Metro Outer Joint Development Assessment Panel Agenda

Meeting Date and Time: Monday, 5 December 2022; 9:30am
Meeting Number: MOJDAP/216
Meeting Venue: Electronic Means

To connect to the meeting via your computer -
https://us06web.zoom.us/j/82170230338

To connect to the meeting via teleconference dial the following phone number -
+61 8 6119 3900
Insert Meeting ID followed by the hash (#) key when prompted - 821 7023 0338

This DAP meeting will be conducted by electronic means (Zoom) open to the public rather than requiring attendance in person.

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Attendance

DAP Members

Mr Eugen Koltasz (Presiding Member)
Ms Rachel Chapman (A/Deputy Presiding Member)
Mr Jason Hick (Third Specialist Member)
Cr Lorna Buchan (Local Government Member, City of Rockingham)
Cr Mark Jones (Local Government Member, City of Rockingham)

Officers in attendance

Mr Michael Ross (City of Rockingham)
Mr David Waller (City of Rockingham)

Minute Secretary

Mr Stephen Haimes (DAP Secretariat)

Applicants and Submitters

Mr Alessandro Stagno (Apex Planning)

Members of the Public / Media

Nil.

1. Opening of Meeting, Welcome and Acknowledgement

The Presiding Member declares the meeting open and acknowledges the traditional owners and pay respects to Elders past and present of the land on which the meeting is being held.

This meeting is being conducted by electronic means (Zoom) open to the public. Members are reminded to announce their name and title prior to speaking.

2. Apologies

Ms Karen Hyde (Deputy Presiding Member)

3. Members on Leave of Absence

Nil.

4. Noting of Minutes

Signed minutes of previous meetings are available on the DAP website.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Cr Mark Jones	10.1	Impartiality Interest – Under clause 2.4.9 of the DAP Code of Conduct, Cr Jones participated in the prior Council decision in accordance with his functions as a member of a local government. Cr Jones undertakes to exercise judgment in relation to any DAP application before him, which he will consider on its planning merits.

7. Deputations and Presentations

7.1 Mr Alessandro Stagno presenting in support of the recommendation for the application at Item 8.1. The presentation will address support for the officer recommendation.

The City of Rockingham may be provided with the opportunity to respond to questions of the panel, as invited by the Presiding Member.

8. Form 1 – Responsible Authority Reports – DAP Applications

8.1 Lot 9101 Solis Boulevard, Baldivis

Development Description:	Proposed Child Care Premises
Applicant:	Apex Planning
Owner:	The Glow Development (WA) Pty Ltd
Responsible Authority:	City of Rockingham
DAP File No:	DAP/22/02294

9. Form 2 – Responsible Authority Reports – DAP Amendment or Cancellation of Approval

Nil.

10. State Administrative Tribunal Applications and Supreme Court Appeals

Current SAT Applications				
File No. & SAT DR No.	**LG Name**	**Property Location**	**Application Description**	**Date Lodged**
DAP/18/01543 DR 75/2022	City of Joondalup	Lot 649 (98) O'Mara Boulevard, Iluka	Commercial development	02/05/2022
DAP/22/02148 DR146/2022	City of Rockingham	Lot 53 (No 67) Folly Road, Baldivis	Proposed place of worship (Hindu Temple)	26/08/2022
DAP/22/02220 DR162/2022	City of Kwinana	Lot 9507 Berthold Street, Orelia	Proposed Child Care Centre	28/09/2022
DAP/22/02159 DR163/2022	Shire of Murray	No. 630 (Lot 137) Pinjarra Road, Furnissdale	Proposed Petrol Filling Station	28/09/2022

11. General Business

In accordance with Section 7.3 of the DAP Standing Orders 2020 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.

12. Meeting Closure

Government of **Western Australia**
Development Assessment Panels

Presentation Request Form

Regulation 40(3) and DAP Standing Orders 2020 cl. 3.5

Must be submitted at least 72 hours (3 ordinary days) before the meeting

Presentation Request Guidelines

Persons interested in presenting to a DAP must first consider whether their concern has been adequately addressed in the responsible authority report or other submissions. Your request will be determined by the Presiding Member based on individual merit and likely contribution to assist the DAP's consideration and determination of the application.

Presentations are not to exceed **5 minutes**. It is important to note that the presentation content will be **published on the DAP website** as part of the meeting agenda.

Please complete a separate form for each presenter and submit to daps@dplh.wa.gov.au

Presenter Details

Name	Alessandro Stagno
Company (if applicable)	Apex Planning
Please identify if you have any special requirements:	**YES** ☐ **NO** ☒ If yes, please state any accessibility or special requirements: Click or tap here to enter text.

Meeting Details

DAP Name	Metro Outer JDAP
Meeting Date	5 December 2022
DAP Application Number	DAP/22/02294
Property Location	Lot 9101 Solis Boulevard, Baldivis (parent lot)
Agenda Item Number	8.1

Presentation Details

I have read the contents of the report contained in the Agenda and note that my presentation content will be published as part of the Agenda:	**YES** ☒
Is the presentation in support of or against the report recommendation)? *(contained within the Agenda)*	**SUPPORT** ☒ **AGAINST** ☐
Is the presentation in support of or against the proposed development?	**SUPPORT** ☒ **AGAINST** ☐
Will the presentation require power-point facilities?	**YES** ☐ **NO** ☒ **If yes, please attach**

Government of **Western Australia**
Development Assessment Panels

Presentation Content*

These details may be circulated to the local government and applicant if deemed necessary by the Presiding Member. Handouts or power points will not be accepted on the day.

Brief sentence summary for inclusion on the Agenda	*The presentation will address:* Support for the officer recommendation

In accordance with Clause 3.5.2 of the *DAP Standing Orders*, your presentation request must also be accompanied with a written document detailing the content of your presentation.

Please attach detailed content of presentation or provide below:

We are pleased this application is recommended for **approval**.

The City of Rockingham RAR provides a comprehensive and logical assessment of the merits of the proposed development.

The development will deliver 110 childcare places on suitably located land, is compatible with its surrounding context, and will create positive outcomes for the surrounding community.

I would be pleased to answer any questions of the Panel.

SOLIS BOULEVARD, LOT 9101 BALDIVIS (PARENT LOT) – PROPOSED CHILD CARE PREMISES

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Outer Joint Development Assessment Panel	
Local Government Area:	City of Rockingham	
Applicant:	Apex Planning	
Owner:	Glow Development (WA) Pty LTD	
Value of Development:	$2.15 million ☐ Mandatory (Regulation 5) ☒ Opt In (Regulation 6)	
Responsible Authority:	City of Rockingham	
Authorising Officer:	Mr Peter Ricci, Acting Director Planning and Development Services	
LG Reference:	DD020.2022.00000181.001	
DAP File No:	DAP/22/02294	
Application Received Date:	9 August 2022	
Report Due Date:	23 November 2022	
Application Statutory Process Timeframe:	90 Days, with an additional 23 days agreed.	
Attachment(s):	1. Development Application 2. External Agency Comments	
Is the Responsible Authority Recommendation the same as the Officer Recommendation?	☒ Yes ☐ N/A	Complete Responsible Authority Recommendation section
	☐ No	Complete Responsible Authority and Officer Recommendation sections

Responsible Authority Recommendation

That the Metro Outer Joint Development Assessment Panel resolves to:

1. **Approve** DAP Application reference DAP/22/02294 and accompanying plans in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, the provisions of Clause 68(2)(b) of the Deemed Provisions of the City of Rockingham Town Planning Scheme No. 2 and pursuant to Clause 26 of the Metropolitan Region Scheme, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of 4 years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.

2. All development must be carried out in accordance with the approved plans (and drawings) as listed below including any amendments to those plans (and drawings) as shown in red:

- Survey Plan, Job No. 2022047, Drawing No. 3570, Revision 4, Sheet No.02, dated 25 July 2022;
- Location Plan, Job No. 2022047, Drawing No. 3570, Revision 1, Sheet No.03, dated 6 July 2022;
- Site Plan, Job No. 2022047, Drawing No. 3570, Revision 4, Sheet No.04, dated 4 August 2022;
- Floor Plan, Job No. 2022047, Drawing No. 3570, Revision 2, Sheet 05, dated 12 July 2022;
- Roof Plan, Job No. 2022047, Drawing No. 3570, Revision 3, Sheet No.06, dated 20 July 2022;
- Elevations, Job No. 2022047, Drawing No. 3570, Revision 2, Sheet No.07, dated 12 July 2022;
- Street Elevations, Job No. 2022047, Drawing No. 3570, Revision 3, Sheet No.08 dated 4 August 2022; and
- 3D View, Job No. 2022047, Drawing No. 3570, Revision 2, Sheet No.09, dated 12 July 2022.

save that, in the event of an inconsistency between the approved plans and a requirement of the conditions set out below, the requirement of the conditions shall prevail.

3. No more than 110 children are to be accommodated at the Child Care Premises.

4. The Child Care Premises must only operate between the hours of 6:30am to 6:30pm, Monday to Friday, with children not permitted in the open space areas until after 7:00am. Staff are permitted to access the site from 6:00am.

5. Prior to applying for a Building Permit, a Stormwater Management Plan must be prepared by a suitably qualified engineering showing how stormwater will be contained on-site and those plans must be submitted to the City of Rockingham for its approval. All stormwater generated by the development must be managed in accordance with Planning Policy 3.4.3 - Urban Water Management to the satisfaction of the City of Rockingham. The approved plans must be implemented and all works must be maintained for the duration of the development.

6. Prior to applying for a Building Permit a Construction Management Plan must be submitted and approved by the City of Rockingham. The Construction Management Plan shall include, but not be limited to, the following:

   (i) A Dust, Noise and Vibration Management Plan;

   (ii) Detail how access roads to and all trafficable areas on the site/s will be treated and maintained to prevent or minimise the generation of airborne dust;

(iii) How any stockpiles on site/s are to be managed;

(iv) Construction waste disposal strategy and location of waste disposal bins;

(v) How materials and equipment will be delivered and removed from the site/s; and

(vi) Parking arrangements for contractors.

All works must be carried out in accordance with the approved Construction Management Plan and maintained at all times, for duration of the development.

7. A 2.0 wide footpath connecting to the existing footpath network, shall be provided along the Bannerdale Road and Viva Boulevard to the City's standard specifications shall be provided.

8. The crossover shall be designed and constructed in accordance with the City's *Commercial Crossover Specifications*.

9. The carpark must:

(i) provide a minimum of 28 car parking spaces;

(ii) be designed, constructed, sealed, kerbed, drained and marked in accordance with User Class 1A (Staff) and User Class 3 (Visitors) of Australian/New Zealand Standard AS/NZS 2890.1:2004, Parking facilities, Part 1: Off-street car parking prior to applying for a Building Permit;

(iii) provide one additional (1) car parking space dedicated to people with disabilities, which are designed, constructed, sealed, kerbed, drained and marked in accordance with User Class 4 of Australian/New Zealand Standard AS/NZS 2890.6:2009, Parking facilities, Part 6: Off-street parking for people with disabilities and which are linked to the main entrance of the development by a continuous accessible path of travel designed and constructed in accordance with Australian Standard AS 1428.1—2009, Design for access and mobility, Part 1: General Requirements for access—New building work;

(iv) be constructed, sealed, kerbed, drained and clearly marked prior to the development being occupied and maintained thereafter;

(v) have lighting installed, prior to the occupation of the development, to the satisfaction of the City of Rockingham; and

(vi) confine all illumination to the land in accordance with the requirements of Australian Standard AS 4282-2019, Control of the obtrusive effects of outdoor lighting, at all times.

10. Prior to applying for a Building Permit, a Parking Management Plan is to be prepared and endorsed by the City. The endorsed Parking Management Plan is observed for the duration of the development.

11. Prior to applying for a Building Permit, a Waste Management Plan must be prepared for the Childcare Premises development and include the following detail to the satisfaction of the City of Rockingham:

    (i) the location of bin storage areas and bin collection areas;

    (ii) the number, volume and type of bins, and the type of waste to be placed in the bins;

    (iii) management of the bins and the bin storage areas, including cleaning, rotation and moving bins to and from the bin collection areas; and

    (iv) frequency and timing of bin collections of which are to be conducted outside of operating hours only.

    All works must be carried out in accordance with the Waste Management Plan and maintained at all times, for the duration of development.

12. Prior to applying for a Building Permit, a bin storage area must be designed with a size suitable to service the development and screened from view of the street to the satisfaction of the City of Rockingham. The bin storage area must be constructed prior to the occupation of the development and must be retained and maintained in good condition for the duration of the development.

13. Prior to the occupation of the development, a Final Acoustic Assessment must be prepared and provided to the City of Rockingham which demonstrates to City's satisfaction, that the completed development complies with the *Environmental Protection (Noise) Regulations 1997*. The Final Acoustic Assessment must include the following information:

    (i) noise sources compared with the assigned noise levels as stated in the *Environmental Protection (Noise) Regulations 1997*, when the noise is received at the nearest "noise sensitive premises" and surrounding residential area;

    (ii) tonality, modulation and impulsiveness of noise sources; and

    (iii) confirmation of the implementation of noise attenuation measures. Any further works must be carried out in accordance with the Acoustic Report and implemented as such for the duration of the development.

14. The recommendations contained in the Lloyd George Acoustics report, dated 5 August 2022, with respect to fencing must be complied with for the duration of the development.

15. Prior to applying for a Building Permit, a Landscaping Plan to the satisfaction of the City of Rockingham must be prepared and include the following detail:

    (i) The location, number and type of existing and proposed trees and shrubs, including calculations for the landscaping area;

    (ii) Any lawns to be established and areas to be mulched;

(iii) Those areas to be reticulated or irrigated, acknowledging that groundwater source cannot be used for this site.

(iv) Proposed upgrading to landscaping, paving and reticulation of the street setback area and all verge areas;

(v) Shade trees at a rate of one (1) per four (4) car parking bays; and

(vi) Street trees to be provided along Bannerdale Road and Viva Boulevard at a rate of one (1) tree per ten (10) metres.

The landscaping, paving and reticulation must be completed prior to the occupation of the development, and must be maintained at all times to the satisfaction of the City of Rockingham for the duration of the development.

16. Prior to the issue of a Building Permit, exhaust facilities associated with the proposed kitchen area must be designed in accordance with Australian Standard AS 1668.2—2002, *The use of ventilation and air conditioning in buildings, Part 2: Ventilation design for indoor air containment control (excluding requirements for the health aspects of tobacco smoke exposure)* and be fitted with filtration and odour suppression devices to the satisfaction of the City of Rockingham.

The exhaust facilities must be installed prior to the occupation of the development and must be thereafter maintained to the satisfaction of the City of Rockingham for the duration of the development.

17. The applicant is responsible for protecting any existing City streetscape assets along Bannderdale Road, Viva Boulevard and Sixty Eight Road during the course of construction. This includes any existing streetscape lighting, grated gully pits, side entry pits, kerbing, footpaths, trees, turf etc. If any damage is caused to the existing assets (identified to be retained), they must be rectified to the satisfaction of the City of Rockingham. It is recommended that a photographic dilapidation report is undertaken by the applicant, to record the current condition of these assets.

18. In accordance with the City of Rockingham Planning Policy No. 3.3.14 – Bicycle Parking and End of Trip Facilities, one short-term bicycle parking spaces and two long-term bicycle parking spaces must be provided for the development. The bicycle parking spaces must be designed in accordance with AS2890.3-1993, Parking facilities, Part 3: Bicycle Parking Facilities and must be approved by the City of Rockingham prior to applying for a Building Permit and constructed prior to occupancy of the development.

Advice Notes

1 This Approval relates to the details provided in the application; to undertake the development in a different manner to that stated in the application a fresh application for Development Approval must be submitted to the City.

2. A Certified Building Permit must be obtained prior to any demolition or construction and thereafter an Occupancy Permit must be obtained; the applicant and owner should liaise with the City's Building Services in this regard.

3. The development must comply with the *Health (Public Building) Regulations 1992*; the applicant and owner should liaise with the City's Health Services in this regard.

4. The development must comply with the *Food Act 2008, the Food Safety Standards and Chapter 3 of the Australian New Zealand Food Standards Code (Australia Only);* the applicant and owner should liaise with the City's Health Services in this regard.

5. A Sign Permit must be obtained for any advertising associated with the development, including signage painted on the building; the applicant and owner should liaise with the City's Building Services in this regard.

6. All works in the road reserve, including construction of a crossover or footpath, installation of on-street car parking spaces, planting of street trees, bicycle parking devices, street furniture and other streetscape works and works to the road carriageway must be to the specifications of the City; the applicant and owner should liaise with the City's Land Infrastructure and Development Services in this regard.

7. The applicant is advised that in respect of Condition 5, a Stormwater Management Plan will require compliance with *Planning Policy 3.4.3 - Urban Water Management*. The applicant is encouraged to discuss the specific policy requirements with the City prior to the submission of the plan.

8. As the proposed buildings will be classed as 9b, plans will need to be lodged with DFES BEB for assessment. The building is over 500m^2 and will require a fire hydrant onsite, the fire hydrant located on Sixty Eight Road looks to be located below the level of the block and usage will be hindered by retaining wall and stormwater sump. The building may be required to comply with Specification 43 of the NCC 2022 which comes into enforcement as of the 1st October but does have a 12 month transitional period. DFES advocated these requirements early in the design of the building.

Details: outline of development application

Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	Town Planning Scheme No.2
Local Planning Scheme - Zone/Reserve	Development
Structure Plan/Precinct Plan	Lot 19 Sixty Eight Road Structure Plan
Structure Plan/Precinct Plan - Land Use Designation	RMD (25-40)
Use Class and permissibility:	Child Care Premises - “A” use

Lot Size:	4.9326ha (Parent Lot) 2,533m^2 (Development Site)
Existing Land Use:	Vacant Land
State Heritage Register	No

Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area
Design Review	☒ N/A ☐ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	Yes
Swan River Trust Area	No

Proposal:

The application proposes the development of a CCP on Lot 9101 Solis Boulevard, comprising of:

- A single storey building located centrally on the site, with car parking to the west and outdoor child play space (776m²) to the north, east and south;

- 17 Full time staff and 110 children are proposed between the following age groups:

  - 0-1 years (8 spaces);
  - 1-2 years (12 spaces);
  - 2-3 years (30 spaces);
  - 3-5 years (60 spaces);

- An external bin store to the south of the carpark;

- A total of 29 on-site car parking bays are proposed to the west of the building, with vehicle access proposed from Bannerdale Road; and

- The proposed hours of operation are 6:30am to 6:30pm on weekdays. No outdoor activities are proposed between 6.30am and 7.00am.

To mitigate noise from the car park and outdoor play areas, the following fencing is proposed:

- 2m high colourbond along the western boundary;

- 1.8m high limestone piers with 1.6m high aluminium infills along the north east and southern boundaries; and

- 2m high 'Plexiglass' infills along the northern boundary.

The following reports and supporting material accompany the application:

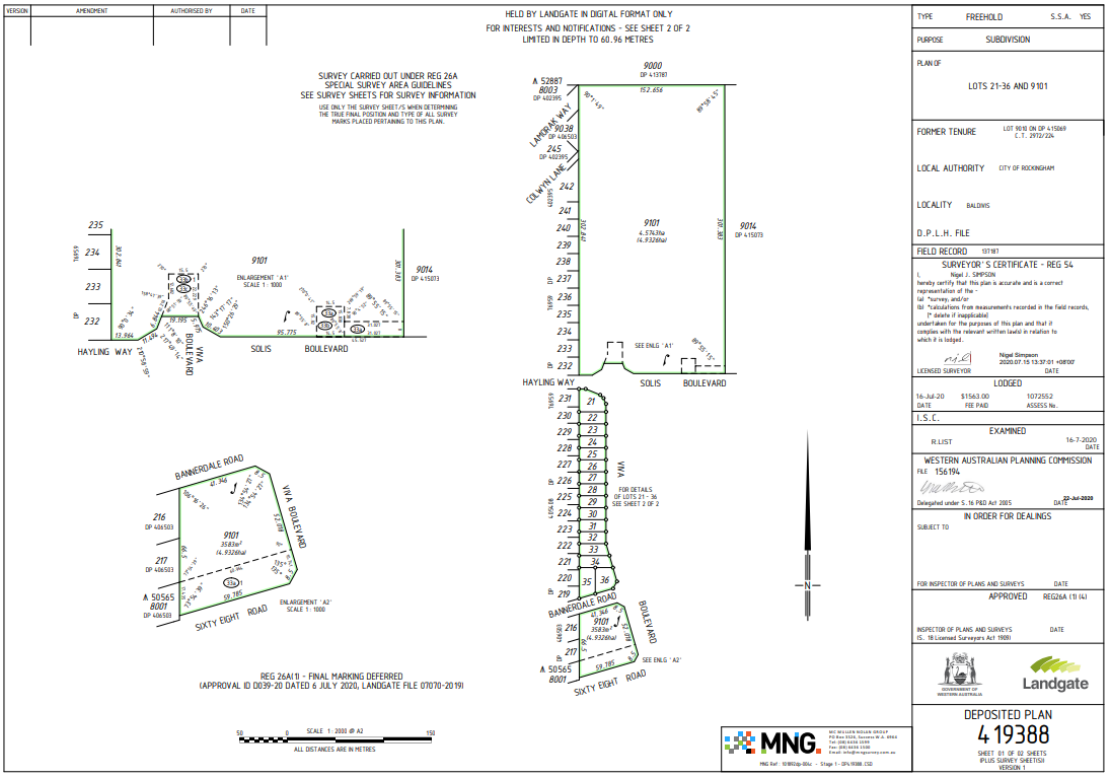
- Development Application Report;
- Development Plans;
- Child Care Needs Assessment;
- Landscape Plan;
- Transport Impact Statement ;
- Acoustic Assessment; and
- Bushfire Management Plan and Emergency Evacuation Plan.

Background:

Site and Locality

The development site is currently described as Lot 9101 Solis Boulevard, being a portion of the balance Lot of the parent Title (Figure 1).

The development site is located on proposed Lot 37, being a lot created under subdivision number 156194 (Figure 3), approved by the Western Australian Planning Commission (WAPC). The development site has a land area of 2,533m^2. Retaining walls are proposed to be constructed along the southern and eastern boundaries of the development site to create a level lot.



1. Current Deposited Plan showing Balance lot

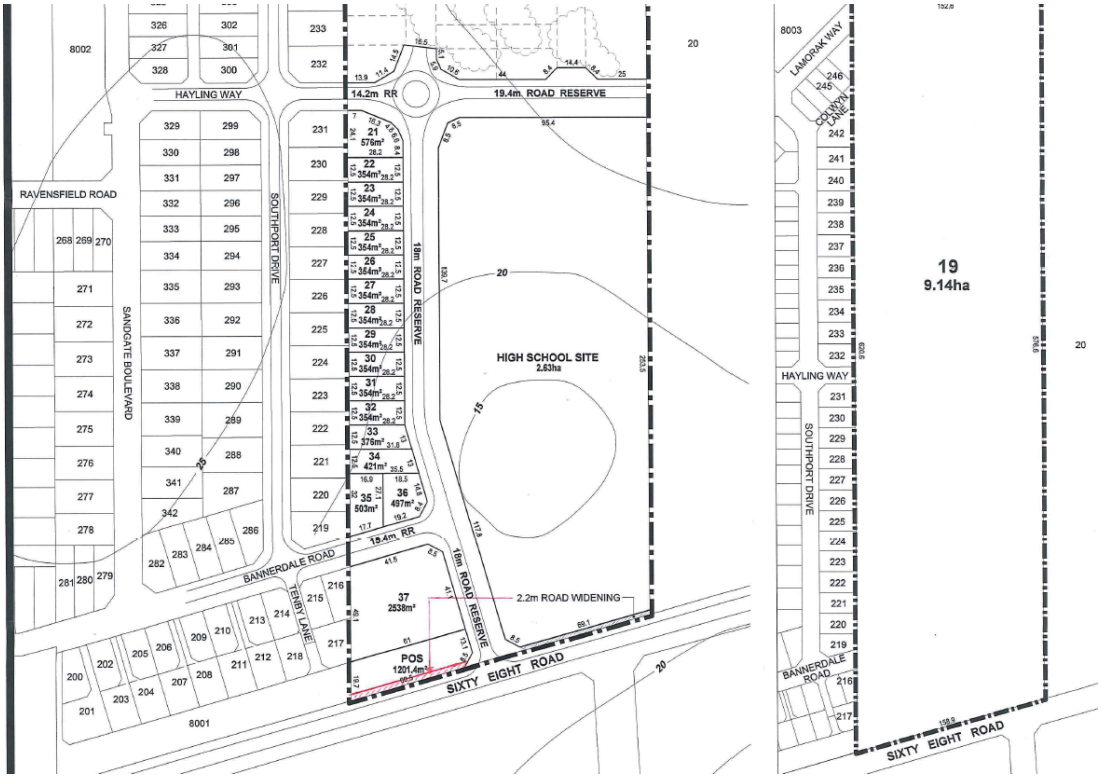
2. Location Plan

The development site is located on the southern periphery of the South Baldivis urban area, within the 'Lot 19 Sixty Eight Road' Structure Plan. The South Baldivis urban area is experiencing ongoing urban expansion, particularly in the area east of the subject site within the Brightwood Estate.

The development site is bound by Bannerdale Road to the north, Viva Boulevard to the east and currently Sixty Eight Road to the south. The land directly abutting the development site to the south is currently being developed as Public Open Space (POS) as a result of the current subdivision (Figure 3).

There are two residential lots adjoining the development site to the west, one being vacant and the other containing a Single Dwelling. The land to the north of the site along Viva Boulevard has recently been subdivided and a number of new homes are under construction.

The Ridge View Secondary College is located across Viva Boulevard to the east, while to the south of Sixty Eight Road is Special Rural zoned land, with lots generally ranging in size between approximately two to three hectares.



3. WAPC Approval No.156194

4. Site Photo (POS Foreground)

Legislation and Policy:

Legislation

- Planning & Development Act 2005;
- Metropolitan Region Scheme;
- Town Planning Scheme No.2;
- Planning and Development (Local Planning Schemes) Regulations 2015; and
- Environmental Protection (Noise) Regulations.

State Government Policies

- State Planning Policy 3.7 - Planning in Bushfire Prone Areas;
- State Planning Policy 7.0 - Design of the Built Environment; and
- State Planning Policy 7.3 - Residential Design Codes Volume 1.

Structure Plans/Activity Centre Plans

- Lot 19 Sixty Eight Road

Local Policies

- Planning Policy 3.3.5 - Child Care Premises
- Planning Policy 3.3.14 - Bicycle Parking and End of Trip Facilities
- Planning Policy 3.4.3 - Urban Water Management

Consultation:

Public Consultation

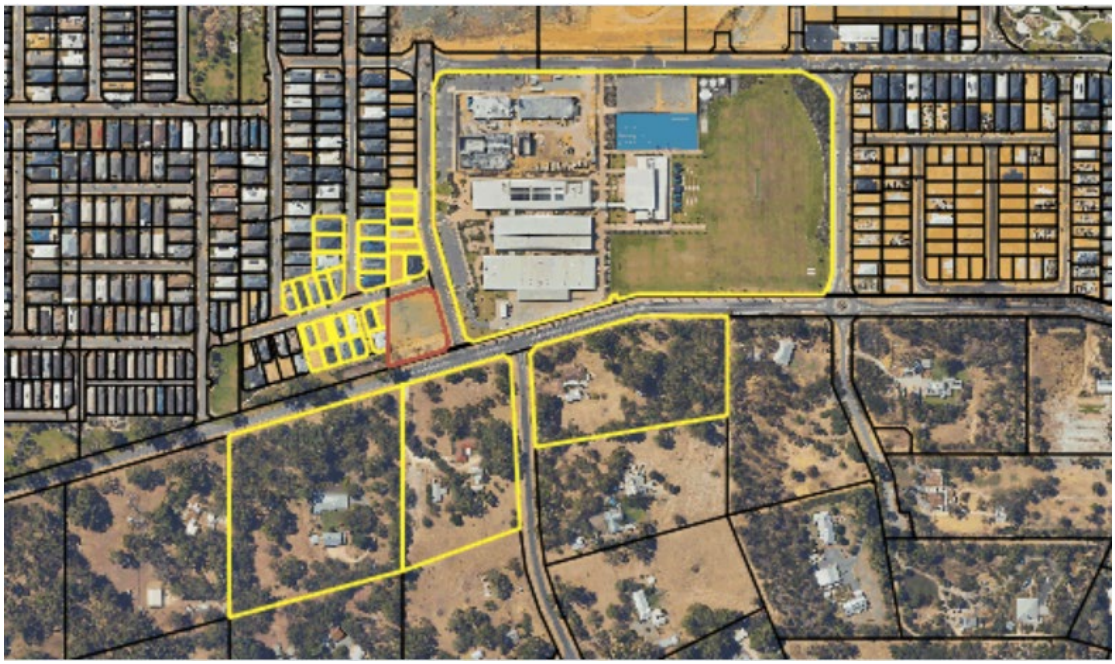
The application was advertised for public comment in the following manner:

- Landowners and occupiers identified on the Consultation Map below were notified in writing of the proposed application;

- The application was made available for public inspection at the City's Administration Offices and published on the City's website; and

- Submissions were sought over a 15 day period, between 23 August and 7 September 2022.

No public submissions were received at the conclusion of the advertising period.



5. Consultation Map

Referrals/consultation with Government/Service Agencies

The following government departments and service agencies were consulted:

- Department of Fire and Emergency Services (DFES); and
- Department of Education (DoE).

The following summarises the comments received:

1. Department of Education
Submission: "The State Government's Educare commitment seeks to increase the opportunity for parents to access child care related services within close proximity of public school sites. The proposed child care premises is located directly across from Ridge View Secondary College (College). Given that the subject site is directly opposite the College the Department must take into account the WAPC's Operational Policy 2.4 - Planning for School Sites (OP 2.4). Careful planning consideration of the proposal is required to be undertaken to ensure it does not adversely impact traffic circulation, access, parking and the safety of students in accordance with the provisions of the OP 2.4. It is evident that a car parking shortfall is proposed. Therefore, it is important to note that during peak school drop off/pickup times there is a significant increase in traffic surrounding the College. The Department has reservation with the car parking shortfall as it will likely exacerbate traffic in the event parent/carers are unable to use the proposed on-site car parking. Ultimately, the increased safety risks to students and motorists may arise. In view of the above, the Department would have no objections to the proposal subject to the following conditions being imposed should the JDAP resolve to support the proposal: • A detailed Car Parking Management Plan being submitted to and approved by the City of Rockingham to demonstrate car parking is contained entirely on site in accordance with the City's requirements. A Construction Management Plan (CMP) be submitted to and approved by the City of Rockingham. The CMP should clearly address how noise, odour and dust emissions will be mitigated so as not to comprise the health and safety of the students and staff of the College and the occupants of the surrounding locality".
Applicant's Response: • "Whilst we disagree that a 'shortfall' is being proposed (as our traffic and planning justification shows parking supply will adequately cater for the needs of the centre based on a number of operational / practical criteria), we don't have an issue with producing a Parking Management Plan. This can be provided at detailed design stage. • A Construction Management Plan is a standard requirement, which we have no issue providing at detailed design stage".
City's Comment: The parking assessment in the Legal and Statutory section below demonstrates that there are sufficient car bays on-site to address the parking demand generated by the development. Conditions are recommended, in the event approval is granted, requiring the submission of a Parking Management Plan and Construction Management Plan.

2. Department of Fire and Emergency Services (DFES)

Submission

"Further clarification is required within the BMP of the requirements of SPP 3.7, and the supporting guidelines as outlined in our assessment below.

1. Policy Measure 6.5 a) Preparation of a BAL contour map		
Issue	**Assessment**	**Action**
Vegetation classification	Evidence to support the exclusion of vegetated areas within Plot 3 as managed to low threat in accordance with AS3959 is required. In particular, the road reserve has been classified as Class G Grassland adjacent to the existing dwellings (Plot 2), however the road reserve adjacent to the proposed childcare centre has been excluded. Photographic evidence depicts what appear to be Woodland areas within the road reserve (Photo ID 9). Technical evidence and verification should be included in the BMP to qualify the vegetation exclusions can be achieved and under what legislative instrument it is enforceable in perpetuity. If unsubstantiated, the vegetation classification should be revised as per AS3959, or the resultant BAL ratings may be inaccurate.	Modification to the BMP is required. Decision maker to be satisfied with the vegetation exclusions and ongoing management of the road reserve to low threat.
2. Policy Measure 6.5c) Compliance with the Bushfire Protection Criteria		
Element	**Assessment**	**Action**
Location, Siting and Design	**A1.1 and A2.1 - not demonstrated** The BAL ratings cannot be validated for the reason(s) outlined in the table above.	Modification to the BMP required.

2. Department of Fire and Emergency Services (DFES) (cont…)		

3. AS3959 Construction standards including clause 3.2.3 adjacent structures		
Issue	**Assessment**	**Action**
Building Construction Standards	Class 9 buildings should be afforded significant protection from the impacts of a bushfire due to being occupied by people who may need assistance, or be unable, to evacuate the building in the event of a bushfire. In response, revised provisions in the National Construction Code are proposed for implementation in 2022. The proposed changes include but are not limited to; minimum separation between buildings, and separation from allotment boundaries, carparking areas and hazards. It is suggested the decision maker consider applying the proposed higher construction and design standards to the proposed development. Further formation regarding the proposed changes can be found at http://construction.abcb.gov.au/engagement/ncc-2022-public-comment-draft/supporting_doccumentsNCC2022VolumeOnePCD.pdf.	Comment only.
4. Policy Measure 6.6.1 Vulnerable land uses		
Issue	**Assessment**	**Action**
Emergency Evacuation Plan (BEEP)	The referral has included an '*Emergency Evacuation Plan'* for the purposes of addressing the policy requirements. Consideration should be given to the Guidelines Section 5.5.4 'Developing a Bushfire Emergency Eventuation Plan'. This contains detail regarding what should be included in a BEEP and will ensure the appropriate content is detailed when finalising the BEEP to the satisfaction of the City.	Comment only.

The Built Environment Branch (BEB) of DFES provided the following advice:

- As the proposed buildings will be classed as 9b, plans will need to be lodged with DFES BEB for assessment. The building is over 500m^2 and will require a fire hydrant onsite, the fire hydrant located on Sixty Eight Road looks to be located below the level of the block and usage will be hindered by retaining wall and stormwater sump. The building may be required to comply with Specification 43 of the NCC 2022 which comes into enforcement as of the 1st October but does have a 12 month transitional period. DFES advocated these requirements early in the design of the building.

Recommendation – not supported modifications required

The development is not supported for the following reasons:

1. The development design has not demonstrated compliance to Element 1 Location and Element 2 Siting and Design".

2. Department of Fire and Emergency Services (DFES) (cont…)
Applicant's Comment: • "We disagree with the 'vegetation classification' comments by DFES, which appear to be based on presumptuous grounds when compared to the 'vegetation classification' map in the BMP. In particular: - Plot 3 has been correctly classified as low threat, noting the area is cleared with no vegetation and contains various forms of development including housing and a school. - Plot 2 is a local park which is classified as POS under the relevant local structure plan, and was established in accordance with the standards for asset protection zones. Therefore, Plot 2 creates limited (if any) bushfire risk. • Any refinements to the EEP can be made at detailed design stage in accordance with a condition of planning approval. In consideration of the above, the BMP is prepared correctly and compliance with SPP3.7 is achieved".
City's Comment: The City supports the classification of the future drainage basin (Plot 3) as being low threat due to exemption s2.2.3.2(f) of AS3959. The City does not support the classification of the existing drainage basin on Sixty Eight Road (Plot 2) as being "Grassland", as it is managed in a low threat state. Given that it is separated sufficiently from CCP, however, it results in a BAL rating of 12.5 which is lower than the overall BAL of 19 which comes from the "Forrest" classified vegetation on the south side of Sixty Eight Road. The City considers the overall BAL rating of BAL-19 to be accurate. As it does not result in an overall higher BAL, the BMP is therefore acceptable nonetheless. This issue is discussed further in the Policy section below. The submitted Emergency Evacuation Plan is considered to comply with Clause 5.2.2 of the WAPC's Guidelines for Planning In Bushfire Prone Areas. The City supports the inclusion of the Built Environment Branches comments regarding the building classification as an Advice Note in the event that the application is supported.

Design Review Panel Advice

Not Applicable

Swan Valley Planning

Not Applicable

Planning Assessment:

Car Parking

Pursuant to Clause 4.15.1.3, car parking for a CCP is to be provided in accordance with Table 2 of TPS2. The following table shows the calculation for the proposal:

Land Use	TPS2 Requirement	Proposed Staff and Children	Bays Required
Child Care Premises	1 bay per 8 children	110 children	13.75
	1 per staff	17 staff	17
Total Required	30.75 (31)		
Total Bays Provided on-site	29		
Shortfall	**2**		

The Traffic Impact Statement submitted in support of the application proposes to manage the shortfall through:

- The staff are proposed to be arriving and departing the site in staggered 15-30 minute intervals during the morning and afternoon periods. The centre is proposed to be fully staffed between 9am-9:30am to 3pm-3:30pm.

- Additional support staff are also proposed to access the site outside of the peak drop-off/pick-up times when the visitor bays are underutilised (i.e. between 9:30am and 3:30pm).

The proposed two (2) car parking bay shortfall has been rationalised by the applicant through car parking management limiting the amount of staff on site at any given time through staggering of staff hours. The City proposes a condition requiring a Parking Management Plan to be prepared to ensure that the proposed staggered staffing arrangements are enforceable.

In light of the above reasons and parents arriving and departing at staggered internals there is a likely reciprocity of visitations between Ridge High School and the CCP also providing a further rationale to support the slight variation, it is considered that car parking has been sufficiently addressed.

Bicycle Parking and End of Trip Facilities

The City of Rockingham's Planning Policy No.3.3.14 aims to facilitate the appropriate provision of secure, well designed and effective onsite bicycle parking and end-of-trip facilities to encourage the use of bicycles as a means of transport and access to and within the City.

Provision	Requirement	Proposed	Assessment
Bicycle Parking PP3.3.14 – Table 1	Short Term parking 0.05 spaces per visitor =0.7 (1) Long Term Parking 0.1 spaces per staff =1.7(2)	Nil	A condition is recommended that 3 parking bays are provided.

Conclusion:

The proposed CCP is considered compatible with the existing surrounding context of the locality.

The siting of the building on the land, proposed acoustic walls and the location of outdoor play areas has mitigated potential noise impacts on adjoining residential properties.

Having due regard to the relevant planning considerations, the City is satisfied that any potential impacts of the proposed CCP can be adequately addressed by conditions of Development Approval. As such, it is recommended that the application be conditionally approved.

Proposed Child Care Premises

Application for Planning Approval

Future Lot 37 Bannerdale Road, Baldivis

August 2022

apex planning

Development Application

Future Lot 37 Bannerdale Road, Baldivis

Prepared for Jarra Childcare Developments Pty Ltd

DOCUMENT CONTROL

DESCRIPTION	DATE
220805 22-093 DA report - Bannerdale Road (rev0).docx	5 August 2022

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CONTENTS

APPENDICES

1 INTRODUCTION

Apex Planning has produced this application for planning approval for Jarra Childcare Developments Pty Ltd, with regard to a new childcare facility proposed to be located at future Lot 37 Bannerdale Road, Baldivis (hereafter referred to as the **development site**).

The proposal involves the use and development of an early learning centre accommodating up to 110 children, with associated full-time educators and support staff.

The proposal will establish a quality childcare facility within a developing section of Baldivis, a key urban growth area of the south west sub-region of the metropolitan area. There is an established and growing demand for childcare services within the surrounding community.

The proposed facility features a site-responsive layout informed by expert architectural, traffic, and acoustic input. The building is designed in a contemporary style with domestic finishes which allow it to integrate with its context and respond sensitively to adjoining properties.

The proposed facility will be readily accessible to the local community by virtue of its corner location at Bannerdale Road / Viva Boulevard, and proximity to the existing public transport network.

It is requested the Metro Outer JDAP grant approval to the proposed development.

1.1 PRE-LODGEMENT ENGAGEMENT

On 8th July 2022, representatives of the proponent and Apex Planning attended a pre-lodgement engagement meeting with the City of Rockingham.

A number of key elements of the site, development and local planning framework were discussed, including a specific request for a needs analysis to be provided as part of the development application package.

The City's feedback was used to inform finalisation of the proposed development.

2 LAND DESCRIPTION

2.1 LOT DETAILS

The land subject of this application for planning approval is described in **Table 1** below.

Table 1: Lot details					
Lot	**Deposited Plan**	**Volume**	**Folio**	**Lot area**	**Ownership**
9101	419388	2986	252	4.9326ha	The Glow Development (WA) Pty Ltd

The Certificate of Title (**CT**) and Deposited Plan are provided at **Appendix 1**. There are no encumbrances listed on the CT which relate to the proposed development.

On 31 October 2018, the WA Planning Commission granted approval to a subdivision (WAPC ref 156194) for a multi-lot subdivision associated with land within the Lot 19 Sixty Eight Road, Baldivis Local Structure Plan area. The approved subdivision has been progressed in stages, with the latest lots having been created in July 2020 (as evident from the Deposited Plan).

The approved subdivision includes the creation of future Lot 37, an approximate 2,533sqm parcel of land at the south-western corner of the Bannerdale Road / Viva Boulevard T intersection which will contain the proposed childcare development (referred to as the **development site**).

It is anticipated that subdivisional works would be completed and future Lot 37 formally created (complete with services/utilities and access to frontage roads) before the subject development is commenced.

3 CONTEXTUAL CONSIDERATIONS

The following sub-sections describe the contextual characteristics of the site. Refer to **Figure 1: Aerial Photo** on the subsequent page, which illustrates the development site and surrounds.

3.1 REGIONAL CONTEXT

The development site is located in the municipality of the City of Rockingham and is approximately:

- 45km south of the Perth CBD
- 10.5km south-east of the Rockingham Strategic Centre
- 3km south of the Baldivis District Centre

The site is at the southern end of Baldivis, an urban growth area which is located within the south-west sub-region of the Perth metropolitan area.

The site is located adjacent to Sixty Eight Road (south), which forms the southern boundary of the urban zoned part of Baldivis. Sixty Eight Road is a key transport route for the locality, linking Baldivis Road (east of site), Eighty Road (west of site) and Mandurah Road (west of site).

3.2 LOCAL CONTEXT

The development site is located within an emerging part of Baldivis south, which is currently undergoing subdivision and development.

The development site forms part of Lot 9101, a fragmented superlot which is in the process of subdivision in accordance with local structure planning (which includes the creation of the development site).

In particular, the development site is an approximate 2,533sqm parcel of land located at the south-western corner of the Bannerdale Road / Viva Boulevard T intersection. The completion of subdivision will result in the delivery of the final component of Public Open Space (POS) immediately south of the development site, fronting Sixty Eight Road.

In terms of local contextual characteristics:

- The development site enjoys frontage to Bannerdale Road and Viva Boulevard, which offer linkages to the wider road network. In particular, Viva Boulevard provides access into the estate via Sixty Eight Road.
- The northern side of Bannerdale Road contains residential sites (some vacant, some developed) at varying densities in the low-medium range.
- The eastern side of Viva Boulevard contains Ridge View Secondary College. More specifically, a bus embayment and egress only crossover to the school site are located adjacent to the development site.

Figure 1: Aerial Photo / Context Map

NORTH

Drawn: Alessandro Stagno

Rev: 0

Future Lot 37 Bannerdale Road, Baldivis

Source: MNG Access

Date: 1 August 2022

apex planning

- The southern side of the development site will adjoin future POS which will form the continuation of existing POS along Sixty Eight Road, as explained above.
- The southern side of Sixty Eight Road contains semi-rural land with dwellings.
- The western boundary of the site adjoining a vacant residential lot and a developed residential lot containing a dwelling.

In terms of wider context, the southern portion of Urban zoned Baldivis is in the process of completing urbanisation. Relatively large pockets of Baldivis South (within the Urban zone of the MRS) are vacant and will undergo subdivision in accordance with outcomes envisaged under the planning framework, including:

- Parkland Heights Local Structure Plan
- Lots 635, 739 & 740 Baldivis Road Local Structure Plan
- Baldivis South East Structure Plan
- Heritage Park Local Structure Plan

In terms of public transport, the 565 bus route operates along Bannerdale Road, Viva Boulevard and Sixty Eight Road, which provides a public transit link to Warnbro train station via southern Baldivis. The bus service operates on 15 minute frequency across a 2 hour AM and PM peak period.

3.3 SITE CONDITIONS AND TOPOGRAPHY

The land is vacant, with site works undertaken previously as part of earlier stages of subdivision/development in the immediate area.

The intended civil design for the development site and adjoining POS lot in accordance with WAPC approval ref 156194 has been reflected on the proposed development plans provided at **Appendix 3**. It is important to note the civil design depicted on the development plans will be delivered as part of the completion of subdivisional lot creation works, and not this development proposal.

In terms of local topographical conditions, Sixty Eight Road sits approximately 2m-2.5m lower than established sites to the north, with POS forming a transition. At the completion of subdivision, the development site will sit at approximately RL21.63. Retaining walls will be constructed along the southern boundary of the development site (forming part of the POS) and the eastern boundary of the development site.

According to mapping systems, the development site appears to have access to the necessary urban utilities services.

3.4 NEEDS ASSESSMENT

A childcare needs assessment provided at **Appendix 2** was undertaken for the Baldivis locality, examining various demographic, economic and locational considerations to determine whether demand exists for further childcare services in the locality. In short, the needs assessment demonstrates an existing demand which will increase over a 10 year period, and a projected under-supply of childcare places.

4 DESCRIPTION OF PROPOSAL

The proposal involves the development of a new childcare facility within the development site, which is an approved lot of 2,533sqm at the south-western corner of Bannerdale Road and Viva Boulevard.

The development plans depicting the proposed development are provided at **Appendix 3** for reference. A conceptual landscape plan is included at **Appendix 4**.

The facility will provide early learning and care services for up to 110 children, serviced by up to 17 full-time 'educators' as required by the *Education and Care Services National Regulations 2012*. The facility will also be serviced by additional support staff (typically attending during off-peak periods) for the purpose of lunch cover, admin duties, or training purposes.

The early learning centre is proposed to operate from 6:30am-6:30pm Monday to Friday and will cater for the following age demographics:

- 0-1 years: 8 places
- 1-2 years: 12 places
- 2-3 years: 30 places
- 3+ years: 60 places

The proposed development will increase the provision of early learning places for the Baldivis south community, which is undergoing residential subdivision and development in accordance with outcomes envisaged under the local planning framework.

The site is in a highly accessible location adjacent to Sixty Eight Road and at the corner of Bannerdale Road / Viva Boulevard, which will provide a high level of accessibility for future residents of the estate as well as the wider catchment.

The development features a site-responsive design which addresses its corner location, interface with residential lots to the west and interface with the adjacent school site. The layout is such that noise impacts are minimised and design response is optimised, through the siting of the car park within the western side (adjoining residences) and built form / playscape forming the response to street frontages.

The building is single storey in scale, maintaining congruity with the predominant scale of the local area. The roof format employs two skillion sections with central clerestory windows (inspired by the adjacent school site) and enhances the facility's architectural response whilst optimising access to natural light within the building. Muted colour tones and domestic materials are incorporated into the design, allowing the building to integrate with its surroundings.

The outdoor playscape runs along both street frontages of the development site, and creates a connection with the future POS to the south through the use of open style fencing which forms a continuation of fencing for the adjoining sites.

The playscape will be framed with semi-permeable residential style fencing which will facilitate a level of passive surveillance and engagement with the street. Transparent infill panels will be incorporated into the fence where required by the acoustic assessment, to achieve compliant noise levels. The western lot boundary will contain typical 2m high colorbond fencing (relative to the height of the adjoining residential properties). The corner truncation boundary to Bannerdale / Viva will contain a solid blockwork wall with Genius Childcare signage.

The car park will be accessed by a 6.2m wide crossover to Bannerdale Road. The car park will contain a total of 30 bays, of which 13 will be set aside and allocated to visitors. The car park includes a turning bay for efficient turnaround movements and ACROD bay. The car park contains landscape buffer strips a mixture of low level planting and trees.

An 'at-grade' footpath connection is provided from Bannerdale Road to the site's main entrance, which will facilitate accessibility for all modes. The entry to the facility includes a gated area for the convenience and security of parents/carers.

A bin enclosure is provided at the north-western corner of the lot which will be treated to a high standard and easily accessible by both staff of the centre and private contractors carrying out waste collection. Mechanical plant and air conditioning condensers will be located within a dedicated enclosure at the southern end of the car park, out of view and away from adjoining residences.

Simple Genius Childcare signs are proposed to be provided near the building entry, at the car park entry, and on the fence facing Bannerdale Road / Viva Boulevard corner. The signs are entirely consistent with the design style of the building and feature similar colours and finishes. The signs will complement the overall vista of the development.

Having regard for the above, the proposed childcare facility is designed in a site-responsive manner and will provide a positive contribution to the locality.

4.1 LANDSCAPING ARRANGEMENTS

A conceptual landscape plan depicting planting arrangements within the car park and the verges of Bannerdale Road and Viva Boulevard is provided at **Appendix 4**. The landscape plan depicts:

- The planting of three red flowering gum trees in the car park, with two of the trees provided at either side of the entry driveway to form an attractive entry statement into the site.
- The planting of various groundcover species within verges to form an attractive streetscape response.

4.2 TRAFFIC ASSESSMENT

The proposed development is supported by a Transport Impact Statement (**TIS**) produced by Transcore. The TIS is provided at **Appendix 5**.

With regard to traffic generation, the TIS concludes that the AM and PM peak trip generation is estimated at 92 and 82 respectively, resulting in an insignificant impact to the surrounding road network.

The traffic assessment also considers parking demand for the centre and determines parking provision should be sufficient to cater for the needs of the centre, noting the provision of 30 bays for 110 placements, 17 full-time educators, and additional support staff that may attend the site during off-peak periods.

The traffic assessment also contains swept path plans demonstrating both an 8m and 8.8m waste collection vehicle can make satisfactory movements through the site. Waste collection would need to occur when the facility is closed.

In summary, the assessment demonstrates that the proposal does not generate unacceptable traffic, and that the surrounding road network is entirely capable of accommodating movements associated with the facility.

4.3 ACOUSTIC

An environmental noise assessment has been produced by Lloyd George Acoustics in accordance with statutory requirements. The acoustic report is provided at **Appendix 6**.

The assessment concludes that the facility will comply with the *Environmental Protection (Noise) Regulations 1997* at all times for all current and future sensitive receivers within proximity of the site, based on the details depicted on the plans.

4.4 WASTE AND SERVICING

The proposed development provides an enclosed bin storage area at the south-western corner of the car park. Waste collection will be undertaken by private contractor. Waste collection activities will be carried out during off-peak periods or when the facility is closed. Swept path plans are included with the TIS which demonstrate an 8.8m waste collection vehicle can enter and exit the car park in a forward gear. A waste management plan can be provided at building permit stage.

5 STATUTORY PLANNING ASSESSMENT

5.1 METROPOLITAN REGION SCHEME (**MRS**)

The subject site and adjoining roads are zoned Urban under the Metropolitan Region Scheme (**MRS**). The proposed development is consistent with the MRS and warrants approval.

5.2 STATE PLANNING POLICY 3.7: PLANNING IN BUSHFIRE PRONE AREAS (**SPP3.7**)

The development site falls within an area identified as 'bushfire prone' under the Department of Fire and Emergency Services (**DFES**) mapping system, which emanates from vegetation contained within semi-rural sites at the southern side of Sixty Eight Road.

A bushfire assessment and associated emergency evacuation plan have been prepared in support of the proposed development which demonstrate a post-development BAL rating of BAL-19, which is a compliant and acceptable outcome.

The bushfire assessment and emergency evacuation plan are provided at **Appendix 7**.

5.3 STATE PLANNING POLICY 7.0: DESIGN OF THE BUILT ENVIRONMENT

An assessment against the ten principles of SPP7.0 is provided in **Table 2** below.

Table 2: Ten design principles of SPP7.0
1. Context and character *Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*
Design response: • The development is consistent with the objectives of the Residential zone, and will provide an essential community service which will meet the current and future needs of the area. • The facility is proposed within a suitable corner location which is highly accessible to the community via the adjoining road network, including Viva Boulevard which provides a connection to Sixty Eight Road. • The proposed development is comprised of a contemporary style building with muted colour tones and domestic style materials. • The arrangement of the development is responsive to the characteristics of the locality, with the car park forming the interface with adjoining residences (reducing noise impacts) and the playscape and building forming the site's corner response. • The access arrangements are responsive to local characteristics, by siting the facility's crossover to Bannerdale Road to ensure vehicular movements in/out of the site are separated from school movements along Viva Boulevard.

2. Landscape quality

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.

Design response:

- A landscape plan is provided at **Appendix 4** which depicts attractive and native landscape planting within the site's car park and the adjoining verges of Bannerdale Road and Viva Boulevard.
- The playscape forms part of the site's design response to the adjoining streetscapes, and is likely to contain various landscape treatments and play equipment.

3. Built form and scale

Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.

Design response:

- The building is single storey, incorporating a skillion roof format with feature clerestory windows. Built form scale is congruent with the local area.
- The built form approach is architecturally treated, incorporating domestic materials and muted colour tones which are consistent with other buildings in the local area.

4. Functionality and build quality

Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.

Design response:

- The development provides large open indoor and outdoor areas which are well connected and generally north facing. The younger age groups will play within the southern playscape, which takes advantage of passive shading.
- The facility meets all relevant regulatory requirements, ensuring the spaces are functional and fit for purpose.
- The arrangement of the building and outdoor areas discourages 'dead spaces' and ensures a clear line of sight is maintained between internal and external activity spaces which enhances child supervision.
- Significant natural light is achieved within the building as a result of the feature roof.
- Materials and finishes are carefully selected to ensure durability and weather resistance.

5. Sustainability

Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.

Design response:

- The building is designed to optimise access to natural sunlight. The eastern and western sides of the building provide glazed openings which will allow daylight permeability and facilitate natural ventilation and airflow.
- The playscapes are designed to receive sunlight, whilst containing vegetation and verandahs which will increase shade and provide a natural cooling effect.
- The facility will enhance social and economic outcomes through the increase of childcare places for the local community and the creation of full time employment for local residents.
- Landscape planting selection is comprised of native waterwise species.

6. Amenity

Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.

Design response:

- The facility provides generous internal and external spaces designed to a high standard with an engaging playscape connected to the internal activity spaces, which will result in optimised amenity for children.

- The car park provides acoustically compliant fencing as necessary to achieve suitable noise levels. The car park also contains landscape planting to soften its visual effect, particularly from the street.
- The development is attractively and responsively designed, which contributes positively to streetscape amenity. This includes the architecturally treated building with feature roof framed by engaging outdoor play spaces.
- The arrangement of the development is sensitive to receivers to the west, through placement of the car park and the positioning of playscapes along street frontages.

7. Legibility

Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.

Design response:

- The site is at a key corner location which will be identifiable and form a community focal point.
- The facility's car park is accessed by an identifiable crossover extending to Bannerdale Road.
- An accessible pedestrian pathway will link the entry of the facility to Bannerdale Road.

8. Safety

Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.

Design response:

- The facility is designed in accordance with relevant regulatory standards which ensures safety and security for the users of the centre.
- The centre optimises passive surveillance of the car park and street through the use of openings and permeable fencing.

9. Community

Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.

Design response:

- The facility is intended to be a community focal point which would offer services to local families.
- The playscape will be an engaging environment in which children will be able to socialise, learn and play together.
- Parents will have opportunities to converge at the facility during drop off and pick up.

10. Aesthetics

Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.

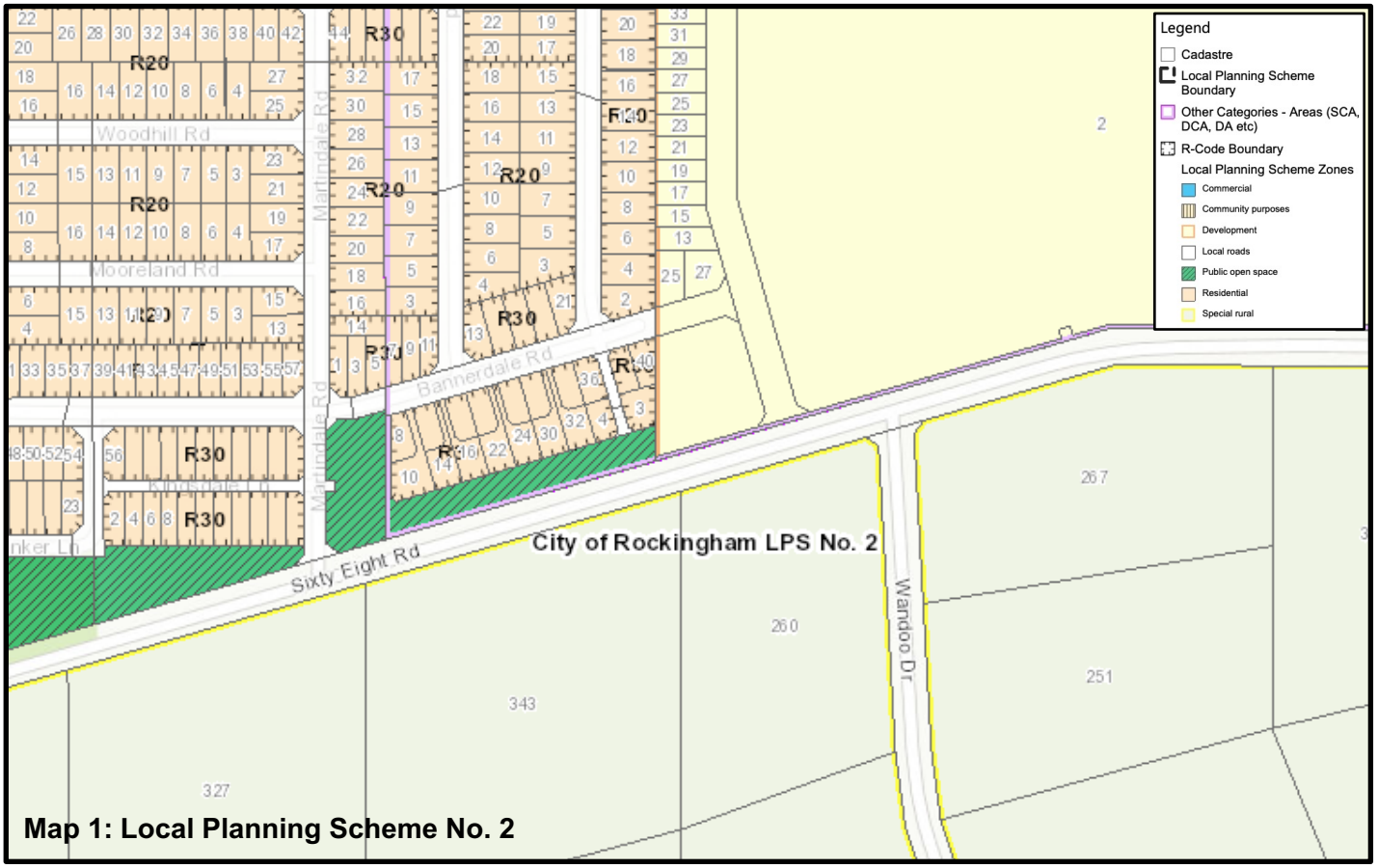
Design response:

- The development is designed in response to site-specific constraints which facilitate the prominence of its attractive buildings and external spaces, as well as the screening of its car park.
- The building is of a high design quality, utilising a number of built form treatments and soft, unimposing colour tones with domestic style materials.
- The feature roof creates a site-specific identity and adds architectural expression to the development.

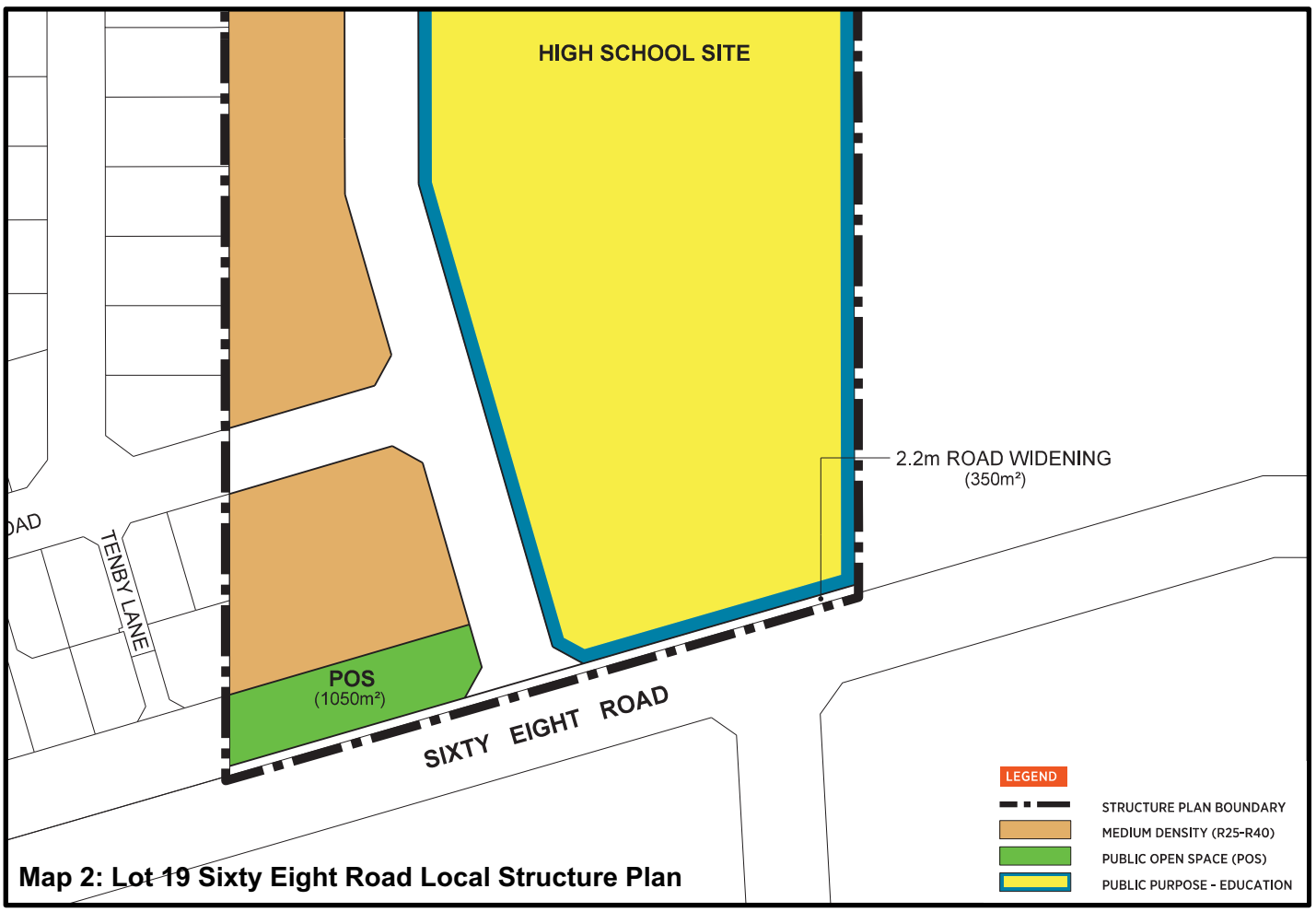
5.4 CITY OF ROCKINGHAM LOCAL PLANNING SCHEME NO. 2 (**LPS2**)

5.4.1 ZONING

The development site is zoned Development under the City's LPS2. Refer to **Figure 2 – Zoning / Structure Plan Map**.



Map 1: Local Planning Scheme No. 2



Map 2: Lot 19 Sixty Eight Road Local Structure Plan

Figure 2: Zoning / Structure Plan Map	NORTH	**Drawn:** Alessandro Stagno **Rev:** 0
Future Lot 37 Bannerdale Road, Baldivis		**Source:** DPLH, SITE P+D **Date:** 1 August 2022 apex planning

Having regard to Clause 4.2 of LPS2, development of land zoned Development should be in accordance with a structure plan.

The Lot 19 Sixty Eight Road, Baldivis LSP applies to the site and is addressed in the subsequent section of this report.

5.4.2 LOT 19 SIXTY EIGHT ROAD, BALDIVIS LOCAL STRUCTURE PLAN (**LSP**)

In accordance with the LSP, the development site is designated a zoning of Residential (R25-R40). Refer to **Figure 2 – Zoning / Structure Plan Map**.

An assessment against the objective and land use permissibility of the Residential zone of LPS2 is provided below.

5.4.3 RESIDENTIAL ZONE OBJECTIVE

Under Clause 4.1.1 of LPS2, the objective of the Residential zone is:

> *to promote a high quality residential environment by maintaining and enhancing the quality of existing residential areas and providing for a range of residential densities and housing types throughout the Scheme Area.*

The proposal is consistent with the Residential zone objective for the following reasons:

- The proposed development would deliver an important urban support service which caters for the care and early education of children from families of the surrounding community, within a highly accessible and suitable location in proximity to an existing educational institution and adjoining POS.
- The facility will provide a suitable design response to its corner location which incorporates attractive architectural expression, domestic style design features and an engaging outdoor area. A positive contribution will be made to the local streetscape environment.
- A range of expert reporting and the justification provided in this report demonstrates that the amenity of surrounding properties will not be adversely impacted with respect to traffic, noise, and landscaping.
- The development is single storey in scale and is consistent with the scale and form of development in the immediate area.

5.4.4 LAND USE PERMISSIBILITY

The proposal will provide a childcare facility on the development site which will cater for up to 110 children. The proposed use is properly classified as Child Care Premises in accordance with the land use definitions of LPS2.

Child Care Premises is an ‘A’ discretionary use in the Residential zone, meaning the use is capable of approval at the discretion of the decision-maker (subject to mandatory advertising). The proposed child care premises is entirely suitable for establishment on the development site for the following reasons:

1. The proposed development will deliver an essential community service which will increase the provision of childcare places for the residents and workers of the growing community.
2. The local Baldivis south area is undergoing subdivision and development for residential purposes, which will deliver more dwellings and increase the number of families. A demand analysis has demonstrated the need for this facility.
3. The proposal will contribute positively to local visual amenity and streetscape quality, providing a suitable response to the site's corner location.
4. The proposal is supported by expert traffic and acoustic input, which demonstrate there will be no unacceptable impacts to surrounding properties.

The proposed use is appropriate and warrants approval accordingly.

5.4.5 PARKING ASSESSMENT

An assessment against the parking standards set out under *Table No. 2 – Carparking Table* of LPS2 is provided below.

Under *Table No. 2 – Carparking Table*, a Child Care Premises requires:

> *1 bay per employee and 1 bay per eight children*

The facility includes a car park which provides 17 staff bays and 13 visitor bays, equating to 30 onsite bays.

The proposed childcare facility will have a capacity of 110 children. With regard to staffing arrangements:

- A minimum of 17 full-time educators are required by the *Education and Care Services National Regulations 2012.* It is important to note that whilst there are 17 full-time educators, this does not represent the maximum number of staff required to compliantly and effectively deliver childcare services on the site.
- The 17 full-time educators typically work a full 8 hour day, but their arrival and departure is staggered in 15-30 minute intervals during the morning and afternoon periods. The centre will typically be fully staffed between 9am-9:30am to 3pm-3:30pm. This means not all 17 staff bays are utilised during the peak AM and PM periods.
- Support staff performing important support functions for the centre also attend during off-peak periods. These include a cook to prepare meals, and lunch cover staff to provide supervision to children while the main educators take breaks in the middle of the day. Support staff typically attend outside of the centre's peak drop-off / pick-up times, when the visitor bays are underutilised (ie between 9:30am and 3:30pm).

The intent of outlining the above is to demonstrate that the provision of 30 onsite bays will be sufficient to cater for the needs of the centre based on the operational characteristics of the facility, with respect to the arrival/departure of both parents and staff.

In addition to this, it is pertinent to note that not all staff are expected to drive to the site. Some staff are likely to car pool or use public transport (noting the 565 route is readily accessible to the site).

In consideration of the information provided above, it is respectfully requested that no condition be applied which contains an upper limit of staff. Such a restriction would only create operational implications for the centre, and may create perverse outcomes whereby the number of staff attending who do not park onsite exceeds the upper limit enforced by the condition. The proponent has no objection to providing a parking management plan in accordance with a condition of planning approval.

5.4.6 MATTERS TO BE GIVEN DUE REGARD

Clause 67(2) of the Deemed Provisions provides a list of matters which require due regard when considering a development application. **Table 4** below provides an assessment against the relevant matters.

Table 3: matters to be given due regard

Matter to be given due regard	Comment
(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area	The content of this report addresses LPS2, and demonstrates the proposal is consistent with its aims and intent.
(c) any approved State planning policy	This report addresses SPP3.7 and SPP7.0.
(g) any local planning policy for the Scheme area	The subsequent sections of this report address the City's local planning policy framework.
(m) the compatibility of the development with its setting, including — (i) the compatibility of the development with the desired future character of its setting; and (ii) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;	<u>Desired future character</u> • The development site and adjoining land is designated Residential under the LSP and is still undergoing development. • The proposal is designed in a manner broadly consistent with low/medium density residential development, noting the use of domestic style materials, a skillion roof and a built form scale at single storey. • Additionally, the nature of the proposed land use is heavily community-focused and will complement the growing population of the local area. <u>Relationship to development in locality</u> The proposed development features a site responsive configuration and design approach, which addresses its corner location through single storey built form scale and contemporary design features with distinct domestic elements. The development is arranged such that the car park is provided at the western side of the site and is screened from view of the main roads, whilst built form interface is provided to street frontages. This reduces noise impacts to adjoining sensitive receivers and optimises streetscape response.

	The design approach employed for the facility utilises residential style materials, muted colour tones, and a roof format consistent with the adjacent school site. The scale, height, orientation and appearance of the development is consistent with the current and future character of the locality.
(n) the amenity of the locality including the following (i) environmental impacts of the development; (ii) the character of the locality; (iii) social impacts of the development;	The local area is largely characterised by development of a residential/suburban nature, with a large school site at the eastern side of Viva Boulevard. The development is consistent with this established local character by virtue of its architectural design response. Additionally, the community-focused nature of the use will build on the availability of essential services for the current and future residents of the local area. An environmental noise assessment was prepared in support of the proposal which demonstrates it will comply at all times with the *Environmental Protection (Noise) Regulations 1997*. The establishment of a childcare facility on the site will not result in any detrimental social impacts. The proposal will result in direct full time employment for childcare staff, and will provide childcare services to local families. This is a positive social outcome.
(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved	A conceptual landscape plan is provided with the DA package which demonstrates landscaping within the car park and verges.
(s) the adequacy of (i) the proposed means of access to and egress from the site; and (ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;	A TIS has been produced in support of the proposal which demonstrates the appropriateness and adequacy of proposed access arrangements. The TIS also includes swept path plans demonstrating the acceptable movements of waste collection vehicles, which can enter and exit the car park in forward gear.
(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety	A TIS has been produced in support of the proposal which demonstrates the facility will create an insignificant amount of traffic, particularly during peak traffic periods.
(x) the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals	The proposed facility will provide 110 additional childcare places of varying age groups for the local community and create direct full time employment for staff. These are considered to be positive outcomes for the community.

5.4.7 PLANNING POLICY 3.3.5 CHILD CARE PREMISES

The development site is designated a zoning of Residential (R30-R40) under the LSP. A density code of R30 was allocated to the site through the subdivision process.

An assessment against the key development standards of the R-Codes is provided in **Table 3** below.

Table 4: policy standards (child care premises)	
4.1 Location	
(a) Distributed strategically to provide maximum benefit to the community it serves;	The proposed childcare facility is located such that it is accessible to the local community, commuters and parents accessing local schools. The site has frontage to an estate entry road and is in close proximity to Sixty Eight Road, and is not within a cul de sac road or embedded within the local road network.
(b) Within easy walking distance or part of appropriate commercial, recreation or community nodes and education facilities;	The development site is located adjacent to a school and within walking distance of a bus route and a local park.
(c) Located in areas where adjoining uses are compatible with a Child Care Premises (includes considering all permissible uses under the zoning of adjoining properties);	The development site adjoins residential properties. The content of this DA package demonstrates residential amenity is maintained to an acceptable standard with respect to built form, noise, traffic.
(d) Serviced by public transport (where available);	the site is adjacent to a local bus route which provides a public transit link to Warnbro train station. The site is considered to be well serviced.
(e) Considered suitable from a traffic engineering/safety point of view; and	A TIS has been prepared in support of the development which demonstrates an insignificant impact to the local road network, and a suitable access system.
(f) Of sufficient size and dimension to accommodate the development without affecting the amenity of the area.	The site is 2,533sqm and generally rectangular in shape (though slightly irregular). The development provides compliant indoor and outdoor play areas, acceptable setbacks, and a responsive built form approach.
4.2 Site characteristics	
Sites selected for Child Care Premises should be of sufficient size and suitable shape to accommodate the development, including all buildings and structure, parking for staff and parents, outdoor play areas and landscaping, as determined by the City. As a general rule, sites in a residential area should be of regular shape and greater than 1000m2 in size. A maximum site coverage of 50% will apply to any proposal to prevent the over-development of any lot. The topography of the site should be considered, as steep slopes may affect access to the facility, noise transfer and methods of noise mitigation.	As noted above, the site is 2,533sqm and provides ample space to accommodate buildings, playscapes, car parking, landscaping and various amenities. Site cover equates to approximately 30%. The development is proposed on land which will be flat at the completion of subdivisional lot creation works. The land does not contain any known contamination.

Sites selected for Child Care Premises should also be assessed to determine their potential for soil and groundwater contamination. Section 6 of the Department of Water, Environment and Regulation (DWER) *'Contaminated Sites and the 'Land Use Planning Process'* (April 2006) guideline sets out a useful methodology to assist local government in carrying out such assessments.	
4.3 Carparking	
An application for Development Approval shall make provision for parking bays in accordance with the standards and requirements of Clause 4.15 and Table Nos.2 and 3 of Town Planning Scheme No.2.	A comprehensive parking assessment is provided earlier in this report and as part of the supporting TIS, which demonstrate the parking arrangements are satisfactory.
4.4 Traffic impacts	
A Traffic Impact Statement/Assessment will be required where, in the opinion of the Manager, Statutory Planning, a proposed Child Care Premises has the potential to impact on the functionality and amenity of an area and may create or exacerbate unsafe conditions for children and families using the premises, or for pedestrian or road users.	A TIS has been prepared in support of the proposed development by a suitably qualified and experienced transport consultant, demonstrating the proposal is entirely acceptable.
4.5 Noise impacts	
A Noise Impact Assessment may be required for the development of a Child Care Premises. The objectives should be to limit the noise impact of the Child Care Premises on adjacent properties, and also limit any noise impact from extern sources on the Child Care Premises. This may be achieved either by physical separation, design and layout of the premises or by implementing noise-mitigation measures, such as acoustic treatments to buildings. Although each application will need to be assessed on its individual merit, the following basic principles apply:	An environmental noise assessment has been prepared in support of this proposal and has informed the design of the facility. Compliance with the Noise Regulations is readily achieved.
(a) Where a Child Care Premises is located adjacent to a noise sensitive use, such as houses, retirement village and nursing homes, the noise-generation activities of the Child Care Premises, such as the outdoor play areas, parking areas and any plant equipment, are to be located away from the noise sensitive use;	The car park is provided at the western side of the site, interfacing with two residential properties, whilst the playscape and plant yard are located away from sensitive receivers with no direct interface. The car park provides a suitable acoustic interface with residences as it generates the least amount of noise. In addition, the bays adjacent to the western boundary are allocated as staff, which are only used once or twice a day and generate minimal impact due to low turnover.
(b) Where, due to design limitations or safety considerations, noise-generating activities such as outdoor play areas are located close	Acoustic mitigation measures are incorporated into the development to achieve compliance, including a 2m colorbond fence along the western boundary,

to noise-sensitive uses, appropriate noise mitigation is to be undertaken; and	controlled use of bays, and attenuation within the playscape fence.
(c) The design and construction of buildings may include noise-mitigation measures to reduce impact from external sources and to achieve accepted indoor noise limits.	Not applicable.
4.6 Design considerations	
The appearance of a Child Care Premises must be consistent with the scale and character of the locality. In this regard, where the development is located in a residential area, the built-form should lend itself to domestic (residential) architecture. Setbacks to side and rear boundaries and the orientation of openings to indoor play areas should minimum any impact on adjoining properties. Outdoor play areas are to be located so as to limit their impact on the amenity of adjoining properties, whilst taking advantage of a passive solar orientation wherever possible. Measures should be taken to ensure that play areas are large enough and of such dimensions to be useful as play areas, and side setback and leftover building areas are not desirable for the purpose. Where a play area is located in the front setback area, fencing of the area should be of predominantly open construction to provide a safe playing area without closing the site in, casting shadows on the play area, or adversely affecting the residential streetscape. Landscaping will be required along the frontage of the development to a standard equal to that required or provided for on adjacent properties. Landscaping should not include potentially hazardous heights and potentially toxic plants.	The design approach adopted for the proposal achieves a high architectural standard by virtue of: • Its single storey scale, which is consistent with other buildings in the area • The use of domestic style high quality materials with muted/unimposing colour tones • An attractive feature roof which acts as a keynote to the adjacent school site • Engaging playscape forming the streetscape response The building does not directly adjoin residential properties, hence side/rear setbacks are not of concern. Passive solar orientation has been optimised, through innovative building design / roof layout which captures natural light in the building and also provides passive shading for the youngest age group's playscape at the southern end of the site. Open style fencing is provided along the playscapes and POS area which is consistent with typical suburban streetscapes. Landscaping is provided within the car park and adjoining Bannerdale Road and Viva Boulevard verges, which will enhance the development.
4.7 Hours of operation	
For Child Care Premises in Residential areas, hours of operation will be restricted to 6:30am to 7:00pm, unless otherwise agreed to by the Council.	Hours of operation are consistent with the policy standard.
4.8 Advertising signs	
Any proposed advertising sign must accord with the provisions of clause 5.3 of Town Planning Scheme No.2. Furthermore, a Sign Licence application is required to be submitted to Building Services, pursuant to the Council's Signs, Hoardings and Bill Posting Local-Law.	An assessment against policy 3.3.1 is provided in this report.
4.9 Need for child care premises	
Where, in the opinion of the Manager, Statutory Planning, a proposed Child Care Premises may have an adverse impact on	A needs assessment has been prepared at the request of the City, which demonstrates an established and growing need for childcare services.

the level of service to the community by similar existing or approved facilities, the proponent will be required to provide further information in regard to the level existing services in the locality, proximity to other Child Care Premises, population catchments for the proposed Child Care Premises and the number of primary schools and kindergartens in the locality, in relation to the development of the proposed new facility.	The proposed development will deliver 110 childcare places and will contribute toward meeting the growing demand.

5.5 PLANNING POLICY 3.3.1 CONTROL OF ADVERTISEMENTS

Proposals involving external signage are to be assessed against the City's Planning Policy 3.3.1.

The development includes the following signage:

- A 'Genius Childcare' insignia on the corner truncation fence, at 3.45m x 1.9m (identified as 'signage 01' on the plans). The sign is comprised of simple lettering and will face the school site (north-east direction).
- A 'Genius Childcare' insignia at the car park entry fence, at 1.7m x 0.7m (identified as 'signage 02' on the plans). The sign is comprised of simple lettering and acts as an entry sign.
- A 'Genius Childcare' insignia on the building facing the car park, at 2.5m x 1m (identified as 'signage 03' on the plans).

The information provided on the plans is considered to constitute a 'signage strategy' as is outlined in the policy.

In considering the suitability of the signs, the following factors warrant due regard:

- Only three signs are proposed, which is minimal and does not constitute a proliferation.
- The signs are all simplistic in nature, comprising the Genius insignia which relates to the proposed business.
- Each sign has a purpose and is integrated into the development through appropriate sizing, colour and design style.
- The largest sign does not face any residential properties and hence will have no impact on residential amenity.

The City's support for the signage is warranted.

6 CONCLUSION

This application for planning approval involves the establishment of a new Early Learning Centre future Lot 37 Bannerdale Road, Baldivis which would cater for up to 110 children.

The proposed development warrants the City's support for the following reasons:

- The facility is highly accessible to local residents and the wider catchment by virtue of its key corner location, and will build on the provision of essential community services for the local area.
- The proposal is consistent with the requirements of the local planning framework and will cater for the needs of the growing Baldivis community, which is undergoing significant residential subdivision and development.
- The proposed building is designed to a high architectural standard, incorporating contemporary residential design elements, and will enhance the streetscape quality of the local area.
- The proposal is supported by expert traffic and acoustic assessments, demonstrating its suitability.

It is respectfully requested that the Metro Outer JDAP grant approval to the proposed development.

APPENDIX 1

CERTIFICATE OF TITLE AND DEPOSITED PLAN

WESTERN AUSTRALIA

REGISTER NUMBER	
9101/DP419388	
DUPLICATE EDITION **N/A**	DATE DUPLICATE ISSUED **N/A**

VOLUME **2986** FOLIO **252**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 9101 ON DEPOSITED PLAN 419388

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

THE GLOW DEVELOPMENT (WA) PTY LTD OF 6 ARROWGRASS ROAD CANNING VALE WA 6155
(AF O461320) REGISTERED 31/7/2020

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR DRAINAGE PURPOSES TO LOCAL AUTHORITY - SEE DEPOSITED PLAN 419388 AS CREATED ON DEPOSITED PLAN 415069.
2. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT TO WATER CORPORATION FOR WATER AND SEWERAGE PURPOSES - SEE DEPOSITED PLAN 419388 AS CREATED ON DEPOSITED PLAN 415069.
3. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR ELECTRICITY PURPOSES TO ELECTRICITY NETWORKS CORPORATION - SEE DEPOSITED PLAN 419388 AS CREATED ON DEPOSITED PLAN 415069.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP419388
PREVIOUS TITLE:	2972-224
PROPERTY STREET ADDRESS:	NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ROCKINGHAM

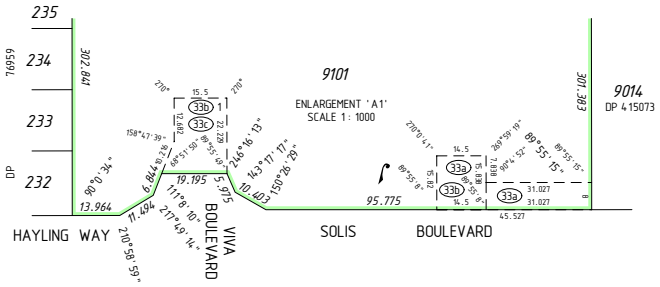
NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING O461320

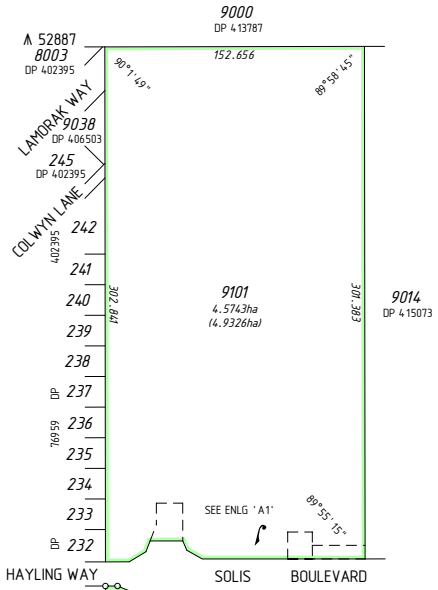
VERSION	AMENDMENT	AUTHORISED BY	DATE

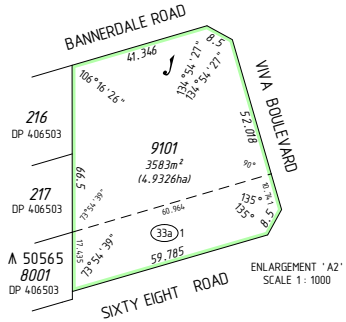
HELD BY LANDGATE IN DIGITAL FORMAT ONLY
FOR INTERESTS AND NOTIFICATIONS - SEE SHEET 2 OF 2
LIMITED IN DEPTH TO 60.96 METRES

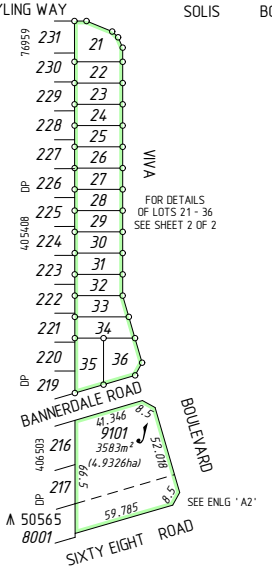
SURVEY CARRIED OUT UNDER REG 26A
SPECIAL SURVEY AREA GUIDELINES
SEE SURVEY SHEETS FOR SURVEY INFORMATION

USE ONLY THE SURVEY SHEET/S WHEN DETERMINING THE TRUE FINAL POSITION AND TYPE OF ALL SURVEY MARKS PLACED PERTAINING TO THIS PLAN.









REG 26A(1) - FINAL MARKING DEFERRED
(APPROVAL ID D039-20 DATED 6 JULY 2020, LANDGATE FILE 07070-2019)

SCALE 1 : 2000 @ A2
50 0 150
ALL DISTANCES ARE IN METRES

TYPE	FREEHOLD S.S.A. YES
PURPOSE	SUBDIVISION
PLAN OF	LOTS 21-36 AND 9101
FORMER TENURE	LOT 9010 ON DP 415069 C.T. 2972/224
LOCAL AUTHORITY	CITY OF ROCKINGHAM
LOCALITY	BALDIVIS
D.P.L.H. FILE	
FIELD RECORD	137187

SURVEYOR'S CERTIFICATE - REG 54

I, Nigel J. SIMPSON
hereby certify that this plan is accurate and is a correct representation of the -
(a) *survey, and/or
(b) *calculations from measurements recorded in the field records,
[* delete if inapplicable]
undertaken for the purposes of this plan and that it complies with the relevant written law(s) in relation to which it is lodged.

LICENSED SURVEYOR — Nigel Simpson 2020.07.15 13:37:01 +08'00' DATE

LODGED

16-Jul-20	$1563.00	1072552
DATE	FEE PAID	ASSESS No.

I.S.C. 15-7-2020

EXAMINED
R.LIST 16-7-2020 DATE

WESTERN AUSTRALIAN PLANNING COMMISSION
FILE 156194
Delegated under S. 16 P&D Act 2005 DATE 22-Jul-2020

IN ORDER FOR DEALINGS
SUBJECT TO

FOR INSPECTOR OF PLANS AND SURVEYS 22-7-2020 DATE

APPROVED REG26A (1) (4)
INSPECTOR OF PLANS AND SURVEYS (S. 18 Licensed Surveyors Act 1909) □1□0□2020 DATE

GOVERNMENT OF WESTERN AUSTRALIA
Landgate

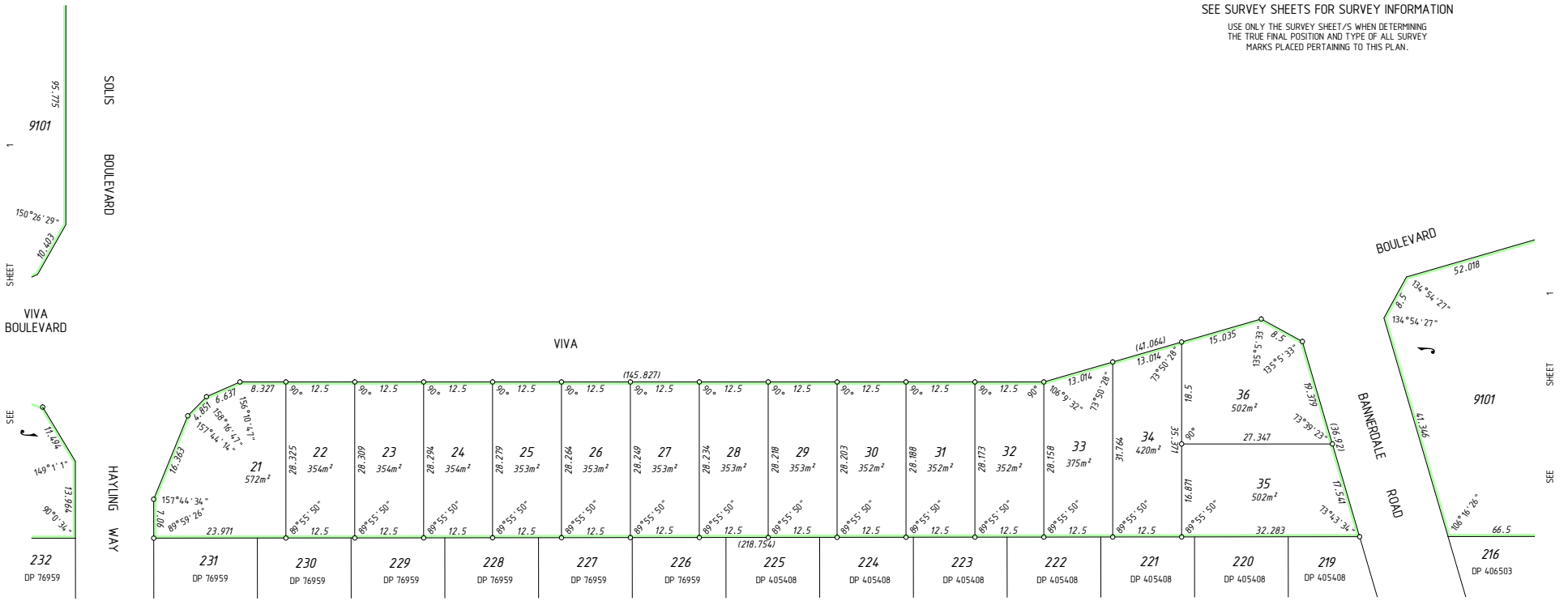
DEPOSITED PLAN
419388
SHEET 01 OF 02 SHEETS
(PLUS SURVEY SHEET(S))
VERSION 1

MNG
MC MULLEN NOLAN GROUP
PO Box 3526, Success W.A. 6964
Tel: (08) 6436 1599
Fax: (08) 6436 1500
Email: info@mngsurvey.com.au
MNG Ref : 101892dp-004c - Stage 1 - DP419388.CSD

FOR HEADING SEE SHEET 1

SURVEY CARRIED OUT UNDER REG 26A
SPECIAL SURVEY AREA GUIDELINES
SEE SURVEY SHEETS FOR SURVEY INFORMATION

USE ONLY THE SURVEY SHEET/S WHEN DETERMINING THE TRUE FINAL POSITION AND TYPE OF ALL SURVEY MARKS PLACED PERTAINING TO THIS PLAN.



INTERESTS AND NOTIFICATIONS

SUBJECT	PURPOSE	STATUTORY REFERENCE	ORIGIN	LAND BURDENED	BENEFIT TO	COMMENTS
(33a), (33a)1	EASEMENT (Drainage)	SEC 167 OF THE P.& D. ACT REG 33 (a)	DP 415069	LOT 9101	CITY OF ROCKINGHAM	
(33b), (33b)1	EASEMENT (WATER SUPPLY & SEWERAGE)	SEC 167 OF THE P.& D. ACT REG 33 (b)	DP 415069	LOT 9101	WATER CORPORATION	
(33c)	EASEMENT (Electricity Supply)	SEC 167 OF THE P.& D. ACT REG 33 (c)	DP 415069	LOT 9101	ELECTRICITY NETWORKS CORPORATION	

SCALE 1 : 500 @ A2
10 0 40
ALL DISTANCES ARE IN METRES

HELD BY LANDGATE IN DIGITAL FORMAT ONLY

MNG

MNG Ref : 101892dp-004c - Stage 1 - DP419388.CSD

Nigel Simpson
2020.07.15 13:37:10 +08'00'
LICENSED SURVEYOR DATE

GOVERNMENT OF WESTERN AUSTRALIA
Landgate

DEPOSITED PLAN
419388
SHEET 02 OF 02 SHEETS
VERSION 1

AMENDMENTS TABLE (SURVEY SHEETS ONLY)

VER.	AMENDMENT	AUTHORISED BY	DATE

FOR SURVEY INFORMATION ONLY

SURVEY INFORMATION COMPRISES
SURVEY SHEETS ..... A .....

SURVEY CARRIED OUT UNDER REG 26A
SPECIAL SURVEY AREA GUIDELINES

ALL BEARINGS AND DISTANCES ON THIS SHEET ARE THE RESULT OF LEAST SQUARES ADJUSTMENTS CARRIED OUT ON FIELD OBSERVATIONS

GRID DATUM IS PCG94

SURVEYOR'S CERTIFICATE - REG 54

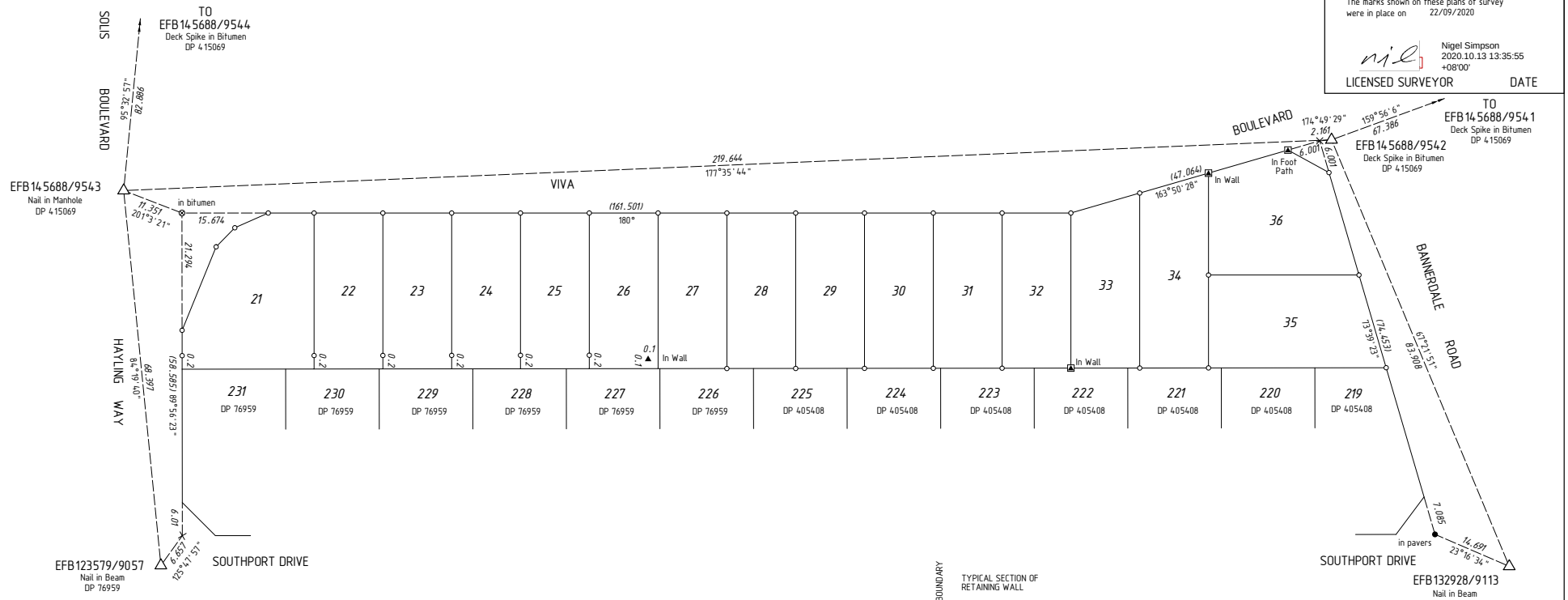
I, Nigel J. SIMPSON
hereby certify that this plan is accurate and is a correct representation of the -
(a) *survey, and/or
(b) *calculations from measurements recorded in the field records,
[* delete if inapplicable]
undertaken for the purposes of this plan and that it complies with the relevant written law(s) in relation to which it is lodged.

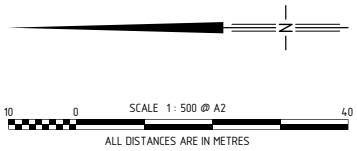
SURVEYOR'S CERTIFICATE - REG 55E(d)

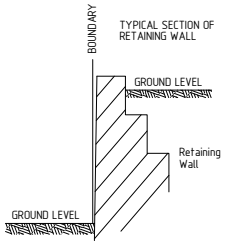
The marks shown on these plans of survey were in place on 22/09/2020

Nigel Simpson
2020.10.13 13:35:55 +08'00'

LICENSED SURVEYOR DATE







THIS SUBDIVISION CONTAINS RETAINING WALLS WHICH ARE LOCATED WITHIN THE HIGH LOTS.

LEGEND

- Standard Survey Mark (SSM)
- Permanent Survey Mark (PSM)
- Permanent Control Mark (PCM)
- Temporary Control Mark (TCM)
- Peg unless stated otherwise
- Nail
- Nail and Plate
- Rivet
- Spike
- Drill Hole
- Deck Spike
- Deck Spike and Plate

MNG

MNG Ref: 101892ss-005b

GOVERNMENT OF WESTERN AUSTRALIA

Landgate

DEPOSITED PLAN
419388
SURVEY SHEET A
VERSION 1

SURVEY SHEET PROCESSED
DATE: 18/01/2021 L.O.

HELD BY LANDGATE IN DIGITAL FORMAT ONLY

APPENDIX 2

NEEDS ASSESSMENT

Future Lot 37 Bannerdale Road, Baldivis, WA

Childcare Needs Assessment

August 2022

Executive Summary

This needs assessment has been prepared for a 110-place childcare centre at future Lot 37 Bannerdale Rd, Baldivis, WA. The site is located in one of Western Australia's fastest growing localities, coupled with a very attractive competitive environment which are indicators for the demand for childcare.

Location

The site is located in Baldivis (City of Rockingham), an urban growth area undergoing substantial residential land development.

The site has frontage to Sixty Eight Road, an important local transport route which connects to Baldivis Road (east) and Mandurah Road (west).

Competitive Landscape

Both the current and forecast competitive landscape for childcare within the Trade Area are considered very attractive.

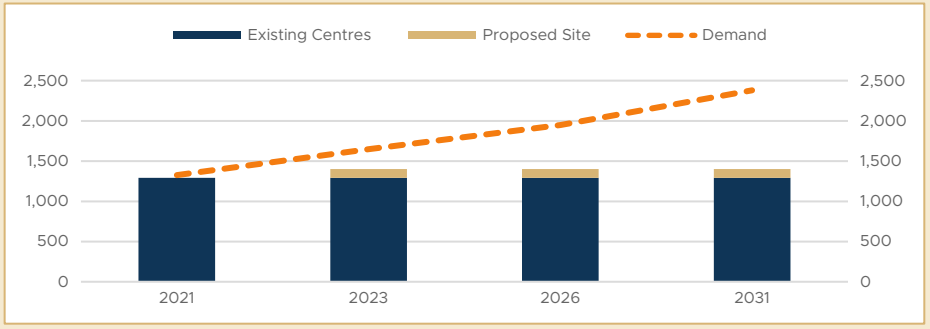
The rapidly growing population of Baldivis as well as trends in labour participation and childcare attendance call for an immediate demand for quality childcare providers.

Daily Demand of Childcare Places

1,648	2,381
By 2023	by 2031

Childcare Supply and Demand

Our analysis of the supply of and demand for childcare places indicates an ongoing and projected undersupply in the Trade Area. This is supported by an estimated childcare demand of 2,381 places by 2031.



Population & Demographics

The Trade Area surrounding the site is one of WA's fastest growing populations. With ongoing large-scale commercial and residential development planned (and underway) for the area, this trend is expected to continue. The resident population is typified by young families with high labour force participation.

Median Age of Residents

31 years

5 years below state average

Labour Force Participation

69 %

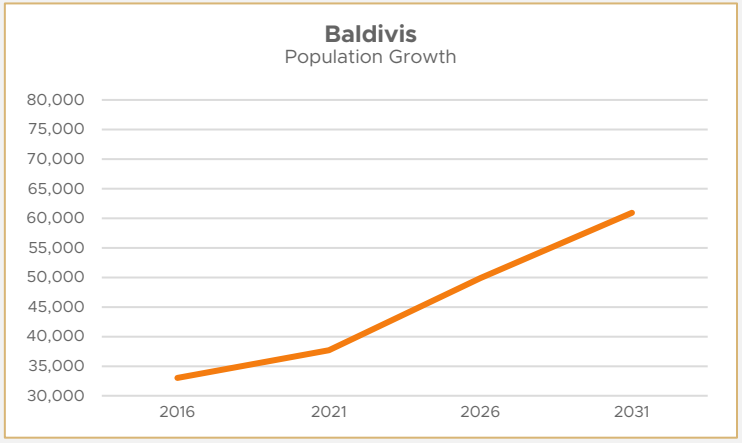
6% above state average

Annual Population Growth (2021-2026)

5.8%

Annual Population Growth (2026-2031)

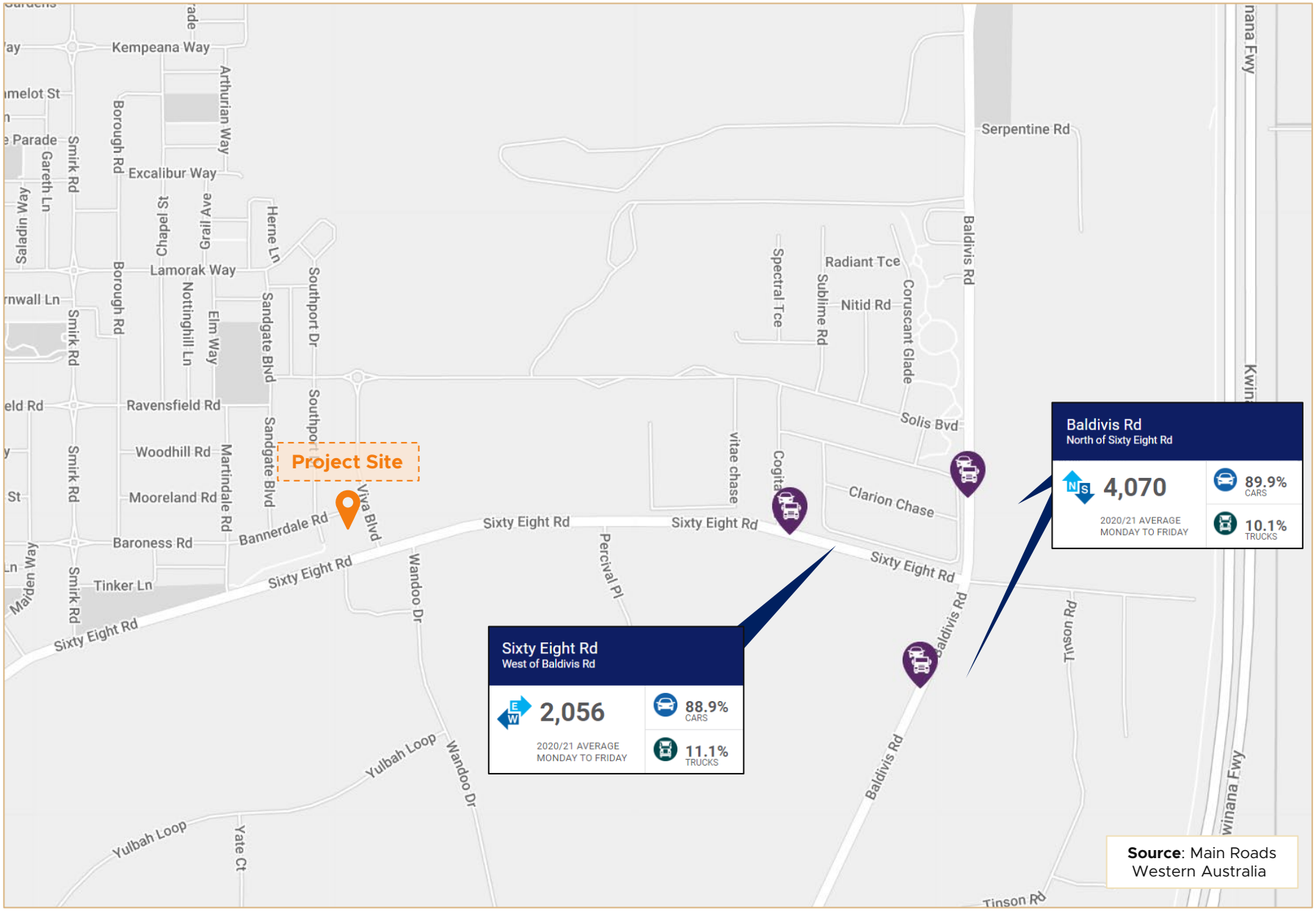
4.1%



Project Map


CARNARVON PARK
ELM RESERVE
SITE
RIDGE VIEW SECONDARY COLLEGE
VIVA BLVD
BANNERDALE ROAD
SIXTY EIGHT ROAD
MAIDEN RESERVE
SMIRK RESERVE
1:4841@A4
100 m

Traffic Map

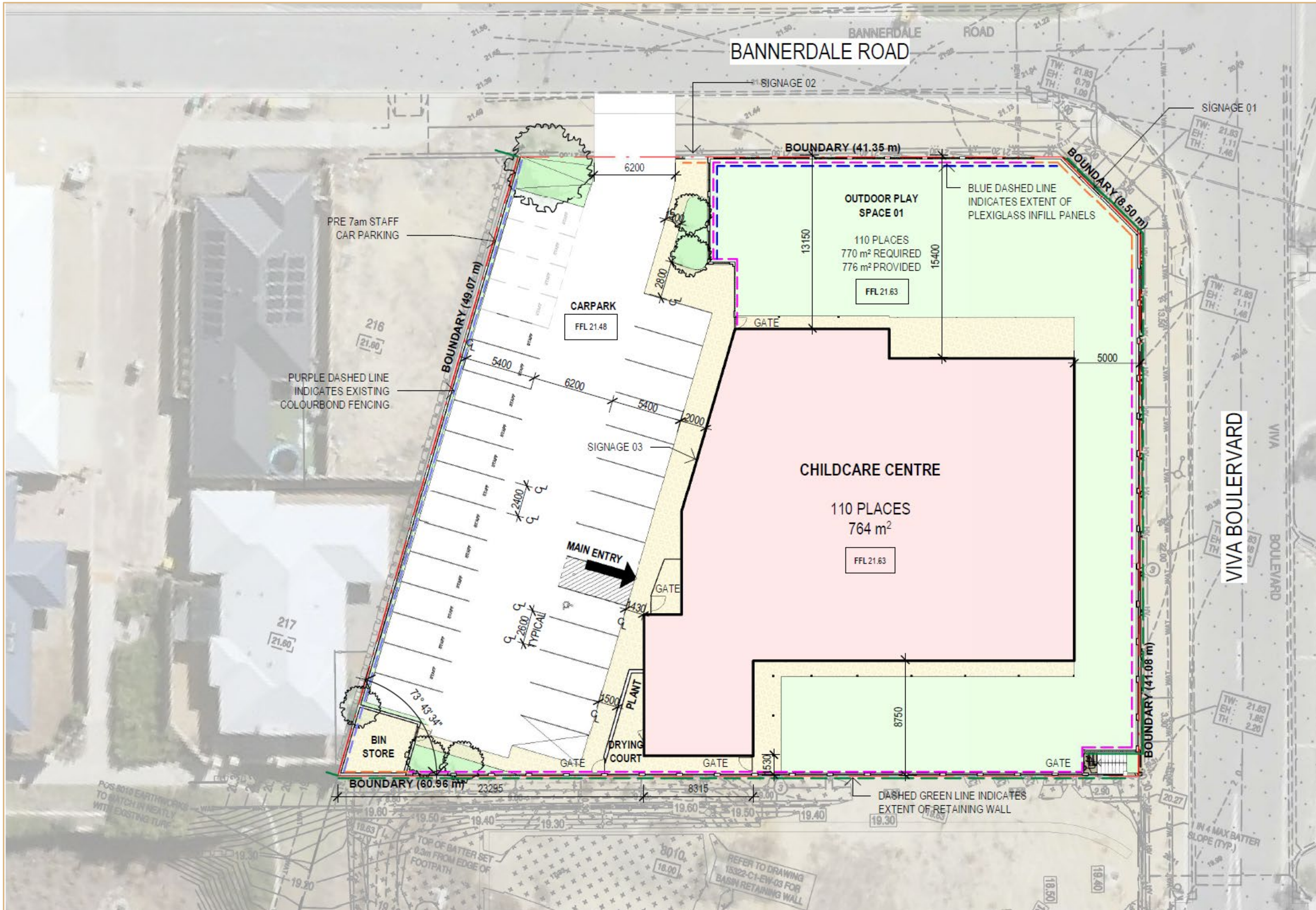


Source: Main Roads Western Australia

Proposed Development


Genius
Genius
BROLA
FALCONER

Site Plan



BANNERDALE ROAD
SIGNAGE 02
SIGNAGE 01
BOUNDARY (41.35 m)
BOUNDARY (8.50 m)
BOUNDARY (49.07 m)
BOUNDARY (41.08 m)
BOUNDARY (60.96 m)
BLUE DASHED LINE INDICATES EXTENT OF PLEXIGLASS INFILL PANELS
OUTDOOR PLAY SPACE 01
110 PLACES
770 m² REQUIRED
776 m² PROVIDED
FFL 21.63
PRE 7am STAFF CAR PARKING
CARPARK
FFL 21.48
PURPLE DASHED LINE INDICATES EXISTING COLOURBOND FENCING
SIGNAGE 03
CHILDCARE CENTRE
110 PLACES
764 m²
FFL 21.63
MAIN ENTRY
GATE
PLANT
DRYING COURT
BIN STORE
73° 43' 34"
DASHED GREEN LINE INDICATES EXTENT OF RETAINING WALL
VIVA BOULERVARD
6200
5400
6200
5400
2000
2800
13150
15400
5000
8750
2400
2600 TYPICAL
23295
8315

Childcare Industry

Childcare Industry

Industry Overview

The childcare industry services children under 12 years of age. Key services include long day care, family day care, occasional care, outside school hours care and vacation care.

Government assistance has been the key driver of childcare industry growth in the past five years. Implementation of the National Quality Framework (NQF) and the presence of non-profit centres has put pressure on operator profit margins. Private enterprises' strategy to pursue economies of scale and quality service differentiation (THINK and Green Leaves) to justify higher child day rates has been effective in maintaining margins.

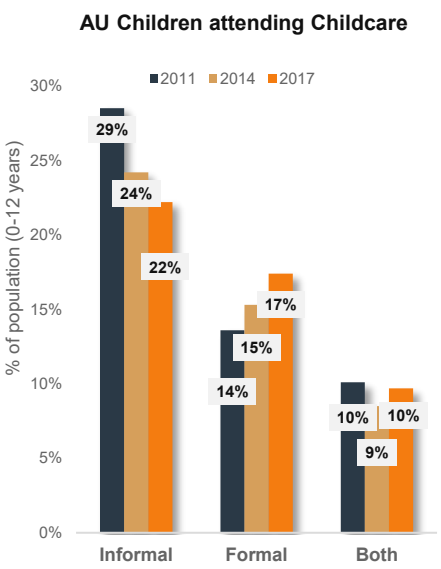
Industry Outlook

The childcare industry outlook is positive, with revenue forecast to grow at an annualised 3.4% to $17.1 billion over the five years through 2024-25. This will be predominantly driven by ongoing government assistance but also rising maternal workforce participation rates, ongoing demand for formal childcare arrangements, and higher fees.

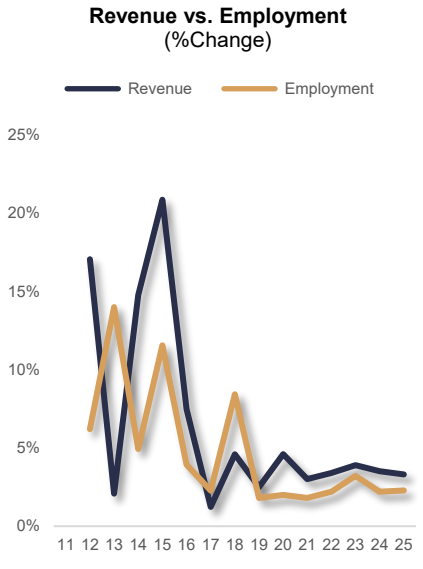
Although changes in government policy is a risk, any future government policy changes are expected to be positive for industry given the general social benefits, productivity gains, need for accessibility and push for maternal woman to return to work. The propensity for childcare operators labelling themselves as "Early Learning Centres" and integration into formal education curriculum frameworks further supports positive policy changes. In 2017, the number of children aged four and five enrolled in a preschool program offered by a long day care centre (53.5%) exceeded the number enrolled in a preschool. The role of childcare centres in providing early preschool education is growing and the childcare sector is increasingly competing with the preschool education industry. The industry is projected to outperform the wider economy over the 10 years through 2023-24.

For 2022, the Federal Government committed $1.7 billion of additional funding for Australian families with young children via boosting the Child Care Subsidy (CCS). This includes the removal of the annual rebate cap for families earning over $189,390 plus bolstering the current CCS by 30% for the second (or more) child attending an early learning service. This offers valuable support to the early learning sector, with unprecedented recognition of the importance of access to affordable, high-quality early learning services for all children and families across Australia.

Industry Snapshot



Source: ABS Data



Source: IBISWorld Childcare July 2019

Key Industry Drivers

- ✓ Levels of social assistance
- ✓ Labour force participation
- ✓ Population aged 14 and younger
- ✓ Household discretionary income
- ✓ Continued integration into Australia's education system.

Revenue	Annual growth (15-20)	Annual growth (20-25)
$14.5 bn	4.1%	3.4%

Businesses	Profit	Wages
11,582	$1.5 bn	$8.5 bn

Competitive Landscape

The Development Application is for a 110 place childcare centre at future Lot 37 Bannerdale Road, Baldivis. In assessing the need and sustainability of the project, our methodology is outlined below:

I. Define Trade Area

The proposed site is located within the Statistical Area 2 (SA2) of Baldivis North and Baldivis South (as defined by the ABS). Therefore, we have determined that the Trade Area for this study shall cover the aforementioned SA2s.

SA2 areas are functional areas that interact together socially and economically.

II. Demographics

The demographics of the Trade Area were assessed based on the recent 2021 ABS Census data, being the most comprehensive dataset available at the date of this presentation.

A Trade Area population forecast has been estimated based on ABS data, other credible independent population data sources and our own internal workings.

III. Childcare Supply

The available supply of childcare places within the Trade Area is studied.

Approved development applications for childcare centres within the defined Trade Area are also considered.

IV. Supply and Demand Forecast

The population forecast for the Trade Area along with other factors (detailed in succeeding sections) is compared with the existing and expected supply to assess the existing and projected need for childcare places within the Trade Area.

Trade Area

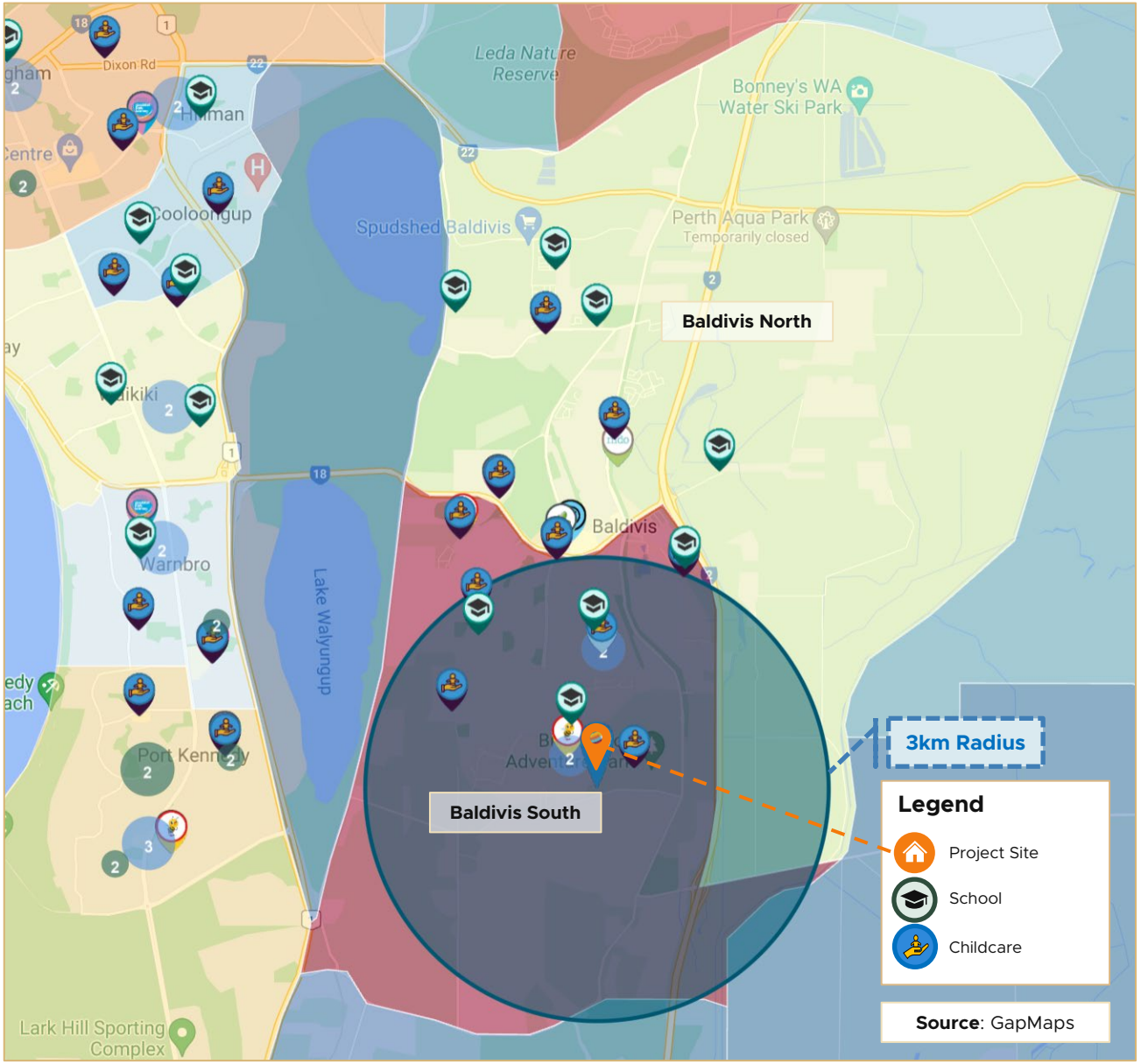
The Trade Area has been defined to include **Baldivis North** and **Baldivis South**, all located in the booming City of Rockingham.

It is also worth emphasising that the City of Rockingham is one of the fastest growing local governments in the south metropolitan area. It is also expected to be one of the largest local government areas in Western Australia within the next ten years.

Given the ongoing large-scale residential and commercial development planned for the area, the rising population growth trend is expected to continue in the foreseeable future.

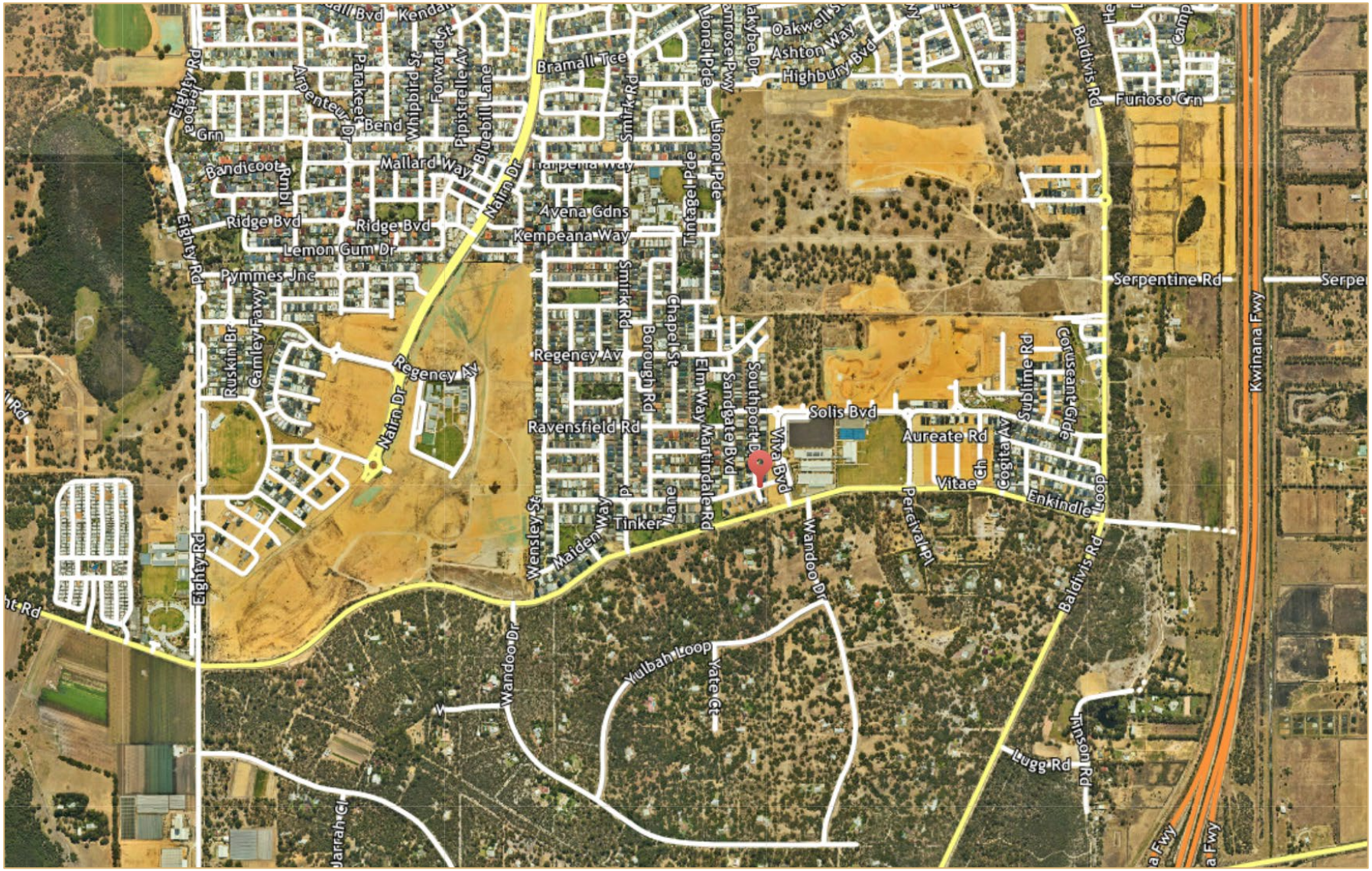
These growth indicators are suitable growth areas for quality childcare which is ideal for the area's rapidly increasing population.

Source: City of Rockingham Annual Report 2019-2020



Trade Area

It is noted that a significant portion of the anticipated growth in the Baldivis Trade Area is also within 1.5km of the proposed site and is highly likely to be developed in the near future.



Demographics

The tables below provide key demographic statistics of the Trade Area. The demographics of Baldivis's population is typified by **(1)** young families with **(2)** home mortgages, and **(3)** above average labour force participation. These are considered positive attributes for childcare demand as will be discussed further.

	Trade Area	WA	AU
Population			
Male	48.8%	50.0%	49.3%
Female	51.2%	50.0%	50.7%
Labour Participation			
Male	75.6%	67.8%	64.8%
Female	63.1%	58.0%	55.9%
Age Distribution			
0-4 years old	9.0%	6.5%	6.3%
5-14 years old	17.8%	12.7%	12.4%
15-19 years old	6.4%	6.1%	6.1%
20-24 years old	5.6%	6.5%	6.7%
25-34 years old	17.0%	15.3%	14.4%
35-44 years old	16.0%	13.9%	13.4%
45-54 years old	11.6%	13.5%	13.3%
55-64 years old	7.8%	11.4%	11.8%
65 years old and above	8.6%	14.0%	15.7%
Median Age	31	36	38

	Trade Area	WA	AU
Average Household Size	2.9	2.6	2.6
Median Household Income (weekly)	$2,096	$1,595	$1,438
Family Type			
Couple without children	28.6%	38.5%	37.8%
Couple with children	55.2%	57.9%	44.7%
One parent family	15.4%	9.7%	15.8%
Other family	0.9%	1.6%	1.7%
Household Composition			
Family household	82.5%	72.7%	71.3%
Single household	15.2%	23.6%	24.4%
Group household	2.3%	3.8%	4.3%
Household Status			
Owned outright	14.7%	28.5%	31.0%
Owned with mortgage	59.7%	39.7%	34.5%
Rent	23.1%	28.3%	30.9%
Others / Not stated	2.5%	3.5%	3.7%

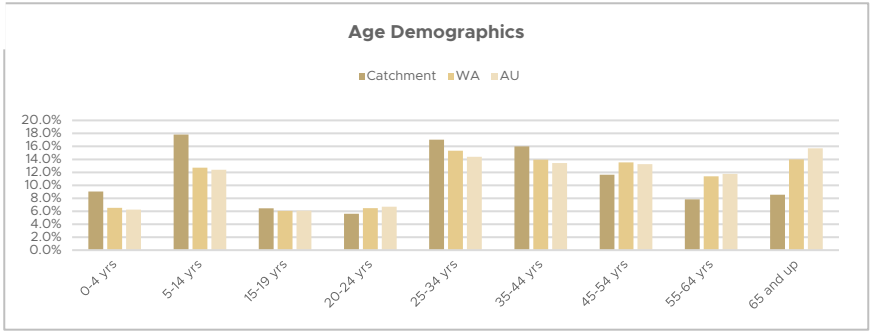
Source: 2021 ABS Census (partial as of July 2022), 2016 ABS Census

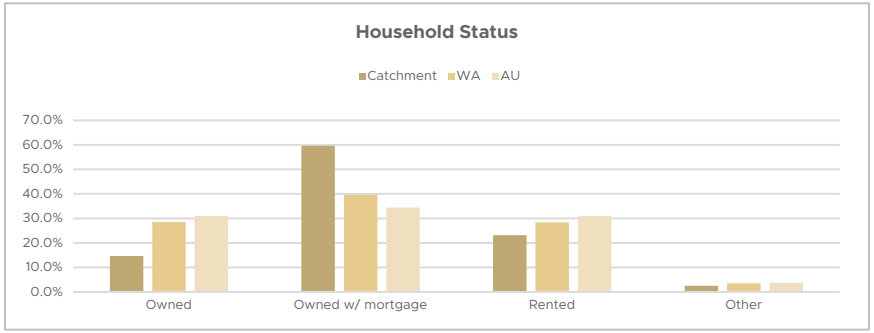
Home Mortgages & Labour Force Participation

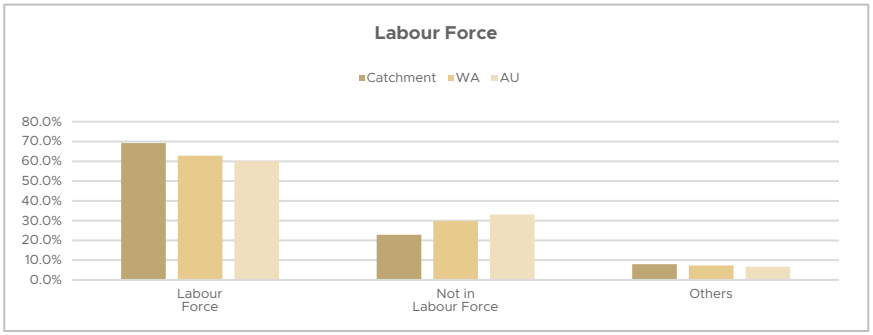
Studies have shown that men and women work more intensively the greater their outstanding debt.[1] Given that 59.7% of the Trade Area is composed of families with home mortgages, families are likely to be remain part of or join the labour force.

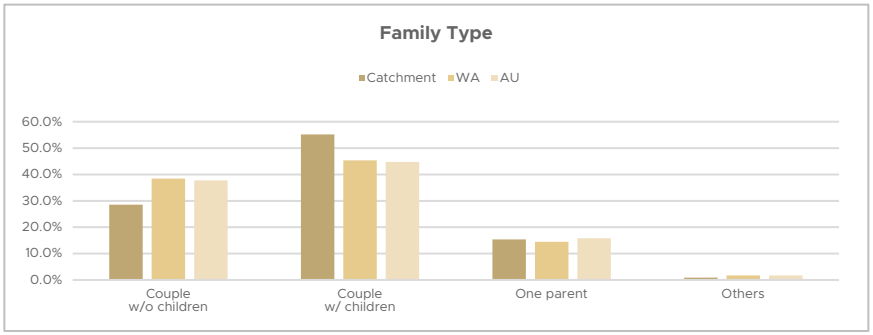
However, despite increasing female participation in the labour force, caring for children has remained the most common perceived barrier to participation in the labour market for women according to data from the Australian Bureau of Statistics (ABS).[2] Therefore, Increasing childcare supply in rapidly growing areas such as Baldivis is expected to improve overall labour participation which will positively affect demand for childcare.

Demographic Charts[3]



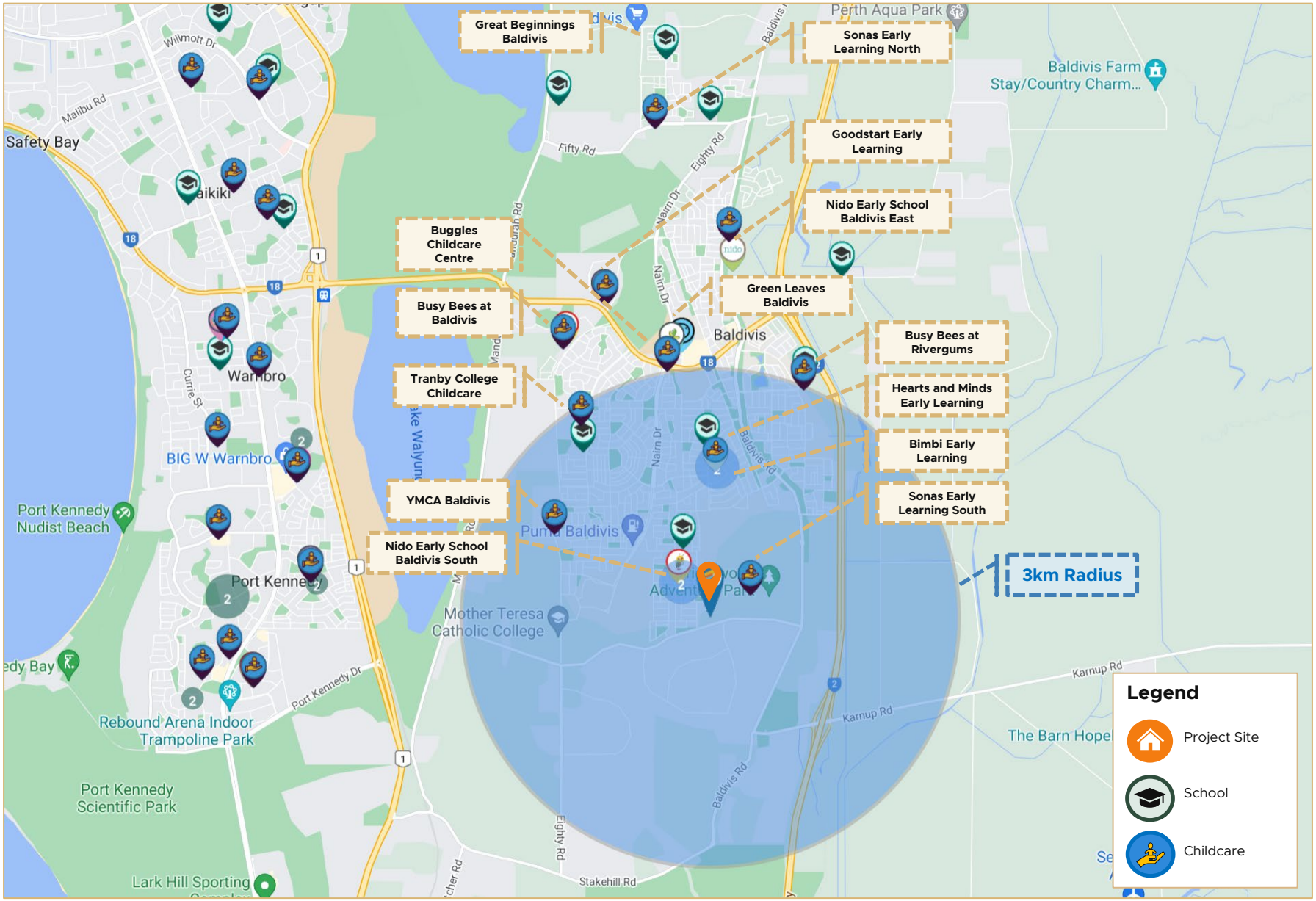






[1] House prices, household debt and labour supply in Australia, AHURI 2016
[2] Barriers and Incentives to Labour Force Participation, Australia, ABS 2020
[3] 2021 ABS Census (partial as of July 2022), 2016 ABS Census

Childcare Supply



Childcare Supply

The following table shows the existing centres in the designated Trade Area. Based on our review, there are no ongoing development approvals.

Existing Centres

Provider	Address	Places
Green Leaves Early Learning Baldivis	23 Minden Lane Baldivis, WA 6171	90
Great Beginnings Baldivis	2 Chilvers Street Baldivis, WA 6171	120
Buggles Early Learning and Kindy	3 Monaghan Close, Baldivis, WA 6171	92
Nido Early School Baldivis East	2 Olearia Street, Baldivis, WA 6171	82
Tranby College Child Care Centre	17 Tranby Drive off Eighty Road, Baldivis, WA 6171	57
Hearts and Minds Early Learning Baldivis	Statesman Parade, Baldivis, WA 6171	101
Nido Early School Baldivis South	51 Borough Road, Baldivis, WA 6171	104
Busy Bees at Rivergums	River Gums Estate, 2 Avoca Chase, Baldivis, WA 6171	95
Busy Bees at Baldivis	2 Hillier St, Baldivis, WA 6171	104
YMCA Baldivis Early Learning Centre	585 Eighty Road, Baldivis, WA 6171	92
Goodstart Early Learning Baldivis	276 Eighty Road, Baldivis, WA 6171	85
Sonas Early Learning & Care Baldivis North	24 Amalfi Chase, Baldivis, WA 6171	106
Sonas Early Learning & Care Baldivis South	78 Solis Boulevard, Baldivis, WA 6171	92
Bimbi Early Learning Centre	67 Makybe Rise, Baldivis, WA 6171	72
Total Places		**1,292**

Sources: Department of Planning, Lands & Heritage, careforkids.com.au

Demand Forecast

The following table details the estimated demand for long day care from the population of children aged under 0-12 years based on noted benchmarks for participation and attendance and the specific socio-demographic characteristics of the Trade Area. According to the most recent ABS study[1], 24.8% of children aged 0-12 years old attend childcare as of 2020**,** with the age group of 0-5 year-olds accounting for a significant proportion of such (see below).

It is also worth noting that participation and attendance rates for childcare in Western Australia have been consistently increasing over the past 10 years, indicating the strong and rising demand for childcare. Thus, projected participation and attendance rates have been used.

	2021	2023	2026	2031
Trade Area Population[2]	37,706	42,178	49,899	60,932
Children Aged 0-5 yrs old				
% of Children aged 0-5 yrs old[3]	11.0%	11.0%	11.0%	11.0%
Children aged 0-5 yrs old	4,143	4,634	5,483	6,695
Participation Rate[4]	35.3%	38.0%	38.0%	38.0%
Children attending Childcare (0-5 yrs old)	1,462	1,761	2,083	2,544
Children Aged 6-12 yrs old				
% of Children aged 6-12 yrs old[3]	10.8%	10.8%	10.8%	10.8%
Children aged 6-12 yrs old	4,054	4,535	5,365	6,551
Participation Rate[4]	14.1%	15.0%	15.0%	15.0%
Children attending Childcare (6-12 yrs old)	572	680	805	983
Total Children attending Childcare (0-12 yrs old)	**2,034**	**2,441**	**2,888**	**3,527**
Attendance Rate[5]	65.3%	67.5%	67.5%	67.5%
Estimated Demand	**1,327**	**1,648**	**1,950**	**2,381**

[1] Early Childhood Education and Care - Report on Gov't Services 2020 & 2021, ABS, Table 3A.14
[2] idcommunity, Population Summary, City of Rockingham
[3] 2021 ABS Census (partial as of July 2022)
[4] ABS, supra note 1, at Table 3A.14
[5] ABS, supra note 1, at Table 3A.16

Supply and Demand Forecast

Projected Under-Supply

The existing and proposed centres as identified within the Trade Area have been compared with the Estimated Demand taken from the previous section.

In conclusion, even with the proposed site, there is an existing **UNDER SUPPLY** of childcare places by an estimated 2.7% of total demand. Further, this under supply is expected to grow to up to a 41.1% deficit over estimated demand by the year 2031.

	2021	2023	2026	2031
Existing Supply [1]	1,292	1,292	1,292	1,292
Places with Dev't Approvals [1]	-	-	-	-
Proposed Project	**-**	**110**	**110**	**110**
Total Projected Supply	**1,292**	**1,402**	**1,402**	**1,402**
Less: Estimated Demand [2]	**(1,327)**	**(1,648)**	**(1,950)**	**(2,381)**
Over (Under) Supply (Places)	**(35)**	**(246)**	**(548)**	**(979)**
Over (Under) Supply (%)	**(2.7%)**	**(14.9%)**	**(28.1%)**	**(41.1%)**

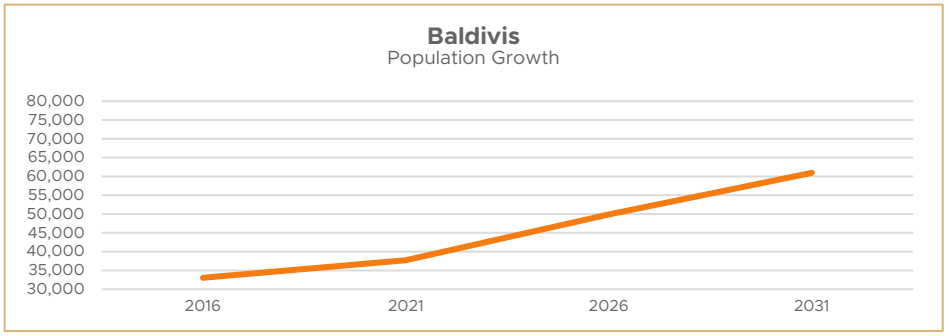
Children per Licensed Place

	2021	2023	2026	2031
Children aged 0-5 yrs old [2]	4,143	4,634	5,483	6,695
Children aged 6-12 yrs old [2]	4,054	4,535	5,365	6,551
Total Projected Supply	1,292	1,402	1,402	1,402
Children per Licensed Place (0-5 yrs old)	**3.2**	**3.3**	**3.9**	**4.8**
Children per Licensed Place (6-12 yrs old)	**3.1**	**3.2**	**3.8**	**4.7**

[1] Refer to Page 17.
[2] Refer to Page 18.

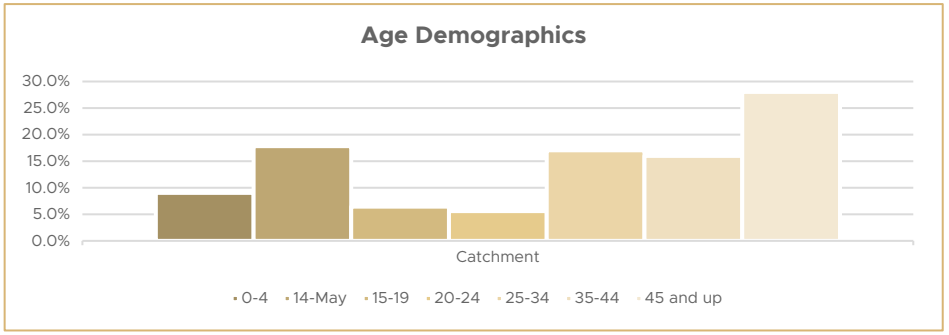
Rapidly-growing Area and Population

The Trade Area belongs to one of the fastest growing local areas in Western Australia. Population has been consistently increasing over the years and is expected to continue increasing at high rates over the next 10 years.



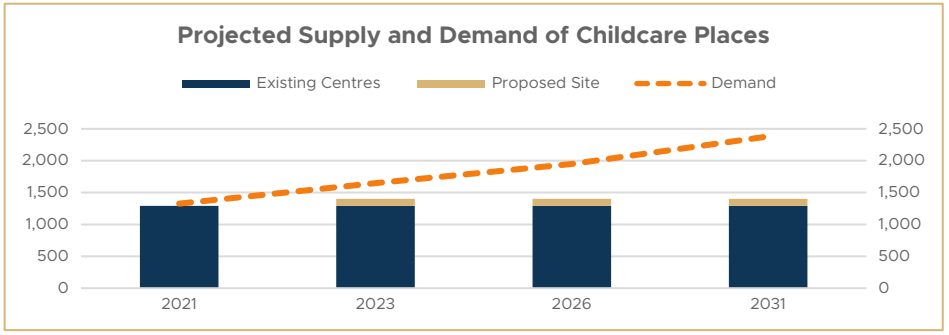
Young Families with High Labour Force Participation

The Trade Area is typified by young families with high labour force participation, both of which are higher than the WA state average. Further, the introduction of additional childcare is expected to improve female labour participation.



Projected Under-Supply of Childcare Places

Due to the rapidly growing population of the Trade Area and the rising demand for childcare, the current and forecasted supply of childcare is expected to be insufficient to cater to the area's needs.



CONCLUSION

In summary, a childcare is deemed to be a suitable and attractive complement to the growth of the Trade Area. Further, the proposed site is particularly suitable given the anticipated developments within 1.5 km of the site.

APPENDIX 3

DEVELOPMENT PLANS

01	COVER SHEET	3
02	SURVEY	4
03	LOCATION PLAN	1
04	SITE PLAN	4
05	FLOOR PLAN	2
06	ROOF PLAN	3
07	ELEVATIONS	2
08	STREET ELEVATIONS	3
09	3D VIEWS	2

BANNERDALE CHILDCARE CENTRE

LOT 37 BANNERDALE ROAD, BALDIVIS

JULY 2022

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
2		12/07/22
3		20/07/22

BROLA FALCONER
9/300 Rokeby Road, Subiaco, Western Australia
Telephone : 08 6382 0303 ABN 65 007 846 586
brownfalconer.com.au

JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

COVER SHEET

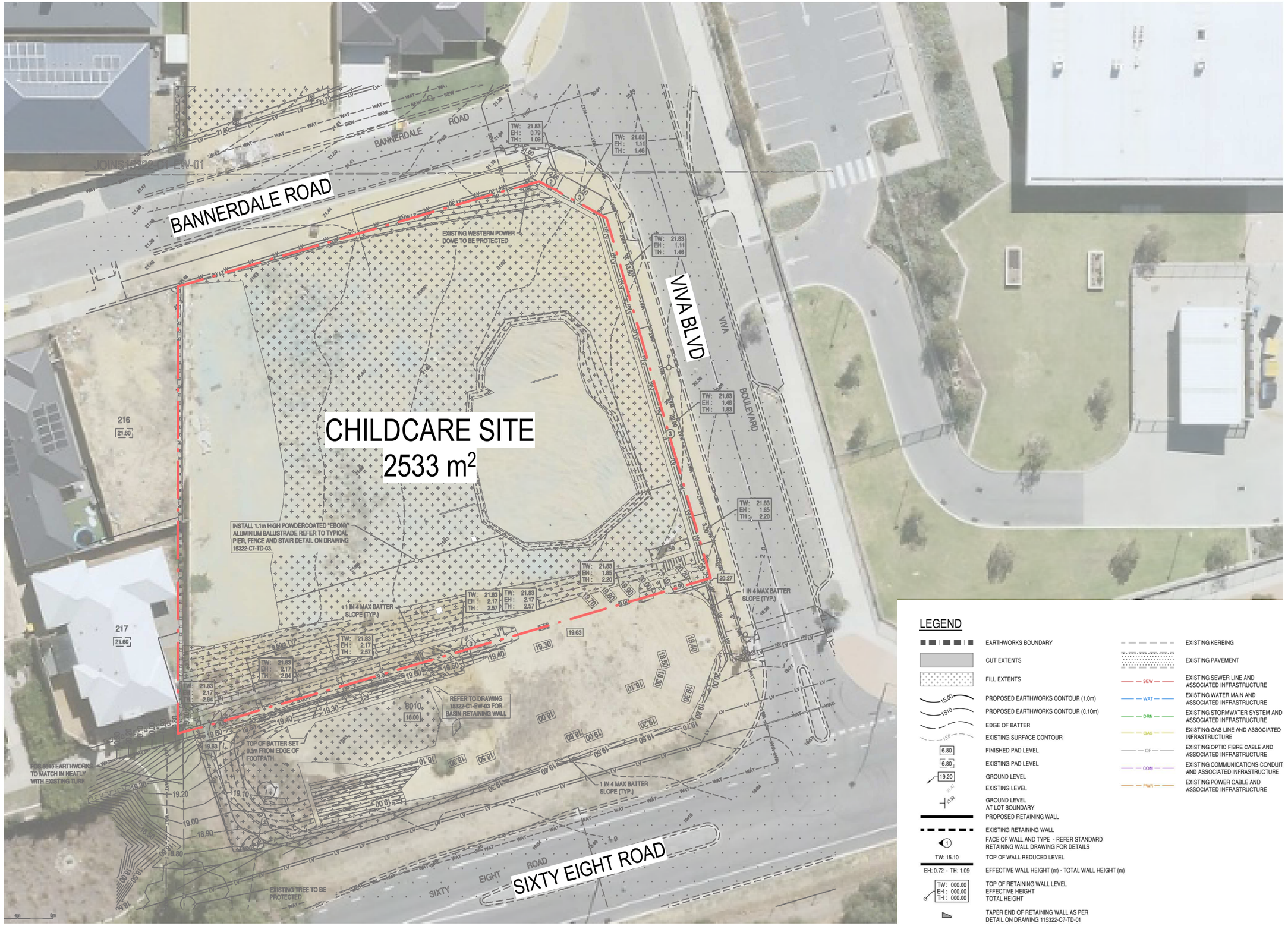
Scale
Drawn AD Checked MJ
Date 20/07/22
Job No. 2022047
Dwg No. **3570 01** Rev: **3** A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
4		25/07/22

BASED DATA
ORIGINATES FROM
THE APPROVED CIVIL
DESIGN DRAWINGS
PREPARED BY
PRITCHARD FRANCIES



LEGEND

- EARTHWORKS BOUNDARY
- CUT EXTENTS
- FILL EXTENTS
- PROPOSED EARTHWORKS CONTOUR (1.0m)
- PROPOSED EARTHWORKS CONTOUR (0.10m)
- EDGE OF BATTER
- EXISTING SURFACE CONTOUR
- FINISHED PAD LEVEL
- EXISTING PAD LEVEL
- GROUND LEVEL
- EXISTING LEVEL
- GROUND LEVEL AT LOT BOUNDARY
- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL
- FACE OF WALL AND TYPE - REFER STANDARD RETAINING WALL DRAWING FOR DETAILS
- TOP OF WALL REDUCED LEVEL
- EFFECTIVE WALL HEIGHT (m) - TOTAL WALL HEIGHT (m)
- TOP OF RETAINING WALL LEVEL EFFECTIVE HEIGHT TOTAL HEIGHT
- TAPER END OF RETAINING WALL AS PER DETAIL ON DRAWING 115322-C7-TD-01
- EXISTING KERBING
- EXISTING PAVEMENT
- EXISTING SEWER LINE AND ASSOCIATED INFRASTRUCTURE
- EXISTING WATER MAIN AND ASSOCIATED INFRASTRUCTURE
- EXISTING STORMWATER SYSTEM AND ASSOCIATED INFRASTRUCTURE
- EXISTING GAS LINE AND ASSOCIATED INFRASTRUCTURE
- EXISTING OPTIC FIBRE CABLE AND ASSOCIATED INFRASTRUCTURE
- EXISTING COMMUNICATIONS CONDUIT AND ASSOCIATED INFRASTRUCTURE
- EXISTING POWER CABLE AND ASSOCIATED INFRASTRUCTURE

SURVEY

1 : 400

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

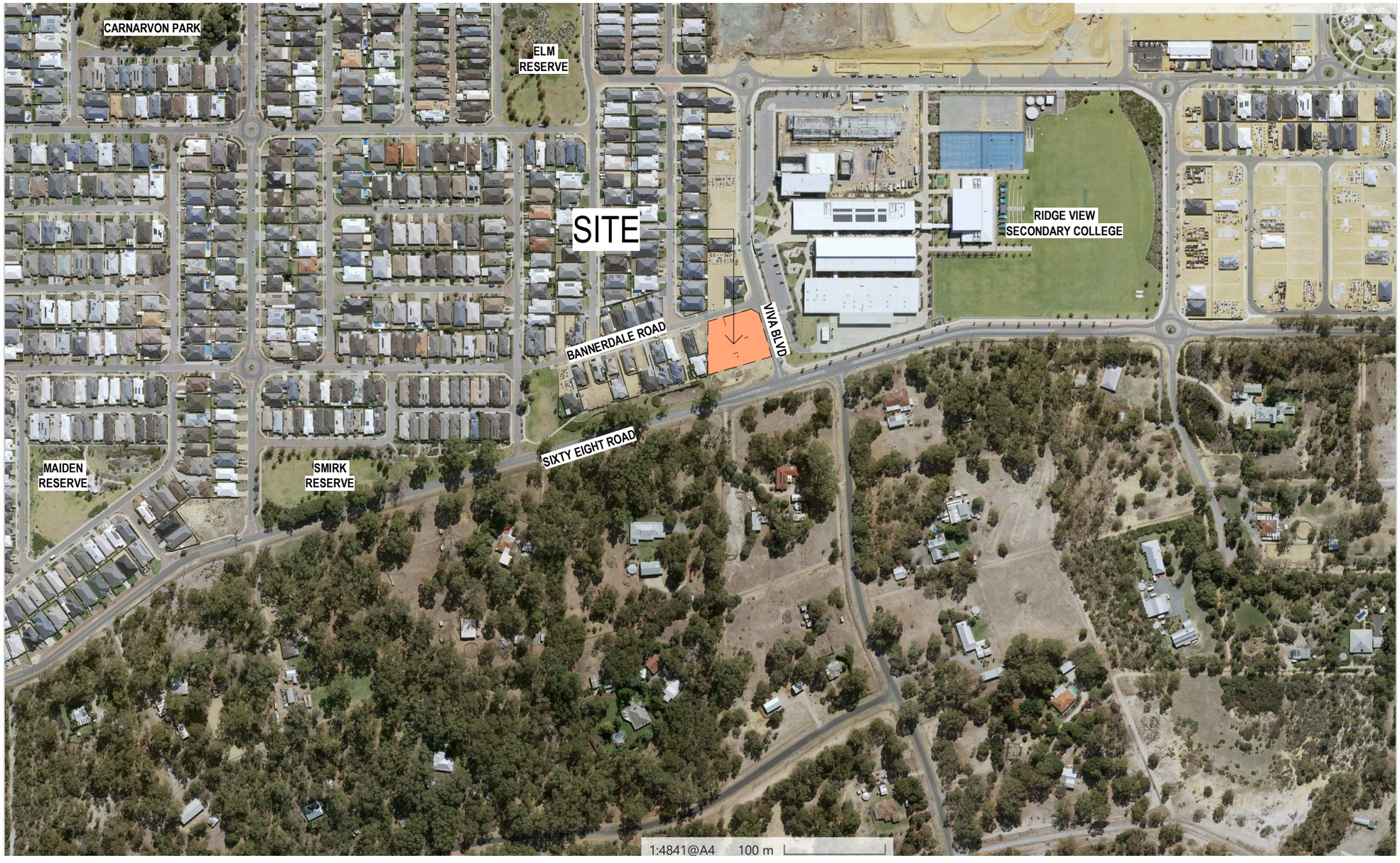
SURVEY

Scale	1 : 400		
Drawn	AD	Checked	MJ
Date	25/07/22		
Job No.	2022047		
Dwg No.	3570 02	Rev:	4 A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22



LOCATION PLAN

1 : 4000

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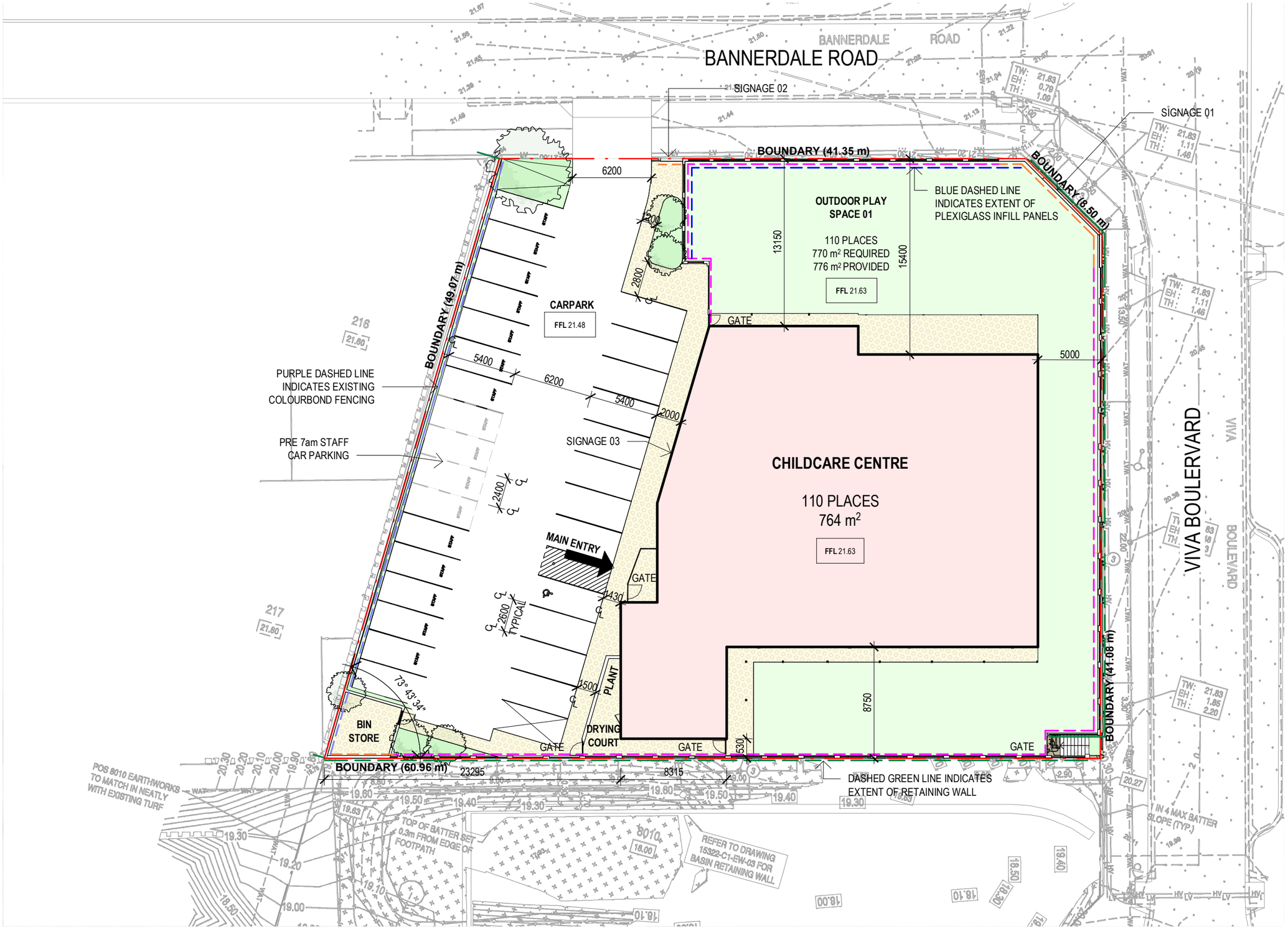
JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

LOCATION PLAN

Scale	1 : 4000		
Drawn	AD	Checked	MJ
Date	6/07/22		
Job No.	2022047		
Dwg No.	**3570 03**	Rev:	**1** A3 SHEET



SITE PLAN

1 : 300

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
0		6/07/22
1		12/07/22
2		20/07/22
3		25/07/22
4	PRE 7AM PARKING MOVED, FENCE HEIGHT CHANGE	04/08/22

DEVELOPMENT SUMMARY

SITE AREA:	2533 m²
BUILDING AREA	764 m²
BUILDING AREA PER PLACE	6.94
OUTDOOR PLAY AREA REQUIRED	770 m²
OUTDOOR PAY AREA PROVIDED	776 m²
REQUIRED VISITOR CAR BAYS	
1 BAY PER 8 PLACES	13.75
REQUIRED STAFF BAYS (1 PER EDUCATOR)	17
TOTAL REQUIRED BAYS	30.75
STAFF BAYS PROVIDED	17
VISITOR BAYS PROVIDED	13
TOTAL BAYS PROVIDED	30
SOFT LANDSCAPING	732 m²
% OF SITE SOFT LANDSCAPING	28.9%

FENCING LEGEND

FENCE TYPE 01

1800mm HIGH
LIMESTONE PIERS

1600mm HIGH INFIL
ALUMINIUM FENCING
IN BLACK

FENCE TYPE 02

1800mm HIGH SOLID
LIMESTONE WALL

ON TOP OF RETAINING
WALL AS REQUIRED

FENCE TYPE 03

2m HIGH NEW
COLOURBOND FENCE

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

SITE PLAN

Scale	As indicated		
Drawn	AD	Checked	MJ
Date	04/08/22		
Job No.	2022047		
Dwg No.	3570 04	Rev: 4	A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
2		12/07/22

GROUND FLOOR PLAN

1 : 200

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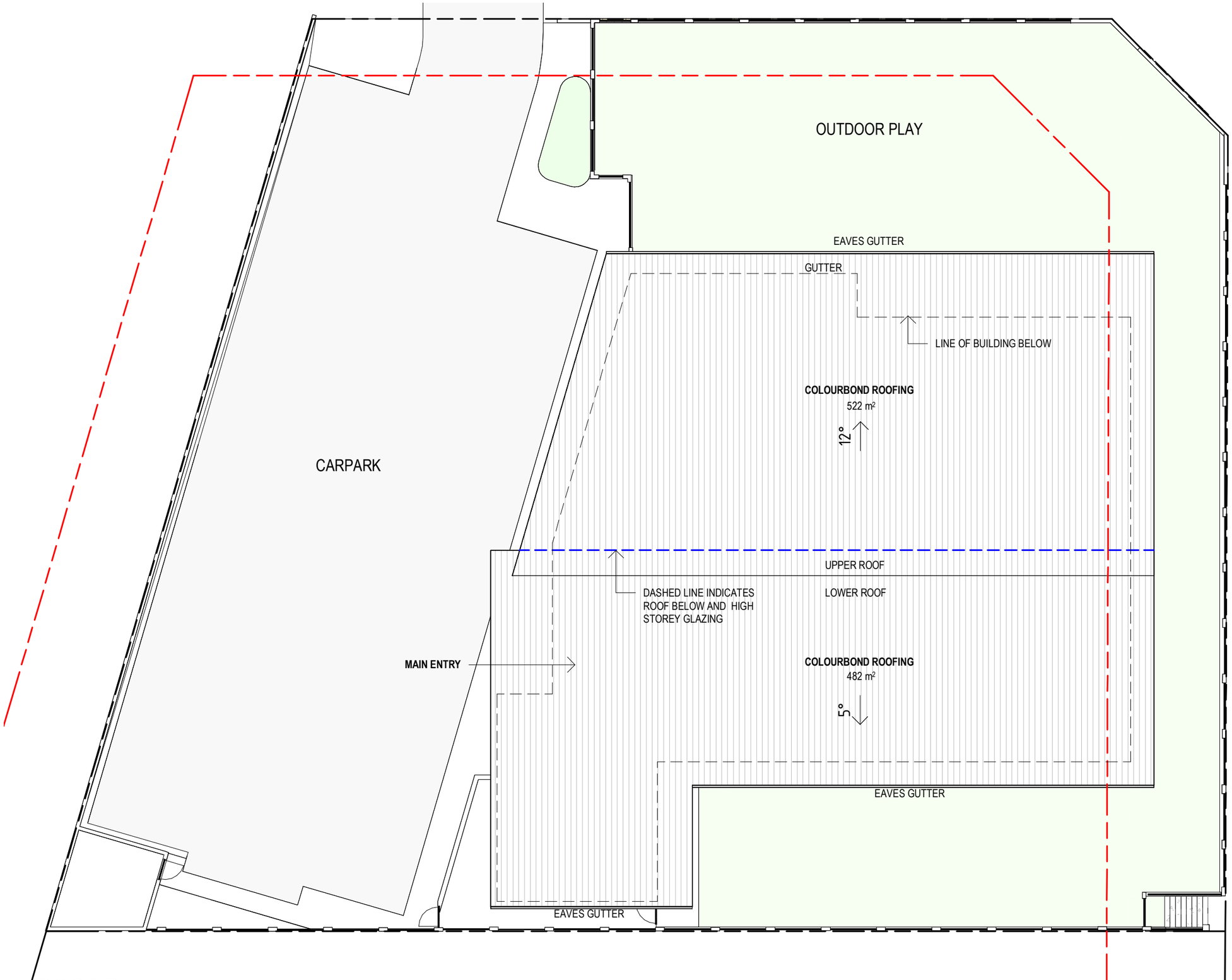
JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

FLOOR PLAN

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	12/07/22		
Job No.	2022047		
Dwg No.	**3570 05**	Rev:	**2** A3 SHEET



1 - ROOF PLAN

1 : 200

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
3		20/07/22

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

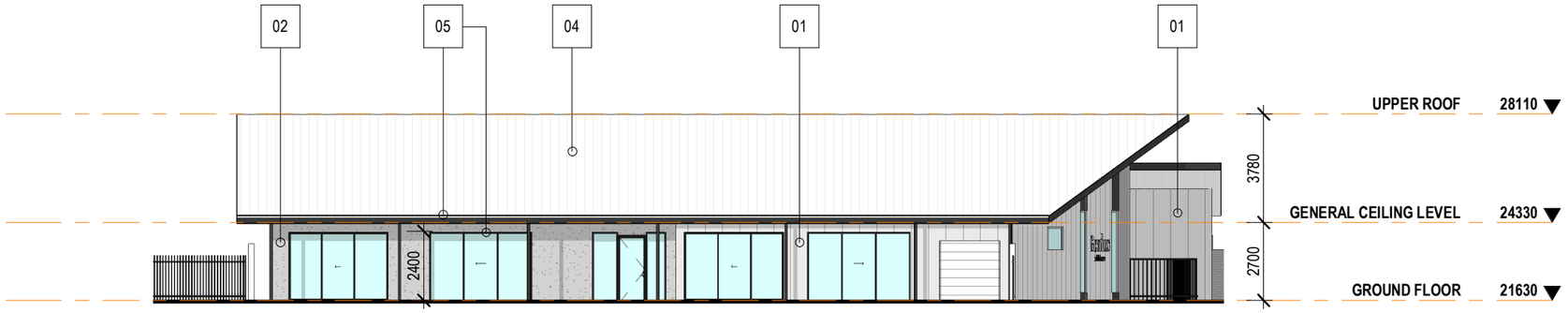
ROOF PLAN

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	20/07/22		
Job No.	2022047		
Dwg No.	**3570 06**	Rev: **3**	A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
2		12/07/22



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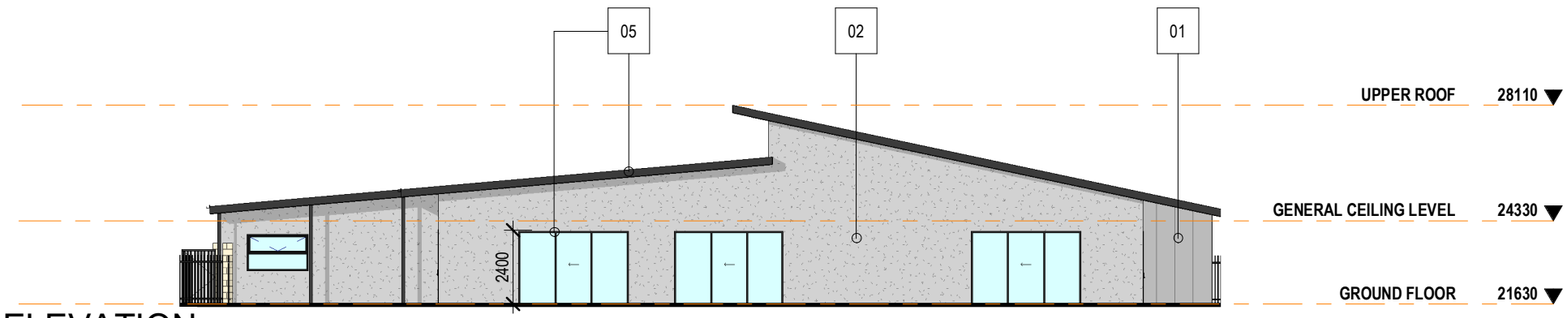

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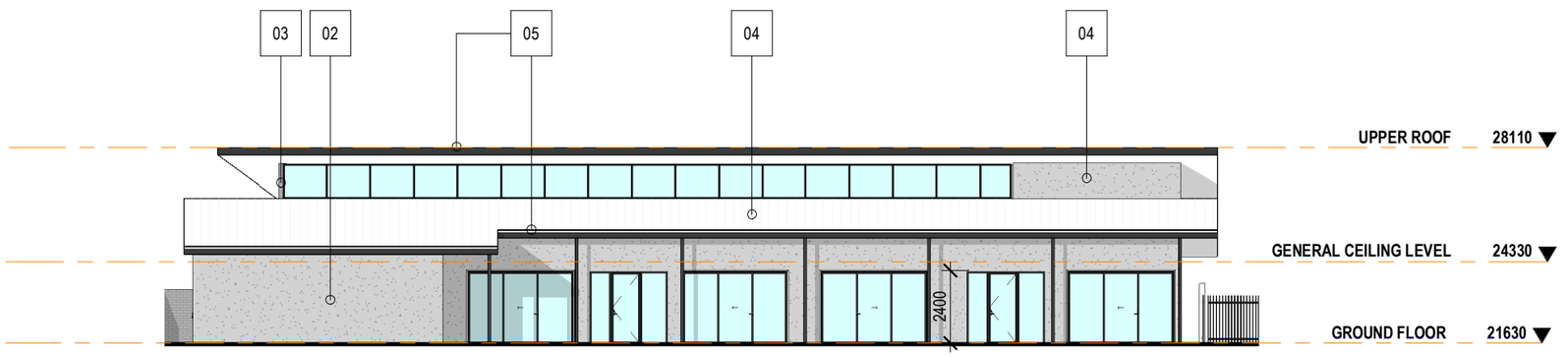

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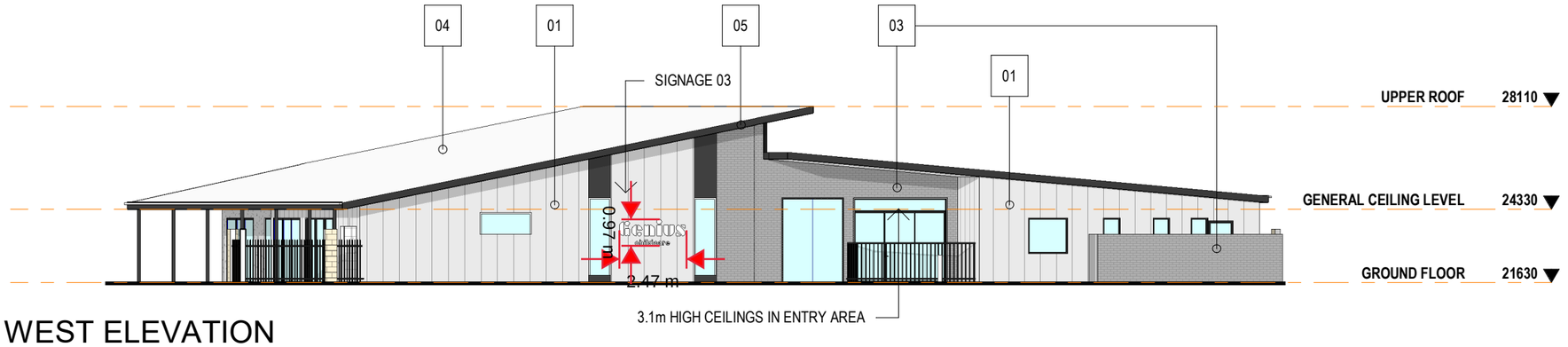

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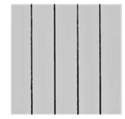
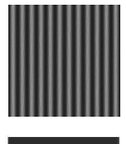


01 VERTICAL AXON CLADDING
COLOUR: LIGHT GREY

02 DURATEX CLADDING
ACROTEX FINISH
COLOUR: GREY

03 BRICK FACE
COLOUR: STEEL



04 COLOURBOND METAL
COLOUR: MONUMENT

05 ALUMINIUM DOORS & WINDOW FRAMES, FASCIAS,COLUMNS AND SOFFITS
COLOUR: BLACK

06 LIMESTONE FENCING
PIERS AND RETAINING WALLS

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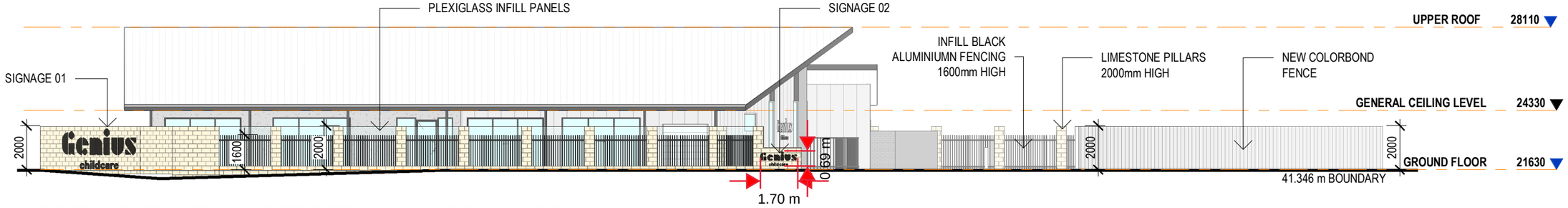
JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

ELEVATIONS

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	12/07/22		
Job No.	2022047		
Dwg No.	3570 07	Rev:	2 A3 SHEET



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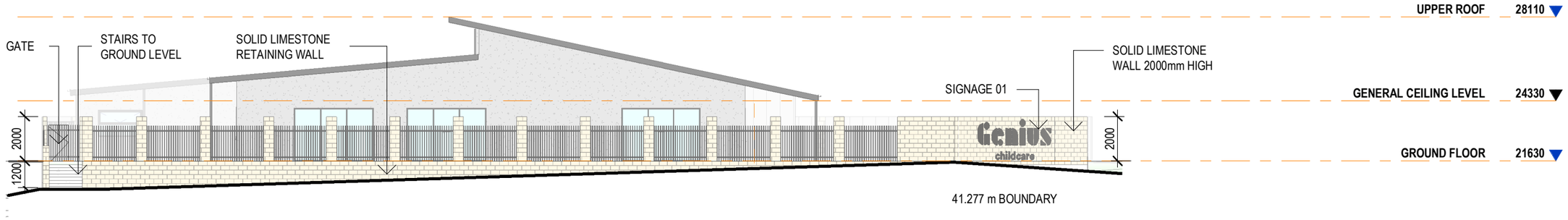

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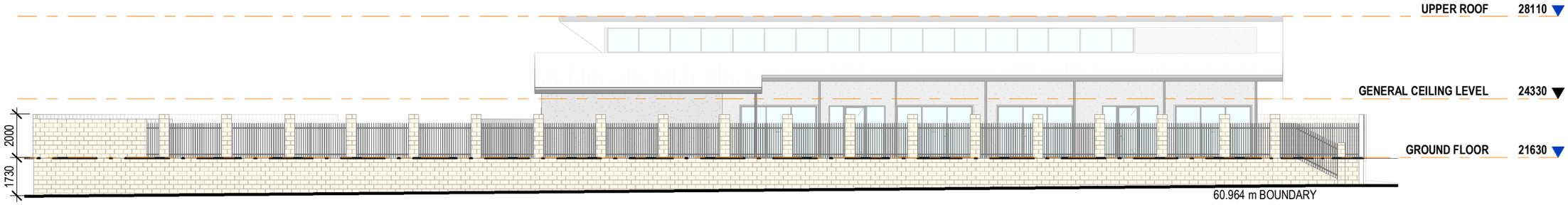

SOUTH ELEVATION STREET

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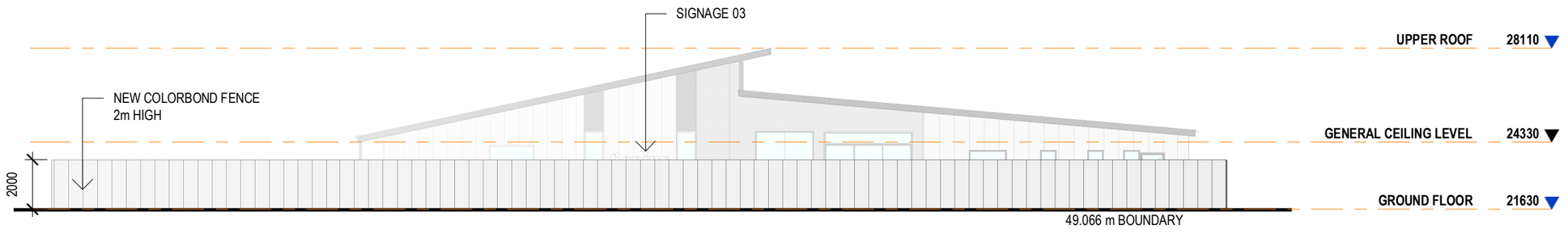

WEST ELEVATION STREET

1 : 200

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
0		6/07/22
1		12/07/22
2		20/07/22
3	PRE 7AM PARKING MOVED, FENCE HEIGHT CHANGE	04/08/22

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

STREET ELEVATIONS

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	04/08/22		
Job No.	2022047		
Dwg No.	3570 08	Rev:	3 A3 SHEET

DA ISSUE

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Rev.	Amendment	Date
1		6/07/22
2		12/07/22

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

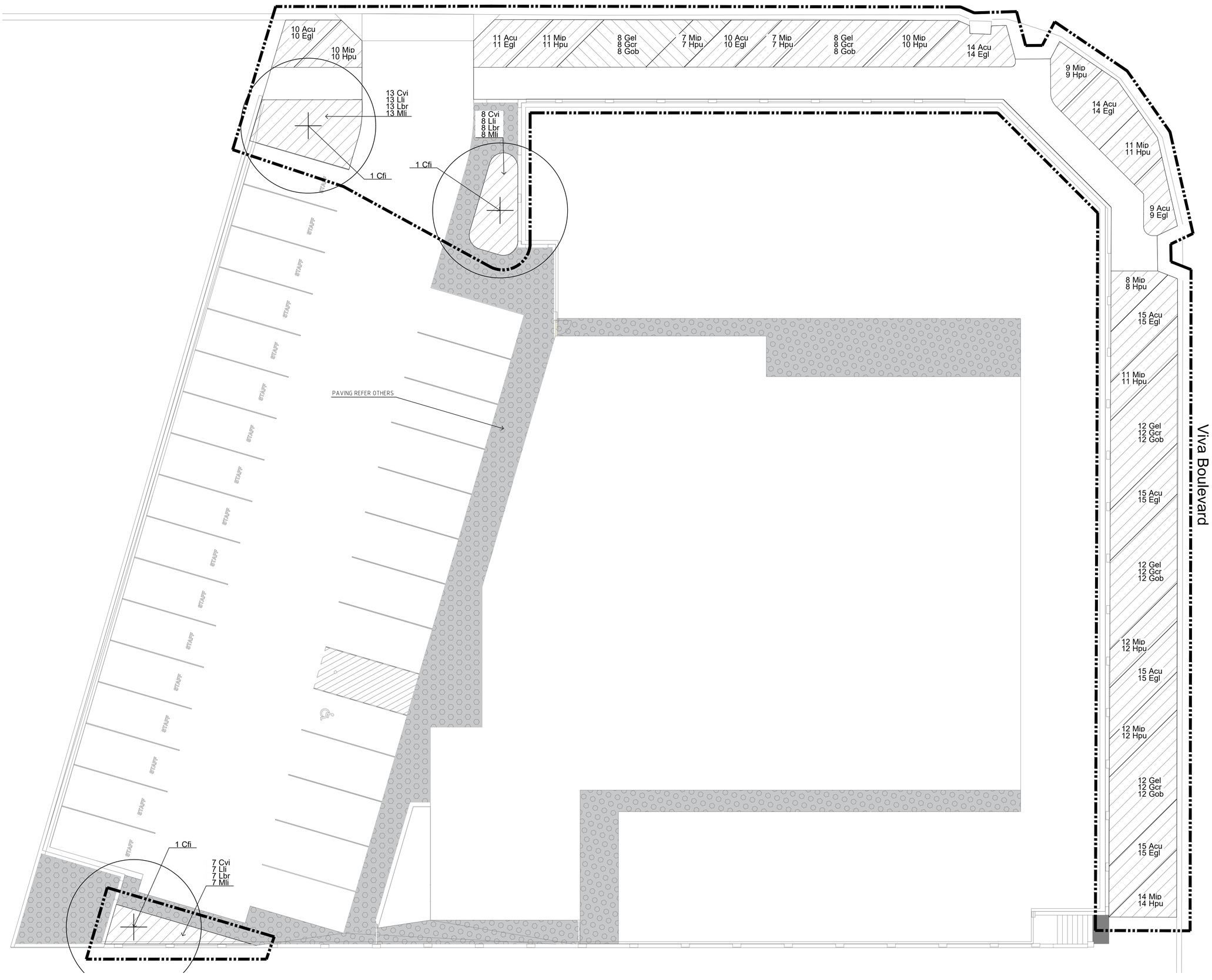
3D VIEWS

Scale
Drawn AD Checked MJ
Date 12/07/22
Job No. 2022047
Dwg No. **3570 09** Rev: **2** A3 SHEET

APPENDIX 4

LANDSCAPE PLAN

Bannerdale Road



NOTES

ALL DRAWINGS TO BE READ IN COLOUR.

ALL COMPLETED WORKS TO BE PROTECTED AND MAKE GOOD ANY DAMAGE TO EXISTING WORKS CAUSED AS PART OF THIS CONTRACT. ALL WORK WITHIN DRIP LINES OF EXISTING TREES IS TO BE DONE BY HAND.

ALL SET OUT IS TO BE DONE BY A LICENSED SURVEYOR. THESE DRAWINGS WILL BE MADE AVAILABLE DIGITALLY TO THE SURVEYOR UPON REQUEST.

FIGURED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. INSETS AND DETAIL DRAWINGS TAKE PRECEDENCE & NOTIFY SUPERINTENDENT OF ANY IDENTIFIED DISCREPANCIES PRIOR TO UNDERTAKING WORK.

WHERE MIXED PLANTING IS PROPOSED PLANT IN GROUPS OF 3, 5 OR 7 OF THE SAME SPECIES.

LEGEND

EXTENT OF WORKS

LOW SHRUB PLANTING

PROPOSED TREE

Plant Schedule

Symbol	Botanical Name	Pot Size	Quantity
TREES			
Cfi	*Corymbia ficifolia*	100L	3
SHRUBS			
Cvi	*Callistemon viminalis 'Little John'*	130ml	28
Gel	*Grevillea ellabella*	130ml	52
Lli	*Lomandra 'Lime tuff'*	130ml	28
Lbr	*Leucophyta brownii*	130ml	28
Mli	*Melalueca 'little nessie'*	130ml	28
GROUND COVERS			
Acu	*Adenanthos cuneatus*	130ml	128
Egl	*Eremophila glabra prostrate*	130ml	128
Gcr	*Grevillea crithmifolia prostrate*	130ml	52
Gob	*Grevillea obtusifolia 'Gingin Gem'*	130ml	52
Hpu	*Hemiandra pungens*	130ml	122
Mip	*Myoporum insulare prostrate*	130ml	122

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REV	DATE	ISSUE
A	28/07/2022	ISSUE FOR REVIEW

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NORTH

PROJECT: 37 BANNERDALE ROAD, BALDIVIS

CLIENT: APEX PLANNING

PROJECT STAGE: DOCUMENTATION

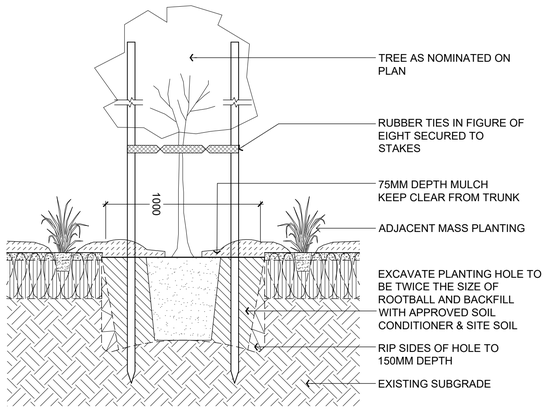
DESIGNED	DRAWN	CHECKED	PROJECT No.	ORIG. SIZE
NS	NS	PJ	4756-22	A1

DRAWING TITLE: PLANTING PLAN

SCALE: SCALE 1:100 @ A1

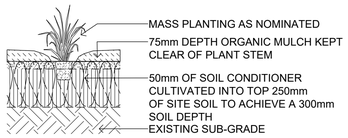
DRAWING No.: L1-1

0 1 2 3 4 5 10m



01 TYPICAL TREE PLANTING

TYPICAL SECTION SCALE 1:20 @ A1



02 TYPICAL PLANTING

TYPICAL SECTION SCALE 1:20 @ A1

NOTES

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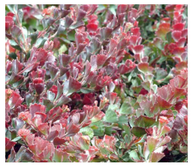
WHERE MIXED PLANTING IS PROPOSED PLANT IN GROUPS OF 3, 5 OR 7 OF THE SAME SPECIES.

Plant Palette Imagery



Adenanthos cuneatus

Callistemon 'Little John'

Eremophila glabra prostrate

Grevillea crithmifolia prostrate

Grevillea ellabella

Grevillea obtusifolia 'Gingin Gem'

Hemiandra pungens

Leucophyta brownii

Lomandra 'Lime Tuff'

Melaleuca nesophila ' little nessie'

Myoporum insulare prostrate

Corymbia ficifolia

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REV	DATE	ISSUE
A	28/07/2022	ISSUE FOR REVIEW

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NORTH

PROJECT
37 BANNERDALE ROAD, BALDIVIS

CLIENT
APEX PLANNING

PROJECT STAGE
DOCUMENTATION

DESIGNED	DRAWN	CHECKED	PROJECT No.	ORIG. SIZE
NS	NS	PJ	4756-22	A1

DRAWING TITLE
LANDSCAPE DETAILS

SCALE
SCALE AS SHOWN

DRAWING No.
L1-2

0 0 0 0 0 0 0m

APPENDIX 5

TRAFFIC ASSESSMENT

Baldivis Childcare Centre
(Lot 37 Bannerdale Road, Baldivis)

TRANSPORT IMPACT STATEMENT

email: info@flyt.com.au twitter.com/flytplan web: www.flyt.com.au

PROJECT	81113-750-FLYT-TRS-0002 Rev1			
Revision	Description	Originator	Review	Date
0	Draft	MDR	CXS	03/08/2022
1	Final	MDR	CXS	04/08/2022

Contents

1. INTRODUCTION

1.1 Development Proposals

This Transport Impact Statement (TIS) has been prepared by Flyt in support of the proposed development of the current vacant land at Lot 37 Bannerdale Road, Baldivis – into a Childcare Centre.

The proposed development of the existing vacant land into a Childcare Centre can be summarised as comprising:

- Childcare Centre to accommodate 110 children
  - 8 children between the ages of 0-1 years
  - 12 children between the ages of 1-2 years
  - 30 children between the ages of 2-3 years
  - 60 children between the ages of 3-5 years
- Childcare Centre to be serviced under the following staff arrangements:
  - 17 educators (Monday-Friday, full-time)
  - Additional part-time educators covering staff breaks (Monday-Friday, 10am-3pm)
  - 1 chef (Monday-Friday, half day)
  - 1 centre area manager (visits site once or twice a week between 10am-3pm)

1.2 Site Context

The site of the proposed Baldivis Childcare centre is located at Lot 37 Bannerdale Road in Baldivis. The site has boundaries with Bannerdale Road to the north, Viva Boulevard to the east, public open space to the south and existing residential development to the west.

The site is located at the southern end of Baldivis, opposite Ridge View Secondary College and close to the intersection of Sixty Eight Road and Viva Boulevard. The site is also a short distance from Tuart Rise Primary School and Pine View Primary School.

As shown in Figure 1 the site of the proposed Baldivis Childcare Centre is located close to Baldivis South Community Centre and a number of public reserves, including Elm Reserve, Smirk Reserve, Maiden Reserve, Carnarvon Park and Atherstone Reserve.

Figure 1 Location of the proposed Baldivis Childcare Centre (source: Brown Falconer Architects, 2022)

1.3 Transport Impact Statement

This TIS has been prepared in accordance with the WA Planning Commission's (WAPC) *Transport Impact Assessment Guidelines – Volume 4 Individual Developments* (2016). The Guidelines promote a three level assessment process, where the required level of assessment is dependent on the likely level of impact, as follows (as shown in Figure 2):

- Low impact – less than 10 peak hour trips, no assessment required.
- Moderate impact – between 10 and 100 peak hour trips, Transport Impact Statement required.
- High impact – more than 100 peak hour trips, full Transport Impact Assessment required.

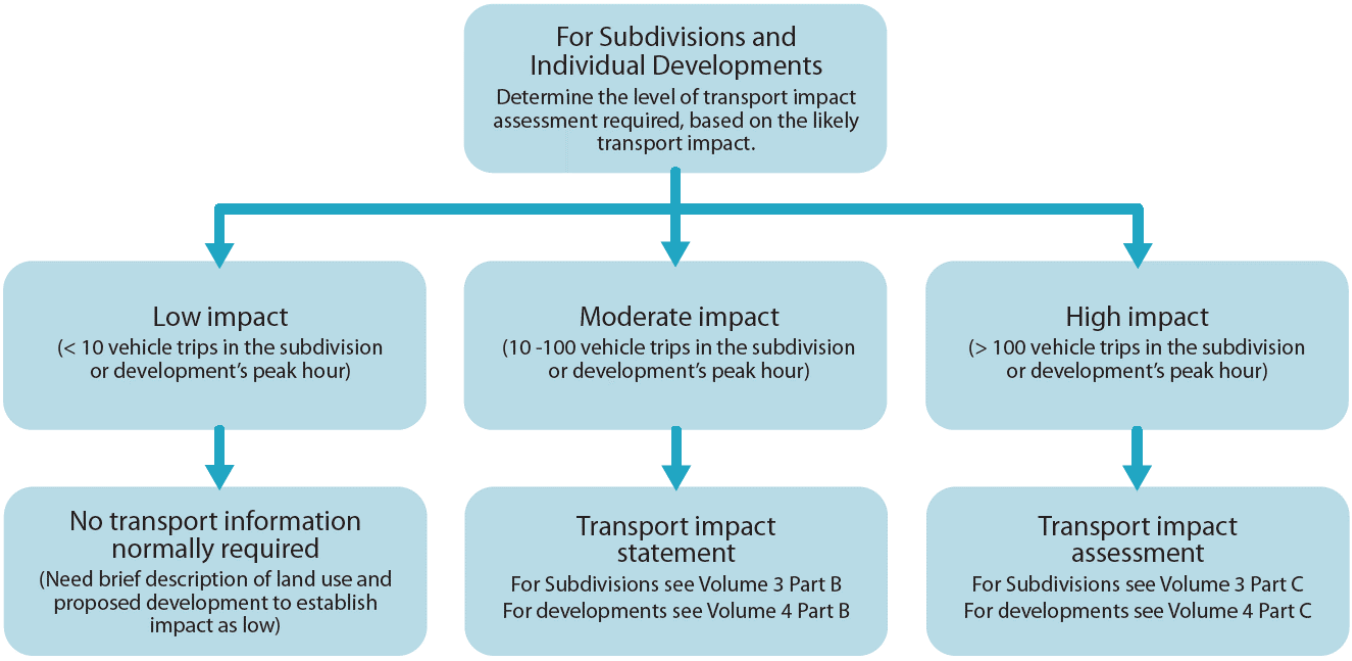

Figure 2 Level of transport impact assessment required (source: WAPC Transport Impact Assessment Guidelines, 2016)

As set out in this report, the traffic attributable to the proposed development has been determined to be less than 100 vehicle trips in the operating peak hour, therefore the required level of assessment is a TIS.

1.4 Report Structure

The report is structured as required by the *Transport Impact Assessment Guidelines* (WAPC, 2016), with the following sections:

- Proposed development
- Vehicle access and parking
- Provision for service vehicles
- Traffic volumes
- Frontage streets
- Public transport access
- Pedestrian access and amenity
- Bicycle access and amenity
- Site specific issues
- Safety issues
- Summary

2. PROPOSED DEVELOPMENT

The site of the proposed Baldivis Childcare centre is located at Lot 37 Bannerdale Road in Baldivis. The site has boundaries with Bannerdale Road to the north, Viva Boulevard to the east, public open space to the south and existing residential development to the west – as shown in Figure 3.

Figure 3 Detailed location of the proposed Baldivis Childcare Centre (aerial image source: MetroMap)

The proposed development of the existing vacant land into a Childcare Centre can be summarised as comprising:

- Childcare Centre to accommodate 110 children
  - 8 children between the ages of 0-1 years
  - 12 children between the ages of 1-2 years
  - 30 children between the ages of 2-3 years
  - 60 children between the ages of 3-5 years
- Childcare Centre to be serviced under the following staff arrangements:
  - 17 educators (Monday-Friday, full-time)
  - Additional part-time educators covering staff breaks (Monday-Friday, 10am-3pm)
  - 1 chef (Monday-Friday, half day)
  - 1 centre area manager (visits site once or twice a week between 10am-3pm)

Figure 4 shows the site plan for the proposed Baldivis Childcare Centre and Figure 5 shows the site floor plan for the proposed Baldivis Childcare Centre.

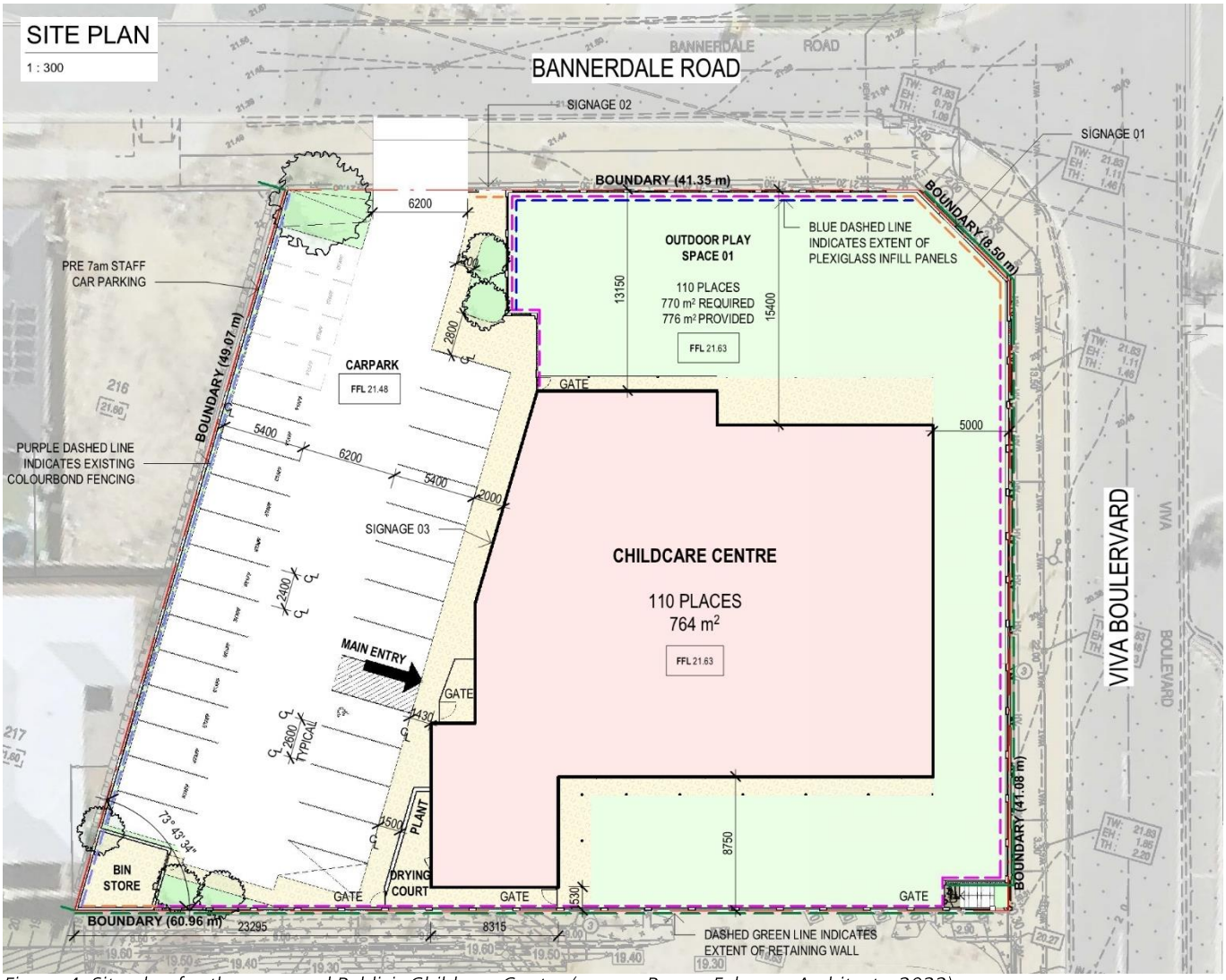

Figure 4 Site plan for the proposed Baldivis Childcare Centre (source: Brown Falconer Architects, 2022)

Figure 5 Site floor plan for the proposed Baldivis Childcare Centre (source: Brown Falconer Architects, 2022)

3. VEHICLE ACCESS AND PARKING

3.1 Vehicle Access

The proposed Baldivis Childcare Centre is located at Lot 37 Bannerdale Road in Baldivis. The site has boundaries with Bannerdale Road to the north, Viva Boulevard to the east, public open space to the south and existing residential development to the west.

It is proposed that all vehicle access to the site would be via a crossover on Bannerdale Road. The crossover would be located approximately 40m from the intersection with Viva Boulevard.

The intent of providing vehicle access to the site from Bannerdale Road, is to separate the Childcare Centre crossover movements from school related traffic along Viva Boulevard.

It is proposed that the crossover would be 6.2m wide and permit two-way vehicle access to the on-site car park and bin store.

Figure 6 shows the vehicle access arrangements for the proposed Baldivis Childcare Centre.

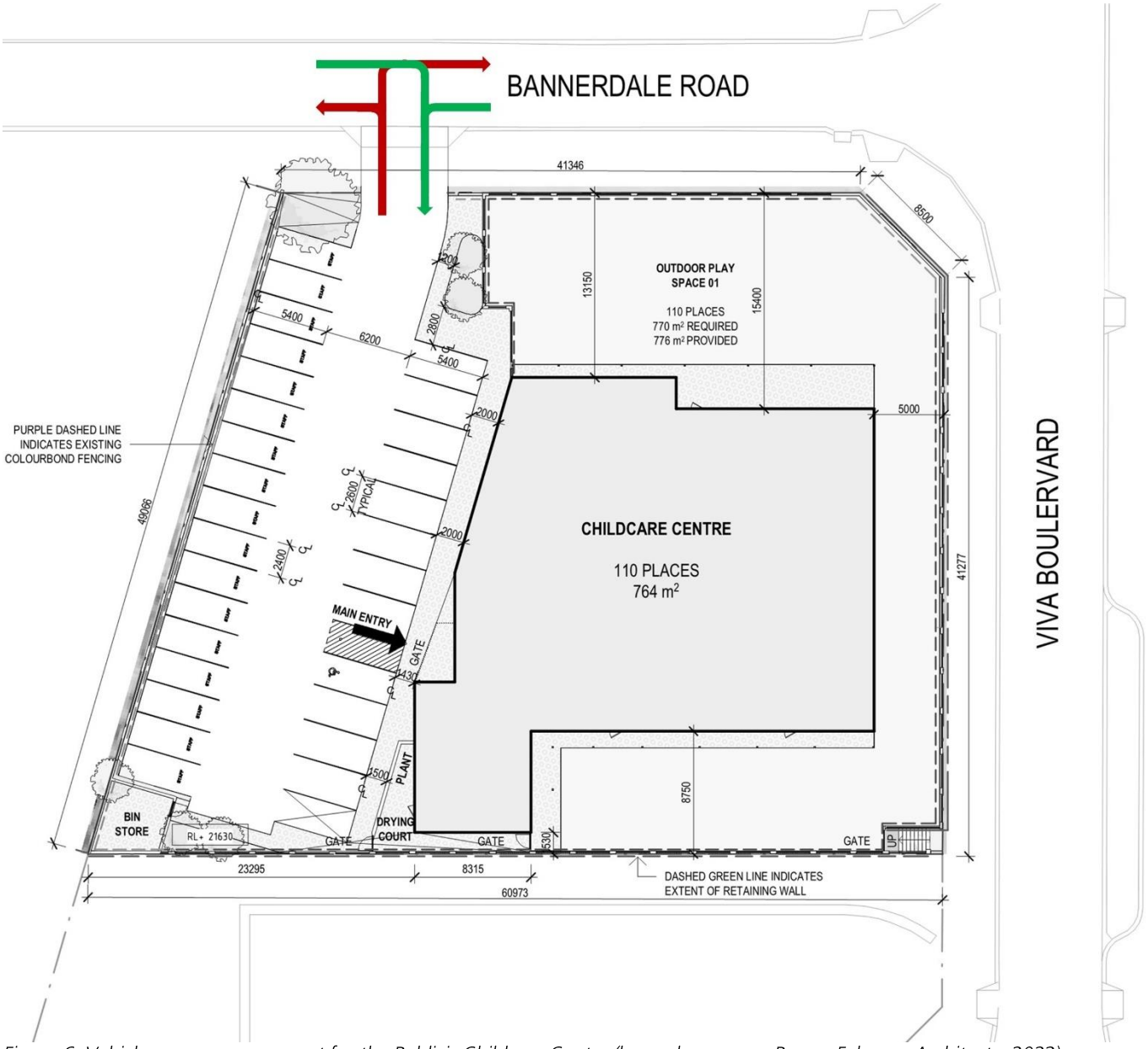

Figure 6 Vehicle access arrangement for the Baldivis Childcare Centre (base plan source: Brown Falconer Architects, 2022)

Figure 7 to Figure 12 show the routes of vehicle access to the proposed Baldivis Childcare Centre site from the surrounding road network.

Figure 7 View along Sixty Eight Road eastbound on approach to Viva Boulevard (source: Google Streetview)

Figure 8 View along Sixty Eight Road westbound on approach to Viva Boulevard (source: Google Streetview)

Figure 9 View along Viva Boulevard northbound on approach to Bannerdale Road – the proposed Baldivis Childcare Centre site is the vacant lot to the left (source: Google Streetview)

Figure 10 View along Viva Boulevard southbound on approach to Bannerdale Road – the proposed Baldivis Childcare Centre site is the vacant lot to the right (source: Google Streetview)

Figure 11 View along Bannerdale Road eastbound on approach to Viva Boulevard – the proposed Baldivis Childcare Centre site is the vacant lot to the right (source: Google Streetview)

Figure 12 View along Bannerdale Road westbound from Viva Boulevard – the proposed Baldivis Childcare Centre site is the vacant lot to the left (source: Google Streetview)

□

3.2 On-Site Parking

The City of Rockingham Local Planning Policy 3.3.5 *Child Care Premises* (July 2019) outlines that a Traffic Impact Statement/Assessment is required to support Development Applications for new Childcare Centres, in-line with the requirements of WAPC's *Transport Impact Assessment Guidelines – Volume 4 Individual Developments* (2016).

The Local Planning Policy also states that the proposed Childcare Centre should make provision for parking bays in accordance with the standards and requirements of the City's Town Planning Scheme No.2.

The City's Town Planning Scheme No.2 outlines that following off-street car parking requirements for Childcare Centres within the City:

> *"Child Care Premises – minimum car parking requirement*
>
> - *1 bay per staff member*
> - *1 bay per 8 children attending"*

Based on the above requirements under the Town Planning Scheme the proposed Baldivis Childcare Centre has the following minimum off-street car parking requirements:

- Staff parking = 17 bays required for 17 full-time staff
  = Additional part-time/occasional staff to utilise parent parking outside of peak drop-off/pick-up periods
- Parent parking = 14 bays required

  TOTAL PARKING = 31 bays required

The proposed Baldivis Childcare Centre has a total of 29 on-site car parking bays. It is proposed that the on-site car parking bays are allocated as follows:

- Staff parking = 17 bays allocated for staff parking along the western boundary of the site
- Parent parking = 12 bays allocated for parent pick-up/drop-off adjacent to the Childcare Centre building
  = 12 parent bays include 1 ACROD bay and adjacent shared space (with bollard)

The 17 staff bays are provided along the western boundary, meeting the requirement for full-time room ratio educators. It should be noted that these educators do not arrive and depart from the site at the same time. The first staff begin arriving between 6:00-6:30am, and then continually arrive in 15-30 minute intervals until 9:30am. The centre is fully staffed until 3:00-3:30pm when the first staff start completing their shift and departing the site. This means not all 17 staff bays are occupied at the same time.

In addition, not all staff are expected to drive to the site. Some staff are likely to car pool or use public transport. In this regard, it is noted that the 565 bus route runs along Viva Boulevard and Bannerdale Road, which connects to Warnbro train station. The site is serviced by public transport.

Additional support staff would attend the site over the course of a day to perform various support functions. These staff are not present at the site for a whole day and are typically in attendance outside of the peak pick-up / drop-off periods (when the car park is significantly underused).

Typically, the drop-off or pick-up of children from Childcare Centres takes between 10-15 minutes. Using an average time of 12½ minutes for drop-off or pick-up – the 11 parent parking bays on-site (excluding the 1 ACROD bay) would turnover approximately 4.8 times during the peak hour and accommodate approximately 53 vehicle movements – therefore accommodating the expected peak hour parent parking demand (see Section 5.2 for details of the development proposals estimated peak hour vehicle trip generation).

Figure 13 shows the allocation of car parking across the proposed Baldivis Childcare Centre site.

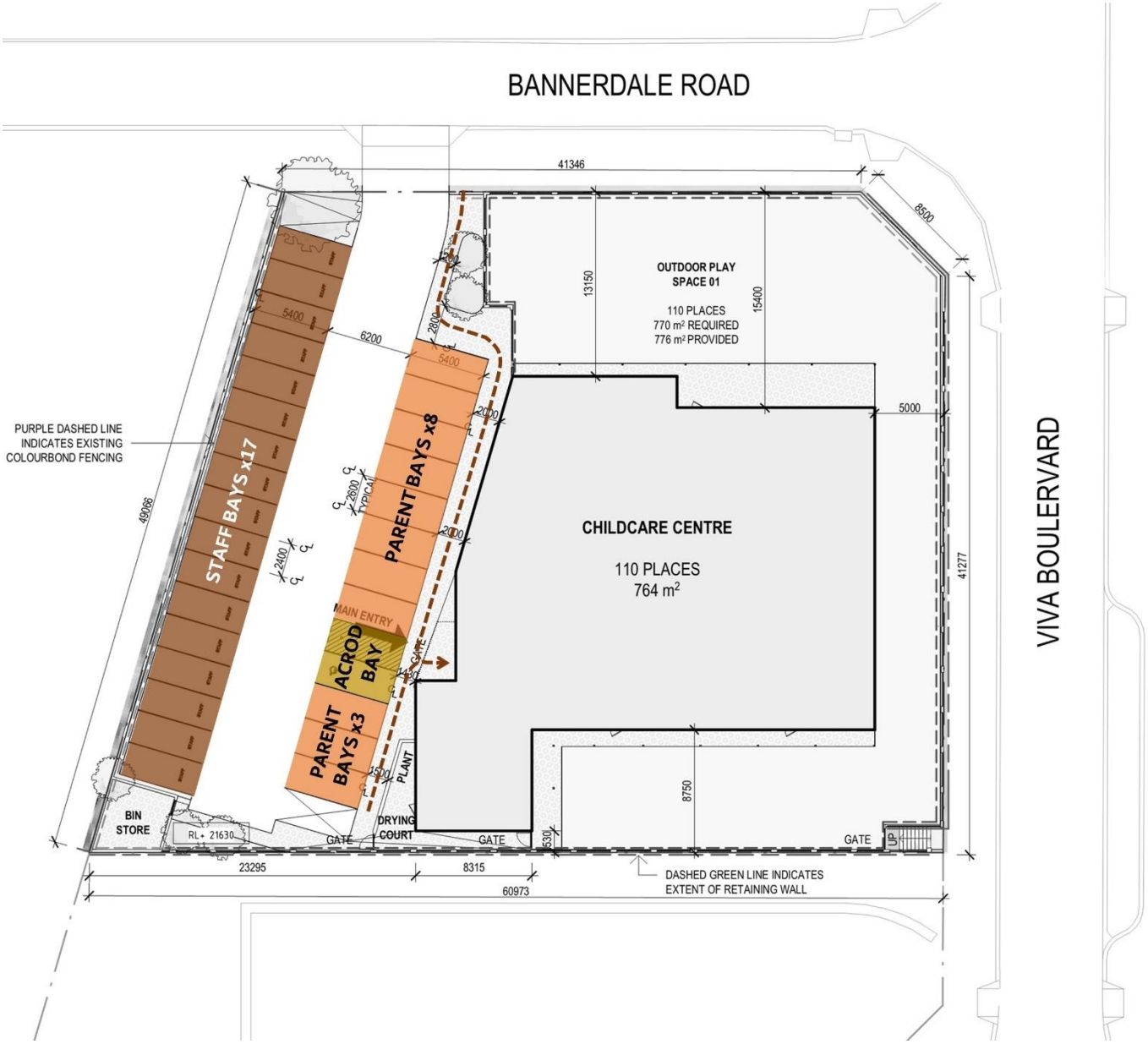

Figure 13 Proposed parking bay allocation for the Baldivis Childcare Centre (base plan source: Brown Falconer Architects, 2022)

3.3 Off-Site Parking

No off-site parking is proposed as part of the Development Application for the proposed Baldivis Childcare Centre facility.

□

4. PROVISION FOR SERVICE VEHICLES

The proposed Baldivis Childcare Centre's bin store is located in the southwest corner of the on-site car park.

It is proposed that servicing of the site will be by private waste collection outside of the Childcare Centre's operating hours – it is intended that the private waste contractor will collect waste on a Saturday between 9am-5pm. As such, there will be no parked cars within the site's car park when the waste collection occurs.

The private waste contractor currently operates 8.0m long vehicles, to ensure the site is future proofed to accommodate slightly larger waste collection vehicles in the private waste contractor fleet changes – swept path analysis has been completed for both an 8.0m long vehicle (Figure 14) and 8.8m long vehicle (Figure 15).

The swept path analysis shows that the site accommodates both 8.0m and 8.8m long vehicles entering and exiting the site in forward gear, with sufficient room to manoeuvre within the site to back-up to the bin store in the southwest corner of the on-site car park.

- Waste collection vehicles would access the site from Viva Boulevard and then Bannerdale Road.
- Waste collection vehicles would drive into the on-site car park in forward gear and then pull into the parking bay adjacent to the ACROD bay.
- Waste collection vehicle would reserve back to the bin store and service the bins.
- Waste collection vehicle would then drive out of the site in forward gear via Bannerdale Road and Viva Boulevard.

The proposed routing of the waste collection vehicle movements to access and egress the site, would limit any impact on neighbouring residential properties.

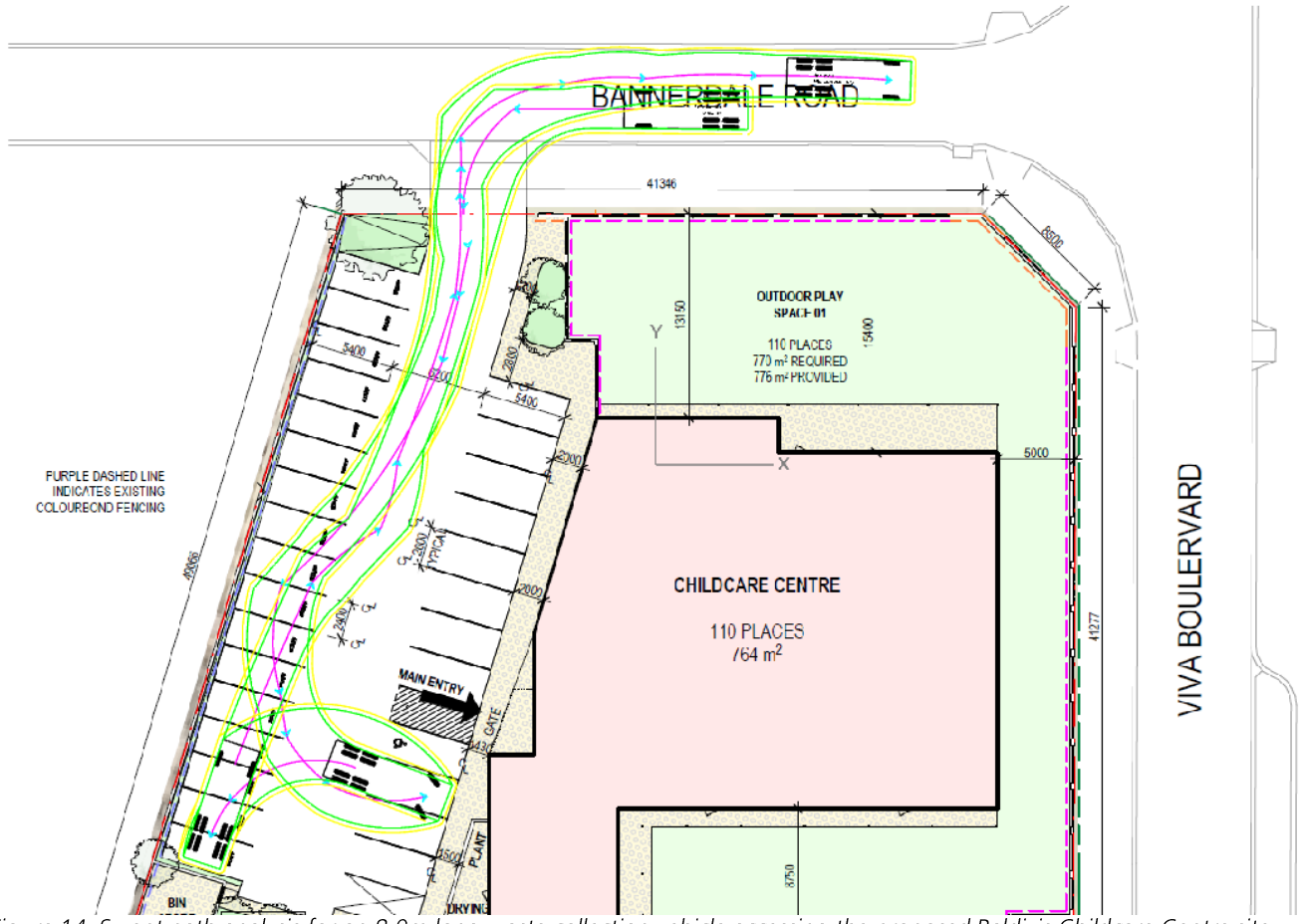

Figure 14 Swept path analysis for an 8.0m long waste collection vehicle accessing the proposed Baldivis Childcare Centre site (base plan source: Brown Falconer Architects, 2022)

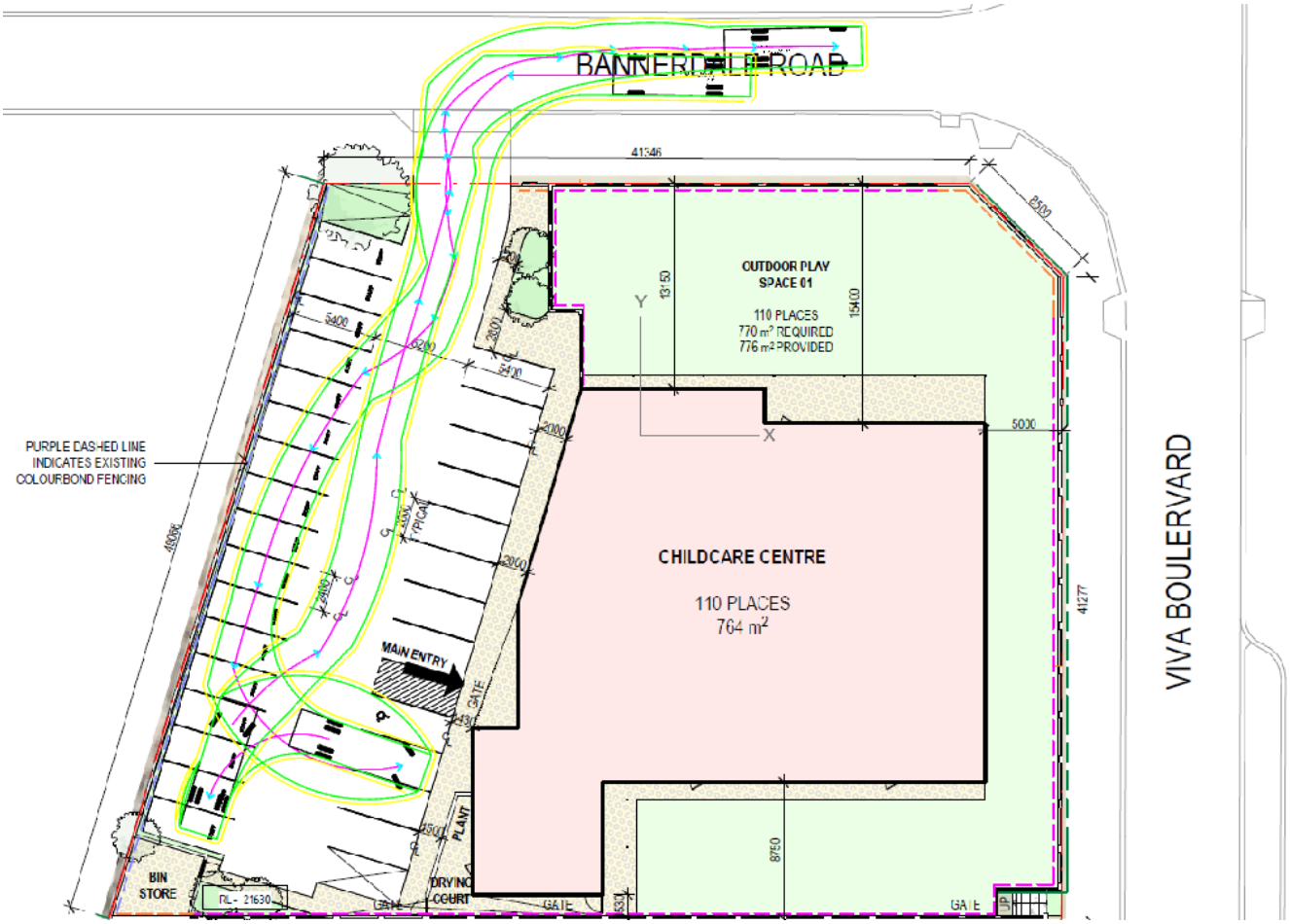

Figure 15 Swept path analysis for an 8.8m long waste collection vehicle accessing the proposed Baldivis Childcare Centre site (base plan source: Brown Falconer Architects, 2022)

5. TRAFFIC VOLUMES

5.1 Existing Traffic Generated by Proposed Site

The site of the proposed Baldivis Childcare Centre is located at Lot 37 Bannerdale Road in Baldivis. The site has boundaries with Bannerdale Road to the north, Viva Boulevard to the east, public open space to the south and existing residential development to the west.

The site of the proposed Childcare Centre is vacant land and therefore does not generate any existing traffic movements.

5.2 Trip Generation of Proposed Development

For the purpose of trip generation assessment, the Childcare Centre is assumed to operate with 20 staff and 110 registered children. The following assumptions have been made in relation to traffic that would be generated by this proposal.

- The Childcare Centre will operate with 20 staff:
  - 17 staff would work on-site Monday-Friday in a full-time educator role.
  - Additional staff would work on-site Monday-Friday in a part-time role – typically working half day 10am-3pm.
  - 1 staff would work on-site once or twice a week as a visiting area manager – between 10am-3pm.
  - A conservative assumption has been made that all staff will independently drive to the site each day. This may not be the case in operation with some staff likely to car pool or use public transport.

  - The 17 full-time educator staff would be required on-site Monday-Friday to care for the full complement of 110 children – this is based on a required ratio of educators per child.
  - The additional part-time staff would be required on-site Monday-Friday during the middle of the day.
  - The area manager will typically visit the site once or twice a week during the middle of the day.

  - All 17 full-time staff will be provided on-site car parking with 17 car parking bays available for staff parking along the western boundary of the site.
  - The additional part-time staff will utilise parent parking outside of peak drop-off/pick-up periods for children.
  - The area manager will utilise parent parking outside of peak drop-off/pick-up periods for children.

  - The Childcare Centre's anticipated operating hours are from 6:30am to 6:30pm – it is expected that 2 members of staff would be rostered to start work during the developments AM peak hour and finish work during the development PM peak hour, with all other staff travelling to or from the site outside of the development peak hours.

- The Childcare Centre will cater for 110 registered children:
  - At a range of childcare centres across Perth that Fly have surveyed, typically:
    - 15% of children are walked to the childcare centre by parents and do not generate a vehicle trip. These children are either walked from their home within a walkable catchment of the childcare centre or they use public transport services to access the childcare centre.
    - 25% of children are from families with more than one child attending the childcare centre – therefore 25% of the children generate 0.5 inbound vehicles trips and 0.5 outbound vehicle trips (assuming these families have two children attending the childcare centre).
    - 60% of children generate 1 inbound vehicle trip and 1 outbound vehicle trip.
    - Of those children arriving at the childcare centre by private vehicle, typically:

- 55% of children are dropped off during the AM peak hour
- 50% of children are picked-up during the PM peak hour

Based on maximum attendance at the Childcare Centre on a given weekday and applying the typical childcare centre mode splits outlined above, it is estimated that a maximum total of 92 vehicle trips to/from the site will occur during the developments AM peak hour and 82 vehicle trips to/from the site will occur during the development PM peak hour – as outlined in Table 1.

Table 1 Proposed Childcare Centre development peak hour vehicle trips based on the proposed operations of the Childcare Centre

Type of User	Total On-Site	Number Generating Vehicle Trips	AM Peak Hour Vehicle Movements			PM Peak Hour Vehicle Movements		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Staff (full-time)	17	17 (1.0 trips)	2	0	2	0	2	2
Staff (part-time)	3	3 (1.0 trips)	0	0	0	0	0	0
Children	110	17 (0.0 trips)	0	0	0	0	0	0
		28 (0.5 trips)	8	8	16	7	7	14
		66 (1.0 trips)	37	37	74	33	33	66
Total Staff & Children	130	17 (0.0 trips)	0	0	0	0	0	0
		28 (0.5 trips)	8	8	16	7	7	14
		86 (1.0 trips)	39	37	76	33	35	68
TOTAL VEHICLE TRIPS			**47**	**45**	**92**	**40**	**42**	**82**

5.3 Traffic Impacts of Proposed Development

The proposed Baldivis Childcare Centre is unlikely to generate significant additional vehicle trips on the road network – many of the vehicle trips to drop-off and pick-up children from the Childcare Centre would be part of a linked trip already being made. The majority of linked trip will be part of the parents commute to their place of work.

The proposed Childcare Centre will generate more vehicle movements during the developments AM peak hour (more concentrated child drop-off activity) as opposed to during the developments PM peak hour (more dispersed child pick-up activity).

As outlined in Section 3.2, the 11 parent parking bays on-site (excluding the 1 ACROD bay) would turnover approximately 4.8 times during the peak hour and accommodate approximately 53 vehicle movements. As such, the number of parent parking bays on-site would be sufficient to accommodate the expected peak hour vehicle trip generation.

In summary:

- The level of vehicle trips generated by the proposed Baldivis Childcare Centre is focused on generation of vehicle trips associated with children drop-off and pick-up movements. Staff movements are generally outside of peak periods as the educators have to be on-site to cater for the arrival of children and they cannot leave the facility until certain ratios of educators to children are achieved. In addition, some staff are likely to use alternate forms of transport, such as car pooling or public transport.

- Some drop-off and pick-up movements will be undertaken by foot or involve trips with multiple children being dropped-off or picked-up. In addition, not all movements will be made in the development AM or PM peak hour.
- The majority of traffic movements generated by the site are expected to be a slight redistribution of existing trips on the network as part of a linked trip – primarily as part of a parents existing commute and/or school drop-off/pick-up of older children.

6. FRONTAGE STREETS

6.1 Road Network Hierarchy

The proposed Baldivis Childcare Centre has a northern boundary to Bannerdale Road and an eastern boundary to Viva Boulevard. Both of these boundary roads to the site are categorised as Access Roads under the Main Roads WA road network hierarchy.

All other roads in proximity of the proposed Baldivis Childcare Centre site are also categorised as Access Roads under the Main Roads WA road network hierarchy – other than Sixty Eight Road, Nairn Drive, Arpenteur Drive and Eighty Road which is categorised as a Local Distributor Road under the Main Roads WA road network hierarchy.

To the east of the site Baldivis Road (south of Serpentine Road) is categorised as a Regional Distributor Road, while Baldivis Road (north of Serpentine Road) is categorised as a Distributor B Road under the Main Roads WA road network hierarchy.

Further to the east of the site the Kwinana Freeway is categorised as a Primary Distributor Road under the Main Roads WA road network hierarchy – with the road corridor under the control of Main Roads.

The road hierarchy surrounding the proposed Baldivis Childcare Centre site is shown in Figure 16

Figure 16 Road hierarchy surrounding the proposed Baldivis Childcare Centre site (source: Main Roads WA)

6.2 Road Network Speed Limits

Most streets in vicinity of the proposed Baldivis Childcare Centre site operate under a typical default 50km/h urban speed limit. Sixty Eight Road to the south of the site has a 70km/h posted speed limit.

The speed zoning surrounding the proposed Baldivis Childcare Centre site is shown in Figure 17.

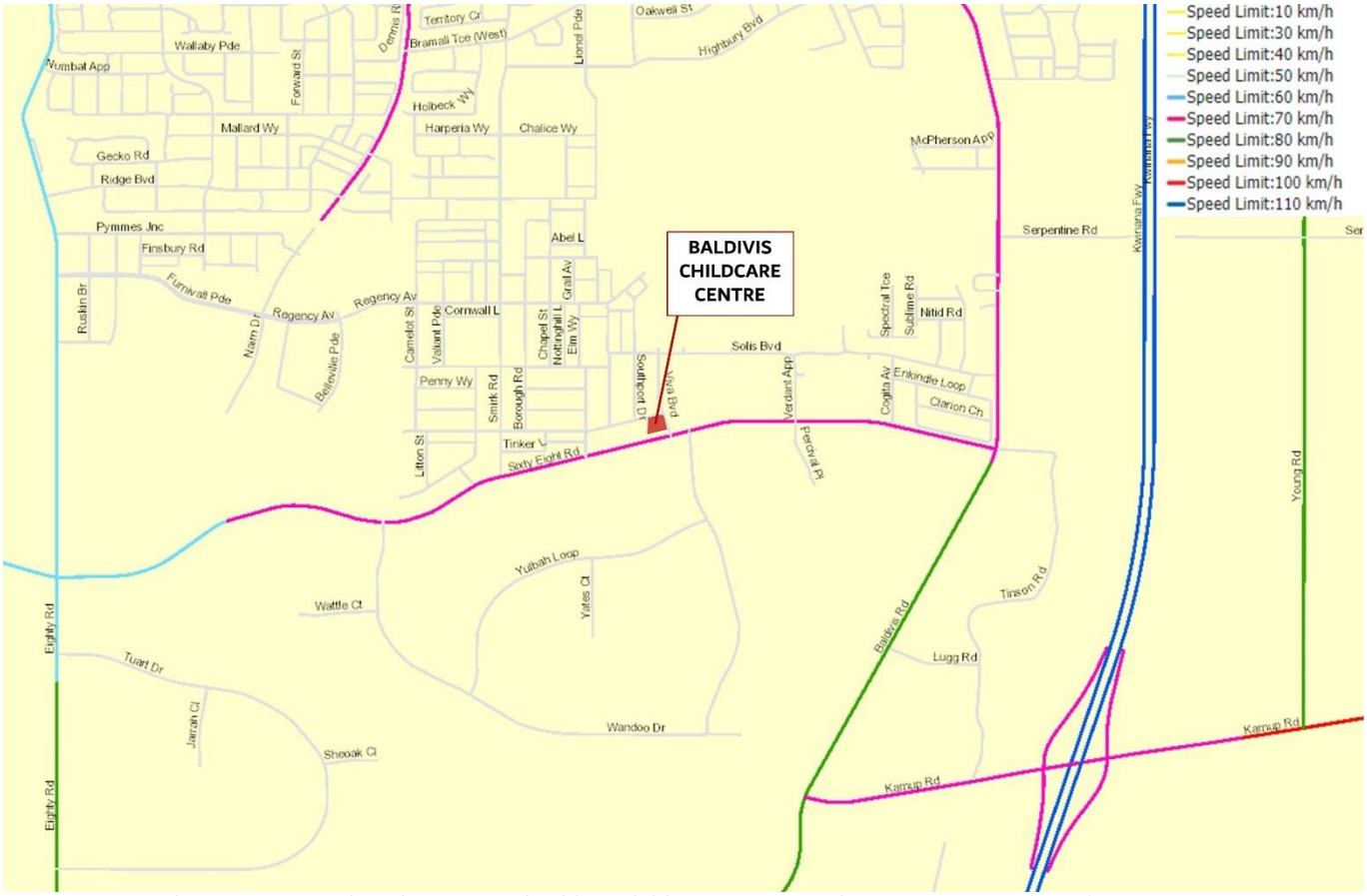

Figure 17 Speed zoning surrounding the proposed Baldivis Childcare Centre site (source: Main Roads WA)

Viva Boulevard and Solis Boulevard are subject to a 40km/h school speed zone limit. The school speed zone is in effect on school days between 7.30am-9am and 2.30pm-4pm.

The school speed zoning in proximity to the proposed Baldivis Childcare Centre site is shown in Figure 18.

Figure 18 School speed zoning surrounding the proposed Baldivis Childcare Centre site (source: Main Roads WA)

7. PUBLIC TRANSPORT ACCESS

7.1 Existing Public Transport Services

The proposed Baldivis Childcare Centre site is accessible by public transport – with Bus Route 565 providing direct access to the site.

- Bus Route 565
  - Route 565 operates between Warnbro Station and southern Baldivis via Nairn Drive and Smirk Road. The bus route travels along Smirk Road to Sixty Eight Road and then along Sixty Eight Road to Viva Boulevard and then via Bannerdale Road past the subject site to Baroness Road back to Smirk Road.
  - Route 565 provides connections to residential catchments either side of Nairn Drive and Smirk Road through southern Baldivis as well as key land uses such as Tuart Rise Primary School, Baldivis South Community Centre and Ridge View Secondary College.
  - Weekday bus services operate between 6am and 10pm – operating on a 15 minute frequency across a 2 hour AM and PM peak period – and operating on a 30 minute or 60 minute frequency outside of these times.
  - Saturday bus services operate between 7am and 7pm – operating on a 60 minute frequency.
  - Sunday bus services operate between 8am and 6pm – operating on a 60 minute frequency.

From the entrance of the proposed Baldivis Childcare Center, Bus Route 565 services can be accessed with a short 325m walk (3-4 minute walk time) to the bus stop on Sixty Eight Road. It's possible that in the future as vacant lots in the area of the subject site are developed, that Transperth may introduce a bus stop on Bannerdale Road or Baroness Road – which would be closer to the site of the proposed Childcare Centre.

Figure 19 shows the location of the proposed Baldivis Childcare Centre site in relation to local bus routes.

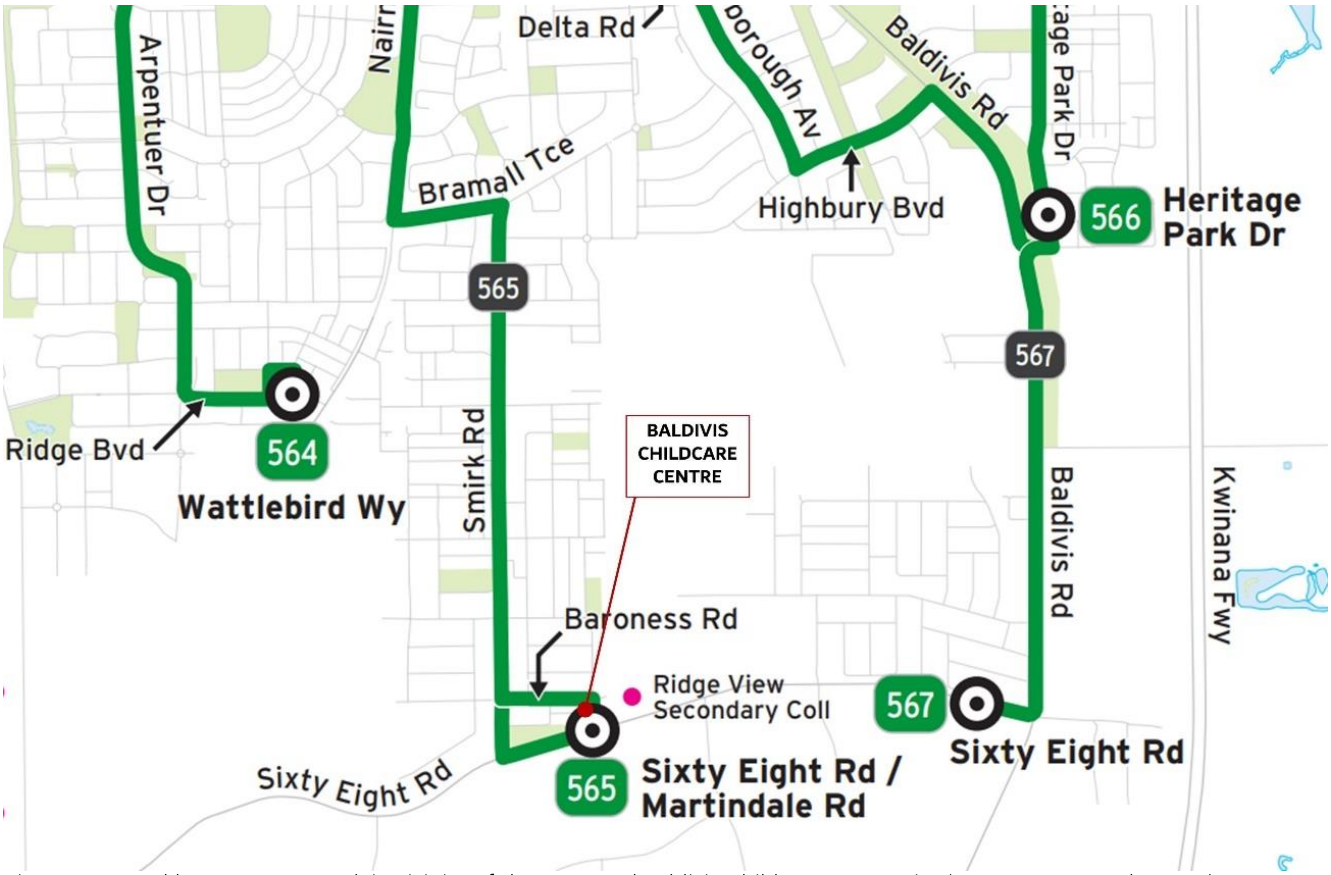

Figure 19 Local bus route network in vicinity of the proposed Baldivis Childcare Centre site (source: Transperth, 2022)

8. PEDESTRIAN ACCESS AND AMENITY

8.1 Existing Pedestrian Network

The proposed Baldivis Childcare Centre site is located in the southernmost area of Baldivis close to Ridge View Secondary College and Sixty Eight Road. The area has good levels of pedestrian connectivity with footpaths on at least one side all surrounding streets.

However, the Walk Score walkability assessment tool considers the proposed Baldivis Childcare Centre site to be "car-dependent" where almost all errands require a car. There are limited destinations with a walkable catchment from the site, mainly limited to sites of education and local parks/reserves.

The 15-minute walkable catchment is shown in Figure 20, which includes destinations such as Ridge View Secondary College, Tuart Rise Primary School, Baldivis South Community Centre, Elm Reserve, Smirk Reserve, Maiden Reserve, Carnarvon Park and Atherstone Reserve.

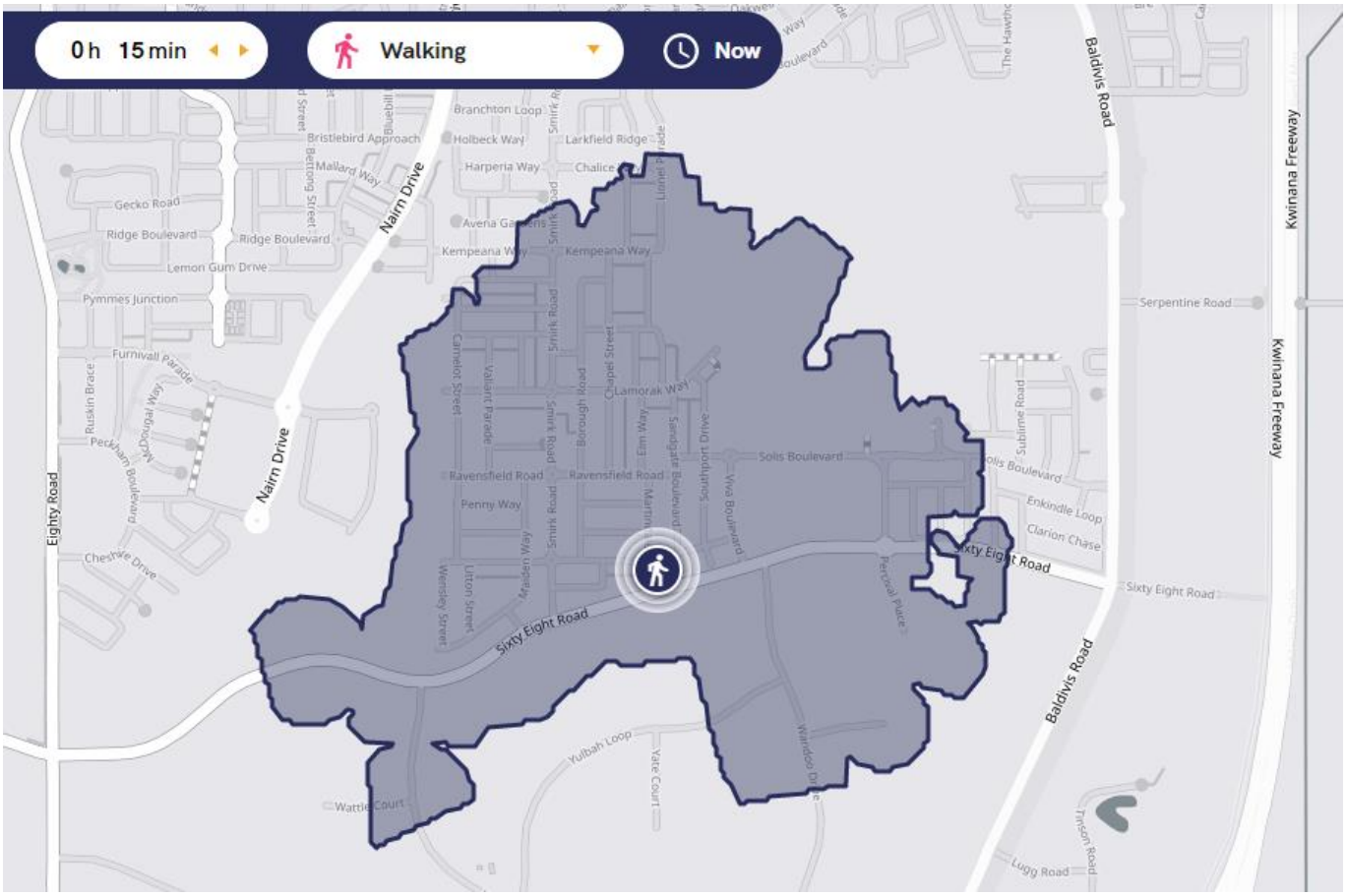

Figure 20 TravelTime Map 15 minute walking catchment from the proposed Baldivis Childcare Centre site (source: TravelTime)

The site of the proposed Baldivis Childcare Centre is currently vacant land with constructed residential properties and several undeveloped residential lots along Bannerdale Road. The footpath network immediately surrounding the boundary of the subject site is currently uncomplete, with the footpath on the southern side of Bannerdale Road and footpath on the northern side of Sixty Eight Road both stop prior to the subject site.

However, constructed pram ramps indicate that it is planned to continue footpaths along the northern (Bannerdale Road), eastern (Viva Boulevard) and southern (Sixty Eight Road) boundaries of the subject site. Figure 21 shows the location of the constructed pram ramps and the expected continuation of the footpath network surrounding the subject site.

Figure 21 Expected continuation of the footpath network surrounding the proposed Baldivis Childcare Centre site (aerial image source: MetroMap)

The Department of Planning, Lands and Heritage (DPLH) recently released the Urban Tree Canopy Dashboard which provides an interactive snapshot of the extent of tree canopy coverage across the Perth and Peel regions. The urban tree canopy is an essential part of creating healthy, liveable neighbourhoods, where more dense and mature tree canopies can support active travel along walking and cycling paths.

The Perth Metropolitan area has an average of 12% canopy cover from trees over 3m tall in street blocks. In 2018, the street blocks in the City of Rockingham had 10% canopy cover from trees over 3m tall, resulting in 90% of the street block area without any canopy cover. In 2018, the street blocks in the suburb of Baldivis had 13% canopy cover from trees over 3m tall, resulting in 87% of the street block area without any canopy cover – as shown in Figure 22.

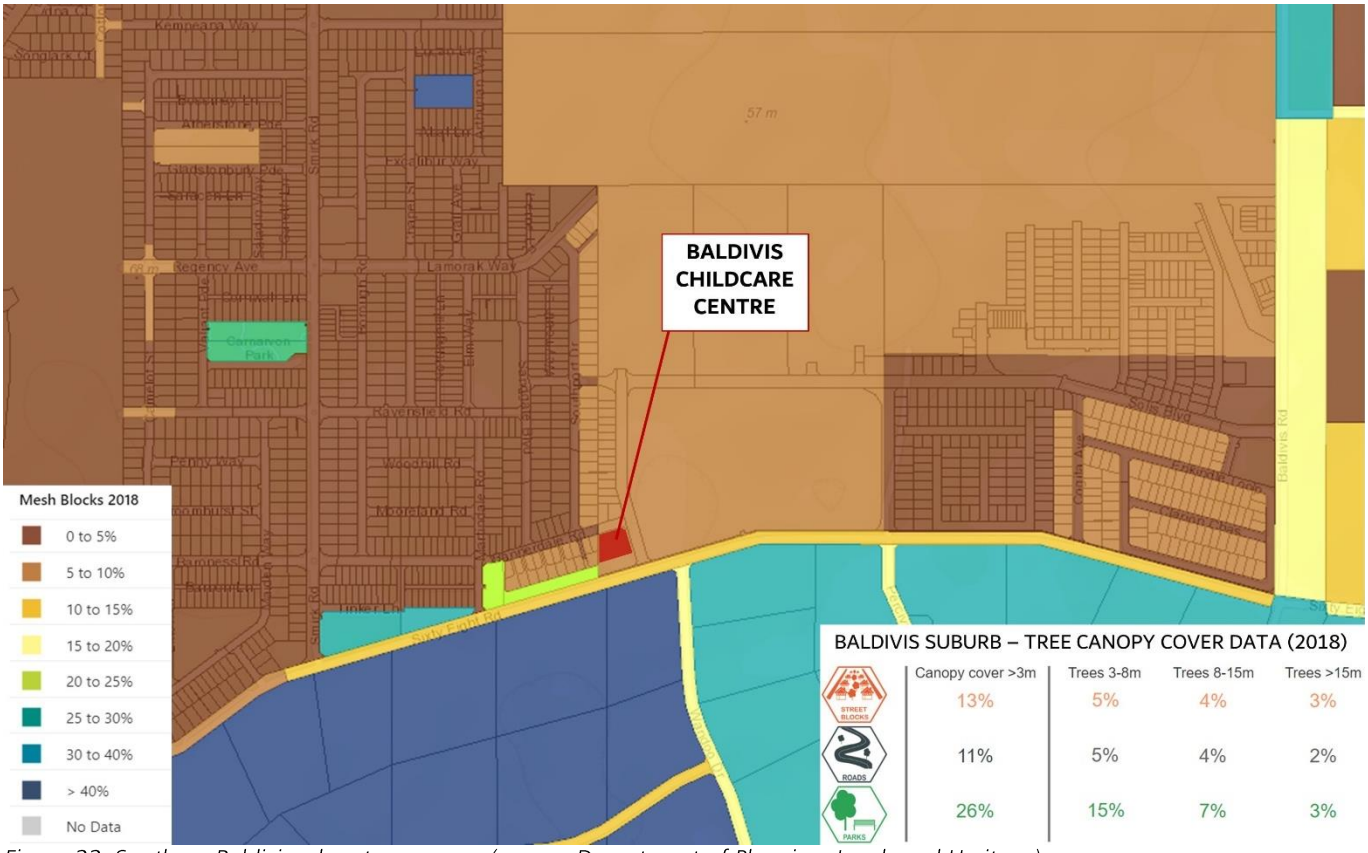

Figure 22 Southern Baldivis urban tree canopy (source: Department of Planning, Lands and Heritage)

The low street block tree canopy cover with trees greater than 3m high, is reflective of the recent development and build-out of the Baldivis suburb. Over time street trees planted as part of the development of the suburb will grow and mature and increase the tree canopy cover.

8.2 Development Proposals

The development proposals for the Baldivis Childcare Centre include a proposed 1.2m-2.0m wide footpath along the western side of the Childcare Centre building – providing a footpath connection between the path expected to be continued along the southern side of Bannerdale Road and the pedestrian entrance to the Childcare Centre.

The new footpath connection would enable pedestrians to walk safely between Viva Boulevard-Bannerdale Road to the pedestrian entrance to the proposed Childcare Centre.

Figure 23 shows the location of the proposed connecting footpath infrastructure.

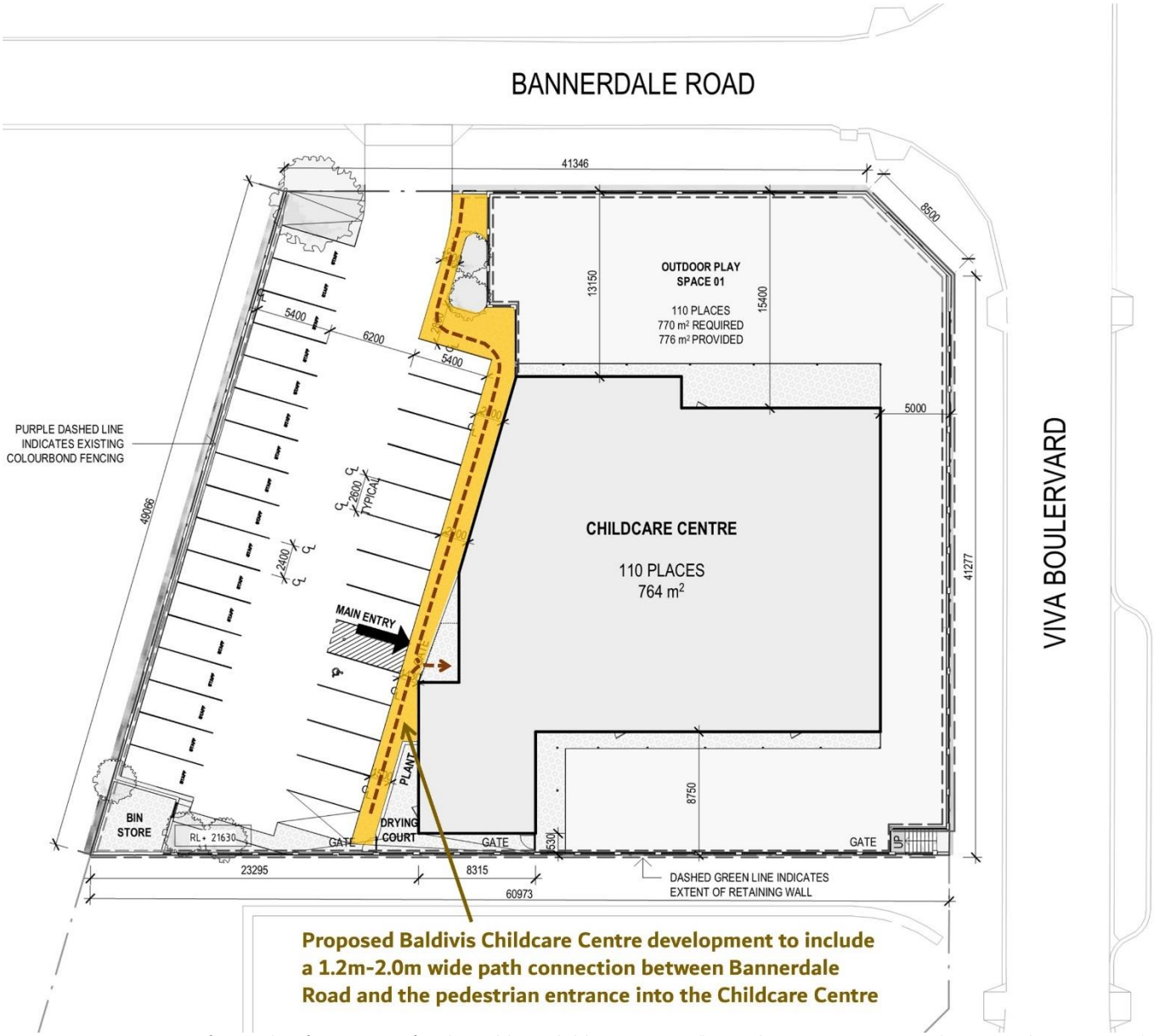

Figure 23 Connecting footpath infrastructure for the Baldivis Childcare Centre (base plan source: Brown Falconer Architects, 2022)

9. BICYCLE ACCESS AND AMENITY

9.1 Existing Cycle Network

The proposed Baldivis Childcare Centre site limited bicycle accessibility via existing formal cycling routes. The existing cycle network in proximity of the proposed Childcare Centre is shown in Figure 24.

Whilst more established areas of Baldivis to the north of the subject site have a network of formal shared paths through parks/reserves and along local streets – the new-build area of southern Baldivis where the proposed Childcare Centre is located does not yet feature in Department of Transport nor City of Rockingham cycle network mapping.

It would be expected that in time the existing cycle network mapping will be updated to feature the full extent of southern Baldivis.

Whilst the cycle network mapping does not yet feature the area of Baldivis surrounding the proposed Baldivis Childcare Centre site – it should be noted that all local streets in proximity to the proposed Childcare Centre site feature paths on at least one side of the street. With cycling permitted on footpaths (with cyclists required to travel safely along the footpath paying due care and attention to pedestrians) this does ensure children can be biked to the Childcare Centre using off-road routes via the local footpath network.

Figure 24 Existing bicycle network surrounding the proposed Baldivis Childcare Centre site (source: Department of Transport, Rockingham South Bike Map, 2016)

A heatmap of cycle activity in the vicinity of the proposed Baldivis Childcare Centre site is shown in Figure 25. The heatmap is produced by cyclists tracking their trips using the commercial product Strava.

The heatmap shows the highest levels of cycling in the local area along Sixty Eight Road and Smirk Road – as well as slightly higher use on the bounadry roads around Ridge View Secondary College. Along with many of the local streets, Bannerdale Road and Baroness Road show slightly lower levels of use by cyclisits.

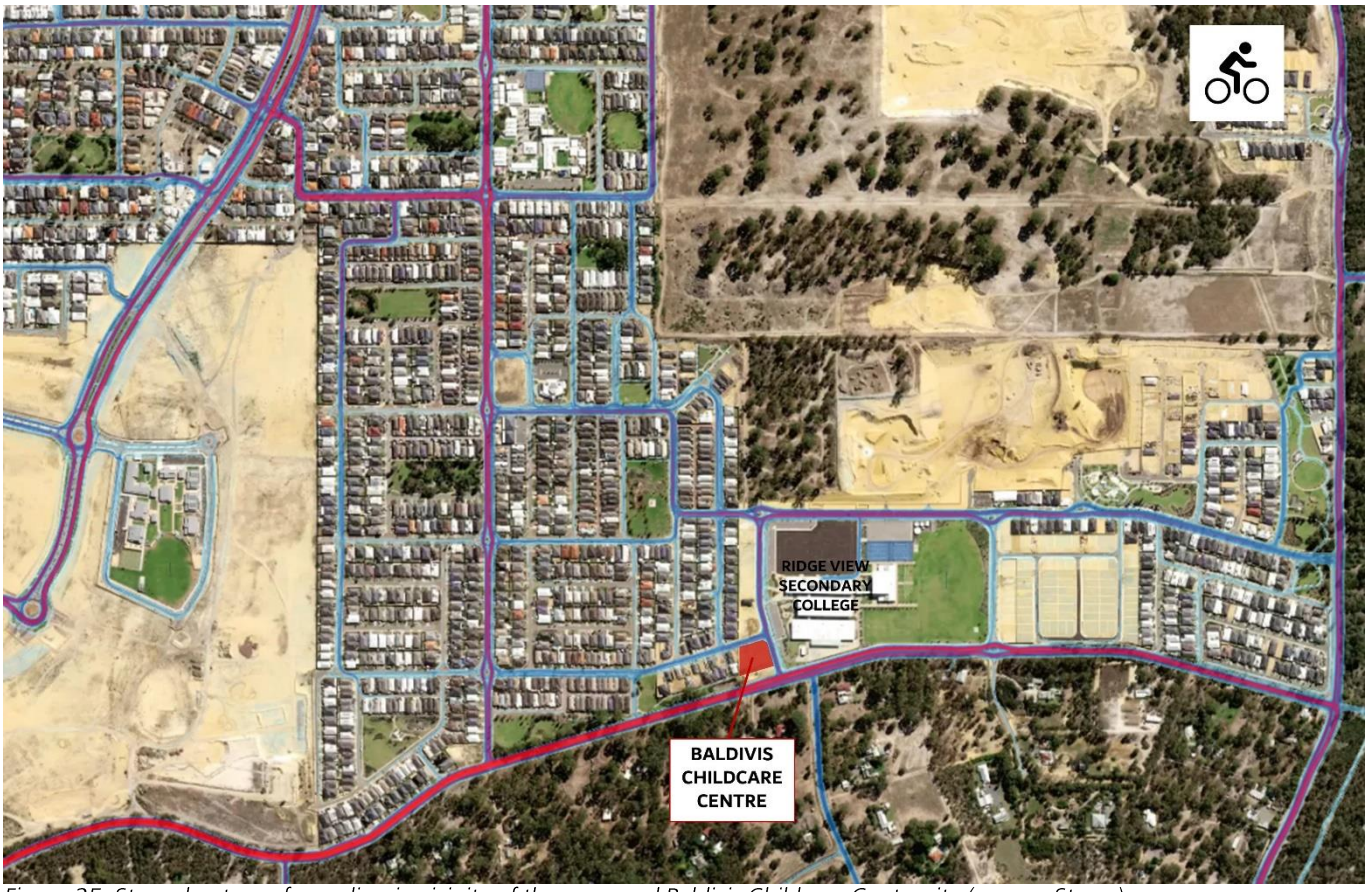

Figure 25 Strava heatmap for cycling in vicinity of the proposed Baldivis Childcare Centre site (source: Strava)

9.2 Future Cycle Network

Between 2018-2020 the Department of Transport worked with 33 local governments across Perth and Peel on the Long Term Cycle Network (LTCN) project. The LTCN project has been a collaboration between State and local governments to agree on an aspirational network of bicycle routes that link parks, schools, community facilities and transport services, to make cycling a convenient and viable option for more people and more journeys.

The aim of the project was to develop an aspirational blueprint to ensure State and local governments work together towards the delivery of one continuous cycling network providing additional transport options, recreational opportunities and support for tourism and commercial activity.

In June 2020 the City of Rockingham Council endorsed their LTCN – from July 2020 the LTCN is eligible for the City to seek grant funding support from DoT to deliver bicycle infrastructure along the identified routes – as shown in Figure 26.

The identified LTCN shows the long-term goal to create a Secondary Route along Sixty Eight Road and Local Routes along Smirk Road and the Solis Boulevard-Hayling Way-Sandgate Boulevard-Lamorak Way-Regency Avenue route between Baldivis Road and Nairn Drive.

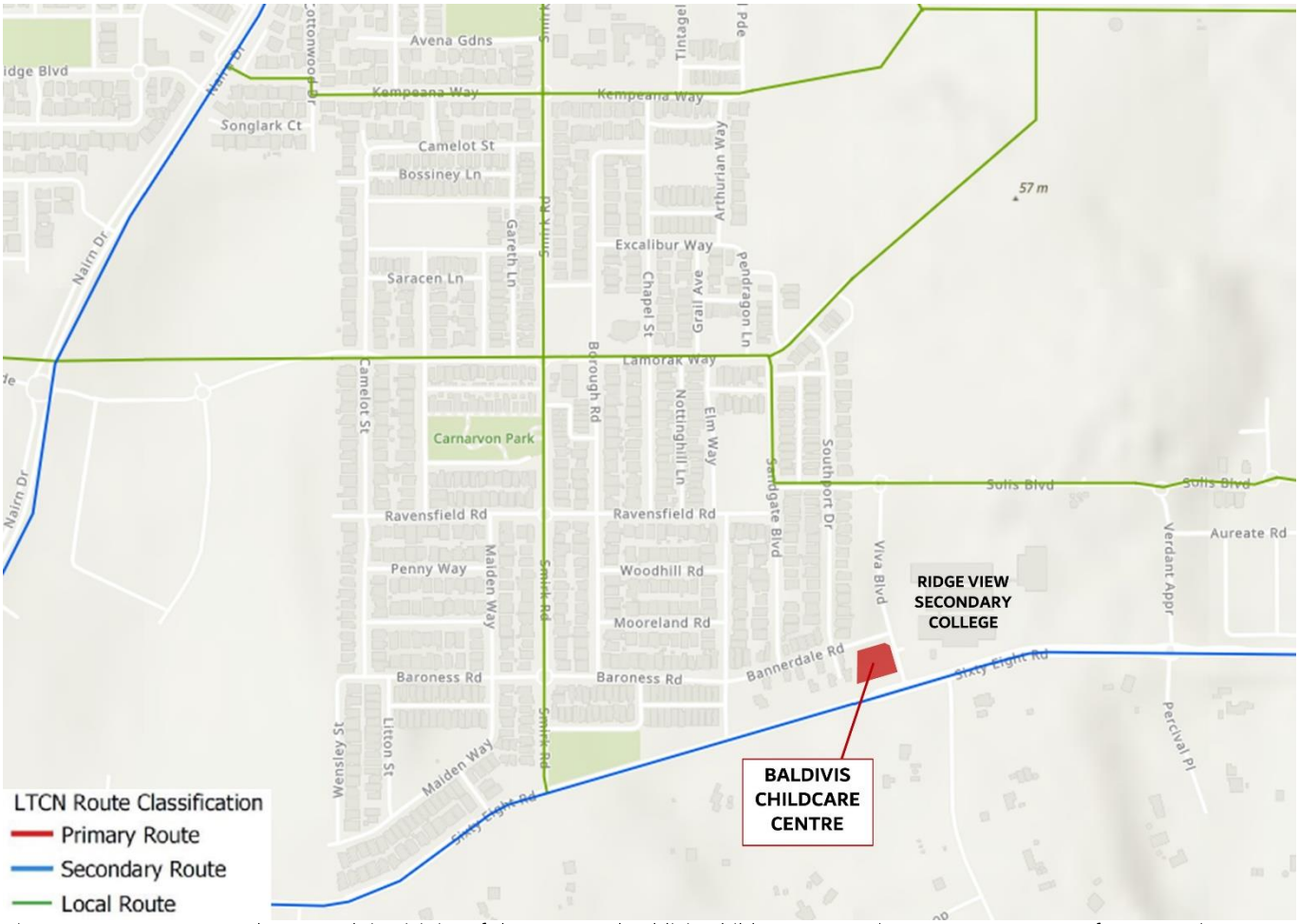

Figure 26 Long Term Cycle Network in vicinity of the proposed Baldivis Childcare Centre (source: Department of Transport)

10. SITE SPECIFIC ISSUES

There are no additional site specific issues that are required to be addressed as part of this TIS.

11. SAFETY ISSUES

11.1 Crash History

In the five-year period ending November 2020, there were no reported crashes within immediate proximity of the proposed Baldivis Childcare Centre site.

Slightly further from the proposed Childcare Centre site, there were the following reported crashes over the five-year period:

- Sixty Eight Road x4 crashes
  - x2 intersection crashes at Sixty Eight Road and Hearth Way – collision between two vehicles resulting in major vehicle property damage.
  - x1 intersection crash at Sixty Eight Road and Smirk Road – collision between two vehicles resulting in major vehicle property damage.
  - x1 intersection crash at Sixty Eight Road and Martindale Road – collision between two vehicles resulting in major vehicle property damage.
- Baroness Road x2 crashes
  - x1 intersection crash at Baroness Road and Smirk Road – collision between two vehicles resulting in major vehicle property damage.
  - x1 intersection crash at Baroness Road and Martindale Road – collision between two vehicles resulting in major vehicle property damage.
- Other streets x2 crashes
  - x1 intersection crash at Lamorak Way and Chapel Street – minor collision between two vehicles resulting in medical treatment for one vehicle occupant.
  - x1 intersection crash at Hayling Way and Southport Drive – collision between two vehicles resulting in major vehicle property damage.

Figure 27 shows the recorded location of the reported crashes (blue dots) in relation to the proposed Baldivis Childcare Centre site.

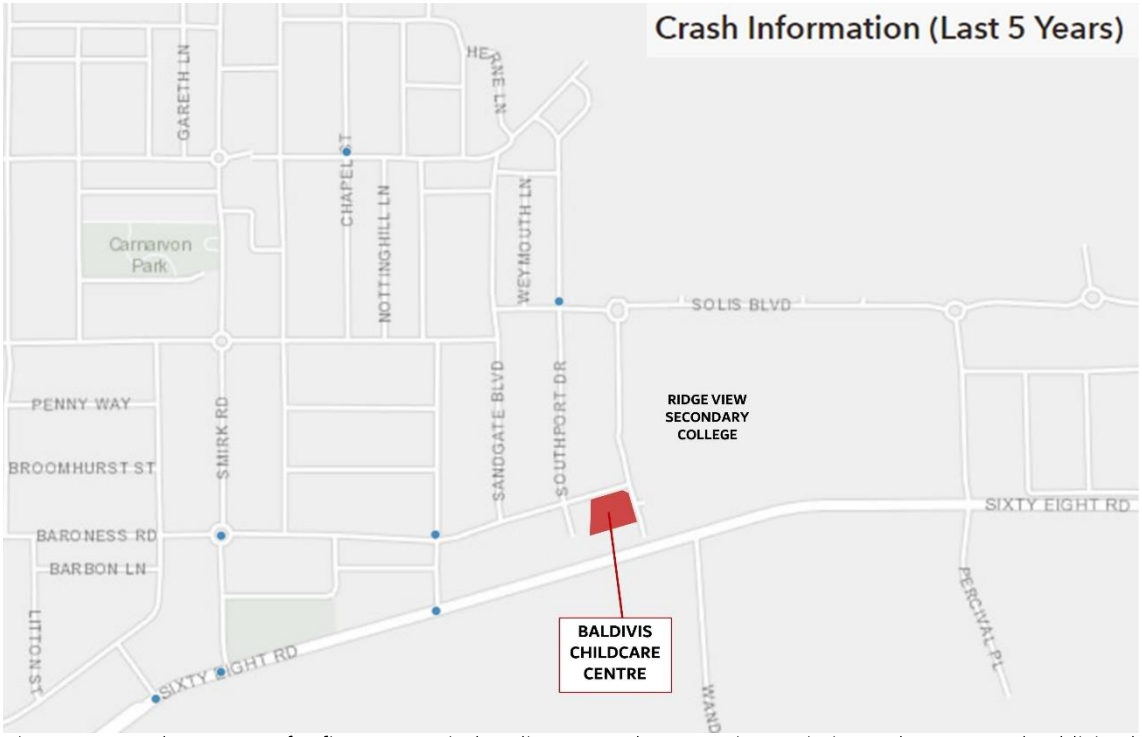

Figure 27 Crash Summary for five-year period ending November 2020 in proximity to the proposed Baldivis Childcare Centre site (source: Main Roads WA)

12. SUMMARY

12.1 Development Proposals

This TIS has been prepared by Flyt in support of the proposed development of the current vacant land at Lot 37 Bannerdale Road, Baldivis – into a Childcare Centre.

The proposed development of the existing vacant land into a Childcare Centre can be summarised as comprising:

- Childcare Centre to accommodate 110 children
  - 8 children between the ages of 0-1 years
  - 12 children between the ages of 1-2 years
  - 30 children between the ages of 2-3 years
  - 60 children between the ages of 3-5 years
- Childcare Centre to be serviced under the following staff arrangements:
  - 17 educators (Monday-Friday, full-time)
  - Additional part-time educators covering staff breaks (Monday-Friday, 10am-3pm)
  - 1 chef (Monday-Friday, half day)
  - 1 centre area manager (visits site once or twice a week between 10am-3pm)

12.2 Vehicle Access and Parking

The proposed Baldivis Childcare Centre is located at Lot 37 Bannerdale Road in Baldivis. The site has boundaries with Bannerdale Road to the north, Viva Boulevard to the east, public open space to the south and existing residential development to the west.

It is proposed that all vehicle access to the site would be via a crossover on Bannerdale Road. The crossover would be located approximately 40m from the intersection with Viva Boulevard.

Under the City of Rockingham Town Planning Scheme No.2 the proposed Baldivis Childcare Centre has the following minimum off-street car parking requirements:

- Staff parking = 17 bays required for 17 full-time staff
  = Additional part-time/occasional staff to utilise parent parking outside of peak drop-off/pick-up periods
- Parent parking = 14 bays required

  TOTAL PARKING = 31 bays required

The proposed Baldivis Childcare Centre has a total of 29 on-site car parking bays. It is proposed that the on-site car parking bays are allocated as follows:

- Staff parking = 17 bays allocated for staff parking along the western boundary of the site
- Parent parking = 12 bays allocated for parent pick-up/drop-off adjacent to the Childcare Centre building
  = 12 parent bays include 1 ACROD bay and adjacent shared space (with bollard)

12.3 Provision for Service Vehicles

The proposed Baldivis Childcare Centre's bin store is in the southwest corner of the on-site car park.

It is proposed that servicing of the site will be by private waste collection outside of the Childcare Centre's operating hours – it is intended that the private waste contractor will collect waste on a Saturday between 9am-5pm. As such, there will be no parked cars within the site's car park when the waste collection occurs.

The private waste contractor currently operates 8.0m long vehicles, to ensure the site is future proofed to accommodate slightly larger waste collection vehicles in the private waste contractor fleet changes – swept path analysis has been completed for both an 8.0m long vehicle and 8.8m long vehicle.

The swept path analysis shows that the site accommodates both 8.0m and 8.8m long vehicles entering and exiting the site in forward gear, with sufficient room to manoeuvre within the site to back-up to the bin store in the southwest corner of the on-site car park.

12.4 Traffic Impact

The proposed Baldivis Childcare Centre it estimated to generate a maximum total of 92 vehicle trips to/from the site during the developments AM peak hour and 82 vehicle trips to/from the site will occur during the development PM peak hour.

The Childcare Centre is unlikely to generate significant additional vehicle trips on the road network – many of the vehicle trips to drop-off and pick-up children from the Childcare Centre would be part of a linked trip already being made. The majority of linked trip will be part of the parents commute to their place of work and/or school drop-off/pick-up of older children.

The Childcare Centre will generate more vehicle movements during the developments AM peak hour (more concentrated child drop-off activity) as opposed to during the developments PM peak hour (more dispersed child pick-up activity).

The 11 parent parking bays on-site (excluding the 1 ACROD bay) would turnover approximately 4.8 times during the peak hour and accommodate approximately 53 vehicle movements. As such, the number of parent parking bays on-site would be sufficient to accommodate the expected peak hour vehicle trip generation.

The level of vehicle trips generated by the proposed Baldivis Childcare Centre is focused on generation of vehicle trips associated with children drop-off and pick-up movements. Staff movements are generally outside of peak periods as the educators have to be on-site to cater for the arrival of children and they cannot leave the facility until certain ratios of educators to children are achieved. In addition, some staff are likely to use alternate forms of transport, such as car pooling or public transport.

Some drop-off and pick-up movements will be undertaken by foot or involve trips with multiple children being dropped-off or picked-up. In addition, not all movements will be made in the development AM or PM peak hour.

The majority of traffic movements generated by the site are expected to be a slight redistribution of existing trips on the network as part of a linked trip – primarily as part of a parents existing commute and/or school drop-off/pick-up of older children.

12.5 Public Transport Access

The proposed Baldivis Childcare Centre site is accessible by public transport – with Bus Route 565 providing direct access to the site.

From the entrance of the proposed Baldivis Childcare Center, Bus Route 565 services can be accessed with a short 325m walk (3-4 minute walk time) to the bus stop on Sixty Eight Road. It's possible that in the future as vacant lots in the area of the subject site are developed, that Transperth may introduce a bus stop on Bannerdale Road or Baroness Road – which would be closer to the site of the proposed Childcare Centre.

Bus Services

- Routes 565 operates between Warnbro Station and southern Baldivis via Nairn Drive and Smirk Road. The bus route travels along Smirk Road to Sixty Eight Road and then along Sixty Eight Road to Viva Boulevard and then via Bannerdale Road past the subject site to Baroness Road back to Smirk Road.

- Route 565 provides connections to residential catchments either side of Nairn Drive and Smirk Road through southern Baldivis as well as key land uses such as Tuart Rise Primary School, Baldivis South Community Centre and Ridge View Secondary College.

12.6 Pedestrian Access

The proposed Baldivis Childcare Centre site is located in the southernmost area of Baldivis close to Ridge View Secondary College and Sixty Eight Road. The area has good levels of pedestrian connectivity with footpaths on at least one side all surrounding streets.

The Walk Score walkability assessment tool considers the proposed Baldivis Childcare Centre site to be "car-dependent" where almost all errands require a car. There are limited destinations with a walkable catchment from the site, mainly limited to sites of education and local parks/reserves.

The 15-minute walkable catchment includes destinations such as Ridge View Secondary College, Tuart Rise Primary School, Baldivis South Community Centre, Elm Reserve, Smirk Reserve, Maiden Reserve, Carnarvon Park and Atherstone Reserve.

APPENDIX 6

ACOUSTIC ASSESSMENT

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Environmental Noise Assessment

Lot 37 Bannerdale Road, Baldivis
Proposed Childcare Centre

Reference: 22057314-01

Prepared for:
Jarra Childcare Developments Pty Ltd

Report: 22057314-01

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Date:	Rev	Description	Prepared By	Verified
22-Jul-22	-	Issued to Client	Matt Moyle	Terry George
5-Aug-22	0	Issued with finalised DA plans	Matt Moyle	Terry George

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Appendices

1 INTRODUCTION

It is proposed to develop Lot 37 Bannerdale Road, Baldivis (refer *Figure 1-1*) to construct a childcare centre (CCC). The proposed centre will consist of the following:

- Six internal teaching spaces capable of accommodating up to 110 children, grouped as follows:
  - Activity Group 1: 8 places for children aged 0-1 years,
  - Activity Group 2: 12 places for children aged 1-2 years,
  - Activity Group 3: 15 places for children aged 2-3 years,
  - Activity Group 4: 15 places for children aged 2-3 years,
  - Activity Group 5: 30 places for children aged 3+ years,
  - Activity Group 6: 30 places for children aged 3+ years,
- Outdoor play areas located on north, east and south sides of the building.
- Amenities and associated mechanical plant such as:
  - One kitchen with rangehood and exhaust fan assumed to be located on the roof above,
  - Various exhaust fans (toilets, laundry, nappy room) assumed to be located on the roof above, and
  - AC plant assumed to be located on ground in a fenced area as shown on DA plans.
- Car parking on the west end of the lot.

It is noted on the aerial view of the surrounds, that noise sensitive premises exist and are proposed in the vicinity of the subject site, to the west and north. Ridge View Secondary College is noted to the east, and teaching rooms and libraries are considered noise sensitive also. As such an assessment of noise to these receptors is required.

This report presents the assessment of the noise emissions from child play, car doors closing in the car park and mechanical plant associated with the childcare centre against the prescribed standards of the *Environmental Protection (Noise) Regulations 1997* (the Regulations) based on the development drawings shown in *Appendix A*.

The proposed hours of operation are 6.30am to 6.30pm Monday to Friday. Therefore, staff and parents can arrive and park before 7.00am, which is during the night-time period of the Regulations. It is assumed outdoor child play would not occur until after 7.00am.

Appendix B contains a description of some of the terminology used throughout this report.

Figure 1-1 Project Locality

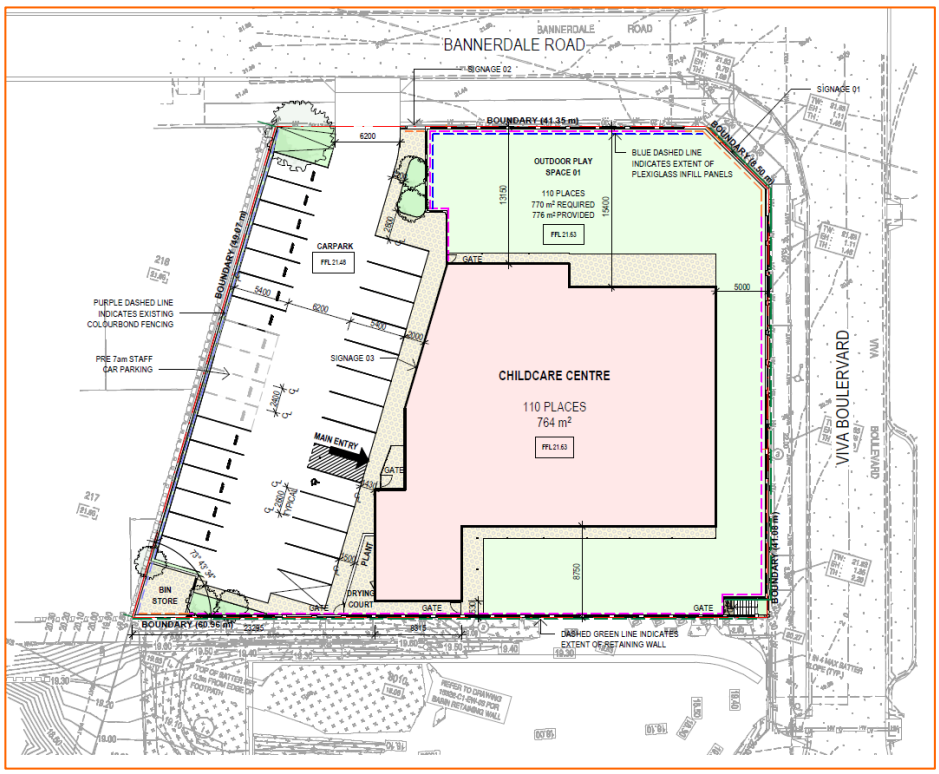


Figure 1-2 Project Site Plan

2 CRITERIA

Environmental noise in Western Australia is governed by the *Environmental Protection Act 1986*, through the *Environmental Protection (Noise) Regulations 1997* (the Regulations).

Regulation 7 defines the prescribed standard for noise emissions as follows:

"7. (1) Noise emitted from any premises or public place when received at other premises –

(a) Must not cause or significantly contribute to, a level of noise which exceeds the assigned level in respect of noise received at premises of that kind; and

(b) Must be free of –

i. tonality;

ii. impulsiveness; and

iii. modulation,

when assessed under regulation 9"

A "…noise emission is taken to significantly contribute to a level of noise if the noise emission … exceeds a value which is 5 dB below the assigned level…"

Tonality, impulsiveness and modulation are defined in Regulation 9. Noise is to be taken to be free of these characteristics if:

(a) The characteristics cannot be reasonably and practicably removed by techniques other than attenuating the overall level of noise emission; and

(b) The noise emission complies with the standard prescribed under regulation 7 after the adjustments of *Table 2-1* are made to the noise emission as measured at the point of reception.

Table 2-1 Adjustments Where Characteristics Cannot Be Removed

Where Noise Emission is Not Music			Where Noise Emission is Music	
Tonality	Modulation	Impulsiveness	No Impulsiveness	Impulsiveness
+ 5 dB	+ 5 dB	+ 10 dB	+ 10 dB	+ 15 dB

Note: The above are cumulative to a maximum of 15dB.

The baseline assigned levels (prescribed standards) are specified in Regulation 8 and are shown in *Table 2-2*.

Table 2-2 Baseline Assigned Noise Levels

Premises Receiving Noise	Time Of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises: highly sensitive area[1]	0700 to 1900 hours Monday to Saturday (Day)	45 + influencing factor	55 + influencing factor	65 + influencing factor
	0900 to 1900 hours Sunday and public holidays (Sunday)	40 + influencing factor	50 + influencing factor	65 + influencing factor
	1900 to 2200 hours all days (Evening)	40 + influencing factor	50 + influencing factor	55 + influencing factor
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays (Night)	35 + influencing factor	45 + influencing factor	55 + influencing factor
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80

1. ***highly sensitive area*** means that area (if any) of noise sensitive premises comprising —
   (a) a building, or a part of a building, on the premises that is used for a noise sensitive purpose; and
   (b) any other part of the premises within 15 metres of that building or that part of the building.

The total influencing factor, applicable at surrounding noise sensitive premises has been calculated as 0 dB. There are no significant commercial or industrial premises, nor secondary roads within 450m to provide a transport factor.

Table 2-3 shows the assigned noise levels including the influencing factor and transport factor at the receiving locations.

Table 2-3 Assigned Noise Levels

Premises Receiving Noise	Time Of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
All nearest highly sensitive areas[1]	0700 to 1900 hours Monday to Saturday (Day)	45	55	65
	0900 to 1900 hours Sunday and public holidays (Sunday)	40	50	65
	1900 to 2200 hours all days (Evening)	40	50	55
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays (Night)	35	45	45
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80

1. ***highly sensitive area*** means that area (if any) of noise sensitive premises comprising —
   (a) a building, or a part of a building, on the premises that is used for a noise sensitive purpose; and
   (b) any other part of the premises within 15 metres of that building or that part of the building.

It must be noted the assigned noise levels above apply outside the receiving premises and at a point at least 3 metres away from any substantial reflecting surfaces. Where this was not possible to be achieved due to the close proximity of existing buildings and/or fences, the noise emissions were assessed at a point within 1 metre from building facades and a -2 dB adjustment was made to the predicted noise levels to account for reflected noise.

It is noted the assigned noise levels are statistical levels and therefore the period over which they are determined is important. The Regulations define the Representative Assessment Period (RAP) as *a period of time of not less than 15 minutes, and not exceeding 4 hours*, which is determined by an *inspector* or *authorised person* to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission. An *inspector* or *authorised person* is a person appointed under Sections 87 & 88 of the *Environmental Protection Act 1986* and include Local Government Environmental Health Officers and Officers from the Department of Environment Regulation. Acoustic consultants or other environmental consultants are not appointed as an *inspector* or *authorised person*. Therefore, whilst this assessment is based on a 4 hour RAP, which is assumed to be appropriate given the nature of the operations, this is to be used for guidance only.

3 METHODOLOGY

Computer modelling has been used to predict the noise emissions from the development at all nearby receivers. The software used was *SoundPLAN 8.2* with the ISO 9613 algorithms (ISO 171534-3 improved method) selected, as they include the influence of wind and are considered appropriate given the relatively short source to receiver distances.

Input data required in the model are:

- Meteorological Information;
- Topographical data;
- Ground Absorption; and
- Source sound power levels.

3.1 Meteorological Information

Meteorological information utilised is provided in *Table 3-1* and is considered to represent worst-case conditions for noise propagation. At wind speeds greater than those shown, sound propagation may be further enhanced, however background noise from the wind itself and from local vegetation is likely to be elevated and dominate the ambient noise levels.

Table 3-1 Modelling Meteorological Conditions

Parameter	Day (0700-1900)	Night (1900-0700)
Temperature (°C)	20	15
Humidity (%)	50	50
Wind Speed (m/s)	Up to 5	Up to 5
Wind Direction*	All	All

* Note that the modelling package used allows for all wind directions to be modelled simultaneously.

It is generally considered that compliance with the assigned noise levels needs to be demonstrated for 98% of the time, during the day and night periods, for the month of the year in which the worst-case weather conditions prevail. In most cases, the above conditions occur for more than 2% of the time and therefore must be satisfied.

3.2 Topographical Data

Topographical information was based on publicly available data from *Google Earth*. It is noted that the terrain is generally flat in the vicinity of the subject site.

3.3 Buildings and Receivers

Surrounding existing buildings were included in the noise model, as these can provide noise shielding as well as reflection paths.

Nearby future houses are considered to be mostly single storey, matching those currently constructed in the area. Receivers were located 1.4 metres above respective floor level. The childcare centre building incorporates a car park and play areas as shown in the design drawings of *Appendix A* and this was reproduced within the noise model.

Figure 3-1 shows a 2D overview of the noise model with the location of all relevant receivers identified.

Figure 3-1 2D Overview of Noise Model

3.4 Source Sound Levels

The sound power levels used in the modelling are provided in *Table 3-2*.

Table 3-2 Source Sound Power Levels, dB

Description	Octave Band Centre Frequency (Hz)								Overall dB(A)
	63	125	250	500	1k	2k	4k	8k	
Babies Play Aged 0-2 Years (10 kids), L_{10}	78	54	60	66	72	74	71	67	**78**
Toddler Play Aged 2-3 Years (10 kids), L_{10}	61	67	73	79	81	78	74	70	**85**
Kindy Play Aged 3+ Years (10 kids), L_{10}	64	70	75	81	83	80	76	72	**87**
AC plant, double fan unit (3 off), each, L_{10}	72	74	68	69	63	61	53	47	**70**
Toilet/Laundry Exhausts, each, L_{10}	60	65	62	63	60	61	56	53	**67**
Kitchen Exhaust, L_{10}	50	64	61	70	69	66	62	50	**73**
Closing Car Door, L_{max}	71	74	77	81	80	78	72	61	**84**

The following is noted in relation to the source levels above:

- Child play source levels are based on Guideline 3.0 provided by the Association of Australasian Acoustical Consultants (AAAC) published September 2020. Where the number of children for individual play areas is specified in the plans, these have been adjusted from the reference source levels using appropriate acoustical calculations. Outdoor child play was modelled as area sources at 1-metre heights above ground level. The sound power levels used in the model were scaled as follows:
    - 20 children aged 0-2 years = 80 dB(A)
    - 30 Toddlers aged 2-3 years = 90 dB(A)
    - 60 Kindy aged 3+ years = 94 dB(A)
- Based on the AAAC Guideline 3.0, source sound power levels for AC condensing units were assumed. Medium sized (double fan) outdoor units were deemed appropriate. Each was modelled as a point source located in the plant yard as indicated on plans. It is noted that solid screening will be provided in the design.
- Other mechanical plant includes three exhaust fans (toilets and laundry) and one kitchen exhaust fan/rangehood fan. All were modelled as point sources approximately 0.5 metres above roof level and above the area serviced.
- Car doors closing were modelled as a point source 1.0 metre above ground level. Since noise from a car door closing is a short term event, only the L_{Amax} level is applicable.

3.5 Walls and Fences

The area is mostly suburban residential and will therefore consist of typical boundary fencing (*Colorbond* type) between residences. It is noted that a design incorporating visually permeable panels is proposed at 2.0m high (relative to play area level) bordering the play areas on the north and west sides - refer DA drawings for more detail. The modelling has assumed that no gaps are present in these barriers, and this will need to be ensured in the final build. The material selected for all new child play barriers must have a minimum 8kg/m^2 surface mass to be effective acoustically. *Figure 3-2* shows a view of the 3D model based on the information above in relation to topography and building and fence heights. Also shown are the outdoor play areas (pink polygon) and point sources (e.g. mechanical plant, car doors) as pink dots.

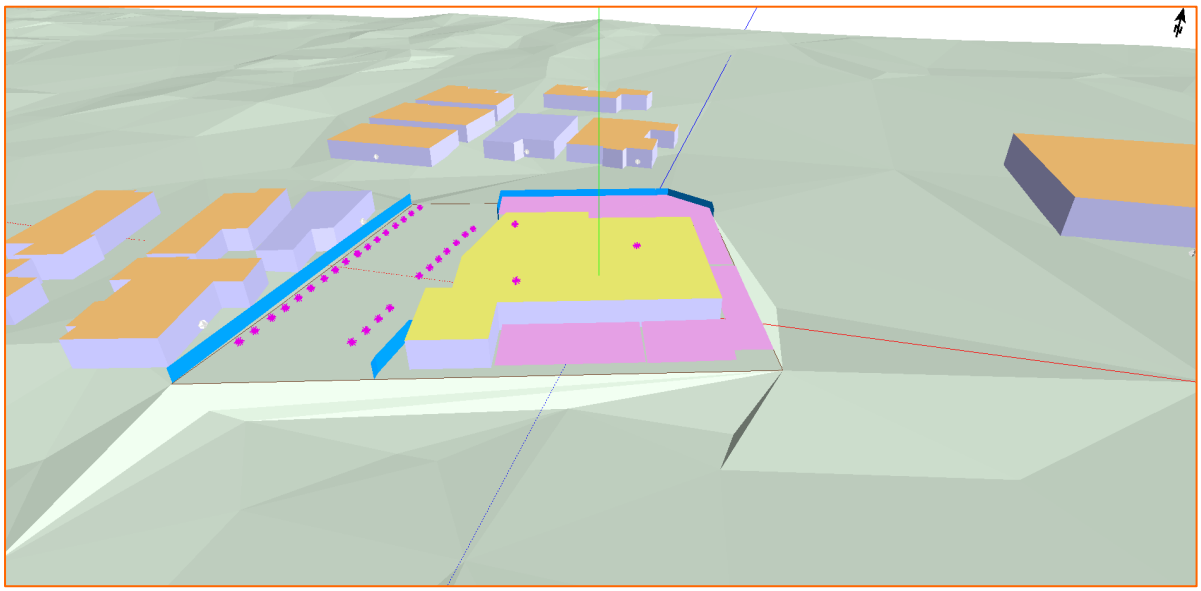


Figure 3-2 South Perspective View of 3D Noise Model

3.6 Ground Absorption

Ground absorption varies from a value of 0 to 1, with 0 being for an acoustically reflective ground (e.g. asphalt, concrete) and 1 for acoustically absorbent ground (e.g. grass/sand). In this instance, a value of 1 has been used for the outdoor play areas and 0.0 for the car park and road areas, and 0.6 for all other areas.

4 RESULTS

4.1 Outdoor Child Play

The childcare development will host up to 110 children. It is noted play time is generally staggered and therefore not all children would be playing outside at once for extended periods of time. However, noise levels were conservatively predicted for all children playing, as a worst-case scenario.

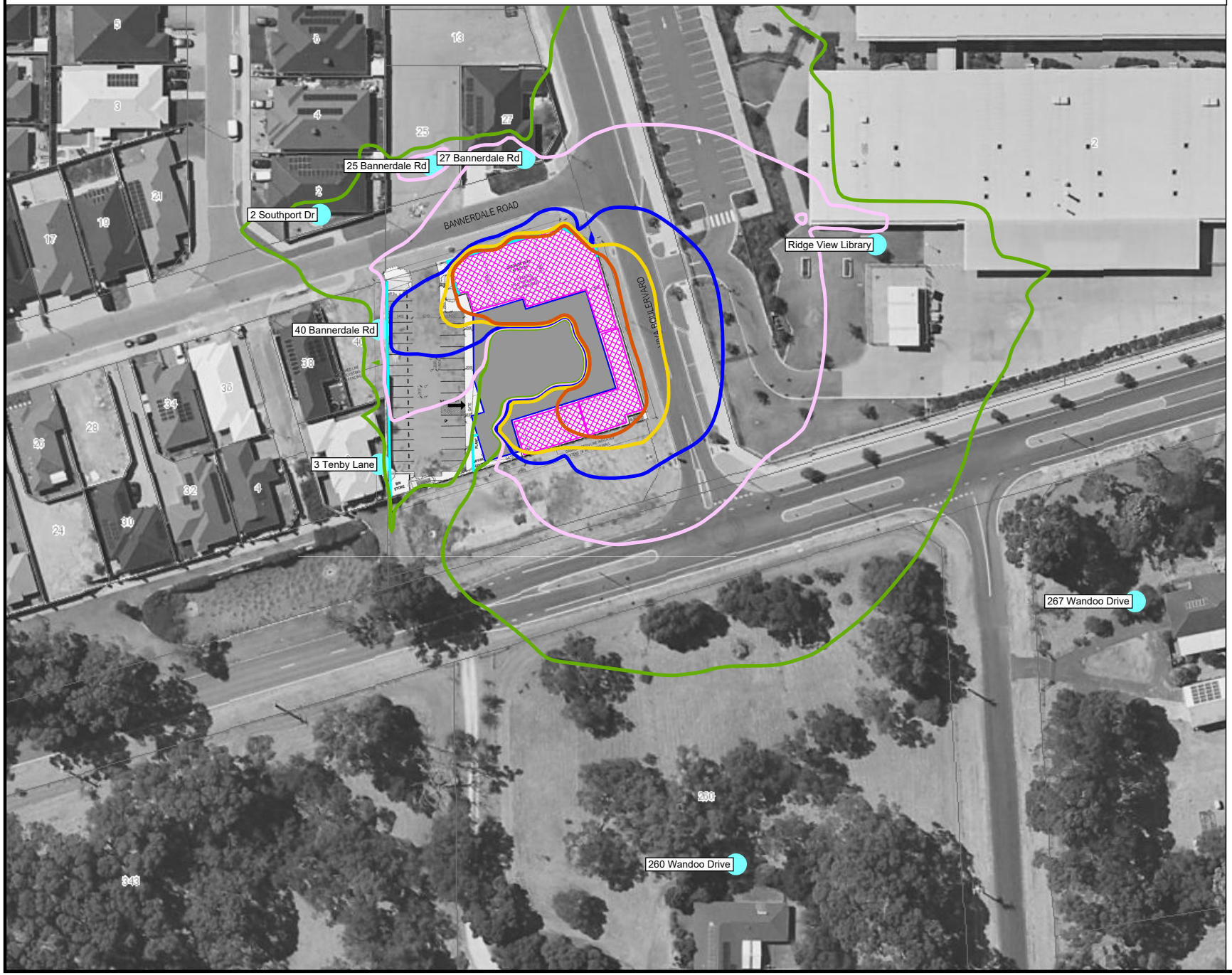
Table 4-1 presents the predicted noise levels at each receiver, noting the predicted noise levels are from child play only i.e. mechanical plant noise is not included. *Figure 4-1* also shows the predicted noise levels as noise contour maps at ground level (1.4 metres AGL).

Table 4-1 Predicted Noise Levels of Child Play, dB L_{A10}

Receiver	Babies (0-2)	Toddlers (2-3)	Kindy (3+)	Total Combined
2 Southport Drive	9	18	42	**42**
3 Tenby Lane	16	26	38	**38**
25 Bannerdale Rd	9	22	45	**45**
27 Bannerdale Rd	10	30	45	**45**
40 Bannerdale Rd	13	21	40	**40**
260 Wandoo Drive	27	36	31	**38**
267 Wandoo Drive	25	34	35	**38**
Ridge View Library	28	40	44	**45**

The highest predicted levels are to the residences to the north and to the library at Ridge View Secondary College. While these levels indicate the conservative potential outcome, in reality noise levels would be lower on average, with reduced child numbers (staggered play times) and with periods of passive play.

Figure 4-1 Outdoor Child Play Noise Ground Floor (1.5m AGL), dB L_{A10}



Predicted Noise level

	= 40
	= 45
	= 50
	= 55
	= 60

Legend

- CCC building
- Fence
- Outdoor Childplay
- Receiver

N

0 5 10 20 30 m

Project No: 22057314
Consultant: MM
Date: 22/07/2022
Algorithm: ISO 9613
SoundPLAN Version: 8.2

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4.2 Mechanical Plant

Mechanical plant consists of AC plant and extraction fans for the kitchen, toilets and laundry. The exhaust fans were assumed to be located on the roof and above the room being serviced. The AC plant was modelled as per the designated plant yard on the south western side.

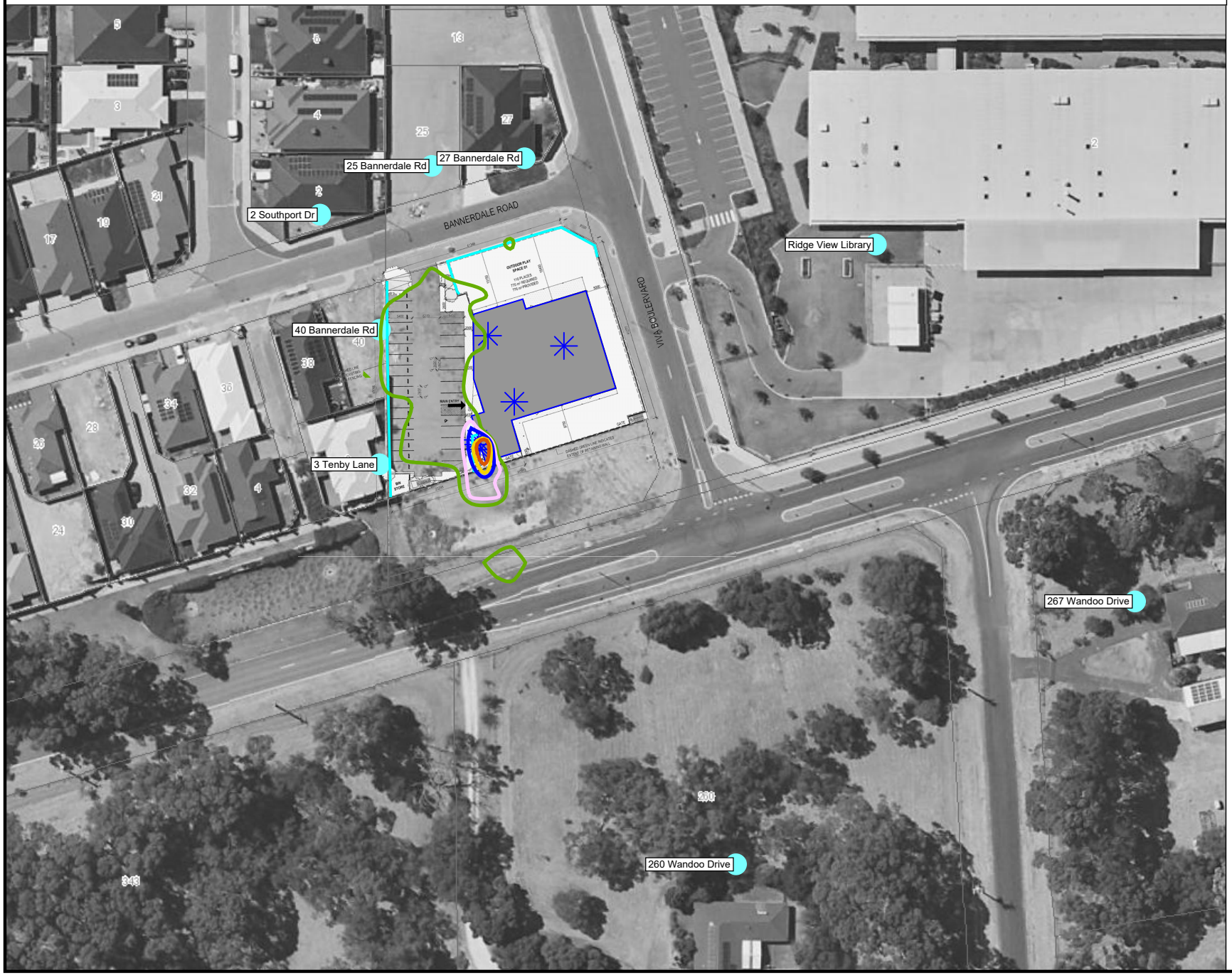
The predicted mechanical plant noise levels are presented in *Table 4-2*. The overall plant noise levels are also shown on *Figure 4-2*.

Table 4-2 Predicted Noise Levels of Mechanical Plant, dB L_{A10}

Receiver	All Plant Combined
2 Southport Drive	25
3 Tenby Lane	28
25 Bannerdale Rd	24
27 Bannerdale Rd	23
40 Bannerdale Rd	27
260 Wandoo Drive	20
267 Wandoo Drive	13
Ridge View Library	19

It can be seen that at most receivers, the predicted mechanical plant noise is lower than the child play noise levels (*Table 4-1*). Therefore, child play noise would dominate the noise levels during the day at most receivers, except prior to 7.00am, when child play noise is not present. The above results are based on assumed plant source levels and should therefore be recalculated once mechanical plant specifications are known closer to building permit application.

Figure 4-2 Mechanical Plant Noise Ground Floor (1.5m AGL), dB L_{A10}



Predicted Noise level

	= 30
	= 35
	= 40
	= 45
	= 50

Legend

- CCC building
- Fence
- Outdoor Childplay
- Receiver
- Car/Mech Source

N

0 5 10 20 30 m

Project No: 22057314
Consultant: MM
Date: 22/07/2022
Algorithm: ISO 9613
SoundPLAN Version: 8.2

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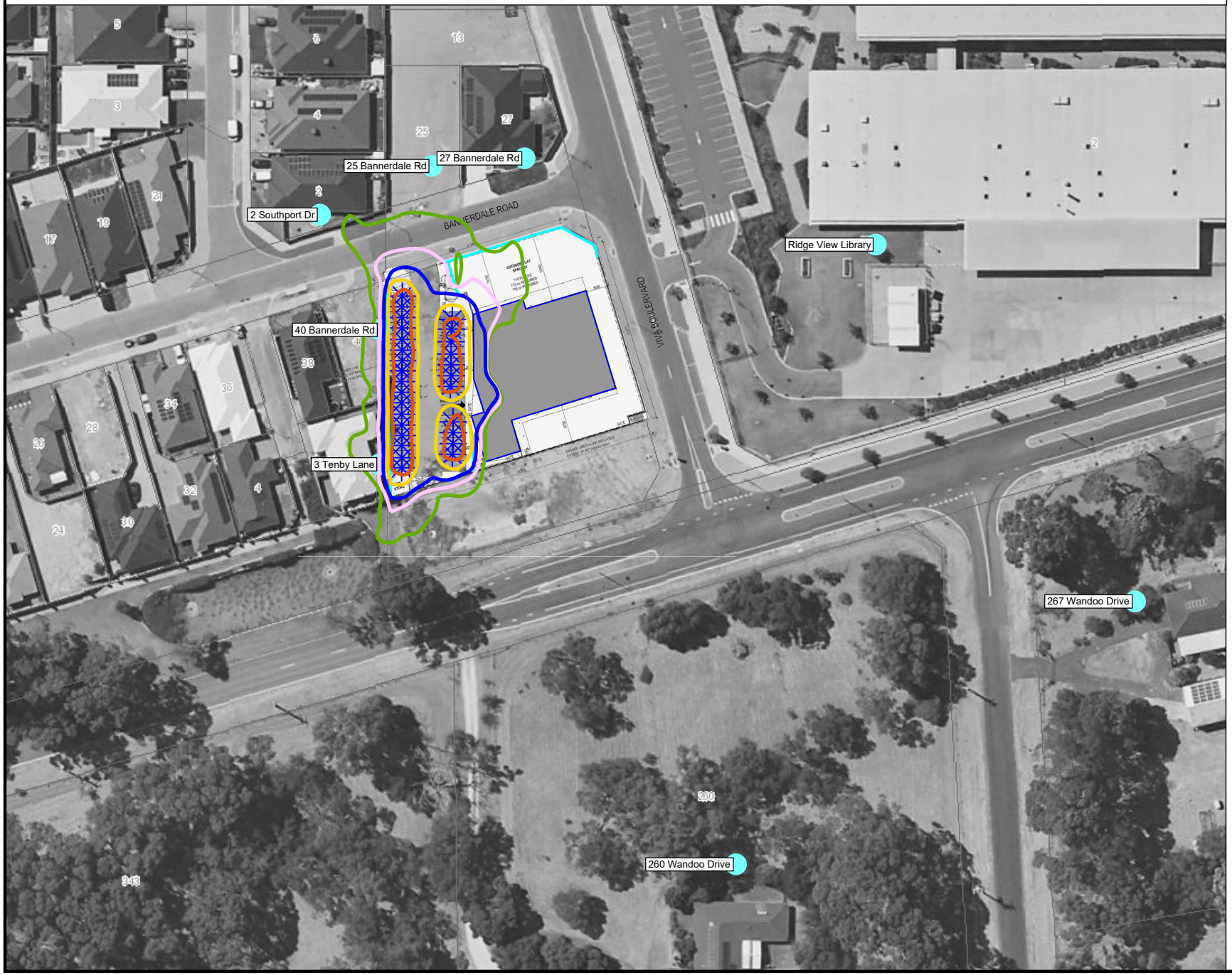
4.3 Car Park

The model includes noise from car doors closing in all parking bays and *Table 4-3* presents the highest predicted noise levels applicable to each receiver. *Figure 4-3* also presents the maximum noise levels at ground level (1.4 m AGL) for car doors as a contour map. Note that this contour is not a cumulative level, but a composite contour of each maximum noise event.

Table 4-3 Predicted Car Doors Closing Noise Levels, dB L_{Amax}

Receiver	Car Doors
2 Southport Drive	42
3 Tenby Lane	50
25 Bannerdale Rd	40
27 Bannerdale Rd	39
40 Bannerdale Rd	47
260 Wandoo Drive	31
267 Wandoo Drive	28
Ridge View Library	33

Figure 4-3 Car Park Noise Ground Floor (1.5m AGL), dB L_{A10}



Predicted Noise level

	= 45
	= 50
	= 55
	= 60
	= 65

Legend

- CCC building
- Fence
- Outdoor Childplay
- Receiver
- Car/Mech Source

N

0 5 10 20 30 m

Project No: 22057314
Consultant: MM
Date: 22/07/2022
Algorithm: ISO 9613
SoundPLAN Version: 8.2

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5 ASSESSMENT

5.1 Outdoor Child Play

Although the childcare centre opens from 6.30am, outdoor child play will only occur after 7.00am, when the assigned noise levels increase by 10 dB compared to prior to 7.00am. Noise from child play is not considered to contain annoying characteristics within the definition of the Regulations and therefore, no adjustments are made to the predicted noise levels.

Table 5-1 presents the assessment of the highest predicted noise levels from all 110 children playing outside against the L_{A10} assigned noise level at each receiver. For the purposes of this assessment, the vacant lots near the site are assumed to be developed as houses, and the Ridge View Secondary School library is classified as highly noise sensitive.

Table 5-1 Assessment of Outdoor Child Play Noise Levels, dB L_{A10}

Receiver	Assigned Noise Level	Predicted Level	Exceedance
2 Southport Drive	**45**	**42**	*Complies*
3 Tenby Lane	**45**	**38**	*Complies*
25 Bannerdale Rd	**45**	**45**	*Complies*
27 Bannerdale Rd	**45**	**45**	*Complies*
40 Bannerdale Rd	**45**	**40**	*Complies*
260 Wandoo Drive	**45**	**38**	*Complies*
267 Wandoo Drive	**45**	**38**	*Complies*
Ridge View Library	**45**	**45**	*Complies*

Based on a conservative scenario of all 110 children playing simultaneously, the assessment demonstrates compliance at all receivers. The proposed barriers are therefore considered effective, provided construction is solid and free of gaps.

5.2 Mechanical Plant

Given the proposed opening hours of the childcare centre, the night-time period (i.e. before 7.00am) is most critical. The overall noise levels are generally dominated by the kitchen exhaust plant and A/C condenser noise, which may be considered tonal, and a +5 dB adjustment (refer *Table 5-2*) applies to predictions.

Table 5-2 Assessment of Mechanical Plant Noise Levels, dB L_{A10}

Receiver	Night Assigned Noise Level	Predicted Level	Adjusted Level	Exceedance
2 Southport Drive	**35**	25	**30**	*Complies*
3 Tenby Lane	**35**	28	**33**	*Complies*
25 Bannerdale Rd	**35**	24	**29**	*Complies*
27 Bannerdale Rd	**35**	23	**28**	*Complies*
40 Bannerdale Rd	**35**	27	**32**	*Complies*
260 Wandoo Drive	**35**	20	**25**	*Complies*
267 Wandoo Drive	**35**	13	**18**	*Complies*
Ridge View Library	**35**	19	**24**	*Complies*

Noise levels are demonstrated to comply at all receivers. Note that this assessment is based on assumptions in relation to the number, location, size and type of AC plant and exhaust fans. Therefore, mechanical plant noise is to be reviewed by a qualified acoustical consultant during detailed design, when plant selections and locations become known. In any case, the design of the rooftop plant yard should allow for solid screening of a material such as *Colorbond* steel and at a height to obscure vision of the condensers to first floors of nearby dwellings. This design should be reviewed at building permit stage.

5.3 Car Doors

Car doors closing noise are short duration events and were therefore assessed against the L_{Amax} assigned noise level. Given the proposed hours of operation, staff and visitors may arrive before 7.00am when the night-time assigned noise level of 57 dB L_{Amax} is applicable. Car door noise may be considered impulsive within the definition of the Regulations. Therefore, an adjustment of +10 dB (refer *Table 5-3*) is applied to the predicted noise levels.

Table 5-3 Assessment of Car Doors Closing Noise Levels, dB L_{Amax}

Receiver	Night Assigned Noise Level	Predicted Level	Adjusted Level	Exceedance
2 Southport Drive	**55**	42	**52**	*Complies*
3 Tenby Lane	**55**	50	**60**	*+5*
25 Bannerdale Rd	**55**	40	**50**	*Complies*
27 Bannerdale Rd	**55**	39	**49**	*Complies*
40 Bannerdale Rd	**55**	47	**57**	*+2*
260 Wandoo Drive	**55**	31	**41**	*Complies*
267 Wandoo Drive	**55**	28	**38**	*Complies*
Ridge View Library	**55**	33	**43**	*Complies*

The noise from car doors is demonstrated to exceed at nearest noise sensitive locations to the west at night. During the day compliance is readily achieved. It is recommended that bays along the west portion of the lot (which are observed to be nominated as staff bays) be controlled such that staff opening the centre use those in the centre of the bank of bays. It is noted that these bays have been highlighted in the DA plans (Appendix A) and therefore compliance is achievable on this basis.

5.4 Indoor Child Play

An assessment of noise levels from indoor child play was carried out and the resulting noise levels at all locations were predicted to be well below that of outdoor child play considered in *Section 4.1*. This assessment was carried out based on the following considerations:

- Internal noise levels within activity rooms would not exceed those from outdoor play for each age group regardless of windows being opened or closed; and,
- Any music played within the internal activity areas would be 'light' music with no significant bass content and played at a relatively low level.

6 RECOMMENDATIONS

6.1 Outdoor Child Play

Noise from child play is demonstrated to comply during the day at all nearest residences provided all proposed play area walls are free of gaps and of a material with minimum surface mass of 8 kg/m^2. The effective barrier height must be minimum 2.0m relative to the play area floor level.

6.2 Mechanical Plant

To minimise noise impact from exhaust fans, it is recommended that inline type fans, which could be installed with attenuators or diverted ducting, be favoured over externally mounted plant. The A/C condensing units, while potentially compliant at all times at highly sensitive receivers, may be mitigated further quiet mode programming prior to 7.00am. This should be explored during detailed design and verified by the mechanical services engineer and a qualified acoustical consultant, when plant selections and locations become finalised.

6.3 Car Doors

Excessive noise from the car park to properties to the west should be anticipated at night (prior to 7.00am), with compliance achieved during the day. The DA Site plans in Appendix A denote bays to be nominated for staff arriving prior to 7.00am to achieve compliance. Day time arriving staff can utilise all other bays as needed.

6.4 Best Practice Measures

Separate to the above, the following ‘best practice’ measures could be incorporated to further reduce acoustic impact (though not specifically required to achieve compliance):

- The behaviour and 'style of play' of children should be monitored to prevent particularly loud activity e.g. loud banging/crashing of objects, 'group' shouts/yelling,
- Favour soft finishes in the outdoor play area to minimise impact noise (e.g. soft grass, sand pit(s), rubber mats) over timber or plastic,
- Favour soft balls and rubber wheeled toys,
- Crying children should be taken inside to be comforted,
- No amplified music to be played outside,
- Any music played within the internal activity areas to be 'light' music with no significant bass content and played at a relatively low level.
- Car park drainage grates to be plastic or metal with rubber gasket and securely fitted.

7 CONCLUSIONS

The noise impacts from the proposed childcare centre to be located at Lot 37 Bannerdale Road, Baldivis have been assessed against the relevant criteria of the *Environmental Protection (Noise) Regulations 1997*.

Based on the modelling and assessments in relation to the noise emissions from child play, mechanical plant and car doors closing, it is concluded that compliance can be achieved for all nearest existing and future noise sensitive premises, subject to further analysis of mechanical plant at detailed design.

Appendix A

Development Plans

01	COVER SHEET	3
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03	LOCATION PLAN	1
04	SITE PLAN	4
05	FLOOR PLAN	2
06	ROOF PLAN	3
07	ELEVATIONS	2
08	STREET ELEVATIONS	3
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BANNERDALE CHILDCARE CENTRE

LOT 37 BANNERDALE ROAD, BALDIVIS

JULY 2022

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
2		12/07/22
3		20/07/22

BROLA FALCONER
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brownfalconer.com.au

JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

COVER SHEET

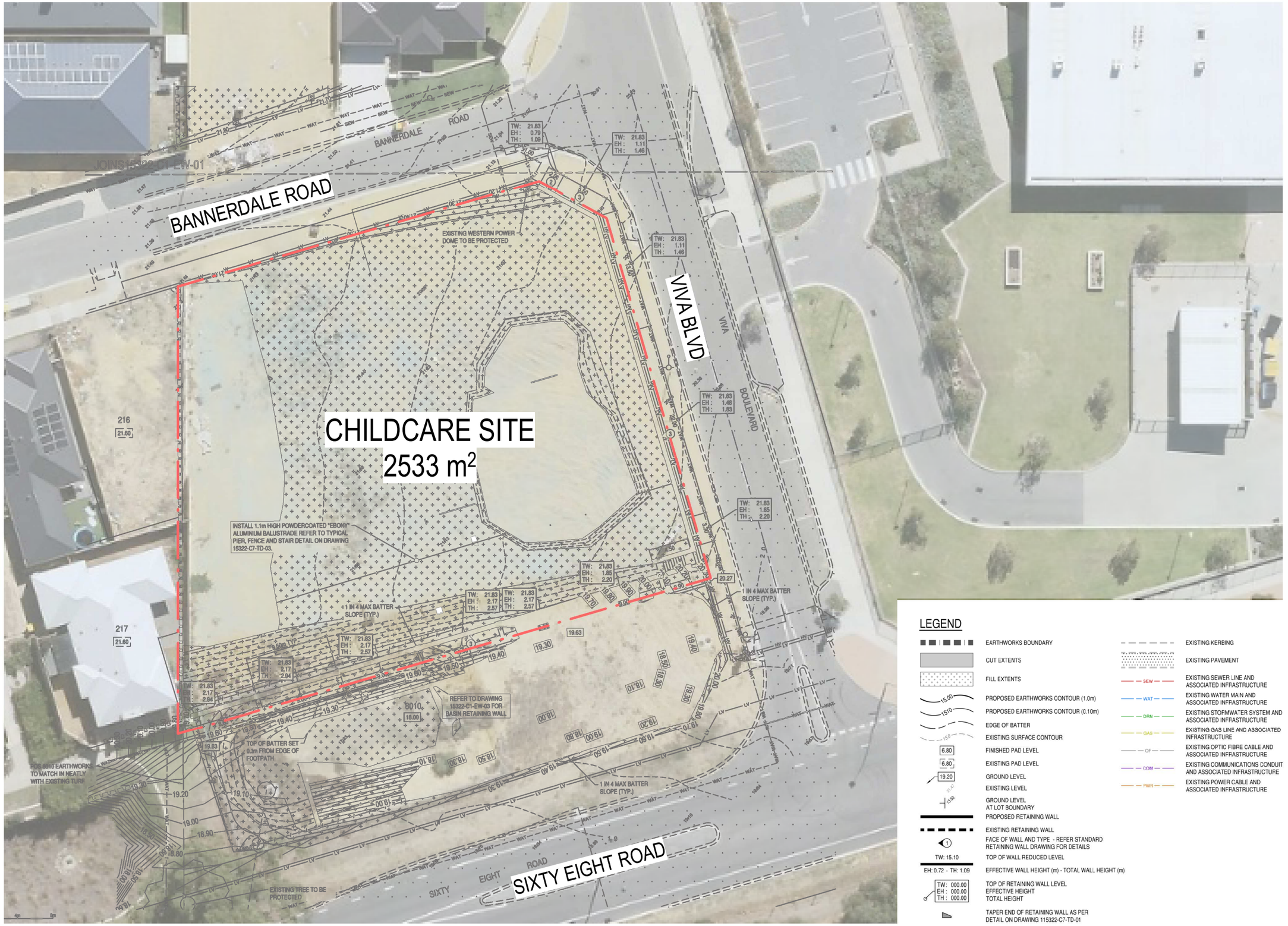
Scale
Drawn AD Checked MJ
Date 20/07/22
Job No. 2022047
Dwg No. **3570 01** Rev: **3** A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22
4		25/07/22

BASED DATA
ORIGINATES FROM
THE APPROVED CIVIL
DESIGN DRAWINGS
PREPARED BY
PRITCHARD FRANCIES



LEGEND

- EARTHWORKS BOUNDARY
- CUT EXTENTS
- FILL EXTENTS
- PROPOSED EARTHWORKS CONTOUR (1.0m)
- PROPOSED EARTHWORKS CONTOUR (0.10m)
- EDGE OF BATTER
- EXISTING SURFACE CONTOUR
- FINISHED PAD LEVEL
- EXISTING PAD LEVEL
- GROUND LEVEL
- EXISTING LEVEL
- GROUND LEVEL AT LOT BOUNDARY
- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL
- FACE OF WALL AND TYPE - REFER STANDARD RETAINING WALL DRAWING FOR DETAILS
- TOP OF WALL REDUCED LEVEL
- EFFECTIVE WALL HEIGHT (m) - TOTAL WALL HEIGHT (m)
- TOP OF RETAINING WALL LEVEL EFFECTIVE HEIGHT TOTAL HEIGHT
- TAPER END OF RETAINING WALL AS PER DETAIL ON DRAWING 115322-C7-TD-01
- EXISTING KERBING
- EXISTING PAVEMENT
- EXISTING SEWER LINE AND ASSOCIATED INFRASTRUCTURE
- EXISTING WATER MAIN AND ASSOCIATED INFRASTRUCTURE
- EXISTING STORMWATER SYSTEM AND ASSOCIATED INFRASTRUCTURE
- EXISTING GAS LINE AND ASSOCIATED INFRASTRUCTURE
- EXISTING OPTIC FIBRE CABLE AND ASSOCIATED INFRASTRUCTURE
- EXISTING COMMUNICATIONS CONDUIT AND ASSOCIATED INFRASTRUCTURE
- EXISTING POWER CABLE AND ASSOCIATED INFRASTRUCTURE

SURVEY

1 : 400

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

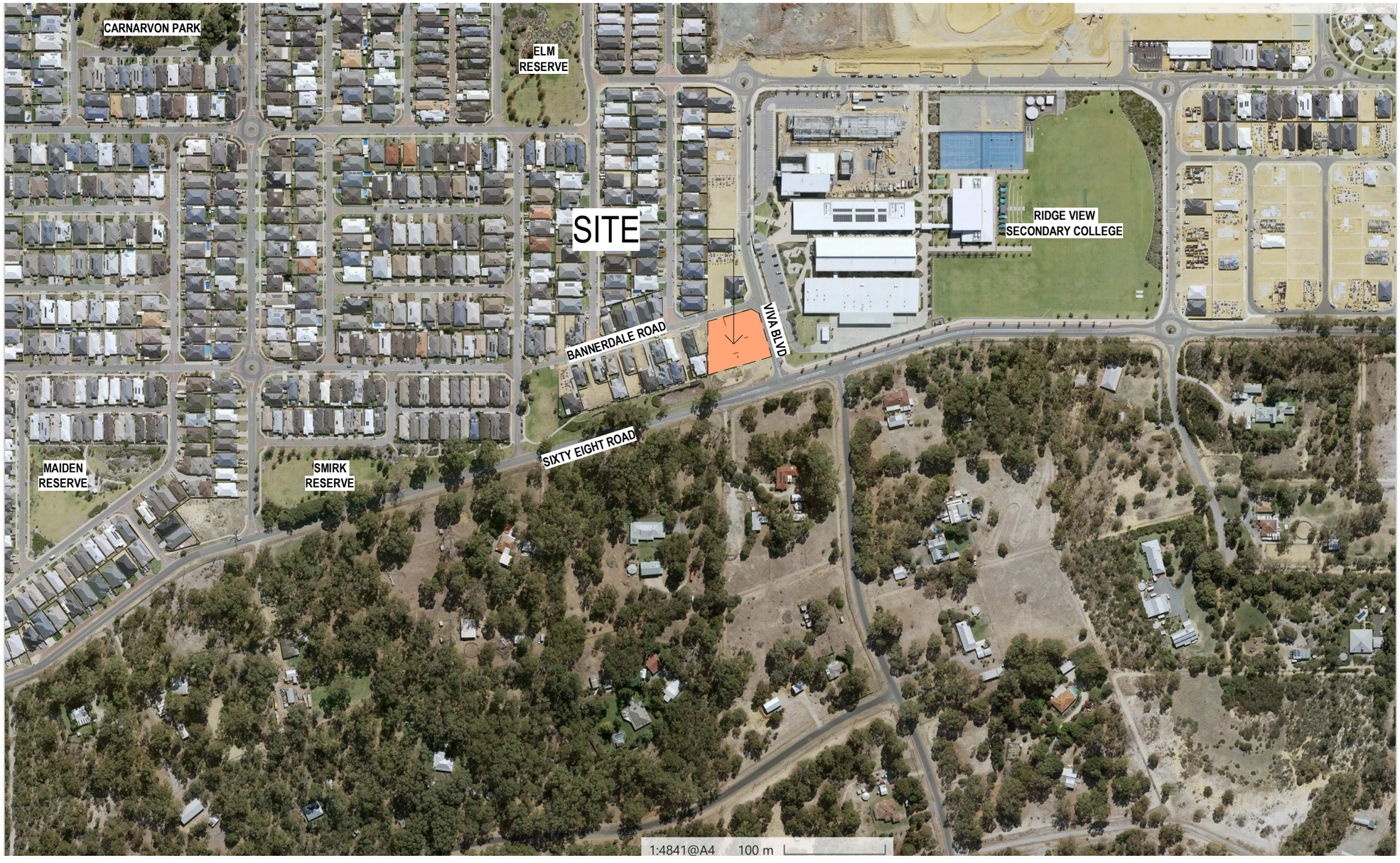
SURVEY

Scale	1 : 400		
Drawn	AD	Checked	MJ
Date	25/07/22		
Job No.	2022047		
Dwg No.	3570 02	Rev:	4 A3 SHEET

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22



LOCATION PLAN

1 : 4000

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JARRA PROPERTY

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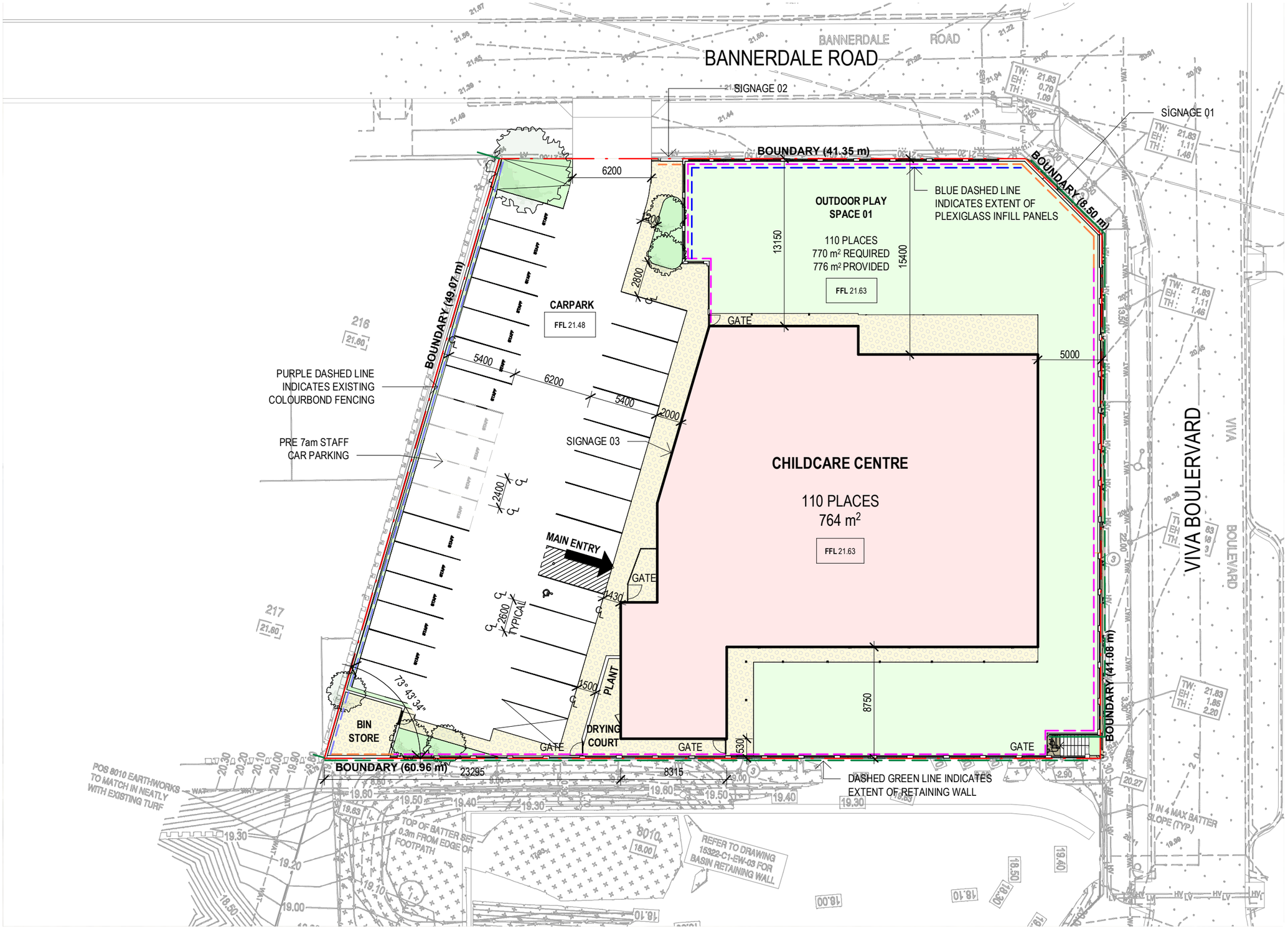
BALDIVIS 6171

LOCATION PLAN

Scale	1 : 4000		
Drawn	AD	Checked	MJ
Date	6/07/22		
Job No.	2022047		
Dwg No.	**3570 03**	Rev:	**1** A3 SHEET



SITE PLAN

1 : 300

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
0		6/07/22
1		12/07/22
2		20/07/22
3		25/07/22
4	PRE 7AM PARKING MOVED, FENCE HEIGHT CHANGE	04/08/22

DEVELOPMENT SUMMARY

SITE AREA:	2533 m²
BUILDING AREA	764 m²
BUILDING AREA PER PLACE	6.94
OUTDOOR PLAY AREA REQUIRED	770 m²
OUTDOOR PAY AREA PROVIDED	776 m²
REQUIRED VISITOR CAR BAYS	
1 BAY PER 8 PLACES	13.75
REQUIRED STAFF BAYS (1 PER EDUCATOR)	17
TOTAL REQUIRED BAYS	30.75
STAFF BAYS PROVIDED	17
VISITOR BAYS PROVIDED	13
TOTAL BAYS PROVIDED	30
SOFT LANDSCAPING	732 m²
% OF SITE SOFT LANDSCAPING	28.9%

FENCING LEGEND

FENCE TYPE 01

1800mm HIGH
LIMESTONE PIERS

1600mm HIGH INFIL
ALUMINIUM FENCING
IN BLACK

FENCE TYPE 02

1800mm HIGH SOLID
LIMESTONE WALL

ON TOP OF RETAINING
WALL AS REQUIRED

FENCE TYPE 03

2m HIGH NEW
COLOURBOND FENCE

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

SITE PLAN

Scale	As indicated		
Drawn	AD	Checked	MJ
Date	04/08/22		
Job No.	2022047		
Dwg No.	3570 04	Rev: 4	A3 SHEET

DA ISSUE

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Rev.	Amendment	Date
1		6/07/22
2		12/07/22

GROUND FLOOR PLAN

1 : 200

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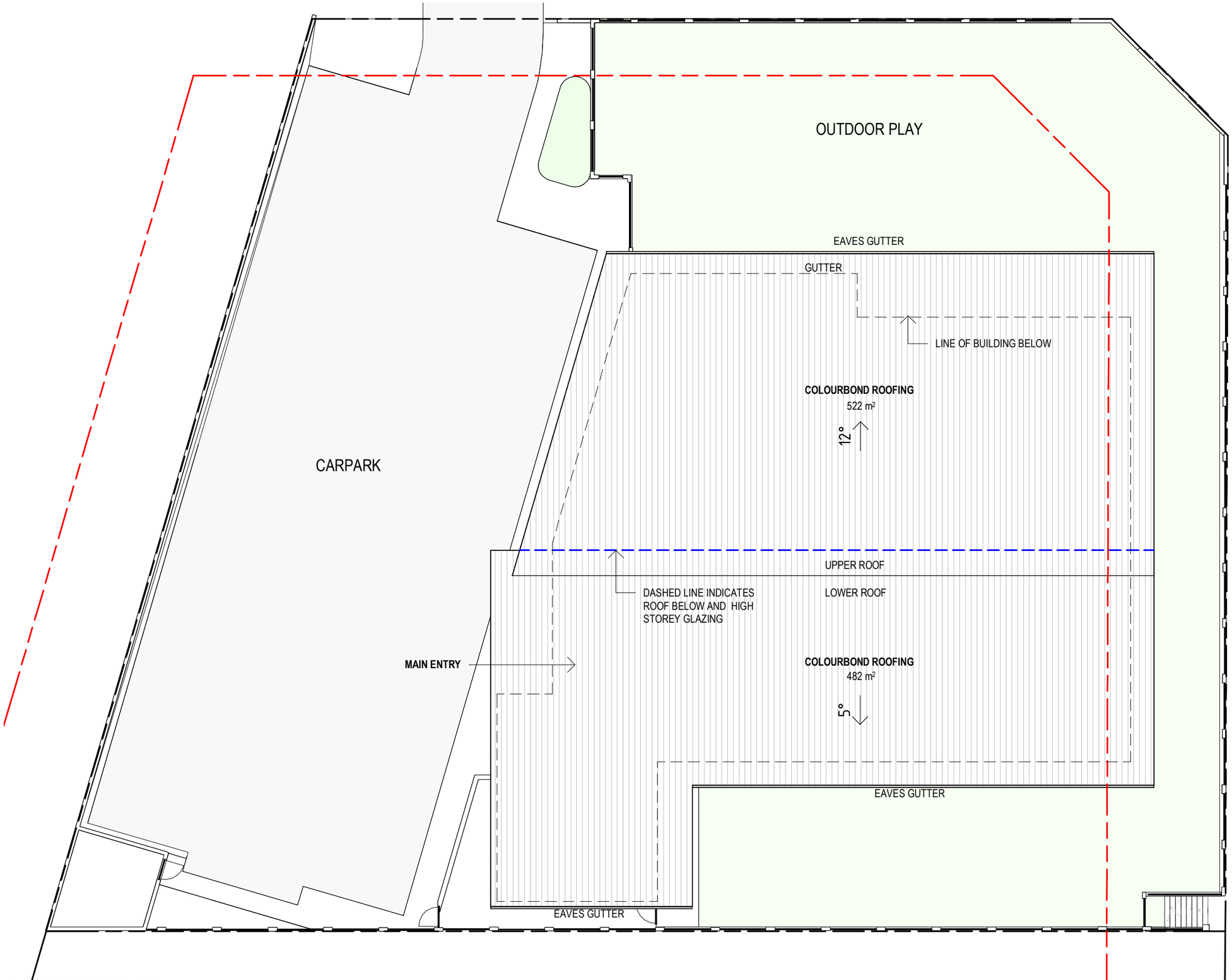
BALDIVIS 6171

FLOOR PLAN

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	12/07/22		
Job No.	2022047		
Dwg No.	**3570 05**	Rev:	**2** A3 SHEET



1 - ROOF PLAN

1 : 200

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3		20/07/22

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ROOF PLAN

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	20/07/22		
Job No.	2022047		
Dwg No.	**3570 06**	Rev: **3**	A3 SHEET

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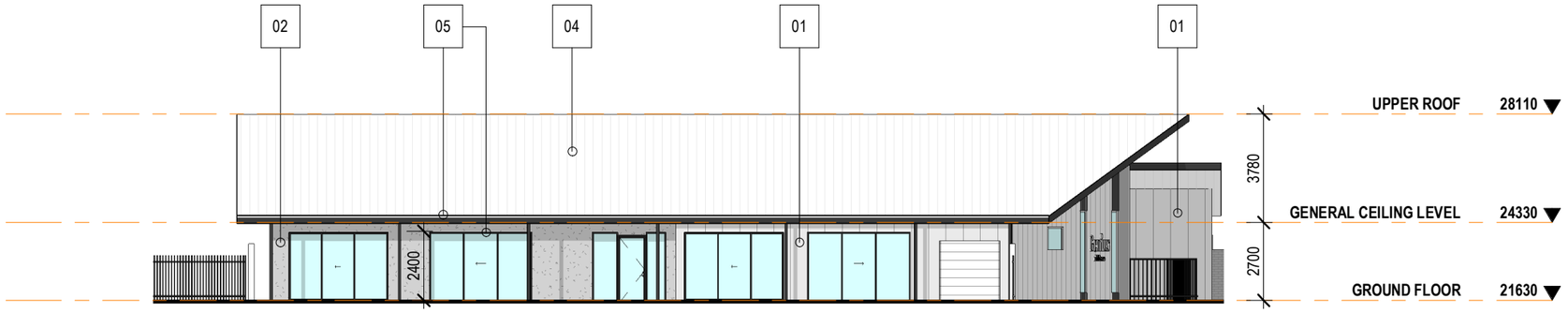
Rev.	Amendment	Date
1		6/07/22
2		12/07/22



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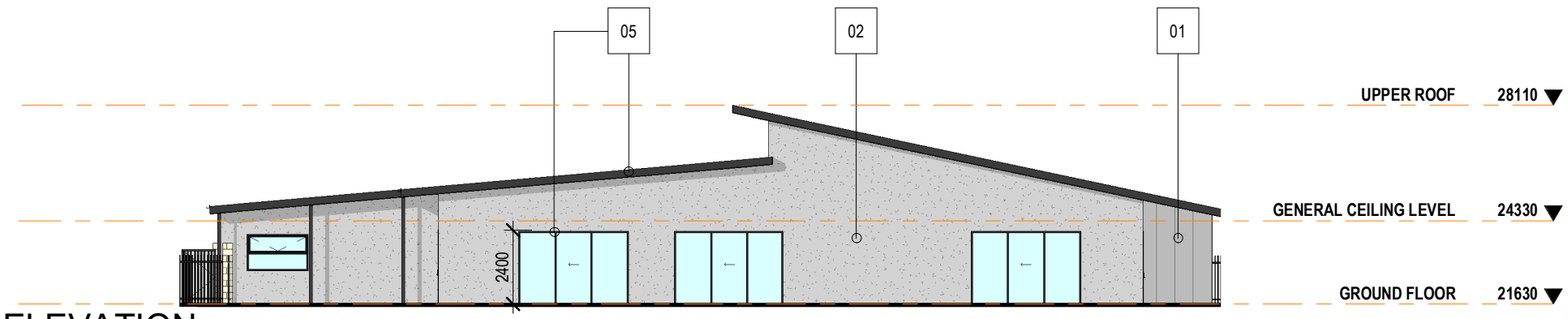

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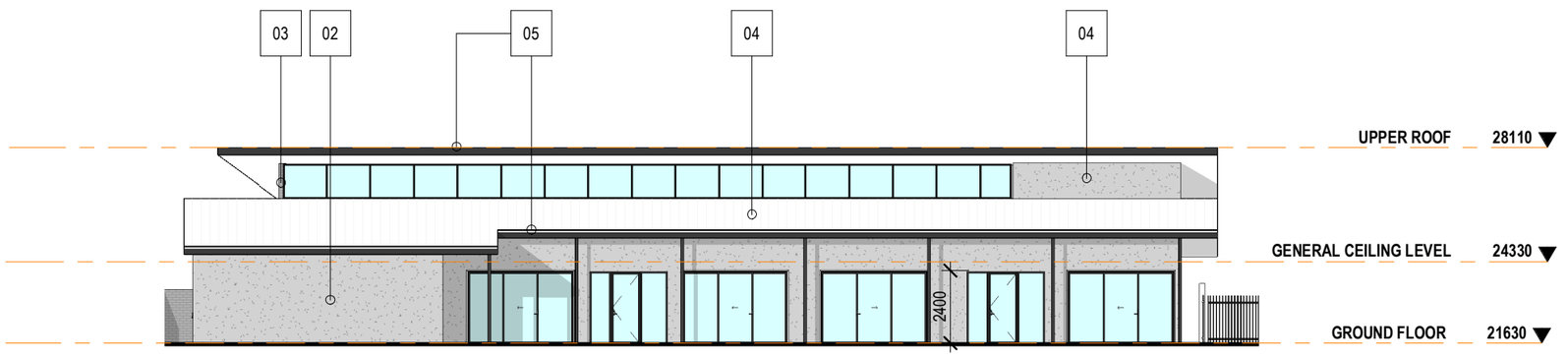
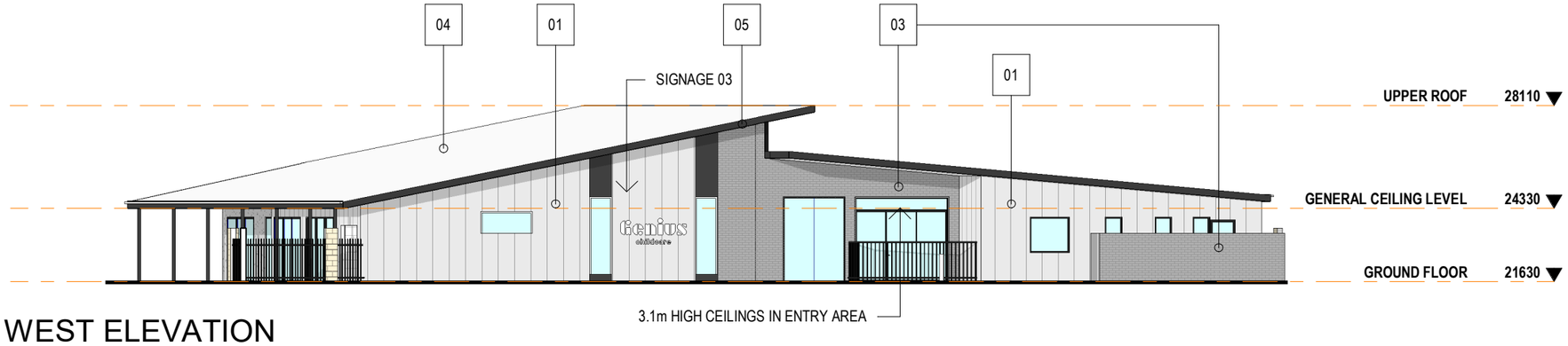


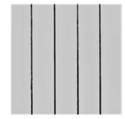
SOUTH ELEVATION

1 : 200



WEST ELEVATION

1 : 200



01 VERTICAL AXON CLADDING
COLOUR: LIGHT GREY

02 DURATEX CLADDING
ACROTEX FINISH
COLOUR: GREY

03 BRICK FACE
COLOUR: STEEL

04 COLOURBOND METAL
COLOUR: MONUMENT

05 ALUMINIUM DOORS & WINDOW FRAMES, FASCIAS,COLUMNS AND SOFFITS
COLOUR: BLACK

06 LIMESTONE FENCING
PIERS AND RETAINING WALLS

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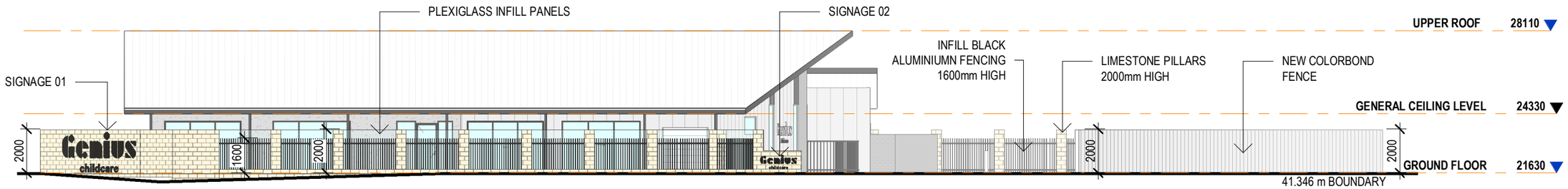
BALDIVIS 6171

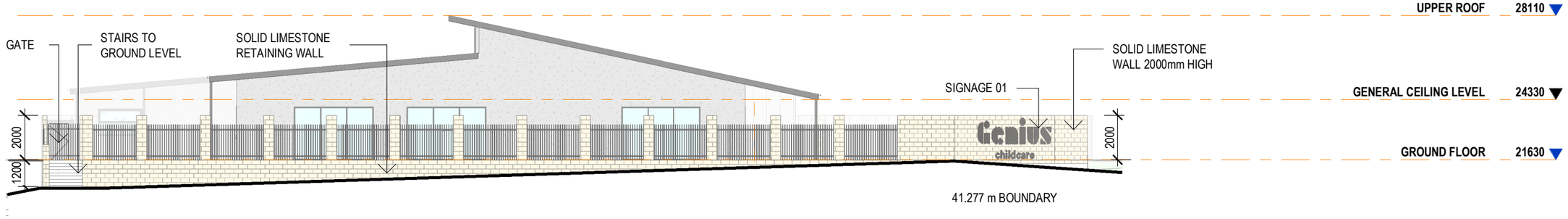
ELEVATIONS

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	12/07/22		
Job No.	2022047		
Dwg No.	**3570 07**	Rev:	**2** A3 SHEET



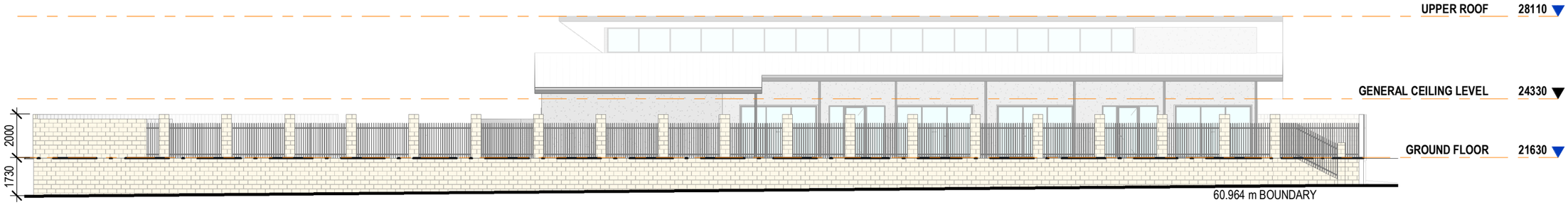
NORTH ELEVATION STREET - BANNERDALE RD

1 : 200



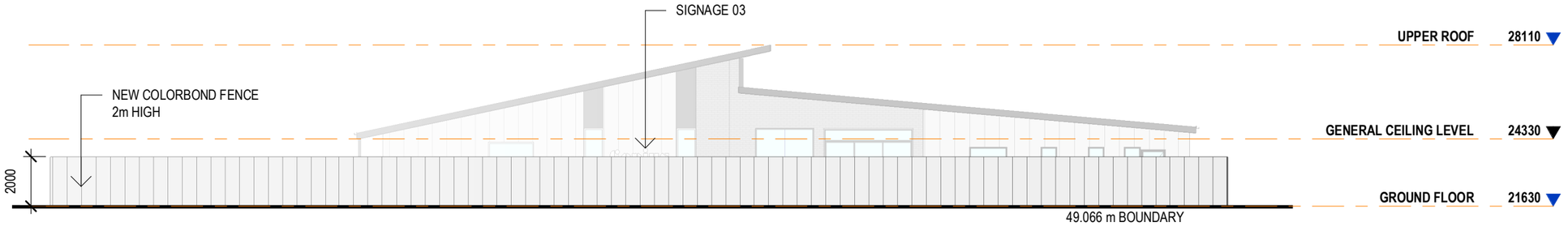
EAST ELEVATION STREET - VIVA BOULEVARD

1 : 200



SOUTH ELEVATION STREET

1 : 200



WEST ELEVATION STREET

1 : 200

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STREET ELEVATIONS

Scale	1 : 200		
Drawn	AD	Checked	MJ
Date	04/08/22		
Job No.	2022047		
Dwg No.	3570 08	Rev: 3	A3 SHEET

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LOT 17, BANNERDALE ROAD
BALDIVIS 6171

3D VIEWS

Scale
Drawn AD Checked MJ
Date 12/07/22
Job No. 2022047
Dwg No. **3570 09** Rev: **2** A3 SHEET

Appendix B

Terminology

The following is an explanation of the terminology used throughout this report.

Decibel (dB)
The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

A-Weighting
An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A dB.

Sound Power Level (L_w)
Under normal conditions, a given sound source will radiate the same amount of energy, irrespective of its surroundings, being the sound power level. This is similar to a 1kW electric heater always radiating 1kW of heat. The sound power level of a noise source cannot be directly measured using a sound level meter but is calculated based on measured sound pressure levels at known distances. Noise modelling incorporates source sound power levels as part of the input data.

Sound Pressure Level (L_p)
The sound pressure level of a noise source is dependent upon its surroundings, being influenced by distance, ground absorption, topography, meteorological conditions etc and is what the human ear actually hears. Using the electric heater analogy above, the heat will vary depending upon where the heater is located, just as the sound pressure level will vary depending on the surroundings. Noise modelling predicts the sound pressure level from the sound power levels taking into account ground absorption, barrier effects, distance etc.

L_{ASlow}
This is the noise level in decibels, obtained using the A frequency weighting and the S (Slow) time weighting as specified in IEC 61672-1:2002. Unless assessing modulation, all measurements use the slow time weighting characteristic.

L_{AFast}
This is the noise level in decibels, obtained using the A frequency weighting and the F (Fast) time weighting as specified in IEC 61672-1:2002. This is used when assessing the presence of modulation only.

L_{APeak}
This is the greatest absolute instantaneous sound pressure in decibels using the A frequency weighting as specified in IEC 61672-1:2002.

L_{Amax}
An L_{Amax} level is the maximum A-weighted noise level during a particular measurement.

L_{A1}
An L_{A1} level is the A-weighted noise level which is exceeded for one percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

L_{A10}
An L_{A10} level is the A-weighted noise level which is exceeded for 10 percent of the measurement period and is considered to represent the "*intrusive*" noise level.

L_{Aeq}
The equivalent steady state A-weighted sound level ("equal energy") in decibels which, in a specified time period, contains the same acoustic energy as the time-varying level during the same period. It is considered to represent the "average" noise level.

L_{A90}
An L_{A90} level is the A-weighted noise level which is exceeded for 90 percent of the measurement period and is considered to represent the "*background*" noise level.

One-Third-Octave Band
Means a band of frequencies spanning one-third of an octave and having a centre frequency between 25 Hz and 20 000 Hz inclusive.

L_{Amax} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded at any time.

L_{A1} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 1% of the representative assessment period.

L_{A10} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 10% of the representative assessment period.

Tonal Noise
A tonal noise source can be described as a source that has a distinctive noise emission in one or more frequencies. An example would be whining or droning. The quantitative definition of tonality is:

the presence in the noise emission of tonal characteristics where the difference between -

(a) the A-weighted sound pressure level in any one-third octave band; and

(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

This is relatively common in most noise sources.

Modulating Noise
A modulating source is regular, cyclic and audible and is present for at least 10% of the measurement period. The quantitative definition of modulation is:

a variation in the emission of noise that —

(a) is more than 3 dB $L_{A\ Fast}$ or is more than 3 dB $L_{A\ Fast}$ in any one-third octave band;

(b) is present for at least 10% of the representative.

Impulsive Noise
An impulsive noise source has a short-term banging, clunking or explosive sound. The quantitative definition of impulsiveness is:

a variation in the emission of a noise where the difference between $L_{A\ peak}$ and $L_{A\ Max\ slow}$ is more than 15 dB when determined for a single representative event;

Major Road
Is a road with an estimated average daily traffic count of more than 15,000 vehicles.

Secondary / Minor Road
Is a road with an estimated average daily traffic count of between 6,000 and 15,000 vehicles.

Influencing Factor (IF)

$$= \frac{1}{10}(\%\ \text{Type A}_{100} + \%\ \text{Type A}_{450}) + \frac{1}{20}(\%\ \text{Type B}_{100} + \%\ \text{Type B}_{450})$$

where:

$\%\ \text{Type A}_{100}$ = the percentage of industrial land within a100m radius of the premises receiving the noise

$\%\text{TypeA}_{450}$ = the percentage of industrial land within a 450m radius of the premises receiving the noise

$\%\ \text{Type B}_{100}$ = the percentage of commercial land within a100m radius of the premises receiving the noise

$\%\text{TypeB}_{450}$ = the percentage of commercial land within a 450m radius of the premises receiving the noise

+ Traffic Factor (maximum of 6 dB)

= 2 for each secondary road within 100m

= 2 for each major road within 450m

= 6 for each major road within 100m

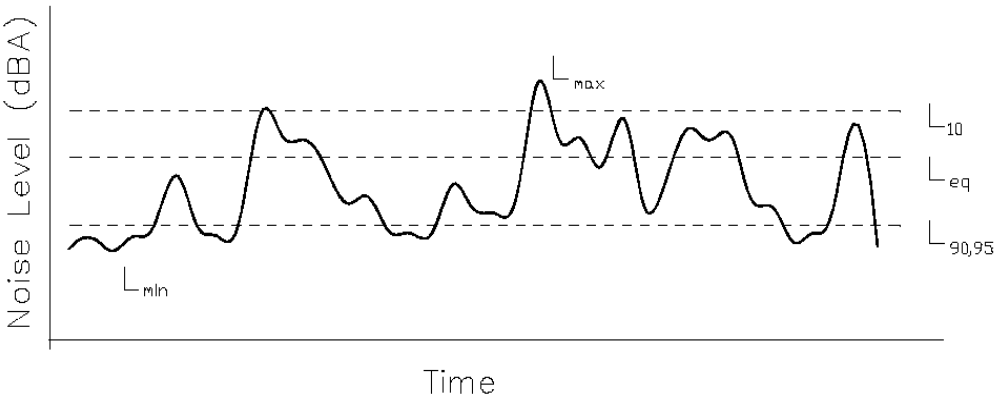
Representative Assessment Period
Means a period of time not less than 15 minutes, and not exceeding four hours, determined by an inspector or authorised person to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission.

Background Noise
Background noise or residual noise is the noise level from sources other than the source of concern. When measuring environmental noise, residual sound is often a problem. One reason is that regulations often require that the noise from different types of sources be dealt with separately. This separation, e.g. of traffic noise from industrial noise, is often difficult to accomplish in practice. Another reason is that the measurements are normally carried out outdoors. Wind-induced noise, directly on the microphone and indirectly on trees, buildings, etc., may also affect the result. The character of these noise sources can make it difficult or even impossible to carry out any corrections.

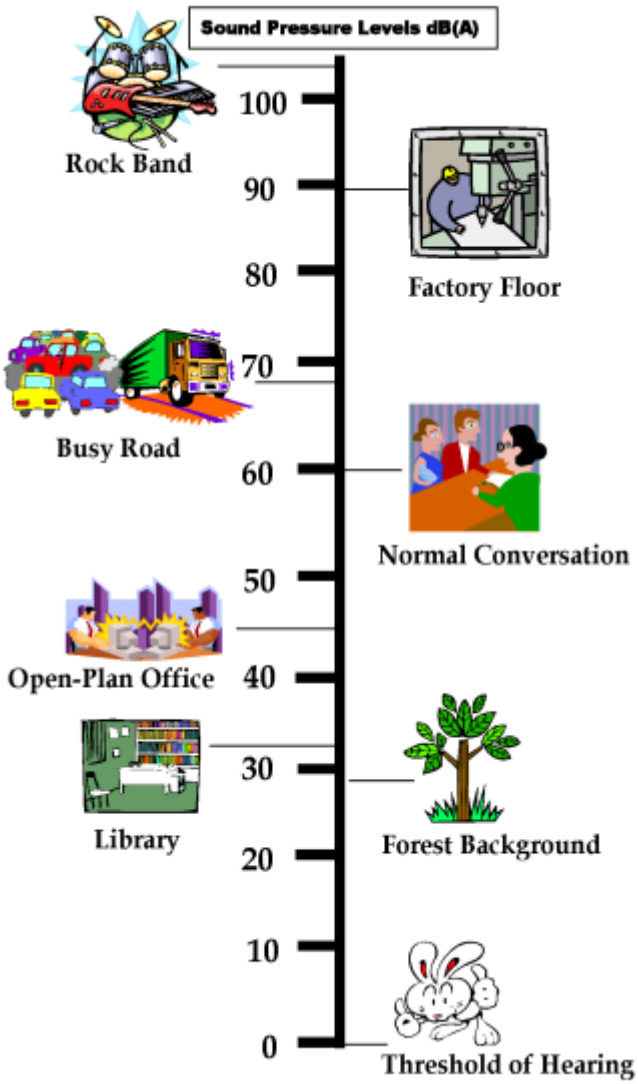
Ambient Noise
Means the level of noise from all sources, including background noise from near and far and the source of interest.

Specific Noise
Relates to the component of the ambient noise that is of interest. This can be referred to as the noise of concern or the noise of interest.

Chart of Noise Level Descriptors



Typical Noise Levels



APPENDIX 7

BUSHFIRE ASSESSMENT

Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address: Lot 37 Bannerdale Road, Baldivis

Site visit: Yes ☑ No ☐

Date of site visit (if applicable): Day 19th Month July Year 2022

Report author: Gavin Fancote

WA BPAD accreditation level (please circle):

Not accredited ☐ Level 1 BAL assessor ☐ Level 2 practitioner ☑ Level 3 practitioner ☐

If accredited please provide the following.

BPAD accreditation number: 37922 Accreditation expiry: Month September Year 2022

Bushfire management plan version number: 2

Bushfire management plan date: Day 4th Month August Year 2022

Client/business name: Jarra Childcare Developments Pty Ltd

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?		✔
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?		✔

Is the proposal any of the following (see SPP 3.7 for definitions)?	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)		✔
Strategic planning proposal (including rezoning applications)		✔
Minor development (in BAL-40 or BAL-FZ)		✔
High risk land-use		✔
Vulnerable land-use	✔	

None of the above ☐

Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author  Date 04/08/2022

Bushfire Management Plan

Prepared for Lot 37 Bannerdale Road, Baldivis 6171 WA

Table of Contents

List of figures

List of appendices

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Document control

Report Version	Purpose	Author/reviewer and accreditation details	Date Submitted
Revision 1	For Approval and Implementation	Paul Smith Gavin Fancote BPAD37922	04/08/2022

Disclaimer

This report is based on the site conditions surveyed at the time the document was prepared. The assessment of the bushfire threat made in this report is made in good faith based on the information available to Entire Fire Management at the time.

The recommendations contained in this report are considered to be minimum standards and they do not guarantee that a building or assets will not be damaged in a bushfire. In the making of these comments and recommendations it should be understood that the focus of this document is to minimise the threat and impact of a bushfire.

Finally, the implementation of the adopted measures and recommendations within this report will contribute to the amelioration of the potential impact of any bushfire upon the development, but they do not and cannot guarantee that the area will not be affected by bushfire at some time.

Section 1: Proposal Details

This BMP has been developed in support of a development application for the Commercial Development located at Lot 37 Bannerdale Road, Baldivis.

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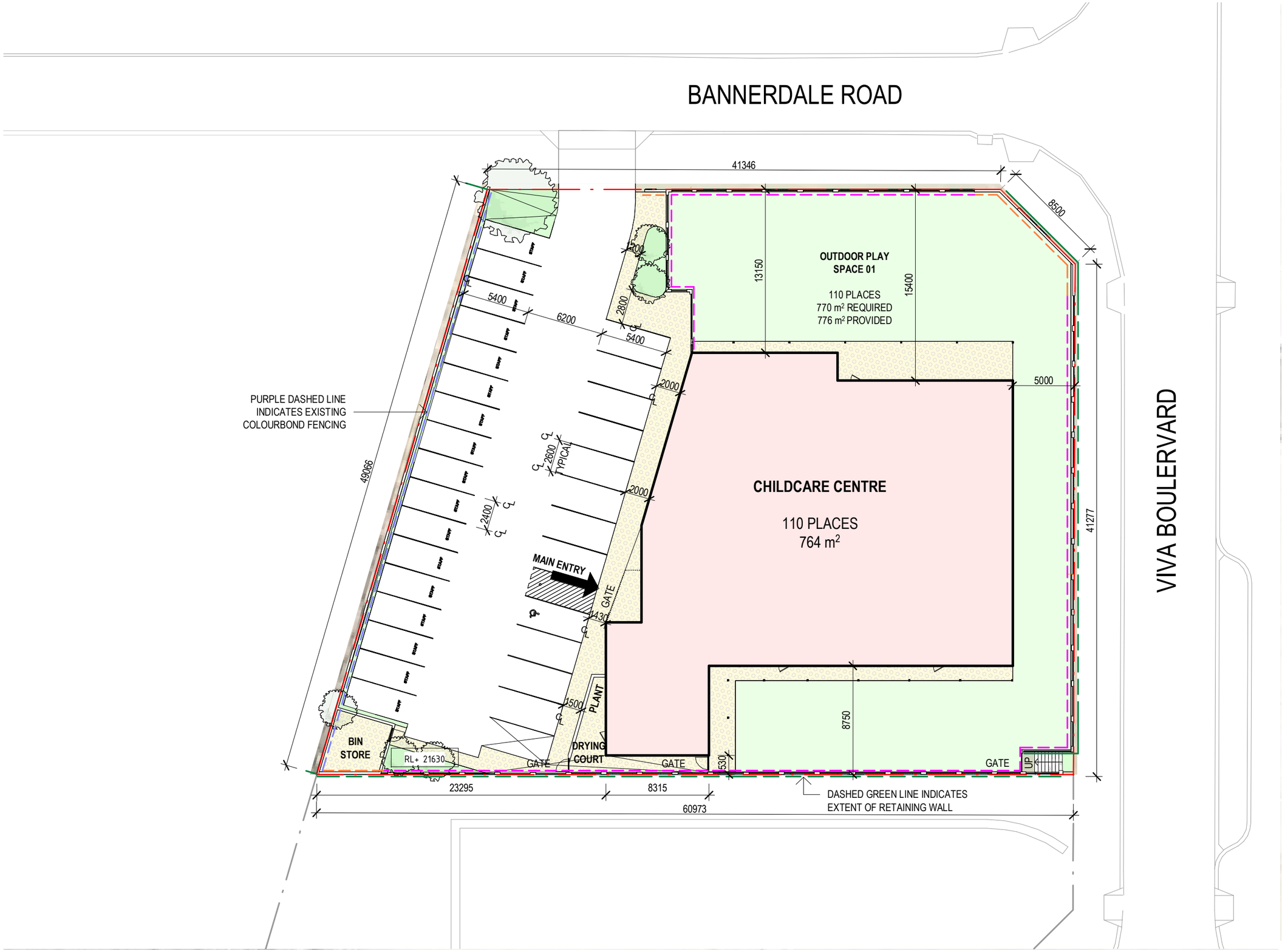

SITE PLAN

1 : 300

DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev.	Amendment	Date
1		6/07/22

FENCING LEGEND

FENCE TYPE 01

1800mm HIGH LIMESTONE PIERS

1600mm HIGH INFIL ALUMINIUM FENCING IN BLACK

FENCE TYPE 02

1800mm HIGH SOLID LIMESTONE WALL

ON TOP OF RETAINING WALL AS REQUIRED

FENCE TYPE 03

1800mm HIGH EXISTING COLOURBOND FENCE

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JARRA PROPERTY

LOT 17, BANNERDALE ROAD
BALDIVIS 6171

SITE PLAN

Scale	As indicated		
Drawn	AD	Checked	MJ
Date	6/07/22		
Job No.	2022047		
Dwg No.	3570 04	Rev: 1	A3 SHEET

FIGURE 2: Map of Bushfire Prone Areas for Subject Site

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Section 2: Environmental Considerations

The proposed development site has been assessed for environmental values using the national database set *www.nationalmap.gov.au* to ensure that any clearing of native vegetation for bushfire protection does not adversely affect recognised conservational elements.

Datasets explored within NationalMap include the following:

Data sets checked	Identified	Consideration required	Comment
Department of Biodiversity, Conservation and Attractions:			
Threatened Ecological Communities (DBCA-038)	No	No	Owner to consult with Local Government Environmental Officer.
Carnabys Cockatoo Confirmed Roost (DBCA-050)	Yes	Yes	Not required to seek advice from Local Government Environmental Officer.
Black Cockatoo Roosting Site (DBCA-064)	Yes	Yes	Owner to consult with Local Government Environmental Officer.
Department of Planning, Lands Heritage:			
Bush Forever Areas 2000 (DPLH-019)	No	No	Not required to seek advice from Local Government Environmental Officer.
Department of Water and Environmental Regulation			
Clearing Regulations – Environmentally Sensitive Areas (DWER-046)	No	No	Owner to consult with Local Government Environmental Officer.

The Visual representation is shown on the follow page & is taken from the NationalMap data base.

The Development falls within a Threatened Ecological Community zone, in the event of the need to clear any native vegetation a permit should be obtained from the Department of Biodiversity, Conservation and Attractions prior to any clearing works.

As the development does not require any clearing, The above does not need further considerations or additional consultation.

The area that the future development is being built, on was purely assessed for these environmental values, and currently does not affect the biodiversity, conservation and attraction data sets.

Proposed Asset Protection Zones (APZ) and placement of buildings will not require clearing of trees or any vegetation. The APZ is to be maintained to APZ guidelines as per Appendix 1.

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FIGURE 3: National Map Environmental Considerations for Subject Site - DBCA

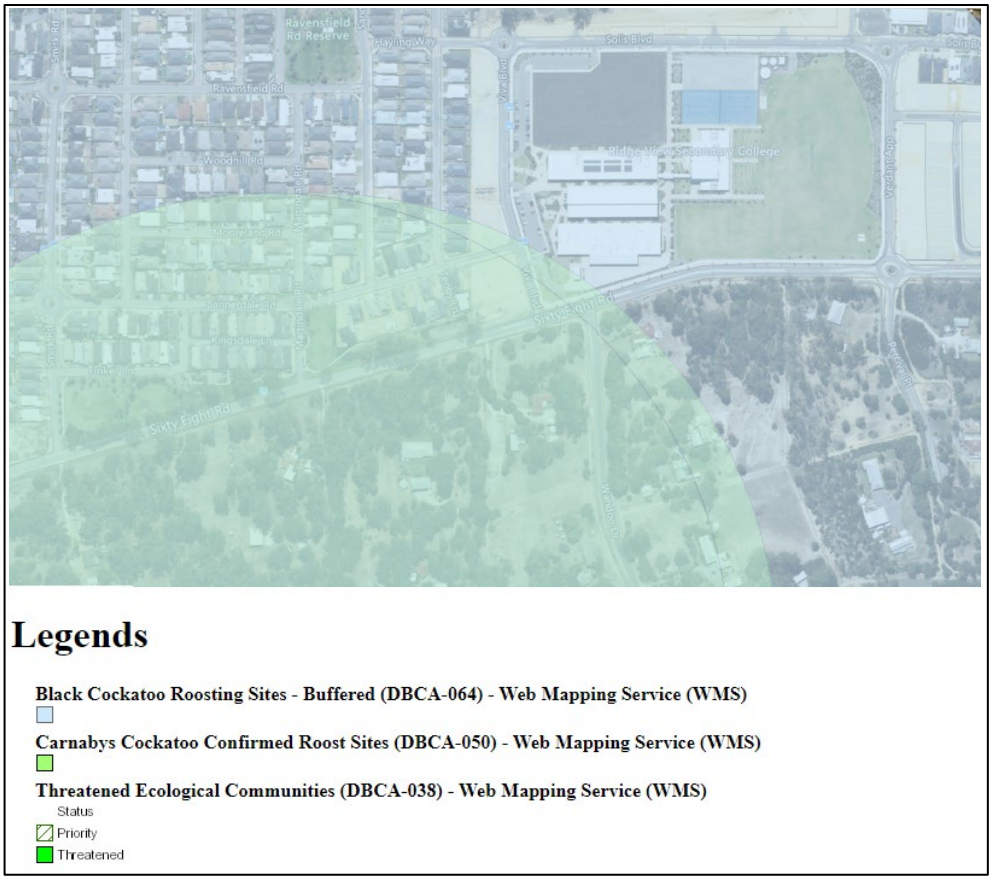
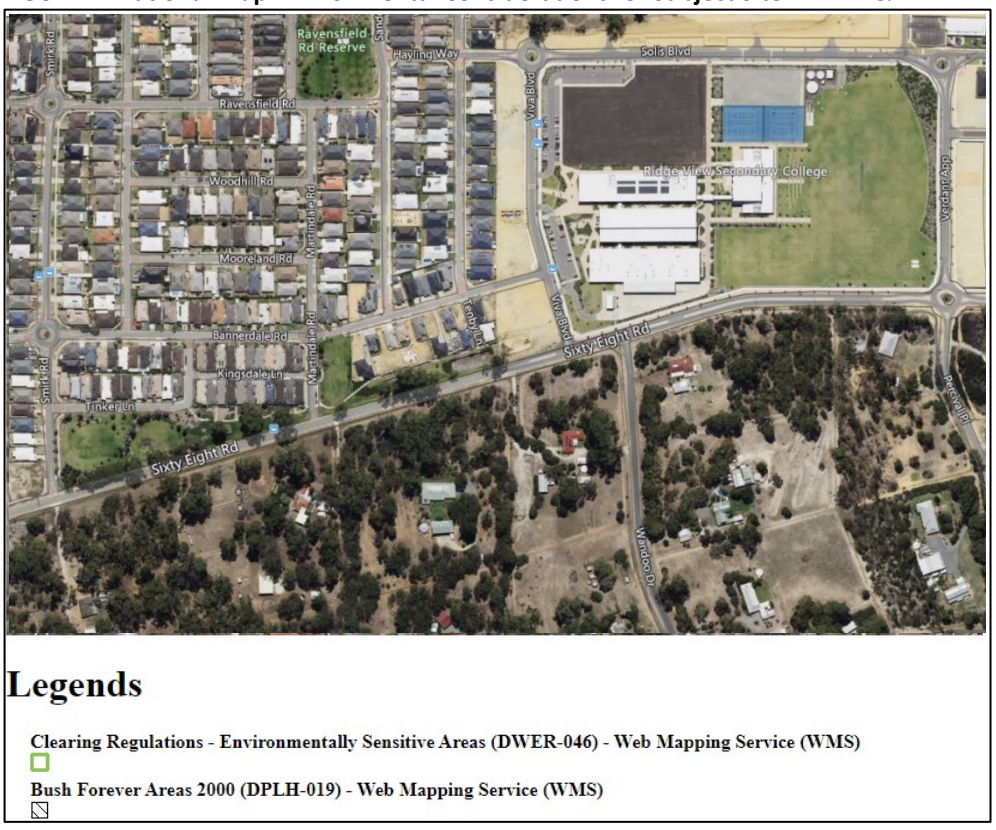


FIGURE 4: National Map Environmental Considerations for Subject Site – DPLH & DWER



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Subsection 2.1: Native Vegetation – Modification and Clearing

The proposed Building envelope and Asset Protection Zone will not require the removal of native vegetation. The site is mainly Low threat vegetation.

Subsection 2.2: Re-vegetation/Landscape Plans

N/A

Section 3: Bushfire Assessment Results

A Bushfire Attack Level (BAL) Assessment Report has been prepared to support the proposed development application.

The following BAL Map has been prepared in accordance with AS 3959 and provides evidence and justification gathered during a site assessment that was conducted to determine the potential BAL rating associated with the proposed development.

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AS 3959 Bushfire Attack Level (BAL) Assessment Report

Site Details			
Address:	Lot 37 Bannerdale Road		
Suburb:	Baldivis	**Postcode:**	6171
Local Government Area:	City of Rockingham		
Description of Building Works:	Commercial Development		

Report Details			
Report Number:	4967	**Report Revision:**	1
Assessment Date:	19/07/2022	**Report Date:**	04/08/2022

BPAD Accredited Practitioner Details		
Prepared by:	Paul Smith	I hereby declare that I am a BPAD accredited bushfire practitioner.
Author:	Gavin Fancote	
Company Details:	Entire Fire Management	Accreditation No. BPAD37922
I hereby certify that I have undertaken the assessment of the above-mentioned site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959 -2018 (Method 1)		Signature:

Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the Assessment date. If the assessment was completed more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.

Site Assessment & Site Plans

The assessment of this site / development was undertaken on the above-mentioned date by an Accredited BPAD Practitioner for determining the Bushfire Attack Level in accordance with AS 3959 - 2018 Simplified Procedure (Method 1).

FIGURE 5: Vegetation Classification on the following page

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Entire Empire Pty Ltd **ABN:** 63 468 728 651 **Office:** (08) 9498 0056 **Address:** 6 Potts Road Forrestdale Business Park Forrestdale WA 6112	**Project** Lot 37 Bannerdale Road, Baldivis			
	Title Vegetation Classification			
	Size A3	Scale 1:1200	Sheet 4967	Rev 0
	Name Paul Smith		Date 27/07/2022	

Legend

- Subject Property
- 150m Exclusion Zone
- 100m Exclusion Zone
- Photo Location
- Vegetation Plot Boundary
- Class A - Forest
- Class G - Grassland
- Excluded c2.2.3.2(e,f)
- New Building

Notes

0 48 96 Meters

Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	1	**Plot no:**	1
Vegetation Classification or Exclusion Clause			
Class A - Forest			
Description			
Trees up to 20m high; 30%-70% foliage cover. Typically dominated by eucalypts. Includes low trees & shrubs.			

Photo ID:	2	**Plot no:**	1
Vegetation Classification or Exclusion Clause			
Class A - Forest			
Description			
Trees up to 20m high; 30%-70% foliage cover. Typically dominated by eucalypts. Includes low trees & shrubs.			

Photo ID:	3	**Plot no:**	2
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description			
Grassland. With isolated single trees.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	4	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	5	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	6	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	7	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	8	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	9	**Plot no:**	3
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Potential Bushfire Impacts

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified on this page.

Relevant Fire Danger Index

The fire danger index for this site has been determined in accordance with Table 2.1 or otherwise determined in accordance with a jurisdictional variation applicable to the site.

Fire Danger Index FDI 80 Table 2.4.3

Potential Bushfire Impacts

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below.

Distances are to subject lots as house plans have not been supplied at this stage.
When houses plans and positions are introduced, distances to vegetation may increase.

Plot	Vegetation Classification	Effective Slope	Childcare Centre	
			Separation (m)	BAL
1	Class A – Forest	Flat	39m	19
2	Class G - Grassland	Flat	25m	12.5
3	Excluded - Low Threat Vegetation	N/A	0m	LOW

Determined Bushfire Attack Level	19

Table 1: BAL Analysis

Section 4: Identification of Bushfire Hazard Issues

N/A

Section 5: Assessment Against the Bushfire Protection Criteria

The proposed plan for development at Lot 37 Bannerdale Road, Baldivis has been assessed against WAPC's Guidelines for Planning in Bushfire Prone Areas - Bushfire Protection Criteria.
The table on the following pages assess each element of the criteria and indicates how compliance can be achieved for each.

Bushfire protection criteria	Method of Compliance Acceptable solutions	Proposed bushfire management strategies
Element 1: Location	A1.1 Development location	The proposed development is located sufficiently to be provided with an area at BAL- 19 or below.
Element 2: Siting and design	A2.1 Asset Protection Zone	An Asset Protection Zone must be installed in accordance with Figure 6: Spatial Representation of Bushfire Management Strategies and Appendix 1: APZ Standards.
Element 3: Vehicular access	A3.1 Two access routes.	Bannerdale Road provides access to multiple alternative Routes.
	A3.2 Public road	All existing roads meet the minimum technical requirements set out in column 1 of Appendix 2: Vehicular access technical requirements.
	A3.3 Cul-de-sac (including a dead-end-road)	N/A
	A3.4 Battle-axe	N/A
	A3.5 Private driveway longer than 70 m is to meet detailed requirements (refer to the Guidelines for detailed private driveway requirements).	The existing driveway does not exceed 70m in length.
	A3.6 Emergency access way	N/A
	A3.7 Fire service access routes (perimeter roads)	N/A
	A3.8 Firebreak width	N/A
Element 4: Water	A4.1 Reticulated areas	The site is serviced by reticulated water and does not require a water tank.
	A4.2 Non-reticulated areas	N/A. The site is serviced by reticulated water.
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A

FIGURE 6: Spatial Representation of the Bushfire Management Strategies on the following page

Entire Empire Pty Ltd **ABN:** 63 468 728 651 **Office:** (08) 9498 0056 **Address:** 6 Potts Road Forrestdale Business Park Forrestdale WA 6112	Project: Lot 37 Bannerdale Road, Baldivis			
	Title: Mitigation Map			
	Size: A3	Scale: 1:500	Sheet: MIT 4967	Rev: 0
	Name: Paul Smith		Date: 27/07/2022	

Legend

- Subject Property
- Proposed Building
- Asset Protection Zone
- H — Hydrant

Notes

0 — 20 — 40 Meters

Entire Empire Pty Ltd
ABN: 63 468 728 651
Office: (08) 9498 0056
Address: 6 Potts Road Forrestdale Business Park
Forrestdale WA 6112

Project	Lot 37 Bannerdale Road, Baldivis		
Title	BAL Contour Assessment		
Size A3	Scale 1:1200	Sheet BAL 4967	Rev 0
Name Paul Smith		Date 27/07/2022	

Legend

- Property Boundary
- Proposed Building
- 100m Exclusion Zone
- 150m Assessment area
- Vegetation Plot Boundary

Indicative Bushfire Attack Levels:

- BAL-LOW
- BAL-12.5
- BAL-19
- BAL-29
- BAL-40
- BAL-FZ

Notes

0 — 48 — 96 Meters

Section 6: Responsibilities for Implementation & Management of the Bushfire Measures

DEVELOPER/SUBDIVIDER – PRIOR TO ISSUE OF CERTIFICATE OF TITLES FOR NEW LOTS	
No.	**Implementation action**
1	Landowner - Property owner shall install an Asset Protection Zone in accordance with *Figure 6: Spatial Representation of the Bushfire Management Strategies* and to comply with the Asset Protection Zone standards provided in Appendix 1 of this BMP.
2	Notification is to be placed on title of the lot that the land is within a designated bushfire prone area and is subject to an existing Bushfire Management Plan.

LANDOWNER/OCCUPIER – ONGOING MANAGEMENT	
No.	**Management action**
1	Landowner - Property owner shall maintain the Asset Protection Zone in accordance with the standards provided in Appendix 1 of this BMP.

Conditional Vegetation Classification Post APZ measures applied.

The table below indicates the vegetation classifications as per the original site assessment. However, the application of an APZ has been taken into account.

Table 2 - Post Mitigation Vegetation distances and achievable BAL ratings

Areas with Potential to Determine Bushfire Attack Level Post APZ				
Vegetation Area	Classification	Effective Slope	Distance	BAL Rating
1	Class A – Forest	Flat	39m	19
2	Class G - Grassland	Flat	25m	12.5
3	Excluded - Low Threat Vegetation	N/A	5m	LOW

Conditional BAL Determination

The building envelope target Bushfire Attack Level is **BAL -**

Explanatory notes: The Conditional Bushfire Attack Level of BAL - can only be achieved if prescribed conditions have been met.

Appendices

A1: APZ – Asset Protection Zone Guidelines

A2: Vehicular Access Technical Documents

A1: APZ - Asset Protection Zone Guidelines

The siting and design of the strategic planning proposal, subdivision, or development application, including roads, paths, and landscaping, is appropriate to the level of bushfire threat that applies to the site. That it incorporates a defendable space and significantly reduces the heat intensities at the building surface thereby minimising the bushfire risk to people, property, and infrastructure, including compliance with AS 3959-2018 if appropriate.

To achieve compliance with this Element the following acceptable solution must be met.

A2.1 Asset Protection Zone (APZ)

Every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

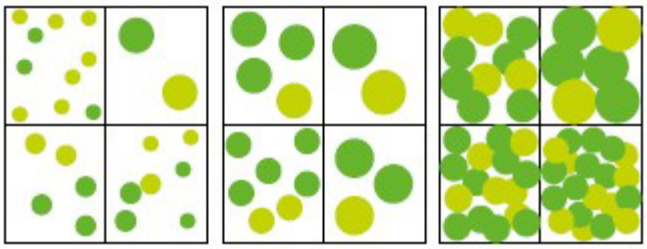
- **Width:** Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat output does not exceed 29KW/m² (BAL-29) in all circumstances.
- **Location:** the APZ should be contained solely within the boundaries of the lot on which the building is situated, except in circumstances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity.
- **Management:** the APZ is managed in accordance with the requirements of 'Standards for Asset Protection Zones'.

Design of Asset Protection Zone

The proportion of the APZ reflects the distance from the hazard to ensure adequate separation is achieved.

Standards for Asset Protection Zones

- **Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- **Fine Fuel Load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- **Trees (>5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.



Tree Canopy Cover – Ranging from 15 to 70 percent at maturity

- **Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- **Ground Covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- **Grass:** should be managed to maintain a height of 100 millimetres or less.

Reference; WAPC Guidelines for Planning in Bushfire Prone Areas – V1.4

A2: Vehicular Access Technical Requirements

TECHNICAL REQUIREMENTS	1 Public road	2 Cul-de-sac	3 Private driveway	4 Emergency access way	5 Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 metres	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5
*Refer to E3.2 Public roads: Trafficable surface					

Disclaimer:
The following document purposely contains missing information to be added after the building application process is completed.

Missing or TBC information can be added by owners or management after the building stage is complete, and the required information is confirmed.

EMERGENCY EVACUATION PLAN

Name of facility: TBC

Address: Lot 37 Bannerdale Road, Baldivis

Prepared by: (Bushfire planning practitioner) Paul Smith

Owner/operator: TBC

Date: (date/month/year) 27 / July / 2022 Plan version: 1

Document Control

Version	Date	Details	Undertaken by
0	25/07/2022	Document creation	Paul Smith
1		Document completion for submission	TBC

Emergency Management Team

Name	Organisation	Contact details
TBC		

Contents

Version: 1.1 (October 2019)

FACILITY DETAILS

This plan is for: (Insert name of facility) TBC

and has been designed to assist management to protect life and property in the event of a bushfire.

This plan outlines procedures for both **evacuation** and **shelter-in-place** to enhance the protection of occupants from the threat of a bushfire.

The primary action to follow in a bushfire emergency is to (tick which is applicable):

EVACUATE ✔ **SHELTER-IN-PLACE**

Name of on-site contact person:	TBC
Position/role of contact person:	Owner Operator
Phone number:	TBC

Type of facility:	Childcare Centre	Number of buildings:	1
Number of employees:	TBC	Number of occupants:	Max of **

Number of occupants with support needs: Max of **

Provide description of support needs: Minors, dependent on Guardians.

Version: 1.1 (October 2019)

RESPONSIBILITIES

The following outlines who has responsibility for implementing the emergency procedures in the event of a bushfire.

Position	Name of person	Building/area of responsibility	Responsibilities	Mobile phone number
Example: *Manager*	*John Blank*	*Fire warden and initial contact*	• *Respond and take control as appropriate* • *Determine the nature of the emergency and implement appropriate action.*	*0400 000 000*
Owner Operator/TBC	TBC	Fire warden	R.A.C.E.	TBC

EMERGENCY CONTACTS

Name or organisation	Office/contact	Contact details
Fire, Police, Ambulance	Fire or Emergency	000
Department of Fire & Emergency Services	Emergency information	13 DFES (13 33 37)
EmergencyWA	Warnings and incidents	www.emergency.wa.gov.au

Secondary Contacts

Name or organisation	Office/contact	Contact details

Version: 1.1 (October 2019)

PREPAREDNESS

Ongoing, just prior and during the bushfire season

Bushfire season: (date/month) 1 / December to 31 / March

Actions	Frequency	Responsible person
Ongoing		
1. Maintain asset protection zones around all buildings.	Yearly	Onsite staff name- TBC
2. Ensure roof and gutters are free from leaf litter and debris.	Yearly	Onsite staff name- TBC
3.		
To be completed just prior to the bushfire season by: (date/month) 01 / November to 30 / November		
1. Review Emergency Action Plan -Procedures and contact details	Yearly	Onsite staff name- TBC
2. Ensure Emergency bag is prepared & contents havent expired	Yearly	Onsite staff name- TBC
3. Ensure employees and occupants are informed of procedure.	Yearly	Onsite staff name- TBC
4. Current site layout visible and current.	Yearly	Onsite staff name- TBC
5. Ensure offsite location and routes are still a safe option.	Yearly	Onsite staff name- TBC
6. Confirm off-site location(s) can be used during emergency	Yearly	Onsite staff name- TBC
7. Ensure firefighting equipment is serviceable and available.	Yearly	Onsite staff name- TBC
8. Ensure no hazards are present that could contribute to fire risk.	Yearly	Onsite staff name- TBC
9. Ensure property access is kept clear and easily trafficable.	Yearly	Onsite staff name- TBC
10. Ensure the Emergency Evacuation Plan is up to date.	Yearly	Onsite staff name- TBC
To be completed during the bushfire season between: (date/month) 1 / December to 31 / March		
1. Maintain asset protection zones.	Yearly	Onsite staff name- TBC
2. Maintain spaces around buildings and assembly points.	Yearly	Onsite staff name- TBC
3. Maintain situational awareness DFES,ABC radio,EmergencyWA	Daily	Onsite staff name- TBC
4. Look outside for any signs of smoke or fire in the area.	Daily	Onsite staff name- TBC
5. Inform occupants of the fire situation.	Situational	Onsite staff name- TBC
6.		
7.		
8.		
9.		
10.		

(Note: Add or delete rows as required)

AWARENESS AND PRE-EMPTIVE PROCEDURES

The following table outlines actions to be undertaken to ensure the facility maintains situational awareness of a possible bushfire approaching and pre-emptive procedures (if applicable). This will assist with the assessment of the bushfire situation and whether the triggers identified in the evacuation/sheltering-in-place procedures have occurred.

Actions	Frequency	Responsible person
Days forecast Very High or Severe Fire Danger rating		
1. Review Emergency Action Plan -Procedures and contact details	Daily	Onsite staff name- TBC
2. Monitor Emergencywa & DFES	Hourly	Onsite staff name- TBC
3. Follow advice given by Emergencywa & DFES	As directed	Onsite staff name- TBC
Days forecast Extreme Fire Danger rating		
1. Review Emergency Action Plan -Procedures and contact details	Hourly	Onsite staff name- TBC
2. Monitor Emergencywa & DFES	ASAP	Onsite staff name- TBC
3. Follow advice given by Emergencywa & DFES	As directed	Onsite staff name- TBC
Days forecast Catastrophic Fire Danger rating		
1. Monitor Emergencywa, DFES and other alert services	ASAP/hourly	Onsite staff name- TBC
2. Apply Emergency Evactuation Plan	ASAP	Onsite staff name- TBC
3. Evacuate the premises	ASAP	Onsite staff name- TBC
An 'Advice,' 'Watch and Act' or 'Emergency Warning' alert or other communication has been issued by an emergency service authority		
1. Monitor Emergencywa & DFES	ASAP/hourly	Onsite staff name- TBC
2. Contact Supervisor & prepare to leave	ASAP	Onsite staff name- TBC
3. Follow advice given by Emergencywa & DFES	ASAP	Onsite staff name- TBC

(Note: The above break downs by the different types of fire danger rating day forecasts is included as an example of how different actions may want to be shown and can be amended to suit your facility. It is recommended that if actions under the example breakdown headings are the same, to combine the breakdown headings as one rather than repeating the same information under two separate breakdown headings. Ensure the Emergency Evacuation Plan is concise and not repetitive.)

EMERGENCY PROCEDURE LOCATION AND TRANSPORT DETAILS

Evacuation

Designated evacuation assembly point(s):

1. TBC
2. TBC
3. TBC

Primary off-site location

Name of venue: TBC if any.

Address of venue: TBC

Nearest cross-street: TBC Map references: TBC

Venue phone number: TBC

Primary route to location: (e.g. via north on xx Highway) TBC

Secondary route to location: (e.g. via xx Road) TBC

Primary transportation arrangements

Number of vehicles required: TBC/NA

Name of organisation providing transportation: TBC/NA

Contact phone number: TBC/NA

Time required for transportation to arrive: TBC/NA

Estimated travelling time to destination: TBC/NA

Secondary off-site location

Name of venue: TBC/NA

Address of venue: TBC/NA

Nearest cross-street: TBC/NA Map references: TBC/NA

Venue phone number: TBC/NA

Primary route to location: TBC/NA

Secondary route to location: TBC/NA

Secondary transportation arrangements

Number of vehicles required: TBC/NA

Name of organisation providing transportation: TBC/NA

Contact phone number: TBC/NA

Time required for transportation to arrive: TBC/NA

Estimated travelling time to destination: TBC/NA

Shelter-in-place

Designated on-site building:

1.

Not recommended.

EMERGENCY RESPONSE

Procedures for evacuation and shelter-in-place in the event of a bushfire.

(Note: Early evacuation should always be the primary action – you should never 'wait and see what happens'. Sheltering-in-place during a bushfire should be a last option when there is insufficient time to evacuate. In some limited circumstances such as in remote locations or facilities with people with morbidity issues, early evacuation may be difficult to implement and sheltering-in-place may be the safest action).

The **primary action** to follow with an imminent bushfire threat is to (tick which is applicable):

EVACUATE ✔ **SHELTER-IN-PLACE** ☐

Trigger	Action	Responsible person
1. Bushfire advice	Monitor Emergencywa & DFES	Owner operator TBC
2. Watch & Act	Evacuate Premises	Owner operator TBC
3. Emergency	Evacuate Premises	Owner operator TBC
4. Seeing Fire	Follow Evacuate plan & contact 000	Owner operator TBC
5.		
6.		
7.		
8.		

RECOVERY

Procedures following the bushfire if EVACUATED

Actions	Responsible person
1. Contact Manager/Owner & relevant organisations.	Owner operator TBC
2. Follow advice from Emergency personnel, EmergencyWA, DFES	Owner operator TBC
3. Do not return until "all clear has been given"	Owner operator TBC
4.	
5.	
6.	

Procedures following the bushfire if SHELTERED-IN-PLACE

Actions	Responsible person
1. Not advised.	
2.	
3.	
4.	
5.	
6.	

Attachments

- ☐ Occupants/employee register
- ☐ Parent/guardian contact register
- ✔ Site layout of premise

Version: 1.1 (October 2019)

EMERGENCY EVACUATION PLAN

Lot 37 Bannerdale Road, Baldivis

R

RESCUE:
- yourself.
- other customers and staff.

A

Raise the ALARM:
- Alert the Fire Brigade by calling 000.
- Notify staff onsite.

C

CONTAIN the fire:
- To the room or space of origin.
- Close the doors behind you.

E

EXTINGUISH or EVACUATE:
- Follow instructions.
- Go to Assembly Area.
- Only attempt to extinguish if safe, you're trained and it is safe to do so.

000
EMERGENCY

LEGEND

- Evacuation Path
- Emergency Exit
- Assembly Area
- Switchboard
- Wheel Chair Access
- CO_2 Extinguisher
- Fire Blanket
- Fire Hose Reel

Created by:

ENTIRE FIRE MANAGEMENT

Version 1
Date Issued: 25/07/2022 Valid until: 26/02/2025

Department of
Education

GOVERNMENT OF
WESTERN AUSTRALIA

Your ref: 20.2022.181.1 – AD22/147028
Our ref: D22/0686329
Enquiries: Sharnie Stuart

City of Rockingham
Email: eric.anderson@rockingham.wa.gov.au

Attention: Eric Anderson
Planning Officer

Dear Sir / Madam,

Proposed Child Care Premises – Lot 37, corner of Bannerdale Road and Viva Boulevard, Baldivis

Thank you for your letter dated 23 August 2022 providing the Department of Education (the Department) with the opportunity to comment on the abovementioned proposal. I would also like to thank you for providing an extension to the advertising period.

The State Government's Educare commitment seeks to increase the opportunity for parents to access child care related services within close proximity of public school sites. The proposed child care premises is located directly across from Ridge View Secondary College (College).

Given that the subject site is directly opposite the College the Department must take into account the Western Australian Planning Commission's Operational Policy 2.4 – Planning for School Sites (OP 2.4). Careful planning consideration of the proposal is required to be undertaken to ensure it does not adversely impact traffic circulation, access, parking and the safety of students in accordance with the provisions of the OP 2.4.

It is evident that a car parking shortfall is proposed. Therefore, it is important to note that during peak school drop off / pick up times there is a significant increase in traffic surrounding the College. The Department has reservations with the car parking shortfall as it will likely exacerbate traffic in the event parents/carers are unable to use the proposed on-site car parking. Ultimately, increased safety risks to students and motorists may arise.

In view of the above, the Department would have no objections to the proposal subject to the following conditions being imposed should the Joint Development Assessment Panel resolve to support the proposal:

- A detailed Car Parking Management Plan being submitted to and approved by the City of Rockingham to demonstrate car parking is contained entirely on site in accordance with the City's requirements.

- A Construction Management Plan (CMP) be submitted to and approved by the City of Rockingham. The CMP should clearly address how noise, odour and dust emissions will be mitigated so as not to compromise the health and safety of the students and staff of the College and the occupants of the surrounding locality.

Should you have any queries on the above, please contact Sharnie Stuart, A/Principal Consultant – Land Planning on (08) 9264 4046, or by email at sharnie.stuart@education.wa.edu.au.

Yours sincerely

Matt Turnbull
Manager Land and Property

9 September 2022

[illegible] Ref: D2[illegible]1
[illegible] Ref: DD020-2022-0000181-001

[illegible]

Dear Mr [illegible]

RE: VULNERABLE LAND USE - LOT 9101 SOLIS BOULEVARD BALDIVIS – CHILD CARE CENTRE - DEVELOPMENT APPLICATION

[illegible] 1 [illegible] 2022 [illegible] 1 [illegible] 2022 [illegible]

[illegible] *State Planning Policy 3.7: Planning in Bushfire Prone Areas* [illegible] *Guidelines for Planning in Bushfire Prone Areas* [illegible]

Assessment

- [illegible]
- [illegible]

1. Policy Measure 6.5 a) Preparation of a BAL contour map

Issue	Assessment	Action
Vegetation classification	[illegible] 2 [illegible]	[illegible]

2. Policy Measure 6.5 c) Compliance with the Bushfire Protection Criteria

Element	Assessment	Action
Location, and Siting & Design	**A1.1 & A2.1 – not demonstrated**	

3. AS3959 construction standards including clause 3.2.3 adjacent structures

Issue	Assessment	Action
Building Construction Standards	2022	

4. Policy Measure 6.6.1 Vulnerable land uses

Issue	Assessment	Action
Bushfire Emergency Evacuation Plan (BEEP)	*'Bushfire Emergency Evacuation Plan'* ‘Developing a Bushfire Emergency Evacuation Plan’	

- [illegible]

Recommendation – not supported modifications required

[illegible]

1. [illegible]
   - [illegible]
   - [illegible]

[illegible]

[illegible]

[illegible]

Naomi Mynott
DIRECTOR LAND USE PLANNING

28 [illegible] 2022

[illegible]