



# Traffic & Parking Assessment Report

7 Regiment Road, Rutherford

Proposed Subdivision & Childcare Centre

Ref 24190

2<sup>nd</sup> January 2025



CONSULTING  
ENGINEERS

## Document Control

|                        |                             |                      |               |                    |
|------------------------|-----------------------------|----------------------|---------------|--------------------|
| <b>Project Number</b>  | 24190                       |                      |               |                    |
| <b>Project Address</b> | 7 Regiment Road, Rutherford |                      |               |                    |
| <b>Revision</b>        | <b>Date</b>                 | <b>Details</b>       | <b>Author</b> | <b>Approved By</b> |
| Draft                  | 06.12.24                    | First draft          | D. Alloc      | C. Palmer          |
| Final                  | 02.01.25                    | Final for submission | D. Alloc      | C. Palmer          |
|                        |                             |                      |               |                    |

CJP Consulting Engineers Pty Ltd (CJP) has prepared this report in accordance with the instructions of the Client, for the sole use of the Client and for a specific purpose, as expressly stated in the document. CJP does not accept any responsibility for any use of or reliance on the contents of this report by any third party. Any other persons who use any information contained herein do so at their own risk. CJP reserves all legal rights and remedies in relation to any infringement of its rights in respect of its intellectual property and/or confidential information.

## Table of Contents

|   |           |
|---|-----------|
| <b>1. Introduction</b>                                  | <b>1</b>  |
| 1.1 Project Summary                                     | 1         |
| 1.2 Assessment Tasks                                    | 2         |
| 1.3 Relevant Planning Controls                          | 2         |
| 1.4 Traffic, Transport & Parking Guidelines & Standards | 2         |
| <b>2. Existing Conditions</b>                           | <b>3</b>  |
| 2.1 Site Location & Description                         | 3         |
| 2.2 Planning Context                                    | 5         |
| 2.3 Road Network  | 5         |
| 2.4 Public & Active Transport                           | 6         |
| 2.5 Existing Surrounding Traffic Restrictions           | 8         |
| 2.6 Existing Surrounding Parking Restrictions           | 8         |
| <b>3. Proposed Development</b>                          | <b>9</b>  |
| 3.1 Development Description                             | 9         |
| 3.2 Parking Arrangements                                | 10        |
| 3.3 Loading & Servicing Facilities                      | 10        |
| 3.4 Vehicular Access                                    | 10        |
| <b>4. Traffic Impact Assessment</b>                     | <b>11</b> |
| 4.1 Traffic Generation Guidelines                       | 11        |
| 4.2 Proposed Development Traffic Generation             | 11        |
| 4.3 Existing Development Traffic Generation             | 12        |
| 4.4 Traffic Impact                                      | 12        |
| <b>5. Access, Parking &amp; Servicing Assessment</b>    | <b>13</b> |
| 5.1 Applicable Car Parking Rates                        | 13        |
| 5.2 Car Parking Requirements                            | 13        |
| 5.3 Accessible Parking                                  | 13        |
| 5.4 Proposed Car Parking Provisions                     | 13        |
| <b>6. Design Assessment</b>                             | <b>14</b> |
| 6.1 Applicable Design Standards                         | 14        |
| 6.2 Vehicular Access & Circulation Design               | 14        |
| 6.3 Parking Design                                      | 14        |
| 6.4 Sight Distance Assessment                           | 15        |
| <b>7. Conclusion</b>                                    | <b>17</b> |

**Appendix A:** Architectural Plans

**Appendix B:** Swept Turn Paths

# 1. Introduction

## 1.1 Project Summary

CJP has been engaged by Koby Group to prepare a Traffic & Parking Assessment Report (TPAR) in support of a Development Application (DA) to Maitland City Council, involving a two-lot subdivision and a new childcare centre to be located at 7 Regiment Road, Rutherford.

In summary, the DA involves the subdivision of the subject site into two lots and the construction of a new purpose-built childcare centre on the northern portion of the site, New Lot 1, whilst retaining the existing building supplies on the southern portion, New Lot 2.

The proposed centre seeks to accommodate 122 children at any given time and operate between 6:30am-7:00pm Monday-Friday, with staff number based on the Education & Care Services National Regulations 2011.

Off-street parking is proposed for a total of 32 cars (including 1 accessible space) within a new outdoor at-grade parking area. Vehicular access to the site is proposed via a new entry/exit driveway located off the Regiment Road site frontage.

Additionally, an existing easement runs through the adjoining mixed use site to the north which aligns with the proposed parking aisle, thereby providing an alternative means of access.

Plans of the proposed development have been prepared by Brown Commercial Building and are reproduced in Appendix A.

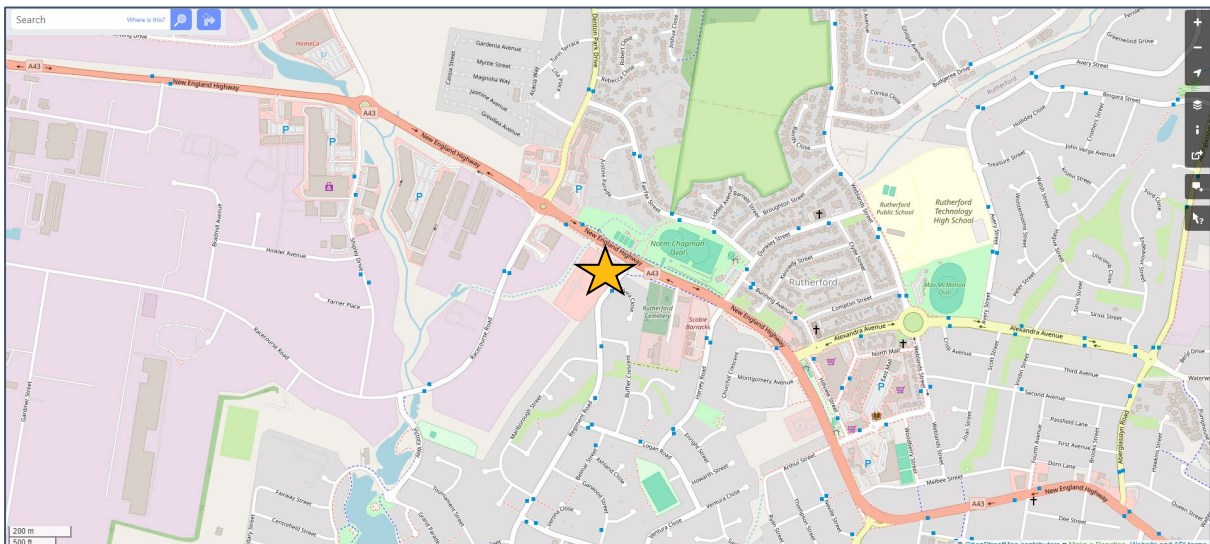


Figure 1.1 – Site Location (Source: OpenStreetMap)

Based on State Environmental Planning Policy (Transport & Infrastructure) 2021, Schedule 3, the proposed development is not classified as a *traffic generating development*, as the prescribed thresholds are not met, therefore referral to Transport for NSW (TfNSW) is not required.

## 1.2 Assessment Tasks

The purpose of this TPAR is to assess the traffic, parking, access, transport and servicing characteristics of the DA, and the associated impacts of the proposal on the surrounding road network, parking and transport environment. This can be briefly summarised as follows:

- Description of the existing site and its location
- Existing traffic & parking conditions
- Public and active transport infrastructure
- Traffic generation potential of the proposal and its impacts on the surrounding road network
- Off-street parking/loading/access requirements and provisions
- Design of access driveway and parking area layout

## 1.3 Relevant Planning Controls

The site lies within the Maitland City Council (Council) Local Government Area (LGA), such that the relevant Council planning controls and strategies referenced in this TPAR include:

- Maitland Local Environmental Plan 2011
- Maitland Development Control Plan 2011

## 1.4 Traffic, Transport & Parking Guidelines & Standards

In preparing this TPAR, references are also made to the following site access, traffic and parking guidelines:

- RMS Guide to Traffic Generating Developments 2002 (RMS Guide)
- TfNSW Guide to Transport Impact Assessments (TS 00085) Version 1.1
- State Environmental Planning Policy (Transport & Infrastructure) 2021
- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.2:2018 – Off-Street Commercial Vehicle Facilities (AS2890.2)
- Australian Standards 2890.6:2022 – Off-Street Parking for People with Disabilities (AS2890.6)
- NSW Government's Planning Guidelines for Walking & Cycling (December 2004)
- Maitland Bicycle Plan and Strategy 2014
- National Construction Code (NCC)
- Building Code of Australia (BCA)
- Child Care Planning Guideline 2021

## 2. Existing Conditions

### 2.1 Site Location & Description

The subject site is located on the western side of Regiment Road, just south of the Alvira Close intersection. The site has a street frontage of approximately 141m in length to Regiment Road, and occupies a total area of approximately 8,265m<sup>2</sup>.

The site is legally described as Lot 2 in DP1260460.

A copy of the subdivision plan of Lot 700 DP 592547 is reproduced below, which includes both the subject site at 7 Regiment Road as well as the adjoining mixed use property at 319 New England Highway.

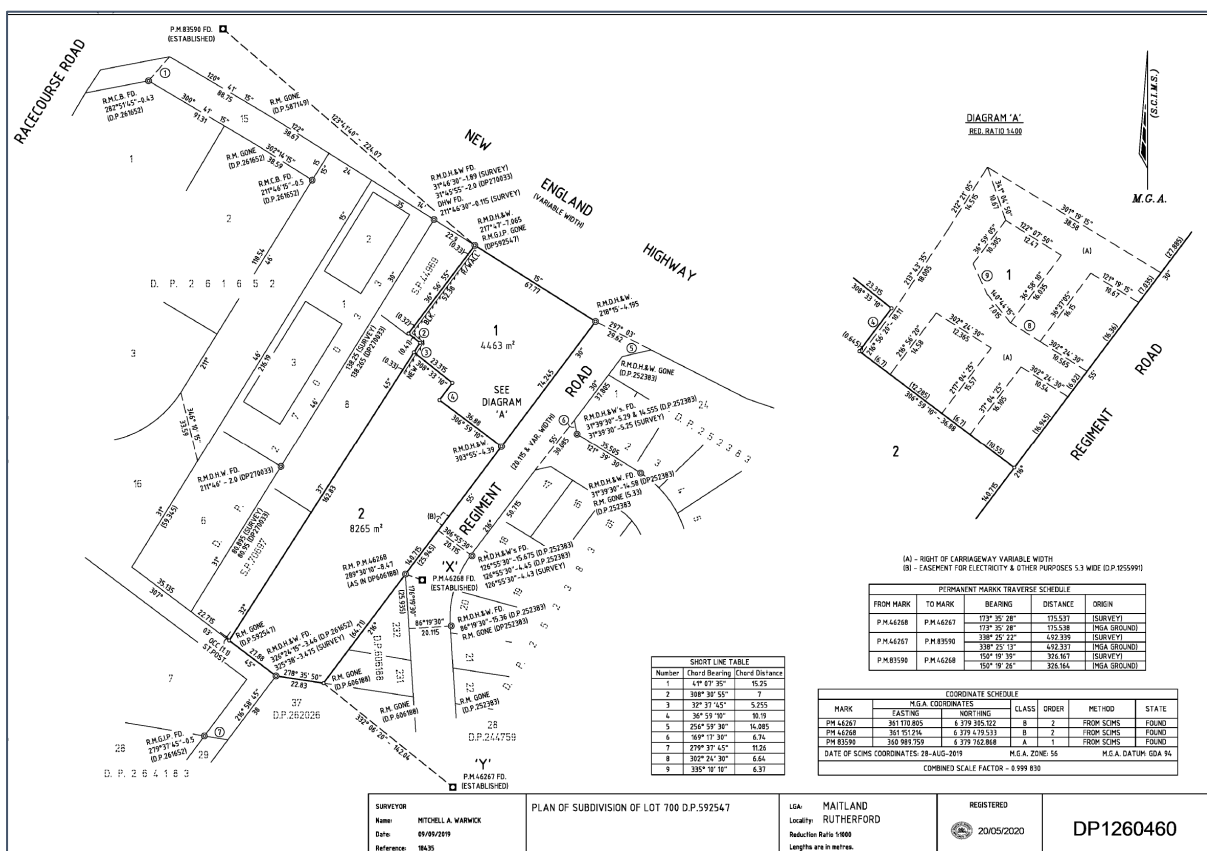


Figure 2.1 – Subdivision plan of the site and the adjoining 319 New England Hwy

The subject site is currently occupied by Saddingtons Building Supplies, and comprises a large industrial building situated in the south-western corner of the site. The vast remaining area is predominantly used for the storage of building supplies.

Informal off-street parking and loading areas are provided throughout the site. Vehicular access to the site is currently provided via an entry/exit driveway located midway along the Regiment Road site frontage, on the outside of the bend in the road.

The site was previously part of a larger site which included the adjoining mixed use property to the north, known as 319 New England Highway, which includes a service station and dine-in/take-away/drive-through fast-food restaurant. The DA for that subdivision and the mixed use development was approved and constructed in 2019 under DA2018/0998.

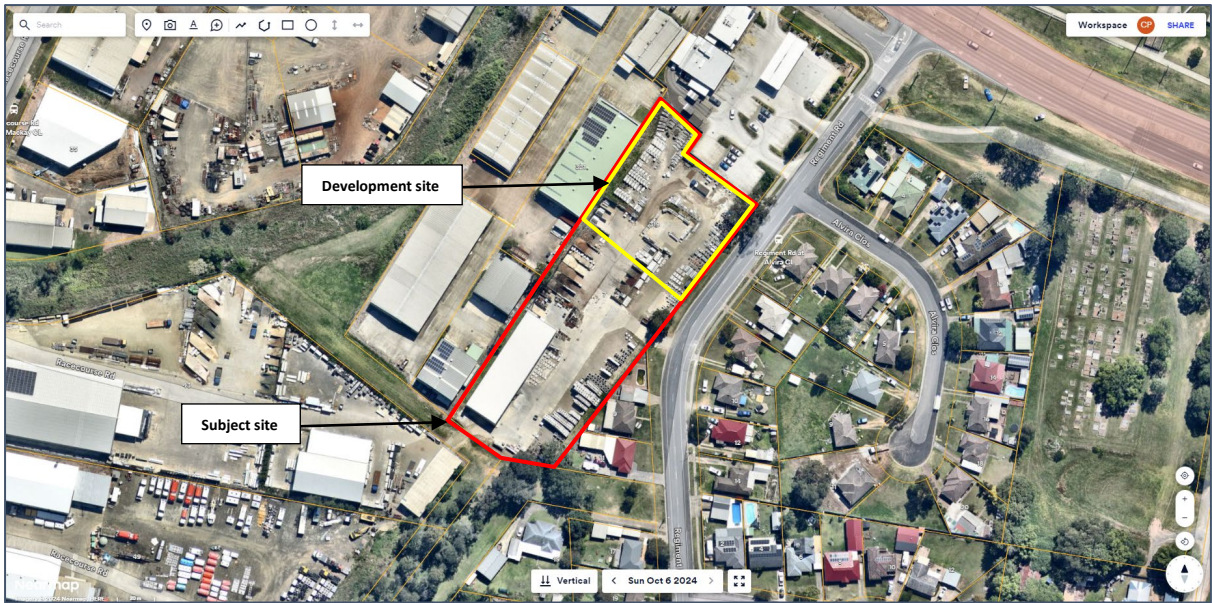


Figure 2.2 – Aerial map (Source: Nearmap)



Figure 2.3 – Streetview image of the Regiment Road site frontage, looking south-west (Source: Google Maps)



Figure 2.4 – Streetview image of the Regiment Road site frontage, looking north-east (Source: Google Maps)

24190 | 7 Regiment Road, Rutherford | 02.01.25

## 2.2 Planning Context

The site is zoned E3 Productivity Support under Maitland LEP 2011, as indicated in the map below. Additionally, there are no height of building and floor space ratio controls applicable to the subject site. The proposed childcare centre is permissible in the zone, subject to development consent.



Figure 2.5 – Zoning Map (Source: ePlanning Spatial Viewer)

## 2.3 Road Network

The Transport for NSW (TfNSW) road hierarchy comprises the following road classifications:

- State Roads: Freeways, Motorways and Primary Arterial Roads (TfNSW managed)
- Regional Roads: Secondary or Sub-Arterial (Council managed, partly funded by the State)
- Local Roads: Collector and Local Access Roads (Council managed)

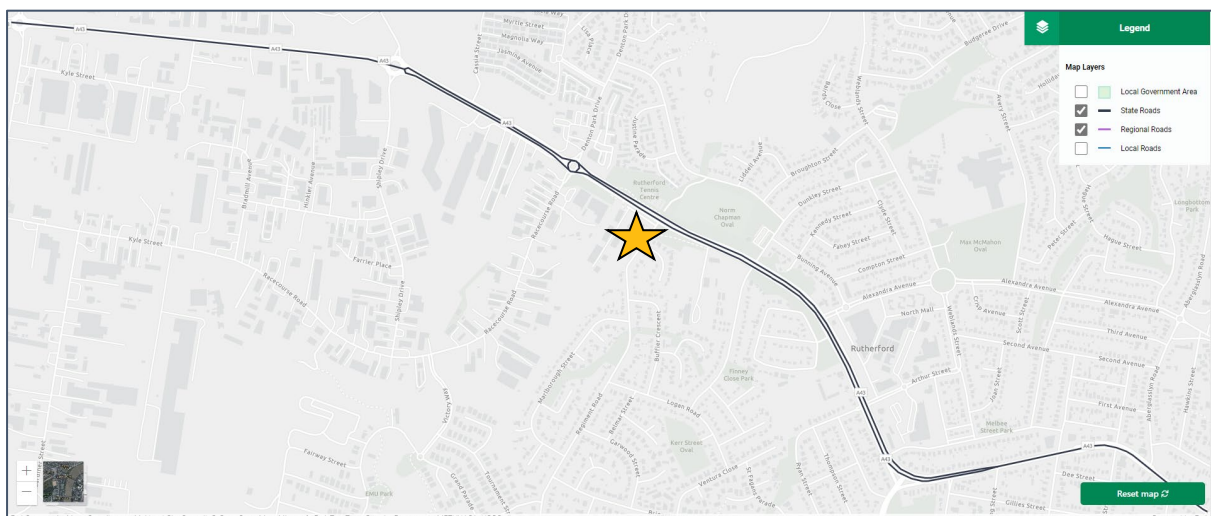


Figure 2.6 – Road Hierarchy (Source: Transport for NSW)



The road hierarchy in the vicinity of the site is shown in Figure 2.6, whilst the key roads and intersections are summarised below:

- New England Highway is classified by TfNSW as a State Road which provides one of the key roads in the National Highway system. The section in the vicinity of the site forms part of the Branxton to Beresfield route, designated as Route A43. It carries two traffic lanes in each direction, separated by a central median, with turning lanes provided at key intersections, including with Regiment Road. New England Highway is signposted with a 60km/h speed limit in the vicinity of the site.
- Regiment Road is classified as a local road which functions as a collector route through the local area, connecting New England Highway to Wollombi Road. It carries one traffic lane in each direction and forms part of the local bus route, with kerbside parking generally permitted along both sides of the road.

## 2.4 Public & Active Transport

The public transport services available in the vicinity of the site are shown in Figure 2.7. The nearest bus stop is conveniently located directly opposite the site on Regiment Road, just south of Alvira Road. The bus stop is serviced by route 179, operating Monday to Saturday between North Rothbury and Green Hills Shopping Centre via Maitland, with services operating every 1-2 hours.

A further two bus services operate along New England Highway, with the nearest bus stop located approximately 325m walking distance north-west of the site. The bus stop is serviced by the 178, 179 & 180 buses, with the 178 operating Monday to Saturday, with weekday services every 1-2 hours, whilst the 180 operates Monday to Saturday, with weekday services every 2-3 hours.

Research suggests that proximity to bus services influence the travel mode choice for areas within 400m walking distance (approximately 5 minutes) of a bus stop. As such, the proposed childcare centre has good potential for future employees to utilise bus for their commute to/from work.

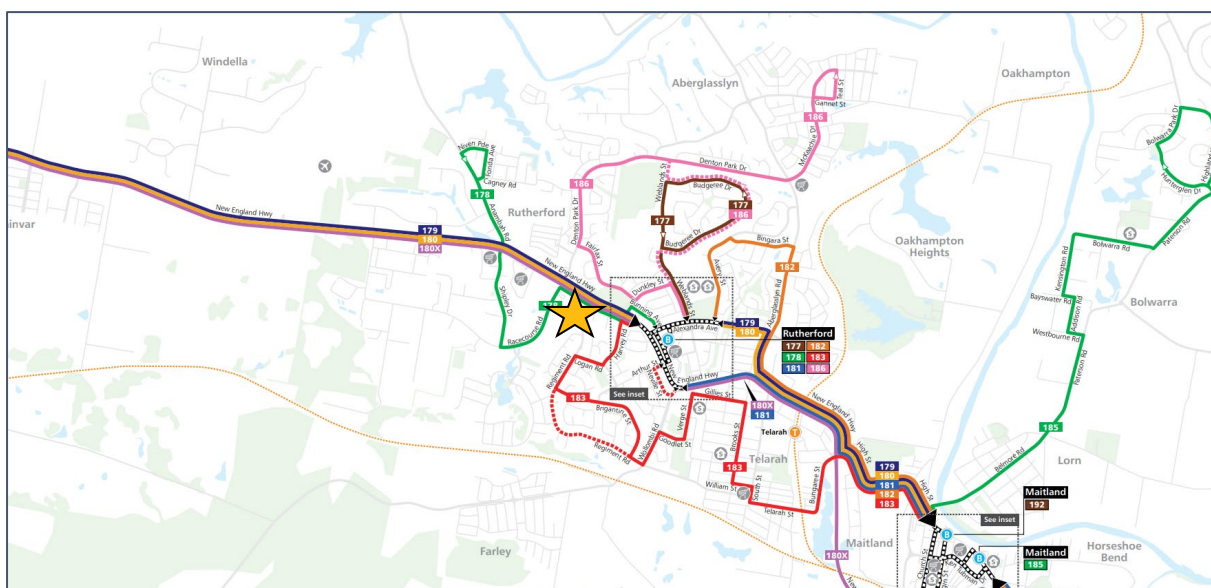


Figure 2.7 – Existing Public Transport Map (Source: Transport for NSW)

Telarah railway station is located approximately 2.7km east of the site (approximately 30-minute walk or 5-minute drive). Broadly speaking, it is common for staff that drive to work to drop-off and/or pick-up colleagues at nearby railway stations before/after work.

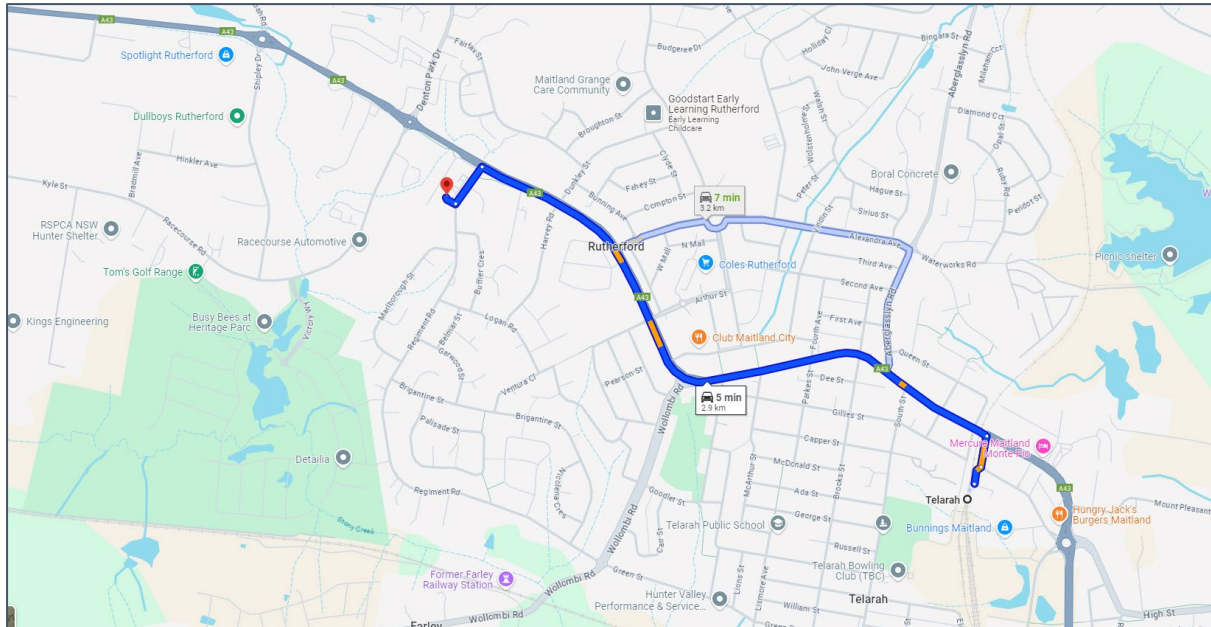


Figure 2.8 – Driving distance between site and nearest railway station (Source: Google Maps)

In addition to the public transport services available in the vicinity of the site, there is also a fair level of pedestrian connectivity, including safe and convenient footpaths to the abovementioned bus stop. All existing footpaths in the surrounding area are of fair quality, with appropriate widths and pram ramps provided at most intersections.

The existing and proposed future bicycle network in the vicinity of the site is reproduced in the figure on the following page, which shows that Regiment Road has existing on-road cycling facilities, whilst the New England Highway has off-road cycling facilities.

The Planning Guidelines for Walking and Cycling identify a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the Guidelines note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

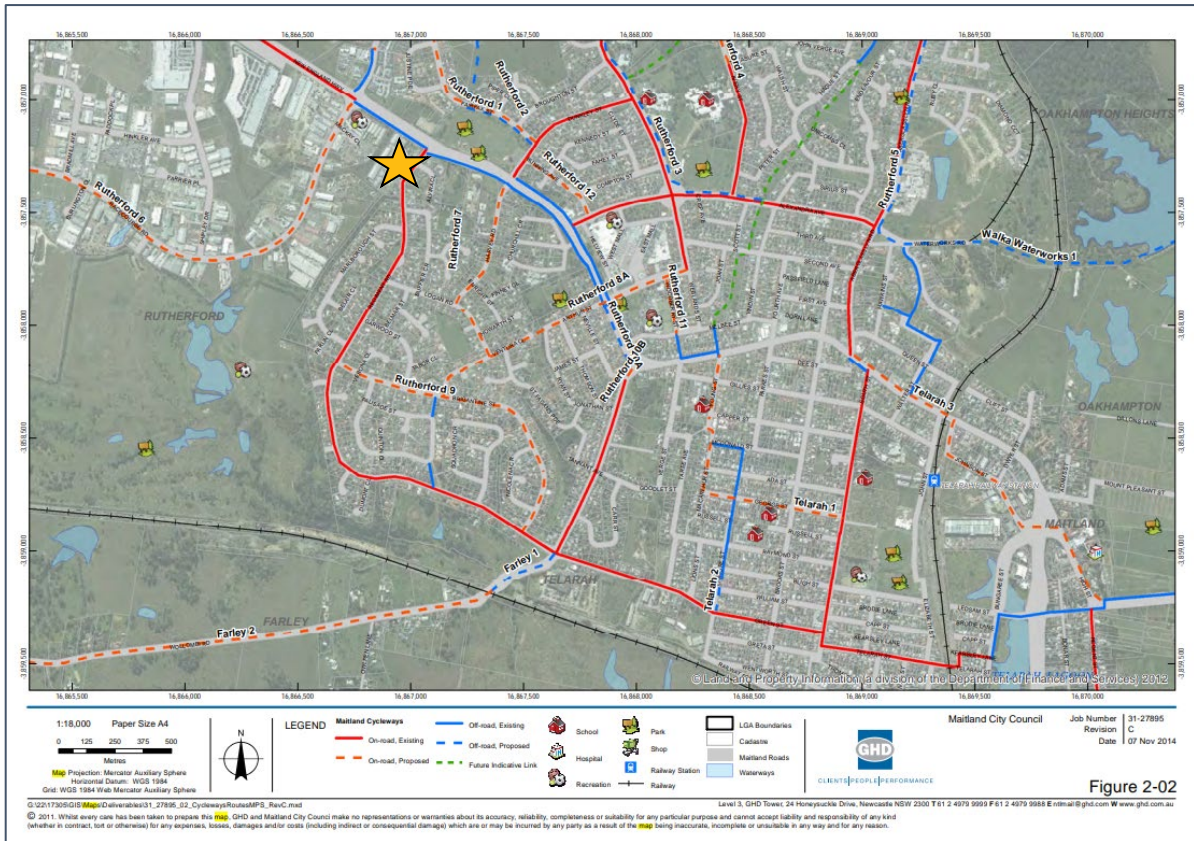


Figure 2.9 – Cycleway map (Source: GHD, provided for Maitland City Council)

## 2.5 Existing Surrounding Traffic Controls

The existing traffic controls in the vicinity of the site comprise:

- a 60 km/h speed limit which applies along New England Highway in the vicinity of the site
- traffic signals in New England Highway, where it intersects with Dunkley Street/Harvey Road
- a roundabout at the intersection of New England Highway, Racecourse Road, and Denton Park Drive
- a half-seagull treatment at the intersection of New England Highway & Regiment Road, with all turning movements permitted except right-turn out movements
- a speed hump located in Regiment Road, just south of the New England Highway service Road

## 2.6 Existing Surrounding Parking Restrictions

The existing parking restrictions in the vicinity of the site comprise:

- Bus Zones located at regular intervals along both sides of Regiment Road
- Generally unrestricted kerbside parking along both sides of Regiment Road, including along the site frontage.



### 3.2 Parking Arrangements

Off-street parking is proposed for a total of 32 cars (including 1 accessible space) within a new outdoor at-grade parking area. All parking spaces are 2600mm wide (with the exception of the accessible space which has been designed to AS2890.6 requirements) with an oversized 7000mm wide aisle. A 1200mm wide footpath is also provided along the rear of the spaces directly in front of the building, thereby providing a safe walking area to/from those car spaces.

### 3.3 Loading & Servicing Facilities

Deliveries to the proposed childcare centre will be undertaken by a variety of light commercial vehicles such as vans, utilities and the like, which are capable of fitting into a conventional parking space. Deliveries will therefore be scheduled to occur *outside* of peak periods when the on-site drop-off/pick-up spaces will be largely vacant. Notwithstanding, a dedicated loading bay is proposed to be provided at the southern end of the car park.

Waste collection is proposed to be undertaken by a private contractor from within the site, with the bin room located at the southern end of the building, directly outside the dedicated loading bay. Again, waste collection will also be scheduled to occur outside of peak periods when traffic activity within the car park is low. Importantly, bins will not be lined up along the kerbside for collection.

### 3.4 Vehicular Access

Vehicular access to the site is proposed via a new entry/exit driveway located approximately midway along New Lot 1's Regiment Road site frontage. Additionally, an existing easement runs through the adjoining mixed use site to the north which aligns with the proposed parking aisle, thereby providing an alternative means of access. Importantly, all vehicles will be able to enter and exit the site in a forward direction at all times.

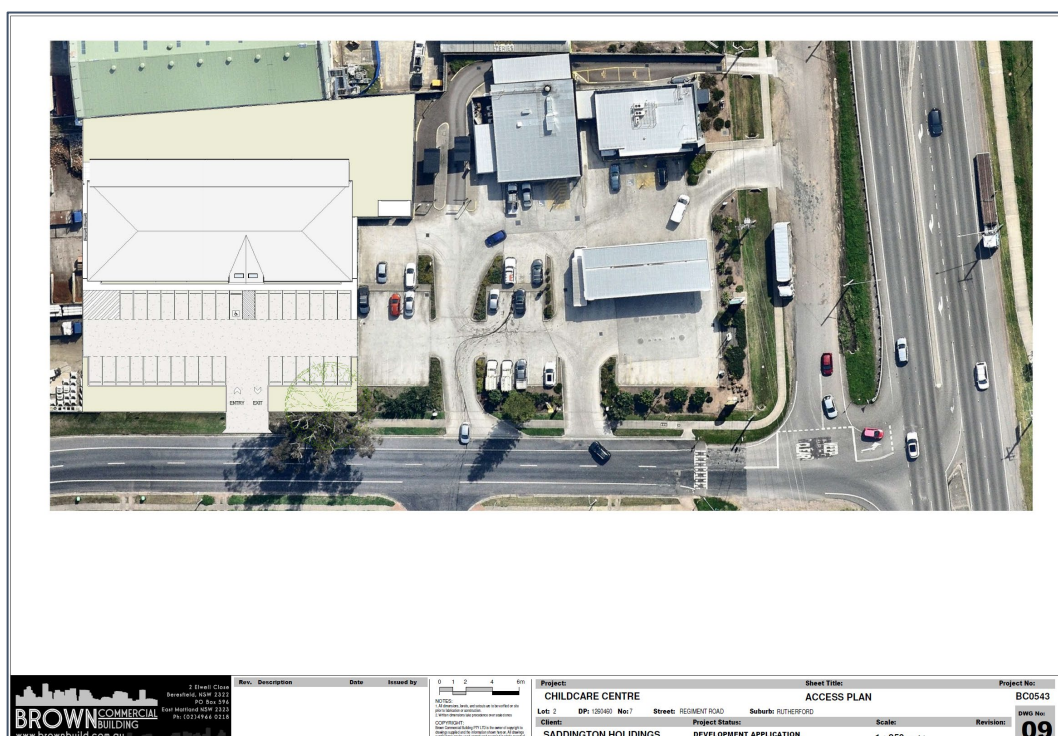


Figure 3.3 – Proposed access plan (Source: Brown Commercial Building)

## 4. Traffic Impact Assessment

### 4.1 Traffic Generation Guidelines

The traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing and/or approved uses, and its impact on the operational performance of the surrounding road network, particularly during the weekday morning and afternoon road network peak periods.

An indication of the traffic generation potential of the proposed childcare centre on the site is provided by reference to the new TfNSW Guide to Transport Impact Assessments (TS 00085) Version 1.1, as per the extract below.

Table 5.59. Child care centre sample summary

|  | Long day care centre | Pre-school | Occasional care | Outside school hours care (OSHC) | All (excl. OSHC) |
|--|----------------------|------------|-----------------|----------------------------------|------------------|
| Weekday rates  | Avg                  | Avg        | Avg             | Avg                              | Avg              |
| <b>Vehicle trips (vehicle trips/licensed child places)</b> |                      |            |                 |                                  |                  |
| Site AM peak hour  | 0.81                 | 0.86       | 0.63            | 0.38                             | 0.77             |
| Site PM peak hour  | 0.80                 | 0.76       | 0.78            | 0.43                             | 0.78             |
| Network AM peak hour                                       | 0.64                 | 0.83       | 0.63            | 0.07                             | 0.69             |
| Network PM peak hour                                       | 0.39                 | 0.51       | 0.06            | 0.23                             | 0.33             |
| Daily  | 2.97                 | 1.96       | 1.65            | 1.30                             | 2.27             |

### 4.2 Proposed Development Traffic Generation

The proposal involves the subdivision of the subject site into two lots and the construction of a new purpose-built childcare centre on the northern portion of the site, New Lot 1, whilst retaining the existing building supplies on the southern portion, New Lot 2.

Based on the above TfNSW trip generation rates for *long day childcare centres*, the proposed development has a traffic generation potential of 78 vehicle trips during the weekday morning road network peak period and 48 vehicle trips during the weekday afternoon road network peak hour, as set out in the table below.

| Table 4.1 – Proposed Peak Traffic Generation Potential |                 |                   |                 |                      |
|--|-----------------|-------------------|-----------------|----------------------|
| Land Use   | Period          | Vehicle Trip Rate | No. of Children | Proposed Peak Trips* |
| Childcare centre                                       | AM Site Peak    | 0.81 trips/child  | 122             | 99 peak trips        |
|  | PM Site Peak    | 0.80 trips/child  | 122             | 98 peak trips        |
|  | AM Network Peak | 0.64 trips/child  | 122             | 78 peak trips        |
|  | PM Network Peak | 0.39 trips/child  | 122             | 48 peak trips        |

\* entry/exit combined

### 4.3 Existing Development Traffic Generation

In addition to the projected future traffic generation potential of the site, consideration should also be given to the traffic generation of the existing uses on the site.

Notwithstanding, whilst there is published trip rates for “building supplies stores”, they are more applicable to traditional Bunnings or Mitre 10 stores, given the rates are *per m<sup>2</sup> GFA*, not largely outdoor facilities such as the existing Saddingtons.

Whilst the existing building supplies would obviously generate some degree of traffic activity during the weekday peak periods, it is unlikely to generate the expected level of traffic of the proposed childcare centre.

### 4.4 Traffic Impact

As noted above, the traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site during the weekday road network peak periods compared to its existing, approved or permissible uses.

Additionally, the development site encompasses only the northern portion of the subject site, where some of the building supplies are stored. The residual land on the southern section which accommodates the building will be retained and continue to operate as a building supplies yard.

Again, whilst the existing building supplies would obviously generate some degree of traffic activity during the weekday peak periods, it is unlikely to generate the expected level of traffic of the proposed childcare centre.

In any event, even assuming that the existing building supplies yard generates zero traffic, such that the proposed childcare centre traffic will be entirely additional to the road network, the anticipated road network peak trips provided in Table 4.1 are not significant.

In this regard, it is noted that the site lies within a large residential catchment area of Rutherford and Telarah in addition to a large industrial and employment area to the west – i.e. the proposed childcare centre is expected to draw much of its enrolments from nearby residents and employees who will likely drop-off/pick-up their child(ren) on the same trip to/from work.

The intersection of New England Highway & Regiment Road is designed with a half-seagull treatment, including a 55m long left-turn deceleration lane and a 60m long right-turn holding lane. Right turn out movements are physically banned whilst New England Highway carries two traffic lanes in the eastbound and westbound directions – i.e. the intersection is designed to accommodate significant capacity, noting not all childcare trips will use the intersection, a portion will come to/from the south. For those wanting to exit to the east, they simply turn left from Regiment Road onto New England Highway and perform a U-turn at the Racecourse Road/Denton Park Road roundabout which also accommodates two circulating traffic lanes.

As such, the traffic impact to the surrounding road network during the weekday morning and afternoon road network peak periods is expected to be minimal and fall within daily fluctuations. Accordingly, the proposed development is supportable on traffic grounds.

## 5. Access, Parking & Servicing Assessment

### 5.1 Applicable Car Parking Rates

The off-street parking rate applicable to the proposed development is specified in Council’s Maitland DCP 2011, Part C – Design Guidelines, Appendix A – Car Parking Requirements for Specific Land Uses, in the following terms.

| LAND USE         | PARKING   | COMMENTS   |
|------------------|---|--|
| Childcare Centre | 1 space per 4 children in attendance or part thereof. | Parking must be provided in a convenient location allowing safe movement of children to and from the centre. |

(Source: Maitland DCP 2011, Part C, Appendix A)

### 5.2 Car Parking Requirements

Based on the proposal for 122 children, the proposed development requires the provision of 31 car parking spaces, as set out in the table below.

| Table 5.1 – Off-Street Car Parking Requirement (MDCP 2011) |                    |                         |
|--|--------------------|-------------------------|
| Children/Staff Numbers                                     | DCP Parking Rates  | DCP Parking Requirement |
| 122 children   | 1 space/4 children | 30.5 spaces             |

### 5.3 Accessible Parking

The Council’s DCP 2011 does not specifically provide parking rates for people with disabilities designated for childcare centres. Reference is therefore made to the Building Code of Australia (BCA) which provides car parking rates for people with disabilities. Childcare centres are classified as Class 9b buildings which require *1 space for every 100 car parking spaces or part thereof*.

Based on the above BCA rate, the proposed childcare centre with 31 spaces requires the provision of 0.31 accessible spaces or 1 accessible space.

The above requirement is satisfied by the proposed provision of 1 accessible parking space located directly outside the pedestrian entrance to the building.

### 5.4 Proposed Car Parking Provisions

The proposed development makes provision for a total of 32 off-street car parking spaces within the outdoor at-grade parking area (including 1 accessible space), thereby satisfying Council’s DCP 2011 and BCA requirements.

| Table 5.2 – Off-Street Car Parking Provision |                    |                         |                               |
|--|--------------------|-------------------------|-------------------------------|
| Children Numbers                             | DCP Parking Rates  | DCP Parking Requirement | Proposed Parking Provision    |
| 122 children                                 | 1 space/4 children | 30.5 spaces             | 32 spaces (inc. 1 accessible) |



## 6. Design Assessment

### 6.1 Applicable Design Standards

The following design standards have been used as the basis for compliance with respect to the vehicular access and parking requirements:

- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.2:2018 – Off-Street Commercial Vehicle Facilities (AS2890.2)
- Australian Standards 2890.6:2022 – Off-Street Parking for People with Disabilities (AS2890.6)

Whilst the vehicular access and parking area has been designed in accordance with the above Australian Standards, it is expected that a condition of consent would be imposed requiring reconfirmation of compliance at the Construction Certificate stage (CC). Any minor amendments required to the current DA design can therefore be addressed at the CC stage.

### 6.2 Vehicular Access & Circulation Design

The following key compliances are noted with respect to the vehicular access design and circulation system:

- a 7.8m wide two-way entry/exit driveway of Regiment Road in accordance with “Category 2” requirements
- driveway located outside of the 6m “prohibited” tangent points of an intersection
- a relatively flat grade throughout the car park and along the vehicular access driveway
- a 2.5m x 2.0m pedestrian sight triangle on the exit side of the driveway
- a 7m wide aisle in exceedance of User Class 1 and 3 requirements

Further to the above, the vehicular access and internal circulation arrangements have been designed to accommodate the swept turning path requirements of the B99 design vehicle as specified in AS2890.1, allowing them to enter and exit the site and circulate through the site in a forward direction at all times. Swept turn path diagrams are reproduced in Appendix B.

The parking spaces have also been tested using the B85 design vehicle, as specified in AS2890.1, confirming that they are easily accessible. Swept turn path diagrams are also reproduced in Appendix B.

### 6.3 Parking Design

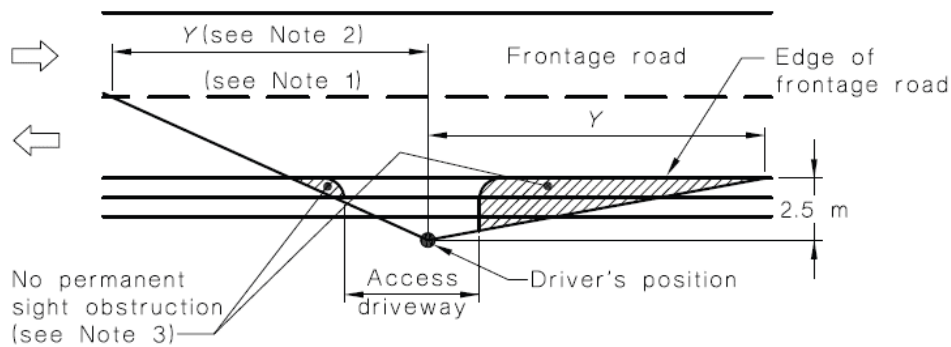
The following key compliances are noted with respect to the parking area design:

- 5.5m long x 2.6m wide car parking spaces
- 5.5m long x 2.4m wide accessible car parking space plus 5.5m long x 2.4m wide adjacent “shared area”
- no obstructions within the “design envelope” of any car parking spaces
- minimum 1m “aisle extension” at the end of the dead-end parking aisles
- all vehicles are able to enter and exit the site in a forward direction at all times.

### 6.4 Sight Distance Assessment

There are a number of criteria for assessing sight distance at access driveways. In particular, vehicle speed is a key factor in determining the required sight distance requirements. In this regard, it is noted that Rouse Road has a legal speed limit of 50km/h.

The driver sight distance/visibility requirements at the proposed temporary site access driveway are specified in *Figure 3.2 Site Distance Requirements at Access Driveways of AS2890.1:2004*, with the relevant extract reproduced below. Accordingly, the “5 second gap” sight distance requirement for a 50km/h frontage road is 69m.



| Frontage road speed limit (km/h) | Distance (Y) along frontage road (m) |                                |  |
|----------------------------------|--------------------------------------|--------------------------------|--|
|                                  | Access driveways other than domestic |                                |  |
|                                  | Desirable 5 sec gap                  | Minimum Safe Stopping Distance | Domestic property access (3 dwellings or less) |
| 40                               | 55                                   | 35                             | 30   |
| 50                               | 69                                   | 45                             | 40   |
| 60                               | 83                                   | 65                             | 55   |
| 70                               | 97                                   | 85                             | 70   |
| 80                               | 111                                  | 105                            | 95   |

The above “desirable 5 second gap” sight distance requirements are also consistent with Table 3.6 of the *Austrroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections*, as per the extract below.

Table 3.6: Table of minimum gap sight distances ('D' metres) for various speeds

| Critical gap acceptance time (t <sub>a</sub> ) (secs) | 85 <sup>th</sup> percentile speed of approaching vehicle (km/h) |    |    |     |     |     |     |     |     |     |     |
|---|---|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
|   | 10  | 20 | 30 | 40  | 50  | 60  | 70  | 80  | 90  | 100 | 110 |
| 4   | 11  | 22 | 33 | 44  | 55  | 67  | 78  | 89  | 100 | 111 | 122 |
| 5   | 14  | 28 | 42 | 55  | 69  | 83  | 97  | 111 | 125 | 139 | 153 |
| 6   | 17  | 33 | 50 | 67  | 83  | 100 | 117 | 133 | 150 | 167 | 183 |
| 7   | 19  | 39 | 58 | 78  | 97  | 117 | 136 | 155 | 175 | 194 | 214 |
| 8   | 22  | 44 | 67 | 89  | 111 | 133 | 155 | 178 | 200 | 222 | 244 |
| 9   | 25  | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 |
| 10  | 28  | 56 | 83 | 111 | 139 | 167 | 194 | 222 | 250 | 278 | 305 |

The above sight distance requirement of 69m is comfortably satisfied, as indicated in the sight distance assessment below.



Figure 6.1 – Proposed driveway crossover and raised central median island (Source: Nearmap)

As per the Australian Standards, the sightline splay must be clear of *permanent obstructions*. Whilst parked vehicles may impact a driver’s sight line, typically this is only a significant issue if there are constantly parked vehicles along the sight line without any gaps to view oncoming traffic – i.e. if parked vehicles are a *permanent obstruction*.

Reference to historical aerial imagery website, [www.nearmap.com](http://www.nearmap.com), indicates that on-street parking demand along the northern side of Regiment Road in the vicinity of the site frontage is not high, and also noting that the off-street parking requirement is satisfied, the likelihood of parked car sight line obstruction is minimal.

## 7. Conclusion

In summary, the development proposal involves the subdivision of the subject site into two lots and the construction of a new purpose-built childcare centre on the northern portion of the site, New Lot 1, whilst retaining the existing building supplies on the southern portion, New Lot 2.

The proposed centre seeks to accommodate 122 children at any given time and operate between 6:30am-7:00pm Monday-Friday, with staff number based on the Education & Care Services National Regulations 2011.

Based on the findings contained within this report, the following conclusions are made:

- the site is conveniently located within walking distance of two bus stops and three bus services; the 178, 179 & 180
- the proposed development is expected to generate in the order of 78 vehicle trips during the weekday morning road network peak period and 48 vehicle trips during the weekday afternoon road network peak period
- given the half-seagull design of the New England Highway & Regiment Road intersection, and the ability for drivers to also arrive to/from the south along Regiment Road, the proposed traffic impact to the road network is expected to be relatively modest
- the proposed development makes provision for 32 car parking spaces (including 1 accessible space), in accordance with Council's MDCP 2011
- the proposed vehicular access and parking area design complies with the relevant requirements of the AS2890 series

In light of the foregoing assessment, it is therefore concluded that the proposed development is supportable on vehicular access, traffic, parking and servicing grounds and will not result in any unacceptable implications.

**Appendix A**  
Architectural Plans



| Rev | Description  | Date     | Issued by |
|-----|--------------|----------|-----------|
| 5   | DA SET       | 16.12.24 | B.SIVA    |
| 4   | DA SET       | 03.12.24 | B.SIVA    |
| 3   | DA SET       | 27.11.24 | B.SIVA    |
| 2   | DRAFT DA SET | 17.10.24 | B.SIVA    |


 2 Elwell Close  
 Beresfield, NSW 2322  
 PO Box 596  
 East Maitland NSW 2328  
 Ph: (02) 4566 0216  
[www.brownbuild.com.au](http://www.brownbuild.com.au)

COPYRIGHT:  
 BROWN COMMERCIAL BUILDING PTY LTD IS THE OWNER OF COPYRIGHT TO  
 DRAWINGS SUPPLIED AND THE INFORMATION SHOWN HEREON.  
 ALL DRAWINGS SUPPLIED MAY NOT BE USED, REPRODUCED OR COPIED IN  
 WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF BROWN  
 COMMERCIAL BUILDING PTY LTD.

Client: SADDINGTON HOLDINGS

Project: CHILDCARE CENTRE

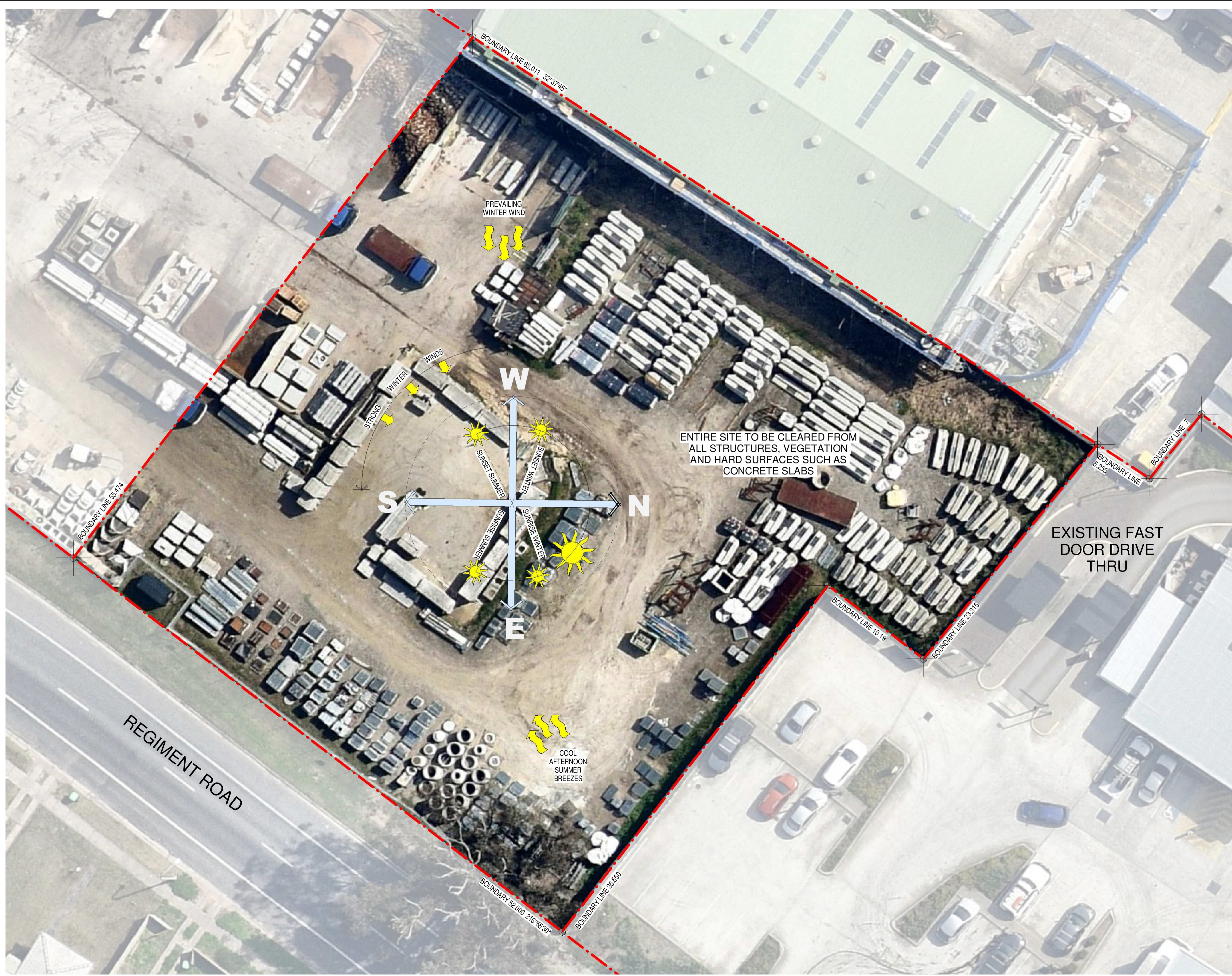
|            |               |
|------------|---------------|
| Location:  |               |
| Lot:       | 2             |
| No:        | 7             |
| Street:    | REGIMENT ROAD |
| Suburb:    | RUTHERFORD    |
| DP:        | 1260460       |
| Scale      | 1 : 300       |
| Drawn by   | B.SIVA        |
| Checked by | B.YOUNG       |
| Sheet Size | A1            |

Drawing

**SUBDIVISION PLAN**

Job No: Issue: No:

BC0543 5 01



| Rev | Description  | Date     | Issued by |
|-----|--------------|----------|-----------|
| 5   | DA SET       | 16.12.24 | B.SIVA    |
| 4   | DA SET       | 03.12.24 | B.SIVA    |
| 3   | DA SET       | 27.11.24 | B.SIVA    |
| 2   | DRAFT DA SET | 17.10.24 | B.SIVA    |

2 Elwell Close  
 Beresfield, NSW 2322  
 PO Box 596  
 East Maitland NSW 2326  
 Ph: (02) 4566 0216  
**BROWN COMMERCIAL BUILDING**  
 www.brownbuild.com.au

COPYRIGHT:  
 BROWN COMMERCIAL BUILDING PTY LTD IS THE OWNER OF COPYRIGHT TO  
 DRAWINGS SUPPLIED AND THE INFORMATION SHOWN HEREON.  
 ALL DRAWINGS SUPPLIED MAY NOT BE USED, REPRODUCED OR COPIED IN  
 WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF BROWN  
 COMMERCIAL BUILDING PTY LTD.

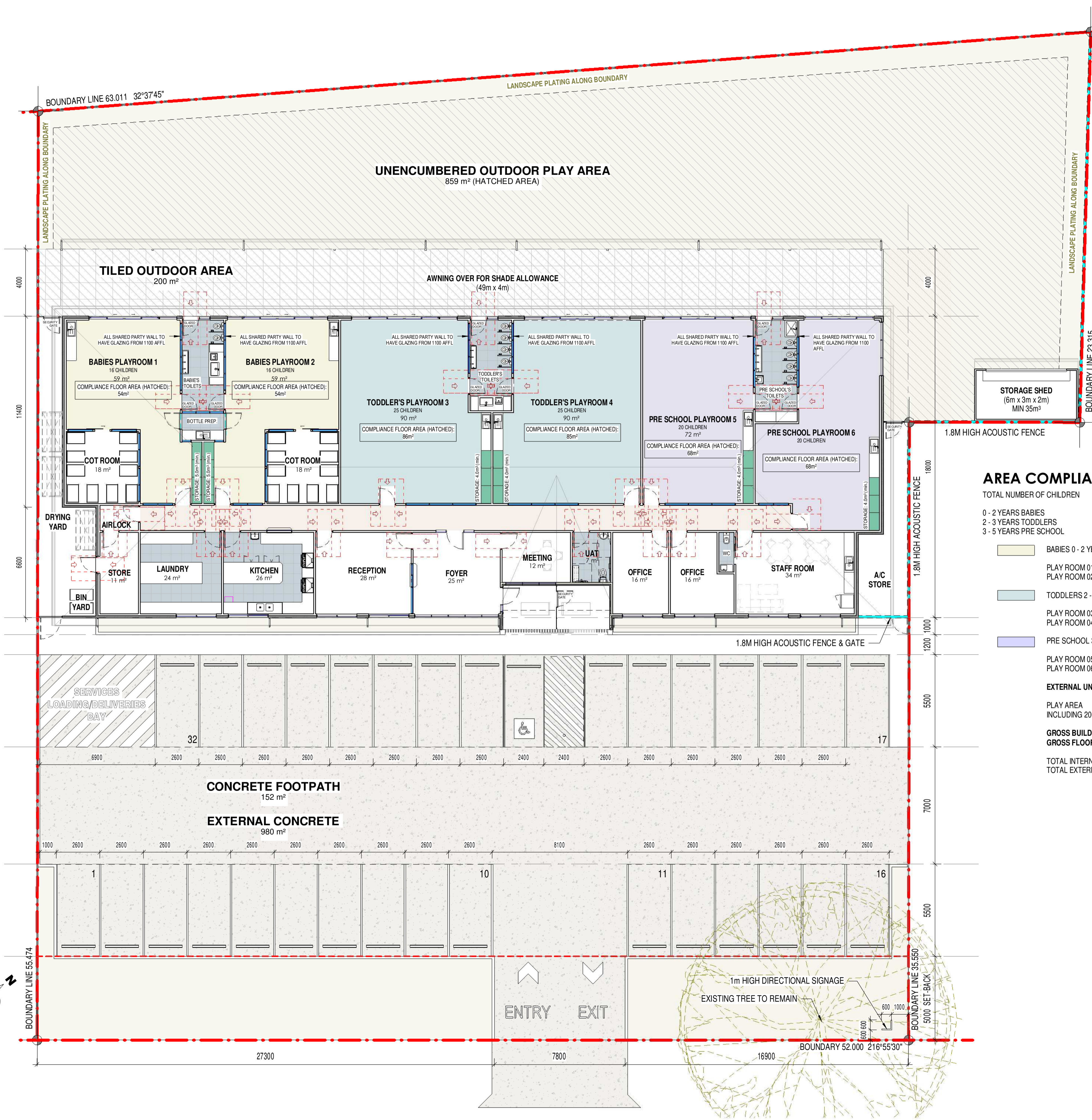
Client: SADDINGTON HOLDINGS

Project: CHILDCARE CENTRE

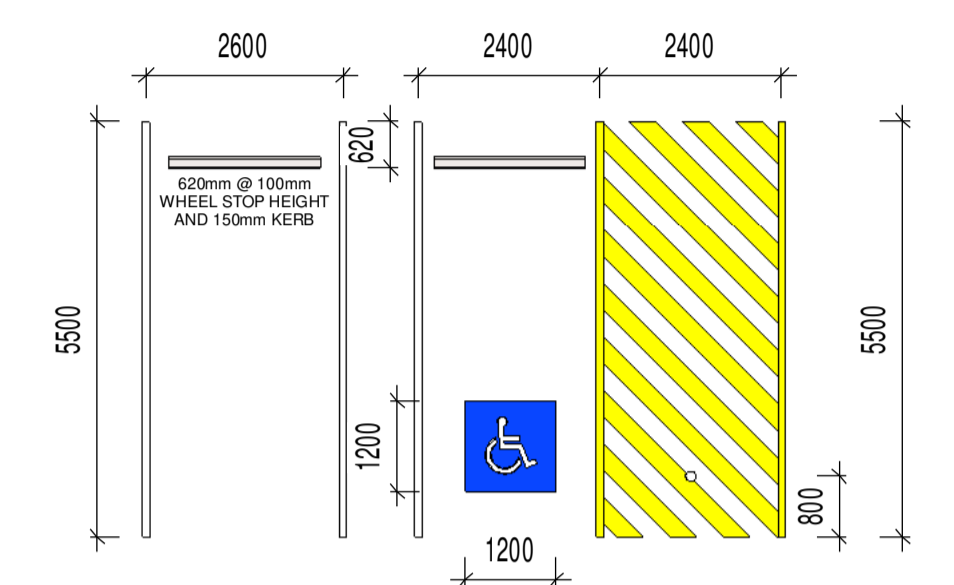
| Location:   |               |
|-------------|---------------|
| Lot:        | 2             |
| No:         | 7             |
| Street:     | REGIMENT ROAD |
| Suburb:     | RUTHERFORD    |
| DP:         | 1260460       |
| Scale:      | As indicated  |
| Drawn by:   | B.SIVA        |
| Checked by: | B.YOUNG       |
| Sheet Size: | A1            |

Drawing: SITE ANALYSIS & DEMOLITION PLAN

Job No: BC0543 Issue: 5 No: 02



**PARKING DETAILS**



ALL PARKING TO COMPLY WITH:  
 AS/NZ 2890.1:2004 PART 1 OFF-STREET PARKING  
 AS/NZ 2890.6:2009 PART 6 OFF-STREET PARKING FOR PEOPLE WITH DISABILITIES

**AREA COMPLIANCE SUMMARY**

TOTAL NUMBER OF CHILDREN 122  
 0 - 2 YEARS BABIES 32  
 2 - 3 YEARS TODDLERS 50  
 3 - 5 YEARS PRE SCHOOL 40

- BABIES 0 - 2 YEARS UNENCUMBERED INDOOR AREA
  - PLAY ROOM 01 16 CHILDREN 54m<sup>2</sup> [52m<sup>2</sup> REQ]
  - PLAY ROOM 02 16 CHILDREN 54m<sup>2</sup> [52m<sup>2</sup> REQ]
- TODDLERS 2 - 3 YEARS UNENCUMBERED INDOOR AREA
  - PLAY ROOM 03 25 CHILDREN 86m<sup>2</sup> [81.25m<sup>2</sup> REQ]
  - PLAY ROOM 04 25 CHILDREN 85m<sup>2</sup> [81.25m<sup>2</sup> REQ]
- PRE SCHOOL 3 - 5 YEARS UNENCUMBERED INDOOR AREA
  - PLAY ROOM 05 20 CHILDREN 68m<sup>2</sup> [65m<sup>2</sup> REQ]
  - PLAY ROOM 06 20 CHILDREN 68m<sup>2</sup> [65m<sup>2</sup> REQ]

**EXTERNAL UNENCUMBERED PLAY AREA**  
 PLAY AREA 122 CHILDREN 859m<sup>2</sup> [854m<sup>2</sup> REQ]  
 INCLUDING 200m<sup>2</sup> UNDERCOVER PLAY AREA

**GROSS BUILDING AREA = 850m<sup>2</sup>**  
**GROSS FLOOR AREA = 837m<sup>2</sup>**  
 TOTAL INTERNAL STORAGE 26m<sup>3</sup>  
 TOTAL EXTERNAL STORAGE 36.6m<sup>3</sup> (MINIMUM)

| Rev | Description    | Date     | Issued by |
|-----|----------------|----------|-----------|
| 5   | DA SET         | 16.12.24 | B.SIVA    |
| 4   | DA SET         | 03.12.24 | B.SIVA    |
| 3   | DA SET         | 27.11.24 | B.SIVA    |
| 2   | DRAFT DA SET   | 17.10.24 | B.SIVA    |
| 1   | PRELIM. DA SET | 26.09.24 | B.SIVA    |

**BROWN COMMERCIAL BUILDING**  
 www.brownbuild.com.au  
 2 Elwell Close  
 Beresfield, NSW 2322  
 PO Box 596  
 East Maitland NSW 2325  
 Ph: (02) 4566 0216

**COPYRIGHT:**  
 BROWN COMMERCIAL BUILDING PTY LTD IS THE OWNER OF COPYRIGHT TO DRAWINGS SUPPLIED AND THE INFORMATION SHOWN HEREON. ALL DRAWINGS SUPPLIED MAY NOT BE USED, REPRODUCED OR COPIED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF BROWN COMMERCIAL BUILDING PTY LTD.

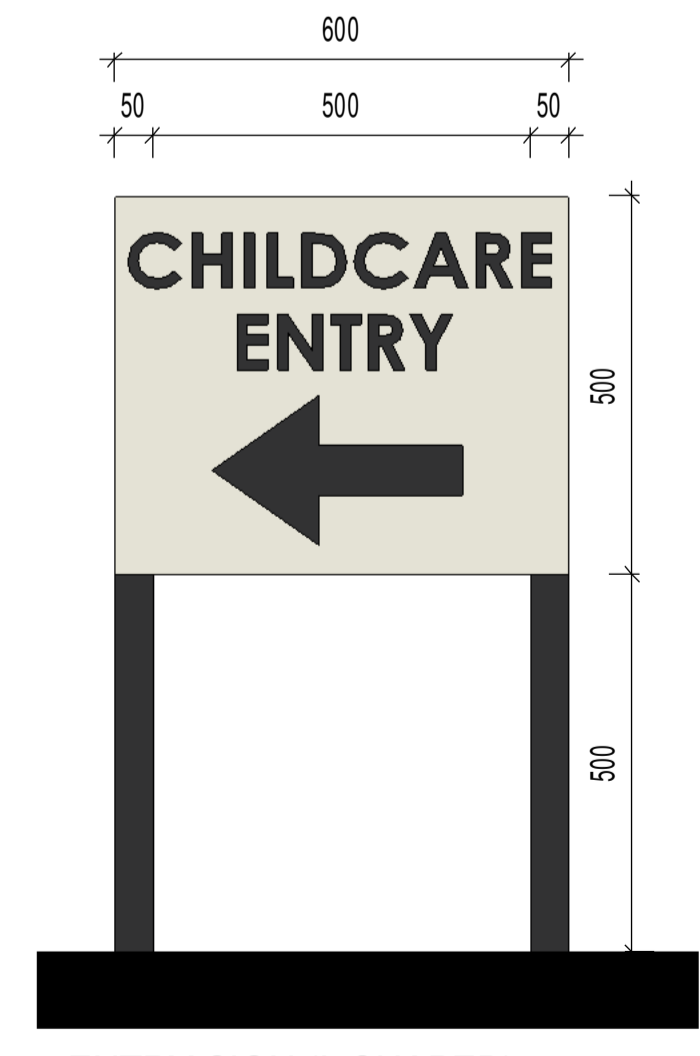
**Client**  
 SADDINGTON HOLDINGS

**Project**  
 CHILDCARE CENTRE

**Location:**  
 Lot: 2  
 No: 7  
 Street: REGIMENT ROAD  
 Suburb: RUTHERFORD  
 DP: 1260460  
 Scale: As indicated  
 Drawn by: B.SIVA  
 Checked by: B.YOUNG  
 Sheet Size: A1

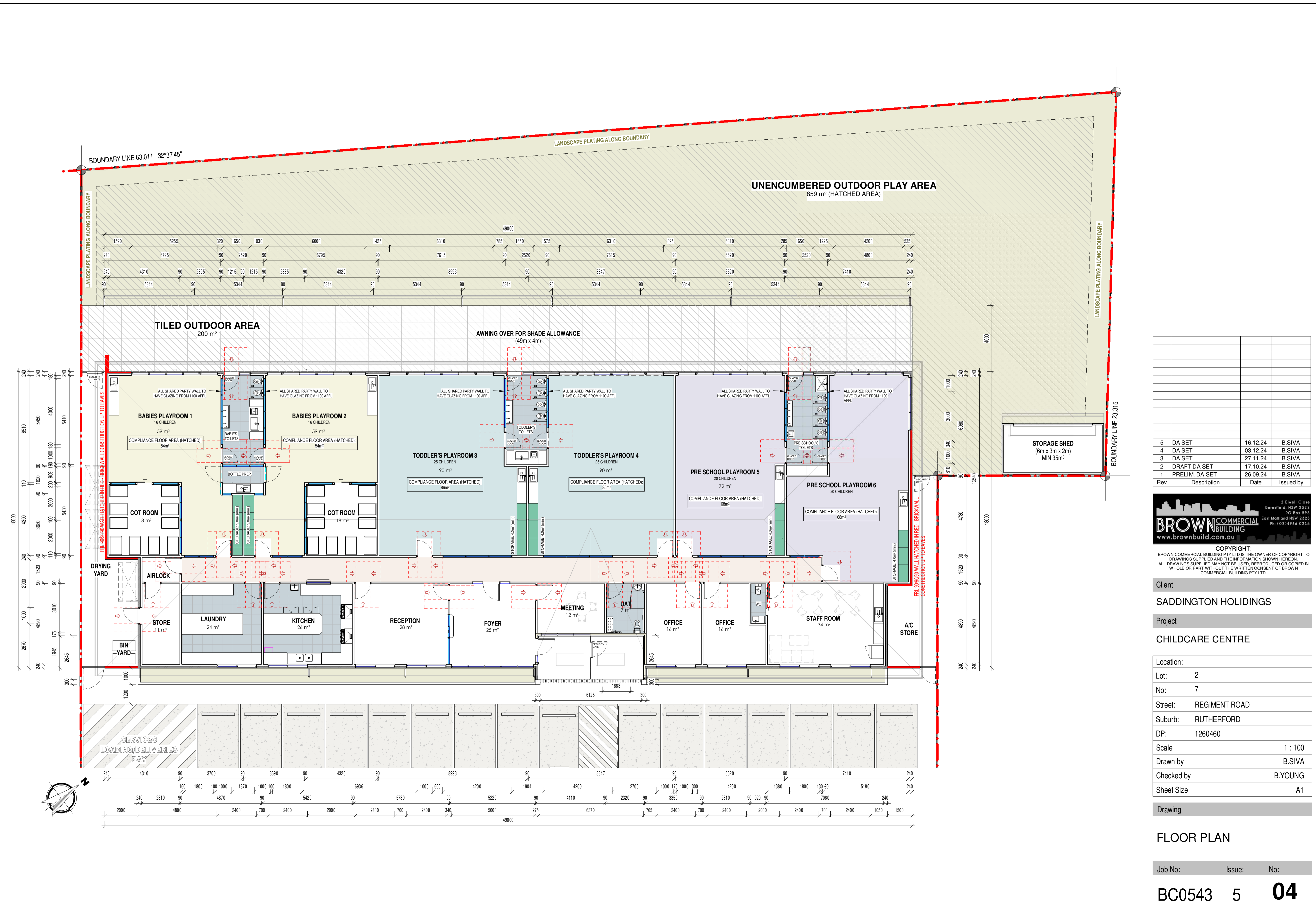
**Drawing**  
 SITE PLAN

**Job No:** BC0543  
**Issue:** 5  
**No:** 03



**2 ENTRY SIGN (L SHAPED)**  
 1:10





| Rev | Description    | Date     | Issued by |
|-----|----------------|----------|-----------|
| 5   | DA SET         | 16.12.24 | B.SIVA    |
| 4   | DA SET         | 03.12.24 | B.SIVA    |
| 3   | DA SET         | 27.11.24 | B.SIVA    |
| 2   | DRAFT DA SET   | 17.10.24 | B.SIVA    |
| 1   | PRELIM. DA SET | 26.09.24 | B.SIVA    |



**COPYRIGHT:**  
 BROWN COMMERCIAL BUILDING PTY LTD IS THE OWNER OF COPYRIGHT TO DRAWINGS SUPPLIED AND THE INFORMATION SHOWN HEREON. ALL DRAWINGS SUPPLIED MAY NOT BE USED, REPRODUCED OR COPIED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF BROWN COMMERCIAL BUILDING PTY LTD.

**Client**  
 SADDINGTON HOLDINGS

**Project**  
 CHILDCARE CENTRE

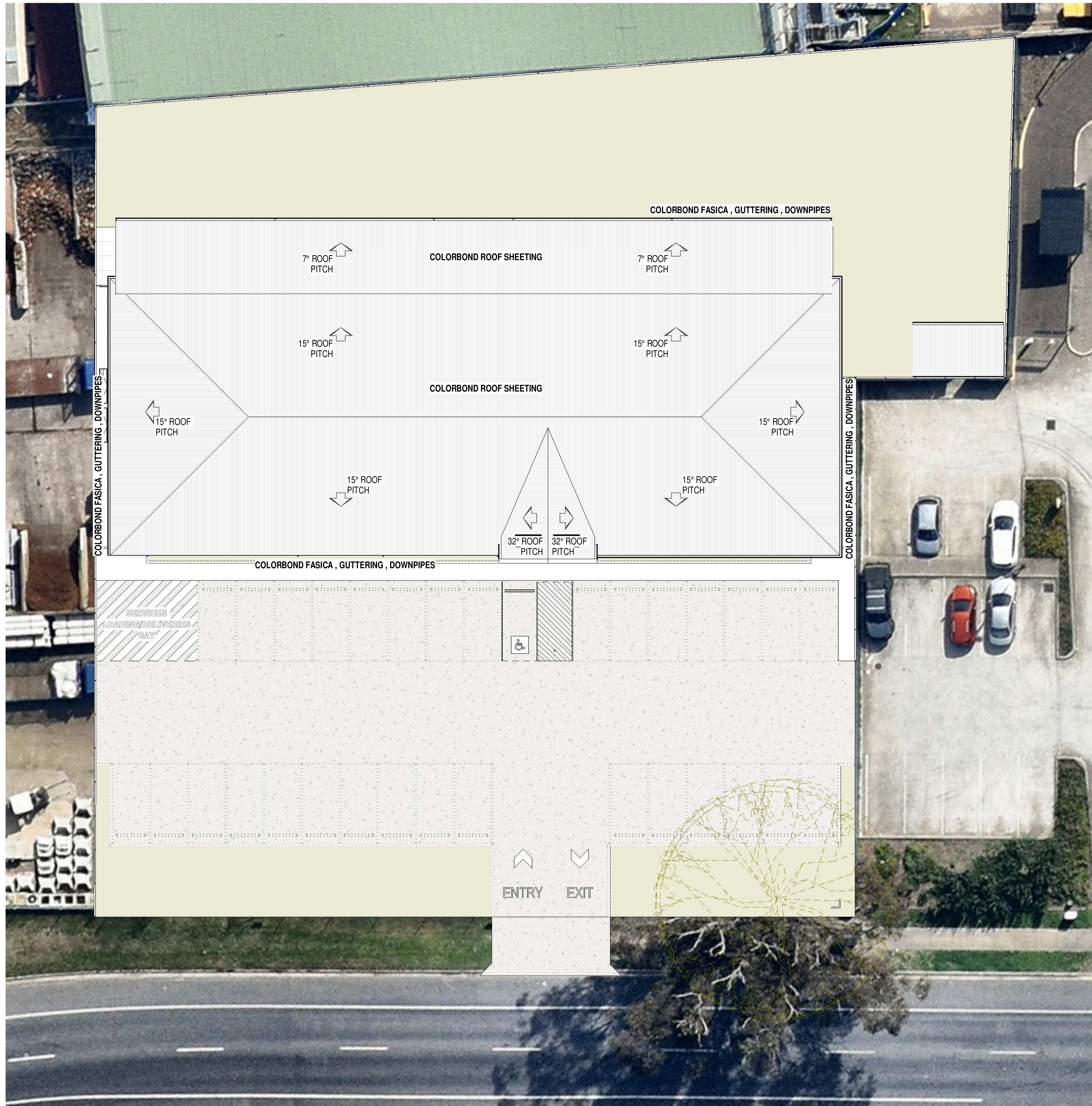
|                  |               |
|------------------|---------------|
| <b>Location:</b> |               |
| Lot:             | 2             |
| No:              | 7             |
| Street:          | REGIMENT ROAD |
| Suburb:          | RUTHERFORD    |
| DP:              | 1260460       |
| Scale            | 1 : 100       |
| Drawn by         | B.SIVA        |
| Checked by       | B.YOUNG       |
| Sheet Size       | A1            |

**Drawing**

**FLOOR PLAN**

Job No: Issue: No:

BC0543 5 04



| Rev | Description    | Date     | Issued by |
|-----|----------------|----------|-----------|
| 5   | DA SET         | 16.12.24 | B.SIVA    |
| 4   | DA SET         | 03.12.24 | B.SIVA    |
| 3   | DA SET         | 27.11.24 | B.SIVA    |
| 2   | DRAFT DA SET   | 17.10.24 | B.SIVA    |
| 1   | PRELIM. DA SET | 26.09.24 | B.SIVA    |


 2 Ewell Close  
 Beresfield, NSW 2322  
 PO Box 596  
 East Maitland NSW 2328  
 Ph: (02) 4566 0216  
[www.browncbuild.com.au](http://www.browncbuild.com.au)

**COPYRIGHT:**  
 BROWN COMMERCIAL BUILDING PTY LTD IS THE OWNER OF COPYRIGHT TO  
 ALL DRAWINGS SUPPLIED AND THE INFORMATION SHOWN HEREON.  
 ALL DRAWINGS SUPPLIED MAY NOT BE USED, REPRODUCED OR COPIED IN  
 WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF BROWN  
 COMMERCIAL BUILDING PTY LTD.

Client

SADDINGTON HOLDINGS

Project

CHILDCARE CENTRE

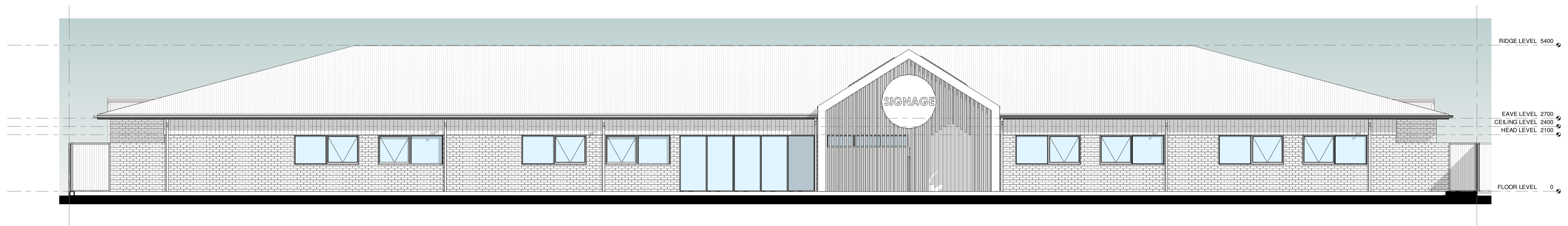
|            |               |
|------------|---------------|
| Location:  |               |
| Lot:       | 2             |
| No:        | 7             |
| Street:    | REGIMENT ROAD |
| Suburb:    | RUTHERFORD    |
| DP:        | 1260460       |
| Scale      | 1 : 150       |
| Drawn by   | B.SIVA        |
| Checked by | B.YOUNG       |
| Sheet Size | A1            |

Drawing

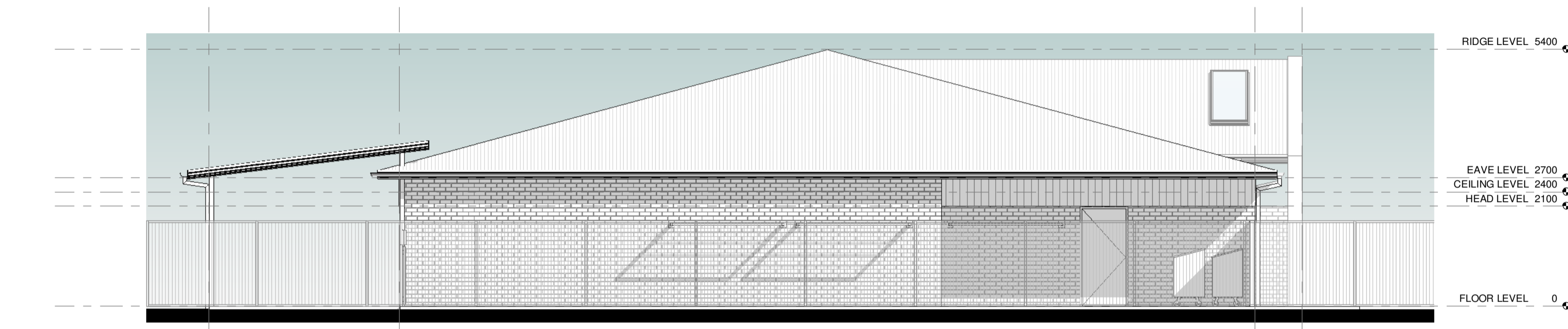
ROOF PLAN

Job No: Issue: No:

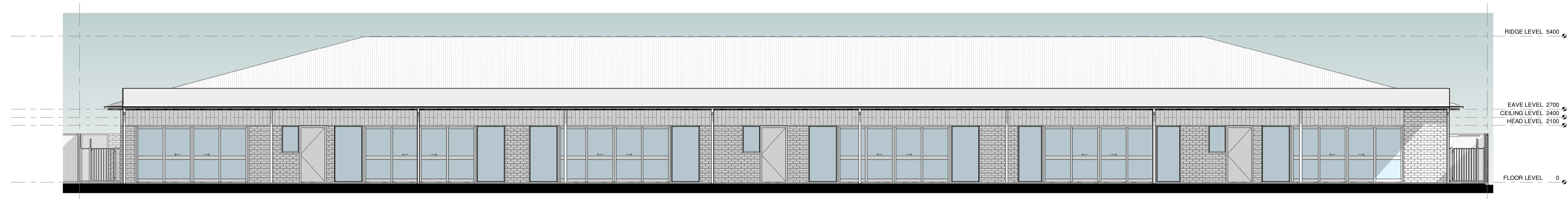
BC0543 5 **05**



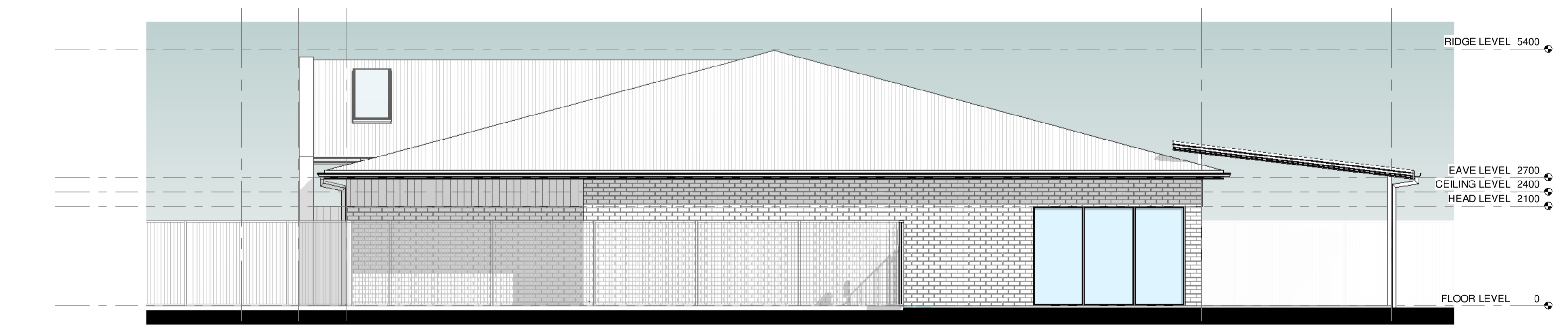
1 SOUTH EAST Elevation  
1:75



2 SOUTH WEST Elevation  
1:75



3 NORTH WEST Elevation  
1:75



4 NORTH EAST Elevation  
1:75

  
 2 Elwell Close  
 Beresfield, NSW 2322  
 PO Box 596  
 East Maitland NSW 2323  
 Ph: (02)4966 0218  
[www.browncommercialbuilding.com.au](http://www.browncommercialbuilding.com.au)

| Rev. | Description    | Date     | Issued by |
|------|----------------|----------|-----------|
| 1    | PRELIM. DA SET | 26.09.24 | B.SIVA    |
| 2    | DRAFT DA SET   | 17.10.24 | B.SIVA    |
| 3    | DA SET         | 27.11.24 | B.SIVA    |
| 4    | DA SET         | 03.12.24 | B.SIVA    |
| 5    | DA SET         | 16.12.24 | B.SIVA    |

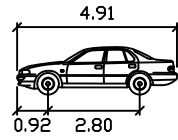
0 1 2 4 6m  
 NOTES:  
 1. All dimensions, levels, and setbacks are to be verified on site prior to fabrication or construction.  
 2. Written dimensions take precedence over scaled ones.  
 COPYRIGHT:  
 Brown Commercial Building PTY LTD is the owner of copyright to drawings supplied and the information shown hereon. All drawings supplied may not be used, reproduced or copied in whole or part of without the written consent of Brown Commercial Building PTY LTD

**Project:** CHILD CARE CENTRE  
**Lot:** 2 **DP:** 1260460 **No:** 7 **Street:** REGIMENT ROAD **Suburb:** RUTHERFORD  
**Client:** SADDINGTON HOLDINGS **Project Status:** DEVELOPMENT APPLICATION  
**Sheet Title:** ELEVATIONS  
**Scale:** 1:75 on A1  
**Project No:** BC0543  
**DWG No:** 07  
**Revision:** 5

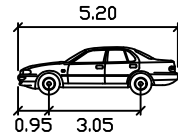
**Appendix B**  
Swept Turn Paths

**SWEPT PATH KEY:**

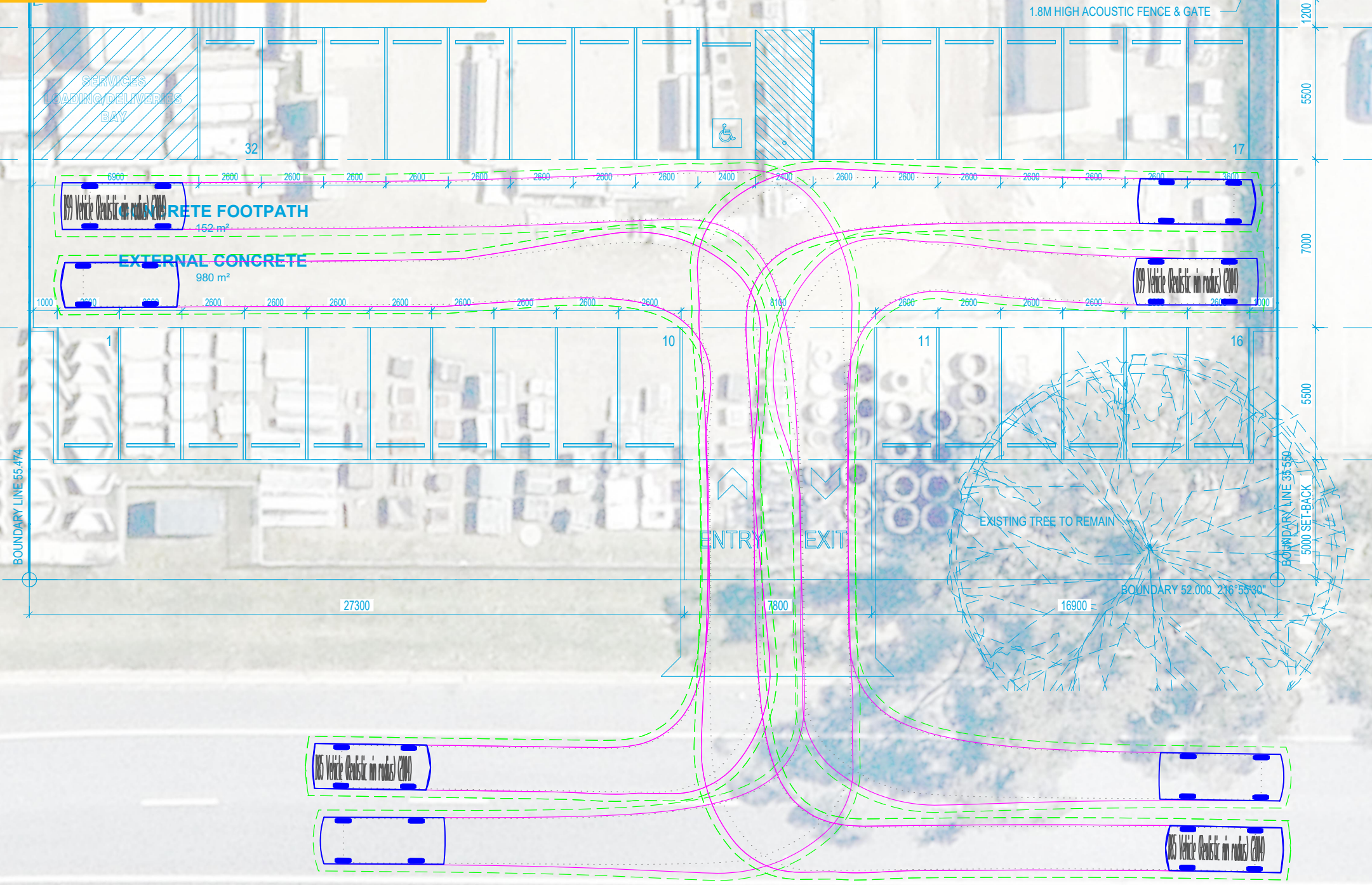
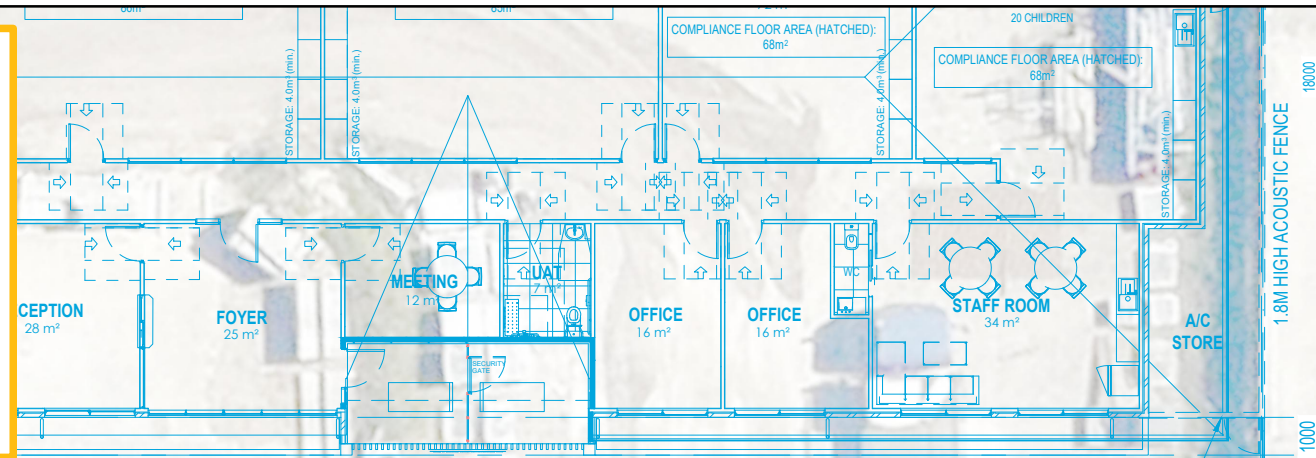
- VEHICLE CENTRE LINE
- ⋯ VEHICLE TYRE PATH
- VEHICLE BODY PATH
- - - 300mm CLEARANCE FROM VEHICLE BODY



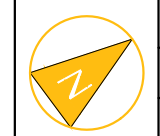
**B85**  
 Width : 4.91 meters  
 Track : 1.87 meters  
 Lock to Lock Time : 6.0  
 Steering Angle : 34.1



**B99**  
 Width : 5.20 meters  
 Track : 1.94 meters  
 Lock to Lock Time : 6.0  
 Steering Angle : 33.9

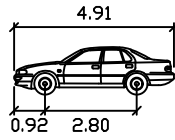


Plotted by CJP CONSULTING ENGRS



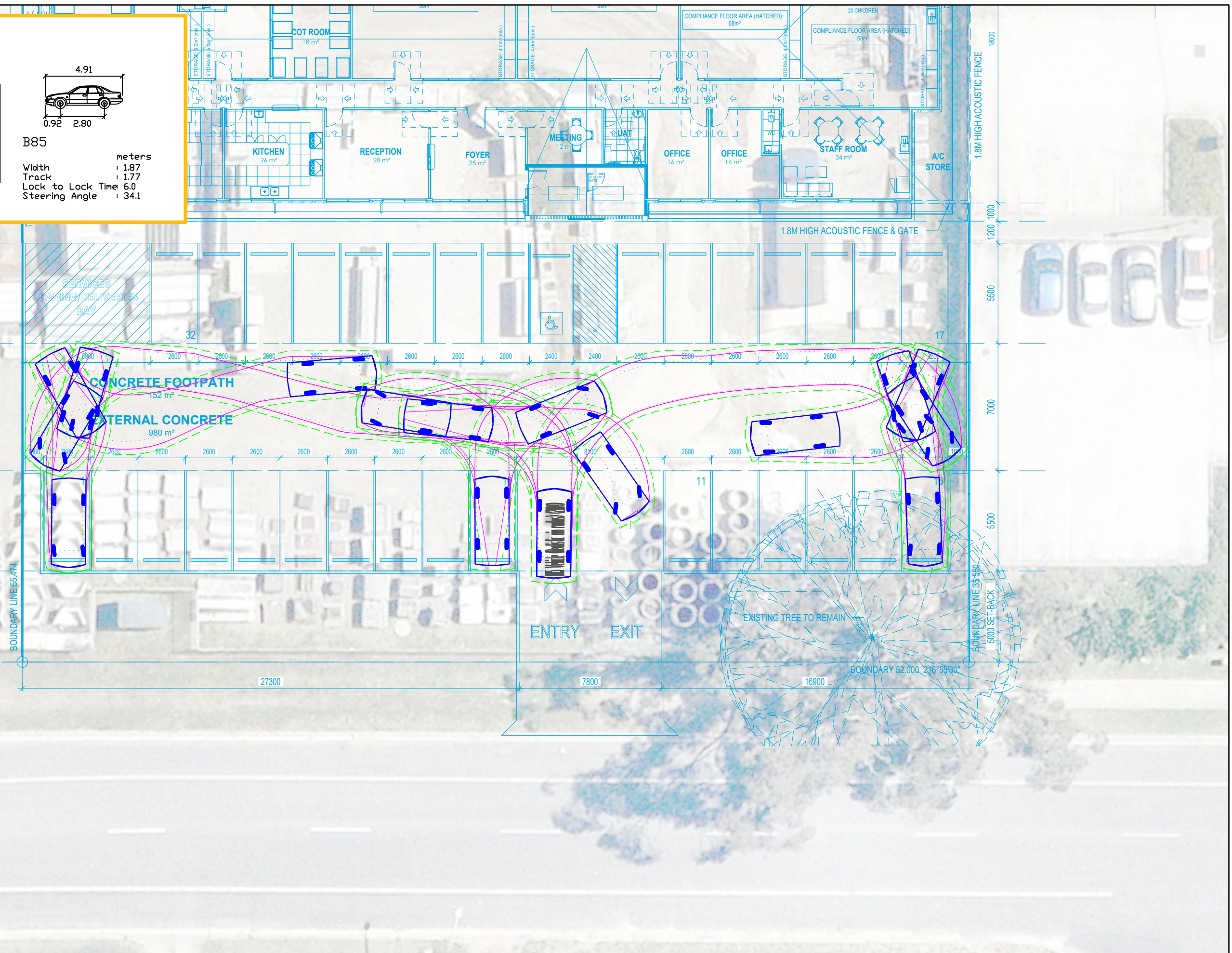
**SWEPT PATH KEY:**

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- - - 300mm CLEARANCE FROM VEHICLE BODY

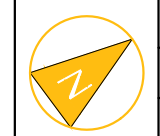


**B85**

Width : 1.87 meters  
 Track : 1.77  
 Lock to Lock Time : 6.0  
 Steering Angle : 34.1

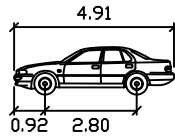


Plotted by CJP CONSULTING ENGRS

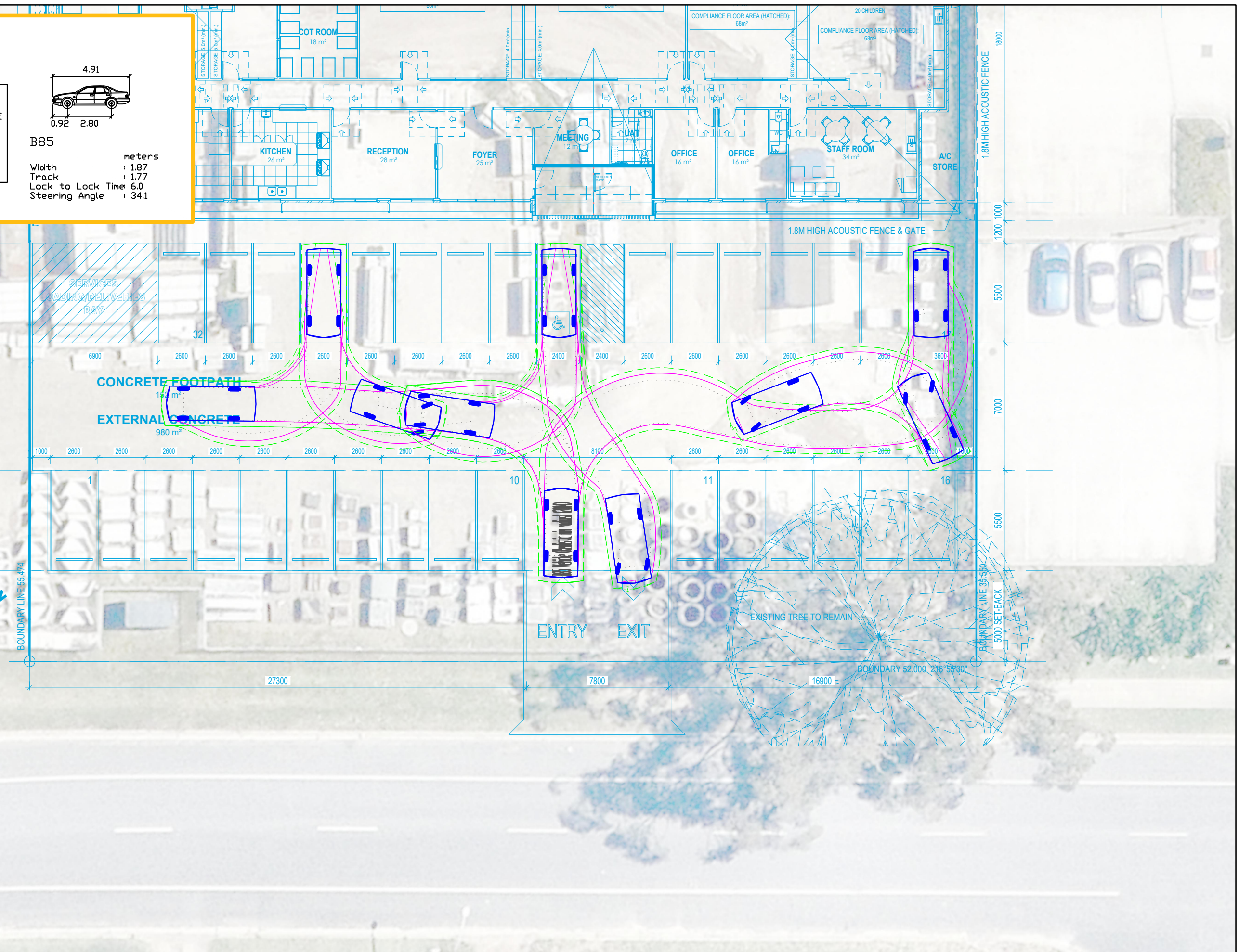


**SWEPT PATH KEY:**

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- - - 300mm CLEARANCE FROM VEHICLE BODY



**B85**  
 Width : 1.87 meters  
 Track : 1.77  
 Lock to Lock Time : 6.0  
 Steering Angle : 34.1

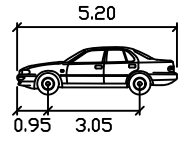


Plotted by CJP CONSULTING ENGRS



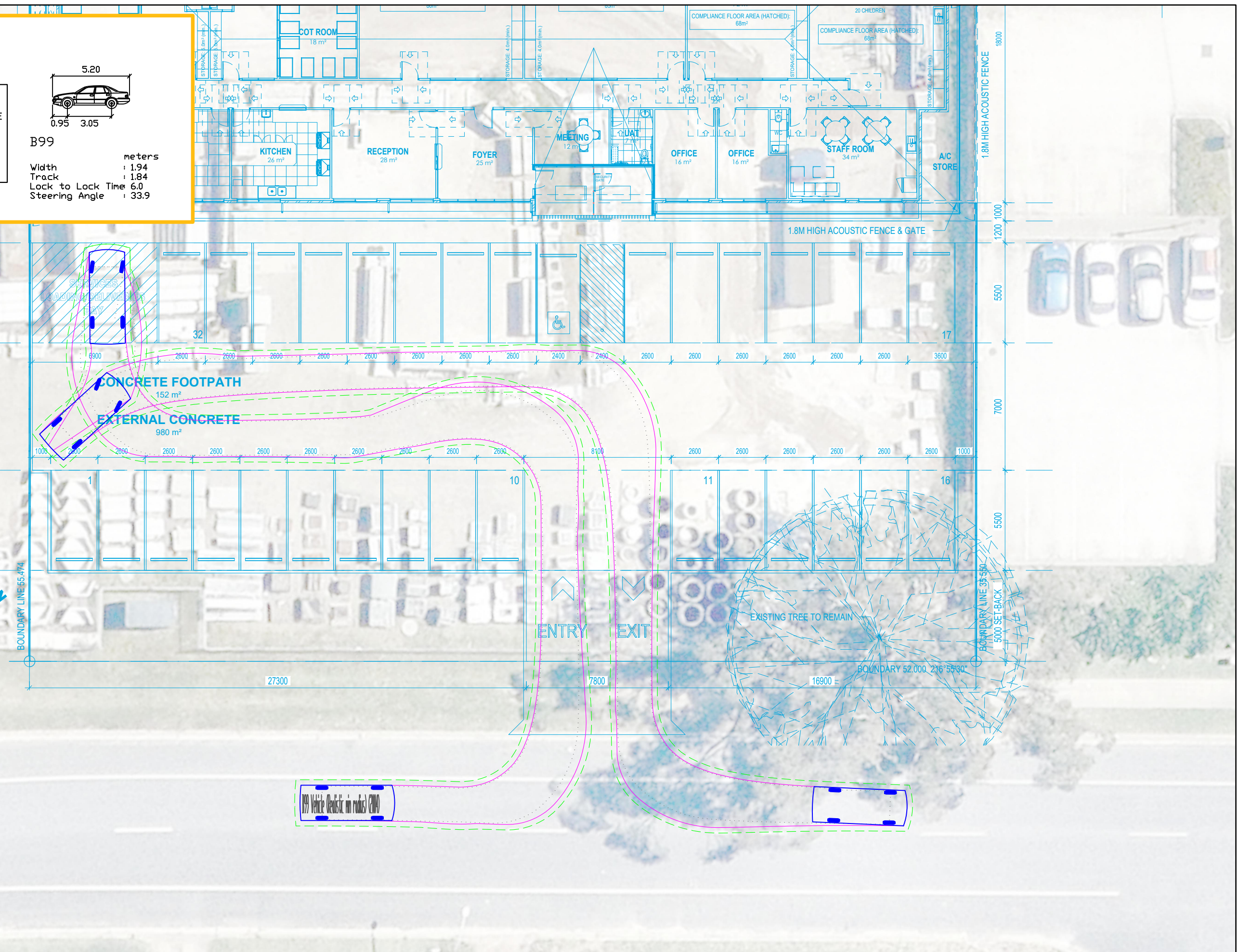
**SWEPT PATH KEY:**

- VEHICLE CENTRE LINE
- ⋯ VEHICLE TYRE PATH
- VEHICLE BODY PATH
- - - 300mm CLEARANCE FROM VEHICLE BODY



**B99**

Width : 1.94 meters  
 Track : 1.84  
 Lock to Lock Time : 6.0  
 Steering Angle : 33.9



Plotted by CJP CONSULTING ENGRS

