 20.3 None are applicable
Private Open Space	
PO 21.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 21.1 Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
PO 21.2 Private open space is positioned to provide convenient access from internal living areas.	DTS/DPF 21.2 Private open space is directly accessible from a habitable room.
Landscaping	
PO 22.1 Soft landscaping is incorporated into development to: (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.	DTS/DPF 22.1 Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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% >200-450 / 20% >450 / 25% (b) at least 30% of any land between the primary street boundary and the primary building line.
Car parking, access and manoeuvrability	
PO 23.1 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area): (a) single width car parking spaces: (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

	(b) double width car parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 23.2 Uncovered car parking space are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.2 Uncovered car parking spaces have: (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 23.3 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.	DTS/DPF 23.3 Driveways and access points satisfy (a) or (b): (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: (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.
PO 23.4 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 23.4 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 23.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 23.5 Driveways are designed and sited so that: (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 or way is at least 6.2m wide along the boundary of the allotment / site
PO 23.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 23.6 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: (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.
Waste storage	
PO 24.1 Provision is made for the convenient storage of waste bins in a location screened from public view.	DTS/DPF 24.1 Where dwellings abut both side boundaries a waste bin storage area is provided behind the building line of each dwelling 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.
Design of Transportable Buildings	
PO 25.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 25.1 Buildings satisfy (a) or (b): (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.
Residential Development - Medium and High Rise (including serviced apartments)	
Outlook and Visual Privacy	
PO 26.1 Ground level dwellings have a satisfactory short range visual outlook to public, communal or private open space.	DTS/DPF 26.1 Buildings: (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	
PO 29.1 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.	DTS/DPF 29.1 Buildings containing in excess of 10 dwellings provide at least one of each of the following: (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least 50m^2 (c) 2 bedroom dwelling / apartment with a floor area of at least 65m^2 (d) 3+ bedroom dwelling / apartment with a floor area of at least 80m^2, and any dwelling over 3 bedrooms provides an additional 15m^2 for every additional bedroom.
PO 29.2 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.	DTS/DPF 29.2 None are applicable.
Common Areas	
PO 30.1 The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.	DTS/DPF 30.1 Common corridor or circulation areas: (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	
PO 31.1 Dwellings are of a suitable size to provide a high standard of amenity for occupants.	DTS/DPF 31.1 Dwellings have a minimum internal floor area in accordance with the following 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
PO 31.2 The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	DTS/DPF 31.2 None are applicable.
PO 31.3 Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	DTS/DPF 31.3 None are applicable.
PO 31.4 Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	DTS/DPF 31.4 Dwelling sites/allotments are not in the form of a battle-axe arrangement.
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 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.	DTS/DPF 33.4 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 sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 36.1 None are applicable.
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	DTS/DPF 37.1 None are applicable.

residents is not unduly restricted by the slope of the land.	
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.
PO 39.6 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	DTS/DPF 39.6 None are applicable.

surveillance.	
Site Facilities / Waste Storage	
PO 40.1 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 40.1 None are applicable.
PO 40.2 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 40.2 None are applicable.
PO 40.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 40.3 None are applicable.
PO 40.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.	DTS/DPF 40.4 None are applicable.
PO 40.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 40.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 40.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 40.6 None are applicable.
PO 40.7 Services, including gas and water meters, are conveniently located and screened from public view.	DTS/DPF 40.7 None are applicable.
Student Accommodation	
PO 41.1 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.	DTS/DPF 41.1 Student accommodation provides: (a) a range of living options to meet a variety of accommodation needs, such as one-bedroom, two-bedroom and disability access units (b) common or shared facilities to enable a more efficient use of space, including: (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 $8m^3$ 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.
PO 41.2 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.	DTS/DPF 41.2 None are applicable.
All non-residential development	
Water Sensitive Design	
PO 42.1 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.	DTS/DPF 42.1 None are applicable.
PO 42.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 42.2 None are applicable.
PO 42.3 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.	DTS/DPF 42.3 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 43.1 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: (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: (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.	DTS/DPF 43.1 None are applicable.
Laneway Development	

Infrastructure and Access	
PO 44.1 Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where: (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 intensity and orderly development of land fronting minor thoroughfares.	DTS/DPF 44.1 Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.

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 <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line. Minimum directly accessible from a living room: 16m2 / 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 rural landscape.	DTS/DPF 1.1 None are applicable.
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 *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992* 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 *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992*.
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	DTS/DPF 2.2 Commercial forestry plantations:

surface water resources.	(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).
PO 2.2 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.	DTS/DPF 2.2 None are applicable.
Primary Street Setback	

PO 3.1 Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.	DTS/DPF 3.1 Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.
Secondary Street Setback	
PO 4.1 Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.	DTS/DPF 4.1 Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.
Boundary Walls	
PO 5.1 Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.	DTS/DPF 5.1 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): (a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height (b) do not: (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.
PO 5.2 Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.	DTS/DPF 5.2 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.
Side Boundary Setback	
PO 6.1 Buildings are set back from side boundaries to provide: (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours.	DTS/DPF 6.1 Other than walls located on a side boundary, buildings are set back from side boundaries: (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.
Rear Boundary Setback	
PO 7.1 Buildings are set back from rear boundaries to provide: (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours	DTS/DPF 7.1 Dwellings are set back from the rear boundary: (a) 3m or more for the first building level (b) 5m or more for any subsequent building level.

(c) private open space (d) space for landscaping and vegetation.	
Buildings elevation design	
PO 8.1 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.	DTS/DPF 8.1 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: (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.
PO 8.2 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 8.2 Each dwelling with a frontage to a public street: (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 $2m^2$ facing the primary street
PO 8.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 8.3 None are applicable.
PO 8.4 Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.	DTS/DPF 8.4 None are applicable.
PO 8.5 Entrances to multi-storey buildings are: (a) oriented towards the street (b) visible and easily identifiable from the street (c) designed to include a common mail box structure.	DTS/DPF 8.5 None are applicable.
Outlook and amenity	
PO 9.1	DTS/DPF 9.1

<table>
<tr><td>Living rooms have an external outlook to provide a high standard of amenity for occupants.</td><td>A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.</td></tr>
<tr><td>PO 9.2

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.</td><td>DTS/DPF 9.2

None are applicable.</td></tr>
<tr><td colspan="2">Private Open Space</td></tr>
<tr><td>PO 10.1

Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</td><td>DTS/DPF 10.1

Private open space is provided in accordance with the following table:

<table>
<tr><th>Dwelling Type</th><th>Dwelling / Site Configuration</th><th>Minimum Rate</th></tr>
<tr><td>Dwelling (at ground level)</td><td></td><td>Total area: 24m^2 located behind the building line

Minimum adjacent to a living room: 16m^2 with a minimum dimension 3m</td></tr>
<tr><td rowspan="4">Dwelling (above ground level)</td><td>Studio</td><td>4m^2 / minimum dimension 1.8m</td></tr>
<tr><td>One bedroom dwelling</td><td>8m^2 / minimum dimension 2.1m</td></tr>
<tr><td>Two bedroom dwelling</td><td>11m^2 / minimum dimension 2.4m</td></tr>
<tr><td>Three + bedroom dwelling</td><td>15 m^2 / minimum dimension 2.6m</td></tr>
</table>
</td></tr>
<tr><td>PO 10.2

Private open space positioned to provide convenient access from internal living areas.</td><td>DTS/DPF 10.2

At least 50% of the required area of private open space is accessible from a habitable room.</td></tr>
<tr><td>PO 10.3

Private open space is positioned and designed to:

(a) provide useable outdoor space that suits the needs of occupants;
(b) take advantage of desirable orientation and vistas; and
(c) adequately define public and private space.</td><td>DTS/DPF 10.3

None are applicable.</td></tr>
<tr><td colspan="2">Visual privacy</td></tr>
</table>

PO 11.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 11.1 Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following: (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 1.5m above the finished floor.
PO 11.2 Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.	DTS/DPF 11.2 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% transparency/openings fixed to a minimum height of: (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
Landscaping	
PO 12.1 Soft landscaping is incorporated into development to: (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.	DTS/DPF 12.1 Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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% <200 — 15% 200-450 — 20% >450 — 25% (b) at least 30% of land between the road boundary and the building line.
Water Sensitive Design	
PO 13.1 Residential development is designed to capture and use	DTS/DPF 13.1 None are applicable.

stormwater to: (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.	
Car Parking	
PO 14.1 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.	DTS/DPF 14.1 On-site car parking is provided at the following rates per dwelling: (a) 2 or fewer bedrooms - 1 car parking space (b) 3 or more bedrooms - 2 car parking spaces.
PO 14.2 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.2 Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area): (a) single parking spaces: (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): (i) a minimum length of 5.4m (ii) a minimum width of 5.5m (iii) minimum garage door width of 2.4m per space.
PO 14.3 Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.3 Uncovered car parking spaces have: (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	DTS/DPF 15.1 None are applicable.

space associated with residential buildings receive direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June.	
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.
PO 17.3	DTS/DPF 17.3

Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	Driveways are designed and sited so that: (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 or way is at least 6.2m wide along the boundary of the allotment / site.
PO 17.4 Driveways and access points are designed and distributed to optimise the provision of on-street parking.	DTS/DPF 17.4 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: 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.
PO 17.5 Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.	DTS/DPF 17.5 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: (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.
PO 17.6 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.	DTS/DPF 17.6 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 17.7 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 17.7 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.
Storage	
PO 18.1 Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.	DTS/DPF 18.1 Dwellings are provided with storage at the following rates and 50% or more of the storage volume is 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 $12m^3$.
Earthworks	
PO 19.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 19.1 The development does not involve: (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.
Service connections and infrastructure	
PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.	DTS/DPF 20.1 The site and building: (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 *South Australian Public Health Act 2011* (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 *Electricity Act 1996*.
Site contamination	
PO 21.1 Land that is suitable for sensitive land uses to provide a safe environment.	DTS/DPF 21.1 Development satisfies (a), (b), (c) or (d): (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 does not 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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that 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).

Infrastructure and Renewable Energy Facilities

Assessment Provisions (AP)

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.

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	DTS/DPF 2.1 None are applicable.

(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.	
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 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.	DTS/DPF 4.1 None are applicable.
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.	DTS/DPF 4.2 None are applicable.
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.	DTS/DPF 4.3 None are applicable.

Electricity Infrastructure and Battery Storage Facilities	
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.	DTS/DPF 5.1 None are applicable.
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.	DTS/DPF 5.2 None are applicable.
PO 5.3 Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.	DTS/DPF 5.3 None are applicable.
Telecommunication Facilities	
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.	DTS/DPF 6.1 None are applicable.
PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.	DTS/DPF 6.2 None are applicable.
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 interrupt views of a	DTS/DPF 6.3 None are applicable.

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 (c) using materials and finishes that complement the environment (d) screening using landscaping and vegetation, particularly for equipment shelters and huts.	
Renewable Energy Facilities	
PO 7.1 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.	DTS/DPF 7.1 None are applicable.
Renewable Energy Facilities (Wind Farm)	
PO 8.1 Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.	DTS/DPF 8.1 Wind turbine generators are: (a) set back at least 2000m from the base of a turbine to any of the following zones: (i) Rural Settlement Zone (ii) Township Zone (iii) Rural Living Zone (iv) Rural Neighbourhood Zone with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine). (b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation
PO 8.2 The visual impact of wind turbine generators on natural landscapes is managed by: (a) designing wind turbine generators to be uniform in colour, size and shape (b) coordinating blade rotation and direction (c) mounting wind turbine generators on tubular towers as opposed to lattice towers.	DTS/DPF 8.2 None are applicable.
PO 8.3 Wind turbine generators and ancillary development minimise potential for bird and bat strike.	DTS/DPF 8.3 None are applicable.
PO 8.4 Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.	DTS/DPF 8.4 No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.
PO 8.5	DTS/DPF 8.5

Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.	None are applicable.
Renewable Energy Facilities (Solar Power)	
PO 9.1 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.	DTS/DPF 9.1 None are applicable.
PO 9.2 Ground mounted solar power facilities allow for movement of wildlife by: (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.	DTS/DPF 9.2 None are applicable.
PO 9.3 Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.	DTS/DPF 9.3 Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria:

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

Notes:

1. Does not apply when the site of the proposed ground mounted solar

	power facility is located within one of these zones.
PO 9.4 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.	DTS/DPF 9.4 None are applicable.
Hydropower / Pumped Hydropower Facilities	
PO 10.1 Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.	DTS/DPF 10.1 None are applicable.
PO 10.2 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.	DTS/DPF 10.2 None are applicable.
PO 10.3 Hydropower / pumped hydropower facilities on existing or former mine sites minimise environmental impacts from site contamination, including from mine operations or water sources subject to such processes, now or in the future.	DTS/DPF 10.3 None are applicable.
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:	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) 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.	(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.

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)	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

(c) any other watercourse, bore or well used for domestic or stock water supplies.	used for domestic or stock water supplies.
PO 3.2 Intensive animal husbandry operations and dairies incorporate appropriately designed effluent and run-off facilities that: (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.	DTS/DPF 3.2 None are applicable.

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	
PO 1.1 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.	DTS/DPF 1.1 None are applicable.
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.
Hours of Operation	
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:	DTS/DPF 2.1 Development operating within the following hours: **Class of Development** | **Hours of operation**

(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.	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

Overshadowing	
PO 3.1 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 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 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 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 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.	DTS/DPF 3.3 None are applicable.

PO 3.4 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.	DTS/DPF 3.4 None are applicable.
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: (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.
PO 4.3 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).	DTS/DPF 4.3 The pump and/or filtration system ancillary to a dwelling erected on the same site is: (a) enclosed in a solid acoustic structure 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.
PO 4.4 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.	DTS/DPF 4.4 Adjacent land is used for residential purposes.
PO 4.5 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).	DTS/DPF 4.5 None are applicable.

<table>
<tr><td>PO 4.6

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.</td><td>DTS/DPF 4.6

Development incorporating music includes noise attenuation measures that will achieve the following noise levels:
<table><tr><th>Assessment location</th><th>Music noise level</th></tr><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 (LOCT10,15 < LOCT90,15 + 8dB)</td></tr></table></td></tr>
<tr><td colspan="2">Air Quality</td></tr>
<tr><td>PO 5.1

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.</td><td>DTS/DPF 5.1

None are applicable.</td></tr>
<tr><td>PO 5.2

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:

(a) incorporating appropriate treatment technology before exhaust emissions are released
(b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.</td><td>DTS/DPF 5.2

None are applicable.</td></tr>
<tr><td colspan="2">Light Spill</td></tr>
<tr><td>PO 6.1

External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).</td><td>DTS/DPF 6.1

None are applicable.</td></tr>
<tr><td>PO 6.2

External lighting is not hazardous to motorists and cyclists.</td><td>DTS/DPF 6.2

None are applicable.</td></tr>
<tr><td colspan="2">Solar Reflectivity / Glare</td></tr>
<tr><td>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.</td><td>DTS/DPF 7.1

None are applicable.</td></tr>
<tr><td colspan="2">Electrical Interference</td></tr>
<tr><td>PO 8.1</td><td>DTS/DPF 8.1</td></tr>
</table>

Development in rural and remote areas does not unreasonably diminish or result in the loss of existing communication services due to electrical interference.	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 on-site storage capacity not exceeding 1000 cubic metres

	(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 (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.
PO 9.6 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.	DTS/DPF 9.6 None are applicable.
PO 9.7 Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.	DTS/DPF 9.7 None are applicable.
Interface with Mines and Quarries (Rural and Remote Areas)	
PO 10.1 Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.	DTS/DPF 10.1 Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the *Mining Act 1971*.

Land Division

Assessment Provisions (AP)

Desired Outcome	
DO 1	Land division: (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	
PO 1.1	DTS/DPF 1.1

Land division creates allotments suitable for their intended use.	Division of land satisfies (a) or (b): (a) reflects the site boundaries illustrated and approved in an operative or existing development authorisation for residential development under the *Development Act 1993* or *Planning, Development and Infrastructure Act 2016* 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.
PO 1.2 Land division considers the physical characteristics of the land, preservation of environmental and cultural features of value and the prevailing context of the locality.	DTS/DPF 1.2 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 infrastructure, street tree planting, landscaping and street furniture.	DTS/DPF 3.5 None are applicable.
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 feature.	DTS/DPF 4.6 None are applicable.
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,	DTS/DPF 7.1 None are applicable.

watercourses or other water bodies.	
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 Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	DTS/DPF 9.2 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	DTS/DPF 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.	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 indigenous plant species and large trees.	DTS/DPF 1.2 None are applicable.
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	DTS/DPF 5.3 None are applicable.

park.	
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 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.	DTS/DPF 6.1 None are applicable.
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.	DTS/DPF 7.4 None are applicable.
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;	DTS/DPF 8.2 None are applicable.

(c) in car parking areas.	
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.

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 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.	DTS/DPF 1.1 None are applicable.
PO 1.2 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 underserviced 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.	DTS/DPF 1.2 None are applicable.

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	
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.	DTS/DPF 1.1 None are applicable.
PO 1.2 Resource extraction activities avoid damage to cultural sites or artefacts.	DTS/DPF 1.2 None are applicable.
Water Quality	
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.	DTS/DPF 2.1 None are applicable.
Separation Treatments, Buffers and Landscaping	
PO 3.1 Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.	DTS/DPF 3.1 None are applicable.
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.

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): (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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that- 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.

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: (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	DTS/DPF 2.6

Long-term occupation does not displace tourist accommodation, particularly in important tourist destinations such as coastal and riverine locations.	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 vegetation lost through bushfire).	DTS/DPF 3.1 None are applicable.
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	DTS/DPF 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.	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 parking is appropriate).	DTS/DPF 3.6 Driveways and access points: (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: (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.
PO 3.7 Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.	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: (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.

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.	DTS/DPF 3.8 None are applicable.
PO 3.9 Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.	DTS/DPF 3.9 None are applicable.
Access for People with Disabilities	
PO 4.1 Development is sited and designed to provide safe, dignified and convenient access for people with a disability.	DTS/DPF 4.1 None are applicable.
Vehicle Parking Rates	
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: (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.	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: (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.
Vehicle Parking Areas	
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.	DTS/DPF 6.1 Movement between vehicle parking areas within the site can occur without the need to use a public road.
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.	DTS/DPF 6.2 None are applicable.
PO 6.3 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.	DTS/DPF 6.3 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	DTS/DPF 10.1

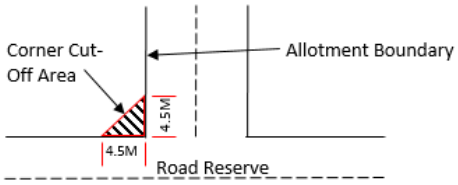
Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	Development does not involve building work, or building work is located wholly outside the land shown as Corner Cut-Off Area in the following diagram: 

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) - 2 spaces per dwelling. 0.2 spaces per dwelling for visitor parking.
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	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. 0.2 spaces per dwelling for visitor parking.
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	Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation. Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation. A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.
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	2.5 spaces per 100m^2 of gross leasable floor area 1 space per 100m^2 of outdoor area used for display purposes.
Shop (no commercial kitchen)	5.5 spaces per 100m^2 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. 5 spaces per 100m^2 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 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)	Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat. Premises with take-away service but with no seats - 12 spaces per 100m^2 of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point. 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.
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	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.

	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. For a tertiary institution - 0.4 per student based on the maximum number of students on the site at any time.
Health Related Uses	
Hospital	4.5 spaces per bed for a public hospital. 1.5 spaces per bed for a private hospital.
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** **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.**		**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 3 spaces for each dwelling with a total floor area greater than 150 square metres. Residential flat building or Residential component of a multi-storey building: 1 visitor space for each 6 dwellings.	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 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.	City Living Zone Urban Corridor (Boulevard) Zone

			Urban Corridor (Business) Zone Urban Corridor (Living) Zone Urban Corridor (Main Street) Zone Urban Neighbourhood Zone
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.	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Business Neighbourhood Zone Suburban Main Street Zone Urban Activity Centre Zone
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	City Living 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
Residential development			
Residential component of a multi-storey building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 2 bedroom dwelling - 1 space per dwelling 3 or more bedroom dwelling - 1.25 spaces per dwelling 0.25 spaces per dwelling for visitor parking.	None specified.	City Living Zone Strategic Innovation 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
Residential flat building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 2 bedroom dwelling - 1 space per dwelling	None specified.	City Living Zone Urban Activity Centre Zone Urban Corridor (Boulevard) Zone Urban Corridor (Business) Zone Urban Corridor (Living) Zone

	3 or more bedroom dwelling - 1.25 spaces per dwelling 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
The designated area is wholly located within Metropolitan Adelaide and any part of the development site satisfies one or more of the following: (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) (b) is within 400 metres of a bus interchange(1) (c) is within 400 metres of an O-Bahn interchange(1) (d) is within 400 metres of a passenger rail station(1) (e) is within 400 metres of a passenger tram station(1) (f) is within 400 metres of the Adelaide Parklands.	(a) All zones in the City of Adelaide (b) Strategic Innovation Zone in the following locations: (i) City of Burnside (ii) City of Marion (iii) City of Mitcham (c) Urban Corridor (Boulevard) Zone (d) Urban Corridor (Business) Zone (e) Urban Corridor (Living) Zone (f) Urban Corridor (Main Street) Zone (g) Urban Neighbourhood Zone

[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 **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.**
Consulting Room	1 space per 20 employees plus 1 space per 20 consulting rooms for customers.
Educational establishment	For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for visitors. For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.

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 Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone	Metropolitan Adelaide

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: (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	DTS/DPF 2.2 Wastewater lagoons are set back 50m or more from

minimise environmental harm and adverse effects on water resources.	watercourse banks.
PO 2.3 Wastewater lagoons are designed and sited to: (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.

PLANNING STUDIO
URBAN & REGIONAL PLANNING

PLANNING ASSESSMENT REPORT

DEVELOPMENT APPLICATION

MOUNT BARKER
REGIONAL AQUATIC & LEISURE CENTRE

304 SPRINGS ROAD
MOUNT BARKER

Prepared for:

Mount Barker District Council
DesignInc Adelaide

17 October 2022

MOUNT BARKER
DISTRICT COUNCIL

DesignInc

Proprietary Information Statement

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Revision	Description	Author	Review	Date
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Approved : Emma Barnes | Director Date : 17/10/2021

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1. EXECUTIVE SUMMARY

Category	Details
PROJECT	Mount Barker Regional Aquatic & Leisure Centre
ADDRESS	304 Springs Road, Mount Barker
CERTIFICATES OF TITLE	A50 in Deposited Plan 123843, CT Volume: 6260; Folio 699
SITE AREA	36.62 hectares (whole of land)
PRIMARY FRONTAGE (Bald Hills Road)	64.71 metres + 161.81 metres (combined frontage 226.52 meters)
LOCAL GOVERNMENT	Mount Barker District Council
RELEVANT AUTHORITY	To be determined
PLANNING & DESIGN CODE	Version 2022.19, 13 October 2022
ZONE	Master Planned Neighbourhood (MPN)
SUB ZONE	Emerging Activity Centre (EAC)
OVERLAYS	Affordable Housing Hazards (Bushfire - Medium Risk) Hazards (Flooding) Hazards (Flooding – General) Heritage Adjacency Local Heritage Place Murray Darling Basin Native Vegetation Prescribed Water Resources Area River Murray Tributaries Protection Area Regulated and Significant Tree Water Resources
VARIATIONS	Concept Plan (V0006) – 3 Concept Plan 3 – Mount Barker and Littlehampton
EXITSING USE	Whole of land used for primary production / farming with associated outbuildings, linear trail and Summit Sport and Recreation Park. Site of proposal currently used for primary production.
PROPOSAL DESCRIPTION	Indoor Recreation Facility with associated car parking and landscaping

Category	Details
GOVERNMENT AGENCY REFERRALS	Nil
CLASSIFICATION OF DEVELOPMENT	Performance Assessed
NOTIFICATION	Exempt
APPLICANT	Mount Barker District Council
EXTERNAL PROJECT MANAGEMENT	Sinclair Brook
PROJECT ARCHITECT	DesignInc Adelaide
PLANNING	Planning Studio
LANDSCAPE	Clover. Green Space
STORMWATER	FMG Engineering
SERVICES	Lucid Consulting Australia
TRAFFIC & PARKING	MFY
ACOUSTIC	Sonus
ARBORIST	Adelaide ARB Consultants
SITE CONTAMINATION	Tierra Environment
PRIMARY CONTACT	Emma Barnes | Planning Studio 0431 527 636 emma@planingstudio.com.au
OUR REFERENCE	P0364

2. BACKGROUND AND CONTEXT

2.1 Purpose

The Planning Assessment Report ('**report**') has been prepared in relation to a development application by the Mount Barker District Council (**'the Council'**) for an 'Indoor Recreation Facility with associated car parking and landscaping', generally known as the Mount Barker Regional Aquatic and Leisure Centre project ('**the Proposal'**).

This report provides information about the subject site and the proposal, and addresses the merits of the proposal against the relevant provisions of the Planning and Design Code (**'the Code'**) as it relates to the proposal.

This report has been prepared on the basis of the plans, elevations and external perspectives for the proposal prepared by DesignInc Adelaide (Project Architect) and provided in **Appendix A**, and having reviewed the reports and advice from a number of specialist consultants in relation to landscape design, stormwater management, provision of services, transport impact (traffic and parking), environmental noise (acoustic), site contamination and an assessment of trees identified on the site and adjoining land.

Specialist reports are provided in **Appendices B - I**.

2.2 About the Project

The proposed Mount Barker Regional Aquatic & Leisure Centre will be built on Council-owned land, within a precinct bordered by Bald Hills Road and Springs Road, Mount Barker. The land contains Stage 1 of the Summit Sport and Recreation Park, linear trail, and local heritage barns, see **Figure 1** below.

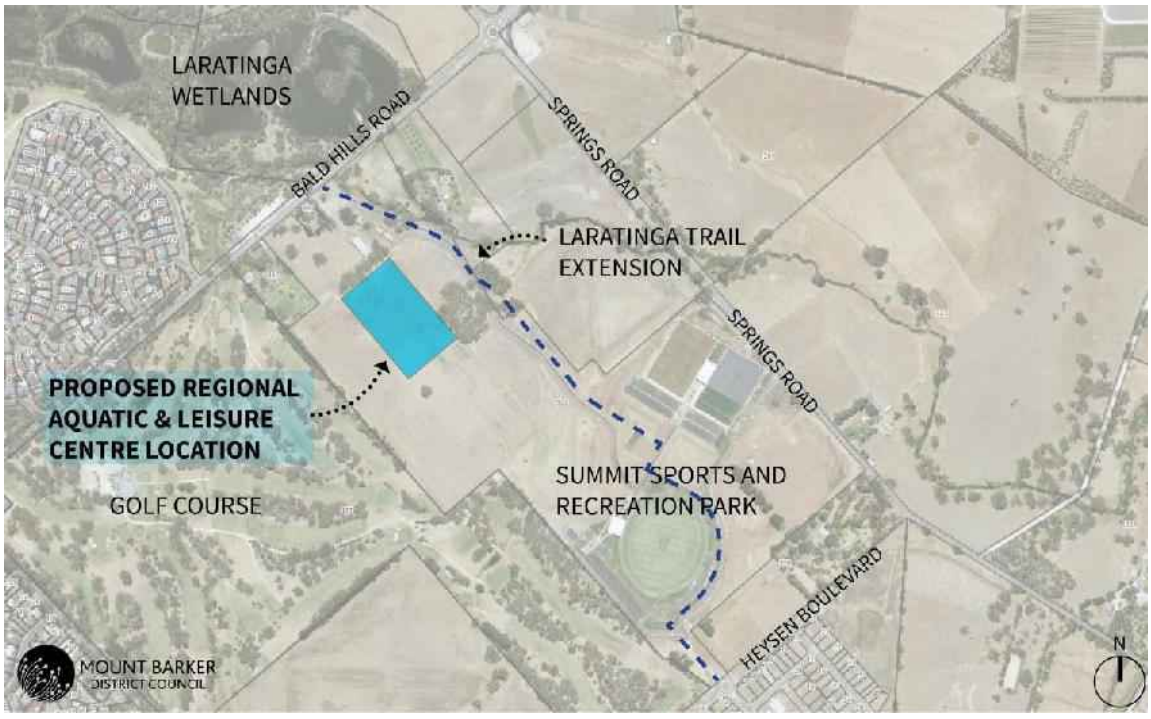

Figure 1 | Location Plan
Source: Mount Barker District Council

In September 2022, Mount Barker District Council (**'the Council'**) endorsed the detailed concept plan for the proposal, which is being co-funded with the Government of South Australia's Local Government Infrastructure Partnership Program and Australian Government's Community Development Grant Scheme.

The new indoor aquatic facility will replace Council's existing, ageing Mountain Pool complex, and has been designed with extensive community and stakeholder consultation including endorsement from SwimmingSA and Royal Life Saving Australia.

DesignInc Adelaide were appointed in 2022 to lead the design process with the Council and community, through a Community Reference Group, to produce an outstanding centre that will deliver the best outcomes for the region.

The design of the facility features a competition capable 25 metre lap pool, leisure pool, toddler splash and play area, warm water therapy pool, gymnasium, café, crèche, and community and wellness rooms.

Other features include sensitive integration with the site's existing native trees and heritage barns and careful consideration of the topography of the land. The building orientation and design enables an attractive outlook to the Mount Barker Summit and adjacent Mount Barker Creek environs.

Acknowledgement: Mount Barker District Council 2022

Artist Impression | Learn to Swim pool

3. SITE AND LOCALITY

3.1 The Site

The current development application is isolated to a vacant portion of the land situated between a private allotment and the Mount Barker Creek and linear trail. Vehicular access is provided via Bald Hills Road. The land can also be accessed readily by walking, cycling and public transport.

The site of the development is a portion of a larger area of land which currently comprises the Summit Sport and Recreation Park, located approximately 500 metres to the east. The broader, non-statutory, 'Summit Leisure and Entertainment Precinct Master Plan' (**'Master Plan'**) has been developed for the land which identifies the site of the proposal as 'aquatic centre'.

The land contains scattered vegetation (River Red Gums – all to be retained) and takes advantage of expansive views of Mount Barker Summit. The development site lies to the south-east of a large existing shed and three local heritage listed barns.

The Mount Barker Creek dissects the northern portion of the land, wholly contained within the land to the north of the existing linear trail.

The land exhibits a variation in topography, falling to the north toward the watercourse and rising again beyond. The land is visible from both Springs Road and the Bald Hills Road roundabout.

Figure 2, below, identifies the area subject of the application (in red).

Figure 2 | Mount Barker Regional Aquatic and Leisure Centre - subject land
(source: DesignInc October 2022)

The land is located within the **Master Planned Neighbourhood Zone** (**'the Zone'**) of the Code, where Desired Outcome (**'DO'**) D01 seeks '*A new or expanding community with a diverse range of housing that supports a range of needs and lifestyles located within easy reach of a diversity of services, facilities and open space'*.

Performance Outcome ('PO') 1.1 anticipates '*Diverse housing choices and a wide range of complementary recreational, community services and other activities to support a growing community and create a pleasant place to live.'*

More specifically, the land is located within the **Emerging Activity Centre Sub Zone** (**'the Sub Zone'**) where *'Activity centres, employment, and community services make neighbourhoods a healthy and convenient place to live.'*

The establishment of the Mount Barker Regional Aquatic and Leisure Centre 'Indoor Recreational Facility' is an anticipated land use within both the Zone and the Sub Zone.

Artist Impression | 25 metre pool

3.2 The Locality and Surrounding Development

The Mount Barker linear trail ('**the linear trail**') is located on the northern boundary of the land, providing a pedestrian/cycling trail that extends from the western extremity of the Mount Barker township, through the Laratinga Wetlands to the north of the proposal, continuing through to the Summit Sport and Recreation Park to the east of the site. The linear trail generally follows the alignment of the Mount Barker Creek.

The land is bounded by the Aston Hills Golf Club to the south and south west, and a continuation of farming land to the north and north west.

Residential development is provided to the west and south east of the broader precinct.

A carpark associated with the Laratinga Wetlands/Mount Barker linear trail is accessed directly opposite the subject land.

The land and the *approximate* siting of the proposal is identified in **Figure 3** below.

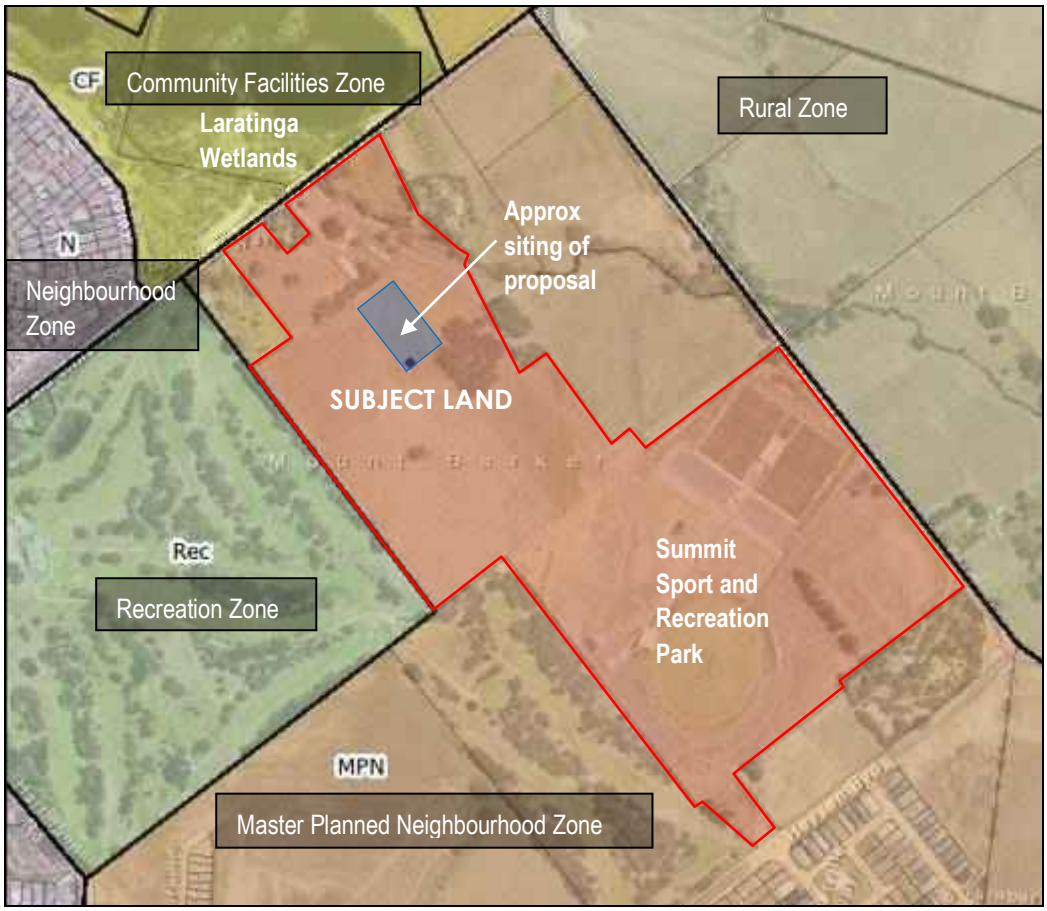

Figure 3 | Zone overlay relative to subject land
(Source: https://maps.sa.gov.au/SAPPA/)

4. PROPOSED DEVELOPMENT

4.1 Architectural Design Statement

The Mount Barker Regional Aquatic & Leisure Centre is located adjacent the Mount Barker Creek, linear trail and existing local heritage barns behind a row of existing mature trees which screens the building from Bald Hills Road. The building provides three separate pool halls with an upper level dry fitness centre above the shared community facilities at the ground level. The building planning and form provides flexibility for the community, with adaptable multiple use spaces allowing the reduction in the overall mass of the centre in its context to the existing site and consideration to the natural fall of the landscape.

The building's positioning from the linear trail and reduced scale of the northern pool hall have been designed specifically with consideration to the existing heritage barns, an appreciation of the adjacent line of existing gum trees, setback from the creek whilst retaining the existing cluster of trees to the south east. These setbacks respect the existing site conditions and heritage of the site whilst enabling the areas along the creek line and barns to remain activated and free for future community use.

The building main entrance has been positioned to enable future flexibility. It's alignment with the Mount Barker Summit provides a destination and a sense of arrival for the community. This encourages movement and connection through the building as well as providing outlook to the creek and Mount Barker Summit beyond from all aquatic spaces.

The development has been master planned with careful consideration given to the safe movement of pedestrians, target user groups, cyclists and vehicles, with connections to the linear trail, multiple equitable access points at ground level, and pedestrian walkways through the carpark.

Proposed materiality includes the use of local stonework, transparent glazing to community spaces along with robust materials at ground level, timber finishes to verandas and secondary elements as well as lightweight cladding. Materials proposed are in response to the existing materiality, natural textures and tones of the site as well as local context. The upper level sun-shading devices are representative of the movement of the hills location and creek with screening segmented to capture views to the adjacent tree canopy and beyond whilst protecting the glazing from the western sun.

4.2 Land Use

The new '*Indoor Recreation Facility*' will service the community of Mount Barker and the Adelaide Hills more broadly. The multi-purpose integrated facility provides a competition capable 25 metre/10 lane Lap Pool, a Learn to Swim/Splash pad pool and a Warm Water (therapy) Pool. The aquatic centre component will be supported by separate viewing/seating areas, a central marshalling concourse and access to changeroom and sanitary facilities within close proximity to each of the pool areas.

An area adjacent the main entry lobby will include ancillary administration areas, a café and a multi-purpose space that could be utilised for creche, meeting rooms or community use. The facility will also contain three 10m^2 ancillary consult rooms that would be used by allied health professionals in association with aquatic and leisure activities when required. Consult rooms will not operate separate to the purpose of the facility.

The southern end of the building at the lower level will contain aquatic plant and equipment storage areas. Each pool is provided with a small store room for equipment. All deliveries of pool equipment and materials (including pool chemicals) will be directed to roller doors located on the southern end of the building, accessible via the delivery and service access road.

At the upper level, a fitness centre provides spaces for a weights and cardio room, and adaptable space for program and spin activities. Any formal fitness classes would be undertaken within this portion of the fitness centre. The upper level is provided with additional changeroom and sanitary facilities and a small area for administration/reception. An internal mechanical plant room is also located on the upper level. The upper level can be accessed via the main lobby or (emergency) stairs to the rear.

The proposal is supported by a dedicated car park to the front (south west) of the building, incorporating a dedicated drop off/pick up zone, with direct access to both the main and secondary entrances at the lower level. The carpark provides a total of 176 spaces, including eight (8) accessible spaces. An overflow parking area, with a capacity for 60 vehicles and four (4) buses is available to the south of the carpark, for instances where unique events are held and additional on-site parking may be required.

The proposal can be serviced by water, sewer, power and communications providers without impediment. While detailed design work and agreements are yet to be finalised, preliminary investigations regarding availability and cost estimates have been undertaken and it is expected that suitable service connections will be achieved.

Figure 4 | External perspective – north elevation *(Source: DesignInc, 2022)*

Figure 5 | External perspective – west elevation *(Source: DesignInc, 2022)*

Figure 6 | External perspective – north-west elevation *(Source: DesignInc, 2022)*

4.3 Built Form Proposal

The proposed Indoor Recreation Facility is a two storey building with a total floor area of some 5,350.4m^2. The ground floor will occupy a footprint of 4,258.09m^2 containing a combination of aquatic facilities, administration and community uses such as the creche, café, community rooms and informal seating areas. Extensive glazing is provided to the ground level, and void area above the pool halls, providing light filled spaces and expansive views to the north. This design approach will ensure public areas are filled with natural light.

The upper level provides an additional 1,092.31m^2 of floor space, dominated by the large weights and cardio space and two adaptable program and spin rooms. The upper level also contains a small administration area, changerooms and sanitary facilities and storage and cleaner rooms. A mechanical plant room is accessed via the upper level.

The main building is provided with a footprint (ground floor) measuring some 112 metres in length, with widths varying from 36.3 metres at the warm water pool end (north) to 53 metres at the southern end (aquatic plant room). The upper level has a considerably smaller floor plate and is well setback from the expansive canopy below, providing an appropriate stepping back and transition between the two levels.

The building has an overall height of 10.0 metres to the top of the parapet.

The proposed building will be setback 162 metres from the primary frontage of the land, (Bald Hills Road) and 58 metres to the linear trail at its closest part. The substantial setback to Bald Hills Road ensures the retention of existing Significant and Regulated trees. There is a 25 metre set back achieved to the closest of the three local heritage listed barns to the north west. At this elevation, the building is intentionally scaled to provide an appropriate spacing and transition to the heritage buildings. The introduction of stone walling to the northern elevation of the building seeks to complement the setting and materials used within the barns. The second storey rises with an additional 22 metre setback to the barns at this elevation.

An arboricultural impact assessment of 21 individual trees within or adjacent to the site area associated with the proposal has been undertaken. This assessment concludes that no trees are required to be removed, or damaged, to facilitate the proposal.

Figure 7 | East Elevation – view from linear trail*(Source: DesignInc, 2022)*

Figure 8 | West Elevation – view from carpark *(Source: DesignInc, 2022)*

4.4 Materials and Finishes

The proposed design utilises a limited number of materials with a natural and neutral material palette, for a contemporary yet elegant and timeless appearance.

External cladding will generally include light and dark coloured brickwork and local stonework feature walling, together with light metal cladding, timber accents and a combination of non-reflective and perforated metal cladding to the upper level.

Metal screen/shading panels will be provided to the western elevation at the upper level, while a large feature window on the northern elevation at the upper level will provide expansive views to the natural landscape and heritage barns. A timber framed canopy will wrap the north-eastern and northern façade. Acoustic screening will be utilised where required (plant).

The lower level will consist of predominantly brickwork masonry walls in a neutral palette, with extensive glazing and feature stone walling. Material selections and landscape features will enhance the visibility of the two main entry points to the facility, with stone walling paying respect to the adjoining local heritage barns. Glazing will consist of aluminium framed 'performance' glazing in accordance with the NCC as well as addressing the internal environment demands of an aquatic facility.

Signage depicted at the main entry to the building is currently presented with black steel signage lettering, in black, featuring the words 'Mount Barker Regional Aquatic & Leisure Centre' however this will be subject to further approval by Council in due course. A separate application for signage will be submitted at a later date.

The location of plant equipment is also indicative at this stage. Notwithstanding, it is proposed that plant equipment be located on the roof, with appropriate screening to provide both visual and acoustic protection. The final design and siting of roof plant will be subject to detail design and further review by the project acoustic engineer.

All external lighting is to be provided in a manner that assists with way finding and security, whilst minimising any light spill impact on adjoining residential properties.

The plans identify a 'future' opportunity to include roof mounted solar panels. If such works proceed, the building has been engineered in a manner that will support installations.

Materials to be used in the building reflect a contemporary approach to design with supplementary landscaping to enhance the appearance of the site access, building and car parking areas, whilst paying respect to the local environment, heritage barns, and the existing trees and linear trail adjoining the Mount Barker Creek. The design seeks to maximise views to Mount Barker Summit whilst ensuring adequate and appropriate connectivity between the proposed building and surrounding environment.

Additional landscaping, comprising swales and rain gardens, together with trees and low level plantings, will be provided in areas around the main building and throughout the parking area.

Material selections successfully integrate and complement the natural and built environment and existing landscape character.

Figure 9 | Material Selections *(Source: Source: DesignInc, Oct 2022)*

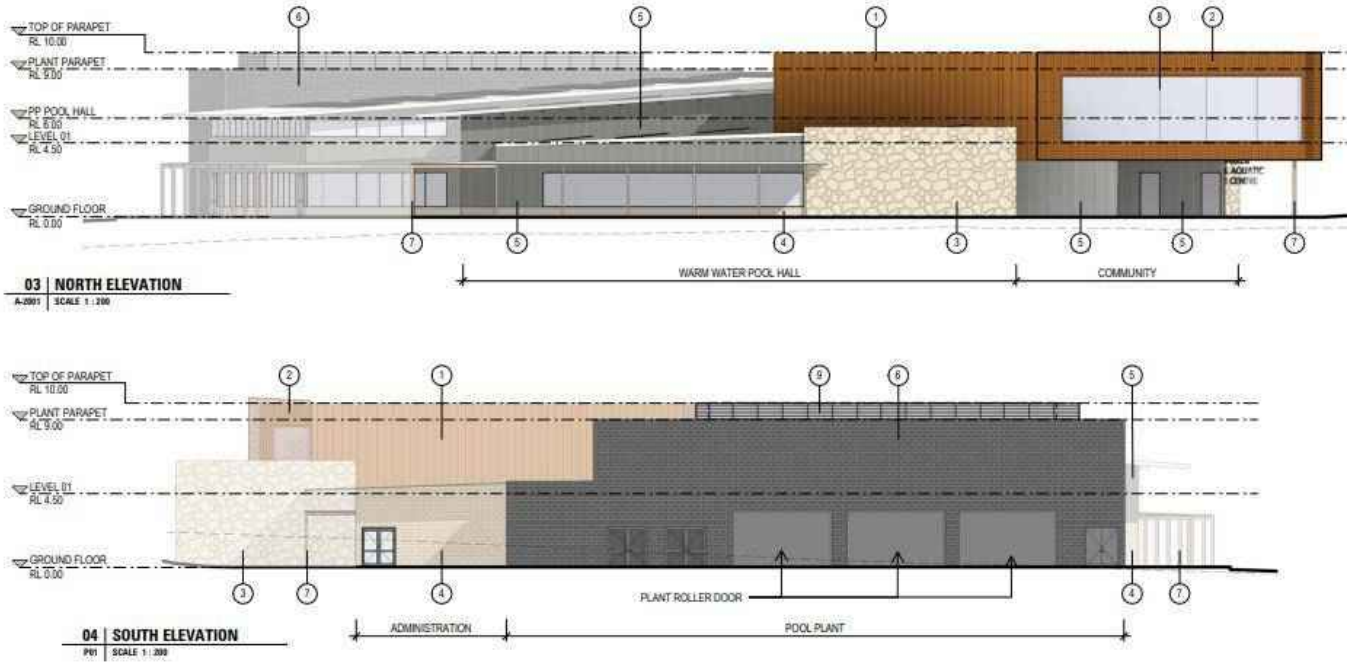

Figure 10 | Material Selections - North and South Elevations *(Source: Source: DesignInc, Oct 2022)*

Architectural Drawings (proposal plans), prepared by DesignInc Adelaide are provided in **Appendix A**.

Note: Architectural drawings take precedence over all others regarding built form. Drawings also include 'External Perspectives' which should be considered similar to artist impressions. They are provided as a graphical illustration of the final form of the development.

4.5 Landscape Concept Design

The Landscape Concept Design developed for the proposal:

- Respects for site and cultural heritage;
- Enhances linkages and connections;
- Connects views to Mount Barker Summit; and
- Retains rural experience.

The Landscape Concept Design looks to provide a sustainable legacy for future phases of the development of the precinct, whilst celebrating the unique sense of place and Hills feel.

The landscape experience is inspired by three key themes of:

1. **Native Woodland** with endemic plantings from the regions with Red Gums, Blackwood and South Australian Blue Gums shading paths and open space;
2. **Riparian** with native sedges, grasses, low shrubs and groundcovers planted within swales and garden beds to treat stormwater runoff and contribute to biodiversity in the area; and
3. **Cultural Heritage** with a strong connection to Aboriginal and European Heritage of the area with interpretation, use of natural materials, endemic plantings and restrained use of a feature oak tree as an accent.

A copy of the Landscape Concept Design, prepared by Clover. Green Space is provided in **Appendix B**, with a reduced version provided in **Figure 11** below.

Figure 11 | Landscape Concept Design, extract *(Source: Source: Clover. Green Space, Oct 2022)*

Note: Landscape drawings take precedence over all others regarding external landscaping. The Landscape Concept Design also includes precedents, materials and montages, provided as a graphical illustration of the final form of the development and are subject to change or refinement as part of detailed design.

4.6 Staging

The development will be undertaken in a number of key stages as outlined below:

Staging Development Approval will allow for delivery of the development in several stages, ensuring effective project management and transition as the development progresses.

Proposed **stages** are as follows:

01 Civil earthworks

02 Sub structure

03 Superstructure

04 Main Building & internal fitout

05 Carpark, access roadway & Bald Hills Road junction works

06 Landscaping

4.7 Land Management Agreement

The whole of the land is subject to a Land Management Agreement ('LMA'), registered 29 January 2010, between the then Minister for Urban Development and Planning and the Council which seeks to ensure land is preserved and maintained for open space for the recreational use and enjoyment of the public and/or for conservation purposes.

The LMA requires Ministerial Approval prior to any building, structure or improvement being erected upon the land.

Council has commenced this process with the Minister and will have the necessary approval in place prior to any development commencing on the land.

Council sought and received Ministerial approval for Stage 1 of the Summit Sports and Recreation Park (which is subject to the same LMA) and will follow the identical process for the current proposal.

4.8 Technical Considerations

4.8.1 Mount Barker Creek Flood Mapping

In February 2021 Southfront completed a flood assessment of the Mount Barker Creek and associated tributaries between Bald Hills Road and Springs Road in response to Council's intent to establish a number of community facilities on land parcels in the immediate locality. Portions of this area are subject to flood inundation in association with the Mount Barker Creek which meanders through the land. Flood plain mapping in the region was documented in 2011. Since that time, further catchment development and creek infrastructure upgrades have occurred which have changed the flood risk through the land.

The Southfront investigation provides an updated assessment of flood risk through the land.

Flood mapping of the study area was undertaken for the 100 year, 50 year, 20 year and 10 year ARI rainfall events. These maps include flood height contours for the extent of flooding. Flood hazard mapping was also undertaken for the 100yr ARI rainfall event.

The Southfront investigation identifies that the site of the proposed building is not subject to inundation.

A copy of the Mount Barker Creek Flood Mapping assessment and maps, prepared by Southfront, is provided in **Appendix C**.

4.8.2 Stormwater Management

FMG Engineering ('FMG') have been engaged to prepare a Stormwater Management Plan ('SMP') for the proposal. The SMP has been prepared based on agreed requirements with Council's Development Engineering team, with no detention required. The SMP has been prepared prior to detailed design and seeks to outline the general intent for managing stormwater on site.

Further details will be resolved as the proposal approaches final design.

FMG has developed the following strategy to manage stormwater on site, with a preliminary Civil plan including levels and concept stormwater layouts shown within Appendix A, and a catchment plan shown in Appendix B of the FMG report.

- Stormwater runoff from roof areas will be collected into downpipes, and conveyed into a meandering swale which conveys all runoff from the development into the nearby watercourse.
- Stormwater runoff from the majority of the carpark will be diverted into a bioretention raingarden / wetland basin within the aisle of the carpark. This basin will provide a high level of visual and ecological amenity, stormwater treatment, and retention of frequent (i.e. 4EY) storm events runoff.
- Stormwater runoff which cannot be feasibly graded into the central basin, will be collected into roadside grassed / vegetated swales for treatment, ultimately discharging into the larger meandering swale outfall.
- Existing overland flood path from the adjacent golf course, identified within the Southfront report, will be maintained. A new 900W x 300H culvert, under the new access roadway, provides sufficient capacity for 0.5m^3/s which aligns with the 5%

AEP peak flow rate for this flood watercourse. Larger events will be able to overtop the entrance road, which will be graded to achieve a broad spillway with sufficient allowance made for erosion protection and flood permeance.

- Stormwater runoff from the new access roadway will be diverted locally into roadside swales with two- way crossfall. During major events these roadside swales can ultimately drain towards Bald Hills Road, and the existing low point associated with the Golf Course Breakout floodway.
- Following detailed workshop discussions, Council's Development Engineering team and FMG have concluded that detention storage is not an effective stormwater principle for this proposal, given the lack of downstream infrastructure constraints on the system. As the proposal can discharge directly into the watercourse downstream of the majority of the Mount Barker catchment, slowing down this peak flow and spreading this out over a longer duration may in fact contribute to higher peak flow depths in Mount Barker Creek compared to the adopted principal of discharging at unrestricted peak flow rates.
- Peak velocities and scour protections will need to be considered in a high level of detail during detailed design to ensure best practices are maintained post-development at the proposed outfall. Given a meandering swale is proposed FMG is comfortable this risk can be adequately abated through planting and other erosion controls, and is considered a far higher quality outcome when compared to a conventional pre-cast headwall arrangement.
- Undeveloped agricultural area to the south forms a natural 2ha upstream catchment which may generate overland flows in storms greater than the 5 year ARI storm event. A cutoff swale has been nominated to intercept all runoff from this catchment up to the 10% AEP storm event. Runoff exceeding the capacity of this swale during the 1% AEP will travel as overland flow down into the carpark catchments, which can safely convey these flows into the meandering swale outfall.

A finished floor level of 308.10mAHD has been nominated, which exceeds the adjacent flood levels of ~307.5-307.76mAHD 100 year flood estimations provided within the Southfront report with a freeboard of >300mm and plan area offset from the extent of flood waters in excess of 50m.

The results of the FMG assessment demonstrate that the Council Development Engineering requirements for stormwater management can be achieved.

A copy of the Stormwater Management Plan, prepared by FMG Engineering, is provided in **Appendix D**.

4.8.3 Services and Infrastructure

LUCID Consulting Australia has undertaken a preliminary site services infrastructure review in relation to the provision of water, sewer, power and communications utilities.

As the site is not currently serviced by SA Water mains water supply, it is anticipated that a new water supply will be obtained via extension of the existing SA Water from Scarborough Way for a distance of some 150 – 200 metres to the Bald Hills Road entrance point. LUCID anticipate that two (2) x 25kL water storage tanks and pump facility may be required to supply the proposed building with potable water. The necessary tanks and pump facility will be included on detailed plans prepared for Building Consent. Further network analysis will be conducted to confirm recycled water and fire water supply and pressure requirements.

The proposed development will be connected into Council's waste water infrastructure via a150mm gravity sewer main at the existing manhole on the south eastern side of the creek.

There is no natural gas within the area and it is considered unlikely that the facility would look to utilise bottled gas supplies.

The development area has access to the adjacent SA Power Networks high voltage lines located along Bald Hills Road, to the north of the site, and central to the farming allotment near the proposed site. Confirmation as to the suitability of the existing high voltage infrastructure and augmentation will be sought from SA Power Networks in due course.

Notwithstanding, a pad mounted transformer will be required. The transformer pad will be approximately 3.5m x 4.0m in dimension and will be located as close to the new facility as possible.

Fibreoptic infrastructure is located within Scarborough Way to the north of the proposed development site. A new connection will likely enter underground and follow the access roadway with pit intervals as required.

The proposal can be adequately serviced by water, sewer, power and communications utility providers.

A copy of the Preliminary Site Services Infrastructure Summary, prepared by LUCID Consulting Australia is provided in **Appendix E**.

4.8.4 Traffic, Access and Parking

MFY Pty Ltd has been engaged to provide specialist advice and to prepare a report that sets out an assessment of the anticipated transport implications of the proposal, including consideration of the following:

- Review of existing road network conditions within the locality of the development area;
- identification of access to the proposal;
- designing an access solution that ensures all vehicles can enter and exit the site in a forward direction;
- design of delivery and service bay access to manage separation of commercial vehicles and pedestrians, including providing a safe environment for vulnerable road users;
- review of access requirements for various vehicles, including commercial vehicles such as delivery vehicles and buses;
- determining traffic generation characteristics of the proposal;
- identifying suitability of the proposed parking associated with the typical peak use of the facility; and
- ensuring overflow parking is available for infrequent larger attendance.

4.8.4.1 Access

Access to the site will require minor alterations to Bald Hills Road at the junction of the new access roadway to accommodate all vehicle movements to and from the site.

The right turn movement from Bald Hills Road will be treated with a channelised right turn lane. The existing road guardrail on Bald Hills Road will be modified to accommodate left turn movement to the site. Minor modifications to linemarking on Bald Hills Road will be required.

4.8.4.2 Access roadway

The proposed access will be constructed as an internal bitumen access road with a width of 7.0 m and 1.0 m shoulders. Swales will be established adjacent the carriageway.

4.8.4.3 Car and bicycle parking

A technical parking assessment has been completed based on the anticipated number of people who will use each component within the proposal, together with an assessment of the parking rates identified within the Planning and Design Code, being a general rate of 4.5 spaces per 100m^2 for an Indoor Recreation Facility. The assessment has identified a peak demand of 96 parking spaces for the aquatic facilities and a further demand of 50 spaces for the gymnasium component. The forecast demand is 146 spaces.

Should the higher rate of 6.5 spaces per 100m^2 be applied to the upper floor as a 'fitness centre', this would increase the forecast demand for the gymnasium to 70 spaces, and therefore the total demand to 166 parking spaces.

The proposal provides a total of 176 spaces. Therefore, the car parking supply is deemed adequate with proposed car park providing a surplus of 10 spaces.

Taking into consideration infrequent times of higher visitation within the aquatic facility, the demand forecast could increase to up to 220 spaces. The proposal identifies an area to the south of the access roadway that will accommodate an additional 60 vehicles and four (4) buses, increasing the total provision to 236 spaces, well in excess of the forecast additional demand during infrequent peak periods.

The proposal generates a demand for 18 bicycle parking spaces, which will be located within bike racks to be positioned within close proximity to each of the two entry areas.

4.8.4.4 Car park configuration and design

The car park has been designed to ensure that all parking spaces, including spaces for people with a disability, movements at access points, indented pick up/set down areas and the movement of commercial vehicles and buses is compliant with the requirements of the relevant Australian Standard.

4.8.4.5 Loading

Loading for the operation of the facility will occur at the north-eastern end of the building. Loading operations, including delivery of chemicals, and refuse collection will be undertaken using rigid vehicles up to 8.8 m in length. A separate delivery vehicle access will be provided on the eastern boundary of the car park to provide separation of delivery vehicles access and users of the facility. The current access route proposed will be in a temporary location to provide flexibility in the future development of the precinct.

A turn-around facility will be provided adjacent to the loading area to enable vehicles to enter and exit the site in a forward direction.

4.8.4.6 Traffic Generation and Distribution

The following traffic generation rates are anticipated for the am and pm peak hour:

- one trip per 100 m^2 in the am peak hour; and
- two trips per 100 m^2 in the pm peak hour.

This would equate to the facility generating approximately 50 trips in the am peak hour and 100 trips in the pm peak hour.

It is anticipated that the gymnasium component of the proposal generates approximately 60 trips in the am and pm peak hours.

Based on the above traffic generation, the proposal will generate a total of 110 trips in the am peak hour and 160 trips in the pm peak hour.

The MFY report has further considered the distribution of traffic attending the facility, and has subsequently determined the access treatments that are warranted to ensure the facility is safe for all users.

The assessment identifies that a channelised right turn lane will be warranted when the facility is developed. The proposal includes a channelised right turn lane as per this requirement.

A similar assessment of the left turning volume identified that the proposal will not generate a requirement for a channelised left turn lane.

The MFY Transport Impact Assessment concludes:

The proposed Regional Aquatic and Leisure Centre will be consistent with that envisaged in the master plan of the site. Access to the facility will be via the proposed internal access road which will intersect with Bald Hills Road. The intersection will comply with Austroads design requirements to ensure safe and convenient access for all road users and will be located to facilitate future upgrades at the intersection can be readily accommodated.

Separate access routes for loading and refuse vehicles will be provided and the design will accommodate the turning movements of all vehicles. All vehicles will be able to enter and exit the site in a forward direction.

Parking for the development will be provided in accordance with AS/NZS 2890.1:2004. There will be sufficient spaces to accommodate the parking demand anticipated during most periods and an overflow parking area will be provided during peak visitation and periods and events. This overflow car park will also cater for bus parking.

The traffic generated by the development will be readily accommodated at the intersection with Bald Hills Road, with minimal queues and delays for drivers entering and exiting the site. Importantly, it will have minimal impact on the existing operation of Bald Hills Road.

A copy of the Transport Impact Assessment, prepared by MFY Pty Ltd is provided in **Appendix F**.

4.8.5 Environmental Noise

Sonus Pty Ltd has been engaged to provide specialist advice and the preparation of an Environmental Noise Assessment which considers the noise from activity associated with the proposal, including noise levels at the nearest noise sensitive receivers from carpark activities and mechanical plant operation.

The nearest noise sensitive receivers are nominated as existing residential dwellings located 140 metres to the north east of the site, 221 metres to the west, and at a greater setback on the opposite side of Bald Hills Road to the west.

It should also be noted that the two closest sensitive receivers front Bald Hills Road, which MFY has identified carries an average annual traffic volume in the order of 8,200 vehicles adjacent the site, including heavy vehicles.

In their assessment Sonus has predicted noise levels at residences based on a range of previous noise measurements and observations at similar facilities. These include:

- typical air conditioning and pool water heating plant as required for similar sized facilities (specifically,
- 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 parked position; and,
- vehicle movements on site.

A 5 dB(A) penalty has been applied to the predicted noise levels for the day time period associated with modulation of car parking noise sources. With the application of the penalty and the assumed level of activity at the site, the average noise levels (Leq) are predicted to be as shown in Table 2 (note the residences with the highest noise levels are presented for each zone).

Table 2: Predicted Noise Levels (L_{eq})

	Day Period (7:00am to 10:00pm)		Night Period (10:00pm to 7:00am)	
	Predicted Noise Level	**Criterion**	**Predicted Noise Level**	**Criterion**
Emerging Activity Centre Subzone	50	52	44	45
Neighbourhood Zone	43	50	37	43

The predicted noise levels achieve the criteria set by the *Environment Protection (Noise) Policy 2007* at all times of the day and night.

The assessment has considered noise at noise sensitive locations in the vicinity, from car park activity and mechanical plant operation.

Relevant assessment criteria have been established based on the Planning and Design Code and the Environment Protection (Noise) Policy 2007.

No acoustic treatments are required to achieve the noise criteria.

Based on the above, the proposal has been designed to not unreasonably impact the amenity of sensitive receivers, thereby achieving the relevant provisions of the Planning and Design Code related to environmental noise.

A copy of the Environmental Noise Assessment Report, prepared by Sonus, is provided in **Appendix G**.

4.8.6 Regulated and Significant Trees and Native Vegetation

Adelaide ARB Consultants ('ARB') were engaged to provide specialist arboricultural advice and the preparation of a Pre-Development Tree Assessment Report. Initial reporting in August 2021 included the conduct of a survey and assessment of selected trees throughout the broader land area, with an emphasis on legislative control (*Native Vegetation Act only*), tree retention suitability and general tree protection guidelines. Reporting included an assessment of 159 trees with a circumference of greater than 1.5m. 114 trees are controlled under the *Native Vegetation Act* 1991. The pre-development tree assessment has been fundamental in identifying a suitable site for the proposal.

ARB has prepared a subsequent Arboricultural Impact Assessment Report, specific to the current development application, including an assessment against the Regulated and Significant Tree Overlay of the Code, which was applied to the land following the initial assessment.

The ARB assessment identifies 21 trees within the scope of the proposal site. The trees are all identified as *Eucalyptus camaldulensis* – River Red Gum.

All trees within the population are controlled under South Australian Legislation. The following table outlines the different legislative controls applied to individual trees.

Native Vegetation Act 1991	*PDI Act 2016* (significant trees)	*Native Vegetation Act 1991* & *PDI Act 2016* (reg tree)	*Native Vegetation Act 1991* & *PDI Act 2016* (sig tree)
Tree 45 Tree 46 Tree 54	Tree 14 Tree 15 Tree 16 Tree 17 Tree 18 Tree 19 Tree 20 Tree 21 Tree 22	Tree 44 Tree 47 Tree 48 Tree 52 Tree 67	Tree 1 Tree 3 Tree 42 Tree 51

The report finds the trees display variable health and structure, and all are sustainable within their environment. The proposal avoids conflict with the vast majority of Regulated and Significant trees and native vegetation on the site, and adequately manages the impact on those directly related to the proposal.

Minor design alignment modifications to the pedestrian footpath and avoidance of open trenching construction methods for underground services, adjacent to Tree 1 and 3 will be considered to minimise the impact of works on the Tree Protection Zones. The required landscape and design service modifications are achievable without substantial change to the layout or function of the facility.

There is no requirement to undertake any tree removals to facilitate the proposal. The Applicant acknowledges and accepts the recommendations of ARB.

A copy of the Arboricultural Impact Assessment Report, prepared by Adelaide ARB Consultants, is provided in **Appendix H**.

4.8.7 Site Contamination

In November 2021, Tierra Environment undertook the preparation of the following reports:

- Bald Hills Road Site, Mount Barker, Preliminary Site Investigation, dated 17 November 2021; and
- Bald Hills Road Site, Mount Barker, Soil Investigation, dated 17 November 2021.

Investigations were conducted in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM).

In considering the proposal, Tierra Environment has advised:

a) A potentially contaminating activity (as defined in the State Planning Commission Practice Direction 14 (Site Contamination Assessment)) is not known to have occurred on the subject land;

b) A class 1 activity (see the State Planning Commission Practice Direction 14 (Site Contamination Assessment)) is not known to have occurred on adjacent land.

General Development Policies (Site Contamination) DO 1 and PO 1.1 seek to ensure land is suitable for the proposed use in circumstances where it is, or may have been, subject to site contamination, particularly when land use changes to a more sensitive use.

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

PO 1.1	DTS/DPF 1.1
Ensure land is suitable for use when land use changes to a more sensitive use.	Development satisfies (a), (b), (c) or (d): (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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that: 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).

In accordance with PO 1.1/DPF 1.1(c) A Site Contamination Declaration is provided in **Appendix I**.

5. PROCEDURAL REQUIREMENTS

5.1 Planning and Design Code

The relevant Code version for the purpose of assessment is Version 2022.19, 13 October 2022. The Code is subject to change, although any broad change that would impact on the subject land is unlikely in the short to medium term given the recent introduction of the new planning system and Code.

The legislation and version of the Planning & Design Code in place at the time of lodgement is relevant to assessment.

5.2 Nature and Classification of Development

The subject land is located within the **Master Planned Neighbourhood (MPN) Zone** (*'the Zone'*) of the Planning and Design Code.

The proposed use has been described as a 'Indoor Recreation Facility with associated car parking and landscaping'.

An 'Indoor Recreation Facility' is defined within the Code as:

'a building designed or adapted primarily for recreation or fitness pursuit'.

The use may include, but is not limited to (*our emphasis*):

- *Bowling alley;*
- *Squash courts;*
- *Fitness centre;*
- *Gymnasium;*
- *Pilates studio;*
- *Yoga studio;*
- *Dance studio;*
- *Indoor swimming centre;*
- *Indoor trampoline centre;*
- *Indoor rock climbing centre;*
- *Indoor children's play centre;*
- *Indoor skating rink.*

The proposed use accords with the definition.

Within the Zone, an Indoor Recreation Facility is not identified as an 'accepted' or 'deemed-to-satisfy' use, nor 'restricted' development. The proposal is therefore a **Performance Assessed** form of development, to be assessed against the relevant policies contained within the Planning & Design Code.

5.3 Relevant Provisions of the Planning and Design Code

The Planning and Design Code indicates that the following provisions are relevant to an assessment of the proposal:

5.3.1 Zone

Master Planned Neighbourhood ('MPN') Zone

5.3.2 Sub Zone

Emerging Activity Centre ('EAC') Sub Zone

5.3.3 Overlays

- Affordable Housing
- Hazards (Bushfire - Medium Risk)
- Hazards (Flooding)
- Hazards (Flooding – General)
- Heritage Adjacency
- Local Heritage Place
- Murray Darling Basin
- Native Vegetation
- Prescribed Water Resources Area
- River Murray Tributaries Protection Area
- Regulated and Significant Tree
- Water Resources

5.3.4 Technical and Numerical Variations

- Concept Plan (V0006) – 3
  Concept Plan 3 – Mount Barker and Littlehampton

The proposal aligns with a broader, non-statutory, Master Plan and provisions of the Land Management Agreement which identifies use of the land for recreational purposes and enjoyment of the public.

Key considerations are land use, built form, traffic and parking, stormwater and flood management, environmental noise impact, local heritage, regulated and significant trees and native vegetation.

Accordingly, we consider that the following provisions of the Planning and Design Code are of particular relevance:

- **Master Planned Neighbourhood Zone**
- **Emerging Activity Sub Zone**

Provisions within the Zone and Sub Zone are most particularly relevant in regard to land use, community facilities, open space and tree canopy with broader provisions identified within relevant Overlays and General Development Policies.

Overlays

- Hazards (Bushfire - Medium Risk)
- Hazards (Flooding)
- Hazards (Flooding – General)
- Heritage Adjacency
- Local Heritage Place
- Native Vegetation
- Regulated and Significant Tree

General Development Policies

- Design
- Design in Urban Areas
- Interface Between Land Uses
- Open Space and Recreation
- Site Contamination
- Transport, Access and Parking

A more detailed assessment of the proposal against these provisions follows.

5.4 Notification

The site is located within the **Master Planned Neighbourhood Zone**, and more particularly within the **Emerging Activity Centre Subzone**. Concept Plan 3 is also relevant. The Concept Plan, amongst other things, identifies the intended location of a Local Activity Centre (LAC). **Figure 12**, below, identifies that LACs are located south of Sims Road and to the east of the site of the proposal.

The Code defines an 'Activity Centre' in relation to the Emerging Activity Centre Subzone in the Master Planned Neighbourhood Zone … either:

1. *land identified for the purposes of an activity centre on a building envelope plan; or*
2. *an activity centre nominated on a Concept Plan in Part 12 of the Code.*

Thus, the site is not located in an activity centre despite being within the EAC subzone.

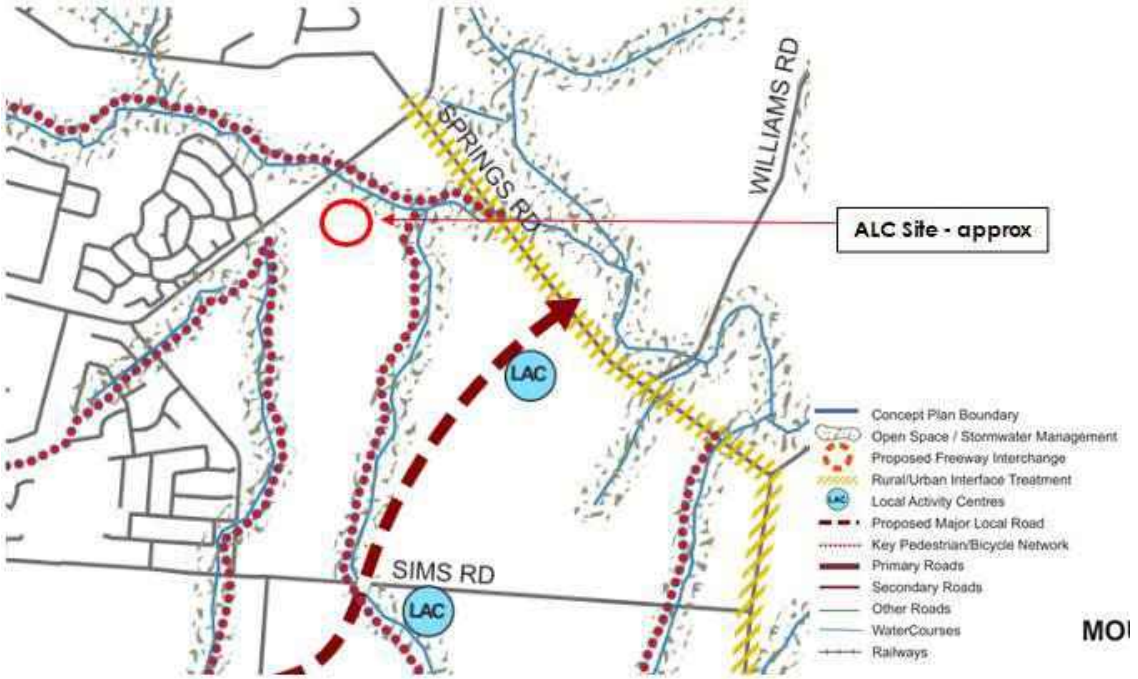

Figure 12 | Concept Plan 3, Planning & Design Code, extract

That being the case, the following nomination of an exemption to notification applies:

3. Any development involving any of the following (or of any combination of any of the following) where **not** located in an activity centre within the Emerging Activity Centre Subzone: (a) air handling unit, air conditioning system or exhaust fan (b) ancillary accommodation (c) building work on railway land (d) carport (e) community facility (f) deck (g) display home (h) dwelling (i) dwelling addition (j) educational establishment (k) fence (l) indoor recreation facility (m) outbuilding	Except development that: 1. does not satisfy Master Planned Neighbourhood Zone DTS/DPF 5.1 or 2. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where in accordance with a building envelope plan or 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 3m measured from the top of footings (other than where in accordance with a building envelope plan or where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).

Except development that:

1. does not satisfy Master Planned Neighbourhood Zone DTS/DPF 5.1 or
2. ~~involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and:~~
    1. ~~the length of the proposed wall (or structure) exceeds 11.5m (other than where in accordance with a building envelope plan or where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment)~~
    ~~or~~
    2. ~~the height of the proposed wall (or post height) exceeds 3m measured from the top of footings (other than where in accordance with a building envelope plan or where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).~~

There is no boundary wall or structure proposed, thus clause 2 can be discounted.

MPN Zone PO5.1 & corresponding DPF 5.1 is as follows:

Building Height	
PO 5.1 Residential buildings establish a low-medium rise residential character with development above 3 building levels located close to activity centres, open space and/or public transport.	DTS/DPF 5.1 Residential buildings (excluding garages, carports and outbuildings) do not exceed the maximum building height nominated on a Building Envelope Plan, or where none exists: (a) a maximum height of 3 building levels or 12m and (b) a maximum wall height of 10m (except where a gable end).

PO 5.1 refers to residential buildings only. It is not applicable to the proposal.

The proposal will be exempt from notification.

5.5 Government Agency Referrals

The proposal does not require mandatory referral to any government agencies, but is anticipated to undergo internal referral to various Council departments, including engineering, environmental health, horticulture, and local heritage

6. PLANNING & DESIGN CODE ASSESSMENT

6.1 Land Use and Intensity

The Desired Outcomes (**'DO'**) 1 of the **Master Planned Neighbourhood ('MPN') Zone** (**'the Zone'**) seeks '*A new or expanding community with a diverse range of housing that supports a range of needs and lifestyles located within easy reach of a diversity of services, facilities and open space'*.

Importantly, Zone Performance Outcome ('**PO**') 1.1 and DTS/DPF 1.1 anticipates a range of non-residential land uses, including an indoor recreation facility, community facility, consulting rooms, offices, and shops, amongst other similar forms of commercial and non-residential development.

PO 1.1 *Diverse housing choices and a wide range of complementary recreational, community services and other activities to support a growing community and create a pleasant place to live.*

DTS/DPF 1.1

Development comprises one or more of the following:

a) Ancillary accommodation
b) Community facility
c) Consulting room
d) Display home
e) Dwelling
f) Educational establishment
g) Indoor recreation facility
h) Office
i) Pre-school
j) Recreation area
k) Residential flat building
l) Retirement facility
m) Shop
n) Supported accommodation.

The land is also located within the **Emerging Activity Centre ('EAC') Sub Zone** (**'the Sub Zone'**) where DO1 anticipates *'Activity centres, employment, and community services make neighbourhoods a healthy and convenient place to live'*. PO 1.1 anticipates that *'activity centres within master-planned communities include a range of land uses to provide services at the local and neighbourhood level'*, with land uses listed within DTS/DPF 1.1 reflecting those identified within the Zone, with Indoor Recreation Facility listed at clause (y).

PO 1.6 of the Sub Zone reiterates the intent for a variety of non-residential and community oriented land uses to be established:

PO 1.6 *Activity Centres include a range of non-residential uses such as shops, offices, consulting rooms, educational establishments and community facilities of a scale to support the anticipated future growth of the surrounding neighbourhood.*

The establishment of the Mount Barker Regional Aquatic and Leisure Centre, an 'Indoor Recreational Facility' is an expressly anticipated land use within both the Zone and the Sub Zone.

6.2 Heritage

Heritage Adjacency

DO1 ***Development adjacent to State and Local Heritage Places maintains the heritage and cultural values of those Places.***

PO 1.1 *Development adjacent to a State or Local Heritage Place does not dominate, encroach on or unduly impact on the setting of the Place.*

Local Heritage Place

DO 1 ***Development maintains the heritage and cultural values of Local Heritage Places through conservation, ongoing use and adaptive reuse.***

PO 1.1 *The form of new buildings and structures maintains the heritage values of the Local Heritage Place.*

PO 1.2 *Massing, scale and siting of development maintains the heritage values of the Local Heritage Place.*

PO 1.3 *Design and architectural detailing (including but not limited to roof pitch and form, openings, chimneys and verandahs) maintains the heritage values of the Local Heritage Place.*

PO 1.4 *Development is consistent with boundary setbacks and setting.*

PO 1.5 *Materials and colours are either consistent with or complement the heritage values of the Local Heritage Place.*

PO 1.6 *New buildings and structures are not placed or erected between the primary or secondary street boundaries and the façade of a Local Heritage Place.*

PO 1.7 *Development of a Local Heritage Place retains features contributing to its heritage value.*

Careful consideration of siting, massing, built form and materiality in relation to the adjacent local heritage barns has had significant influence on the design of the proposal. The building has been deliberately setback from the creek line, public road and linear trail to ensure the local heritage barns remain prominent within the local precinct, with existing vegetation maintained as a buffer between the barns and the building.

The proposal shares similar materiality to the heritage barns which has been selectively incorporated within both the building and landscaping. The use of stone, timber and lightweight cladding materials of similar height and scale contribute to the wayfinding & experience within the precinct.

Pedestrian experience from the existing linear trail in respect to visual identity and sense of approach towards the local heritage barns has been maintained from both northern and southern directions, with the barns to remain as the first visual and primary reference point upon approach to the site.

The existing local heritage barns are identified in **Photo 1** and **Photo 2** overpage.

Photo 1 | Local heritage listed barns view west from linear trail

Photo 2 | Local heritage listed barns view north from proposed building

6.3 Design

General Development Policies in relation to 'Design' and 'Design in Urban Areas' are duplicated in many cases within the Code. Both chapters seek to ensure that development achieves the Desired Outcomes of being contextual, durable, inclusive and sustainable.

DO 1 ***Development is:***

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 space 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.

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

As a significant civic building, the Mount Barker Regional Aquatic and Leisure Centre has been designed with a functional appreciation of the key design principles outlined in Design/Design in Urban Areas DO1 seeking to ensure the facility is a flexible, adaptable and inclusive facility that will support the needs of the community. The proposal represents an innovative design response which enables the facility to adapt and operate under a multi layered approach.

The proposal strives to be recognised as a regional facility that is inclusive and sustainable by providing:

- a high quality facility that reflects the region and character of the site and greater Adelaide Hills;
- a facility that caters for all, accommodating physical, cultural and intergenerational needs; and
- a sustainable outcome which balances competing social, economic and environmental interests.

The proposal also endeavours to achieve exceptional environmental performance and ecological outcomes through innovative landscape, water sensitive urban design and stormwater/flood management techniques.

6.3.1 Safety

PO 2.2 *Development is designed to differentiate public, communal and private areas.*

PO 2.3 *Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.*

PO 2.4 *Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.*

The proposal achieves the desires of the Code in relation to safety as outlined in PO 2.2, PO 2.3 and PO 2.4 of the Design/Design in Urban Areas general policies.

6.3.2 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.*

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.*

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.*

Due to the nature of an internal aquatic facility much of the environmental benefits come from the efficiencies in keeping the spaces at a constant temperature, as heat loss through the water is a major energy consumer in this building typology.

The proposal built form and materiality is a response to maintaining internal temperatures of the aquatic spaces whilst minimising the heat gain via use of overhangs and sun shading devices and limiting direct sunlight onto the pool surface.

The building has been separated into multiple pool halls which, due to the different temperature requirements of each waterbody, enables each space to be controlled individually.

A robust durable material palate has been proposed, with minimal ongoing maintenance requirements across the intended design life of the building, which will result in a lower embodied energy when compared to other materials. Roof form has been orientated to allow for a significant solar array to offset the energy required by the centres aquatic plant.

6.3.3 Water Sensitive Design and Carparking appearance

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.

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.*

PO 7.3 *Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.*

PO 7.4 *Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.*

PO 7.5 *Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.*

PO 7.6 *Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.*

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.*

The proposal has been designed to ensure that the car park is not only functional, but also creates an environment of high visual amenity in addition to ecological performance.

The landscape Concept Design provides widespread reference to the above provisions and seeks to integrate the natural environment and landscape character into the car park and along road corridors. It is intended to develop a site wayfinding strategy for pedestrians and vehicles, established through creation of a network of paths to connect spaces, facilities, and experiences. The site is accessed via a meandering access roadway where it intersects with Bald Hills Road, celebrating existing red gums with native understorey plantings.

Within the car park, swales and rain gardens are used to capture and treat run-off from carparks, roof and pavement that feature WSUD practices. Landscape beds within the car park will be planted with native sedges and endemic vegetation. Path connections and boardwalks will link entrances with parkland.

Trees and vegetation will be used to soften and enhance the appearance of the car park and to frame the architecture of the building and create legible entry points.

The proposal responds to PO 7.2 – PO 7.7 most effectively.

Figure 13 | Car Park appearance perspective, Landscape Concept Design
Source: Colver. Green Space

6.3.4 Waste Storage

Design

PO 1.5 *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.*

Design in Urban Areas

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.*

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.*

PO 11.3 *Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.*

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.*

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.*

The facility operator will be required to prepare a Waste Management Plan as part of the operator engagement process, with a further requirement to enter into a commercial contract in regard to waste collection. A Waste Management Plan will include the implementation of recycling programs within the facility, and provision of suitable general waste and recycling bins throughout the building. Council's kerbside collection will not service the facility.

The proposal includes sufficient storage area for the required refuse bins, with bins to be stored adjacent the delivery and service bay access road located at the southern end of the building. The waste storage area will be suitably screened to minimise any visual intrusion or interference.

MFY Traffic Engineers have recommended the use of 660L bins which can be collected by a rear lift truck on the site. MFY have further recommended the aforementioned access road be used for waste collection vehicles to avoid these vehicles driving near the main entry to the facility.

The proposal responds to the desires of the Design and Design in Urban Areas General Development Policies in regard to the storage of waste and the siting and screening of waste storage areas.

6.4 Community Facilities

PO 3.1 *Community facilities such as schools, community centres, recreation centres and public open space are co-located within activity centres or co-located with complementary uses to reinforce their role as a focal point for community.*

PO 3.2 *Community facilities are located and designed to maximise accessibility by public transport, walking and cycling.*

PO 3.1 and PO 3.2 of the Zone identify a need for the establishment of recreation centres to be co-located with complementary uses that reinforce their role in the community, in addition to being located and designed to maximise accessibility by public transport, walking and cycling.

As outlined in sections 2 and 3 of this report, the site of the proposed Indoor Recreation Facility forms part of a broader Master Plan for the land, which provides a variety of public and recreational pursuits, together with expansive areas of passive and active open space. The current proposal follows the successful delivery of the Summit Sport and Recreation Park, some 500 metres to the east of the development site, is located less than 100 metres from the linear trail, and will be undoubtedly be a catalyst in bringing additional members of the community, and public more broadly, to the precinct.

There is excellent access to the facility by way of walking and cycling via the linear trail and public road network, together with public (bus) transport services available on Bald Hills and Springs Roads.

6.5 Recreation and Landscaping

Key to the deliverables of the Master Planned Neighbourhood Zone is the adequate provision of facilities that encourages active and healthy lifestyles for the community, with the inclusion of a variety of attractive features, including sporting infrastructure.

The proposal directly responds to PO 4.2 in this regard, and will contribute to the intent of the broader Master Plan to deliver considerable recreation assets to the community in due course.

PO 4.2 *The quality of open space encourages recreation and healthy lifestyles by including a variety of attractive features such as walking and cycling trails, play spaces, water features, irrigated recreation spaces, sporting infrastructure or public art. (our emphasis)*

PO 13.1 *Tree planting provided on public streets and public open space to create a comfortable micro-climate and improve the amenity of the neighbourhood.*

In response to PO 13.1, the proposal provides an exceptional response to the quest for high quality landscaping within the Zone, providing way finding and connectivity to Bald Hills Road and the linear trail. Carpark areas and the surrounds of the proposed building are to be landscaped utilising waster sensitive urban design techniques that provide efficient and effective stormwater management, and encourages interaction from facility users, significantly enhancing the general amenity of the reasonably substantial built form.

The proposed landscape design utilises species that look to maximise biodiversity outcomes on the site, creating a sustainable legacy for future phases of the precinct development.

The following provisions are also considered relevant as the proposal will provide a public recreational facility which responds effectively to local climatic conditions to maximise the use, and as a result the healthy lifestyle outcomes, of an all-weather facility.

The proposal includes the establishment of a high quality landscaped environment.

DO1 ***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.***

PO 1.1 *Recreation facilities are compatible with surrounding land uses and activities.*

PO 2.1 *Open space and recreation facilities address adjacent public roads to optimise pedestrian access and visibility.*

PO 2.2 *Open space and recreation facilities incorporate park furniture, shaded areas and resting places.*

PO 2.3 *Open space and recreation facilities link habitats, wildlife corridors and existing open spaces and recreation facilities.*

PO 5.3 *Landscaping provided in open space and recreation facilities maximises opportunities for casual surveillance throughout the park.*

PO 8.1 *Open space and recreation facilities provide for the planting and retention of large trees and vegetation.*

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.

(Design/Design in Urban Areas)

PO 3.1 *Soft landscaping and tree planting is 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;
e) contribute to biodiversity.

PO 3.2 *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.*

Figure 14 | Landscape Concept Design Precedents
Source: Clover. Green Space, October 2022

6.6 Transport, Access & Parking

The Code contains numerous provisions which seek to ensure a comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users. Provisions seek to ensure traffic can move efficiently and safely to, from and within a development site, whilst providing an adequate amount of parking to meet the demand generated by the use.

The relevant Transport, Access and parking general development policies that are applicable to the proposal are listed below.

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

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.*

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.*

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.*

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.*

PO 3.1 *Safe and convenient access minimises impact or interruption on the operation of public roads.*

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.*

PO 3.4 *Access points are sited and designed to minimise any adverse impacts on neighbouring properties.*

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.*

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.*

PO 4.1 *Development is sited and designed to provide safe, dignified and convenient access for people with a disability.*

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:*

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 combined 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

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.*

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.*

PO 6.4 *Pedestrian linkages between parking areas and the development are provided and are safe and convenient.*

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.*

PO 6.6 *Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.*

PO 6.7 *On-site visitor parking spaces are sited and designed to be accessible to all visitors at all times.*

PO 8.1 *Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.*

PO 8.2 *Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.*

PO 9.1 *The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.*

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.*

PO 10.1 *Development is located and designed to ensure drivers can safely turn into and out of public road junctions.*

A Traffic Impact Assessment is provided in **Appendix F**.

Based on the assessment and conclusions contained within the MFY assessment, refer **section 4.8.4**, it has been demonstrated that the proposal satisfies the relevant provisions of the Code relating to transport, access and parking.

6.7 Interface Between Land Uses

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

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.*

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:*

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.

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:*

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.

Sonus was engaged to undertake an Environmental Noise Assessment of the proposal, with the resultant assessment outlined in **section 4.8.5** of this report.

The Sonus assessment has considered the above provisions and has concluded that the proposal has been designed to *not unreasonably impact the amenity of sensitive receivers*, thereby achieving the relevant provisions of the Planning and Design Code, and in turn, achieving the relevant *Environment Protection (Noise) Policy* criteria..

It is considered that the proposal has been designed and sited in a manner that will mitigate any adverse impacts on neighbouring residential land uses and will not unreasonably impact users of land within the locality.

The proposal is sufficiently compliant with provisions relating to environmental noise.

PO 6.1 *External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).*

PO 6.2 *External lighting is not hazardous to motorists and cyclists.*

The above provisions seek to ensure that external lighting associated with development does not unreasonably impact upon adjacent sensitive receivers. While it is noted that the nearest sensitive receivers are sited some 140 metres and 221m metres respectively, from the site of the proposed building, all external lighting is to be provided in a manner that assists with way finding and security, whilst minimising any light spill impact on adjoining residential properties.

The proposal will comply with PO 6.1 and PO 6.2 (Interface between Land Uses).

6.8 Hazards –Flooding and Bushfire Risk

Hazards (Flooding – General) Overlay

DO 1 ***Impacts on people, property, infrastructure and the environment from general flood risk are minimised through the appropriate siting and design of development.***

PO 2.1 *Development is sited, designed and constructed to prevent the entry of floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.*

Hazards (Flooding) Overlay

DO 1 ***Impacts on people, property, infrastructure and the environment from high flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.***

PO 2.1 *Development sited and designed to minimise exposure of people and property to unacceptable flood risk.*

PO 3.1 *Development avoids the need for flood protection works.*

PO 3.2 *Development does not cause unacceptable impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.*

PO 3.3 *Development does not impede the flow of floodwaters through the allotment or the surrounding land, or cause an unacceptable loss of flood storage.*

PO 3.4 *Development avoids frequently flooded or high velocity areas, other than where it is part of a flood mitigation scheme to reduce flood impact.*

PO 3.5 *Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1% AEP flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.*

PO 4.1 *Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during a 1% AEP flood event to avoid potential environmental harm.*

PO 4.2 *Development does not create or aggravate the potential for erosion or siltation or lead to the destruction of vegetation during a flood.*

PO 6.1 *Development does not occur on land:*

a) from which evacuation to areas not vulnerable to flood risk is not possible during a 1% AEP flood event

b) which cannot be accessed by emergency services vehicles or essential utility service vehicles during a 1% AEP flood event.

PO 6.2 *Access driveways and tracks to significant development (i.e. dwellings, places of work, etc.) consist of a safe, all-weather trafficable surface that is accessible during a 1% AEP flood event.*

In response to the flooding provisions, we note that Southfront undertook a flood study and mapping in 2021. While the study extended well beyond the land subject of the current application, the area (approximately) of the proposal is identified below in **Figure 15**. The proposed building sits outside land subject to inundation. Notwithstanding, it is acknowledged that a portion of the access roadway is at risk of flooding up to a height of 0.25 - 0.5m during a 1 in 100 year event.

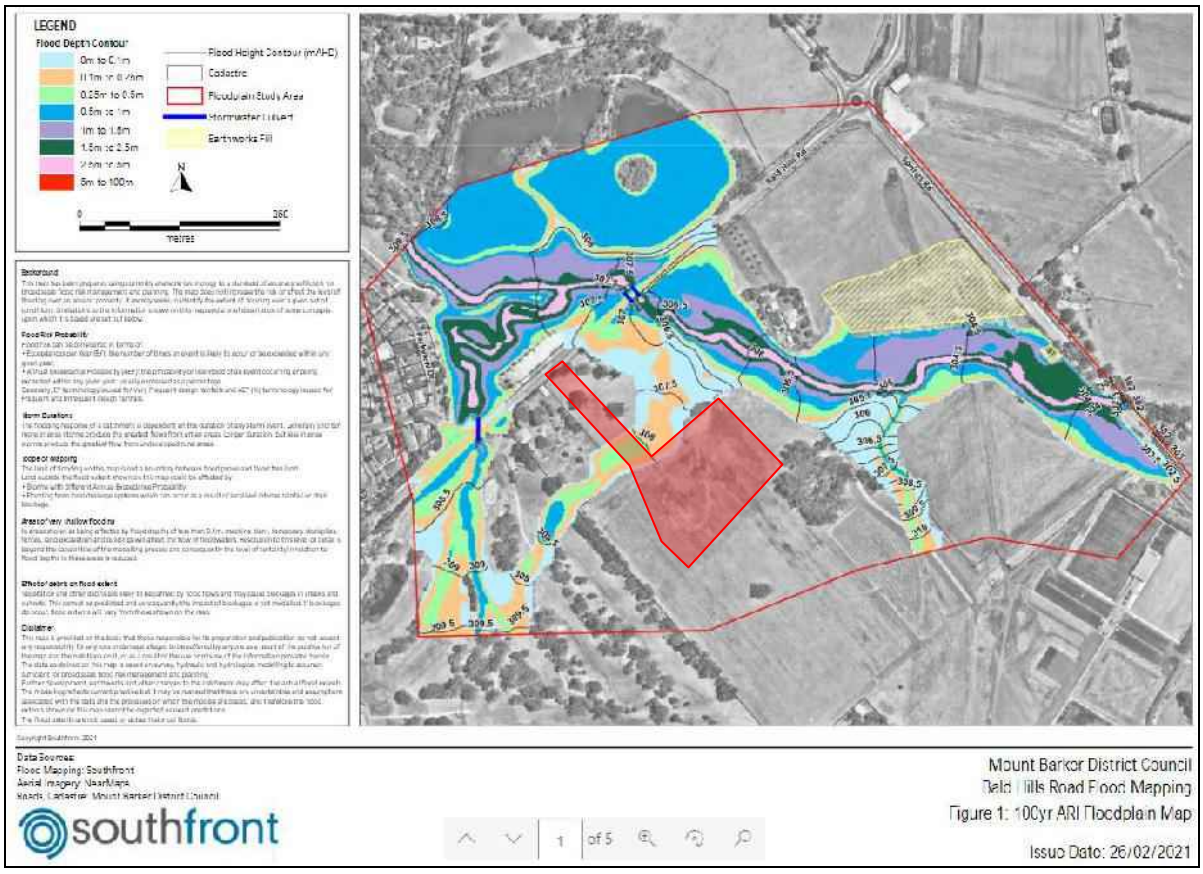

Figure 15 | 100yr ARI Floodplain map (2021)
Source: Southfront (subject land highlight by Planning Studio)

In preparation of the Stormwater Management Plan, FMG Engineering have had consideration of known flood modelling constraints and have incorporated findings of the Southfront study into the subsequent stormwater design.

Existing overland flood paths identified within the provided Southfront reporting will be maintained, with a new 900W x 300H culvert providing sufficient capacity for 0.5m3/s flow through the culvert, aligning with the 5% AEP peak flow rate for this flood watercourse.

Larger events will be able to overtop the entrance road, which will be graded to achieve a broad spillway and sufficient allowance made for erosion protection and flood permeance.

Finished floor levels for the building are required to be at least 150mm above the Q100 flood level adjacent the building to ensure flood protection. A finished floor level of 308.10mAHD has been nominated, which exceeds the adjacent flood levels of ~307.5-307.76mAHD 100 year flood estimations provided within the Southfront reporting with a freeboard of >300mm and plan area offset from the extent of flood waters in excess of 50m.

The proposal satisfies the relevant Hazard (Flooding) provisions of the Code.

Hazards (Bushfire – Medium Risk) Overlay

DO1 ***Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.***

DO 2 ***To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.***

PO 1.1 *Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.*

PO 2.1 *Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and buildings on stilts.*

PO 5.3 *Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.*

The Code seeks to ensure that all development within the Hazard (Bushfire – Medium Risk) Overlay area responds to the risks associated with a medium level of bushfire attack and the potential for ember attack and radiant heat through effective building design, siting and materiality. Importantly, all development must facilitate access for emergency service vehicles to aid in the protection of lives and assets from bushfire danger.

The siting of the proposed building on a portion of the land that is adjacent to stands of existing native vegetation may increase risk to a degree. Notwithstanding, siting has carefully balanced numerous considerations, including the ability to provide safe and convenient access to the site, ensuring risk of flooding is minimised and avoiding a need to remove significant native vegetation. As a commercial building, the facility will be provided with the required fire protection infrastructure to service a building of its size and usage.

In conducting the Traffic Impact Assessment, MFY Traffic Consultants have provided turn paths for vehicles including buses and rigid vehicles up to 8.8m in length. Emergency service vehicles are able to directly access the building from either the main carpark/entry or the delivery and service bay access road on the southern side of the building. The access road is provided with a turning bay to ensure entry and exit in a forward direction.

Assessment undertaken for movements of a MRV vehicle accessing the loading bay would be sufficient for an emergency service vehicle, being the Country Fire Service in the event of a bushfire, or any alternate emergency service vehicle.

The proposal adequately complies with the Overlay in regard to ensuring the design and siting of the building, together with access for emergency service vehicles.

6.9 Regulated and Significant Trees and Native Vegetation

Regulated and Significant Tree Overlay

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

PO 1.1 *Regulated trees are retained where they:*

a) make an important visual contribution to local character and amenity

b) are indigenous to the local area and listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species

and / or

c) provide an important habitat for native fauna.

PO 1.2 *Significant trees are retained where they:*

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 National Parks and Wildlife Act 1972 *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.

PO 2.1 *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.*

Native Vegetation Overlay

DO 1 ***Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.***

PO 1.1 *Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.*

PO 1.4 *Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.*

A comprehensive Arboricultural Impact Assessment Report has been prepared to accompany the proposal. As discussed in **section 4.8.6** of this report, the proposal will not require the removal of, or damage to, any regulated or significant trees, nor vegetation that is controlled by the *Native Vegetation Act 1991*.

The proposal avoids conflict with the vast majority of Regulated and Significant trees, and native vegetation, on the site and adequately manages the impact on those more directly related to the access roadway associated with the proposal.

7. CONCLUSION

This development application seeks Planning Consent for an 'Indoor Recreation Facility with associated car parking and landscaping' on a portion of land identified for development as part of the broader, non-statutory, Summit Leisure and Entertainment Precinct Master Plan for the provision of an aquatic centre.

The proposal is an appropriate form of development when assessed against the relevant provisions of the Planning and Design Code for the following reasons:

- the site of the proposal is within the Master Planned Neighbourhood Zone and Emerging Activity Centre Sub Zone, which anticipate an Indoor Recreation Facility land use;
- the use is complementary to other recreation land uses established within the locality;
- the architecturally designed building is of an appropriate scale and form in the context of the site, paying particular respect to the adjoining local heritage barns;
- provides enhanced connectivity and interface with the Mount Barker linear trail and the Summit Sport and Recreation Park and surrounding land uses;
- provides safe and convenient access for all vehicles anticipated to use the facility;
- provides sufficient on-site car, bus and bicycle parking to meet the forecast peak demands of the site;
- effectively manages stormwater and flood risk through high quality waster sensitive design techniques, enhancing the visual amenity of parking areas and external spaces;
- avoids the removal of Regulated and Significant trees and native vegetation; and
- will mitigate any adverse impacts on neighbouring residential land uses and will not unreasonably impact users of land within the locality

The proposal warrants the granting of Planning Consent.

APPENDIX A

Architectural Drawings

DesignInc Adelaide

Job No. A22-0015
12 October 2022

- PL-000 Rev P1: Cover Sheet & Location;
- PL-100 Rev P1: Site Plan & Landscape Plan
- PL-201 Rev P1: General Arrangement Plan – Ground Floor
- PL-202 Rev P1: General Arrangement Plan – First Floor
- PL-203 Rev P1: Roof Plan
- PL-301 Rev P1: Elevations
- PL-901 Rev P1: External Perspectives

MOUNT BARKER DISTRICT COUNCIL
REGIONAL AQUATIC AND LEISURE CENTRE
BALD HILLS ROAD, MOUNT BARKER SA

DRAWING SCHEDULE - PLANNING	
Sheet Number	Sheet Name
PL-000	COVER SHEET & LOCATION
PL-100	SITE PLAN & LANDSCAPE PLAN
PL-201	GENERAL ARRANGEMENT PLAN - GROUND FLOOR
PL-202	GENERAL ARRANGEMENT PLAN - FIRST FLOOR
PL-203	ROOF PLAN
PL-301	ELEVATIONS
PL-901	EXTERNAL PERSPECTIVES

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NO.	DATE	REVISIONS	BY
P1	12.10.22	ISSUED FOR PLANNING	BL
P2	02.12.22	ISSUED FOR PLANNING	SB

LANDSCAPE ARCHITECT	CLOVER GREENSPACE 1/76 OLD PRINCESS HWY NAIRNE, SA. 5252
COST CONSULTANT	RIDER LEVETT BUCKNALL 1/8-12 LEIGH STREET ADELAIDE, SA. 5000
STRUCTURAL CONSULTANT	LUCID CONSULTING 6/86 FLINDERS STREET ADELAIDE, SA. 5000
MECHANICAL CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA. 5034
CIVIL CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA. 5034
AQUATIC CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA. 5034

MOUNT BARKER DISTRICT COUNCIL

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	COVER SHEET & LOCATION

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
PRELIMINARY			
FOR D.A. APPROVAL	MW	MW	02.12.22
FOR TENDER			
FOR CONSTRUCTION			
DRAWN	SBa		
SCALE @ A1	1 : 1000		
DATE	12.10.22		

JOB NO.	DRAWING NO.	REV.
2021.096	PL-000	P2
ISSUE: PLANNING	ISSUED DATE: 02.12.22	

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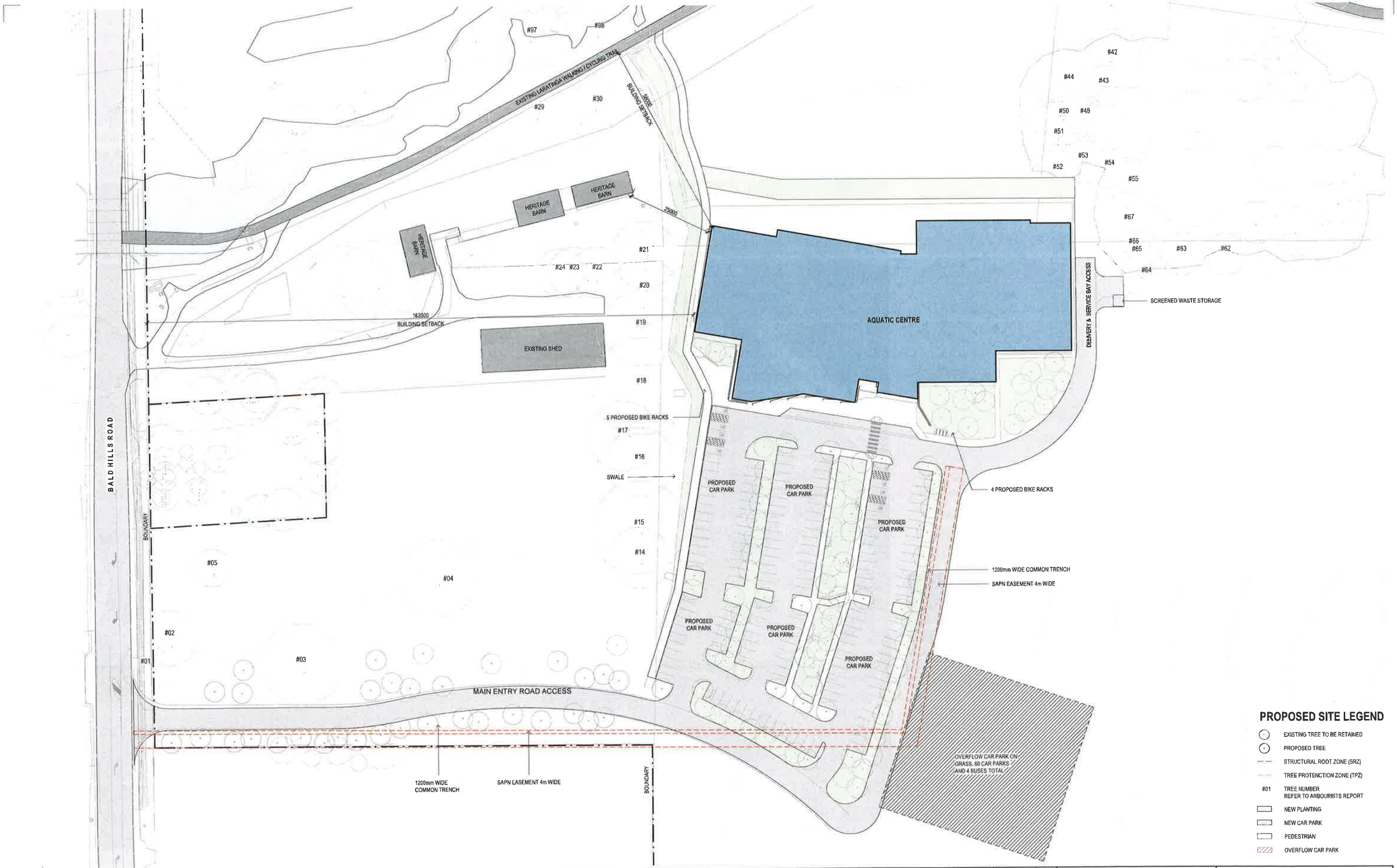

PROPOSED SITE LEGEND

- EXISTING TREE TO BE RETAINED
- PROPOSED TREE
- STRUCTURAL ROOT ZONE (SRZ)
- TREE PROTENCTION ZONE (TPZ)
- #01 TREE NUMBER REFER TO ARBOURISTS REPORT
- NEW PLANTING
- NEW CAR PARK
- PEDESTRIAN
- OVERFLOW CAR PARK

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STRUCTURAL CONSULTANT	LUCID CONSULTING 6/80 FLINDERS STREET ADELAIDE, SA, 5000	AQUATIC CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA, 5034

MOUNT BARKER DISTRICT COUNCIL

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	SITE PLAN & LANDSCAPE PLAN

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
PRELIMINARY			
FOR D.A. APPROVAL	MW	MW	02.12.22
FOR TENDER			
FOR CONSTRUCTION			

DRAWN: SBa
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2021.096	PL-100	P2

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ISSUED DATE: 02.12.22

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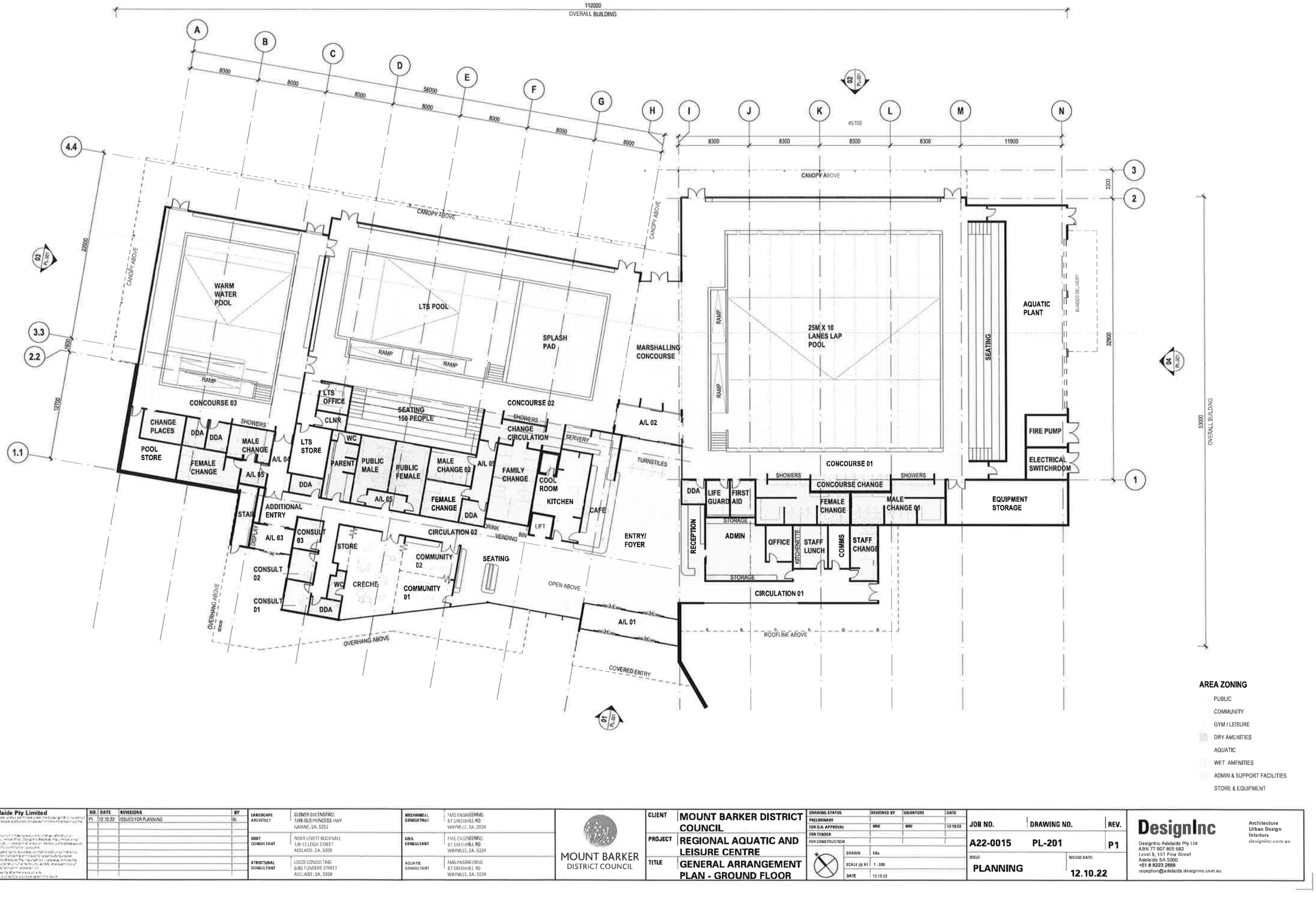

AREA ZONING

- PUBLIC
- COMMUNITY
- GYM / LEISURE
- DRY AMENITIES
- AQUATIC
- WET AMENITIES
- ADMIN & SUPPORT FACILITIES
- STORE & EQUIPMENT

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MOUNT BARKER DISTRICT COUNCIL

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	GENERAL ARRANGEMENT PLAN - GROUND FLOOR

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
PRELIMINARY			
FOR D.A. APPROVAL	MW	MW	12.10.22
FOR TENDER			
FOR CONSTRUCTION			

DRAWN: SBa
SCALE @ A1: 1 : 200
DATE: 12.10.22

JOB NO.	DRAWING NO.	REV.
A22-0015	PL-201	P1

ISSUE: PLANNING
ISSUED DATE: 12.10.22

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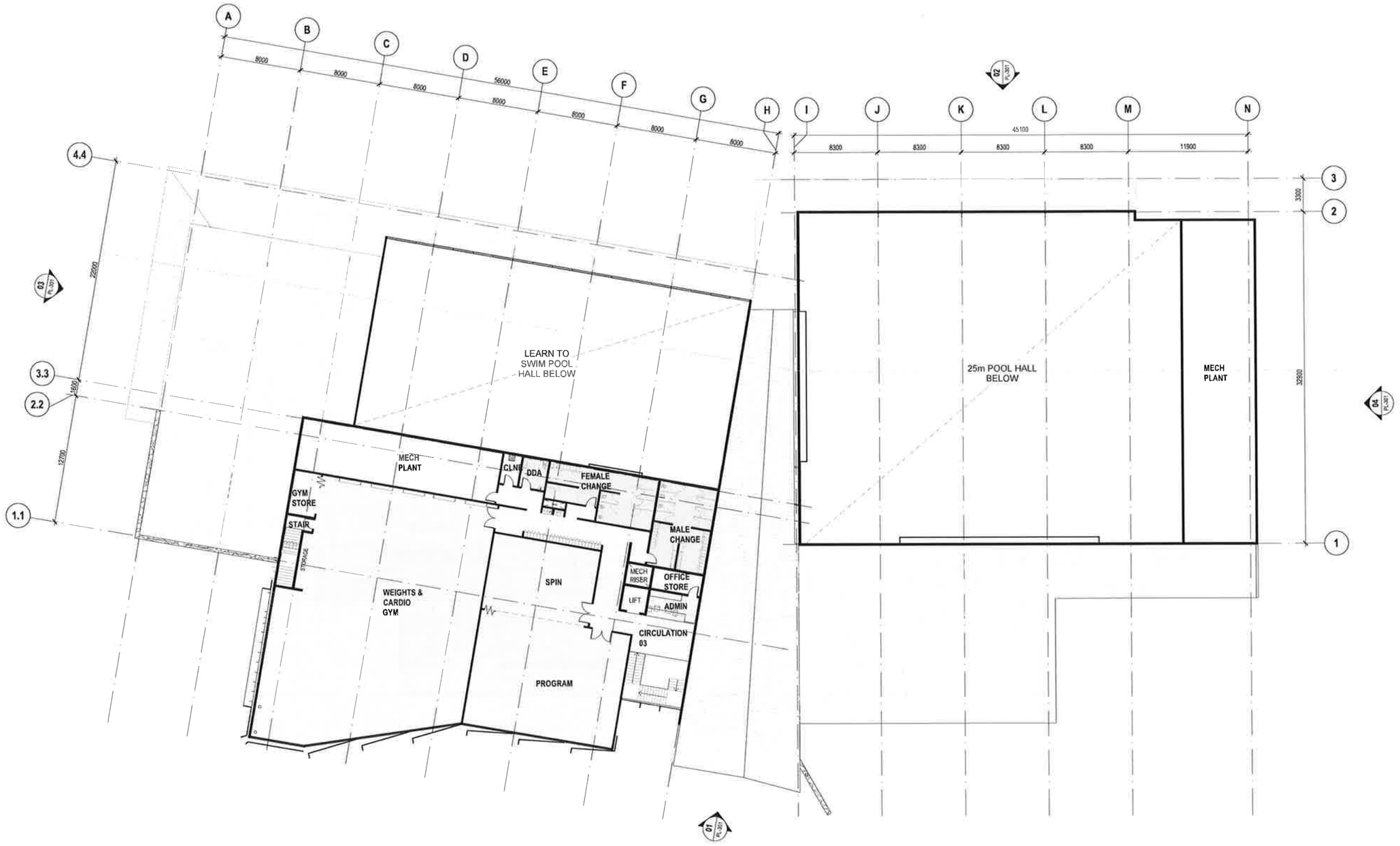

AREA ZONING

- PUBLIC
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- GYM / LEISURE
- DRY AMENITIES
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STRUCTURAL CONSULTANT	LUCID CONSULTING 6/80 FLINDERS STREET ADELAIDE, SA, 5000
MECHANICAL CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA, 5034
CIVIL CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA, 5034
AQUATIC CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA, 5034

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CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	GENERAL ARRANGEMENT PLAN - FIRST FLOOR

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
PRELIMINARY			
FOR D.A. APPROVAL	MW	MW	12.10.22
FOR TENDER			
FOR CONSTRUCTION			
DRAWN	BBa		
SCALE @ A1	1 : 200		
DATE	12.10.22		

JOB NO.	DRAWING NO.	REV.
A22-0015	PL-202	P1
ISSUE: PLANNING	ISSUED DATE: 12.10.22	

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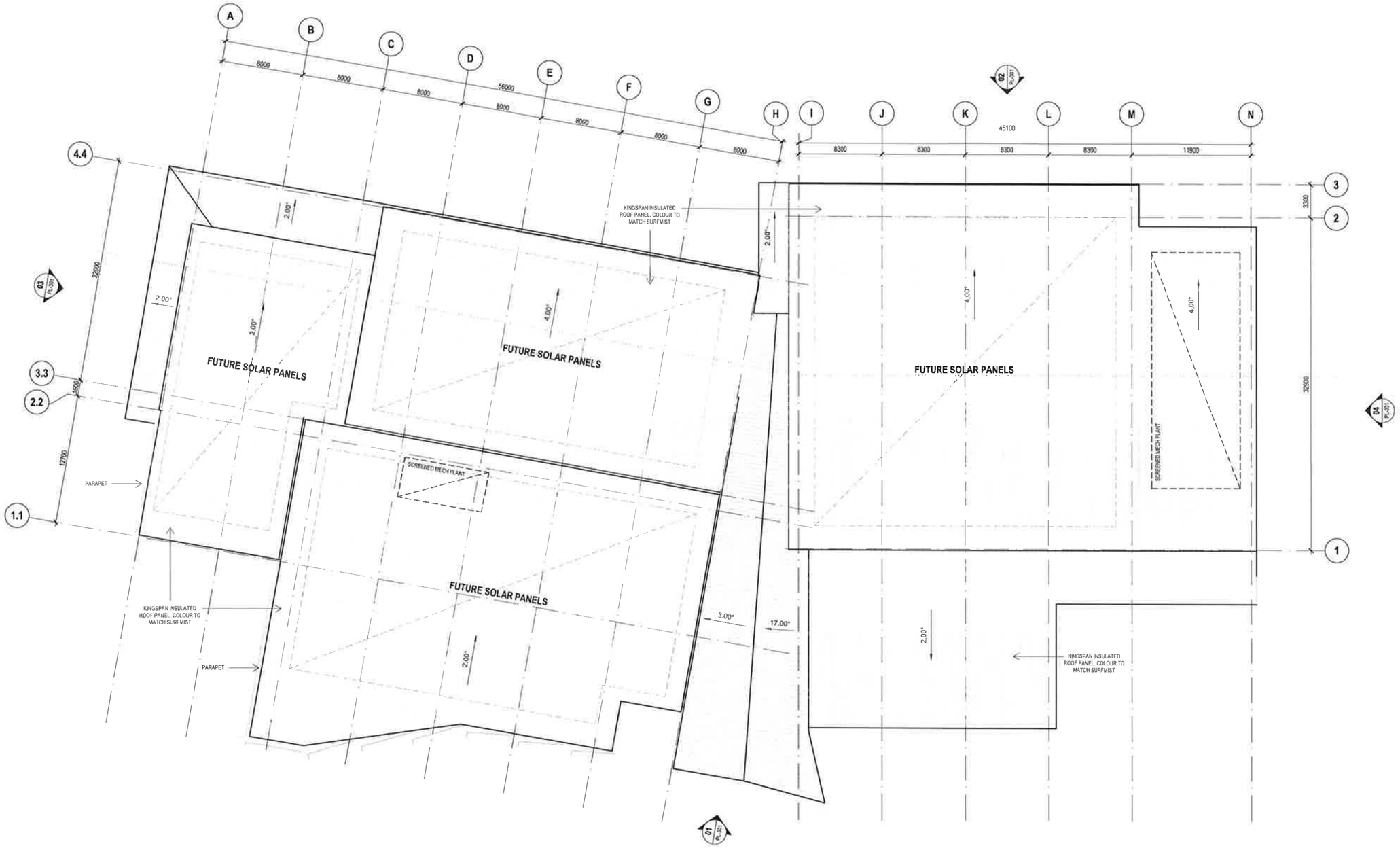

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AQUATIC CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA, 5034

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CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	ROOF PLAN

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
PRELIMINARY			
FOR D.A. APPROVAL	MW	MW	12.10.22
FOR TENDER			
FOR CONSTRUCTION			

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SCALE @ A1	1 : 200
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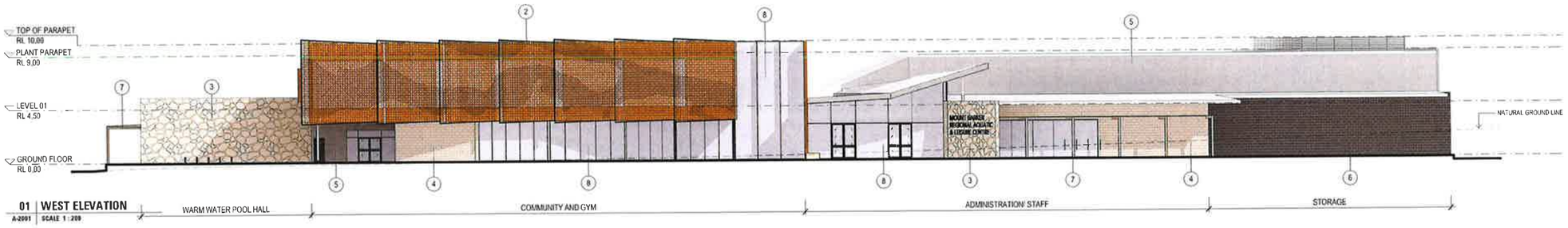
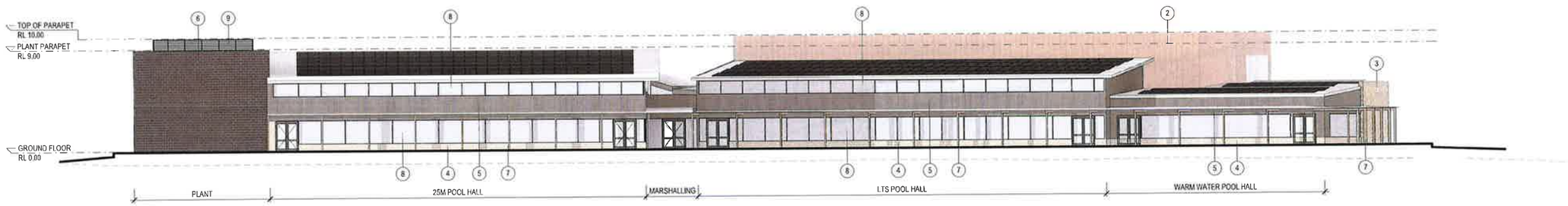


01 | WEST ELEVATION
A-2001 | SCALE 1 : 200



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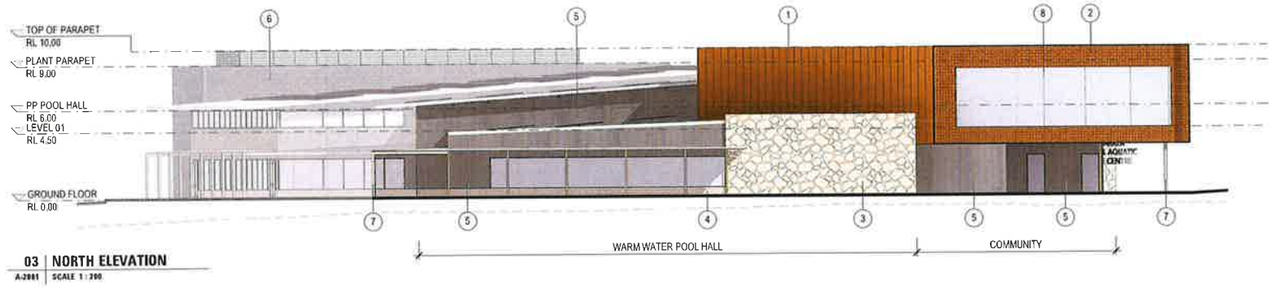
A-2001 | SCALE 1 : 200

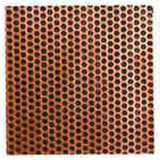


03 | NORTH ELEVATION
A-2001 | SCALE 1 : 200

04 | SOUTH ELEVATION
P01 | SCALE 1 : 200

(1) PRE FINISHED METAL CLADDING (NON REFLECTIVE)

(2) PERFORATED SUN SHADING POWDER COATED



(3) LOCAL STONEWORK

(4) LIGHT COLOURED BLOCK

(5) PRE FINISHED LIGHT METAL CLADDING (NON REFLECTIVE)

(6) DARK COLOURED BLOCK

(7) TIMBER

(8) GLAZING

(9) ACOUSTIC SCREENING

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MOUNT BARKER DISTRICT COUNCIL

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	ELEVATIONS

DRAWING STATUS	REVIEWED BY	SIGNATURE	DATE
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FOR D.A. APPROVAL	MW	MW	12.10.22
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FOR CONSTRUCTION			
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EXTERNAL PERSPECTIVE 01

EXTERNAL PERSPECTIVE 03

EXTERNAL PERSPECTIVE 02

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AQUATIC CONSULTANT	FMG ENGINEERING 67 GREENHILL RD WAYVILLE, SA. 5034

MOUNT BARKER DISTRICT COUNCIL

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT	REGIONAL AQUATIC AND LEISURE CENTRE
TITLE	EXTERNAL PERSPECTIVES

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SCALE @ A1			
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A22-0015	PL-901	P1

ISSUE: PLANNING
ISSUED DATE: 12.10.22

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APPENDIX B

Landscape Concept Design

Clover. Green Space

Landscape Architecture Planning Submission
October 2022

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MOUNT BARKER
DISTRICT COUNCIL

MOUNT BARKER DISTRICT COUNCIL
Regional Aquatic and Leisure Centre

Landscape Architecture
Planning Submission
December 2022 rev B

FOR APPROVAL

clover.
GREEN SPACE

site character
GUIDING PRINCIPLES

Respect site and cultural heritage

Retain, preserve and integrate / use existing heritage features

includes built fabric, site layout and significant trees

acknowledge Peramangk and connection to country

Linkages and connections

create a network of paths to connect spaces, facilities and experiences

integrate natural environment and landscape character into carparks and along road corridors

develop site wayfinding strategy for pedestrians and vehicles

Consider the wider precinct

future proof spatial and infrastructure requirements for adjacent facilities

coordinate common materials, techniques, approaches and design themes across precincts

clover.
GREEN SPACE

site character
GUIDING PRINCIPLES

Connect views to Mount Barker Summit

acknowledge Peramangk and connection to country

celebrate and choreograph views to the summit from across the site and precinct

retain rural views where possible to the wider landscape

Build biodiversity corridor along creekline

manage edges to biodiversity corridor with defined access and maintenance strategies

capture, treat and infiltrate stormwater runoff from the site to manage the health of natural systems

plant endemic species to the local area to maximise biodiversity outcomes

Retain a rural experience and hills feel

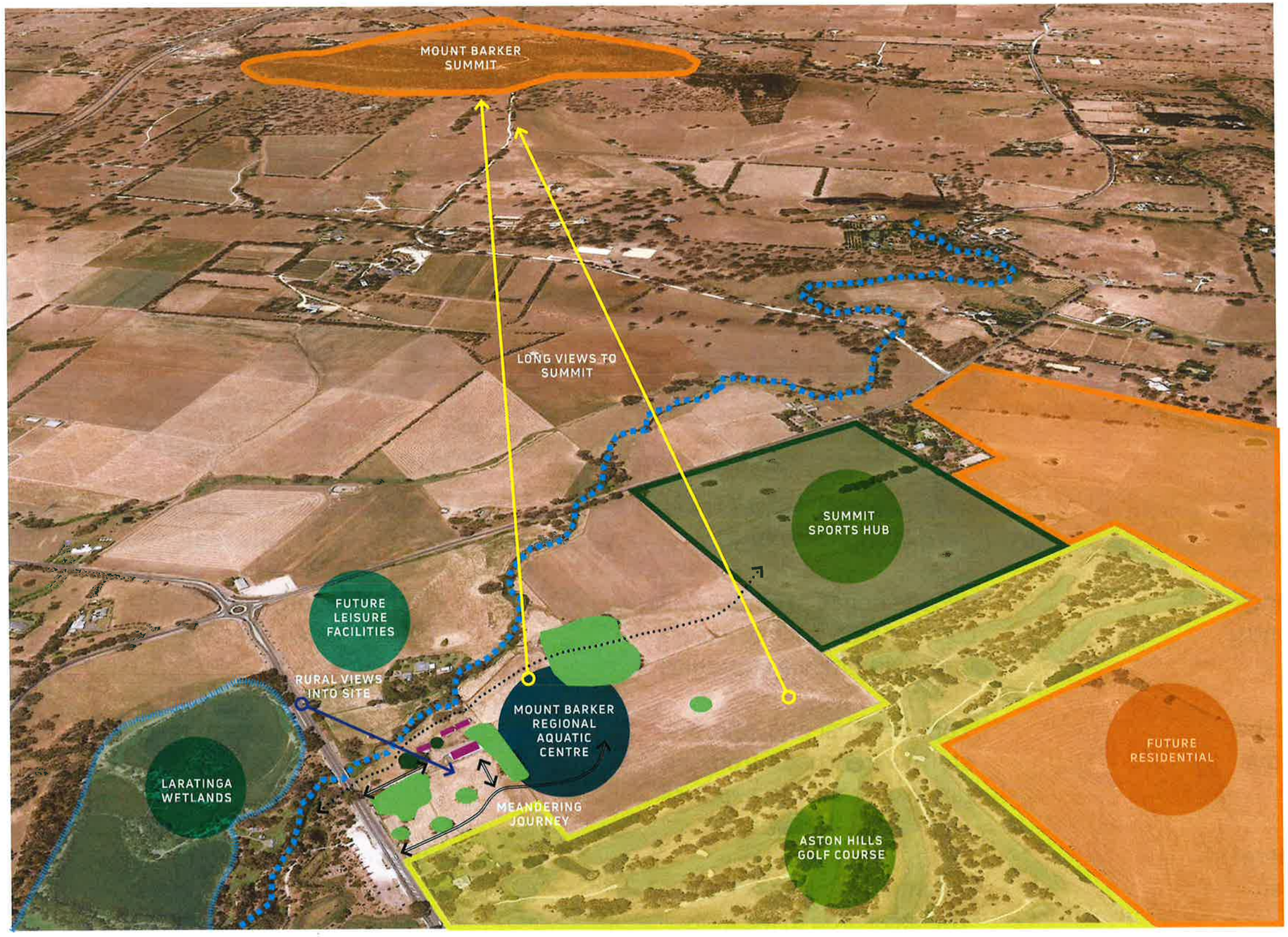
celebrate large red gums and open spaces

retain breathing space between facilities to respect trees

consider journey through the site and precinct to enjoy and celebrate the unique landscape character

clover.
GREEN SPACE

site planning and experiences
GUIDING PRINCIPLES



connect views to Mount Barker Summit between trees

rural entry and arrival experience

meandering journey through site

breathing space between facilities

nestle buildings between red gums

respect and contribute to biodiversity outcomes of the region

CREATE A SUSTAINABLE LEGACY FOR FUTURE PHASES

CELEBRATE THE UNIQUE SENSE OF PLACE AND RURAL HILLS FEEL

clover.
GREEN SPACE

site planning and experiences
LANDSCAPE EXPERIENCES

DISCUSSION POINTS

1. CONNECT VIEWS TO SUMMIT BETWEEN TREES
> Orientation of Aquatic Centre building to connect long view to Mount Barker Summit between trees
> Wrap building and roads along the contours to reduce earthworks and possible retaining structures.

2. RURAL ENTRY AND ARRIVAL EXPERIENCE
> Are there multiple vehicular entries associated with different precincts and landuses?
> This would decentralise carparking breaking them into smaller areas of hardstand

Heritage buildings - the existing driveway could be maintained providing access to a carpark connected to the heritage buildings
Main Entry - Meandering journey to retain the existing farmland and rural character.

3. MEANDERING JOURNEY THROUGH THE SITE
> Allow the site to reveal itself through the arrival experience
> Break up carparking areas through the integration of swales, native plantings and shaded walkways
> Maintain a semi-rural feel rather than squeezing everything into a corner.

4. BREATHING SPACE BETWEEN FACILITIES
> Utilise the space available to create parkland spaces between buildings for recreation.
> Maintain vistas between structures to wider views of the site and surrounds
> Give space for tree protection zones to be maintained.
> Create space for swales, plantings and water treatment prior to entering the creek corridor
> Maintain the rural feel of the site

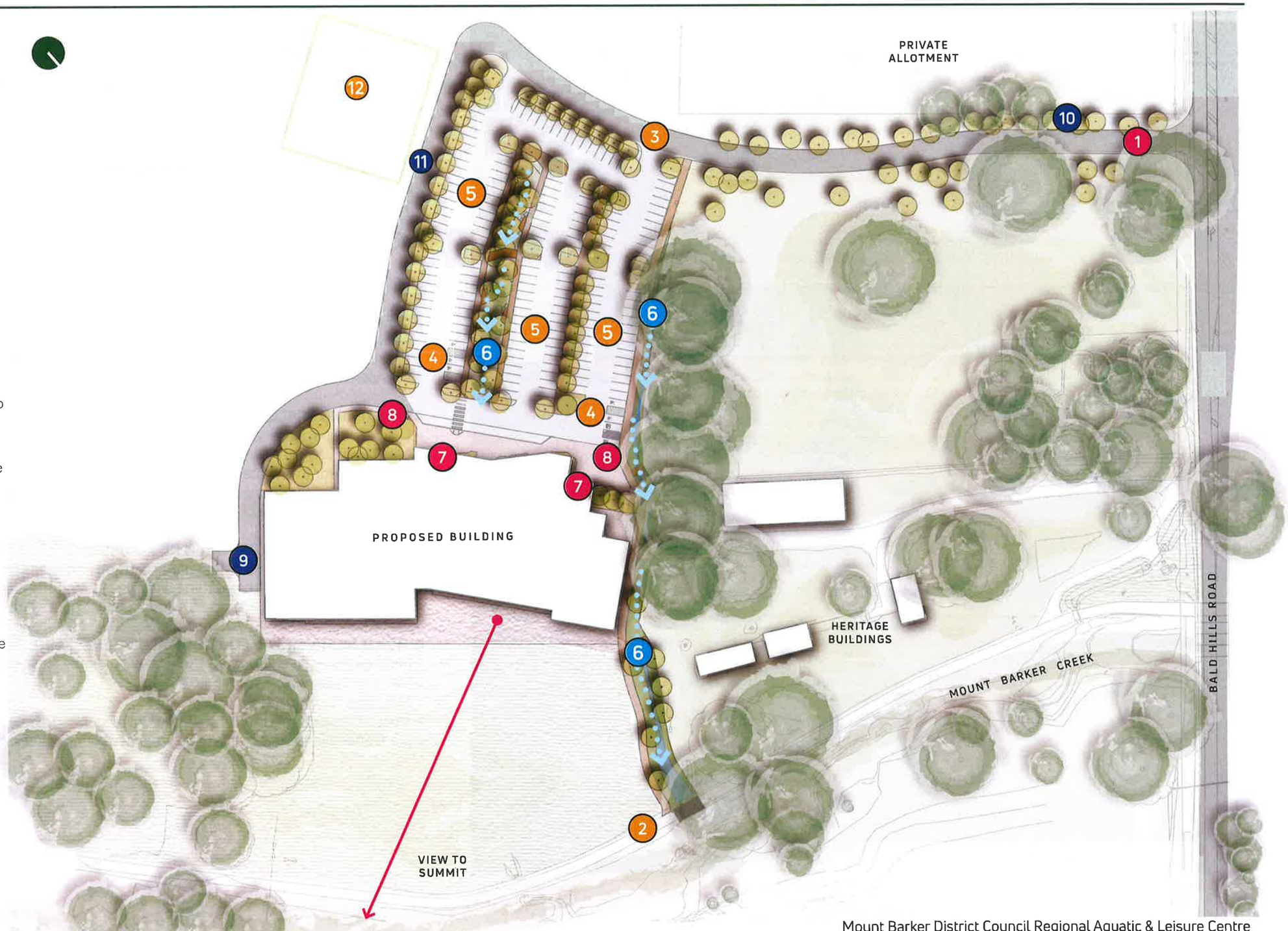
5. NESTLE BUILDINGS BETWEEN RED GUMS
> Celebrate the scale and beauty of the existing Red Gums through the site
> Create views to trees from within buildings
> Consider solar access and orientation of public spaces and building facades

6. BUILD BIODIVERSITY CORRIDOR ALONG CREEKLINE
> Manage edges to biodiversity corridor with defined access and maintenance strategies
> Manage trails and crossing points
> Maximise views to creek corridor
> Treat stormwater and road runoff through vegetated swales and filter beds prior to entering creek
> plant endemic species to the local area to maximise biodiversity outcomes

clover.
GREEN SPACE

site masterplan
CONCEPT PLAN

1. Meandering entry drive with intersection upgrade at Bald Hills Road. Celebrate existing red gums with uplighting and native understorey plantings
2. Shared path connection to Laratinga Trail and Bald Hills Road
3. Entry to carpark
4. Accessible parking bays located for convenience adjacent to each entry point
5. Double aisle parking bay with integrated plantings, swales and pathways
6. Swales and rain gardens to capture and treat runoff from carparks, roof and pavements. Plant with native sedges and endemic vegetation. Path connections with boardwalks linking to entrance and parkland.
7. Entry plaza with seating and bicycle parking. Trees and vegetation to frame architecture and create legible entry points
8. Bicycle Parking
9. Service access to plant
10. Services corridor with clearance from existing trees
11. Temporary road connection for service vehicles and buses
12. Overflow parking area if required



clover.
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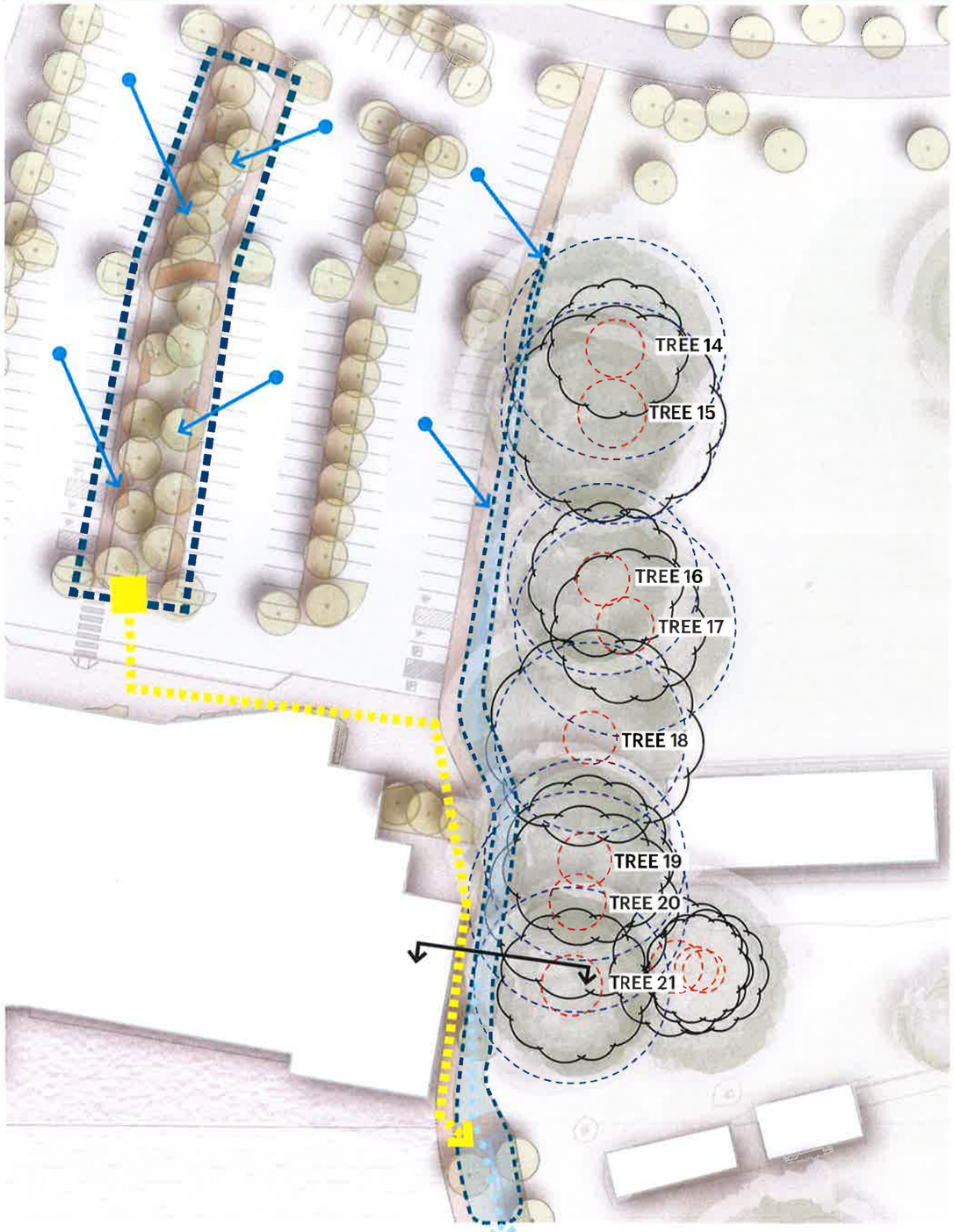
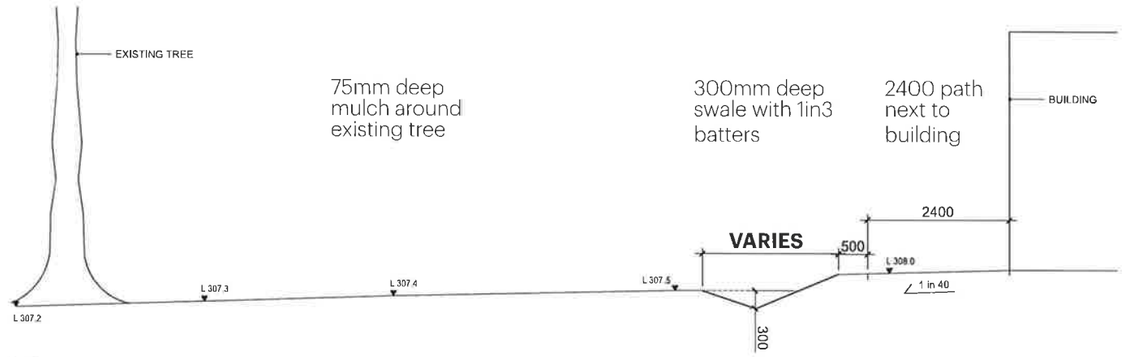
drainage and water treatment

NORTHERN SWALE





1 SECTION - SWALE
SCALE 1:20 @ A1

The site stormwater capture and treatment is managed with the following measures:

1. A central swale that captures and treats runoff from within the carpark.

2. A swale to the north of the carpark that also captures and treats carpark runoff and also roof water.

The northern swale will start at 300mm deep with 1in3 sides that will be planted with aquatic species to filter stormwater runoff before entering creek.
There are minor encroachments into the TPZs of existing trees with the swale and path - See table arborist report. All excavations within TPZ to be undertaken in consultation with project arborist.

Tree Protection Zone

Structural Root Zone

clover.
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precedents & materiality

PRECEDENTS

The landscape experience will be inspired by three key themes of **NATIVE WOODLAND** with endemic plantings from the region with Red Gums, Blackwood and South Australian Blue Gums shading paths and public space. **RIPARIAN** with native sedges, grasses, low shrubs and groundcovers planted within swales and garden beds to treat stormwater runoff and contribute to biodiversity in the area. **CULTURAL HERITAGE** with a strong connection to Aboriginal and European Heritage of the area with interpretation, use of natural materials, endemic plantings and restrained use of a feature oak tree as an accent.

clover.
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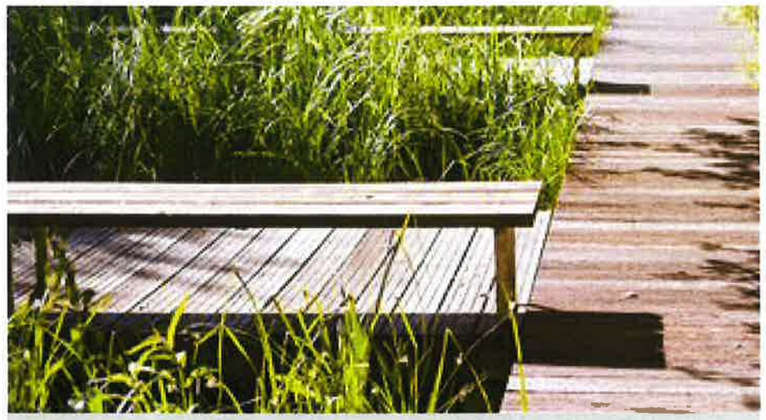
precedents & materiality

MATERIALITY

FEATURE CAREY GULLY SANDSTONE

LITTLEHAMPTON BRICKS

IN SITU CONCRETE PAVEMENT



SWALE CROSSINGS / BOARD WALKS

INTEGRATED SEATING

clover.
GREEN SPACE

concept approach

PLANT PALETTE

1+2. Acacia melanoxylon
3. Calytrix teragona
4. Correa reflexa
5. Goodenia ovata
6. Hardenbergia violacea
7. Grevillea lavandulacea var. lavandulacea
8. Cyperus vaginatus
9+10. Eucalyptus leucoxylon ssp. leucoxylon
11. Leptospermum myrsinoides
12. Astroloma conostephiodes
13. Anthocercis angustifolia

Plantings will be endemic to the regional with a mix of native grasses, sedges, shrubs, trees and groundcovers. These plants are adapted to the climate, soils and hydrology of the region which will contribute to the biodiversity of the corridor. They will offer seasonal colour throughout the year and will require minimal maintenance once established.

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clover.
GREEN SPACE

concept approach
PLANT PALETTE

1. Hibbertia sericea
2. Olearia ramulosa
3. Ajuga australis
4. Kennedia prostrata
5. Carex appressa
6. Myoporum parvifolium
7. Themeda triandra
8. Quercus robusta
9. Eucalyptus camaldulensis
10. Ficinia nodosa
11. Grevillea 'Winpara Gem'
12. Dianella revoluta
13. Cheiranthera alternifolia

A feature Oak tree will be used as an accent tree planted on its own as a reference to the Adelaide Hills farmland feel and history of the site. This will also connect to the specimens of the Carob and Oak adjacent to the heritage stone buildings on the site.

Vistas will be retained to the existing Red Gums onsite which are a key asset and feature.

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clover.
GREEN SPACE

LOOKING NORTH EAST - The carpark will be articulated and divided with vegetated swales and rain gardens to treat stormwater while providing shade and amenity. Accessible pathways which be integrated for safe connections to the facility.

montage 1
CENTRAL SWALE - CARPARK AND ENTRY

clover.
GREEN SPACE

LOOKING NORTH EAST - All stormwater runoff will be channelled into vegetated swale for treatment prior to entering Mount Barker Creek. The building is nestled between existing Red Gums to capture views from inside as well as paths around the facility.

montage 2
PARKLAND NORTHERN CONNECTION

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APPENDIX C

Mount Barker Creek Flood Mapping

Southfront

Ref: 20010-1/DJ/QB
26 February 2021

southfront

31 Hauteville Terrace Eastwood SA 5063
P 8172 1088 E enquiry@southfront.com.au
ABN 96 007 344 191

Our Ref: 20010-1/DJ/QB

26 February 2021

Haley Irvine
Open Space and Urban Designer
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Haley

Mount Barker Creek Flood Mapping, Bald Hills Road to Springs Road

We have completed our assessment of Mount Barker Creek and associated tributaries between Bald Hills Road and Springs Road.

Background

Mount Barker District Council are establishing a number of community facilities on land parcels between Bald Hills Road and Springs Road, Mount Barker. Portions of this area are subject to flood inundation in association with Mount Barker Creek which meanders through this land, and its tributaries.

Flood plain mapping of the region was last documented in *Mount Barker Flood Mapping Study* (AWE, 2011). Since that time, further catchment development and creek infrastructure upgrades have occurred which have changed the flood risk through the subject land. The purpose of this investigation is to provide an updated assessment of flood risk through this land.

Hydrology

The hydrological inputs for the flood model have been extracted and further adapted for the purposes of this assessment from the following sources:

- Mount Barker Creek – RORB/DRAINS model established for the *Mount Barker, Littlehampton & Totness Stormwater Management Plan* (Southfront, 2014)

This model was re-run utilising the latest software version, and was run for the 10 year ARI events, which had not been considered previously.

- Tributaries draining through the golf course through to Mount Barker Creek – DRAINS model established for the *Eastern Sector Mount Barker Stormwater Management Review* (Southfront, 2020)

This DRAINS model provides a more current representation of flows from these catchments which have undergone substantial urban development since the time of development of the broader Mount Barker Creek RORB/DRAINS model. This model was originally prepared to determine flow inputs entering a proposed urban development north-east of Sims Road / Hartman Road. For the purposes of this assessment, the model has been augmented to include the proposed ('WG

Developments') development area and the existing urban catchments and golf course area that drain through to the lower reaches of these tributaries.

Flood Model Construction

A computer-based hydraulic model of the subject land was created using the TUFLOW flood modelling software. The geometry of the creek and floodplain was defined using a digital terrain model of the channel and surrounding land, procured by Council in 2010 for the purpose of previous flood plain modelling. The model extends from upstream of Bald Hills Road to downstream of the Springs Road bridge crossing.

Structures included in the model include:

- Mount Barker Creek culvert structure under Bald Hills Road – this reflects the underpass changes currently nearing completion
- Golf Course Creek culvert structure under Bald Hills Road – based on supplied design drawings
- Mount Barker Creek crossing at Springs Road – based on visual observation and estimation of bridge deck thickness and span

Bulk earthworks filling was also assumed to be in place on the northern side of the creek channel near Springs Road, as per the Bulk Earthworks Concept Plan prepared by Southfront in 2020 (our ref Dwg 20001 Sheet 1).

Model Results

Table 1 below summarises the peak flow rate (and the corresponding storm duration) in key locations for the range of flood events considered. Figure 1 on the following page shows the reference location where these flow rates are reported.

Table 1 Peak Flow Rates at Locations of Interest

Watercourse	Peak Flow Rate (m^3/s) (Critical Storm Duration)			
	100 year ARI	50 year ARI	20 year ARI	10 year ARI
Mount Barker Creek (Bald Hills Rd)	119.8 (6 hour)	76.7 (12 hour)	55.4 (12 hour)	44.3 (12 hour)
Mount Barker Creek (Springs Rd)	123.8 (6 hour)	77.6 (12 hour)	57.9 (12 hour)	45.9 (12 hour)
Golf Course Creek	18.7 (6 hour)	13.0 (9 hour)	8.3 (9 hour)	6.2 (9 hour)
Golf Course Creek Breakout	2.0 (6 hour)	1.2 (9 hour)	0.5 (9 hour)	0.2 (9 hour)
Golf Course Creek East	6.9 (6 hour)	4.8 (25 minute)	3.9 (30 minute)	3.3 (9 hour)

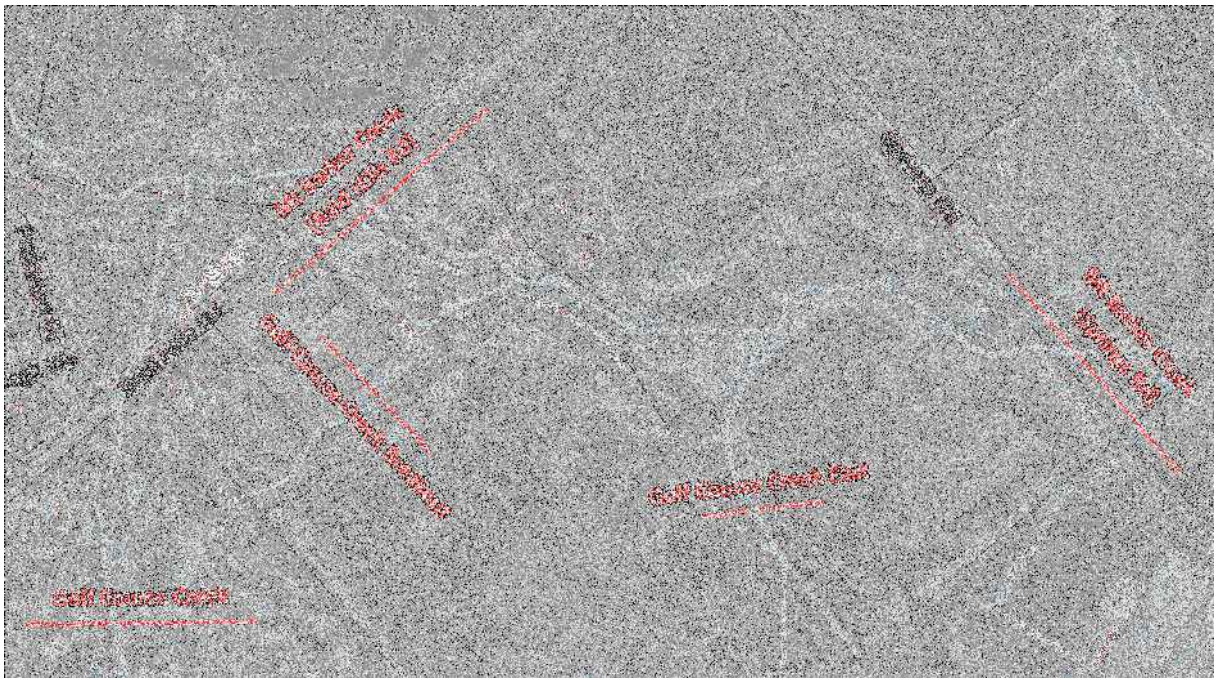


Figure 1 Flow Rate Reporting Locations

Mount Barker Creek is assessed to overtop Bald Hills Road for events commencing at the 20 year ARI level.

Flood mapping of the study area (attached) was undertaken for the 100 year, 50 year, 20 year and 10 year ARI rainfall events. These maps include flood height contours for the extent of flooding. Flood hazard mapping was also undertaken for the 100yr ARI rainfall event.

Please contact this office should you require any further assistance with this matter.

Yours sincerely

Drew Jacobi BEng (Hons) FIEAust CPEng NER
Principal Engineer

Enc: Flood and Hazard Map Series

LEGEND

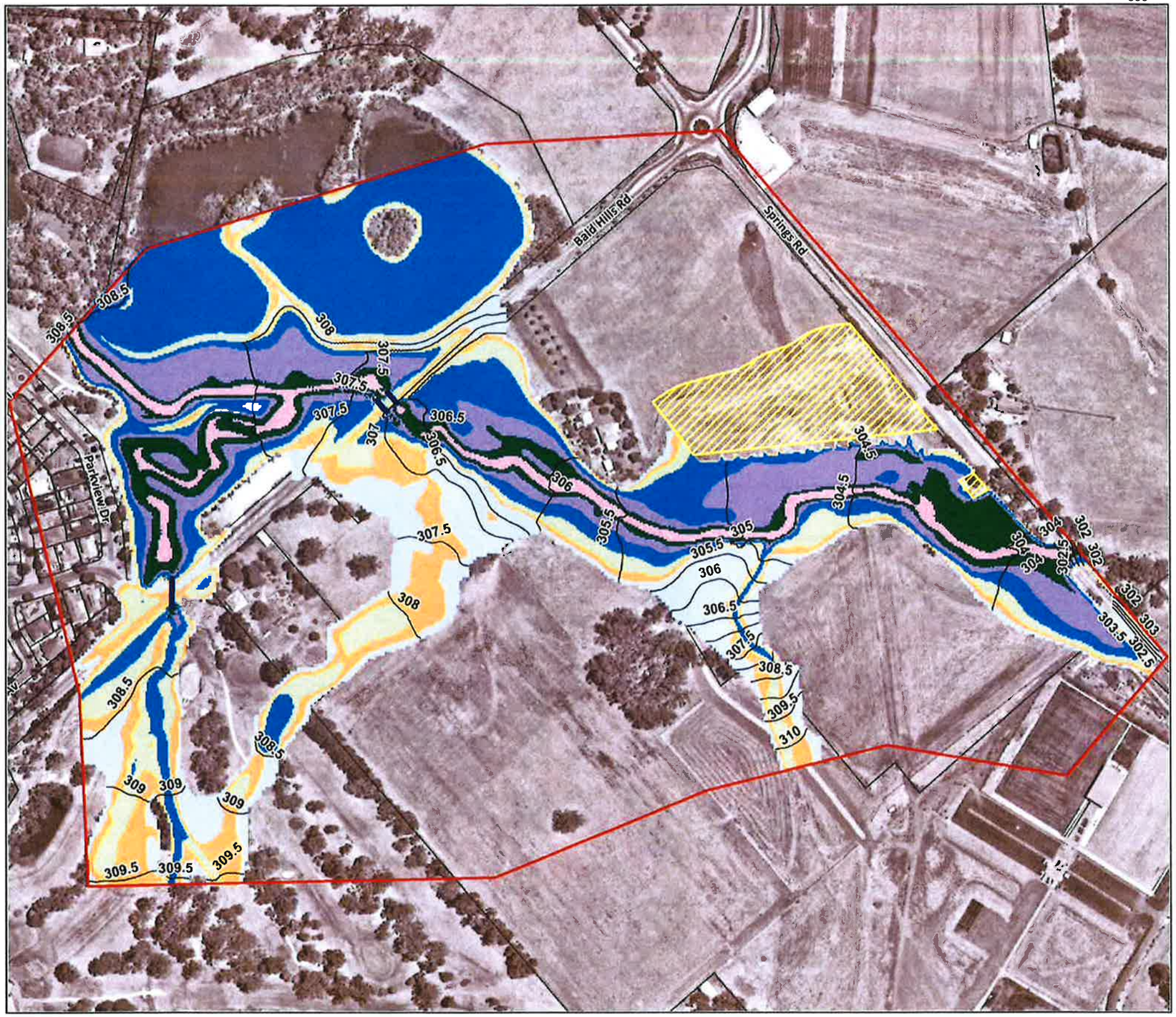
Flood Depth Contour

- 0m to 0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1m
- 1m to 1.5m
- 1.5m to 2.5m
- 2.5m to 5m
- 5m to 100m

- Flood Height Contour (mAHD)
- Cadastre
- Floodplain Study Area
- Stormwater Culvert
- Earthworks Fill

N

0 250
metres



Background
This map has been prepared using currently available technology to a standard of accuracy sufficient for broad scale flood risk management and planning. The map does not increase the risk or affect the level of flooding over an area or property. It merely seeks to identify the extent of flooding over a given set of conditions. Limitations to the information shown on this map and a brief description of some concepts upon which it is based are set out below.

Flood Risk Probability
Flood risk can be considered in terms of:
- Exceedances per Year (EY): the number of times an event is likely to occur or be exceeded within any given year;
- Annual Exceedance Probability (AEP): the probability or likelihood of an event occurring or being exceeded within any given year, usually expressed as a percentage.

Generally, EY terminology is used for Very Frequent design rainfalls and AEP (%) terminology is used for Frequent and Infrequent design rainfalls.

Storm Durations
The flooding response of a catchment is dependent on the duration of any storm event. Generally shorter, more intense storms produce the greatest flows from urban areas. Longer duration, but less intense storms produce the greatest flow from undeveloped rural areas.

Scope of Mapping
The limit of flooding on this map is not a boundary between flood prone and flood free land.
Land outside the flood extent shown on this map could be affected by:
- Storms with different Annual Exceedance Probability;
- Flooding from local drainage systems which can occur as a result of localised intense rainfall or drain blockage.

Areas of very shallow flooding
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The flood extents are not based on actual historical floods.

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Aerial Imagery: NearMaps
Roads, Cadastre: Mount Barker District Council

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Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 1: 100yr ARI Floodplain Map

Issue Date: 26/02/2021

LEGEND

Flood Depth Contour

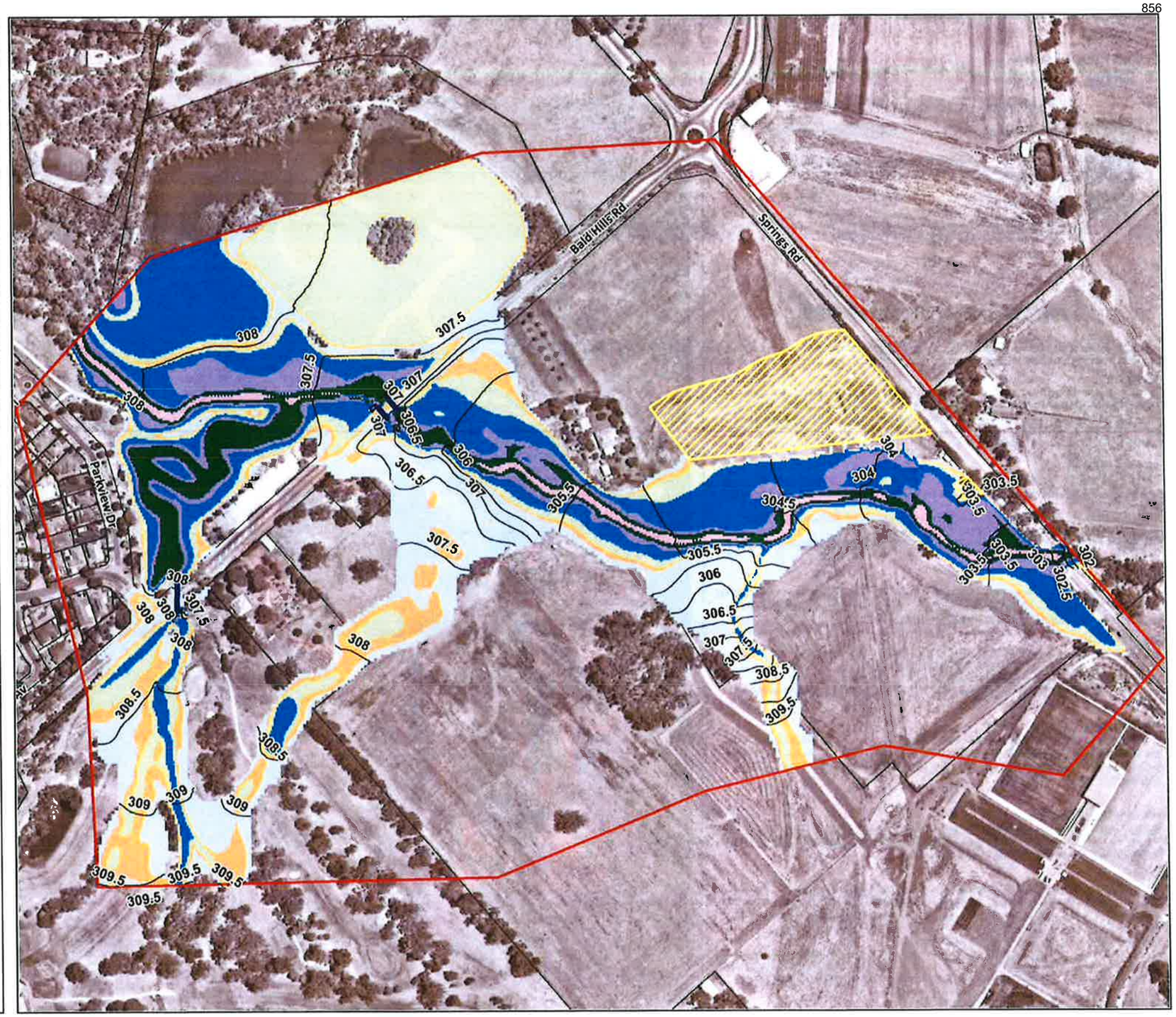
- 0m to 0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1m
- 1m to 1.5m
- 1.5m to 2.5m
- 2.5m to 5m
- 5m to 100m

- Flood Height Contour (mAHD)
- Cadastre
- Floodplain Study Area
- Stormwater Culvert
- Earthworks Fill

N

0 250

metres



Background
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Generally, EY terminology is used for Very Frequent design rainfalls and AEP (%) terminology is used for Frequent and Infrequent design rainfalls.

Storm Durations
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Scope of Mapping
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Roads, Cadastre: Mount Barker District Council

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Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 2: 50yr ARI Floodplain Map

Issue Date: 26/02/2021

LEGEND

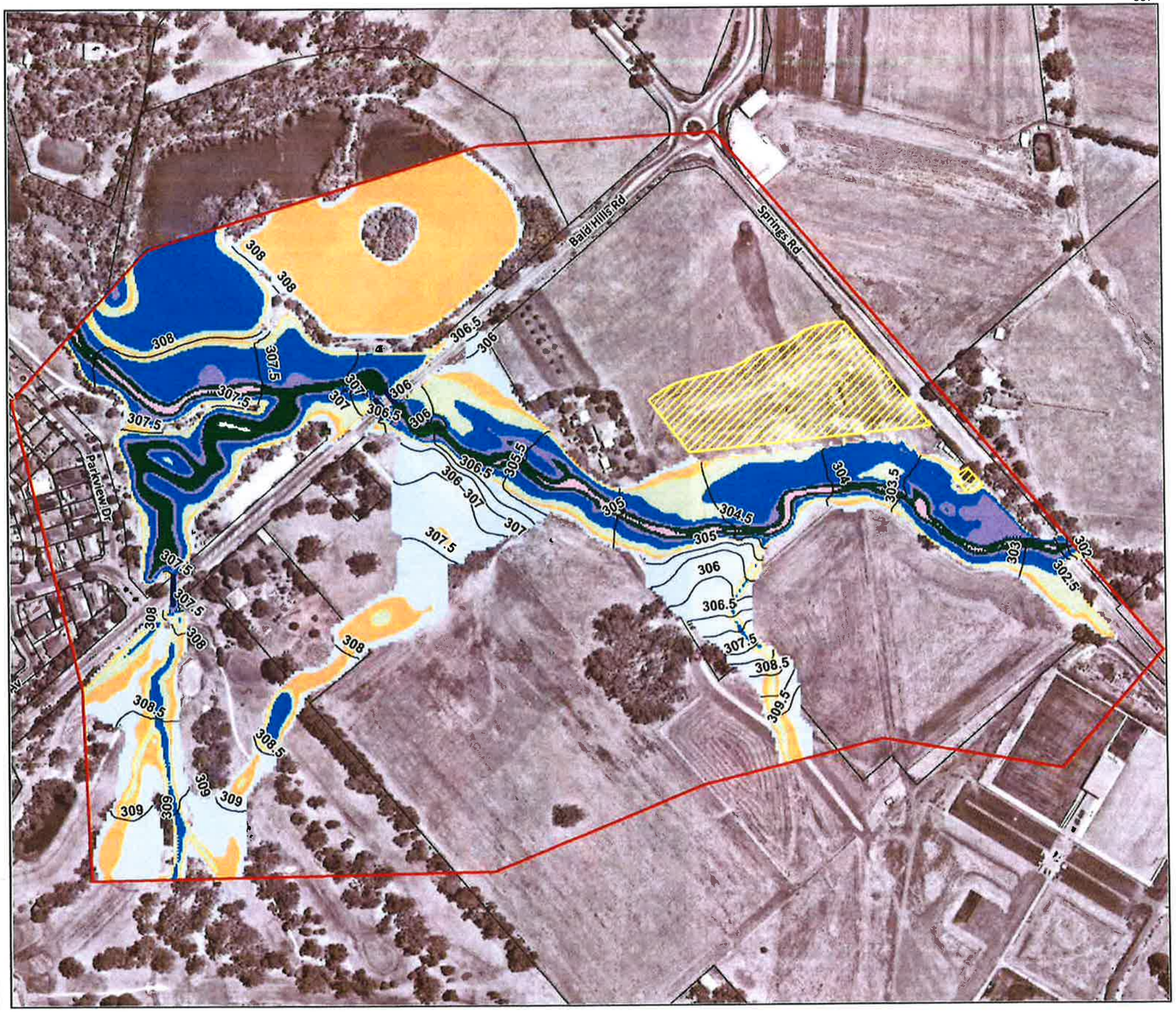
Flood Depth Contour

- 0m to 0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1m
- 1m to 1.5m
- 1.5m to 2.5m
- 2.5m to 5m
- 5m to 100m

- Flood Height Contour (mAHD)
- Cadastre
- Floodplain Study Area
- Stormwater Culvert
- Earthworks Fill

N

0 250
metres



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Scope of Mapping
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Roads, Cadastre: Mount Barker District Council

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Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 3: 20yr ARI Floodplain Map

Issue Date: 26/02/2021

LEGEND

Flood Depth Contour

- 0m to 0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1m
- 1m to 1.5m
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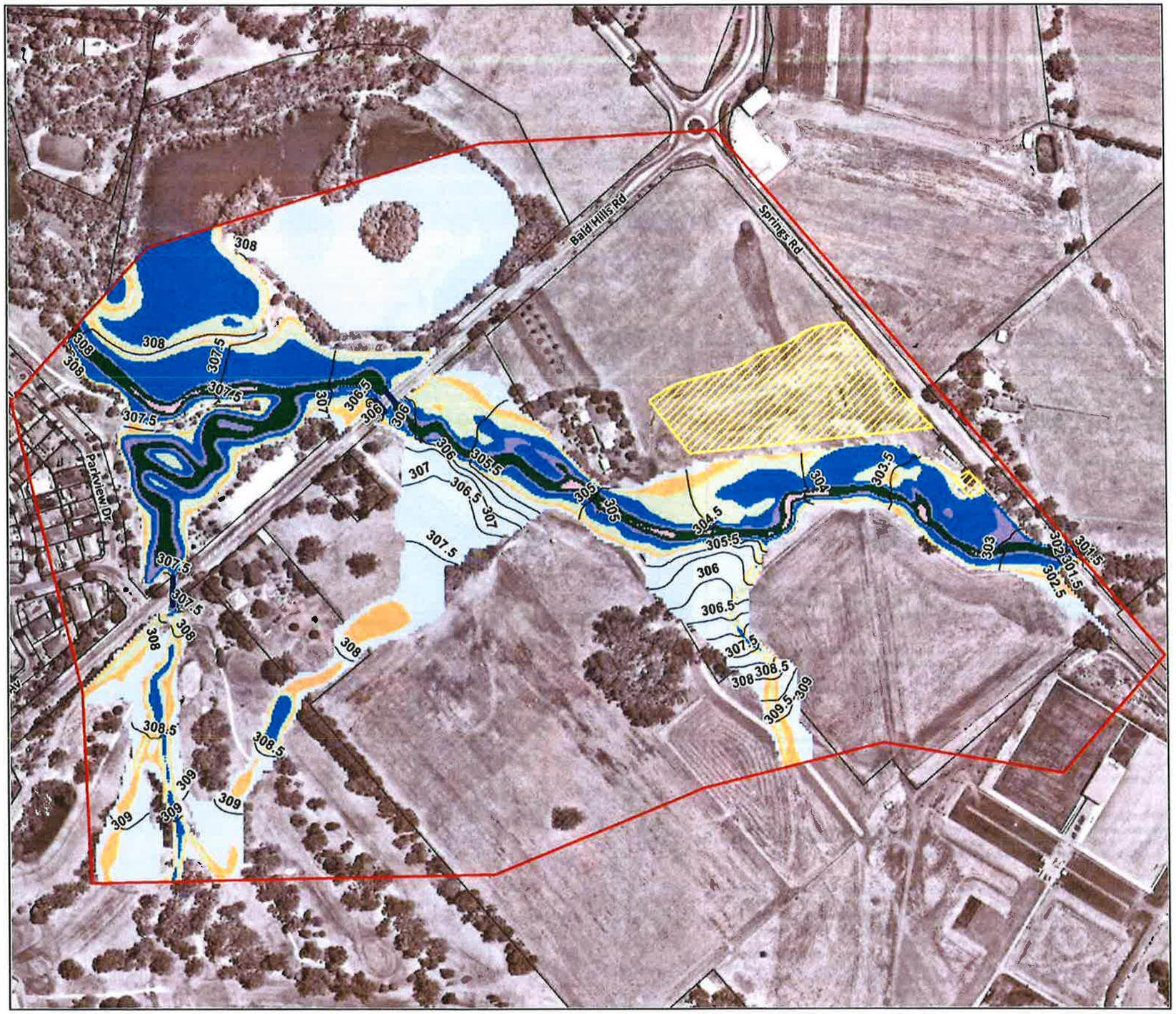
- Stormwater Culvert
- Earthworks Fill

N

0 250
metres



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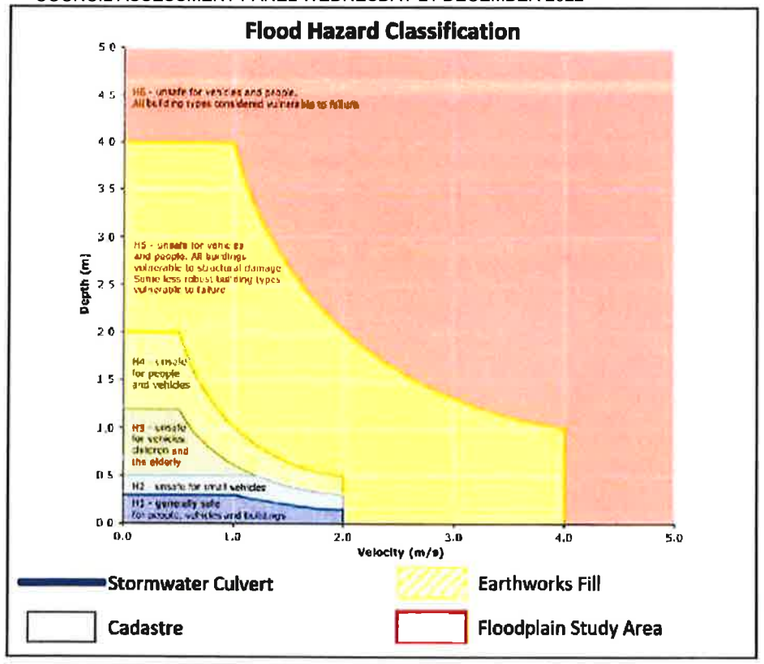
Bald Hills Road Flood Mapping
Figure 4: 10yr ARI Floodplain Map

Issue Date: 26/02/2021



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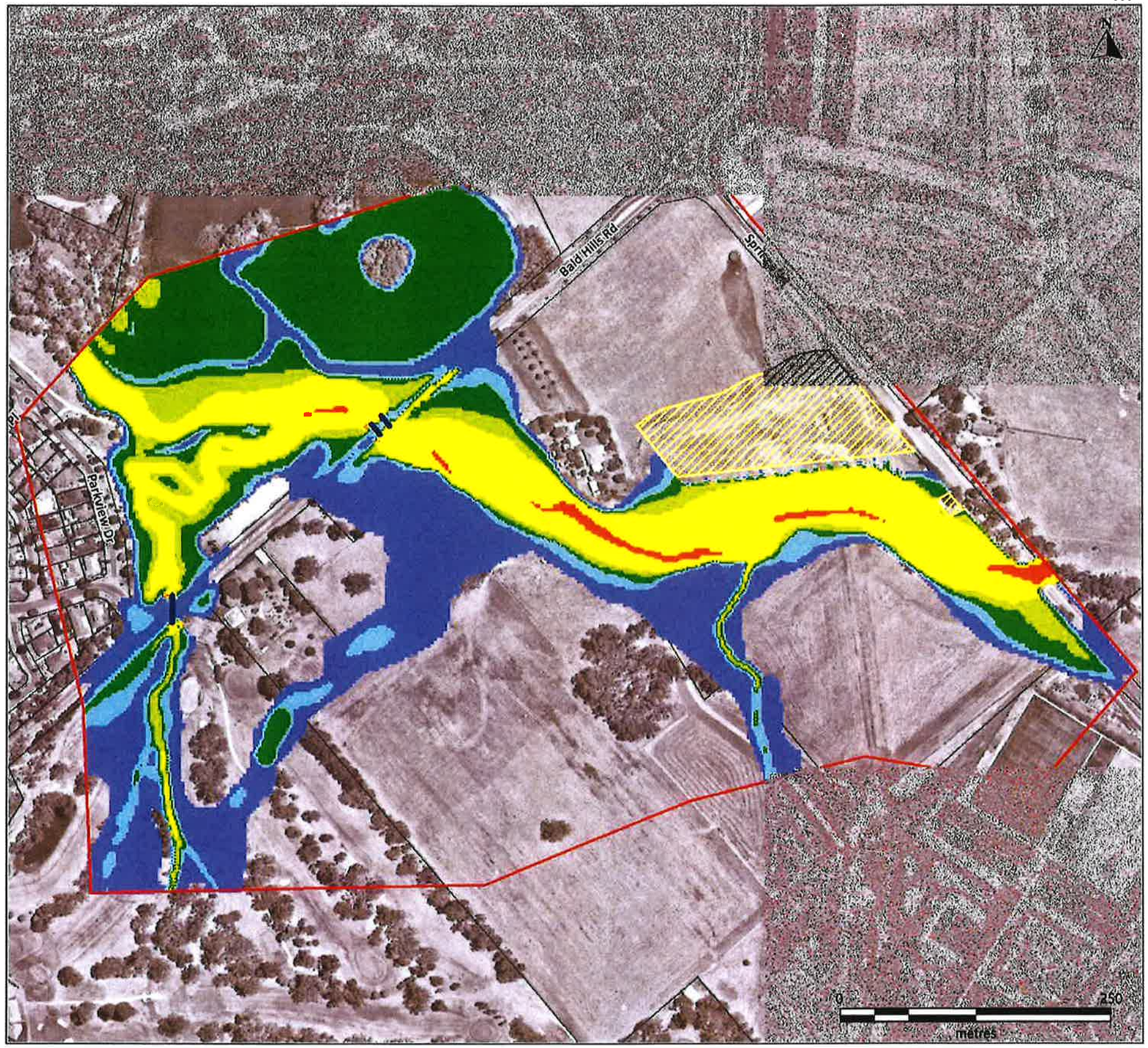

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Data Sources:
Flood Mapping: Southfront
Aerial Imagery: NearMaps
Roads, Cadastre: Mount Barker District Council

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Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 5: 100yr ARI Flood Hazard Map

Issue Date: 22/03/2021

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APPENDIX D

Stormwater Management Plan

FMG Engineering

Job No. S59466-281352
12 October 2022

ENGINEERING

Stormwater management report

Regional Aquatic and Leisure Centre

JOB NUMBER:	S59466 - 281352
CLIENT:	Mount Barker District Council
SITE:	Bald Hills & Springs Road, Mount Barker, SA 5251
DATE:	2/12/2022
REVISION:	3

Engineering your success.
ADELAIDE
MELBOURNE
SYDNEY

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Document Status

REV NO.	STATUS	AUTHOR	REVIEWER		APPROVED FOR ISSUE	
			Name	Date	Name	Date
0	FINAL	Jordan Colbert	Chris Clarke	07.10.2022	Jordan Colbert	07.10.2022
1		Chris Clarke	Jeremy Clapp	12.10.2022	Chris Clarke	12.10.2022
2	DRAINS Figures added	Jordan Colbert	Chris Clarke	04.11.2022	Jordan Colbert	04.11.2022
3	Updated civil plans	Jordan Colbert	Jeremy Clapp	2/12/2022	Jordan Colbert	2/12/2022

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Southfront Flooding Report 16
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Introduction

The work carried out in the preparation of this report has been performed in accordance with the requirements of FMG Engineering's Quality Management System which is certified by a third party accredited auditor to comply with the requirements of ISO9001.

FMG Engineering is engaged by DesignInc Adelaide Pty Limited to prepare a Stormwater Management Plan for a proposed Regional Aquatic and Leisure Centre facility at Bald Hills Road, Mount Barker for the purpose of planning approval.

This Stormwater Management Plan has been prepared in accordance with the Planning & Design Code and the requirements provided by Council's engineering and planning departments discussed through multiple project meetings and pre-lodgement discussions held with Council.

This Stormwater Management Plan was prepared prior to detailed civil design and represents the design intent of stormwater management proposed for the development. If major changes are required during detailed design, an amended report will be submitted to Council for review and approval.

Site understanding

The site is located at Summit Precinct, Aquatic Centre, Bald Hills & Springs Rd, Mt Barker, SA 5251 as shown in Figure 1. The subject site is located on north facing slope, in close proximity to the existing natural watercourse which runs west to east through adjoining land. The site is currently largely cleared for farming use, with some remnant large trees located outside the footprint of the proposed works.

The site features some reasonable existing level change, approximating between 3% and 6% falling towards the north. No formal outlet to the creek is currently observed at this location, however a small bridge / culvert is present beneath the existing shared path which runs along the southern edge of the watercourse.

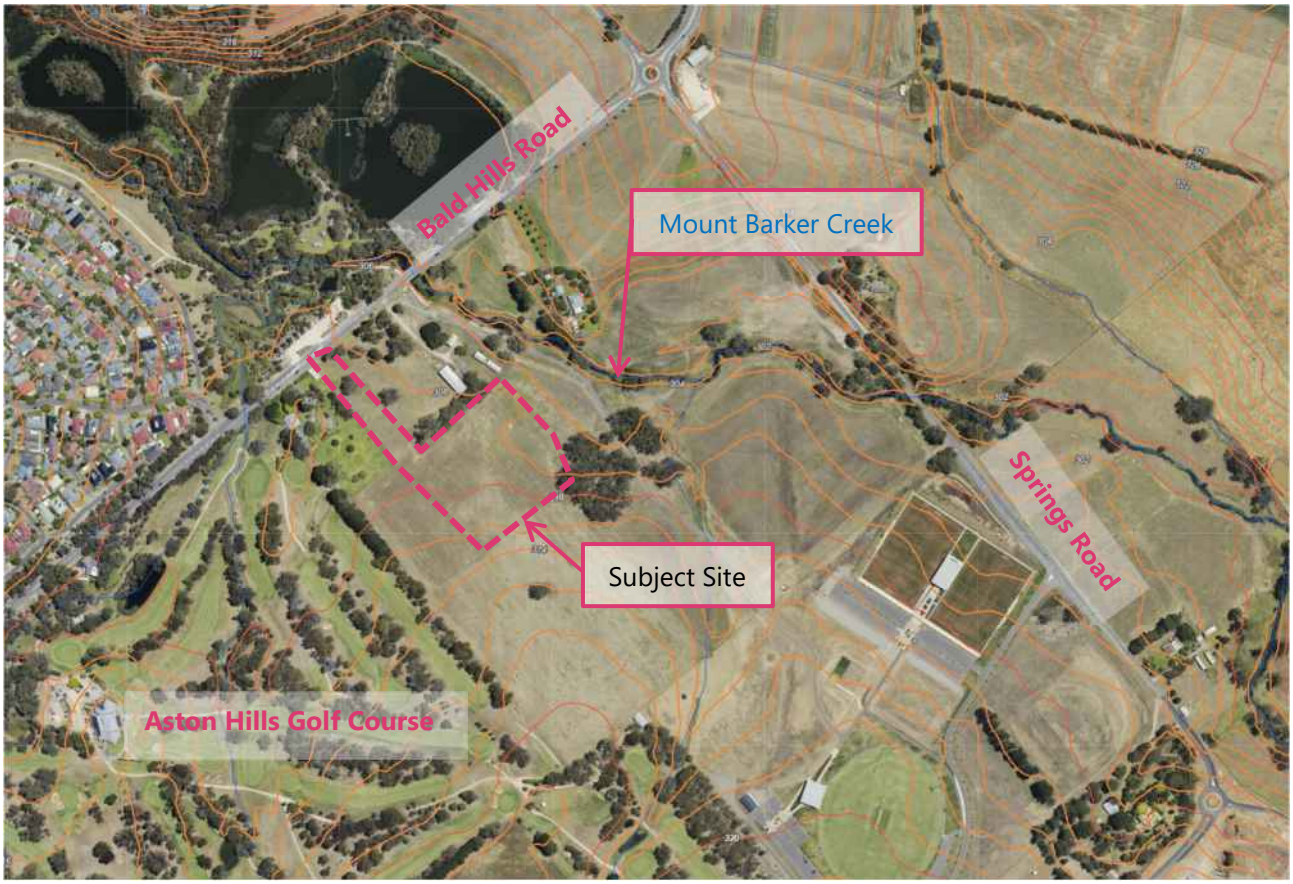

Figure 1: Site location with local area contours showing fall towards the north east within the site

Proposed Development

The proposed Mount Barker Regional Aquatic and Leisure Centre works pertaining to stormwater includes the following:

- New access road from Bald Hills Road
- New Aquatic and Leisure Centre facility
- Asphalt sealed carparking, footpaths and associated landscaping to service the aquatic centre

The proposed site works are shown in the Preliminary Civil Drawings provided in Appendix A

A catchment plan has been provided in Appendix B, with the site catchments summarised below;

Catchment	Area (ha)	Impervious % (Tc)	Pervious % (Tc)
Roof	0.448	100 (12min)	0
Carpark 1	0.412	70 (5min)	30 (10min)
Carpark 2	0.671	50 (5min)	50 (10min)
Carpark 3 + 4	0.620	50 (5min)	50 (10min)
Plaza 1	0.232	25 (5 min)	75 (7 min)
Upstream Catchment	2.195	0	100 (40 min) Bransby-Williams Formula

Stormwater management requirements

FMG and the broader Design Team have met with Council on site, and throughout concept design workshops and pre-lodgement meetings to ensure clear communication of Council's key stormwater requirements.

We have summarised below our understanding;

- **Water quality is of high importance with this project.** Given the proximity to the nearby Mount Barker Creek watercourse, the runoff generated from this development can have direct impact the ecology and ensuring adequate water quality treatment is achieved is highly important
- Council outlined a preference for landscaped based WSUD treatment trains, rather than proprietary filters or units which require maintenance
- A desire to reduce the volume of flows from the site during 3 month ARI storm events
- Management of stormwater through high quality landscaping, swales and soft engineered features to lead the community in WSUD and considered design approaches, rather than one-size-fits-all kerbed roads.
- Consideration towards known flood modelling constraints and incorporation of the findings of the supplied Southfront reporting (Appendix C) into the design.
- More generally, FMG will also ensure best practice stormwater principals are adhered to, including;
  - Stormwater systems shall be designed and constructed to cater for minor storm flows from a 10% AEP (10-year ARI) storm event
  - Surface stormwater shall be managed such that there is no ponding of water against buildings or structures, no runoff into neighbouring properties and does not put downstream property at risk during the 100-year ARI event
  - Finished floor levels for buildings shall be at least 150mm above the Q100 flood level adjacent the building to ensure flood protection.

Stormwater management plan

FMG has developed the following strategy to manage stormwater on site, with a preliminary Civil plan including levels and concept stormwater layouts shown within Appendix A, and a catchment plan shown in Appendix B.

- Stormwater runoff from roof areas will be collected into downpipes, and conveyed into a meandering swale which conveys all runoff from the development into the nearby watercourse.
- Stormwater runoff from the majority of carpark will be diverted into a bioretention raingarden / wetland basin within the aisle of the carpark. This basin will provide a high level of visual and ecological amenity, stormwater treatment, and retention of frequent (i.e. 4EY) storm events runoff.
- Stormwater runoff which cannot be feasibly graded into the central basin, will be collected into roadside grassed / vegetated swales for treatment, ultimately discharging into the larger meandering swale outfall.
- Existing overland flood paths identified within the provided Southfront reporting will be maintained, with a new 900W x 300H culvert providing sufficient capacity for 0.5m^3/s flow through the culvert, aligning with the 5% AEP peak flow rate for this flood watercourse. Larger events will be able to overtop the entrance road, which will be graded to achieve a broad spillway and sufficient allowance made for erosion protection and flood permeance.
- Stormwater runoff from the new entrance road will be diverted locally into roadside swales with two-way crossfall. During major events these roadside swales can ultimately drain towards Bald Hills Road, and the existing low point associated with the Golf Course Breakout floodway.
- Following detailed workshop discussions, Council and FMG have arrived at the conclusion that detention storage is not an effective stormwater principle on this development, given the lack of downstream infrastructure constraints on the system. As the development can discharge directly into the watercourse downstream of the majority of the Mount Barker catchment, slowing down this peak flow and spreading this out over a longer duration may in fact contribute to higher peak flow depths

in Mount Barker Creek compared to the adopted principal of discharging at unrestricted peak flow rates.

- Peak velocities and scour protections will need to be considered in a high level of detail during detailed design to ensure best practices (i.e. QUDM 2013) are maintained post-development at the proposed outfall. Given a meandering swale is proposed FMG is comfortable this risk can be adequately abated through planting and other erosion controls, and is considered a far higher quality outcome when compared to a conventional pre-cast headwall arrangement.

- Undeveloped agricultural area to the south forms a natural 2ha upstream catchment which may generate overland flows in storms greater than the 5 year ARI storm event. Council have advised future plans for this area including further sports facilities, carparking and other structures which will have their own outfall drainage to the east, or the meandering swale will be modified (if required) to accept additional flows from this catchment. In the short term, a cutoff swale has been nominated to be cut into the hill above the proposed development and intercept all runoff from this catchment up to the 10% AEP storm event. Runoff exceeding the capacity of this swale during the 1% AEP will travel as overland flow down into the carpark catchments, which can safely convey these flows into the meandering swale outfall.

A finished floor level of 308.10mAHD has been nominated, which exceeds the adjacent flood levels of ~307.5-307.76mAHD 100 year flood estimations provided within the Southfront reporting with a freeboard of >300mm and plan area offset from the extent of flood waters in excess of 50m.

Stormwater calculations

Hydrological parameters

The DRAINS model hydrological input parameters are outlined below:

- Impervious area depression storage: 1mm
- Supplementary area depression storage: 1mm
- Pervious area depression storage: 5mm (10mm adopted for the upstream catchment)
- Antecedent Moisture Condition: 3.

A conceptual DRAINS model was prepared to verify the magnitude of stormwater to be managed, and provide indicative sizing of basins, outfall swales and internal pipe work. A separate model was also prepared to verify the conveyance capacity of the proposed concrete box culvert and headwall arrangement nominated beneath the entrance road.

Detailed inputs, output results and larger screenshots are provided in Appendix D.

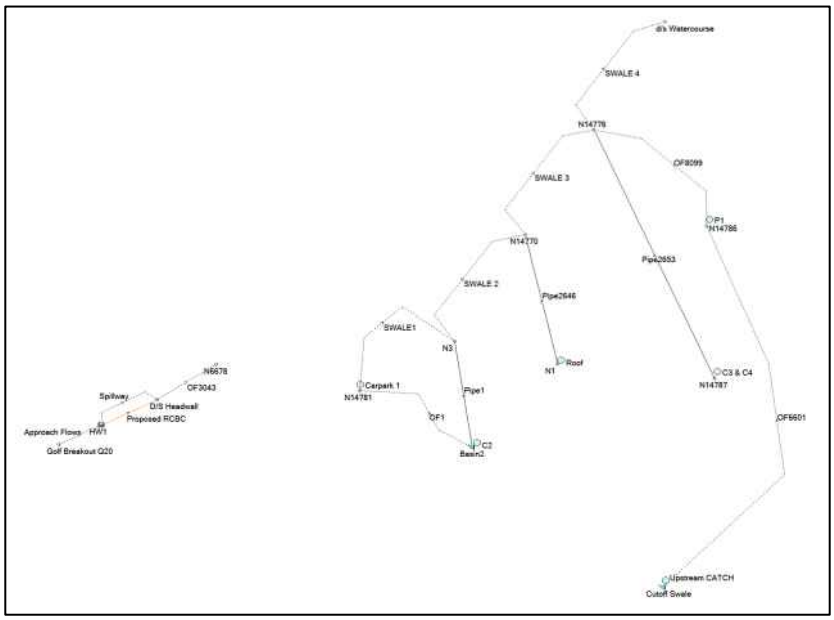

Figure 3 - DRAINS Model Layout

DRAINS modelling results

The results of the DRAINS modelling for the 10% AEP (10-year ARI) storm event are summarised in Figure 4.

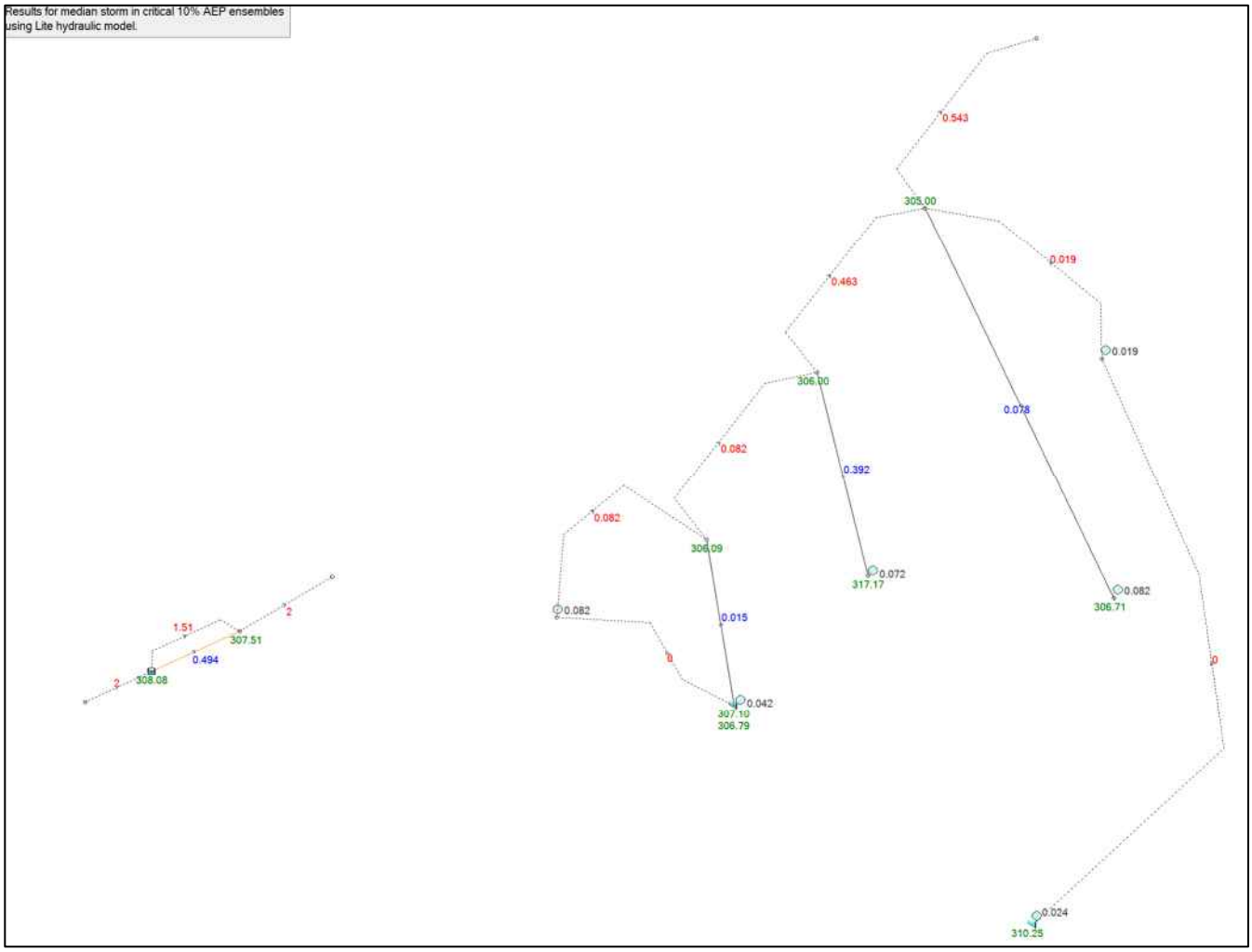

Figure 4: DRAINS modelling results minor storm events

The results of the DRAINS modelling during the major 100-year ARI storm event are summarised in Figure 5.

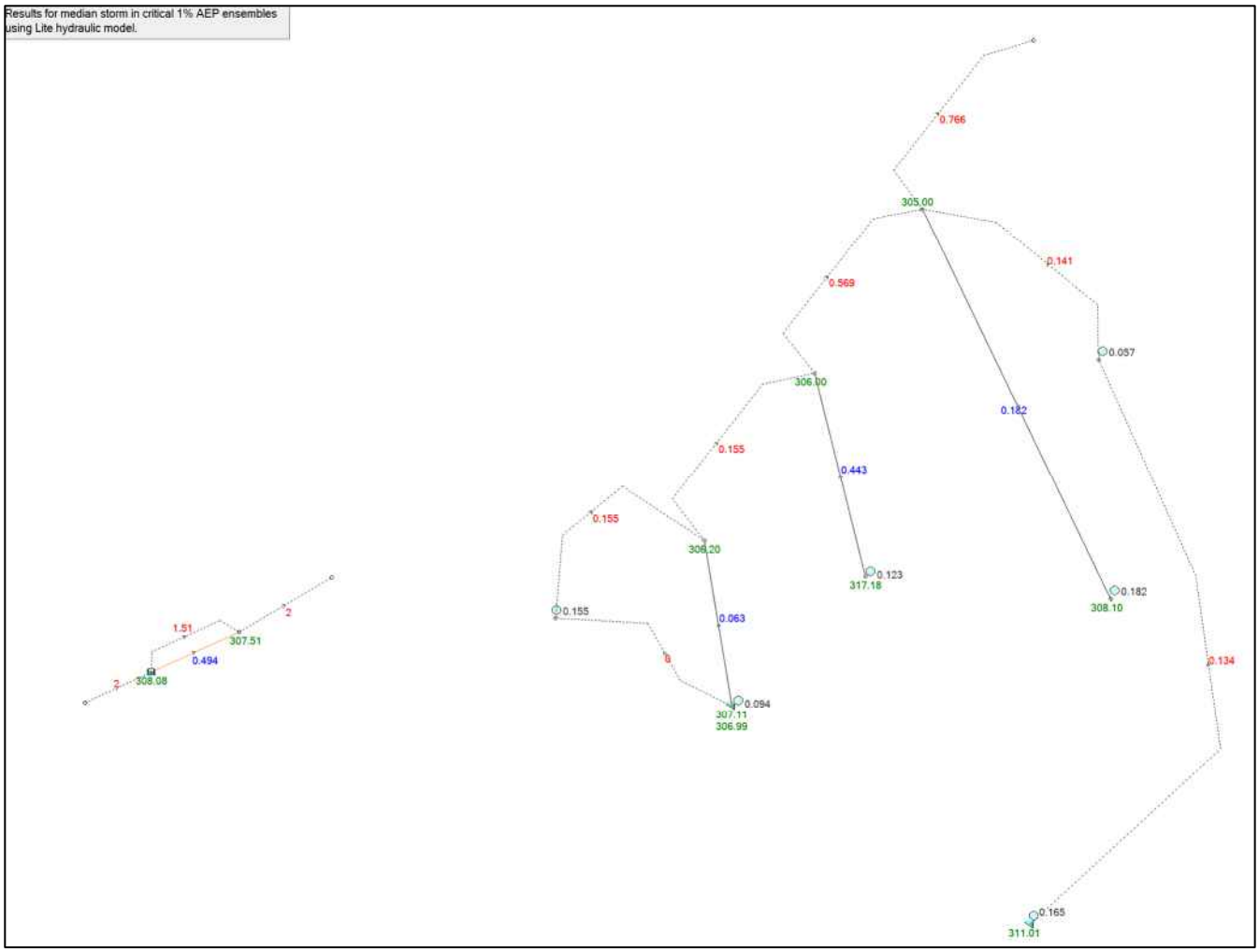

Figure 5: DRAINS modelling results during major storm event

The total discharge from the site is collected and conveyed along a proposed landscaped swale which will meander towards the existing watercourse at approximately 1% longitudinal grade. (noted as Swale 1-4 within the DRAINS model). This swale is to be min. 300mm deep with a 1.5m wide base (variable) and 1:3 planted and vegetated sides. The depth of the flow at the downstream end, once all catchments are contributing to the swale is estimated to be 156mm during the minor storm event, and 185mm during the major storm event, providing >300mm of freeboard to the finished surface of the swale as shown in Figure 6. During detailed design, the specification of this swale will be verified to ensure adequate erosion protection controls are nominated, pedestrian crossing features are specified with adequate freeboard and lateral strength, and downstream tailwater effects accurately modelled to ensure outfall behaviour aligns with the latest flood studies (noting peak discharge from the RALC will precede peak flow in the adjacent watercourse.

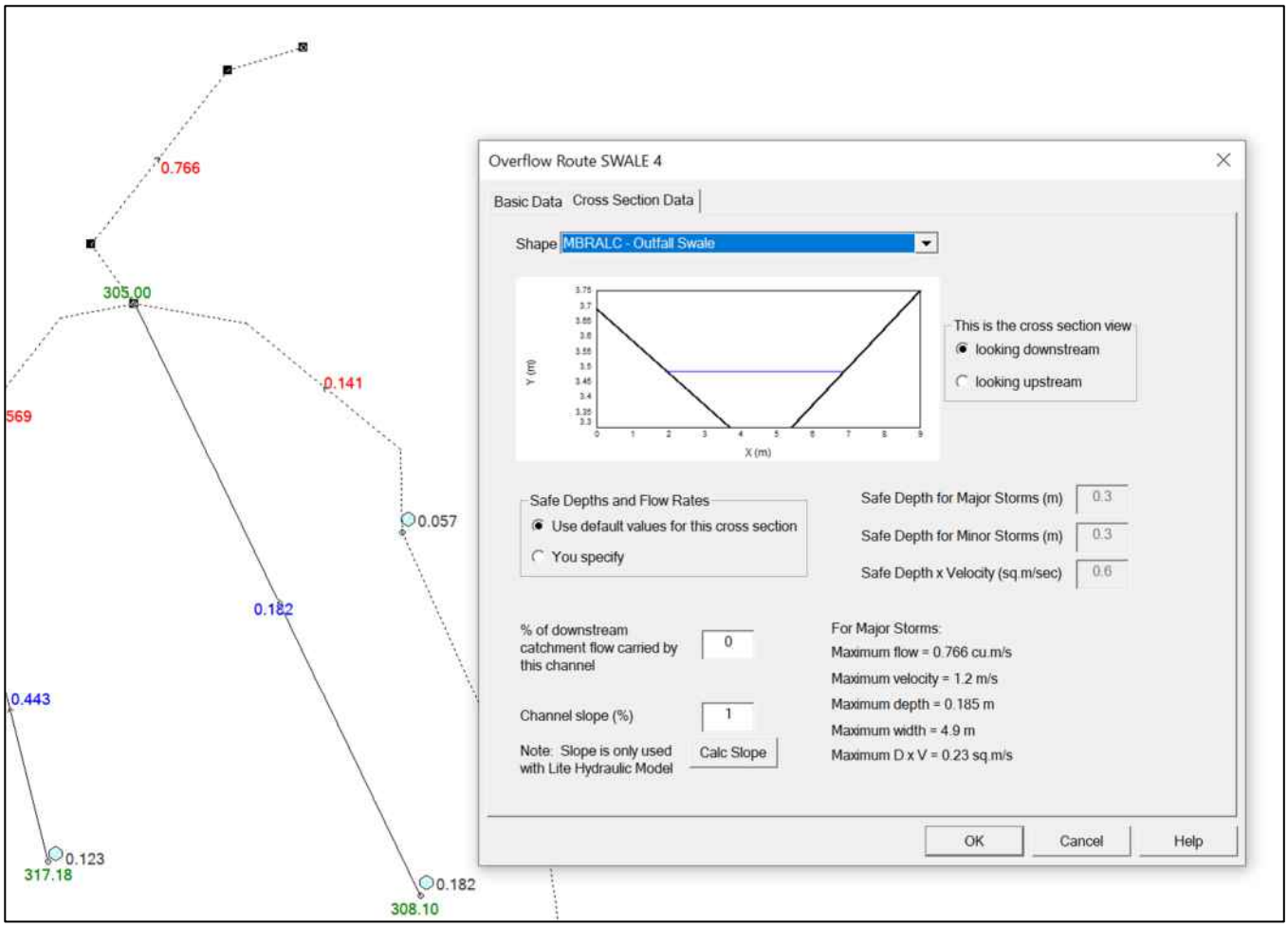

Figure 6: Depth of flow in the landscaped swale during a minor 10% AEP (left) and major 1% AEP (right) storm event

Golf Course Breakout Flood watercourse

Southfront's flood reporting (dated 26 Feb 2021) provides detailed summaries of the nearby breakout creek which travels from the south-east of the site (within the Aston Hills Golf Course) and towards the north east as seen below in Figure 7.

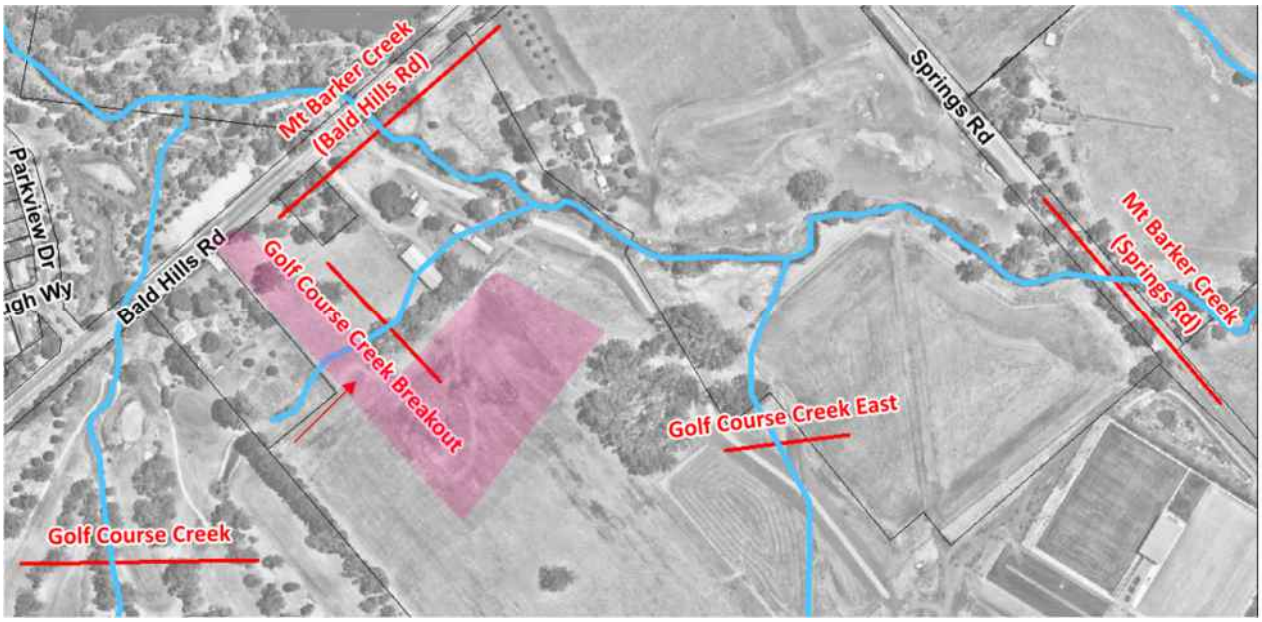

Figure 7: Excerpt from Southfront report showing Golf Course Creek Breakout (proposed RALC in pink overlay)

FMG has reviewed the peak flow estimation of this breakout creek provided within Table 1 of the Southfront report, and then modelled a range of spatially viable culverts which can convey flood waters beneath the proposed access road. The 1% AEP peak flow was modelled as an approach flow, and box culverts were iterated through to identify a solution which would achieve the 10% AEP (0.2m^3/s - minimum level of service) and 5% AEP (0.5m^3/s - desirable level of service).

As seen in Figure 8, a 900W x 300H reinforced concrete box culvert can convey 0.5m^3/s of peak flow which meets the 5% AEP level of service. Given this is the shortest practical height of a culvert which will be easily maintainable, it does not seem cost effective to reduce this culvert further at the risk of more frequent overtopping events.

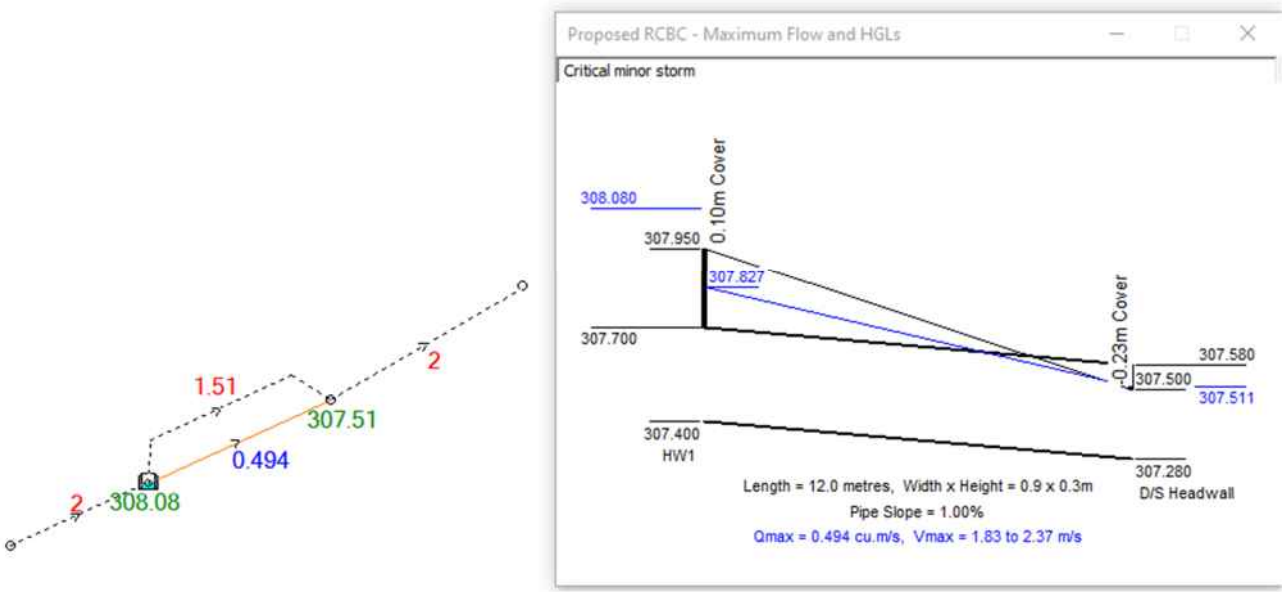

Figure 8: Sizing of breakout creek culvert.

Music modelling results

A Music model was developed to assess the reduction in pollutants based on the proposed treatment train consisting of bioretention raingardens and grassed roadside swales. This assessment was undertaken in accordance with the Water Sensitive SA MUSIC modelling guidelines. The results of the model can be seen in Figure 9 with a summary of reductions shown in Table 1. The results fall slightly short of the targets for phosphorus and nitrogen. There may be opportunities in the detailed design to incorporate additional WSUD elements with additional retention storage (small basins etc.) which may improve these reduction results. However, to fully achieve the targets for nitrogen typically requires a tertiary treatment device with replaceable cartridge style filters which are costly to install and maintain, and we don't believe is warranted on this site.

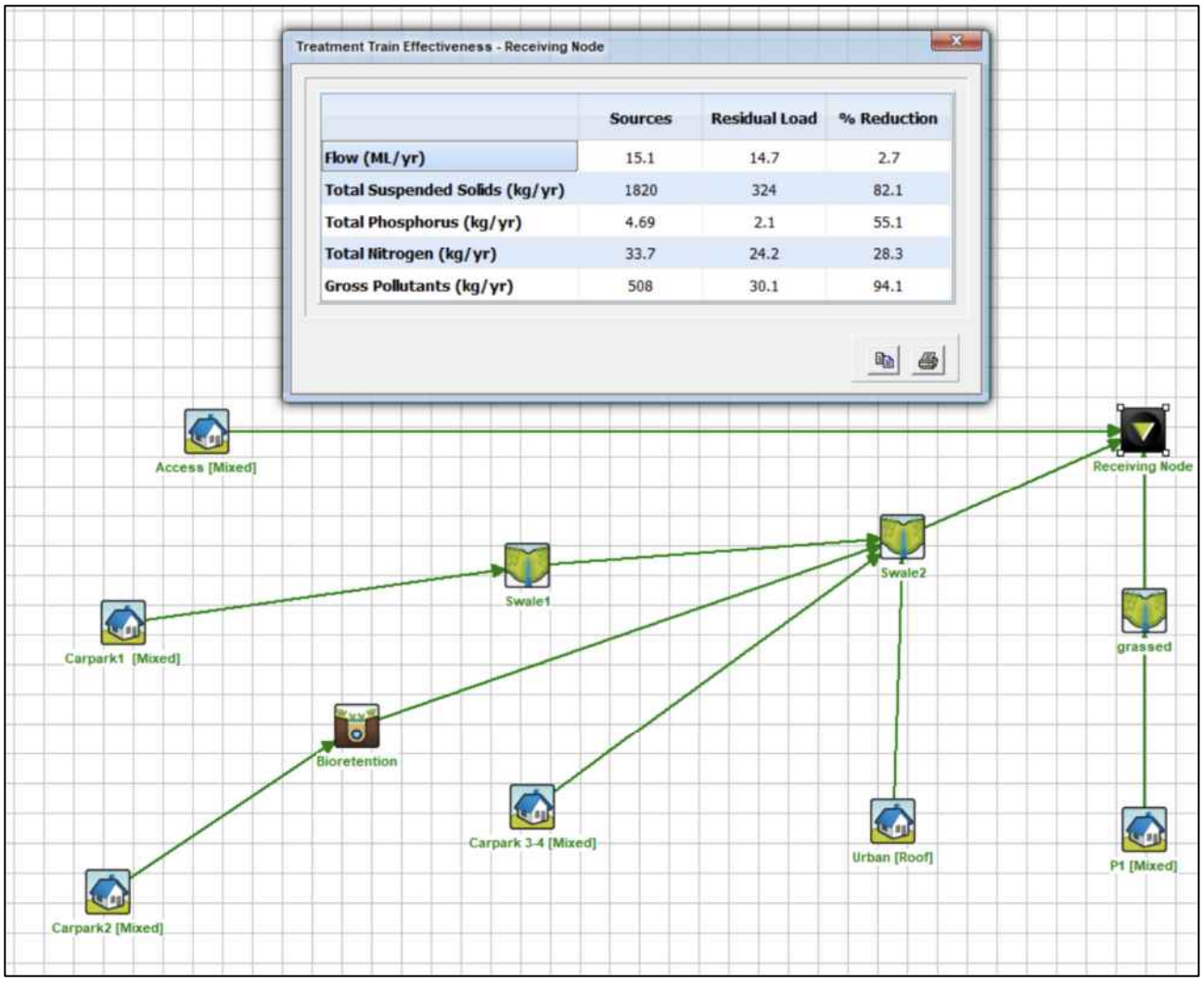

Figure 9 - MUSIC Model Layout and Results

Pollutant	Water Sensitive SA Target	Reduction achieved
Gross Pollutants	90%	94.1%
Total Suspended Solids	80%	82.1%
Total Nitrogen	45%	28.3%
Total Phosporous	60%	55.1%

Table 1 – Summary of MUSIC model results

Conclusions

This SMP has been prepared prior to detailed design and outlines the general intent for managing stormwater on site. This stormwater management plan was prepared during concept and preliminary design phase, and further details will be resolved as the development approaches final design.

FMG has prepared this plan based on agreed requirements with Councils for stormwater management at the subject site, with no detention required. It is proposed that this is submitted for review for planning approval purposes.

The results of this assessment demonstrated that Council's requirements for stormwater management may be feasibly achieved.

Appendix A

Preliminary Civil Drawings

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MOUNT BARKER DISTRICT COUNCIL

REGIONAL AQUATIC AND LEISURE CENTRE

CIVIL WORKS

DRAWING SCHEDULE	
DRAWING NUMBER	DESCRIPTION
S59466-281352-C001	CIVIL WORKS - SITE LOCATION & SCHEDULE OF DRAWINGS
S59466-281352-C002	CIVIL WORKS - SITE LAYOUT
S59466-281352-C003	CIVIL WORKS - SITE PAVEMENTS
S59466-281352-C004	CIVIL WORKS - SITE GRADING
S59466-281352-C005	CIVIL WORKS - SITE CROSS SECTIONS (LOOKING EAST)
S59466-281352-C006	CIVIL WORKS - SITE CROSS SECTIONS (LOOKING NORTH)
S59466-281352-C007	CIVIL WORKS - SITE EARTHWORKS

SCALE 0 20 40 60 80 100 METRES

PRELIMINARY ISSUE
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REV	DESCRIPTION	DATE	INT	APP
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A	FOR PLANNING APPROVAL	7.10.2022	CC	JTC

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FMG ENGINEERING

CLIENT	MOUNT BARKER DISTRICT COUNCIL
PROJECT TITLE	REGIONAL AQUATIC AND LEISURE CENTRE
SITE ADDRESS	SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE	CIVIL WORKS - SITE LOCATION & SCHEDULE OF DRAWINGS
DESIGNED	CC
DRAWN	CC
CHECKED	JTC
No OF SHEETS	7
SCALE	1:2000 @ A1
DATE STARTED	01.08.2022
SITE ID & JOB No	S59466-281352
REV	B
DRAWING No	C001

REVISED LINE MARKING ON BALD HILLS ROAD TO SEPARATE OPPOSING ENTRANCES

SWALE INVERT TO MATCH NEATLY TO EXISTING HEADWALL & PIPE UNDER PATH INSTALL ADDITIONAL HEADWALL AND 900x300 RCBC CULVERT CROSSING UNDER PATH TO DOWNSTREAM WATERCOURSE

NEW 3.0m WIDE FOOTPATH TO TIE IN NEATLY TO EXISTING SHARED PATH

ROCK LINED DROP TO NEW DEEP GRASSED SWALE 1.0m WIDE BASE, MAX 1:3 BATTERS WITH NOMINAL GRADE TO EAST.

NEW FOOTPATH SET DOWN 350mm FROM BUILDING FLOOR LEVEL (RL 307.80) ADJACENT BUILDING

HEADWALL OUTLET RL 306.25

BRIDGE STRUCTURE OVER SWALE

CONSTRUCT NEW GRASSED SWALE TO DIRECT OVERFLOW FROM CARPARK STORMWATER RAIN GARDEN/WETLAND TO EXISTING WATERCOURSE. BASE MIN 150mm BELOW FOOTPATH LEVEL & MIN 0.2% LONGITUDINAL GRADE TO EAST, MAX 1:3 BATTERS.

ROOF DOWNPIPE COLLECTOR NOMINALLY 150-300Ø @ APPROX 1% GRADE

3No. 900x900 GRATED PITS WITH COVER LEVELS SET 300mm ABOVE RAIN GARDEN/ WETLAND SURFACE LEVEL TO DIRECT OVERFLOWS TO SWALE VIA 450mm RCP PIPE.

NEW AQUATIC AND LEISURE CENTRE FFL 308.10

900x300 RCBC UNDER NEW ENTRANCE ROAD TO ALLOW EXISTING OVERLAND FLOW PATH FROM UPSTREAM CATHMENTS TO BE RETAINED

3No 200mm WIDE SLOTS IN KERB @ 800mm SPACINGS CENTRED AROUND LOW POINT IN KERB WITH ROCK EROSION PROTECTION & 200mm DEEP 2m WIDE SWALE CONVEYING SMALL ROAD CATCHMENT TO MAIN OUTLET SWALE. 600x300 RCBC CULVERTS UNDER FOOTPATHS

900x300 RCBC CULVERT UNDER PATH

RAIN GARDEN/WETLAND AREA MIN 1.0m WIDE BASE (WEST END) ENLARGING TO 4m WIDE AT EAST END. 900mm DEEP FILTER MEDIA WITH 300mm EXTENDED STORAGE ABOVE GROUND. LANDSCAPING (ROCKS/PLANTING) AT EDGES

CUTOFF SWALE TO RUN SOUTH OF OVERFLOW PARKING AREA

CONSTRUCT NEW GRASSED CUTOFF SWALE TO DIRECT OVERLAND FLOWS AWAY FROM NEW CARPARK & BUILDINGS. 1.0m WIDE BASE, MIN 300mm DEEP WITH NOMINAL GRADE TO EAST

LEGEND

EXISTING

EXISTING TREE

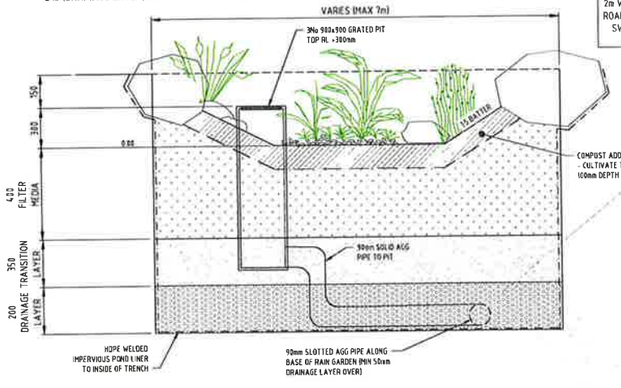
PROPOSED

- ROAD CENTRELINE
- K&WT — 150mm UPRIGHT KERB AND GUTTER
- SPOONDRAIN — 600mm WIDE SPOON DRAIN
- KO — 150mm UPRIGHT KERB
- FK — FLUSH KERB
- PEDESTRIAN KERB RAMP
- PROPOSED STORMWATER PIPE (CLASS 2 RCP U.N.O.)
- PROPOSED 2 BAY SIDE ENTRY PIT
- PROPOSED JUNCTION BOX
- PROPOSED GRATED INLET PIT

SCALE 0 5 10 15 20 25 METRES

RAINGARDEN

1. FILTER MEDIA SPECIFICATIONS:
   a. MATERIAL: A WASHED WELL GRADED SAND FREE OF RUBBISH AND WEEDS
   b. HYDRAULIC CONDUCTIVITY: SATURATED HYDRAULIC CONDUCTIVITY RATE OF THE FILTER MEDIA SHALL BE A MINIMUM OF 100mm/Hr.
   c. PH 5.5-7 AS SPECIFIED FOR NATURAL SOILS AND BLENDS
   d. NUTIRNT CONTENT: TOTAL NITROGEN (TN) < 1000mg/kg
   e. GRADING OF PARTICLES:
      THE SMALLEST 15% (D15) OF THE TRANSITION LAYER PARTICLES MUST BE NO GREATER THAN 5 TIMES THE SIZE OF THE LARGEST 15% (D85) OF THE FILTER MEDIAPARTICLES. THAT IS :
      D15(TRANSITION) <= 5 x D85(FILTER)
2. TRANSITION LAYER SPECIFICATION
   a. THE MATERIAL MUST BE CLEAN, WELL GRADED SAND/COARSE MATERIAL CONTAINING LITTLE OR NO FINES. AN INDICATIVE PARTICLE SIZE DISTRIBUTION IS BETWEEN 0.5mm AND 1.4mm.
   b. THE CONTRACTOR SHALL ARRANGE FOR TESTING OF THE PSD & COMPLIANCE WITH BRIDGING CRITERIA & HYDRAULIC CONDUCTIVITY OF ARATE OF 1 TEST PER 1000m2 OF FILTER MEDIA AREA.
3. DRAINAGE LAYER SPECIFICATION
   a. CLEAN GRAVEL 5-7mm WASHED SCREENING (NOT SCORIA)
   b. BRIDGING CRITERIA: D15 (DRAINAGE LAYER) <= 5 x D85(TRANSITION)
   c. HYDRAULIC CONDUCTIVITY CRITERIA:
      D15 (DRAINAGE LAYER) >= D15(TRANSITION) x 5



RAIN GARDEN - TYPICAL SECTION

SCALE NTS

REFER TO GENERAL NOTES FOR RAINGARDEN SPECIFICATIONS

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SITE ADDRESS: SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE: CIVIL WORKS - SITE LAYOUT

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DRAWN	CC
CHECKED	JTC
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DRAWING No.	C002
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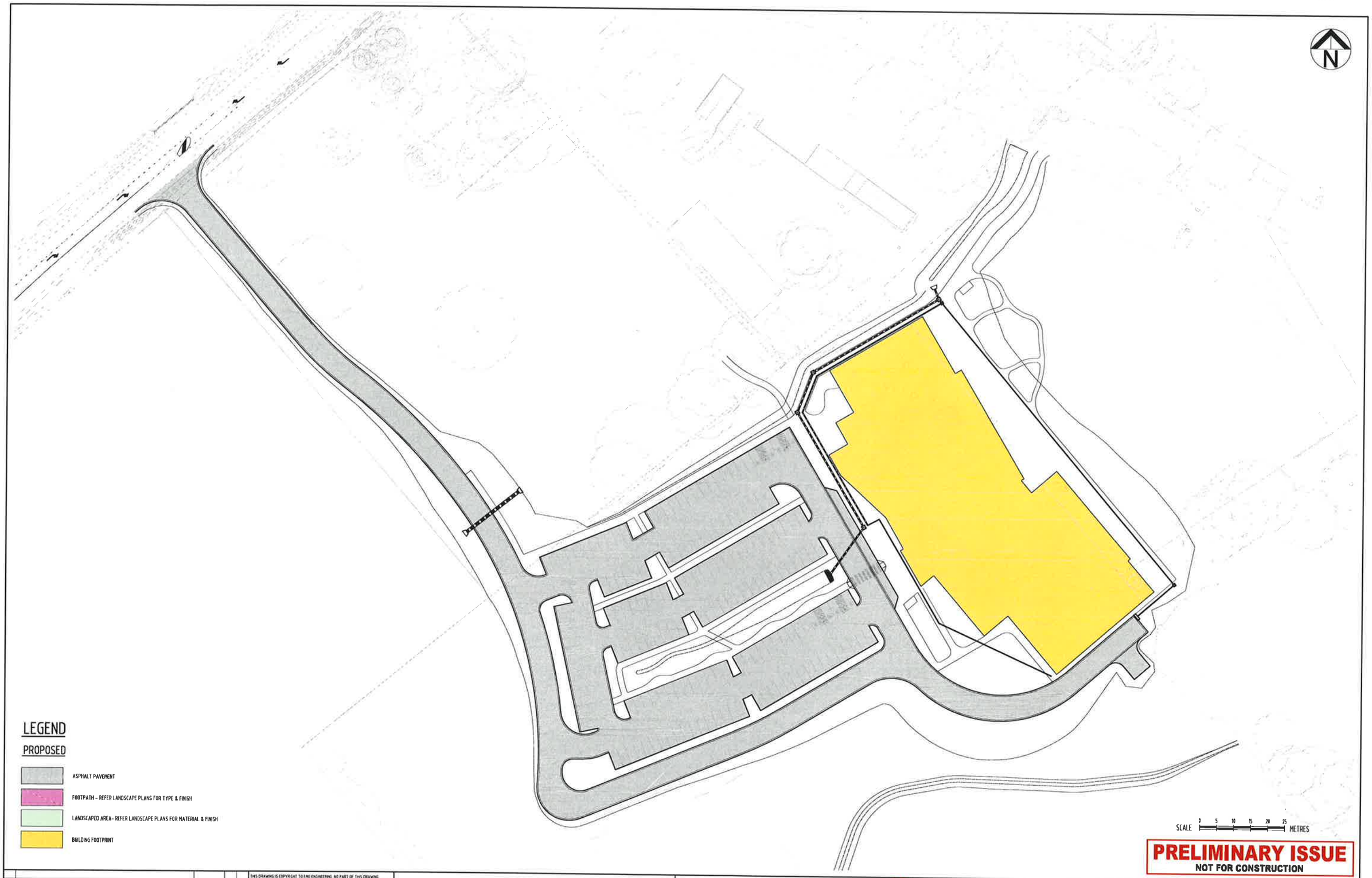

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SITE ADDRESS: SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE: CIVIL WORKS - SITE PAVEMENTS

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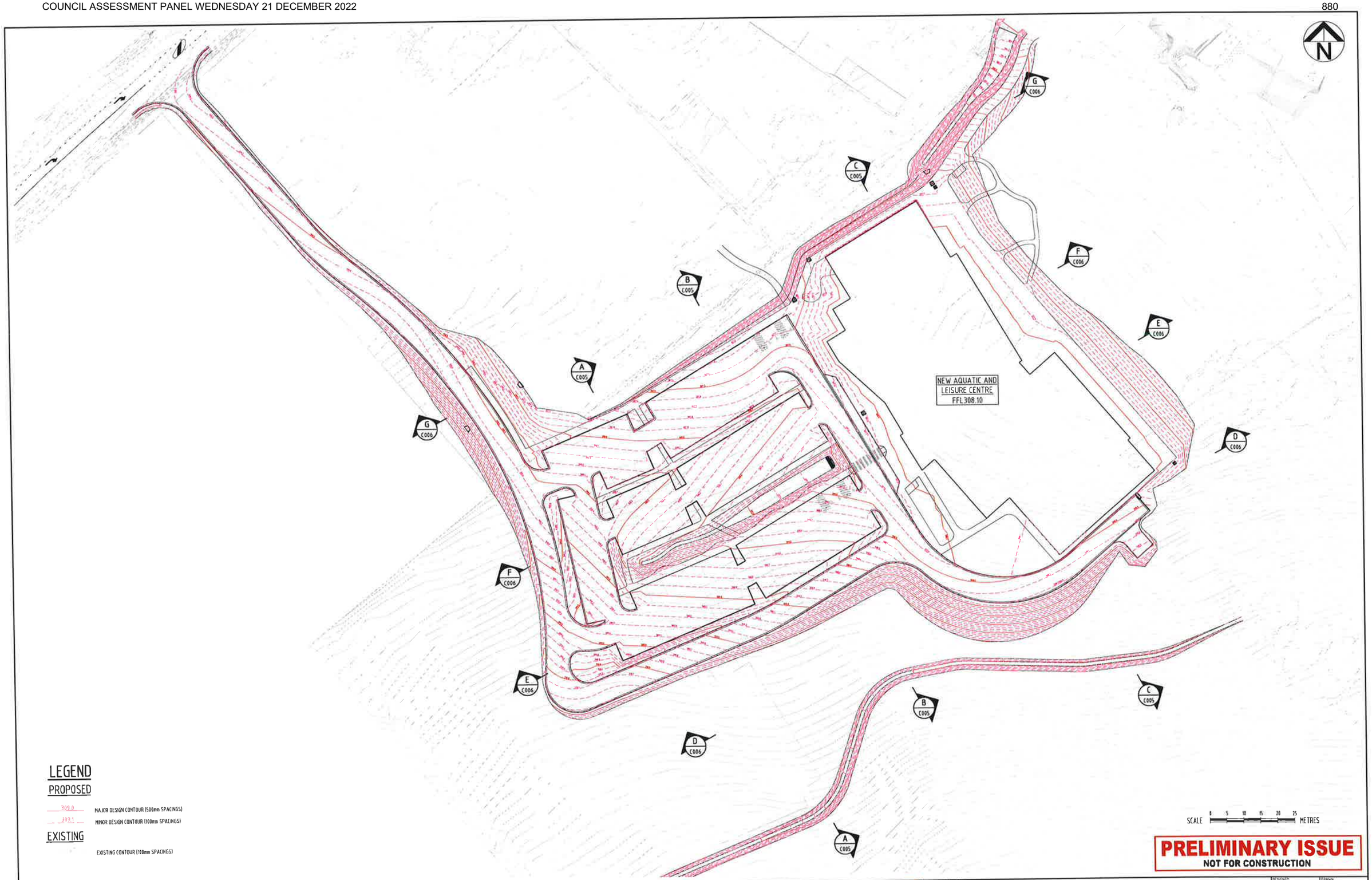

LEGEND

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309.1 MINOR DESIGN CONTOUR (100mm SPACINGS)

EXISTING

EXISTING CONTOUR (100mm SPACINGS)

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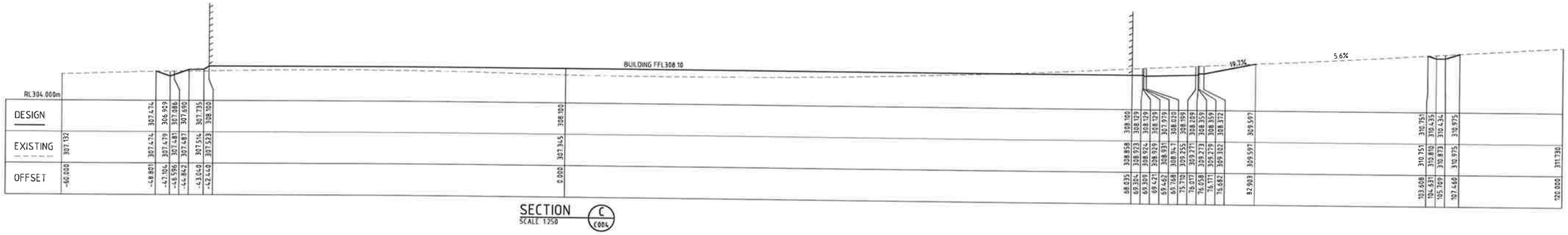

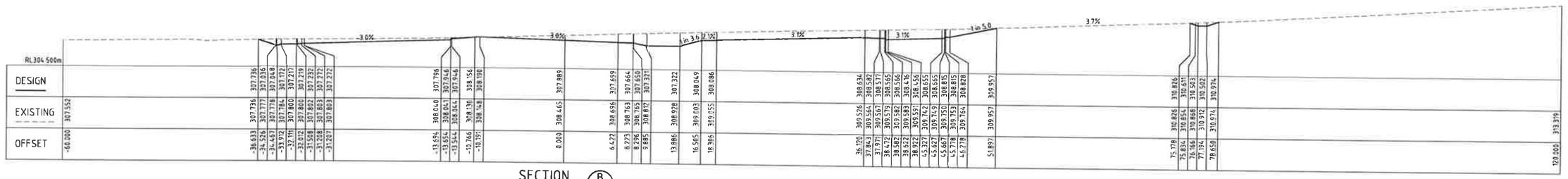

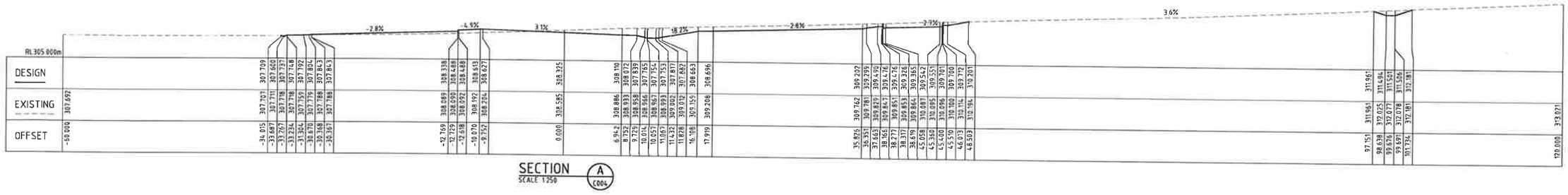

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PROJECT TITLE	REGIONAL AQUATIC AND LEISURE CENTRE
SITE ADDRESS	SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE	CIVIL WORKS - SITE CROSS SECTIONS (LOOKING EAST)
DESIGNED	CC
DRAWN	CC
CHECKED	JTC
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SCALE	1:250 @ A1
DATE STARTED	01.08.2022
SITE ID & JOB No	559466-281352
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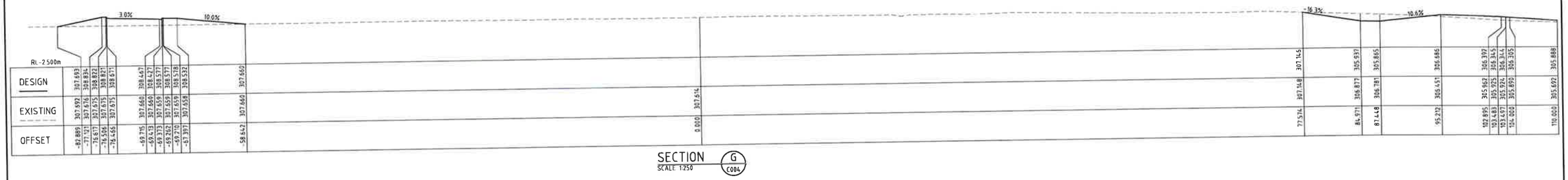

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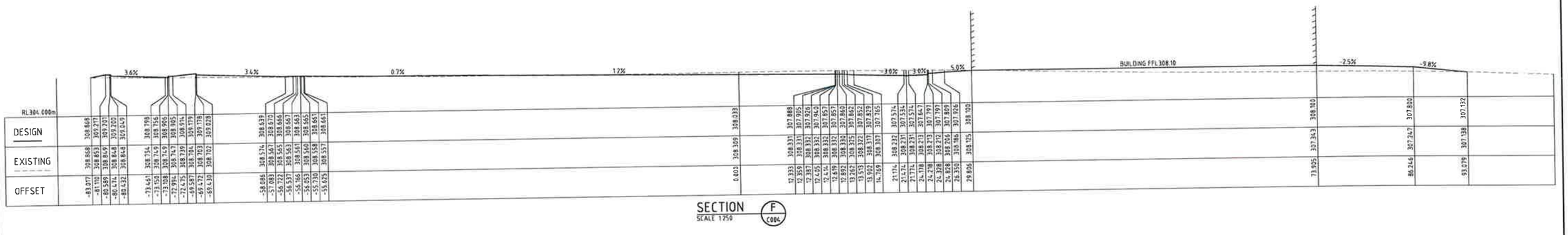

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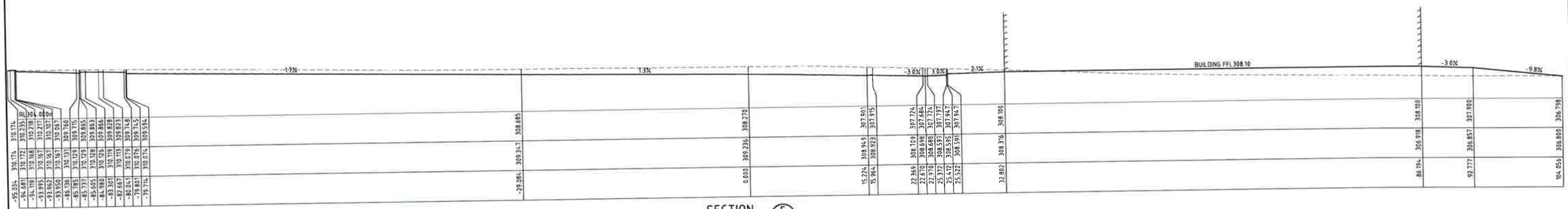

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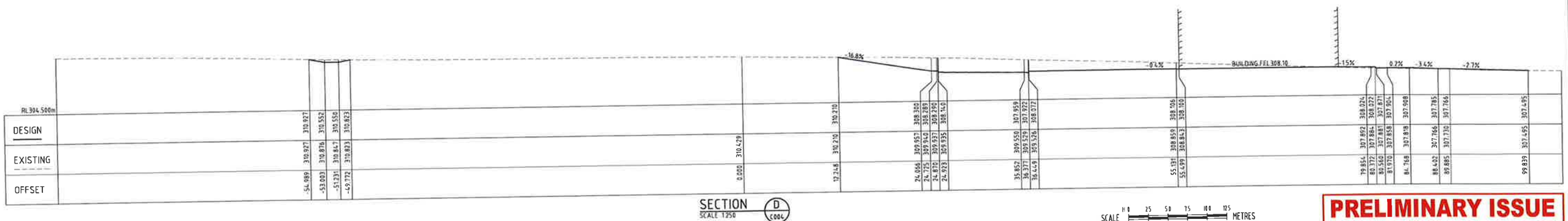

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P 08 8132 6600 | 67 Greenhill Rd, Wayville SA 5034
ABN 58 083 071 185
Quality Management Systems ISO 9001 Certified
FMG ENGINEERING

CLIENT: MOUNT BARKER DISTRICT COUNCIL
PROJECT TITLE: REGIONAL AQUATIC AND LEISURE CENTRE
SITE ADDRESS: SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE: CIVIL WORKS - SITE CROSS SECTIONS (LOOKING NORTH)

DESIGNED	CC
DRAWN	CC
CHECKED	JTC
No OF SHEETS	7
SCALE	1:250 @ A1
DATE STARTED	01.08.2022
SITE ID & JOB No	S59466-281352
DRAWING No	C006
REV	B

CUT(-)/FILL(+) DEPTHS			
No.	LOWER DEPTH (m)	UPPER DEPTH (m)	COLOUR
1	-1.80	-1.60	
2	-1.60	-1.40	
3	-1.40	-1.20	
4	-1.20	-1.00	
5	-1.00	-0.80	
6	-0.80	-0.60	
7	-0.60	-0.40	
8	-0.40	-0.20	
9	-0.20	0.00	
10	0.00	0.20	
11	0.20	0.40	
12	0.40	0.60	
13	0.60	0.80	
14	0.80	1.00	
15	1.00	1.20	
16	1.20	1.40	

CUT/FILL DEPTHS ARE CALCULATED BASED ON THE EXISTING SURVEY PROVIDED & COMPARED TO THE SUBGRADE SURFACE LEVEL OF THE DESIGN

APPROXIMATE VOLUMES:
- CUT 5900m3
- FILL 5900m3

NET BALANCE

NO COMPACTION/EXPANSION FACTORS HAVE BEEN ACCOUNTED FOR

NO SERVICE TRENCHES HAVE BEEN ACCOUNTED FOR.

300mm THICK TOPSOIL STRIP HAS BEEN ACCOUNTED FOR.

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	INIT	APP
C	CARPARK LAYOUT UPDATED. SWALES ADJUSTED	30.11.2022	CC	JTC
B	MINOR AMENDMENTS	12.10.2022	CC	JTC
A	FOR PLANNING APPROVAL	7.10.2022	CC	JTC

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CLIENT: MOUNT BARKER DISTRICT COUNCIL
PROJECT TITLE: REGIONAL AQUATIC AND LEISURE CENTRE
SITE ADDRESS: SUMMIT PRECINCT, BALD HILLS & SPRINGS RD, MOUNT BARKER, SA 5251
DRAWING TITLE: CIVIL WORKS - SITE EARTHWORKS

DESIGNED	DRAWN
CC	CC
CHECKED	No OF SHEETS
JTC	7
SCALE	DATE STARTED
1:500 @ A1	01.08.2022
SITE ID & JOB No	REV
S59466-281352	
DRAWING No	C
C007	

DRAFT

Appendix B

Catchment Plan

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NOTE:

The underlay plan is not reflective of the amended swale and footpath design solution.
Plans provided in Appendix A are to be relied upon for civil design.

Overland flows remain unchanged.

REV	DESCRIPTION	DATE	INIT	APP
A	PRELIMINARY ISSUE	07.10.2022	CC	JTC

PRELIMINARY ISSUE
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SIGNATURE

CLIENT: MOUNT BARKER REGIONAL COUNCIL
PROJECT TITLE: REGIONAL AQUATICS CENTRE
SITE ADDRESS: BALD HILLS ROAD, MT BARKER, SA 5231
DRAWING TITLE: CATCHMENT PLAN

DESIGNED: JTC	DRAWN: CC
CHECKED: JTC	No. OF SHEETS: 1
SCALE: 1:1000 @ A1	DATE STARTED: SEPT 2022
SITE ID & JOB No.: s59466 281352	REV.:
DRAWING No.: SMP-001	A

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Appendix C

Southfront Flooding Report

southfront

31 Hauteville Terrace Eastwood SA 5063
P 8172 1088 E enquiry@southfront.com.au
ABN 96 007 344 191

Our Ref: 20010-1/DJ/QB

26 February 2021

Haley Irvine
Open Space and Urban Designer
Mount Barker District Council
PO Box 54
MOUNT BARKER SA 5251

Dear Haley

Mount Barker Creek Flood Mapping, Bald Hills Road to Springs Road

We have completed our assessment of Mount Barker Creek and associated tributaries between Bald Hills Road and Springs Road.

Background

Mount Barker District Council are establishing a number of community facilities on land parcels between Bald Hills Road and Springs Road, Mount Barker. Portions of this area are subject to flood inundation in association with Mount Barker Creek which meanders through this land, and its tributaries.

Flood plain mapping of the region was last documented in *Mount Barker Flood Mapping Study* (AWE, 2011). Since that time, further catchment development and creek infrastructure upgrades have occurred which have changed the flood risk through the subject land. The purpose of this investigation is to provide an updated assessment of flood risk through this land.

Hydrology

The hydrological inputs for the flood model have been extracted and further adapted for the purposes of this assessment from the following sources:

- Mount Barker Creek – RORB/DRAINS model established for the *Mount Barker, Littlehampton & Totness Stormwater Management Plan* (Southfront, 2014)

This model was re-run utilising the latest software version, and was run for the 10 year ARI events, which had not been considered previously.

- Tributaries draining through the golf course through to Mount Barker Creek – DRAINS model established for the *Eastern Sector Mount Barker Stormwater Management Review* (Southfront, 2020)

This DRAINS model provides a more current representation of flows from these catchments which have undergone substantial urban development since the time of development of the broader Mount Barker Creek RORB/DRAINS model. This model was originally prepared to determine flow inputs entering a proposed urban development north-east of Sims Road / Hartman Road. For the purposes of this assessment, the model has been augmented to include the proposed ('WG

Developments') development area and the existing urban catchments and golf course area that drain through to the lower reaches of these tributaries.

Flood Model Construction

A computer-based hydraulic model of the subject land was created using the TUFLOW flood modelling software. The geometry of the creek and floodplain was defined using a digital terrain model of the channel and surrounding land, procured by Council in 2010 for the purpose of previous flood plain modelling. The model extends from upstream of Bald Hills Road to downstream of the Springs Road bridge crossing.

Structures included in the model include:

- Mount Barker Creek culvert structure under Bald Hills Road – this reflects the underpass changes currently nearing completion
- Golf Course Creek culvert structure under Bald Hills Road – based on supplied design drawings
- Mount Barker Creek crossing at Springs Road – based on visual observation and estimation of bridge deck thickness and span

Bulk earthworks filling was also assumed to be in place on the northern side of the creek channel near Springs Road, as per the Bulk Earthworks Concept Plan prepared by Southfront in 2020 (our ref Dwg 20001 Sheet 1).

Model Results

Table 1 below summarises the peak flow rate (and the corresponding storm duration) in key locations for the range of flood events considered. Figure 1 on the following page shows the reference location where these flow rates are reported.

Table 1 Peak Flow Rates at Locations of Interest

Watercourse	Peak Flow Rate (m^3/s) (Critical Storm Duration)			
	100 year ARI	50 year ARI	20 year ARI	10 year ARI
Mount Barker Creek (Bald Hills Rd)	119.8 (6 hour)	76.7 (12 hour)	55.4 (12 hour)	44.3 (12 hour)
Mount Barker Creek (Springs Rd)	123.8 (6 hour)	77.6 (12 hour)	57.9 (12 hour)	45.9 (12 hour)
Golf Course Creek	18.7 (6 hour)	13.0 (9 hour)	8.3 (9 hour)	6.2 (9 hour)
Golf Course Creek Breakout	2.0 (6 hour)	1.2 (9 hour)	0.5 (9 hour)	0.2 (9 hour)
Golf Course Creek East	6.9 (6 hour)	4.8 (25 minute)	3.9 (30 minute)	3.3 (9 hour)

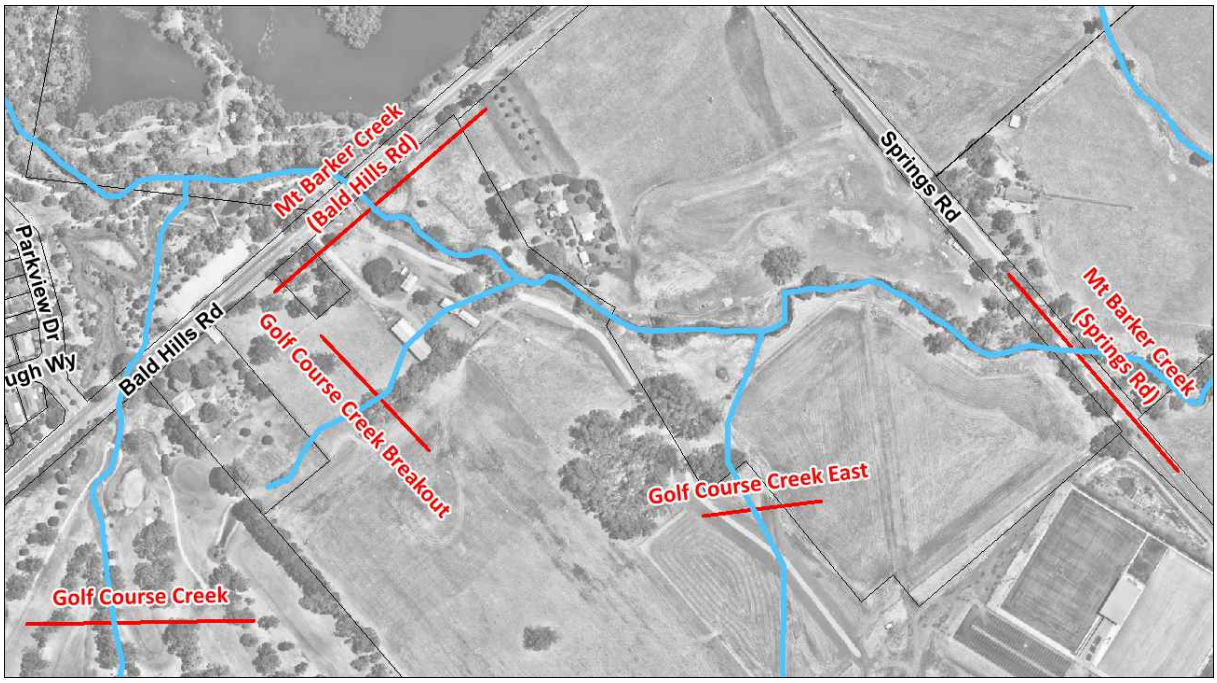


Figure 1 Flow Rate Reporting Locations

Mount Barker Creek is assessed to overtop Bald Hills Road for events commencing at the 20 year ARI level.

Flood mapping of the study area (attached) was undertaken for the 100 year, 50 year, 20 year and 10 year ARI rainfall events. These maps include flood height contours for the extent of flooding. Flood hazard mapping was also undertaken for the 100yr ARI rainfall event.

Please contact this office should you require any further assistance with this matter.

Yours sincerely

Drew Jacobi BEng (Hons) FIEAust CPEng NER
Principal Engineer

Enc: Flood and Hazard Map Series

LEGEND

Flood Depth Contour

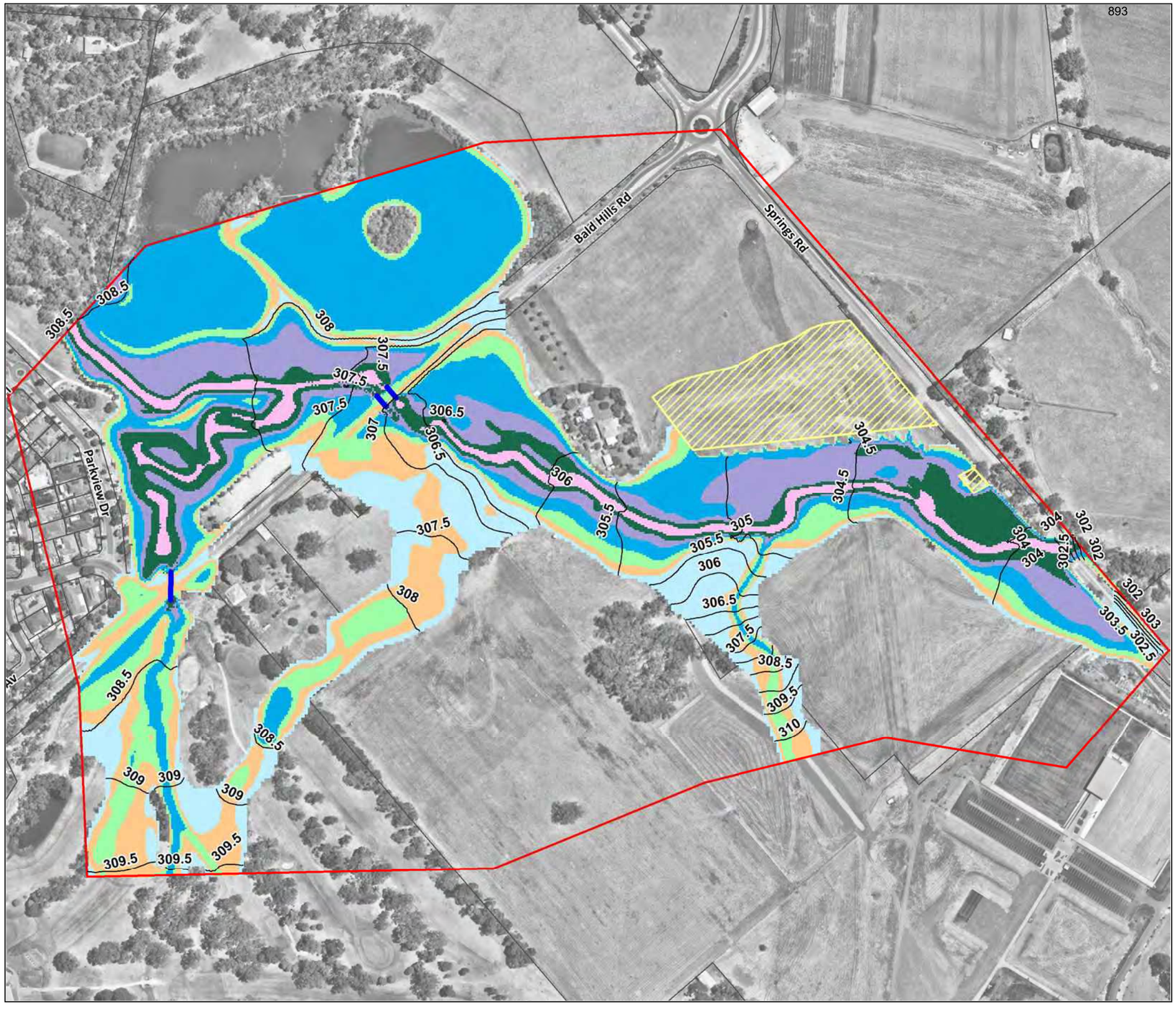
- 0m to 0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1m
- 1m to 1.5m
- 1.5m to 2.5m
- 2.5m to 5m
- 5m to 100m

- Flood Height Contour (mAHD)
- Cadastre
- Floodplain Study Area
- Stormwater Culvert
- Earthworks Fill

N

0 250

metres



Background

This map has been prepared using currently available technology to a standard of accuracy sufficient for broad scale flood risk management and planning. The map does not increase the risk or affect the level of flooding over an area or property. It merely seeks to identify the extent of flooding over a given set of conditions. Limitations to the information shown on this map and a brief description of some concepts upon which it is based are set out below.

Flood Risk Probability

Flood risk can be considered in terms of:

- Exceedances per Year (EY): the number of times an event is likely to occur or be exceeded within any given year;
- Annual Exceedance Probability (AEP): the probability or likelihood of an event occurring or being exceeded within any given year, usually expressed as a percentage.

Generally, EY terminology is used for Very Frequent design rainfalls and AEP (%) terminology is used for Frequent and Infrequent design rainfalls.

Storm Durations

The flooding response of a catchment is dependent on the duration of any storm event. Generally shorter, more intense storms produce the greatest flows from urban areas. Longer duration, but less intense storms produce the greatest flow from undeveloped rural areas.

Scope of Mapping

The limit of flooding on this map is not a boundary between flood prone and flood free land.
Land outside the flood extent shown on this map could be affected by:

- Storms with different Annual Exceedance Probability;
- Flooding from local drainage systems which can occur as a result of localised intense rainfall or drain blockage.

Areas of very shallow flooding

In areas shown as being affected by flood depths of less than 0.1m, machine plant, temporary stockpiles, fences, land excavation and buildings will affect the flow of floodwaters. Resolution to this level of detail is beyond the capabilities of the modelling process and consequently the level of certainty in relation to flood depths in these areas is reduced.

Effect of debris on flood extent

Vegetation and other debris are likely to be carried by flood flows and may cause blockages in creeks and culverts. This cannot be predicted and consequently the impact of blockages is not modelled. If blockages do occur, flood extents will vary from those shown on the map.

Disclaimer

This map is provided on the basis that those responsible for its preparation and publication do not accept any responsibility for any loss or damage alleged to be suffered by anyone as a result of the publication of the map and the notations on it, or as a result of the use or misuse of the information provided herein.
The data contained on this map is based on survey, hydraulic and hydrological modelling to accuracy sufficient for broad scale flood risk management and planning.
Further development, earthworks and other changes to the catchment may affect the actual flood extents.
The modelling reflects current practice but it may be realised that there are uncertainties and assumptions associated with the data and the processes on which the models are based, and therefore the flood extents shown on this map cannot be regarded as exact predictions.
The flood extents are not based on actual historical floods.

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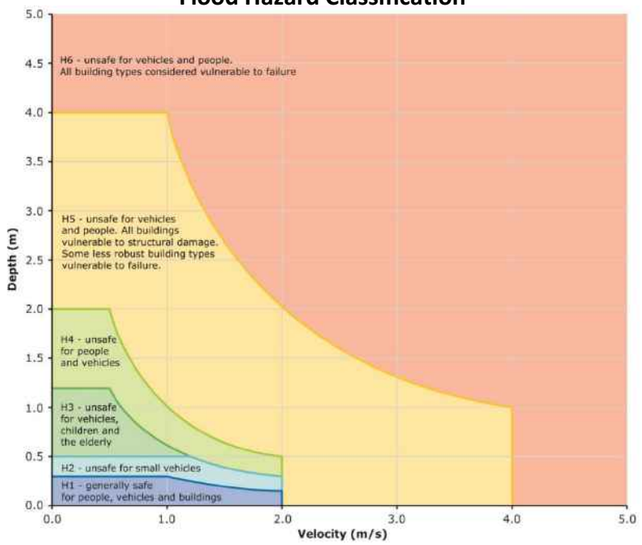
Data Sources:
Flood Mapping: Southfront
Aerial Imagery: NearMaps
Roads, Cadastre: Mount Barker District Council

southfront

Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 1: 100yr ARI Floodplain Map

Issue Date: 26/02/2021

Flood Hazard Classification

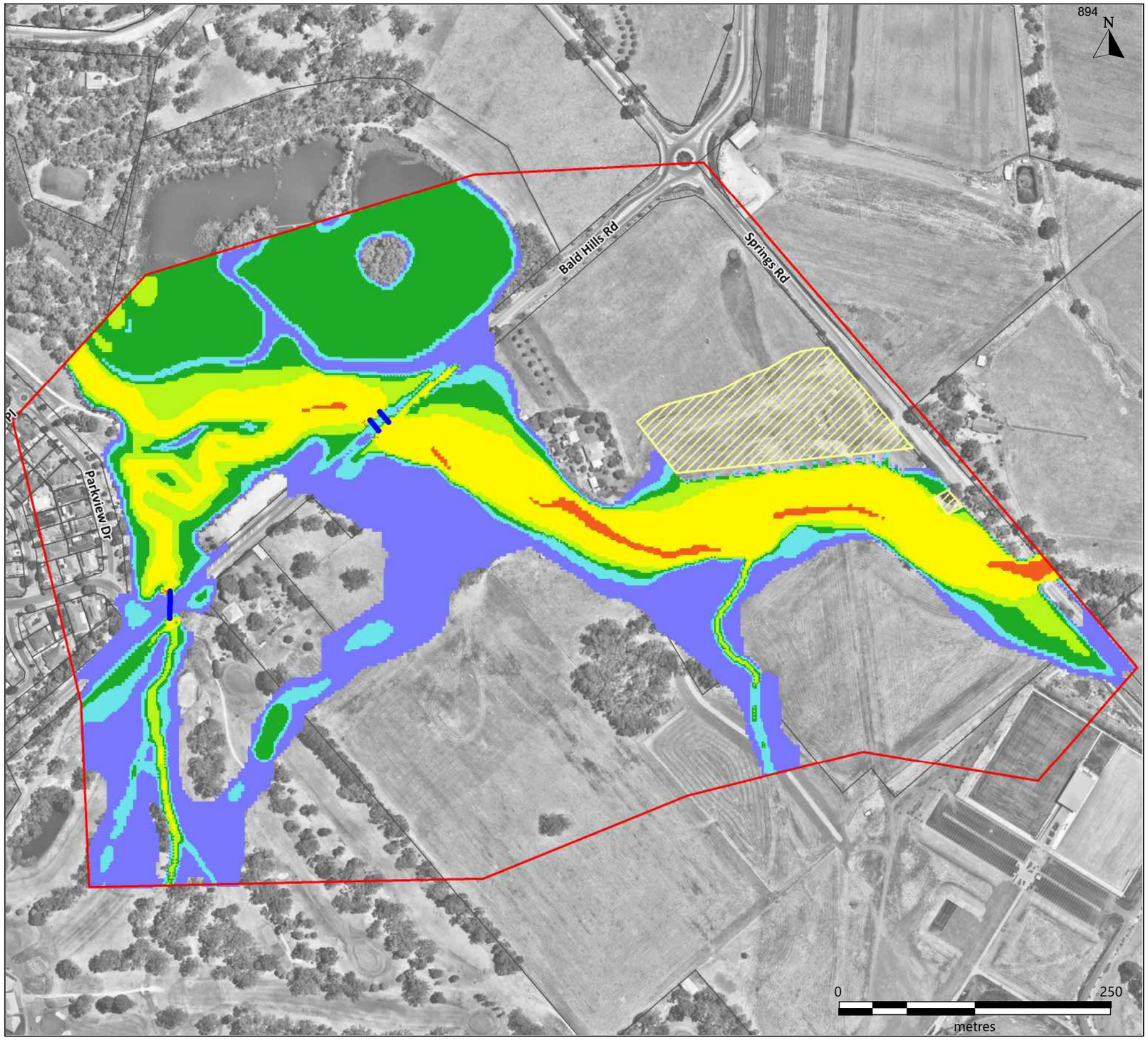


Stormwater Culvert

Earthworks Fill

Cadastre

Floodplain Study Area



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Scope of Mapping

The limit of flooding on this map is not a boundary between flood prone and flood free land. Land outside the flood extent shown on this map could be affected by:

- Storms with different Annual Exceedance Probability;
- Flooding from local drainage systems which can occur as a result of localised intense rainfall or drain blockage.

Areas of very shallow flooding

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The data contained on this map is based on survey, hydraulic and hydrological modelling to accuracy sufficient for broad scale flood risk management and planning.

Further development, earthworks and other changes to the catchment may affect the actual flood extents. The modelling reflects current practice but it may be realised that there are uncertainties and assumptions associated with the data and the processes on which the models are based, and therefore the flood extents shown on this map cannot be regarded as exact predictions.

The flood extents are not based on actual historical floods.

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Data Sources:
Flood Mapping: Southfront
Aerial Imagery: NearMaps
Roads, Cadastre: Mount Barker District Council

southfront

Mount Barker District Council
Bald Hills Road Flood Mapping
Figure 5: 100yr ARI Flood Hazard Map

Issue Date: 22/03/2021

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Mascot NSW 2020
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APPENDIX E

Preliminary Site Services Infrastructure Summary

LUCID Australia

Ref LCE23132-005
13 October 2022

MEMORANDUM

To:	Design Inc – Ben Luppino		
From:	Trevor Todd	Pages:	Page 1 of 5
Project:	MOUNT BARKER AQUATIC CENTRE	Reference:	LCE23132-005a
Date:	13 October 2022		
Subject:	Preliminary Site Services Infrastructure Summary Stage 1 – Mount Barker Regional Aquatic & Leisure Centre		

INTRODUCTION

For the purposes of informing the projects pre-planning spatial development, planning approval and order of cost estimates, Lucid Consulting have prepared the following summary of the potential building services provisions services anticipated for the development located at Bald Hills Road, Mt Barker, South Australia.

Please note the below information is preliminary in nature as assessments with the relevant utility authorities has not yet occurred and a detailed building arrangement has not yet been established to accurately inform the building services demands.

The below has been prepared on the assumption of the stage 1 aquatic center being a standalone facility with no allowances for future master plan stages, should this be required a separate additional assessment will be required.

In summary we advise there is no reason to believe the stage 1 site is not able to be serviced by Water, Sewer, Power and Communications utility providers.

WATER SUPPLY

Existing

The site is not currently serviced by a towns mains water supply.

SA Water utility water mains are present as listed below however are not local to the proposed building and will require either extension of the SA Water main or private reticulation depending on the final site title boundary locations.

- Single 150mm water main within Scarborough Way servicing the residential areas.
- Single 150mm water main adjacent the Sports Hub entry adjacent Pine Valley Parade and Heysen Boulevard round about.

Significant internal water main infrastructure reticulates within the sports hub to services the fields/ovals and buildings.

The Mount Barker area is provided with a council recycled water supply which extends from Springs Road to Bald Hills Road. This provides the potential for a metered connection located on the South Eastern side of the creek approximately 60m from the proposed building location.

Proposed

Subject to investigations with SA Water it is anticipated a new water supply will be obtained via extension of the SA Water main to within Bald Hills Road from Scarborough Way in the order of 150m to 250m. It should be noted at this stage we have not investigated potential upstream alterations/upgrades that may be required from SA Water to service the site.

Potable Water:

The expected peak demand for potable water has not yet been determined and will be largely dependent upon the pool filtration system requirements, however for the purpose of this assessment it is assumed a Ø50mm water meter is required to service the facility.

Upon receipt of the network analysis results from SA Water Corporation we can determine the static pressure within the existing SAWC water main and advise whether a domestic water storage tank and pressure pumpset will be required, for the purposes of this assessment it is assumed storage tanks and pressure pump sets are required, consisting of 2 off 25kL effective capacity tanks (approx. 4m diameter each) and a pump facility containing 2 off pumps (approx. room size 4.0m x 3.0m)

Recycled Water:

The expected peak demand for recycled water has not yet been determined and will be dependent upon the quantity of toilet pans and irrigation requirements, however for the purpose of this assessment it is assumed a Ø50mm water meter is required to service the facility.

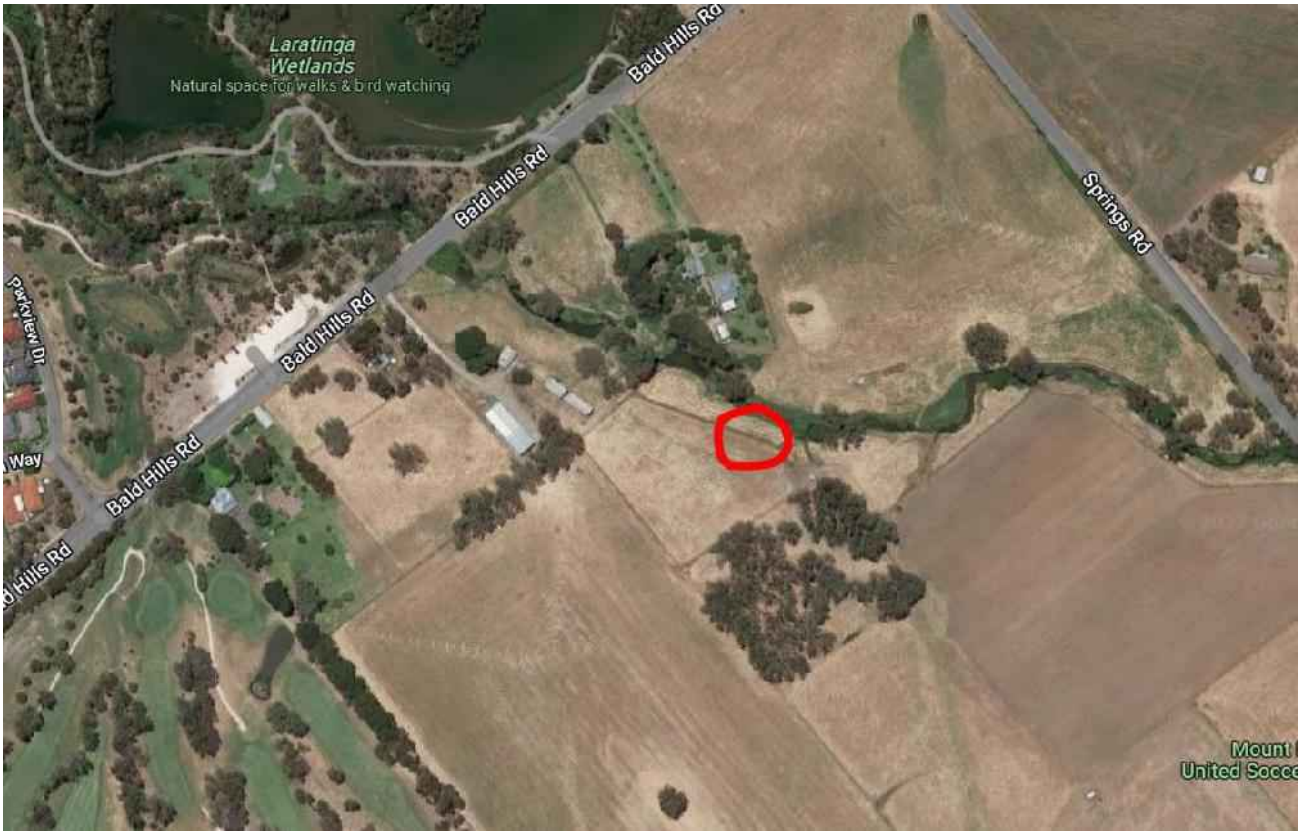
Fire Water:

The fire water demand is assumed to be in the order of 20L/s to 35L/s depending on the requirement for sprinkler protection. This water supply flow requirement demand is confirmed via flow and network analysis to be achievable via connection to the proposed extension of the existing towns mains on Scarborough Way to Bald Hills Road.

SEWER SERVICES

The Mt Barker area is serviced by council waste water infrastructure, with a Ø150 gravity sewer main terminating on the South Eastern side of the creek as shown below. The gravity sewer main extends below the creek and to a council sewer pump station accessed via springs road. A Ø150 sewer connection is proposed to extend off the existing manhole at the extents of the sewer main termination and extend to the proposed site.

At this point in time we cannot advise the likely associated costs.



GAS SERVICES

Existing

Nil – the Mount Barker area is serviced in some locations by a reticulated LPG system however there is no natural gas available within the area.

Proposed

Nil – the facility is unlikely to utilise gas.

ELECTRICAL INFRASTRUCTURE

Existing

The development area has access to the adjacent SA Power Networks Overhead SA Power Networks high Voltage lines located along Bald Hills Road to the north of the proposed development area and central within the current farming allotment near the proposed site.

Proposed

Preliminary benchmarking assessment indicates the proposed building electrical demand to be in the order of 800kVA.

Confirmation will be required from SA Power Networks as to the suitability of the existing high voltage infrastructure and any associated augmentation.

A new onsite pad-mounted transformer will be required with underground high voltage cabling connected to the suitable existing high voltage overhead cabling, determined by SAPN noted above, via new underground high voltage cabling. Subject to the final location of the building and transformer we assume the new high voltage cabling length to be in the order of 250m.

Ideally the transformer (and main switch board) are located as close a practical to the new facility and thermal plant. The spatial requirements for the transformer proposed are given below:

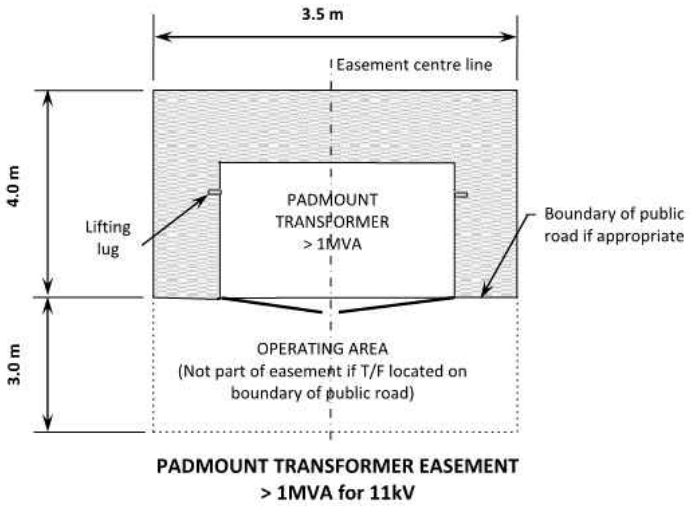


Figure 5: External Pad Mounted Substation

A new main switchboard is required to serve the new site, which to comply with SA Power Networks standards, must be located between 4m and 10m from the transformer. It is proposed to locate the Main Switchboard as close as possible to the new facility and extend / replace the underground high voltage / position the transformer to suit. It should be noted the council may have a strong preference for all switchboards to be located within a room, not outside exposed to elements.

COMMUNICATIONS INFRASTRUCTURE

Existing

Existing fiberoptic infrastructure is currently within Scarborough Way to the north of the proposed development.

Proposed

A new connection to the above existing fiber optic infrastructure is proposed to be established for a new fiber optic connection to the facility. The connection will enter underground and follow the new entry roadway with pits at intervals as required by the authority.

We trust the above is satisfactory for the immediate purposes. Please do not hesitate to contact the undersigned should you require further information.

Regards,
LUCID CONSULTING ENGINEERS

TREVOR TODD
Associate

APPENDIX F

Traffic Impact Assessment

MFY Pty Ltd

Ref 22-0089
7 October 2022

Mount Barker District Council

PROPOSED REGIONAL AQUATIC AND LEISURE CENTRE, BALD HILLS ROAD

TRAFFIC IMPACT ASSESSMENT

October 2022

22-0089

Traffic • Parking • Transport

Unit 6, 224 Glen Osmond Road
FULLARTON SA 5063

T: +61 8 8338 8888
F: +61 8 8338 8880
E: mfya@mfy.com.au
W: mfy.com.au

MFY Pty Ltd
ABN 79 102 630 759

DOCUMENT ISSUE

Revision issue	Date	Description	Approved by
Draft 1	29 Sep 2022	Draft for review	SV
Final	07 Oct 2022	Final	SV

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1.0 INTRODUCTION

This report assesses the traffic and parking aspects of the proposed Regional Aquatic and Leisure Centre in Mount Barker. The proposed development, which will incorporate aquatic facilities and a gymnasium, will be located adjacent the existing Summit Sporting facilities.

The subject development will be located within the Summit Sport and Recreational Park. This facility has been one component considered in the recent development of a master plan which has considered the establishment of a mix of community facilities which will ultimately be realised on the land on the corner of Bald Hills Road and Springs Road.

A key component of the master plan was to establish the basic access and internal road network requirements for the site to inform the access requirements for each stage of development on the land and importantly to ensure that the ultimate development will provide for safe and convenient access and appropriate distribution to ensure future capacity requirements can be managed. In identifying access to the development, therefore, consideration of the future design requirements for the Bald Hills Road access have been incorporated into the assessment.

The design of the proposed facility has incorporated an access solution to ensure that all vehicles can enter and exit the site in a forward direction while providing for all road users. Consideration has also been given to incorporating temporary access to manage separation of commercial vehicles and pedestrians and provide for a safe environment for vulnerable road users. This solution will enable long term access to be developed in conjunction with further development of the broader site while ensuring safe and convenient access is established for all vehicles expected to access the development. in the assessment, is a complete review of access requirements for various vehicles, including commercial vehicles, such as delivery vehicles and buses. Analysis of the access has also been completed to assess the safety and efficiency of the facility.

The parking assessment for the proposal has considered the demand associated with the typical peak use of the facility. To ensure adequate parking provision is balanced with minimising hard paved surfaces on the site, consideration has been given to the typical use of the facility and ensuring overflow parking is available for infrequent larger attendance.

This assessment has been based on DesignInc's Drawing Set (Job no. A22-0015) dated 07 October 2022.

2.0 EXISTING SITUATION

The subject site is located on the corner of Bald Hills Road and Springs Road in Mount Barker. It has frontage to Bald Hills Road and Springs Road, with Aston Hills Golf Club fronting the south-western edge and the Summit Sport and Recreation Park being located to the south-east of the site. Figure 1 identifies the subject site.

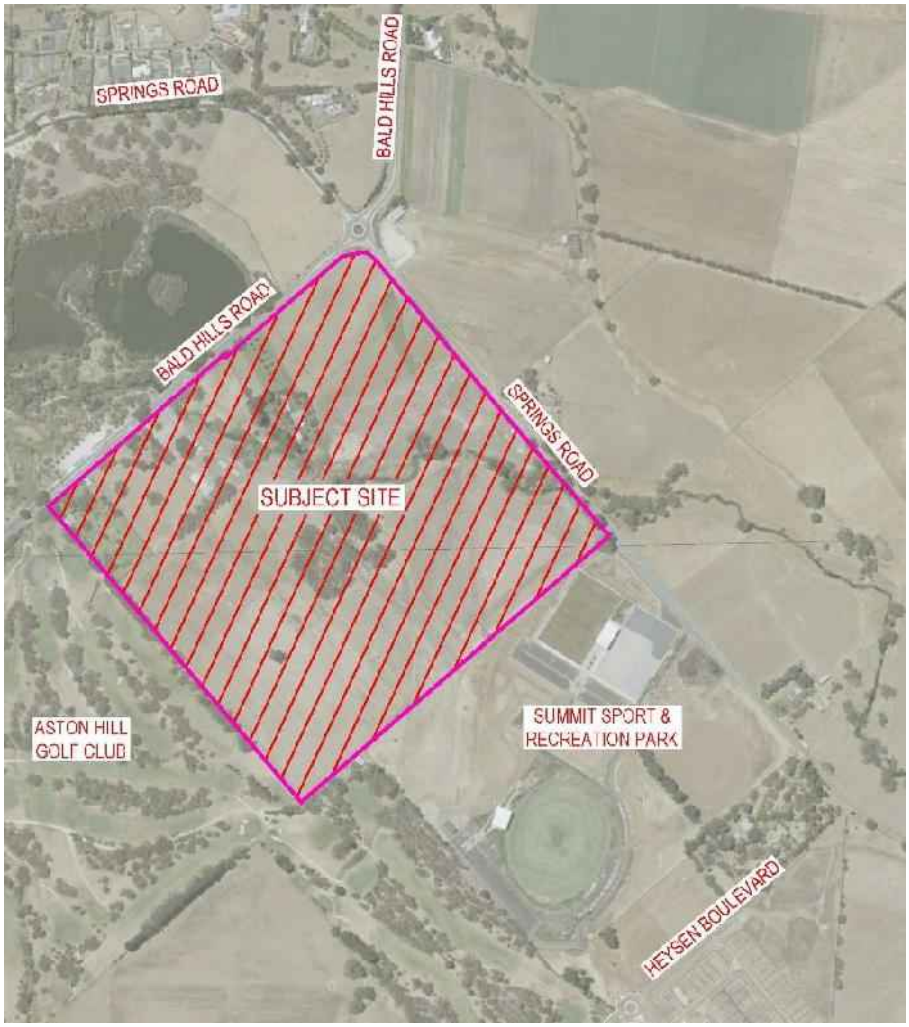

Figure 1: Subject site

2.1 ROAD NETWORK

Bald Hills Road is a major collector road which provides access to Mount Barker from townships to the north and the South-Eastern Freeway. The interchange which links Bald Hills Road to the South Eastern Freeway was opened in 2017 and hence volumes on Bald Hills Road have significantly increased due to the high level access to Bald Hills Road from the National Highway.

Bald Hills Road has a single lane in each direction with an annual average traffic volume in the order of 8,200 vehicles adjacent the site. Right and left turn movements from Bald Hills Road are treated with channelised turn lanes at a number of intersections. The road is gazetted for use by B-Doubles.

Bald Hills Road has a posted speed limit of 80 km/h along the majority of its length, albeit the speed on sections of the road has been reduced to 60 km/h. Council has liaised with the Department for Infrastructure and Transport (DIT) in relation to reducing the speed on the balance of the length of the road which has been endorsed with a view to the lower speed being implemented following development of adjacent land.

Opposite the site, Bald Hills Road provides access to the Laratinga Wetlands car park. The car park has two access points on Bald Hills Road albeit the south-western access has been developed informally. The north-eastern (formalised) access is treated with a channelised right turn lane and all movements are permitted at this access.

Barriers have been installed along sections of the south-eastern edge of Bald Hills Road to protect drivers where street trees and South Australian Power Network (SAPN) poles are located within close proximity to the edge of the driveway. There is an opening in the barriers near the south-western corner of the site.

A pedestrian tunnel is located under Bald Hills Road to provide connectivity for pedestrians and cyclists using the Laratinga Wet lands trail.

A roundabout is located at the intersection of Bald Hills Road and Springs Road. Springs Road is a sealed two-lane road which provides access to Mt Barker Springs. It is approximately 6.0m wide and will ultimately connect to Heysen Boulevard which is the future connector road planned to circumnavigate around the Mount Barker township. The volume on Springs Road will be expected to significantly increase when the connection occurs. While this could warrant widening of the road, the existing bridge will act as a constraint for future road upgrade opportunities.

3.0 THE PROPOSAL

The proposed Regional Aquatic and Leisure Centre will include two levels with a floor area of approximately 6,100 m^2 and will comprise of the following facilities:

- a warm water pool;
- a learn to swim pool;
- a splash pad;
- a lap pool with eight lanes;
- a 1,100 m^2 gymnasium on the second level; and
- ancillary facilities such as change rooms, administration areas and a cafeteria.

3.1 ACCESS

Access to the subject site will be provided via a new crossover on Bald Hills Road which will be constructed at the location where the future internal driveway servicing the master plan will be located.

The proposed access will be designed in accordance with Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)* and will permit all movements to and from the site.

The right turn movement from Bald Hills Road will be treated with a channelised right turn lane. This facility will be developed in accordance with the requirements in Austroads *"Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections"* and has been designed for a 12.5 m heavy rigid vehicle (HRV). In addition, the barrier on Bald Hills Road will be modified to accommodate the left turn movement to the site.

The proposed access treatment will necessitate minor modifications to the existing channelised right turn lane providing access to the Laratinga Wetlands car park. It is also proposed for the western access to the car park to be closed, albeit this access is informal and should be removed regardless of the proposed development.

Figure 2 identifies the proposed access and adjacent treatments.

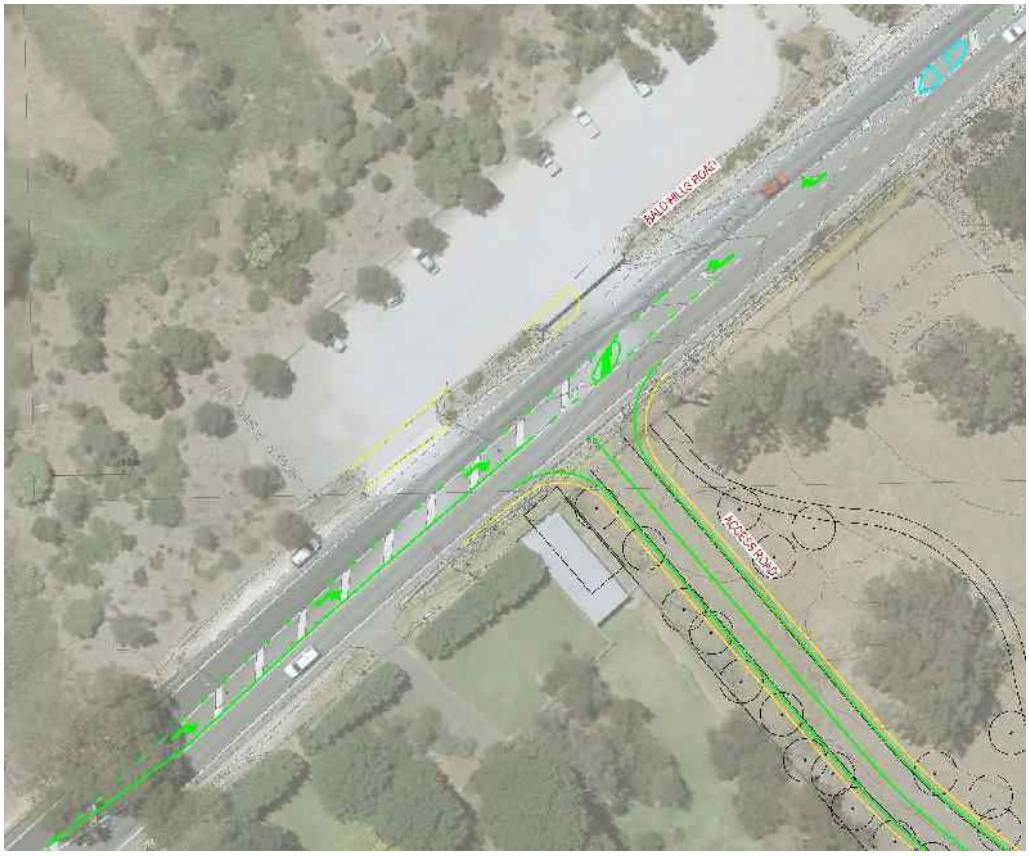

Figure 2: Proposed Bald Hills Road access treatment

The proposed access design will cater for the simultaneous movements of a domestic vehicle and an HRV as illustrated in Figure 3.

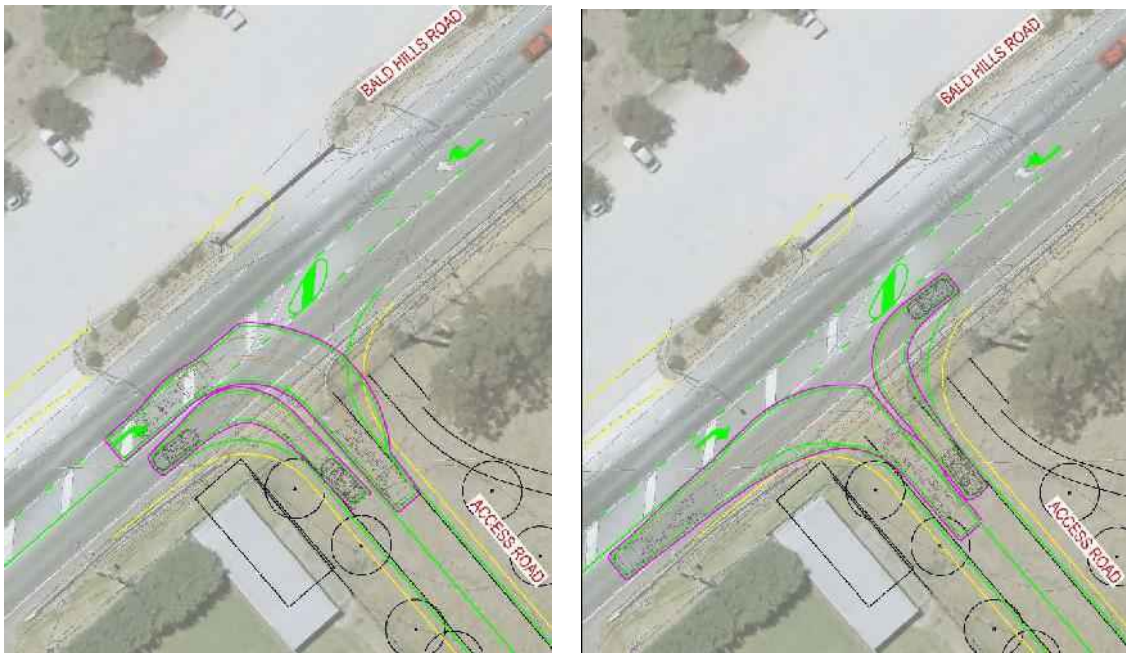

Figure 3: Simultaneous movements at the access

3.2 DRIVEWAY

The proposed driveway which will be constructed to provide access to the centre will be developed as Stage 1 of the internal access road and will be consistent with the master plan for the Summit Precinct development (which illustrates that it will ultimately connect to Heysen Boulevard).

The proposed driveway will be constructed as an internal access road of a rural type nature and will have a width of 7.0 m with 1.0 m shoulders. Swales will be established adjacent the carriageway. Figure 4 illustrates a concept cross section of the driveway.

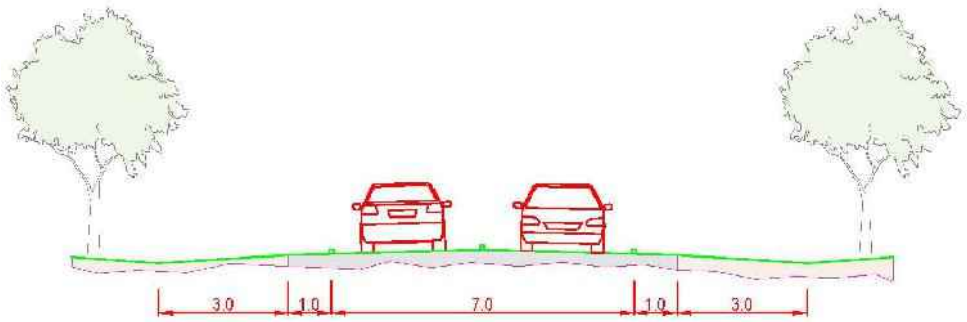

Figure 4: Concept cross section of driveway

3.3 CAR PARK

The proposal includes a car park with 176 parking spaces which will comply with the requirements in Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)* in that:

- spaces will be 2.5 m wide;
- spaces will be 5.4 m long; and
- adjacent aisles will be at least 5.8 m wide but will widen to 7.0 m where a bus will access the car park.

The car park will include eight parking spaces for people with a disability. These spaces will be designed in accordance with Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities (AS/NZS 2890.6:2009)* in that they will include a 2.4 m wide space with an adjacent 2.4 m wide shared space.

The car park will be accessed via two access points to/from the new driveway. These access points will be designed to facilitate simultaneous movements of domestic vehicles, as illustrated in Figure 5.

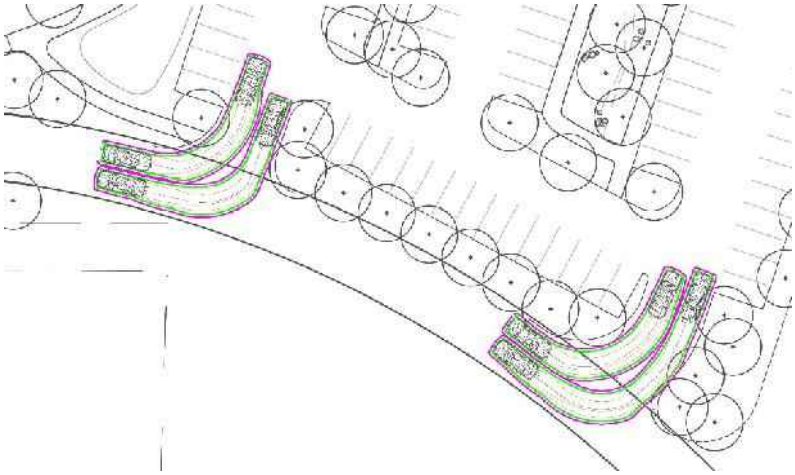

Figure 5: Simultaneous movements of vehicles at access points

An indented pick-up/set-down bay will be provided at the northern end of the car park adjacent the front entrance. This facility will be able to be used by drivers delivering and collecting passengers to and from the development but has also been designed to facilitate pick-up/set-down movements for buses.

The car park will facilitate a low-speed environment which will cater for typical pedestrian movements between vehicles and the building entrance. It will, nonetheless, include a dedicated path within the central landscaped area and a zebra crossing which will provide a dedicated crossing facility. This treatment will be provided in accordance with the *Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices, Part 2 – Code of Technical Requirements"* (the Code).

An area to the east of the car park has also been identified for overflow car parking which will be used when there is a higher demand for parking and buses. This area could accommodate 60 vehicles and four buses as shown in Figure 6.

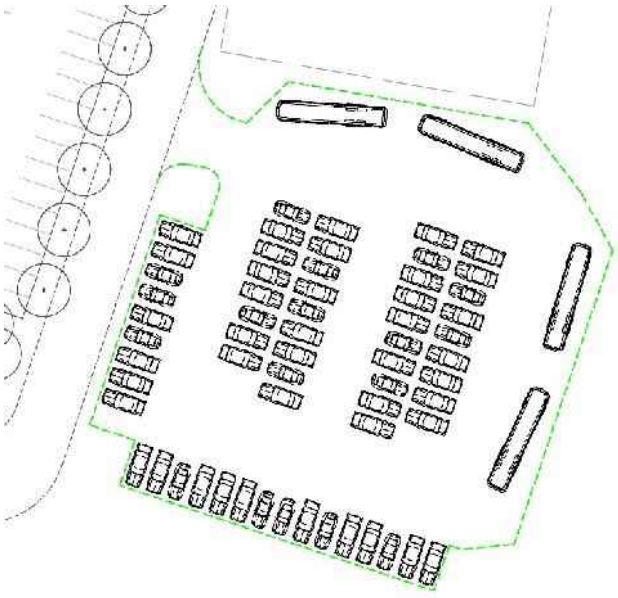

Figure 6: Overflow parking area

Based on contour information, the natural grade of the land would appear to be less than a grade of 1:20 and hence the crossfall of the overflow parking area will comply with the requirements of AS/NZS2890.1:2004.

3.4 LOADING

Loading for the operation of the development will occur at the north-eastern end of the building. Loading operations, including delivery of chemicals, and refuse collection will be undertaken using rigid vehicles up to 8.8 m in length. A separate delivery vehicle access will be provided on the eastern boundary of the car park to provide separation of delivery vehicles access and users of the facility. The current access route proposed will be in a temporary location to provide flexibility in the future development of the precinct. Figure 7 illustrates an MRV accessing the temporary loading route.

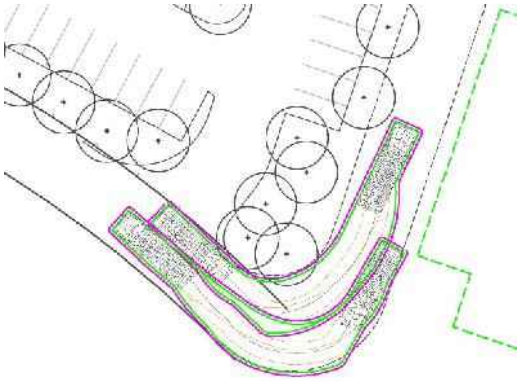

Figure 7: MRV accessing temporary loading route

A turn-around facility will be provided adjacent to the loading area to enable vehicles to enter and exit the site in a forward direction. Figure 8 illustrates the movements of a delivery vehicle accessing the loading bay.

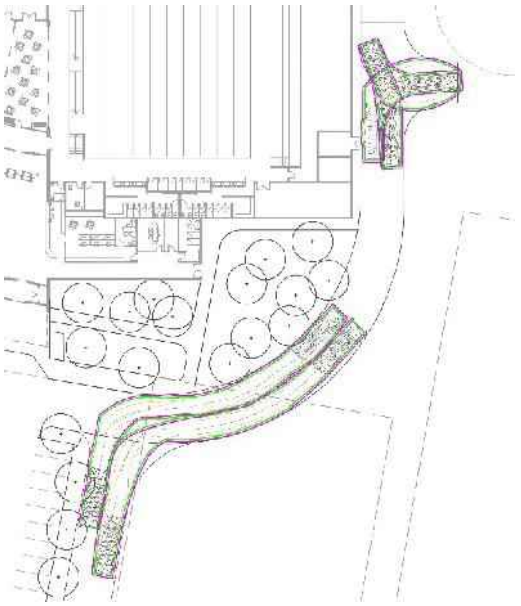

Figure 8: Movements of a MRV accessing the loading bay

3.5 BUSES

The proposal will provide for buses which will transport visitors (potentially school groups) to and from the site. These buses will use the pick-up/set-down facility in the car park for delivering and collecting passengers and will access the site via the wider aisles. Figure 9 identifies the proposed bus movement to and from the facility.

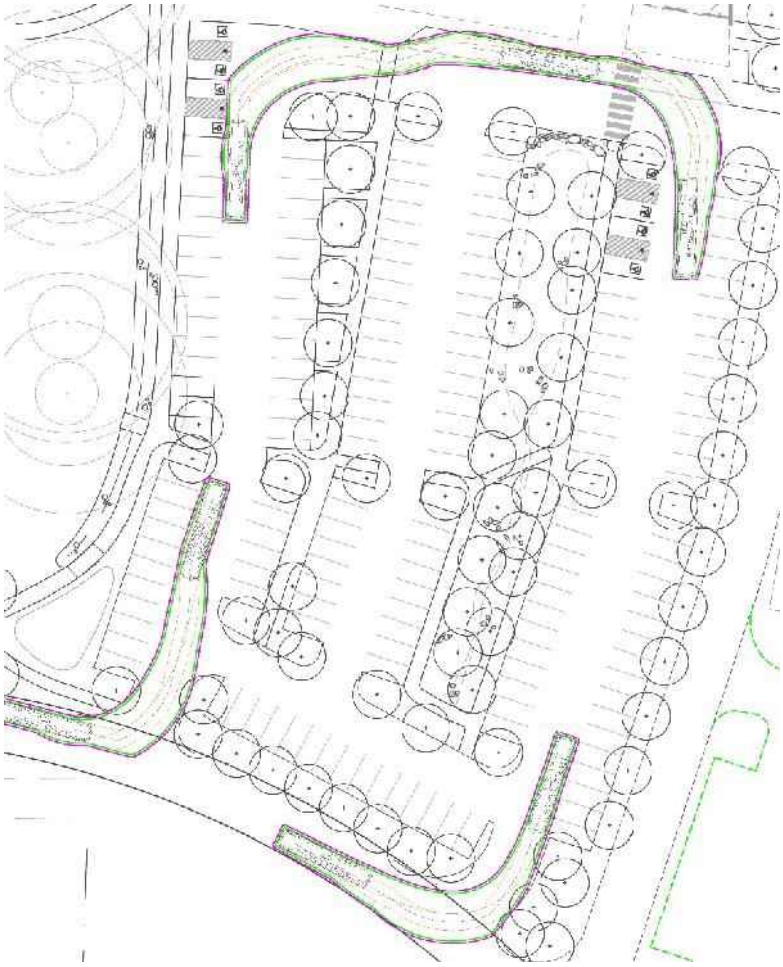

Figure 9: Bus movement to and from the pick-up/set-down area

While the introduction of buses in the car park aisle will result in larger vehicles mixing with domestic vehicles, the buses will be stopping to deliver or collect pedestrians and will therefore be travelling at low speed. Further, the intent of the access for the vehicle is to stop to deliver or collect pedestrians and therefore the drivers are aware of their environment. Accordingly, given the increased safety for visitors alighting from buses if they are delivered or collected at the front door, there will be a holistic improvement in respect to road safety with this outcome.

Bus parking will be available in the overflow car park. Figure 10 illustrates a bus accessing the bus parking area.

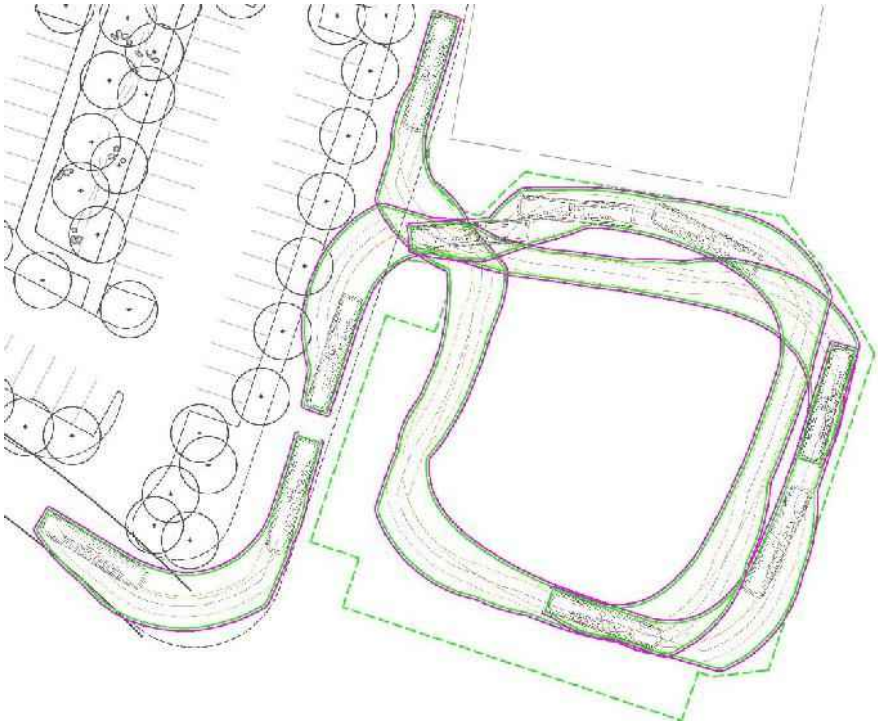

Figure 10: Bus parking within the overflow parking area

4.0 PARKING ASSESSMENT

4.1 VEHICLE PARKING

The Planning and Design Code identifies a parking provision rate of 4.5 spaces per 100 m^2 of total floor area for an indoor recreation centre. Such a parking rate, however, would be expected to estimate a higher parking provision than will be required for the typical operation of the aquatic centre component of the development, particularly given that the density of people using the aquatic facilities will be significantly lower than other indoor recreation facilities.

Accordingly, a technical parking assessment has been completed based on the anticipated number of people who will use each component within the proposed development. The assessment is based on the following:

- there will be 15 swimmers in the warm water pool at any one time;
- each session in the learn to swim pool will accommodate up to six classes with five students each and there will be an overlap between sessions;
- there will be 20 swimmers in the lap pool at any one time; and
- there will be approximately 20 staff in the Regional Aquatic and Leisure Centre during the peak period.

Based on the above, it is anticipated that there would be 115 people related to the aquatic facilities. It is also anticipated that there will be a vehicle occupancy of 1.2 persons per vehicle which would therefore result in a peak demand for 96 parking spaces.

In addition to the above, the gymnasium will demand 50 parking spaces based on the rate identified in the Planning and Design Code for an indoor recreation centre. On this basis, the proposed development would generate a forecast demand for 146 parking spaces.

Notwithstanding the above, should the proposed gymnasium be considered a fitness facility, the Planning and Design Code anticipates a generation of 6.5 spaces per 100m^2 floor area. This is consistent with surveys undertaken by MFY at 24-hour fitness gyms which identified a peak a parking provision rate of 6.4 spaces per 100 m^2. Based on this rate, the gymnasium component will generate a demand for 70 parking spaces.

Should the higher fitness centre rate be adopted, the forecast peak parking demand for the proposal will be 166 parking spaces.

The proposed provision of 176 parking spaces will accommodate this peak demand.

The proposed development will generate a higher parking demand during periods of high visitation (such as on hot summer days).

In order to forecast the anticipated parking demand during these higher visitation periods, reference has been made to detailed parking surveys undertaken at an aquatic centre in Melbourne. The data identified the following:

- summer months will have higher visitation than winter months;
- peak daily visitation during the summer months is forecast to be approximately 1.21% of annual visitation;
- peak number of visitors on-site at any one time is forecast to be 18% of the daily visitation; and
- the number of car parking spaces required is 0.39 spaces per patron.

The Fleurieu Aquatic Centre provides comparable facilities to the proposal and is similar in respect to the area it services. It is therefore anticipated that the subject development will attract a similar number of visitors annually. The 2020/2021 Annual Report identified that there were approximately 192,250 annual visits to the Fleurieu Aquatic Centre.

If the proposed development has 200,000 annual visitors, a peak parking demand of 170 parking spaces could be expected. This would result in a potential demand of approximately 220 spaces during the peak periods. Such parking would be accommodated within the proposed parking areas (including the overflow parking).

4.2 BICYCLE PARKING

The Planning and Design Code identifies the following bicycle parking provision rate for an indoor recreation centre:

- staff: one space per four employees; and
- visitors: one space per 200 m^2 of gross leasable floor areas.

If there is a peak demand for 25 staff (20 staff for the swimming facility and five staff for the gymnasium), there will a demand for approximately six staff bicycle spaces and 30 visitor bicycle parking spaces resulting in a total demand for 36 bicycle spaces.

By way of the same principle as the parking assessment, the density of visitors at the facility will be less than other indoor recreational facilities and therefore the above demand may not be realised. Accordingly, reference has been made to the bicycle parking requirements identified in Austroads "*Guide to Traffic Management – Part 11: Parking Management Techniques*" which identifies the same rates as the Planning and Design Cod and provides the following advice in regard to provision of bicycle parking:

It is sometimes appropriate to make available 50% of the level of provision recommended in the table at the initial installation stage, however, space should be set aside to allow 100% provision in the event that the full demand for bicycle parking is installed.

Adopting the above advice, the proposal will provide capacity for 18 bicycle parking spaces. Additional spaces could be provided in the future if there is a demand.

5.0 TRAFFIC ASSESSMENT

Traffic generated by the proposed facility will peak during weekends when the facility is operating with its highest visitation periods. However, the relevant peak periods for the traffic impact assessment is the combined peak traffic period when the traffic turning to and from the development and the traffic on Bald Hills Road sum to the highest volume. This will occur when the traffic on Bald Hills Road will be the highest, namely the am and pm commuter peak periods.

5.1 TRAFFIC GENERATION

Traffic data provided in the RMS Guide to Traffic Generating Development identifies a traffic generation rate of 2.2 trips per 100 m^2 for a swimming centre during the weekend peak hour. The morning rate will be lower as swimming classes are not usually scheduled during the am commuter peak. Accordingly, the following traffic generation rates are anticipated for the am and pm peak hour:

- one trip per 100 m^2 in the am peak hour; and
- two trips per 100 m^2 in the pm peak hour.

This would equate to the facility generating approximately 50 trips in the am peak hour and 100 trips in the pm peak hour.

The RMS data also identified a peak traffic generation rate of 5.6 trips per 100 m^2 for a gymnasium. However, this rate was observed at 6:45 pm on a weekday and 10:00 am on a Saturday, confirming that the peak traffic generated by the facility would also not coincide with the peak commuter periods but could potentially coincide with the peak aquatic centre generated traffic.

Nonetheless, if this rate was adopted, the proposed development will generate approximately 60 trips in the am and pm peak hours.

Based on the above traffic generation, the proposed development will generate a total of 110 trips in the am peak hour and 160 trips in the pm peak hour.

5.2 DISTRIBUTION

The following distribution factors have been adopted for the assessment:

- the aquatic centre will have 70% of traffic entering and 30% of traffic exiting the site in the am peak hour;
- the aquatic centre will have 50% of traffic entering and 50% of traffic exiting the site in the pm peak hour;

- the gymnasium will have 50% entering and 50% exiting the site in the am and pm peak hours; and
- 60% of the traffic will be to/from the west and 40% of the traffic will be to/from the east.

Based on the above distribution, Figure 11 identifies the forecast turning movements to and from Bald Hills Road.

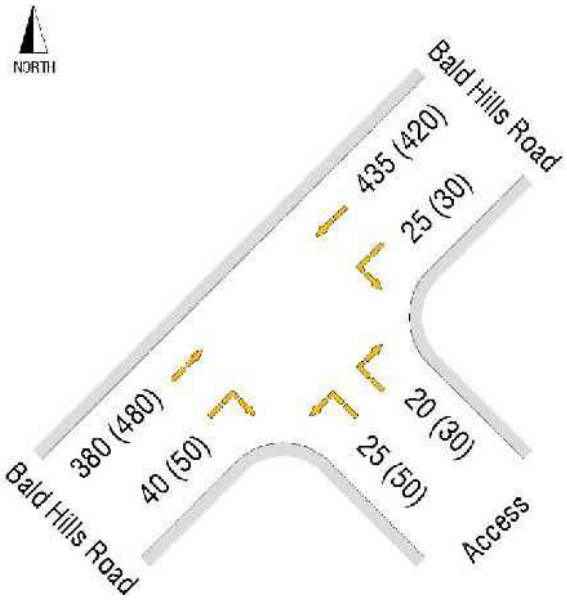

Figure 11: Forecast turning movements at the Bald Hills Road access

5.3 TRAFFIC ANALYSIS

5.3.1 SAFETY ASSESSMENT

The analysis has considered the type of access treatments that are warranted to ensure that the facility is safe for all users. This assessment is provided in accordance with Austroads "*Guide to Traffic Management – Part 6: Intersections, Interchanges and Crossings*". The warrant assessment is identified in Figure 12.

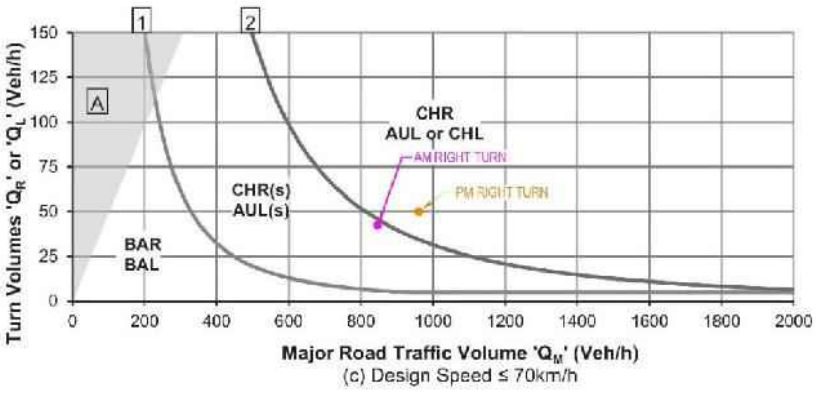

Figure 12: Austroads warrant assessment for the Bald Hills Road access

The assessment identifies that a channelised right turn lane will be warranted when the facility is developed. The proposal includes a channelised right turn lane as per this requirement.

A similar assessment of the left turning volume identified that the proposal will not generate a requirement for a channelised left turn lane.

5.3.2 INTERSECTION ANALYSIS

SIDRA modelling of the access was undertaken to assess the capacity, queues and delays at the proposed access. Detailed analysis of the model is provided in Appendix A. Table 1 identifies the performance indicators of the key movements at the access.

Table 1: SIDRA analysis summary am (pm)

Movement	Degree Of Saturation	95th-percentile Queue (m)	Average Delay (s)
Right turn from Bald Hills Road	0.04 (0.05)	1 (1)	7.5 (7.4)
Right turn to Bald Hills Road	0.09 (0.16)	2 (4)	16.1 (17.3)

The above results identify that the access will operate with a low degree of saturation. There will be minimal queues and delays for drivers entering and exiting the site during the peak periods. In particular, the right turn queue on Bald Hills Road will be accommodated within the available storage which will ensure minimal impact on the Bald Hills Road.

This capacity analysis reinforces that the proposed channelised turn facility is a road safety requirement and is not needed to increase capacity of the access.

6.0 SUMMARY

The proposed Regional Aquatic and Leisure Centre will be consistent with that envisaged in the master plan of the site. Access to the facility will be via the proposed internal access road which will intersect with Bald Hills Road. The intersection will comply with Austroads design requirements to ensure safe and convenient access for all road users and will be located to facilitate future upgrades at the intersection can be readily accommodated.

Separate access routes for loading and refuse vehicles will be provided and the design will accommodate the turning movements of all vehicles. All vehicles will be able to enter and exit the site in a forward direction.

Parking for the development will be provided in accordance with AS/NZS 2890.1:2004. There will be sufficient spaces to accommodate the parking demand anticipated during most periods and an overflow parking area will be provided during peak visitation and periods and events. This overflow car park will also cater for bus parking.

The traffic generated by the development will be readily accommodated at the intersection with Bald Hills Road, with minimal queues and delays for drivers entering and exiting the site. Importantly, it will have minimal impact on the existing operation of Bald Hills Road.

APPENDIX A

SIDRA ANALYSIS

PROPOSED ACCESS

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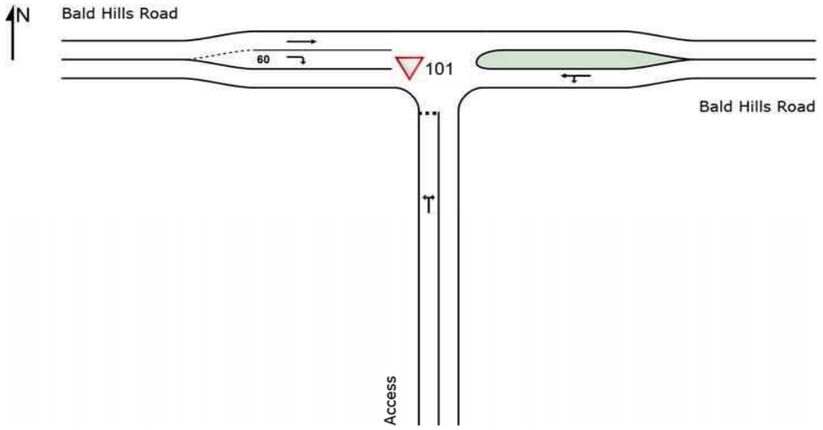
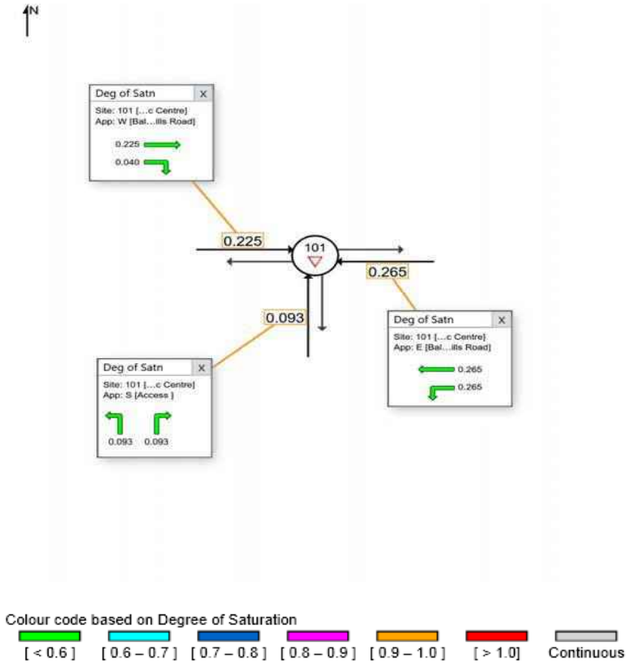
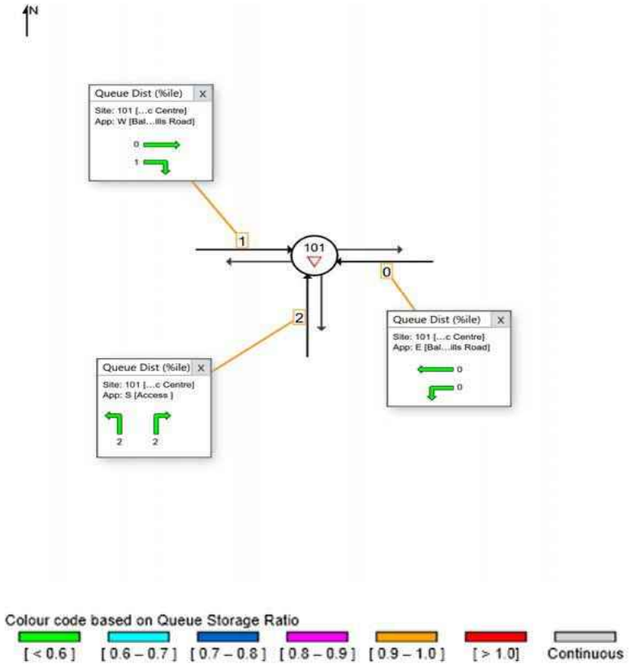
INTERSECTION LAYOUT



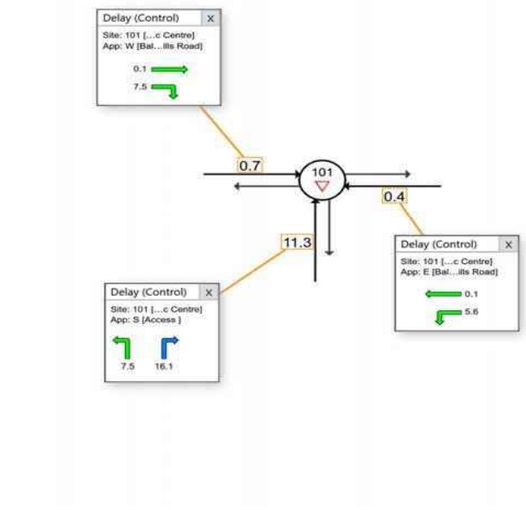
DEGREE OF SATURATION



95%ile QUEUE DISTANCE (metres)

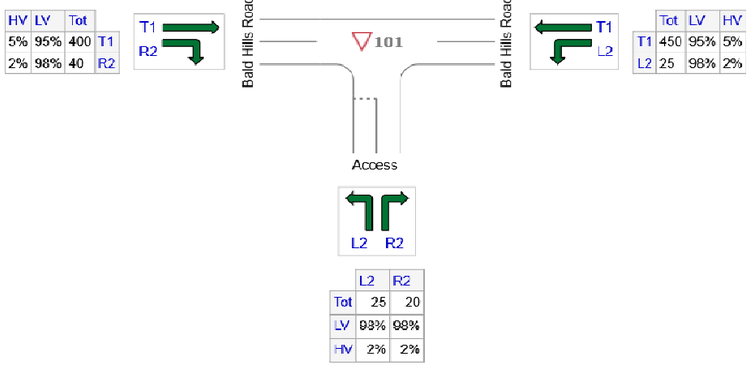


DELAY (CONTROL) & LEVEL OF SERVICE



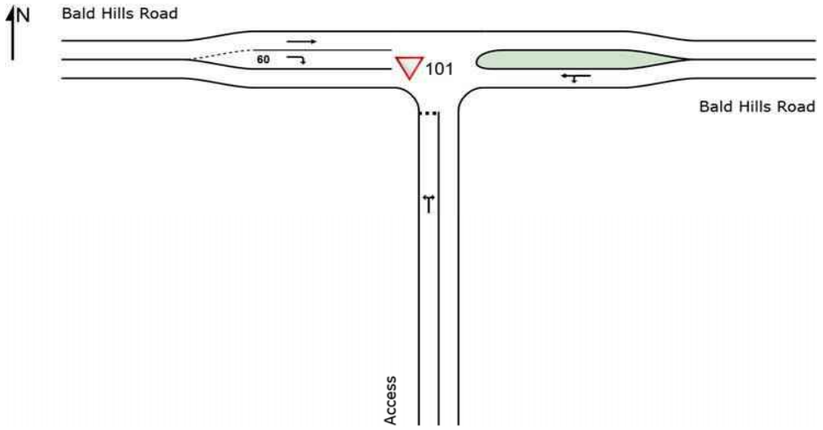
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

INPUT VOLUMES

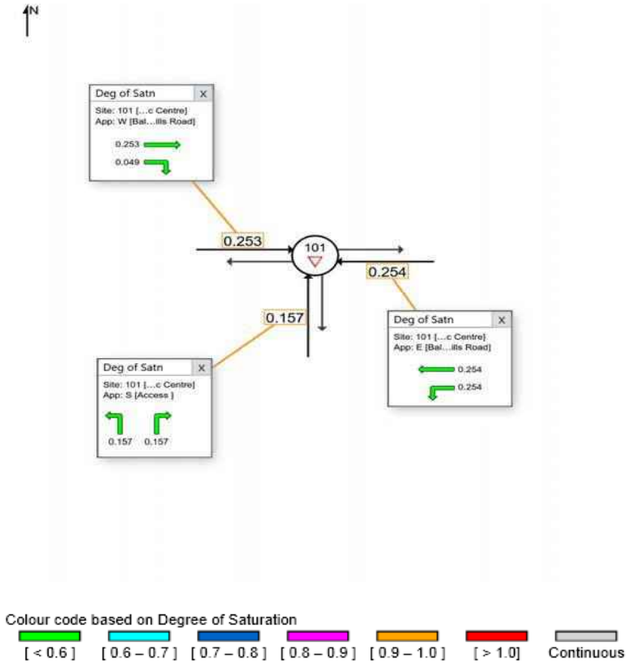


JOB NUMBER:	22-0089
PROJECT NAME:	MOUNT BARKER SUMMIT
INTERSECTION:	PROPOSED AQUATIC CENTRE ACCESS - BALD HILLS ROAD
SCENARIO:	DEVELOPMENT CASE - AM PEAK HOUR
	AQUATIC CENTRE

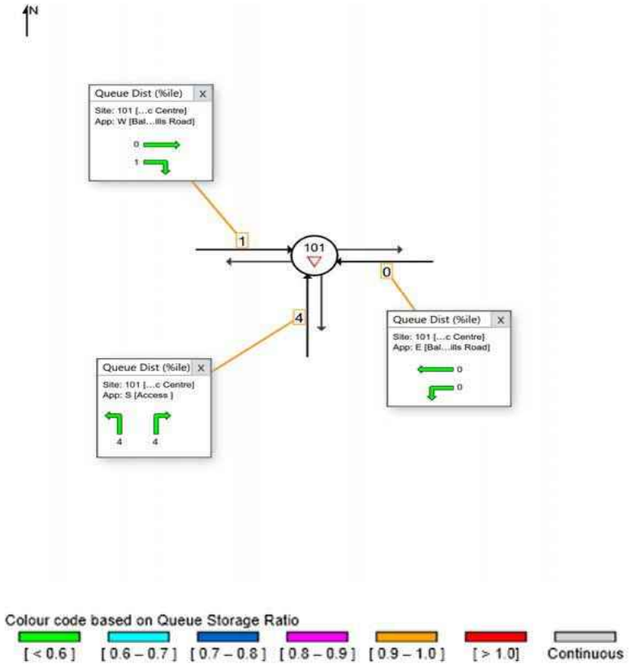
INTERSECTION LAYOUT



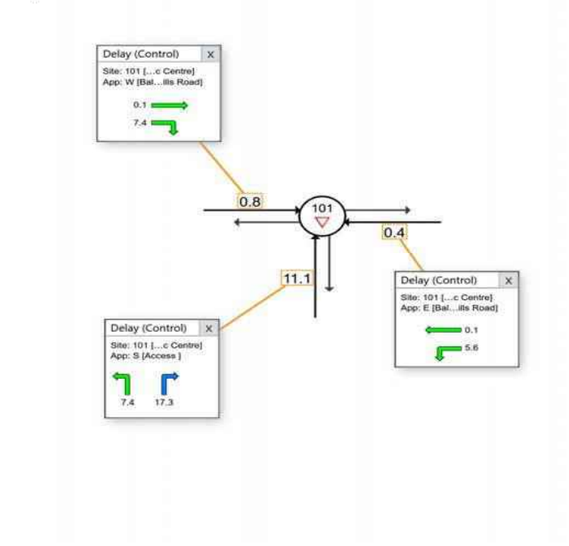
DEGREE OF SATURATION



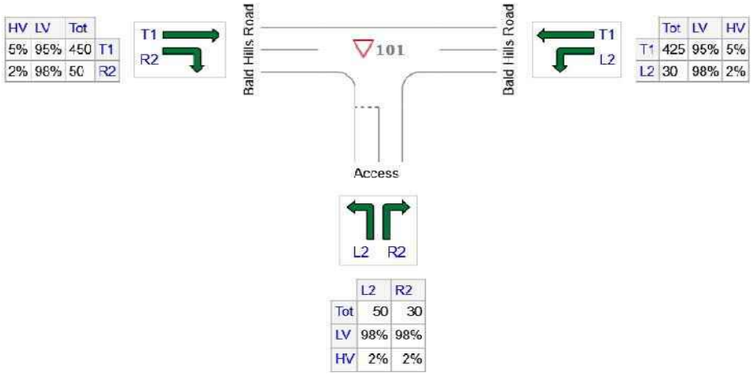
95%ile QUEUE DISTANCE (metres)



DELAY (CONTROL) & LEVEL OF SERVICE



INPUT VOLUMES



JOB NUMBER:	22-0089
PROJECT NAME:	MOUNT BARKER SUMMIT

INTERSECTION:	PROPOSED AQUATIC CENTRE ACCESS - BALD HILLS ROAD
SCENARIO:	DEVELOPMENT CASE - PM PEAK HOUR
	AQUATIC CENTRE

APPENDIX G

Environmental Noise Assessment

Sonus Pty Ltd

Ref S7314C2
October 2022

Mount Barker Regional Aquatic and Leisure Centre

Environmental Noise Assessment

October 2022

S7314C2

sonus.

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Document Title	: Mount Barker Regional Aquatic and Leisure Centre Environmental Noise Assessment
Document Reference	: S7314C2
Prepared For	: Mount Barker District Council
Date	: October 2022
Author	: Simon Moore, MAAS

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INTRODUCTION

An environmental noise assessment has been prepared for the proposed aquatic and leisure centre (indoor recreation facility) to be located at Mount Barker (the **Development**).

The assessment considers noise levels at the nearest noise sensitive receivers from car park activities and mechanical plant operation. The nearest noise sensitive receivers to the Development are the existing residences to the north, to the north west and at a greater setback across Bald Hills Road to the north west. The site and its surroundings are shown in Figure 1. A detailed drawing of the site is shown in Appendix A.

Figure 1: Site and its Surroundings

A general layout of the site is shown in Figure 2.

The assessment has been based on the *DesignInc* drawing of the Development, under the Project No: A22-0015, with Drawing No: PL-000, PL-201 and PL-202, all dated 07 October 2022;

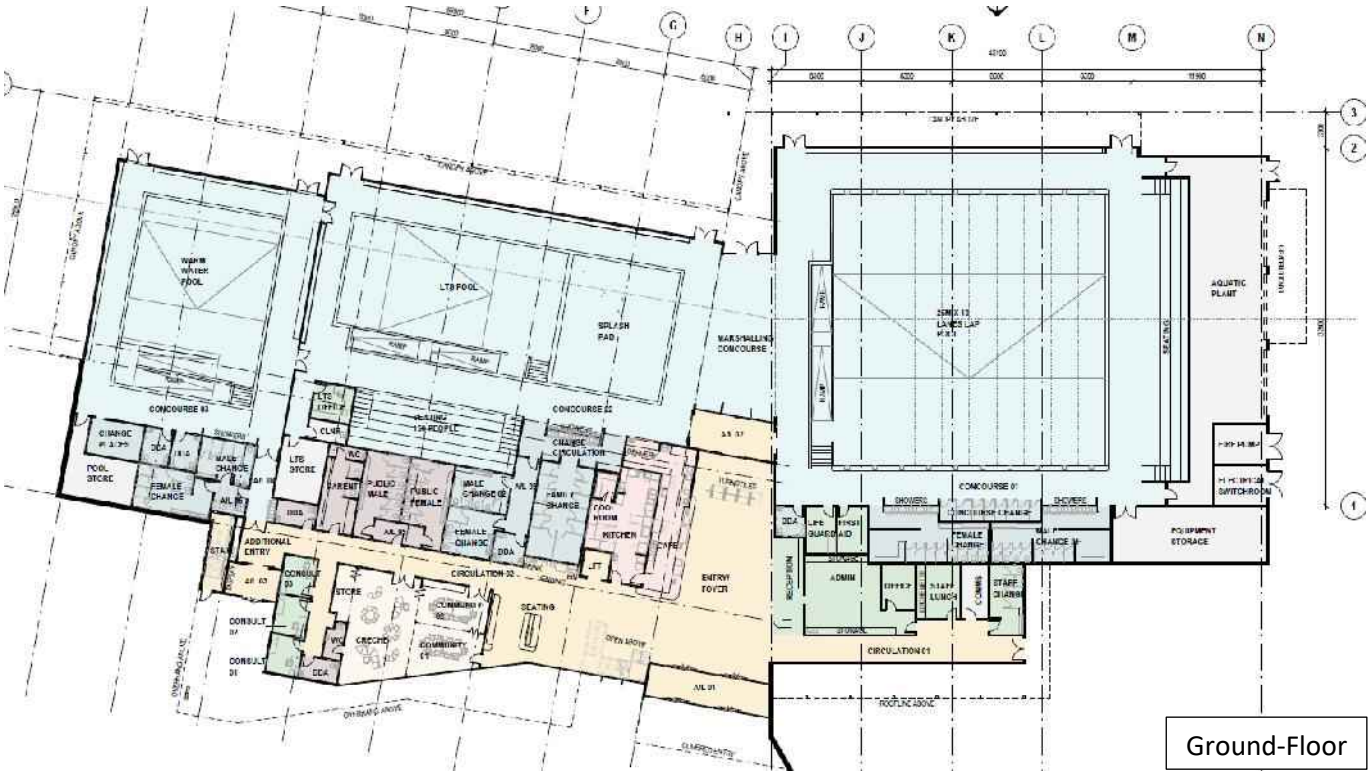

Figure 2: General Layout of the Development

PLANNING AND DESIGN CODE

The subject site is located within the Mount Barker District Council. Development within the council is subject to the provisions of the *Planning and Design Code* (the **Code**).

In accordance with the Code, the Development is within the Master Planned Neighbourhood Zone (Emerging Activity Centre Subzone). The nearby residences are located within the Master Planned Neighbourhood Zone (Emerging Activity Centre Subzone) and the Neighbourhood Zone.

The Code has been reviewed and the provisions considered relevant to the noise assessment are included in Appendix B.

ENVIRONMENT PROTECTION (NOISE) POLICY 2007

Deemed-to-Satisfy Criteria / Designated Performance Feature 4.1[1] of the Code references the *Environment Protection (Noise) Policy* (the **Policy**).

The Policy is based on the World Health Organisation *Guidelines for Community Noise* to prevent annoyance, sleep disturbance and unreasonable interference on the amenity of an area. Therefore, compliance with the Policy is considered to satisfy all provisions of the Code relating to environmental noise.

The Policy provides goal noise levels to be achieved at noise sensitive locations based on the principally promoted land uses of the Planning and Design Code in which the noise source (the Development) and the noise receivers (the existing residences) are located. For Development Applications, the Policy also requires the noise goals to be 5 dB(A) lower than the scheduled indicative noise levels.

In this instance, the following goal noise levels are provided by the Policy to be achieved at the noise sensitive receivers in the vicinity (residences):

For the residences within the Master Planned Neighbourhood Zone (Emerging Activity Centre Subzone):

- an average noise level ($L_{eq,15min}$) of 52 dB(A) during the day (7:00am to 10:00pm);
- an average noise level ($L_{eq,15min}$) of 45 dB(A) at night (10:00pm to 7:00am); and,

For the residences within the Neighbourhood Zone:

- an average noise level ($L_{eq,15min}$) of 50 dB(A) during the day (7:00am to 10:00pm);
- an average noise level ($L_{eq,15min}$) of 43 dB(A) at night (10:00pm to 7:00am); and,
- an instantaneous maximum noise level (L_{max}) of 60 dB(A) during the night time.

When measuring or predicting noise levels for comparison with the Policy, adjustments may be made to the average goal noise levels for each “annoying” characteristic of tonality, impulsiveness, low frequency, and modulation of the noise source. The characteristic must be dominant in the acoustic environment and therefore the application varies depending on the assessment location, time of day, the noise source being assessed and the predicted noise level. Penalties are discussed further in the Assessment section of this report.

[1] Part 4 – General Development Policies, Interface between Land Uses

ASSESSMENT

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:

- typical air conditioning and pool water heating plant as required for similar sized facilities;
- 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 parked position; and,
- vehicle movements on site;

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 as shown in Table 1.

Table 1 : Assumed Mechanical Plant Units

Equipment	Number of Units	Location
Chemical Treatment Plant	-	Ground Floor Plant Room
Air Handing Units	4	Three units within first floor mechanical plant room (above the Plant room) & one unit within the other first floor mechanical plant room.
Pool Water Heating Plant	3	Rooftop

The sound power level for the equipment is shown in Appendix C.

The predictions have been based on the following assumed activity levels within any 15-minute period[2];

- Day Time (7am to 10pm)
    - 40 vehicle movements into or out of the car park using the proposed entry road and corresponding general car park activity at the available car parks; and,
    - Continuous operation of the mechanical plant;
- Night Time (10pm to 7am)
    - Continuous operation of the mechanical plant.

[2] Default assessment period of the Policy

A 5 dB(A) penalty has been applied to the predicted noise levels for the day time period associated with modulation of car parking noise sources. With the application of the penalty and the assumed level of activity at the site, the average noise levels (L_{eq}) are predicted to be as shown in Table 2 (note the residences with the highest noise levels are presented for each zone).

Table 2: Predicted Noise Levels (L_{eq})

	Day Period (7:00am to 10:00pm)		**Night Period (10:00pm to 7:00am)**	
	Predicted Noise Level	**Criterion**	**Predicted Noise Level**	**Criterion**
Emerging Activity Centre Subzone	50	52	44	45
Neighbourhood Zone	43	50	37	43

As shown in Table 2, the predicted noise levels achieve the criteria set by the Policy at all times of the day and night.

As the mechanical plant and equipment operate continuously at any time during day and night and the noise from the units does not vary significantly, the maximum noise level (L_{max}) will be easily achieved where the average levels (L_{eq}) are achieved.

NOTE: It is recommended that the assessment be updated if the noise from the selected units or the number of units is different to what is assumed in this assessment.

CONCLUSION

An environmental noise assessment has been prepared for the proposed aquatic and leisure centre (indoor recreation facility) to be located at Mount Barker (the **Development**).

The assessment has considered noise at noise sensitive locations in the vicinity, from car park activity and mechanical plant operation.

Relevant assessment criteria have been established based on the *Planning and Design Code* and the *Environment Protection (Noise) Policy 2007*. No acoustic treatments are required to achieve the noise criteria.

Based on the above, the Development has been designed to *not unreasonably impact the amenity of sensitive receivers*, thereby achieving the relevant provisions of the *Planning and Design Code* related to environmental noise.

APPENDIX A: The Site and its Surroundings

APPENDIX B: South Australian Planning and Design Code 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.

<table>
<tr><th>Performance Outcome</th><th>Deemed-to-Satisfy Criteria / Designated Performance Feature</th></tr>
<tr><td colspan="2">General Land Use Compatibility</td></tr>
<tr><td>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.</td><td>DTS/DPF 1.2
None are applicable</td></tr>
<tr><td colspan="2">Hours of Operation</td></tr>
<tr><td>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:

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.</td><td>DTS/DPF 2.1
Development operating within the following hours:

<table><tr><th>Class of Development</th><th>Hours of operation</th></tr><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></table></td></tr>
</table>

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: 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

APPENDIX C: Noise Level Data

Activity		Sound Power Level
Car Park Activities	Vehicle Movement	82 dB(A)
	General Activity	83 dB(A)
Mechanical Plant	Chemical Treatment Plant	75 dB(A) as an internal level
	Air Handling Unit	80 dB(A)
	Pool Water Handing Unit	98 dB(A)

APPENDIX H

Arboricultural Impact Assessment Report

Adelaide ARB Consultants

Ref: RJ000237-MtBarPoolArbImpact Assessment
12 October 2022

Document: # - RJ000237-MtBarPoolAIA
Prepared for Mount Barker District Council
Attn: Eloise Langford
PO Box 54
Mount Barker SA 5251
Date: 12th October 2022

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Arboricultural Impact Assessment Report

Mount Barker Regional Aquatic & Leisure Centre

Prepared for

Mount Barker District Council

Compiled by

Michael Palamountain

Adelaide Arb Consultants

Mount Barker Regional Aquatic and Leisure Centre
Arboricultural Impact Assessment
12th October 2022

Executive Summary

- Adelaide Arb Consultants conducted an Arboricultural Impact Assessment of 21 trees at Stage 1 of Mount Barker Hub (304 Springs Road, Mount Barker) in relation to a proposed development.
- The trees are all identified as *Eucalyptus camaldulensis* – River Red Gum and are located within Stage 1 of the Mount Barker Hub precinct.
- All trees within the population are controlled under South Australian Legislation. The following table outlines the different legislative controls applied to individual trees.

Native Vegetation Act 1991	*PDI Act 2016* (significant trees)	*Native Vegetation Act 1991* & *PDI Act 2016* (reg tree)	*Native Vegetation Act 1991* & *PDI Act 2016* (sig tree)
Tree 45 Tree 46 Tree 54	Tree 14 Tree 15 Tree 16 Tree 17 Tree 18 Tree 19 Tree 20 Tree 21 Tree 22	Tree 44 Tree 47 Tree 48 Tree 52 Tree 67	Tree 1 Tree 3 Tree 42 Tree 51

- The trees display variable health and structure, and all are sustainable within their environment.
- An Arboricultural Impact Assessment was undertaken, and the proposed development is not likely to have an adverse impact on most trees. Minor design modifications are required to minimise impacts in Trees 1 and 3.
- A Tree Protection Plan is attached to provide guidelines to the various construction teams to ensure the trees are adequately protected during the construction phase.

Thank you for the opportunity to provide you with this advice, should you have any queries or concerns regarding the management recommendations or aspects of the assessment, please feel free to contact Adelaide Arb Consultants for further information.

Kind regards,

Michael Palamountain
Senior Consulting Arboriculturist
Bachelor of Science
Diploma of Arboriculture
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Senior Consulting Arboriculturist
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Appendix A – Individual Tree Data & Imagery

Appendix B – Arboricultural Impact Assessment Plans

Brief

Adelaide Arb Consultants were commissioned by Mount Barker District Council to conduct an Arboricultural Impact Assessment of selected trees throughout Stage 1 of the Mount Barker Hub proposal on the corner of Bald Hills Road and Springs Road, Mount Barker with an emphasis on, Legislative Control, Tree Retention capability and general tree protection zone guidelines in relation to a proposal to develop a Mount Barker Regional Aquatic and Leisure Centre in the area.

The aim of such an assessment in this case is intended to enable tree protection guidelines to be achieved during development and construction activities.

The assessment criteria included the following attributes:

- Identify trees which may be affected by the development proposal.
- Assess each tree's current health, structure and sustainability within their current environmental conditions.
- Determine each tree's Legislative Control under the current provisions of South Australian Legislation.
- Provide tree protection zones and guidelines during construction works.
- Any other factors that are relevant to tree management in the situation.

Assessments have been conducted with reference to the requirements the *Planning, Development and Infrastructure Act 2016, Native Vegetation Act 1991* as well as Australian Standard AS 4970-2009 *Protection of trees on development sites.*

Tree Report Scope

The assessment criteria included the following attributes:

- Trees within the subject land that may be affected by the proposed development.
- The trees' current health, structure, and sustainability within their current environmental conditions.
- The trees' control status under the current provisions of the *Planning, Development and Infrastructure Act 2016* and the *Native Vegetation Act 1991,* including an assessment against the relevant *Planning & Design Code* Performance Outcomes.
- Assess the potential impacts from the proposed development on the trees with reference to the guidance outlined in AS 4970-2009 *Protection of trees on development sites*.
- Provide relevant tree protection requirements under the current guidelines of Australian Standard AS 4970-2009 *Protection of trees on development sites* to maintain the trees in their current condition during development and construction activities.
- Any other factors that were relevant to tree management in the situation considering development and construction activities may occur within the vicinity of some trees.

Provided Information

The following documents and plans were provided by Planning Studio to assist in the assessment process.

- *Regional Aquatic and Leisure Centre* – Planning Issue, DesignInc. n.d. A22-0015 PL-000.

Relevant Background Information

- All trees within Stages 1-3 have previously been assessed by Adelaide Arb Consultants between July and August 2021 in preparation for the Arboricultural Impact Assessment to be completed once the development proposal had been formalised.

Site Access and Assessment

Site Visit Details

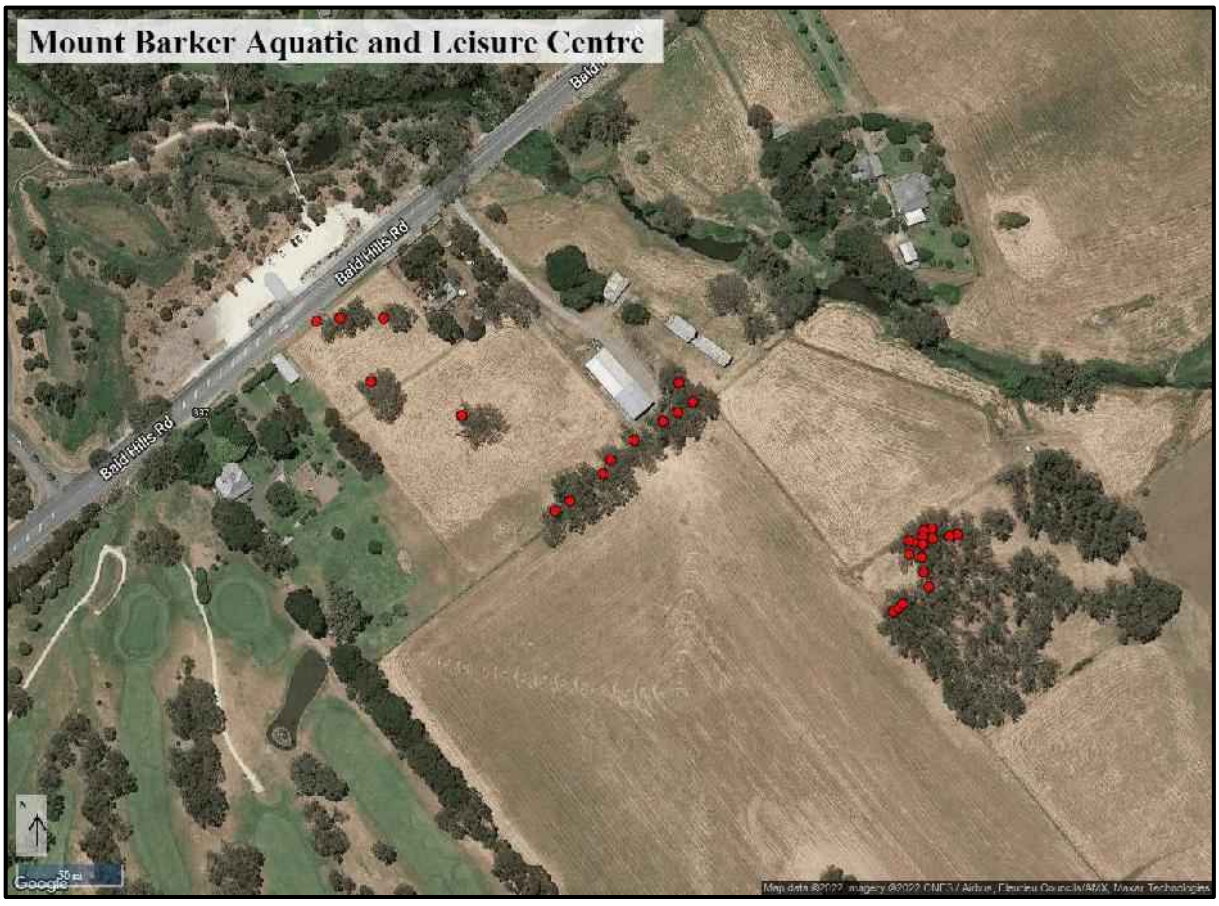
An assessment of various mature trees was conducted during July and August 2021.

This involved a Level 1-2 Visual Tree Assessment[1], carried out from ground level. All measurements are estimates unless otherwise specified within the report and measurements relating to the tree's location, crown projection or root zone extent are taken from the centre of the tree at ground level.

Data collection describes observations noted during the assessment from the open grazing lands surrounding each if the trees. No restrictions to tree access were encountered during the assessment time.

Site Description

The land forming Stage 1 is located at 304 Springs Road, Mount Barker. The vegetative character of the area consists of a variety of indigenous and introduced native trees as well as a small proportion of exotic tree species. The site is linked to wildlife corridors.



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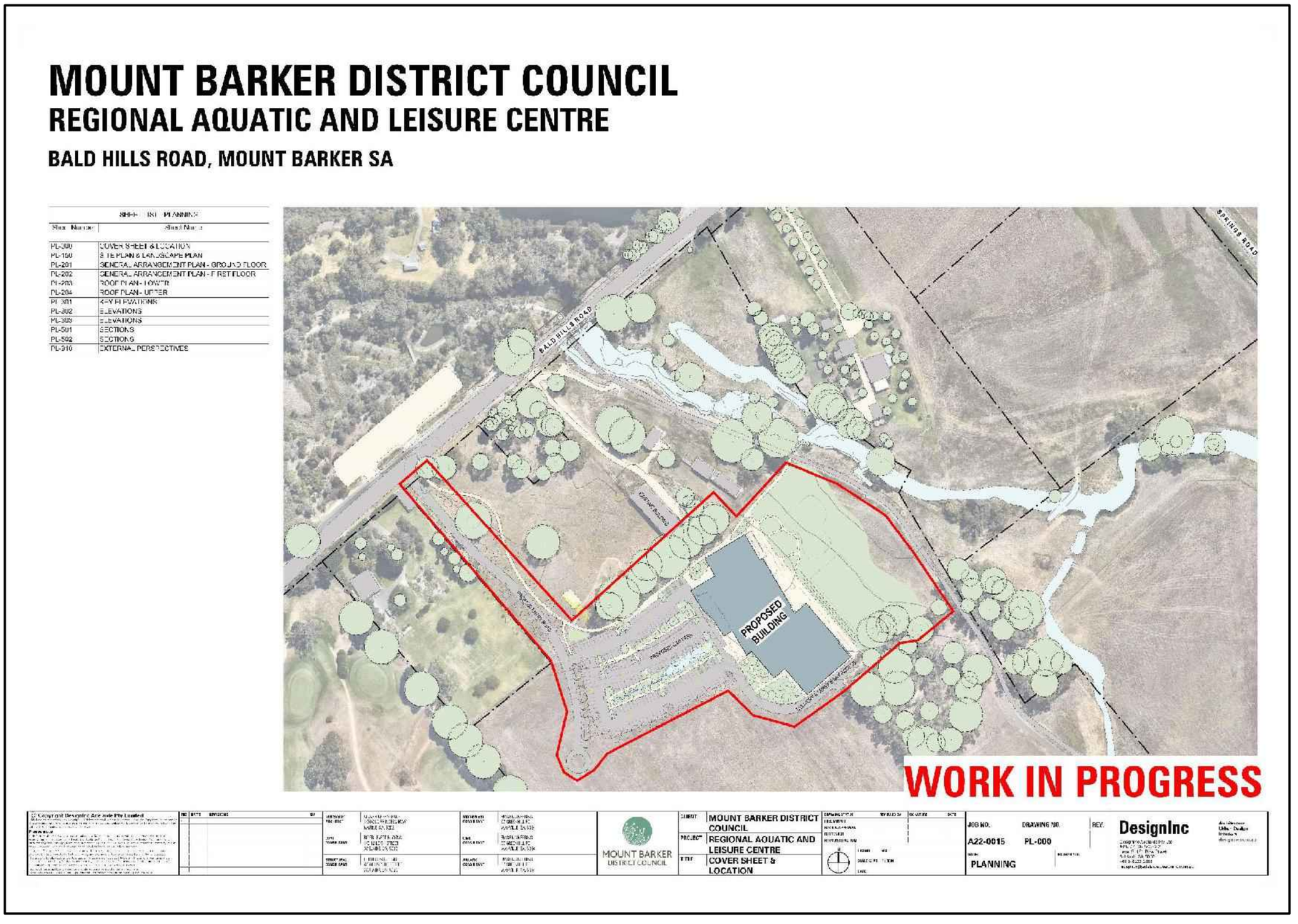
Development Proposal Plan

The development proposal plan below identifies that 21 trees are situated within the area of construction that will require protection, however most are at the periphery of the construction areas.

The development activities proposed at the site include the following, based on the plans provided.

- Construction of a sealed surface driveway from Bald Hills Road, extending parallel to the southwestern boundary alignment.
- Construction of a sealed surface pedestrian pathway extending between Bald Hills Road and the proposed building.
- Construction of a sealed surface car parking area.
- Earthworks, including cut/fill, sloping batters, retaining walls and trenching.
- Construction of a large building incorporating an indoor recreation facility.
- Installation of a range of underground services between the building and street connections, including, but not limited to, gas, sewer, water, electricity, telecommunications, and stormwater.
- New landscaping.



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Findings Assessment

21 trees are identified within the development proposal area that have potential to be impacted by construction activities. These trees are all identified as *Eucalyptus camaldulensis* – River Red Gum and most display good health. Trees 1, 42, 45 and 46 display fair health while Tree 54 displays poor health. None of these trees require removal as a result of health decline.

Tree structure is more variable within the population with most trees displaying fair integrity. Trees 3, 48 and 67 display good structure while Trees 22 and 52 display poor structure. Pruning management could be applied to these trees to maintain tree related risk at acceptable levels, however this has not been considered as part of this assessment. Further consultation regarding tree risk management should be conducted during the development construction phase.

Many trees within the development scope area are controlled under the provisions of the *Native Vegetation Act 1991* while various others are controlled under the provisions of the *Planning, Development and Infrastructure Act 2016* as regulated or significant trees. Some trees are controlled under both pieces of legislation; however, all trees are controlled by at least one. The following table outlines the legislative control status of trees within the scope area.

Native Vegetation Act 1991	PDI Act 2016 (significant trees)	*Native Vegetation Act 1991* & *PDI Act 2016* (reg tree)	*Native Vegetation Act 1991* & *PDI Act 2016* (sig tree)
Tree 45 Tree 46 Tree 54	Tree 14 Tree 15 Tree 16 Tree 17 Tree 18 Tree 19 Tree 20 Tree 21 Tree 22	Tree 44 Tree 47 Tree 48 Tree 52 Tree 67	Tree 1 Tree 3 Tree 42 Tree 51

The site has historically been used for pastoral cultivation and grazing. The environment surrounding some trees will be changed significantly as a result of the development construction while various other trees will not be subjected to such change, however there is an elevated potential for tree damage during construction activities.

A range of tree protection measures should therefore be implemented during all aspects of the development and construction works to enable the sustainable preservation for the trees in their current condition. The extent and type of protection measures are determined by undertaking an Arboricultural Impact Assessment as follows.

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Arboricultural Impact Assessment

To ensure suitable trees are retained and protected from potentially damaging activities during the development of the site, a Tree Protection Zone (TPZ) is required. The TPZ aims to protect a sufficient proportion of the root zone, as well as protecting the above ground parts of the tree to ensure the trees remain viable assets at the site. An Arboricultural Impact Assessment is necessary at the design stage to ensure any potential tree impacts are identified and resolved before finalising the plans.

An arboricultural Impact Assessment for each tree is set out in the table below.

Tree #	Species	TPZ radius (m)	TPZ area (m^2)	Current TPZ encroachment /occupation	New TPZ encroachment from proposal	Level of encroachment
1	*Eucalyptus camaldulensis* – River Red Gum	15m	707m^2	Road 216.16m^2 (30.6%)	Road – 64.57m^2 (9.1%) Footpath – 39.9m^2 (5.6%) Within SRZ – Yes Total Encroachment – 104.47m^2 (14.7%)	Major
3	*Eucalyptus camaldulensis* – River Red Gum	15m	707m^2	None	Road – 68.7m^2 (9.7%) Footpath – 13.24m^2 (1.9%) Within SRZ – No Total Encroachment – 81.94m^2 (11.6%)	Major
14	*Eucalyptus camaldulensis* – River Red Gum	15m	707m^2	None	Footpath – 70.6m^2 (9.98%) Within SRZ – No	Minor
15	*Eucalyptus camaldulensis* – River Red Gum	15m	707m^2	None	Footpath – 29.3m^2 (4.14%) Within SRZ –No	Minor
20	*Eucalyptus camaldulensis* – River Red Gum	15m	707m^2	None	Footpath 6.9m^2 (0.14%) Within SRZ –No	Minor
52	*Eucalyptus camaldulensis* – River Red Gum	6.98m	153m^2	None	Building Apron – 1.4m^2 (0.9%) Within SRZ –No	Minor
16-19 & 21-22, 42, 44-48, 51, 54 & 67.	*Eucalyptus camaldulensis* – River Red Gum	Variable	Variable	N/A	No new encroachments proposed Within SRZ –No	None

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The total level of TPZ encroachment for Trees 1 (14.7%) and 3 (11.6%) is major (>10% of the TPZ area and/or within the SRZ).

When determining the potential impacts of encroachment into the TPZ of these trees, the project arborist[2] should consider the following, as outlined in Section 3.3.4 TPZ encroachment considerations of Australian Standard AS 4970-2009 *Protection of trees on development sites*.

Tree 1

a) Location and distribution of the roots to be determined through non-destructive investigation methods (pneumatic, hydraulic, hand digging or ground penetrating radar). Photographs should be taken, and a root zone map prepared.

NOTE: Regardless of the method, roots must not be cut, bruised, or frayed during the process. It is imperative that exposed roots are kept moist, and the excavation back filled as soon as possible.

No specific root mapping was undertaken for this tree. It is acknowledged that the road occupies ~30% of the tree protection zone area, however, tree roots are likely to be occupying other open areas to a greater extent than under the roadway.

b) The potential loss of root mass resulting from the encroachment: number and size of roots.

There is potential for up to 14.7% root loss form the installation of the new roadway and footpath. This species of tree with a high tolerance to development activities typically tolerates this level of root loss. However, as some development activities are within the structural root zone (the proposed footpath) the overall impacts on the tree are potentially greater. Alternative design solutions should be found to relocate the pedestrian footpath outside the structural root zone.

c) Tree species and tolerance to root disturbance.

This species of tree typically has a high tolerance to root disturbance. However, alternative design solutions should be found to relocate the pedestrian footpath outside the structural root zone.

d) Age, vigour, and size of the tree.

Tree 1 is a mature tree in fair health. Where possible, any root disturbance should be minimised.

e) Lean and stability of the tree.

NOTE: Roots on the tension side are likely to be most important for supporting the tree and are likely to extend for a greater distance.

Tree 1 has a general bias to the southeast as a result of historic pruning activities on the northwestern side of the crown. Any disturbance to tree roots within the structural root zone has the potential to adversely affect tree stability. Alternative design solutions should be found to relocate the pedestrian footpath outside the structural root zone.

f) Soil characteristics and volume, topography, and drainage.

The site is level and contains relatively undisturbed and open soil profiles within a large proportion of the tree protection zone.

g) The presence of existing or past structures or obstacles affecting root growth.

There is an existing roadway to the northwest that occupies 30.6% of the tree protection zone. The tree has adapted to the presence of the roadway, with some, but reduced root development beneath the roadway. The majority of root development will be within the existing open field area. Where possible, any root disturbance should be minimised.

h) Design factors.

Alternative design solutions should be found to relocate the pedestrian footpath outside the structural root zone and to utilise permeable pavement designs for the road surfacing within the tree protection zone.

After considering these factors, the proposed design in its current form has the potential to have an adverse impact on Tree 1. Therefore, some minor modifications to the current design are recommended to minimise the impacts on the tree.

A range of design solutions should be considered, including, but not limited to:

- Relocate the pedestrian footpath outside the structural root zone of Tree 1.
    - The path could be moved towards the southwest, closer to the roadway, outside the structural root zone. As the path will still remain within the tree protection zone, permeable paving materials and installation techniques should be used. This may place the vehicles on the roadway in close proximity to pedestrians on the footpath. Therefore, a barrier to separate pedestrians and vehicles may be required.
    - Alternatively, relocate the pedestrian footpath to the northeast further away from the roadway. The path should be moved outside the structural root zone as a minimum. If site factors allow, the path could be moved completely outside of all tree protection zones.
- Utilise permeable paving materials and installation techniques for the entry roadway. This strategy should be utilised tor Trees 1, 3 and any other tree where paving activities are required within a tree protection zone.
- As the exact location of underground services has not been provided to Adelaide Arb Consultants, strategies to avoid open trenching for underground services through any tree protection zone are required. This may include:
    - Re-routing the services outside all tree protection zones.
    - Directional drilling beneath all tree protection zones.
    - Hydro-excavation through all tree protection zones.
- Modified boundary fencing (e.g., post and pad with lightweight panels)

Tree 3

The level of encroachment into the Tree Protection Zone of **Tree 3** at 11.6% is marginally above the minor threshold of 10%. Given that this species of tree has a good tolerance to development activities, the tree is likely to tolerate this level of encroachment. However, consideration should be given to implementing some or all of the following design modifications to further reduce the impacts on the tree.

- Relocate the pedestrian footpath outside the tree protection zone of Tree 3.
    - Relocate the pedestrian footpath to the northeast further away from the tree. If site factors allow, the path could be moved completely outside of all tree protection zones.
- Utilise permeable paving materials and installation techniques for the entry roadway.
- As the exact location of underground services has not been provided to Adelaide Arb Consultants, strategies to avoid open trenching for underground services through any tree protection zone are required. This may include:
    - Re-routing the services outside all tree protection zones.
    - Directional drilling beneath all tree protection zones.
    - Hydro-excavation through all tree protection zones.
- Modified boundary fencing (e.g., post and pad with lightweight panels)

These modifications are achievable without substantial change tot eh layout or function of the facility. It is acknowledged that the proposal plans lodged for Development Approval may not show these points.

This should not restrict the ability for Development Approval to be granted however conditions of consent should include a provision for the Project Arborist to certify that changes listed above have been satisfactorily illustrated/documented within detailed designs prior to construction works commencing.

Tree Protection Plan

General

To protect suitable trees during the development process, a range of tree protection features and measures are required. The tree protection zone is usually a restricted area delineated by fencing.

The following activities are restricted within the TPZ. Some of these works may be permitted by the determining authority and must be supervised by the project arborist.

a) machine excavation including trenching;

b) excavation for silt fencing;

c) cultivation;

d) storage;

e) preparation of chemicals, including preparation of cement products;

f) parking of vehicles and plant;

g) refuelling;

h) dumping of waste;

i) wash down and cleaning of equipment;

j) placement of fill;

k) lighting of fires;

l) soil level changes;

m) temporary or permanent installation of utilities and signs, and

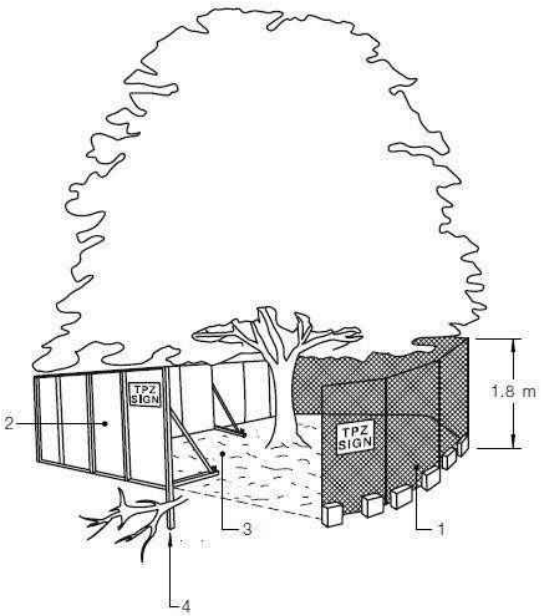
n) physical damage to the tree.

Prior to any site works commencing, the site/project manager and relevant sub-contractors should meet on site with the project arborist to review work procedures, access routes, storage areas, parking areas and tree protection measures.

Tree Protection Zone establishment

Protective fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works, including site earthworks. Once erected, protective fencing must not be removed or altered without approval by the project arborist. The TPZs should be secured to restrict access. The Tree Protection Zones should be established and managed as follows. Please refer to the attached Tree Protection Plan.

- Identify the trees within (and adjacent to) the subject allotment that are to be retained and protected during the development process. This may include trees on adjoining land and Council owned street trees and reserve trees.
- The Tree Protection Zone radius is to be equivalent to that calculated and noted in the Tree Observations and the attached Tree Protection Plan.
- Identify and mark the alignment of protective fencing as indicated on the Tree Protection Plan. This may vary from the actual TPZ radius after considering areas of acceptable encroachment (determined in consultation with the project arborist) and site access requirements. Fencing is only required within the subject allotment (provided boundary fencing is in place).
- Erect/construct protective fencing as indicated in the image below. AS 4687 *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.



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 3 PROTECTIVE FENCING

- Right: Australian Standard AS 4970-2009 *Protection of trees on development sites*, p16.

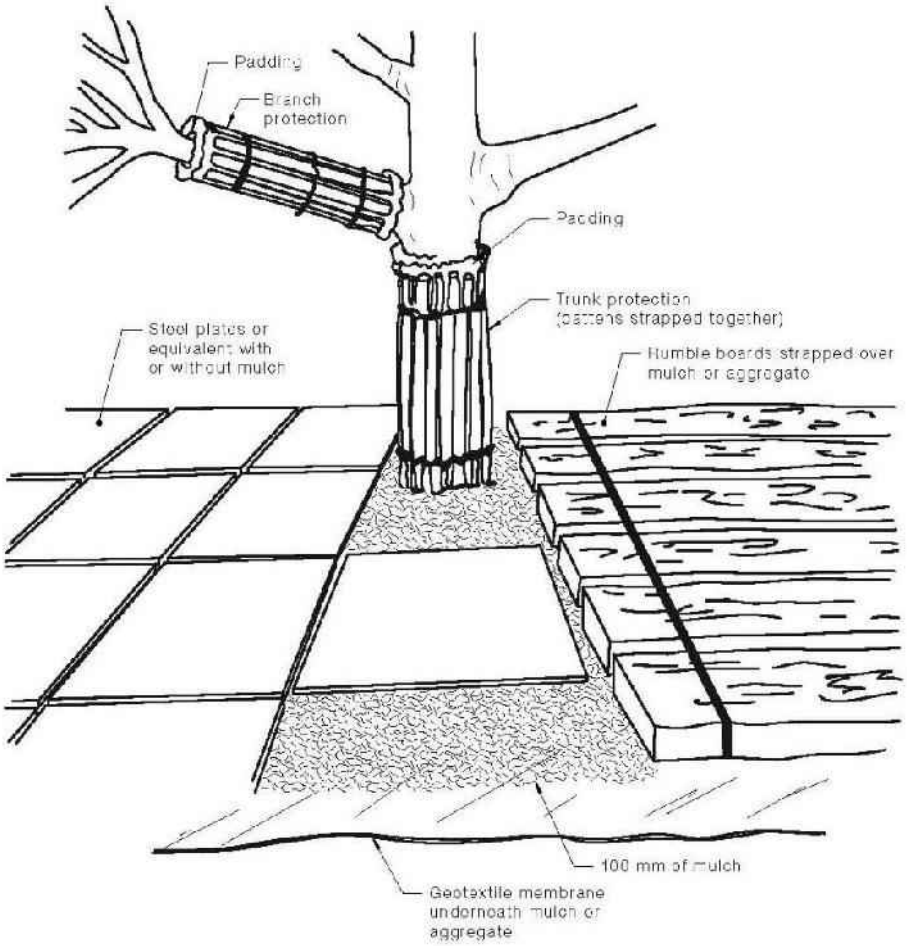
- All visible faces of the Tree Protection Zones to the construction area must be signed with appropriate Tree Protection Zone signage as shown below. A copy of such is attached as an addendum to this report and may be duplicated as required without permission. No alterations to the Tree Protection Zone sign are permitted without written consent from the author.

- Where fencing has been reduced from the full TPZ radius to facilitate vehicle/machinery access, heavy-duty ground protection will be required. This heavy-duty ground protection will be required for essential vehicle access, excavator access, crane access, pier drilling machinery access, hydro-excavation trucks etc along the entry road alignment past Trees 1 and 3.
    - Install vehicle access ground protection as indicated on the Tree Protection Plan.
    - Install a layer of geotextile fabric on top of the natural ground.
    - Install coarse rock ballast set into a cellular webbing system such as Geoweb.

Geoweb Tree Root Protection (image www.greenfix.co.uk)

- At completion of site construction activities, the temporary roadway that passes through the tree protection zones of Trees 1 and 3 can be removed to facilitate final entry road construction.

- Where construction activities or vehicle access is in close proximity to any tree, install protection to the trunk and branches of trees as shown in the figure below. A minimum height of 2m is recommended. Ground protection (as described above) will also be required in this situation.
    - Install breathable padding or hessian around the trunk of the tree.
    - Install closely spaced timber battens around the trunk, with the top edge protecting the trunk/bark by the padding/hessian. Secure with strapping.



NOTES:

1 For trunk and branch protection use boards and padding that will prevent damage to bark. Boards are to be strapped to trees, not nailed or screwed.

2 Rumble boards should be of a suitable thickness to prevent soil compaction and root damage.

FIGURE 4 EXAMPLES OF TRUNK, BRANCH AND GROUND PROTECTION

Site establishment

The establishment of the site should occur in conjunction with the establishment of the Tree Protection Zone structures and features. This may include site access, storage areas, construction huts, waste management areas etc.

1. Refer to the previous section on Tree Protection Zone establishment which outlines some of the essential Tree Protection Zone requirements.
2. All ancillary zones required for construction purposes should be located outside the Tree Protection Zones. This includes, but is not limited to:
    - Site access routes for various vehicles and machinery.
    - Areas to receive and store construction materials.
    - Areas for skip bins and waste management.
    - Wash out areas.
    - Site huts and toilets.
    - Storage of chemicals.
    - Car parking areas.
3. Where site constraints prevent this, and any of these activities are necessary within a Tree Protection Zone, suitable ground protection measures are required set out in the previous section on Tree Protection Zone establishment.

Earthworks and trenching

Earthworks required at the site may include, excavation, cut and fill, levelling, footing preparation, batter formation and trenching activities. These activities have the potential to damage to tree trunks, branches, and the root zone. To minimise the impacts of these activities on the trees to be retained on site, the following precautions are required.

1. Ensure Tree Protection Zone fencing, and other tree protection measures are in place prior to earthworks commencing.
2. Excavation works can only proceed as approved by Council.
3. The project arborist should be on site during any earthworks works within a Tree Protection Zone.
4. All excavation machinery must be kept outside the Tree Protection Zones to avoid soil compaction, or suitable ground protection measures must be in place as outlined in the section on Tree Protection Zone establishment.
5. Excavation machinery must not come into contact with the trunk, branches, or roots within the Tree Protection Zone. Consider using a spotter to supervise, and/or use a smaller machine.
6. No earthworks are permitted within the Structural Root Zone without approvals. Seek direction from the project arborist.
7. No stockpiling of soil, debris, or any other material within any Tree Protection Zone. These materials are to be removed from the site immediately or stockpiled outside the tree protection zones for later disposal.
8. Cut and fill.
    - No lowering of grade (cut) within a Tree Protection Zone. The soil surface can be skimmed by removing loose organic matter, turf or old gravel surfaces carefully using hand tools or with a trimming bucket of an excavator standing outside the Tree Protection Zone (or on suitable ground protection). Skimming of the surface should cease when fine tree roots are encountered and should not exceed 50-80mm below the original level.
    - Deep excavations adjacent to or within a Tree Protection Zone may require a batter or terraced levels. These may encroach further into the TPZ and may require approval. If this is required, please consult with the project arborist before proceeding.
    - There shall be no placement of additional material (fill) within a Tree Protection Zone without approval.
    - In some cases, fill material within a Tree Protection Zone may be permitted. If approved, the fill must consist of graded material that allows air and moisture movement. Suitable materials include single graded, no-fines gravel, washed single grade aggregate or similar. An aeration system may also be required that may consist of a system of vertical and horizontal slotted pipes wrapped in a suitable breathable material.

9. Root pruning
    - Woody tree roots are not to be pulled out by excavation machinery.
    - Roots smaller than 50mmØ may be pruned back (preferably to a side branching root) using sharp pruning tools (such as secateurs or tree pruning handsaws).
    - Roots larger than 50mmØ should only be pruned after consultation with the project arborist.

Construction activities

Construction activities may include (but are not limited to); installation of building footings, concrete slabs, frame construction, installing brickwork or other wall cladding materials, crane lifting operations, scaffolding, roofing, interior fitting, waste disposal etc. If these activities are not appropriately managed within a tree protection zone, there may be adverse impacts for the trees and their growing environment. Construction activities must be well supervised and adhere to the following guidelines.

1. Ensure Tree Protection Zone fencing, and other tree protection measures are in place prior to construction works commencing.
2. Tree Protection Fencing shall not be removed or repositioned to facilitate construction activities. Consult with the project arborist if access to a Tree Protection Zone is required.
3. Ensure the ancillary construction zones are established prior to construction works commencing. This may include site access, storage areas, parking areas, construction huts, waste management areas etc. Refer to the previous section on Site Establishment.
4. Scaffolding for construction activities and crane operations should not interfere with trees to be retained on site.
    - Minor pruning may be permitted to facilitate the installation of scaffolding and crane operations.
    - Any required pruning works should be confirmed with the project arborist and performed by qualified arborists, not construction staff.
5. Parking areas for building staff and sub-contractor vehicles must be clearly defined, well away from tree protection zones.
6. A defined delivery and storage area for building materials and hazardous chemicals should be marked out well away from any TPZ as required. If a storage area is to be set up within a TPZ (due to site limitations), then ground protection measures are required. Refer to the previous section on Tree Protection Zone establishment.
7. Areas for waste disposal and skip bins must be clearly defined, well away from the tree protection zone. If skips are to be set up within a TPZ (due to site limitations), then ground protection measures are required.
8. A wash out area should be defined well away from any TPZ and waste appropriately managed. These should be outside of the TPZ and/or 10m from the trunk of any tree, whichever is greater. Contaminated water must not be allowed to drain into the TPZ area.

Installation of underground services

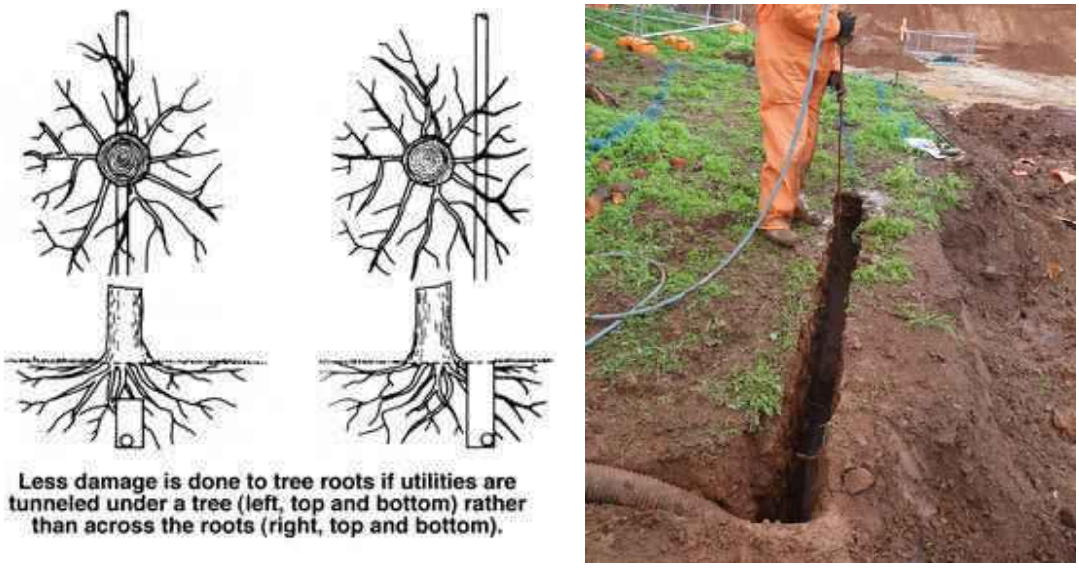
A range of underground services may be required to service a new development. These may include but are not limited to:

- Gas supply
- Electricity supply
- Water supply
- Sewer drainage
- Septic tank connections
- Stormwater drainage
- Irrigation pipes
- Telephone and communication cables
- Fire mains

Open trenching to install these services within a Tree Protection Zone has the potential to sever roots which can adversely affect tree health and stability. Unless otherwise approved, underground services should be installed according to the following guidelines.

1. All services should be routed outside the Tree Protection Zones where possible. If underground services must pass through a Tree Protection Zone, consult with the project arborist. These services should be installed by directional drilling or in manually excavated trenches.
2. Directional drilling.
    - The directional drilling bore should be at least 600mm deep (below the tree's root plate). The project arborist should assess the likely impacts of boring and bore pits on retained trees.
    - Entry, exit points, connection points and inspection points should be located outside the Tree Protection Zone where possible.
3. Manual excavation
    - 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.
    - Excavate the soil using hand tools and hydro excavation down to the required depth for the entire length of the service required within the TPZ.
    - Use the lowest pressure possible to carry out the excavations whilst avoiding damage to the outer bark on tree roots.
    - When tree roots are encountered, the operator should avoid damaging the protective layer by directing high pressure water away from tree roots.
    - Smaller tree roots (<20mm in diameter) may be damaged by the process, as this is generally unavoidable.
    - Tree roots greater than 30mm in diameter shall left intact and undamaged.

4. Root pruning:
    - Retain as many roots as possible extending across the trench.
    - Any root pruning should be carried out in consultation with the project arborist.
    - Roots smaller than 50mmØ may be pruned back (preferably to a side branching root) using sharp pruning tools (such as secateurs or tree pruning handsaws).
    - Roots larger than 50mmØ should only be pruned after consultation with the project arborist.
5. Insert the underground service into the trench by weaving between exposed tree roots.
6. Backfill the trench as soon as possible after the service is installed to avoid root desiccation. If a trench is to remain exposed for more than 2 hours, the exposed roots and surrounding soil must be kept moist by hand irrigation and/or use of shading materials (hessian or boards). These roots must not be allowed to dry out.



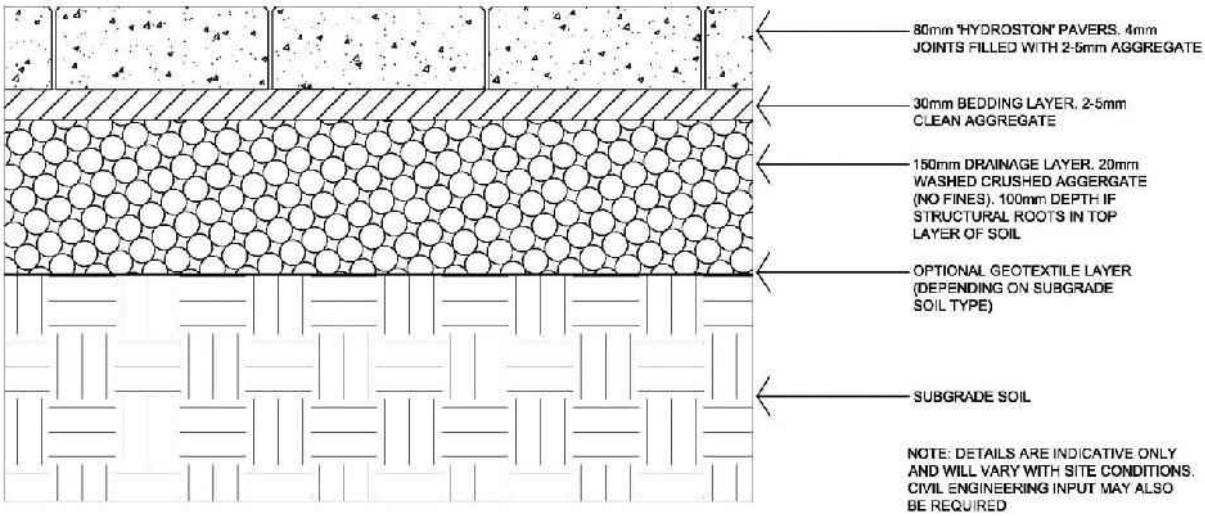
- Above: Examples of directional drilling (left) and manual excavation with hydro-excavation (right).

Paving within a Tree Protection Zone

Paving treatments and other hard surfaces include concrete paths and driveways, unit pavers, bitumen etc. Paving within a Tree Protection Zone can create an impervious surface, limiting gas exchange and water infiltration into the root zone, and may adversely affecting tree health. In addition, compaction works can increase soil density, impairing root development and growth. There is also a risk of root damage from grade changes (cut) when preparing for paving works. To ensure paving works do not adversely affect trees to be retained on site, the following guidelines should be followed.

1. The following guidelines are indicative only and may require consultation with permeable paving specialists and civil engineers.
2. Paving and surface sealing should be excluded from the Tree Protection Zone where possible. Surface sealing of the root zone should not exceed 20% of the Tree Protection Zone area[3].
3. If hard surfaces are required within a Tree Protection Zone, paving materials and methods should aim to avoid damage to the root system and use permeable materials.
4. Consider the finished paving levels in relation to the levels of surrounding structures and crossovers in the design phase of the project.
5. Tree root investigations may be required prior to designing and installing paver systems.
6. Consider future growth of tree roots and how they may impact on the paved surface. Paving works should remain outside the Structural Root Zone to reduce the likelihood of surface disruption in the future.
7. The project arborist should supervise any pavement installation work within a Tree Protection Zone.
8. Grade changes
    - No lowering of grade (cut) within a Tree Protection Zone for paving works without approval. The soil surface can be skimmed by removing loose organic matter, turf or old gravel surfaces carefully using hand tools or with a straight edge trimming bucket of an excavator standing outside the Tree Protection Zone (or on suitable ground protection). Skimming of the surface should cease when fine tree roots are encountered and should not exceed 50-80mm below the original level.
    - Any increase in grade (fill) must use permeable base layers that allow air and water to infiltrate.
9. Root damage
    - Damage to woody tree roots is not permitted. If woody tree roots are encountered, consult with the project arborist.

10. The natural soil structure and density within the Tree Protection Zone should be maintained when installing hard surfaces. The natural soils below paved surfaces should not be compacted unless absolutely necessary (e.g., trafficable loads). Compaction of natural soils should not be necessary for pedestrian or light traffic paving applications.
11. Base layer
    - The depth of the base layer will vary depending on the intended load. Trafficable areas will require a deeper preparation while pedestrian areas can be shallower.
    - Base layer materials should allow air and water to infiltrate and consist of a graded material with no fines, such as 2-5mm graded particle size (or larger).
    - Sand should not be used in the paving system due to its high clogging potential.
    - A geotextile layer can be used between the base layer and subgrade to prevent fine particles migrating up from below.
    - A three-dimensional cellular confinement system (such as 'EcoCell' or 'Geoweb') can be used for the base layer where required. This is a system of cells into which the base material is placed.
    - The base layer material can then be compacted. Compaction should be to the minimum level required to support the intended load.
12. Bedding layer
    - The bedding layer should be applied directly on top of the base layer.
    - The bedding layer should use a single-graded material to provide good porosity and permeability.
    - Regular paving sand is not recommended for this application.
13. Surface treatments
    - Final surface treatments should allow air and water to infiltrate into the root zone. There are two main types of permeable surface treatments:
    - Systems in which the unit pavers are impervious but contain permeable joins where air and water can pass between pavers (e.g., Ecotrihex, Hydrapave).
    - Systems in which the paver material is porous, and air and water can pass through the paver (e.g., HydroSTONE).
    - The unit pavers should have a single-graded aggregate swept in to fill in the gaps between pavers to allow air and water to infiltrate. Regular paving sand is not suitable for this application.



- Above: An example of a permeable paving system (Dr Martin Ely)

Landscaping around established trees

Care is required when landscaping around established trees. Damage can occur from a range of activities, including soil compaction, soil contamination, physical damage to the tree during landscaping works, damage to the root system from trenching and level changes, root disturbance from paving works, planting works and lawn installation etc. The following guidelines should be followed when landscaping around established trees.

To minimise the possible adverse impacts from these activities during landscaping activities, a tree protection zone (TPZ) is required. The TPZ roughly equates to the drip line of the tree, but is accurately calculated in the body of the tree report. All potentially adverse activities must not occur within this zone or must be modified to minimise the impacts.

Landscaping guidelines

1. The landscape design should be reviewed by the project arborist prior to being finalised.
2. Landscaping contractors should observe the guidelines set out in the previous sections on Tree Protection Zone establishment and Site Establishment.
3. The growing environment for mature trees should be optimised with the use of mulches. Mulches should be organic in origin, semi composted and contain a mixture of coarse and fine particles. Mulches should be 75-100mm thick and applied out to the drip line of trees or further, if possible, without coming into contact with the trunk. Mulches should be topped up every 1-2 years as required.
4. Paving works should be kept to a minimum within a Tree Protection Zone. If paving must occur, it must utilize a no dig method, use permeable base preparations to minimum soil compaction requirements and utilise permeable unit pavers or permeable concrete. Refer to the previous section on paving within a Tree Protection Zone.
5. Use caution when applying herbicides in the vicinity of established trees. Target the unwanted plants carefully and follow manufacturer's recommendations.
6. Pruning of established trees should be carried out by qualified arborists (Certificate III in Arboriculture).
7. Retaining walls should not be installed within the Tree Protection Zone. If required, consult with the project arborist.
8. Boundary or internal fencing must be installed without damaging the root system of established trees.
    - Fencing must not use continuous strip footings.
    - Lightweight fencing panels attached to concrete pads and posts are recommended.
    - Concrete pads should be located outside the Structural Root Zone.
    - Grade changes (cut and fill) must be avoided during fence installation.

Other planting considerations

- Care is required when planting new vegetation within the drip line of established trees. Cultivation of the area under the tree should be kept to a minimum and undertaken with hand tools.
- Grade changes (cut or fill) within the drip line of established trees should be avoided. Do not build up soil levels by more than 100mm.
- The use of competitive plants should be kept to a minimum. Minimise the use of turf, and dense groundcovers etc.
- The mature size of larger plants and trees should be considered. Plants should be well spaced to allow them to reach their mature size.
- Select the largest trees for the size available. Larger trees provide greater benefits than smaller trees.
- Provide adequate growing area for the trees to grow in. Small openings in paved areas are usually inadequate for healthy tree growth.
- Species diversity is important in a sustainable garden (and urban forest). While monoculture plantings may provide a desired aesthetic, they are generally more vulnerable to pest and disease outbreaks.
- Consider when to use shade trees or deciduous trees in relation to building orientation, private open space, the movement of the sun and the placement of windows.
- The use of locally indigenous vegetation should be considered for their habitat, biodiversity, and wildlife corridor value.

Development Monitoring and Certification

Through various stages of development, compliance certification provided in writing by a suitably qualified AQF Level 5 Arboriculturist is required.

These are outlined as follows with compliance recommended to be supplied to council as a condition of Development Approval:

Indicative Stages in Development and the Tree Management Process		
Stage in development	**Tree management process**	
	Matters for consideration	**Actions and certification**
Planning (AS 4970-2009 Section 2 and 3)		
Site acquisition	Legal constraints	
Detail surveys	Council plans and policies Planning instruments and controls Heritage Threatened species	Existing trees accurately plotted on survey plan
Preliminary tree assessment	Hazards/risks Tree retention value	Evaluate trees suitable for retention and mark on plan Provide preliminary arboricultural report and indicative TPZs to guide development layout
Preliminary development design	Condition of trees Proximity to buildings Location of services Roads Level changes Building operations space Long-term management	Planning selection of trees for retention Design review by proponent Design modifications to minimise impact to trees
Development submission	Identify trees for retention through comprehensive Arboricultural impact assessment of proposed construction Determine tree protection measures Landscape design	Provide Arboricultural impact assessment including tree protection plan (drawing) and specification
Development approval	Development controls Conditions of consent	Review consent conditions relating to trees

Preconstruction (AS 4970-2009 Section 4 and 5)		
Initial site preparation	State based OHS requirements for tree work Approved retention/removal Refer to AS 4373 for the requirements on the pruning of amenity trees Specifications for tree protection measures	Compliance with conditions of consent Tree removal/tree retention/transplanting Tree pruning Certification of tree removal and pruning Establish/delineate TPZ Install protective measures Certification of tree protection measures
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 (AS 4970-2009 Section 5)		
Defects liability / maintenance period	Tree vigour and structure	Maintenance and monitoring Final remedial tree works Final certification of tree condition

Conclusions

- Adelaide Arb Consultants conducted an Arboricultural Impact Assessment of 21 trees at Stage 1 of Mount Barker Hub (304 Springs Road, Mount Barker) in relation to a proposed development.

- The trees are all identified as *Eucalyptus camaldulensis* – River Red Gum and are located within Stage 1 of the Mount Barker Hub precinct.

- All trees within the population are controlled under South Australian Legislation. The following table outlines the different legislative controls applied to individual trees.

Native Vegetation Act 1991	*PDI Act 2016* (significant trees)	*Native Vegetation Act 1991* & *PDI Act 2016* (reg tree)	*Native Vegetation Act 1991* & *PDI Act 2016* (sig tree)
Tree 45 Tree 46 Tree 54	Tree 14 Tree 15 Tree 16 Tree 17 Tree 18 Tree 19 Tree 20 Tree 21 Tree 22	Tree 44 Tree 47 Tree 48 Tree 52 Tree 67	Tree 1 Tree 3 Tree 42 Tree 51

- The trees display variable health and structure, and all are sustainable within their environment.

- An Arboricultural Impact Assessment was undertaken, and the proposed development is not likely to have an adverse impact on most trees. Minor design modifications to the proposed pedestrian pathway, access roadway, avoidance of underground service trenching within tree protection zones and boundary fencing are required to minimise impacts in Trees 1 and 3.

- A Tree Protection Plan is attached to provide guidelines to the various construction teams to ensure the trees are adequately protected during the construction phase.

Planning and Design Code – (Regulated and Significant Tree Overlay)

Desired Outcomes (DO)

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

The subject trees provide high aesthetic benefit to the local area. As indigenous species that are linked to wildlife corridors, they also have important environmental value.

Performance Outcomes (PO) – Tree Retention and Health

PO 1.1 Regulated trees are retained where they [achieve any of the following attributes]:

(Trees 44, 47, 48, 52 and 67)

a) make an important contribution to the local character and amenity.

Yes – the regulated trees are River Red Gums, the species of which forms the majority of trees in the wider area. The subject trees make an important contribution to the character of the local area. In addition, these trees provide a wide range of human benefits at the site and for the proposed development.

b) are indigenous to the local area and is listed under the *National Parks and Wildlife Act 1972* as a rare or endangered native species.

No – while the species (*Eucalyptus camaldulensis*) is indigenous to the local area, it is not listed as rare or endangered.

c) provide an important habitat for native fauna.

Yes – *Eucalyptus camaldulensis* is a locally indigenous tree species, and these trees provide important habitat value, irrespective of whether they are planted or naturally occurring.

PO 1.2 Significant trees are retained where they [achieve any of the following attributes]:

(Trees 1, 3, 14, 15, 16, 17, 18, 19, 20, 21, 22, 42 and 51)

a) make an important contribution to the character or amenity of the local area.

Yes – the significant trees are River Red Gums, the species of which forms the majority of trees in the wider area. The subject trees make an important contribution to the character of the local area. In addition, these trees provide a wide range of human benefits at the site and for the proposed development.

b) are indigenous to the local area and are listed under the *National Parks and Wildlife Act 1972* as a rare or endangered native species.

No – while the species (*Eucalyptus camaldulensis*) is indigenous to the local area, it is not listed as rare or endangered.

c) represent an important habitat for native fauna.
Yes – *Eucalyptus camaldulensis* is a locally indigenous tree species, and these trees provide important habitat value, irrespective of whether they are planted or naturally occurring.

d) are part of a wildlife corridor of a remnant area of native vegetation.
Yes – this tree grouping is connected with other similar tree groupings nearby, which collectively form a wildlife corridor in the area.

e) are important to the maintenance of biodiversity within the local environment.
Yes – these trees make an important contribution to the biodiversity of the Urban Forest. In addition, as locally indigenous trees, they make an important contribution to the natural biodiversity in the local area.

f) form a notable visual element to the landscape of the local area.
The notability of the trees varies amongst the grouping, depending on their individual size, proximity to roadways and whether they are surrounded by other trees or not. Collectively, they form a notable visual element in the landscape of the local area.

PO 1.3 A tree damaging activity not in connection with other development satisfies (a) or (b):

(a) Tree damaging activity is only undertaken to:

(i) remove a diseased tree where its life expectancy is short.
None of the trees are recommended to be removed.

(ii) mitigate an unacceptable risk to public and private safety due to limb drop or the like.
None of the trees are recommended to be removed.

(iii) rectify or prevent extensive damage to a building of value as comprising any of the following:

A. a Local Heritage Place
No – No evidence has been provided indicating trees are causing extensive damage to the Local Heritage Place (barns at the northern extent of the stage).

B a State Heritage Place
No - The application does not relate to or involve a State Heritage Place.

C. a substantial building of value
No – Adelaide Arb Consultants did not observe, nor were advised of any extensive building damage.

and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity.
N/A

(iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire.

No - None of the trees have been shown to present an unacceptable bushfire hazard.

(v) treat disease or otherwise in the general interests of the health of the tree.

Yes - None of the trees are recommended to be removed.

(vi) maintain the aesthetic appearance and structural integrity of the tree.

Yes - None of the trees are recommended to be removed.

(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.

Yes - None of the trees are recommended to be removed.

PO 1.4 A tree-damaging activity in connection with other development satisfies the following:

(a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible.

Yes – Provided reasonable landscape and services design modifications are implemented and tree protection measures are put into place, the proposed development can occur whist retaining the subject trees.

(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.

Yes – a range of landscape and services design modifications and tree protection measures have been recommended to prevent substantial tree damaging activity from occurring during this development.

Performance Outcomes (PO) – Ground work affecting trees

PO 2.1 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.

Yes – a range of landscape and services design modifications and tree protection measures have been recommended to prevent substantial tree damaging activity from occurring during this development.

Endnotes

[1] **ISA TRAQ – Levels of Assessment** - Tree and risk assessments can be conducted at different levels of detail, each employing varying methods and providing the client with varied options for reporting and recommendations. The level selected should be appropriate for the assignment.

Level 1 - Limited Visual Assessment

- Visual assessment of an individual tree or population of trees near specified targets
- Conducted from a specified perspective.
- To identify certain obvious defects or specified conditions.
- Typically focusses on identifying trees with imminent and/or probable likelihood of failure.
- Typically, one or two of the three factors is/are considered as a constant.
- This is the fastest, but least thorough, means of assessment and are intended primarily for managing large populations of trees when time and resources are limited.
- This can be carried out as a walkover, drive-by or fly-over inspection.

Level 2 – Basic Assessment

- A level 2 or basic assessment is a detailed visual inspection of a tree and its surrounding site.
- This is the level of assessment that is commonly performed by arborists in response to client's requests for individual tree risk assessments.
- It is ground based and requires the arborist to inspect completely around the tree – looking at the site and visible buttress roots, trunk, and branches.
- The use of simple tools may be required (measuring tools, Binoculars, magnifying glass, mallet, probe, hand digging tools, compass, camera)
- Often a basic assessment is adequate for assessing risk and making recommendations, but it sometimes reveals the need for more advanced assessment measures.
- The primary limitation of a basic assessment is that it only includes conditions that can be detected from a ground based visual inspection. Internal, below-ground, and upper-crown factors may be impossible to see or difficult to assess.

Level 3 - Advanced Assessment

- Advanced assessments are performed to provide detailed information about specific tree parts, defects, targets or site conditions.
- An advanced assessment may be conducted in conjunction with or after a basic assessment if additional information is needed and the client approves the additional service.
- Specialised equipment, data collection and analysis and/or expertise are usually required for advanced assessments.
- The assessments are generally more time intensive and expensive.
- There are many types of advanced assessments that can be conducted (aerial inspection, detailed target analysis, detailed site evaluation, decay testing, health evaluation, root inspection, tree stability monitoring and load testing).

(Dunster, J et.al. (2017), *Tree Risk Assessment Manual – Second Edition* – International Society of Arboriculture, Champaign, Illinois, pp. 15-34.)

[2] **Project arborist** - The person responsible for carrying out the tree assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification. The project arborist will be suitably experienced and competent in arboriculture, having acquired through training, qualification (minimum Australian Qualification Framework (AQF) Level 5, Diploma of Horticulture (Arboriculture)) and/or equivalent experience, the knowledge and skills enabling that person to perform the tasks required by this Standard.

(AS 4970 – 2009 *Protection of trees on development sites)*

[3] British Standards – BS 5837 – 2005 *Trees in Relation to Construction – Recommendations*

Document: # - RJ000237-MtBarPool-Appendix A
Prepared for Mount Barker District Council
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Development Impact Tree Assessment Report

Mount Barker Regional Aquatic & Leisure Centre

Prepared for

Mount Barker District Council

Compiled by

Michael Palamountain

Adelaide Arb Consultants

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 1

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 445
Legislative Control: *NV Act 1991*
Significant Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Fair **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Tree with irregular form that has been pruned away from power lines, leaning into subject land.

Tree Protecton Zone Data
DBH (cm): 145 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 149 **SRZ Radius (m):** 3.91

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 3

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x >20m
Age: Mature **Circ @ 1m (cm):** 560
Legislative Control: *NV Act 1991*
Significant Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Good
Form: Good **ULE:** >20 years

Comments: Large, broad spreading tree, several large branch failures, numerous large dead branches.

Tree Protecton Zone Data
DBH (cm): 170 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 185 **SRZ Radius (m):** 4.29

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 14 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 8-13m x 14-20m
Age: Mature **Circ @ 1m (cm):** 520
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line, strong lean to west, various wounds at ground level. Several large branch failures.

Tree Protecton Zone Data
DBH (cm): 166 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 151 **SRZ Radius (m):** 3.93

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 15 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x >20m
Age: Mature **Circ @ 1m (cm):** 695
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line, previously lopped many years ago. Broad spreading, open, you regular crown. Habitat hollows.

Tree Protecton Zone Data
DBH (cm): 221 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 221 **SRZ Radius (m):** 4.62

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 16 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x >20m
Age: Mature **Circ @ 1m (cm):** 355
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line. Smaller, open irregular crown. Previously lopped.

Tree Protecton Zone Data
DBH (cm): 108 **TPZ Radius (m):** 12.96 **TPZ Area (m^2):** 528
DRB (cm): 123 **SRZ Radius (m):** 3.61

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 17 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x >20m
Age: Mature **Circ @ 1m (cm):** 480
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line, previously lopped, several trunk wounds are visible, several large branch failures.

Tree Protecton Zone Data
DBH (cm): 146 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 146 **SRZ Radius (m):** 3.88

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 18 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x >20m
Age: Mature **Circ @ 1m (cm):** 350
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line. Previously lopped, broad spreading irregular crown.

Tree Protecton Zone Data
DBH (cm): 108 **TPZ Radius (m):** 12.96 **TPZ Area (m^2):** 528
DRB (cm): 121 **SRZ Radius (m):** 3.59

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field, water tank	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 19

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x >20m
Age: Mature **Circ @ 1m (cm):** 378
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Tree planted in row along fence line, bias to the West.

Tree Protecton Zone Data
DBH (cm): 114 **TPZ Radius (m):** 13.68 **TPZ Area (m^2):** 588
DRB (cm): 127 **SRZ Radius (m):** 3.66

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field, water tank	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 20 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 520
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line. Previously lopped, irregular crown, several branch failures.

Tree Protecton Zone Data
DBH (cm): 138 **TPZ Radius (m):** 15.00 **TPZ Area (m^2):** 707
DRB (cm): 138 **SRZ Radius (m):** 3.79

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field, wood pile	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 21 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 390
Legislative Control: Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line. Previously lopped near ground level, irregular crown with bias to east.

Tree Protecton Zone Data
DBH (cm): 111 **TPZ Radius (m):** 13.32 **TPZ Area (m^2):** 557
DRB (cm): 169 **SRZ Radius (m):** 4.13

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 22

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 340
Legislative Control: Not Controlled
Significant Tree (*PDI Act 16*)
Tree Retention Value: Retain if Possible
Health: Good **Structure:** Poor
Form: Fair **ULE:** >20 years

Comments: Planted tree in row along fence line. Co-dominant stems at ground level with a notable bark inclusion present. Southern stem has strong lean to West.

Tree Protecton Zone Data
DBH (cm): 109 **TPZ Radius (m):** 13.08 **TPZ Area (m^2):** 537
DRB (cm): 120 **SRZ Radius (m):** 3.57

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field, wood pile	Trunk	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
Reduction Prune -Reduce leverage of southern stem with bark inclusion through substantial reduction pruning if tree is within a higher use zone.

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 42

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 403
Legislative Control: *NV Act 1991*
Significant Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Fair **Structure:** Fair
Form: Fair **ULE:** 10-20 years

Comments: Multi-stemmed tree, bark inclusions at base of stems, slender overextended stems, minor dieback.

Tree Protecton Zone Data
DBH (cm): 72 **TPZ Radius (m):** 8.61 **TPZ Area (m^2):** 233
DRB (cm): 79 **SRZ Radius (m):** 3.00

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 44

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 225
Legislative Control: *NV Act 1991*
Regulated Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Self sown tree on northern edge of group, bias to North, over extended branches to North.

Tree Protecton Zone Data
DBH (cm): 71 **TPZ Radius (m):** 8.52 **TPZ Area (m^2):** 228
DRB (cm): 77 **SRZ Radius (m):** 2.97

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 45 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 4-7m
Age: Mature **Circ @ 1m (cm):** 151
Legislative Control: *NV Act 1991*
Tree Retention Value: Expect Retention Reqd
Health: Fair **Structure:** Fair
Form: Fair **ULE:** 10-20 years

Comments: Slender, sparse, upright crown.

Tree Protecton Zone Data
DBH (cm): 47 **TPZ Radius (m):** 5.64 **TPZ Area (m^2):** 100
DRB (cm): 55 **SRZ Radius (m):** 2.57

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 46 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 8-13m x 8-13m
Age: Mature **Circ @ 1m (cm):** 152
Legislative Control: *NV Act 1991*
Tree Retention Value: Expect Retention Reqd
Health: Fair **Structure:** Fair
Form: Poor **ULE:** 10-20 years

Comments: Stunted, irregular tree, suppressed under larger tree to South, strong lean to North.

Tree Protecton Zone Data
DBH (cm): 48 **TPZ Radius (m):** 5.76 **TPZ Area (m^2):** 104
DRB (cm): 54 **SRZ Radius (m):** 2.55

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

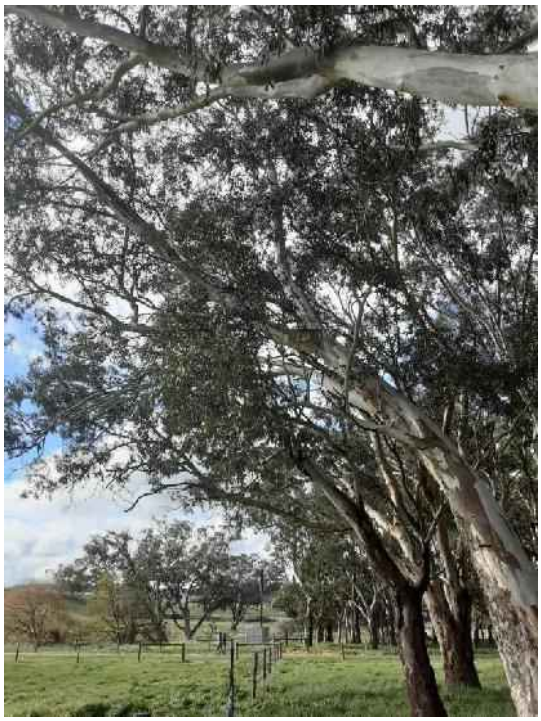
TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 47

Botanical Name: *Eucalyptus camaldulensis*



Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 258
Legislative Control: *NV Act 1991*
Regulated Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Larger tree with bias to North, overhanging smaller trees.

Tree Protecton Zone Data
DBH (cm): 80 **TPZ Radius (m):** 9.60 **TPZ Area (m^2):** 290
DRB (cm): 88 **SRZ Radius (m):** 3.14

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 48 **Botanical Name:** *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x 8-13m
Age: Mature **Circ @ 1m (cm):** 200
Legislative Control: *NV Act 1991*
Regulated Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Good
Form: Good **ULE:** >20 years

Comments: Upright emergent tree.

Tree Protecton Zone Data
DBH (cm): 59 **TPZ Radius (m):** 7.08 **TPZ Area (m^2):** 157
DRB (cm): 66 **SRZ Radius (m):** 2.78

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 51

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 352
Legislative Control: *NV Act 1991*
Significant Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Fair
Form: Fair **ULE:** >20 years

Comments: Broad spreading irregular crown. Tree on corner of grouping .

Tree Protecton Zone Data
DBH (cm): 87 **TPZ Radius (m):** 10.45 **TPZ Area (m^2):** 343
DRB (cm): 98 **SRZ Radius (m):** 3.28

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 52

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 14-20m x 14-20m
Age: Mature **Circ @ 1m (cm):** 233
Legislative Control: *NV Act 1991*
Regulated Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good **Structure:** Poor
Form: Fair **ULE:** 5-10 years

Comments: Tree with co-dominant stems, bark inclusion between main stems near ground level, Southern stem with strong lean to South and over extended.

Tree Protecton Zone Data
DBH (cm): 58 **TPZ Radius (m):** 6.98 **TPZ Area (m^2):** 153
DRB (cm): 65 **SRZ Radius (m):** 2.76

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required -Development design should not encroach below canopy dripline to maintain low risk.

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 54

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): 8-13m x 8-13m
Age: Mature **Circ @ 1m (cm):** 170
Legislative Control: *NV Act 1991*
Tree Retention Value: Expect Retention Reqd
Health: Poor **Structure:** Fair
Form: Fair **ULE:** 5-10 years

Comments: Moderate dieback, moderate epicormic regrowth. Co-dominant stems, slender upright crown, surrounded by other trees.

Tree Protecton Zone Data
DBH (cm): 43 **TPZ Radius (m):** 5.12 **TPZ Area (m^2):** 82
DRB (cm): 47 **SRZ Radius (m):** 2.41

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

Mount Barker Regional Aquatic & Leisure Centre
Development Impact Tree Assessment
Individual Tree Data & Imagery
12th October 2022

Tree No.: 67

Botanical Name: *Eucalyptus camaldulensis*

Common Name: River Red Gum
Origin: Indigenous
Crown Size (HxS): >20m x 14-20m
Age: Mature
Circ @ 1m (cm): 219
Legislative Control: *NV Act 1991*
Regulated Tree (*PDI Act 16*)
Tree Retention Value: Expect Retention Reqd
Health: Good
Structure: Good
Form: Fair
ULE: >20 years

Comments: Emergent tree in group of closely packed trees.

Tree Protecton Zone Data
DBH (cm): 68 **TPZ Radius (m):** 8.16 **TPZ Area (m^2):** 209
DRB (cm): 75 **SRZ Radius (m):** 2.93

TRAQ Risk Assessment

Targets Identified	Tree Part Assessed	
Open field	Branch	
Target Impact Likelihood	**Likelihood of Failure**	**Likelihood Failure & Impact**
Low	Possible	Unlikely

Consequence of Failure & Impact
Severe

TRAQ Risk Rating - Low

Recommended Crown Management
No practical works currently required

TREE LEGEND

- Tree Crown
- TPZ
- SRZ
- T1 Tree no.

Tree survey plan
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing provided by Emma Barnes

DATE	DRAWING NO
10/10/2022	TS01
SCALE	DRAWN BY
NTS	SS

PO Box 381
Goodwood SA 5034
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TREE LEGEND

- Tree Crown
- TPZ
- SRZ
- T1 Tree no.
- TPZ Encroachment
- SRZ Encroachment

Arboricultural Impact Assessment
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing provided by Emma Barnes

DATE	DRAWING NO
10/10/2022	Arb Impact -1
SCALE	DRAWN BY
NTS	SS

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ADELAIDE ARB CONSULTANTS

T1
T3
T22
T21
T17
T20
T19
T15
T14
T18
T16
T46
T44
T47
T51
T42
T52
T45
T54
T48
T67
EXISTING BUILDING
PROPOSED ENTRY ROAD
PROPOSED CAR PARK
PROPOSED BUILDING
DELIVERY & SERVICE BAY ACCESS
EXISTING PATH
EXISTING PATH

TREE LEGEND

Tree Crown

TPZ

SRZ

T1 Tree no.

Alternative footpath location

TREE PROTECTION LEGEND

Protective fencing

Ground protection

Vehicle access

Permeable paving

Tree Protection Plan - Construction 1
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing provided by Emma Barnes

DATE	DRAWING NO
10/10/2022	TPP-Const.-1
SCALE	DRAWN BY
NTS	SS

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BALDHILLSROAD

T1
T3
T22
T21
EXISTING BUILDING
T17
T20
T19
T15
T14
T18
T16
PROPOSED ENTRY ROAD
PROPOSED CAR PARK
PROPOSED BUILDING
T46
T44
T47
T51
T42
T52
T45
T54
T48
T67
DELIVERY & SERVICE BAY ACCESS
EXISTING PATH

TREE LEGEND

Tree Crown

TPZ

SRZ

T1 Tree no.

Alternative footpath location

TREE PROTECTION LEGEND

Protective fencing

Ground protection

Vehicle access

Permeable paving

Tree Protection Plan - Construction 2
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing by Emma Barnes

DATE	10/10/2022
SCALE	NTS
DRAWING NO	TPP-Const.-2
DRAWN BY	SS

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APPENDIX I

Site Contamination Declaration Form

Tierra Environment
5 October 2022

SITE CONTAMINATION DECLARATION FORM

Council area: The District Council of Mount Barker

Regarding the land comprised in Certificate(s) of Title Register Book CT Volume 6260 Folio 699 (portion). The land forms Stage 1 of the redevelopment. A plan showing the extent of the site (in red) is attached.

I Lauren Harvey, a site contamination consultant, certify the following details:

Part 1—Investigations

(a) I have relied on the following reports to complete this statement:

"Bald Hills Road Site, Mount Barker, Preliminary Site Investigation" dated 17 November 2021 and "Bald Hills Road Site, Mount Barker, Soil Investigation" dated 17 November 2021

(b) Investigations were conducted in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM).

Click here to enter text.

Part 2—Site contamination unlikely to exist (for the purposes of planning consent)*

(a) A potentially contaminating activity (as defined in the *State Planning Commission Practice Direction 14 (Site Contamination Assessment)*) is not known to have occurred on the subject land*;

(b) A class 1 activity (see the *State Planning Commission Practice Direction 14 (Site Contamination Assessment)*) is not known to have occurred on adjacent land*.

~~Part 3—Site contamination exists or may exist*~~

~~(a) site contamination exists or may exist on or below the surface of the land* as a result of a class 1 activity (including where a class 1 activity exists or previously existed on adjacent land*), class 2 activity, class 3 activity (see the *State Planning Commission Practice Direction 14 (Site Contamination Assessment)*), or notification of site contamination of underground water (as shown on the South Australian Property and Planning Atlas) including where such a notification exists on adjacent land*;~~

~~(b) the site contamination or potential site contamination originated or is likely to have originated—~~

~~(i) on the subject land*—~~

~~(A) as a result of the following activities carried on there~~

~~Click here to enter text.~~

~~(B) at the following location:~~

**Delete whichever is not applicable*

STATE PLANNING COMMISSION

~~or~~

~~(ii) on adjacent land (i.e. class 1 activity or notification of site contamination of underground water (as shown on the South Australian Property and Planning Atlas))*~~

~~(A) as a result of the following activities carried on there:~~

~~Click here to enter text.~~

~~(B) at the following location:~~

~~(C) the subject site is impacted by a notification of site contamination of underground water originating from adjacent land*:~~

~~Click here to enter text.~~

~~Part 4—Observations*~~

~~The subject land* is located on land within a [select any that apply]—~~

~~☐ groundwater prohibition area (as shown on the South Australian Property and Planning Atlas)~~

~~☐ subject of a notation under section 103P of the *Environment Protection Act 1993* on the relevant title that a site contamination audit report has been prepared in respect of the land.~~

Signed: Lauren Harvey Date: 05/10/2022

☒ *If being lodged electronically please tick to indicate agreement to this declaration.*

Name of company or business / accreditation body and number

Tierra Environment

**Delete whichever is not applicable*

~~**Note 1—**Investigations found the existence of 'fill or soil importation' on site (i.e. importation, to a premises of a business, of soil or other fill originating from a site at which another potentially contaminating activity has taken place pursuant Schedule 3 of the *Environment Protection Regulations 2009*). Fill or soil importation is not a potentially contaminating activity for the purposes of the *State Planning Commission Practice Direction: (Site Contamination Assessment)*, but remains a potentially contaminating activity under the *Environment Protection Regulations 2009*. The EPA's Industry Guideline on *'Construction environmental management plans (CEMP)'* provides assistance on meeting the obligations of the *Environment Protection Act 1993.*~~

Note 2—It is an offence to provide false or misleading information on this Form. Maximum penalty: $20 000 pursuant to section 217 of the *Planning, Development and Infrastructure Act 2016.*

Note 3—The "subject land" is the land the subject of the subject development application.

Note 4—"Adjacent land" is defined in section 3(1) of the *Planning, Development and Infrastructure Act 2016* to mean "in relation to other land, means land that is no more than 60 metres from the other land".

**Delete whichever is not applicable*

STATE PLANNING COMMISSION

Planning Studio Pty Ltd
347 Unley Road, Malvern SA 3144
PO Box 32 Bridgewater SA 5155
0431 527 636
emma@planningstudio.com.au

28 November 2022

Ref: App ID 22035317

Mr Andrew Stuart
Chief Executive Officer
Mount Barker District Council
PO Box 54
Mount Barker SA 5251

By electronic lodgement
PlanSA portal

Attention: Mr Michael Dickson
Senior Planner

RE: Development Application ID 22035317
Response to Request for Information

Planning Studio continues to act for the Mount Barker District Council, the Applicant in relation to Development Application 22035317 for a '*Regional aquatic and leisure centre (indoor recreation facility) with associated car parking and landscaping*' at 304 Springs Road, Mount Barker.

The following submission has been prepared in response to Council's Request for Information ('RFI'), received 14 November 2022. This response should be viewed together with updated proposal drawings and stormwater management plan that will follow by separate cover. These documents will be updated to ensure consistency across all proposal documentation prior to determination of the proposal by the Council Assessment Panel.

Request for Information

In general terms, Council have requested additional information pertaining to trees, stormwater management, access, car parking, pedestrian connectivity and civil design, and have provided advice regarding subsequent considerations that relate to wastewater, environmental health and community planning and well being.

The Applicant acknowledges the issues raised by Council, and the clarification sought, and would like to thank Council staff for providing detailed comments regarding specific elements of the proposal. Response to a number of issues has resulted in a minor amendment to the proposal with respect to the proposed civil design (pedestrian path and swale) which subsequently addresses the need to ensure adequate protection of a number of trees on the land. This has also resulted in a minor variation to the alignment of the carpark and the removal of a pedestrian pathway extending from Bald Hills Road to the main car park. Alternative pedestrian connectivity remains available, with all paths remaining compliant with Council's 'Mount Barker, Littlehampton and Nairne Trails Plan', July 2011.

Matters raised by various departments of Council are discussed below, numbered consistent with the Request for Information for ease of interpretation.

It should be noted that a number of the civil matters raised will most appropriately be pursued further during the detailed design phase of the project. The Applicant will continue to engage with the relevant Council staff to ensure adequate compliance with relevant legislative standards.

1. Trees

Following a redesign of the proposed swale to the east of the proposed building, project arborist Adelaide ARB Consultants ('ARB') has reviewed the updated concept and has provided additional advice regarding the level of encroachment to the Tree Protection Zones ('TPZ') associated with Trees 1, 3, and 14 – 21.

As a result of the considerations noted within the RFI, the pedestrian pathway extending from Bald Hills Road to the main car park, has been deleted from the proposal.

a) The 'splay' of the driveway does not seem to be taken into account into the TPZ encroachment of Tree

1. Please clarify.

ARB have acknowledged that new encroachment arising from the construction of the driveway access to the south west of Tree 1 was not previously calculated, and has sought to do so as part of subsequent advice. This takes into account the deletion of the pedestrian path and the level of encroachment currently experienced within the Bald Hills Road road reserve. ARB have noted only 'fair' health, structure and form of Tree 1 previously, and have attributed this irregular form to a history of pruning the tree away from power lines, causing the tree to lean into subject land.

ARB note that the proposal will result in a slight increase in encroachment as a result of the road shoulder and back of kerb construction requirements. It is noted that minor alterations to construction techniques will enable successful construction without a requirement to disturb the trees structural root zone. Recommendations have been provided and where achieved, encroachment will be reduced to 12.6%.

While there are no alternative locations for the access, impact will be minimised as much as possible while still catering for the design vehicle. Recommendations of ARB are to be adopted.

b) There is approximately 14.7 % encroachment of the TPZ (including SRZ encroachment) of Tree 1 (possibly greater, refer above). The pedestrian path shall either be relocated outside the TPZ or the path shall be built up on top of existing grade with a tree-sensitive sub base of gap-graded rock. The rock shall be well-vented at the sides of the path with the same treatment anywhere the path is within the TPZ (see Mount Barker Council's adopted specification attached for example).

Point 1(b) is no longer relevant.

c) Trees 1 and 3 shall have a tree-sensitive road construction within the TPZs, and it is recommended that these techniques also be employed between the two TPZs which will be of benefit for any new trees planted adjacent to the entry road.

Tree sensitive road construction methods have been identified by ARB previously and will continue to apply. Recommended methods conform to Council's requirements and will enable suitable tree function and sustainable tree retention.

d) The civil design proposes a swale through (or close to) the TPZs of Trees 14-21. The extent of this work and the associated impact on these trees is not clear in the report by Adelaide ARB Consultants who may have relied upon the architectural plans rather than the civil plans. Please provide some commentary and or updated assessment in this regard.

ARB have undertaken an assessment of the amended swale concept, refer following discussion and **Appendix B**, and have calculated the level of encroachment to trees 14 – 21. ARB have concluded that the resultant encroachments are minor (less than 10%)

excepting for Tree 14 which is 10.7%. ARB have concluded that the calculations from swale and footpath works are unlikely to result in an adverse effect to tree sustainability.

ARB note that the design results in only minor alterations to the growing environment of most trees within the land and mitigation options exist to maintain trees in their current health and sustainability.

Supplementary advice from Adelaide ARB Consultants is provided in **Appendix A**.

2. Stormwater Management

As noted above, many of the matters raised in relation to stormwater management will be further considered during detailed design.

a) Please show the invert levels of pipes and their corresponding grades.

Design is in progression and will be included in the forthcoming civil design revision. Generally there is an intent to reduce swale depths whilst maintaining suitable cover / pipe classes in accordance with CPAA requirements.

b) It is strongly recommended a higher pipe class is specified (class 4 recommended under trafficable areas, class 3 elsewhere).

This appears to depart from a typical requirement and it is considered that Class 2 pipes remain appropriate where cover exceeds ~600mm. Further discussion with Council will occur during detailed design.

c) Please clarify what the top 100mm layer consists of for the raingarden detail. A light layer of compost (e.g. 20mm) cultivated into the top 100mm layer of filter media would be acceptable. A thick layer of compost over time will likely clog the infiltration layer reducing its effectiveness.

Noted – to be considered and addressed during detailed design phase.

d) Please consider rock scour protection at all headwalls to prevent undermining and provide a more natural finish.

Noted – to be considered and addressed during detailed design phase.

e) Note on C002 at the end of the swale states "swale invert to match neatly in to existing headwall & pipe under path". From Council's GIS mapping, the existing pipe under the path is DN450. Please confirm if this diameter pipe is sufficient to convey the additional flows from the development noting that there is no detention. Should this have been taken into account in the DRAINs model?

A review of the supplied site survey shows a 450Wx300H RCBC. This has been included in the DRAINS model (Upstream IL 303.90mAHD, Headwall spill level 304.53mAHD) and confirmed that the existing culvert arrangement conveys ~250L/s, with ~500L/s overtopping the culvert during the 1% AEP. Given there are a number of options available, it is recommended the matter be confirmed during detailed design;

a. Replace the existing RCBC with a 1500x300 RCBC (custom)
b. Supplement the existing RCBC with an additional 900x300 RCBC alongside to increase capacity.
c. Allow major storm flows to travel over the footpath and provide erosion protection to mitigate ongoing maintenance

f) *Please note "Cutoff swale to run south of overflow parking area" note on C002 appears to be in wrong location or missing swale detail.*

Noted – to be considered and addressed during detailed design phase.

g) *Please specify roof downpipe size (noting this also picks up some road catchment) and class (would recommend SN8).*

Noted – Detailed design matter. Final design will separate road and roof drainage in case roof is acting under head.

h) *WSUD target reduction factors (Figure 9) have not been met for total nitrogen and total phosphorus.*

Have other options been considered to meet these pollution reduction targets? i.e. increasing the area of the rain garden and/or using a higher efficiency product e.g. Ocean Protect's Filterra?

FMG have advised that options for fully complying with water quality targets were considered during preliminary design, however were not considered appropriate, or warranted. To fully achieve the targets for nitrogen, this typically requires a tertiary treatment device with replaceable cartridge style filters which are costly to install and maintain.

Further design development since the initial Stormwater Management Plan has identified the ability to create slots in the access road kerbing to divert runoff into vegetated wetlands adjacent the existing large tree along the access road. Incorporation of this into the model results in compliance with Total Phosphorus removal (62%) and improved reduction for Nitrogen removal (34%).

Notwithstanding a desire to adopt specific 'Water Sensitive SA Targets', which is explained on page 11 of the Stormwater Management Plan (FMG report), section 6.3.3 the planning assessment report has considered the proposal against PO 5.1 below and outlines various responses to broad Water Sensitive Design initiatives.

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.

PO 18.1, which identifies specific targets and stormwater runoff outcomes, is relevant to residential development and should not be relied upon in the assessment of the current proposal, despite a recognised achievement of most of the targets.

i) *Please provide cross section detail for all swales including finish.*

See **Appendix B**.

j) *Please consider directing stormwater from the 900x300 RCBC to the proposed swale adjacent the carpark, instead of leaving this as overland flow, which could reduce issues in the future for development downstream of this culvert. Also, please confirm what blockage factor was considered for this culvert. In a meeting between Council and FMG, it was suggested that 0.5 be used for a 20 year event.*

FMG have advised that it is preferred to leave existing overland flow paths in place.

At the current time, a blockage factor has not been adopted in the design, however we note that adopting a 50% blockage factor would mean two 900x300 culverts would be required to achieve the desired 20 year event capacity.

Noting that detailed downstream analysis is beyond the scope of this project, and that the design as provided is adequate for the management of existing overland flows, further discussion can occur during detailed design to determine the necessity for a second culvert.

As noted above, updated civil plans and Stormwater Management Plan will follow under separate cover.

3. Access

a) Further detail is requested on the plans for the intersection of Bald Hills Road and the new access (i.e. line marking at access, signage and dimensions).

A concept plan for the intersection of Bald Hills Road and the new access roadway has been outlined within section 3.1 of the MFY report forming Appendix F of the planning assessment report.

An enlarged copy of the Bald Hills Road - Access Intersection | Short Term - CHR Treatment plan is provided in **Appendix C.**

Additional detail will be provided during detailed design.

b) No pavement design has been specified for the access, driveway and car parking. Is it intended that this will be provided for review at detailed design?

Noted – to be considered and addressed during detailed design phase.

c) In the MFY report (Figure 3), the swept path shows a 12.5m HRV traversing the kerb to enter the site.

Please clarify this with either an amended turnpath or a wider access.

There is no kerb proposed on the road, but in any event the turn path does not conflict with the edge of the pavement. The overhang of the vehicle extends over the edge but the wheel lines (orange) do not drive over the edge and hence do not conflict. If Council wishes for the overhang to be within the carriageway this can be addressed in detailed design.

d) Traversable kerbing shall be provided at the entrance to the overflow parking, for the extent shown in the MFY report (Figure 10) to accommodate access for both passenger vehicles and 12.5m HRV.

The nature of kerbing is to be considered in detailed design, but it is acknowledged that it must be traversable to allow entry/exit into the overflow parking area.

4. Car Parking

The Applicant wishes to acknowledge specific design comments made in relation to the car park and advises that the car park, and all trafficable areas, will be design to comply with all relevant codes and standards, with the below requirements, particularly points b) – f) adopted where required and necessary. Ongoing discussions will continue with Council staff during the detailed design phase of the project.

a) *It is recommended that a second pedestrian crossing be provided north of the proposed crossing where the path/landscaping separating the two aisles meets the entrance to the centre.*

This would mean that the parking in the pick-up/set-down bay would not meet the requirements of the Australian Road Rules and if permitted by signage would result in sight distance constraints to pedestrians where they walk between vehicles in the pick-up/set-down bay.

The recommendation is not accepted.

b) *Please provide kerb ramps or step ramps in shared zones for disabled parks to allow these users to access the footpath where the kerbing is not flush kerb.*

Noted – to be considered and addressed during detailed design phase.

c) *Please also provide ramps where there is no flush kerb and the footpath meets the car park.*

Noted – to be considered and addressed during detailed design phase.

d) *Please provide wheel stops for all car parks abutting pedestrian paths or where there is flush kerbing in accordance with AS2890.1:2004.*

Noted – to be considered and addressed during detailed design phase.

e) *Please confirm if the flush kerbing is intentional on the northern most aisle island abutting the footpath. It is also noted that the section adjacent to the east has no kerb type specified.*

Noted – to be considered and addressed during detailed design phase.

f) *Although sections A & B on C004 show the car park gradients, the sections are not orthogonal to the multiple directions of fall which would determine the maximum gradient. Please just confirm the maximum gradient does not exceed the maximum gradients specified in Section 2.4.6.1 of AS/NZS 2890.1:2004.*

Noted – to be considered and addressed during detailed design phase.

g) *In the MFY report (Figure 7), the swept paths for a 8.8m MRV show both vehicles clashing. Please clarify.*

There will not be a demand for simultaneous truck loading this facility (i.e. Figure 7 identifies the same vehicle which enters, unloads and then exits) so there will only be a single turn at any one time. It would be over-design to provide for simultaneous turning movements in this location.

h) *It is recommended that the cross fall of the loading area is reduced from 5.6% (e.g. 3%) to improve driver comfort.*

The Aust. Standards require a crossfall in a loading area of 4%. Detailed design will confirm compliance with the relevant standard.

i) *From the architectural drawings, the loading bay area is shown to include the screened waste storage in the stub turnaround, which appears to conflict with the swept paths shown in MFY's report (Figure 8). Please clarify.*

The comparison between architectural drawings and the MFY plan represents a graphical departure, as the DesignInc plan shows an expanded area for bin storage. A lighter line is visible which corresponds to Figure 8 contained within MFY report.

MFY have subsequently reviewed both plans and have confirmed that there is sufficient area available to design the turning area and the bin storage. The dual purpose nature of this area will be further considered and addressed during detailed design phase.

Figure 1 below reflects the review of MFY in relation to the nominated bin storage area within the loading area:

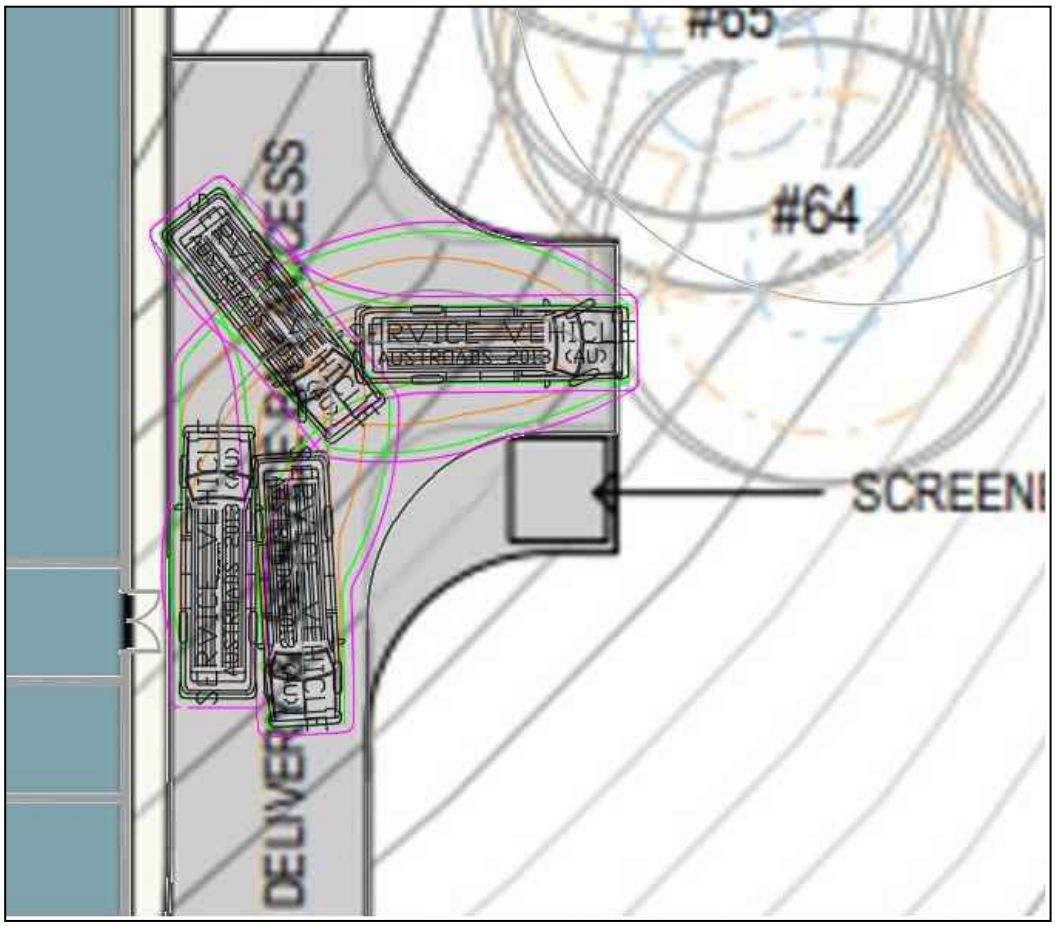


Figure 1 | Updated turn paths within loading area

j) The swept paths provided in the loading bay are for a 8.8m MRV. This shall instead be sized to cater for Solo's largest waste refuse vehicle which is 10m in length. Please also provide the supporting turnpaths accordingly.

The size of the truck can be negotiated with the contractor and does not need to be designed for the largest Solo waste vehicle unless Council is intending for that truck to be used. There are many refuse collection vehicles that are sized similar to an MRV and this could be negotiated with the waste contractor.

k) In regards to the overflow parking area, please provide the construction details and specifications for this.

The overflow parking area is not intended to be utilised regularly or for significant durations. As such, there is no intention to provide a formalised or constructed area, but rather identify an area available to accommodate up to 60 cars and 4 buses, should that be required.

Construction details and specifications will be provided as part of detailed design for Council review.

l) *Will Coach bus parking be allowed for in the sealed car parking area or the unsealed overflow area only?*

Coach and bus parking will not be permitted within the sealed car park, as buses will only use the drop off / pick up area adjacent the main entry. This area will only be during times of passenger set down and pick up. Generally, buses will not remain on site.

5. Pedestrian Connectivity

a) *Both the trail connection to the Laratinga Trail and trail to Bald Hills Road are considered as secondary trails (as per the guidelines in the Mount Barker, Littlehampton and Nairne Trails Plan) and should therefore be constructed in line with the guideline of:*

- *3.0m width (2.4m minimum where site constraints exist);*
- *Hotmix (AC7) surface and line marking to AS; and*
- *Edge constraints consistent with the linear trail it's connecting to.*

Please note that Council's Community Planning and Wellbeing department do not support the use of compacted sand for the length of this trail.

With reference to comments under section 5, the proposed footpath between Bald Hills Road and the Aquatic and Leisure Centre carpark will be removed from the scope of the project. The detailed design for the paths around the building, car park and the new footpath connecting to the existing Laratinga Trail (passing the heritage barns) will be developed in consultation with Councils Community Planning and Wellbeing team and will be cognisant of the guidelines provided in the Trails Plan.

b) *The meandering trail connecting Bald Hills Road to the carpark/building should be shortest route to allow for efficient movement of people. In its current design, people will be incentivized to use the driveway or cut across the parkland area. This shall be redesigned to prioritise efficient pedestrian movement e.g. to follow the same alignment as the driveway.*

c) *Pedestrian and cyclist access from the trail to Bald Hills Road appears to lead to the main vehicular entrance to the site (see screenshot below). With no pedestrian footpath located along this section of Bald Hills Road, please clarify the rationale for the path ending in this location and its ability to link up to the future footpath network. It is noted that if the proposal is to allow for pedestrian access across Bald Hills Road, this location does not appear to be ideal as it is located between two different channelized turning lanes.*

As above, the pathway extending between Bald Hills Road and the main car park has been deleted. Points b) and c) are no longer relevant.

d) *New wayfinding signage should be considered as part of the overall project. When new wayfinding signage is installed, it shall match the design of the existing wayfinding signage on the trail.*

Noted. Wayfinding signage does not form part of the current development application. Signage will be designed and implemented following further consultation with Council staff.

6. Civil Design

a) The 'Landscaped Picnic Area' at the rear of the building appears to clash with the proposed batters on the "Civil Works – Site Grading" plan by FMG. Is this the intent?

The 'landscaped picnic area' has been removed from architectural drawings and scope of the current project. The top of batter will align with agreed final landscaping treatment during detailed design.

b) The overflow car parking shall generally comply with AS 2890.1:2004 with respect to grades (max 5%). Is the overflow car park proposed to be graded/levelled at all? This does not appear to be the case on the "Civil Works – Site Grading" plan by FMG.

See earlier comments under 'car parking' clause 4(k).

c) The extent of the "delivery & service access" area is inconsistent between the Architectural Plans and the Civil Plans. Refer also comments in item 4(i). Please amend.

See earlier comments under 'car parking' clause 4(i).

Wastewater, Environmental Health, Community Planning & Wellbeing

The Applicant acknowledges the additional comments provided in relation to the above considerations. While there is no additional information required in response, the requirement for additional approvals under specific, non-development, legislation is noted.

Ongoing consultation with relevant departments of Council, as required, for all matters that extend beyond the development application will occur in a manner that will ensure compliance with all legislative requirements.

Closing

Having considered and addressed the issues raised by Council staff during assessment, which has resulted in some minor amendments to civil design aspects of the proposal, we remain of the opinion that the proposed development sufficiently accords with the intent of the Master Planned Neighbourhood Zone of the Planning and Design Code and warrants the granting of Planning Consent.

We anticipate a decision will be made by the Council Assessment Panel at its meeting to be held 21 December 2022. While there will be no representors to be heard, it is requested that Council staff advise of meeting details as soon as possible to ensure relevant members of the project team can be available to attend.

The Applicant would be pleased to be available to address any questions of Panel members.

Should you wish to discuss any aspects of this correspondence or the proposal further, please do not hesitate to contact me on 0431 527 636 or emma@planningstudio.com.au.

Yours sincerely

Emma Barnes | MPIA | **Director**

CC: Mount Barker District Council Project Manager
DesignInc

APPENDIX A

Arboricultural Advice

Adelaide ARB Consultants
RJ000237-MtBarPoolAIA-ADD

27 November 2022

Document # - RJ000237-MtBarPoolAIA_ADD
Prepared for Mount Barker District Council
Attn: Eloise Langford
PO Box 54
Mount Barker SA 5251
Date: 27th November 2022

ABN 16 804 909 619
15/15 Fullarton Road
Kent Town SA 5067
Ph. 08 8351 4849
E. info@adelaidearb.com.au

Dear Emma,

I can confirm that I have undertaken further arboricultural assessment of amended design plans regarding the Mount Barker Regional Aquatic and Leisure Centre following a request for information from the Mount Barker District Council.

The request outlines various points within the application however four points specifically relating to tree protection and management during design and construction aspects of the project.

These points have been assessed and relevant information outlining design considerations or justifications to these points provided as follows:

a. *The splay of the driveway does not seem to be taken into account into the TPZ encroachment of Tree 1*

   New encroachment caused by the construction of the driveway access to the southwest of Tree 1 was not calculated in accordance with the lodged design plans as part of the Arboricultural Impact Assessment Report. Further to this, other aspects of the design have been altered including the removal of a pedestrian pathway within this tree's TPZ.

   Reassessment of the design indicates that an encroachment within the SRZ of this tree already exists however may be slightly increased as a result of the road shoulder or back of kerb construction requirements (as shown on the plan by a perforated live between the road edge delineation and Tree 1.

   This is not supported however it is expected that minor alterations to construction techniques will enable the successful construction of this proposal without a requirement to disturb the trees structural root zone.

   Alterations should include the use of HydroVac excavation techniques to enable construction of the grade alignment between the existing road and proposed driveway. This should involve as little proportion of excavation within the TPZ as possible and aim to construct the majority of the driveway surfacing above the exiting soil gradient.

   The extension of the back of kerb splay excavation is required to be limited to omit excavations requirements within the SRZ of Tree 1.

Date: 27th November 2022

Where this is achieved, the proportion of encroachment within the TPZ of Tree 1 will be reduced as shown in the comparison table over page.

Tree #	Species	TPZ radius & area (m)	Current TPZ encroachment /occupation	New TPZ encroachment from proposal	Level of encroachment
1 Previous Plan	*Eucalyptus camaldulensis* – River Red Gum	15m 707m²	Road 216.16m² (30.6%)	Road – 64.57m² (9.1%) Footpath – 39.9m² (5.6%) Within SRZ – Yes Total Encroachment – 104.47m² (14.7%)	Major
1 Current Plan	*Eucalyptus camaldulensis* – River Red Gum	15m 707m²	Road 216.38m² (30.6%)	Road – 89.12m² (12.6%) Within SRZ – Yes (existing) Total Encroachment – 89.12m² (12.6%)	Major

b. *There is approximately 14.7% encroachment of the TPZ (including SRZ encroachment) of Tree 1 (possibly greater, refer above). The pedestrian path shall either be relocated outside of the TPZ of the path shall be built up on top of existing grade with tree-sensitive sub base of gap-graded rock. The rock shall be well-vented at the sides of the path with the same treatment anywhere the path is within the TPZ (see Mount Barker Council's adopted specification attached for example).*

The pedestrian path has been deleted from the design. No further assessment is therefore required regarding this point.

c. *Trees 1 and 3 shall have a tree-sensitive road construction within the TPZs, and it is recommended that these techniques also be employed between the two TPZs which will be of benefit for any new trees planted adjacent to the entry road.*

Tree sensitive hardstand and road construction methods have been provided within the previously provided Arboricultural Impact Assessment Report RJ000237-MtBarPoolAIA_V2. This is noted on pages 11, 12, & 24-26 and technical drawings noted within these sections of the above report conform to the requirements of the Mount Barker Council's adopted specification, which was attached to the request for information as an example to such pavement structure designs. Either design of pervious pavement will suitably enable tree function to be maintained and therefore sustainable tree retention.

Date: 27th November 2022

d. The civil design proposes a swale through (or close to) the TPZs of Trees 14-21. The extent of this work and the associated impact on these trees is not clear in the report by Adelaide Arb Consultants who may have relied upon the architectural plans rather than the civil plans. Please provide some commentary and or updated assessment in this regard.

The detailed design drawings of a proposed swale to the south of Trees 14-21 will make minor encroachments into the TPZ areas of Trees 14, and 18-21. It must be noted that the proportion of encroachment caused by the swale within eh TPZ of Tree 18 and 21 is <1% and does not warrant detailed consideration.

The swale consists of a 2.3-2.6m wise open earth swale which is proposed to be excavated below the existing soil grade to the south and at the periphery of these trees. This will also include a pathway to the south of Trees 14 & 15. The following encroachment calculations note that these activities are unlikely to result in an adverse effect to tree sustainability.

Tree #	Species	TPZ radius & area (m)	Current TPZ encroachment /occupation	New TPZ encroachment from proposal	Level of encroachment
14	*Eucalyptus camaldulensis* – River Red Gum	15m 707m^2	None	Swale – 12.3m^2 (1.74%) Footpath – 63.3m^2 (8.95%) Within SRZ – No Total Encroachment – 75.6m^2 (10.7%)	Major
15	*Eucalyptus camaldulensis* – River Red Gum	15m 707m^2	None	Footpath – 29.1m^2 (4.1%) Within SRZ – No Total Encroachment – 29.1m^2 (4.1%)	Minor
18	*Eucalyptus camaldulensis* – River Red Gum	12.96m 528m^2	Historic Barn 1.05m^2 (0.2%)	Swale – 0.57m^2 (0.1%) Within SRZ – No Total Encroachment – 0.57m^2 (0.1%)	Minor
19	*Eucalyptus camaldulensis* – River Red Gum	13.68m 588m^2	Historic Barn 17.8m^2 (3%)	Swale – 28.1m^2 (4%) Within SRZ – No Total Encroachment – 28.1m^2 (4%)	Minor
20	*Eucalyptus camaldulensis* – River Red Gum	15m 707m^2	Historic Barn 6.7m^2 (1%)	Swale – 48.15m^2 (6.8%) Within SRZ – No Total Encroachment – 48.15m^2 (6.8%)	Minor
21	*Eucalyptus camaldulensis* – River Red Gum	13.32m 557m^2	None	Swale – 0.97m^2 (0.2%) Within SRZ – No Total Encroachment – 0.97m^2 (0.2%)	Minor

Date: 27th November 2022

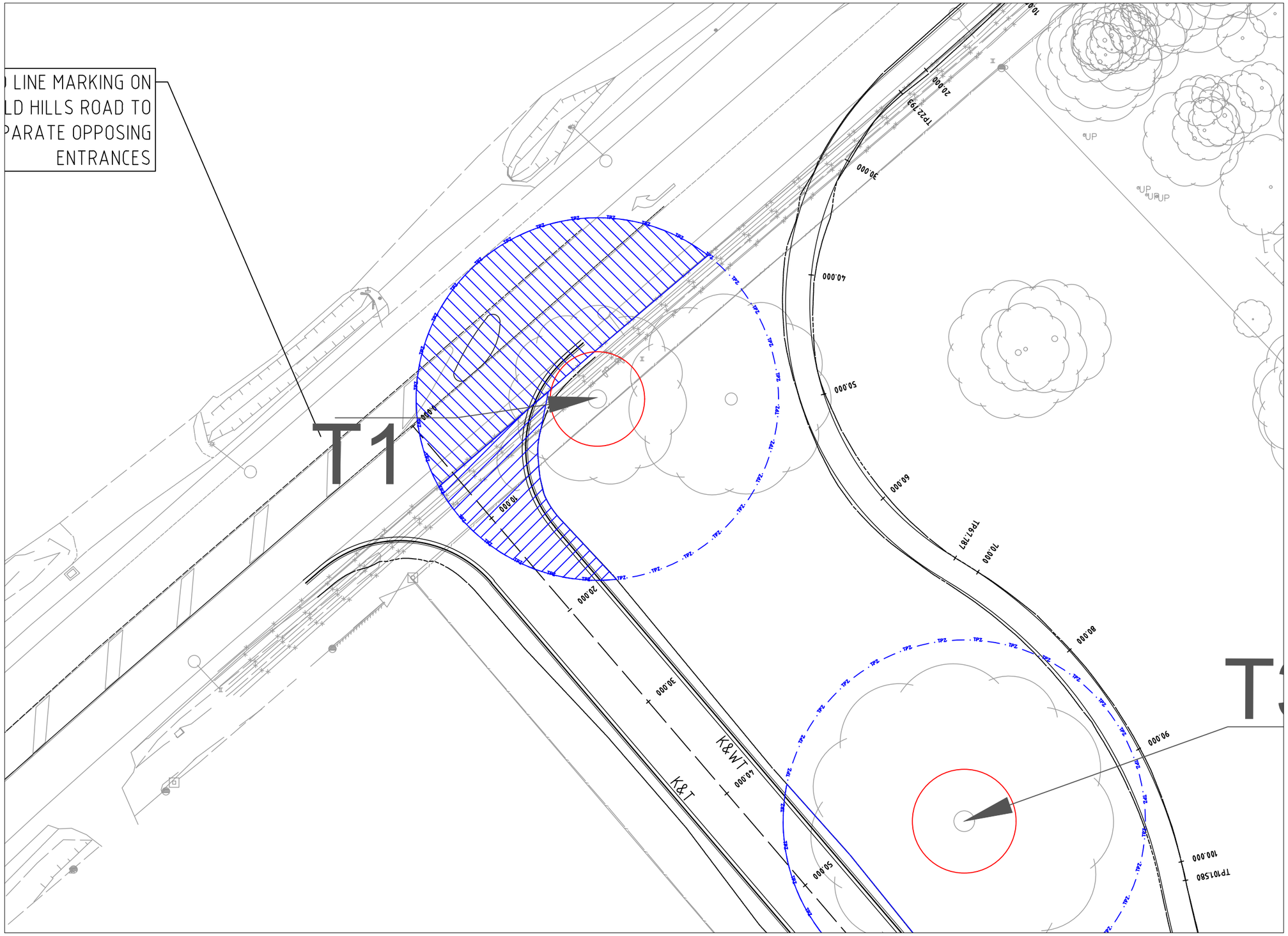
As noted within Arboricultural Impact Assessment Report and previously within this document, various tree protection measures will be required to be implemented during construction works. All aspects of the Tree Protection Plan of Arboricultural Impact Assessment Report 'MtBarPoolAIA_V2' are required to be implemented for the duration of construction activities for the project. In addition to these protection measures, the following additional aspects are required to be incorporated:

1. Pipework connecting an oval shaped swale area to the southwest of Tree 14, should such be required, is not to traverse within the TPZ area of Trees 14 or 15 so as to increase the level of encroachment from that which is calculated within this document. It is acceptable that pipework be positioned below the proposed pathway shown on the attached encroachment drawings.

The noted designs have been shown to result in minor alterations to the growing environment of most trees within this land parcel and mitigation options exist to maintain trees in their current health and sustainability. I therefore support the development proposal as depicted within Drawing C001 – A Regional Aquatic and Leisure Centre – Civil Works – Site Layout (01.08.2022) and Mount Barker District Council Regional Aquatic & Leisure Centre Landscape – Planning Submission | November 2022 – Swale & Carpark Option. As noted, all aspects to the Tree Protection Plan for this project, including those outlined within this document are required to be implemented during all aspects of construction works on this site.

Kind regards,

SHANE SELWAY
Senior Consulting Arboriculturist
Graduate Certificate of Arboriculture
Diploma of Arboriculture
International Society of Arboriculture – Certified Arborist AU-0270A



Arboricultural Impact Assessment - Splay Driveway Encroachment
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing provided by Emma Barnes

DATE 27/11/2022	DRAWING NO Arb Impact -2	PO Box 381 Goodwood SA 5034 (p) (08) 8351 4849 www.adelaidearb.com.au	ADELAIDE ARB CONSULTANTS
SCALE NTS	DRAWN BY SS		

& CARPARK OPTION

FMG have designed the swale (blue) at 300mm deep with 1in3 sides that will be planted with aquatic species to filter stormwater runoff before entering creek.
REQUIRED FOR STORMWATER QUALITY

EXISTING TREE

75mm deep mulch around existing tree

300mm deep swale with 1in3 batters

2400 path next to building

BUILDING

2400

2400 2300

500

2300

1 in 40

300

- SWALE

T4 T14 T15 T16 T17 T18 T19 T20 T21 T22 T23 T24

total TPZ = 581m2
27m2encroachment into TPZ.
4% encroachment only which is acceptable

Swale alignment - capture and treatment of stormwater for northern carparks prior to entering creek

Carpark modification - note turn paths from MFY models for coach movement

TREE LEGEND

- Tree Crown
- TPZ
- SRZ
- T1 Tree no.
- New TPZ Encroachment
- Existing TPZ Encroachment

Arboricultural Impact Assessment - Swale Encroachment
383 Bald Hills Road, Mount Barker
Mount Barker District Council
Base drawing provided by Emma Barnes

DATE	DRAWING NO
27/11/2022	Arb Impact -3
SCALE	DRAWN BY
NTS	SS

PO Box 381
Goodwood SA 5034
(p) (08) 8351 4849
www.adelaidearb.com.au
ADELAIDE ARB CONSULTANTS

APPENDIX B

Swale and Car Park option plan

Clover. Green Space, FMG Engineering and DesignInc

28 November 2022

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clover. GREEN SPACE

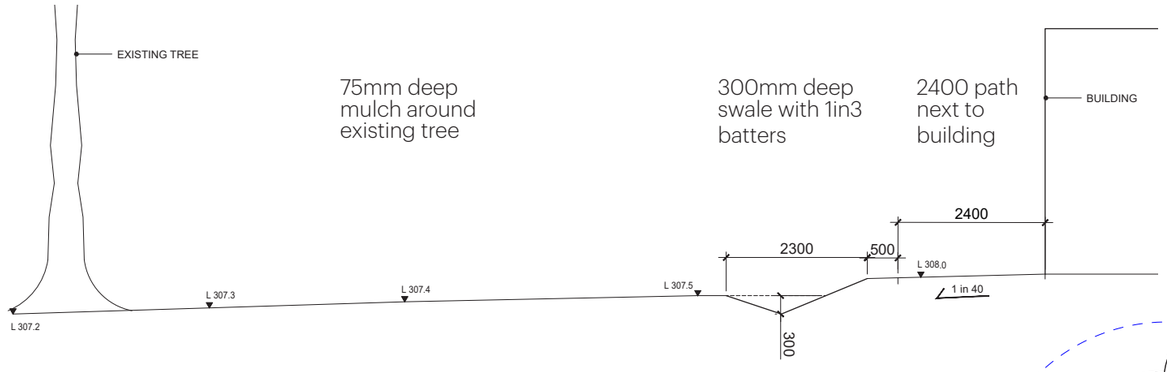
FMG ENGINEERING

DesignInc

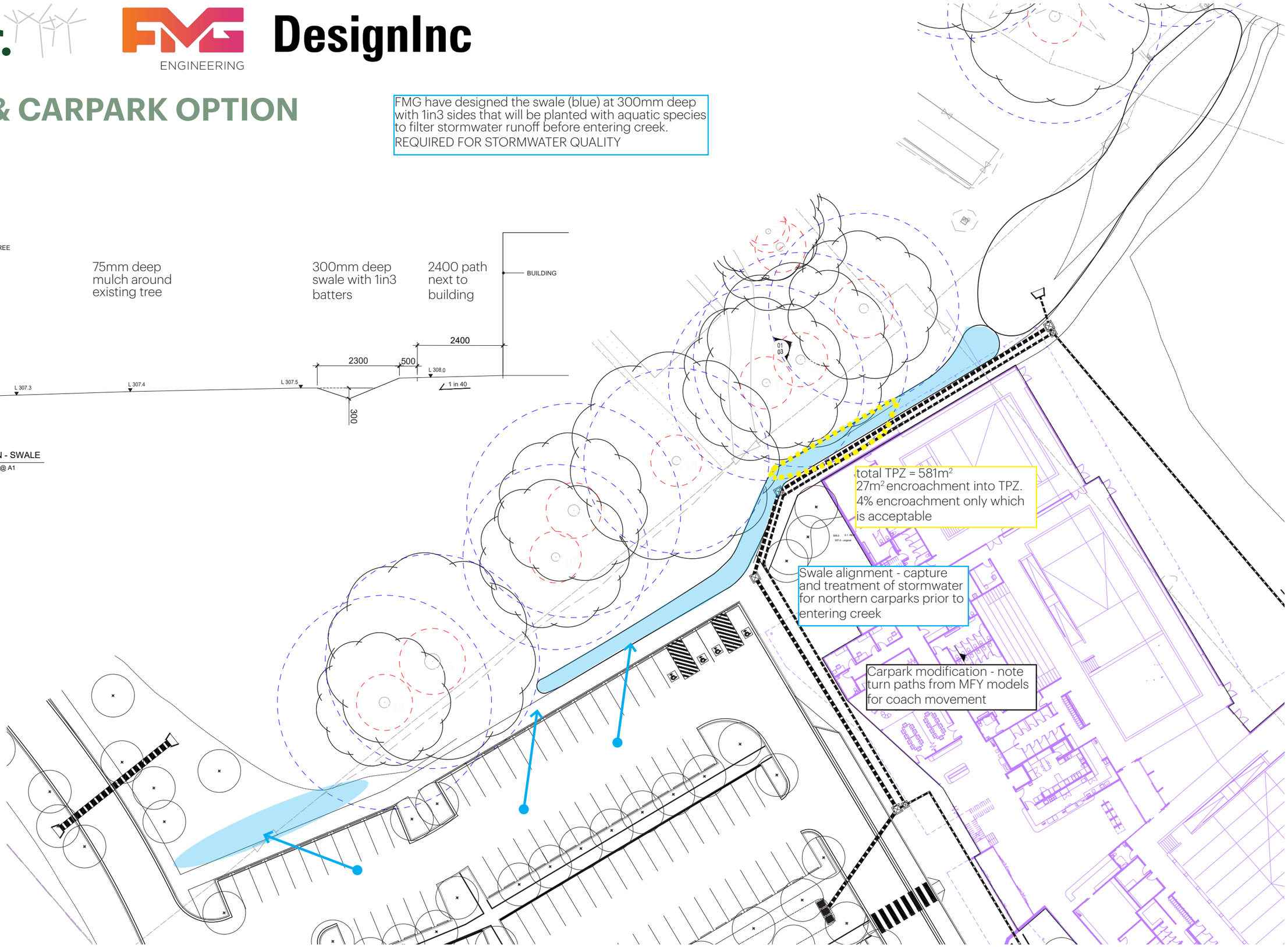
SWALE & CARPARK OPTION

28.11.22

FMG have designed the swale (blue) at 300mm deep with 1in3 sides that will be planted with aquatic species to filter stormwater runoff before entering creek.
REQUIRED FOR STORMWATER QUALITY



1 SECTION - SWALE
SCALE 1:20 @ A1



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APPENDIX C

Bald Hills Road - Access Intersection | Short Term - CHR Treatment

MFY Pty Ltd
MFY_220089_02_SH03

22 November 2022

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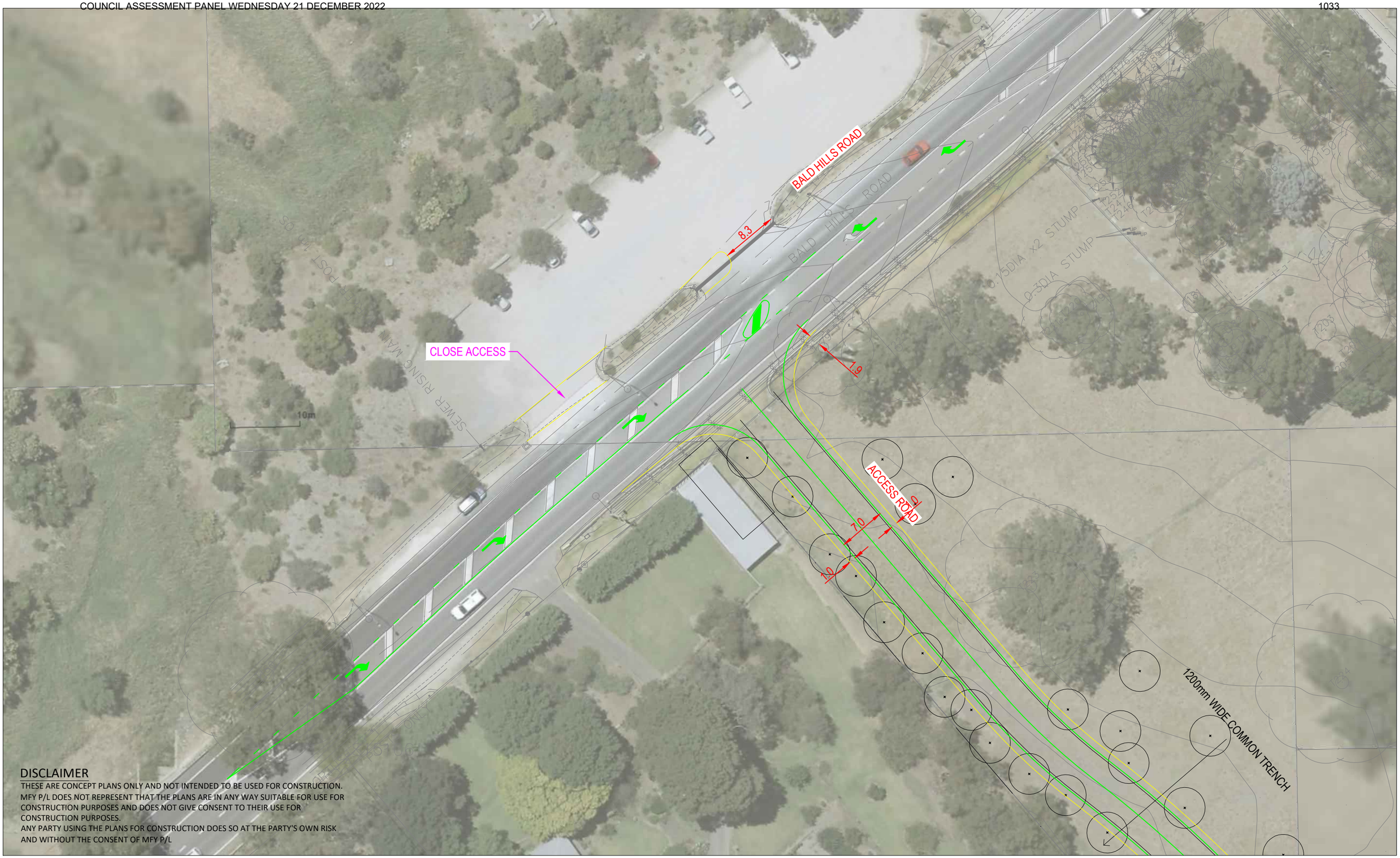

DISCLAIMER

THESE ARE CONCEPT PLANS ONLY AND NOT INTENDED TO BE USED FOR CONSTRUCTION. MFY P/L DOES NOT REPRESENT THAT THE PLANS ARE IN ANY WAY SUITABLE FOR USE FOR CONSTRUCTION PURPOSES AND DOES NOT GIVE CONSENT TO THEIR USE FOR CONSTRUCTION PURPOSES.
ANY PARTY USING THE PLANS FOR CONSTRUCTION DOES SO AT THE PARTY'S OWN RISK AND WITHOUT THE CONSENT OF MFY P/L

Mount Barker Summit Precinct Master Plan

Bald Hills Road - Access Intersection

Short Term - CHR Treatment

Drawing:	MFY_220089_02_SH03	**Revision:**	D
Drawn:	BH	**Scale:**	1:500
Date:	22.11.2022	**Paper Size:**	A3

Traffic • Parking • Transport

Unit 6, 224 Glen Osmond Road
FULLARTON SA 5063
T: +61 8 8338 8888
E: mfya@mfy.com.au

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Tuesday, November 22, 2022 14:02:35

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PLANNING STUDIO
URBAN & REGIONAL PLANNING

Planning Studio Pty Ltd
347 Unley Road, Malvern SA 3144
PO Box 32 Bridgewater SA 5155
0431 527 636
emma@planningstudio.com.au

3 December 2022

Ref: App ID 22035317

Mr Andrew Stuart
Chief Executive Officer
Mount Barker District Council
PO Box 54
Mount Barker SA 5251

By electronic lodgement
PlanSA portal

Attention: Mr Michael Dickson
Senior Planner

RE: Development Application ID 22035317
Response to Request for Information

Planning Studio continues to act for the Mount Barker District Council, the Applicant in relation to Development Application 22035317 for a '*Regional aquatic and leisure centre (indoor recreation facility) with associated car parking and landscaping*' at 304 Springs Road, Mount Barker.

This submission should be viewed together with the written response to your Request for Information provided 28 November 2022.

To accompany that submission, updated architectural, landscape concept and preliminary civil design drawings have been prepared and are provided as separate uploads. In addition, the Stormwater Management Report prepared by FMG Engineering has also been updated to reflect the amendment.

In general terms, amendments to the proposal in response to matters raised during assessment may be summarised as follows:

- amendment to the civil design along the northern side of the carpark to provide a (reduced) 2400mm wide x 300mm deep swale drawn on plan and section. 1 in 3 batters mean that there is no retaining of the swale required;
- Inclusion of a 2400mm path between the swale and building. The path complies with the width requirements of the Trails Plan (where site constraints exist);
- Deletion of the pedestrian pathway extending from Bald Hills Road to the main car park; and
- Slight realignment of the north west corner of the carpark.

The above amendments results in subsequent considerations:

- There is an overall reduced construction footprint.
- Minor encroachments within the TPZ of Trees 14 – 21 which are deemed acceptable.
- The modified car park alignment has been reviewed by MFY to ensure vehicle turn paths are adequate, which has resulted in a modified angle of entry to the indented bus bay to

provide sufficient access for buses and adequate length of the bay to the pedestrian crossing.

— No loss of car park numbers.

We also note that the amended plans supersede those contained within Appendices A, B and C of the Planning Assessment Report. We also note that Figures 2 and 11 of that same report have been superseded by updated drawings. There is, however, no wholesale change to the overall assessment of the proposal that was provided within the Planning Studio report.

We also note your email of 2 December 2022, to Michael Willis of DesignInc, regarding the deletion of the previously identified 'picnic area' and reiterate that this area has been removed from the scope of the project. In addition, we acknowledge that updated civil plans do not show the extent of works within the overflow parking area.

The overflow parking area is not intended to be utilised regularly or for significant durations. As such, there is no intention to provide a formalised or constructed area, but rather identify an area available to accommodate up to 60 cars and 4 buses, should that be required.

Construction details and specifications, including an outline of any earthworks required, will be provided as part of detailed design for Council review.

We trust this additional information and documentation will enable you to complete your assessment and reporting and we look forward to attending the Council Assessment Panel meeting on 21 December 2022.

It would be appreciated if you could provide meeting details as soon as possible.

Should you wish to discuss any aspects of this correspondence or the proposal further, please do not hesitate to contact me on 0431 527 636 or emma@planningstudio.com.au.

Yours sincerely

Emma Barnes | MPIA | **Director**

CC: Mount Barker District Council Project Manager
DesignInc

View south-east of the proposed access from Bald Hills Road

View south-east of the proposed access from Bald Hills Road

View north-east of the site for the proposed building and car park

View north of the site for the proposed building and car park (Trees 14-21 also pictured)

View east of the stand of trees adjacent the proposed building

View north-west from the site to the heritage barns

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6. REVIEW OF ASSESSMENT MANAGER DECISIONS

Nil

7. INFORMATION REPORTS

Nil.

8. CONFIDENTIAL REPORTS

Nil.

9. POLICY MATTERS ARISING FROM THIS AGENDA

10. OTHER BUSINESS

11. CLOSE