

Development Application: Proposed Tavern & Microbrewery

Lot 145 (No. 73) Old Perth Road



Harley Dykstra[®]

PLANNING & SURVEY SOLUTIONS



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TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	Purpose.....	1
1.2	Background.....	1
2	LAND DESCRIPTION	2
2.1	Land Ownership Details	2
2.2	Location and Context	2
2.3	Site Description.....	2
3	PROPOSED DEVELOPMENT	3
3.1	Development Summary.....	3
3.2	Site Layout & Design	3
3.3	Building Design and Rationale	3
3.4	Development Operations and Staffing	4
3.4.1	General Operations.....	4
3.4.2	Tavern Operations and Staffing.....	4
3.4.3	Microbrewery Operations and Staffing.....	4
3.5	General Site Development	5
3.5.1	Vehicle Movements.....	5
3.5.2	Vehicle Parking.....	5
3.5.3	Landscaping.....	5
3.5.4	Acoustic Considerations.....	5
3.5.5	Building Bulk and Scale.....	6
3.5.6	Residential Interface	6
3.5.7	Drainage and Water Management.....	6
3.5.8	Waste Management.....	6
3.5.9	Signage.....	6
4	PLANNING FRAMEWORK & RATIONALE.....	8
4.1	State Planning Framework.....	8
4.1.1	Metropolitan Region Scheme.....	8
4.1.2	State Planning Strategy	8
4.1.3	Perth and Peel @ 3.5 Million	8
4.1.4	Central Sub-Regional Planning Framework.....	8
4.1.5	State Planning Policy 7.0 – Design of the Built Environment	8
4.2	Local Planning Framework.....	9
4.2.1	City of Bassendean’s Local Planning Strategy	9
4.2.2	City of Bassendean’s Local Planning Scheme No. 10	9
4.2.3	Local Planning Policy 1 – Bassendean Town Centre Strategy and Guidelines.....	9
5	DESIGN REVIEW	10



5.1	Design Assessment of Proposal with SPP7.0 Principles	10
6	ZONING	12
6.1	Land Use Permissibility	12
6.2	Vehicle Parking.....	12
6.2.1	Local Planning Scheme No. 10 – Parking Requirements	12
6.2.2	City of Bassendean Local Integrated Transport Plan – Part 2.....	13
6.2.3	Stantec Parking Study – Results and Recommendations	14
6.3	Additional Requirements/Guidelines	14
6.3.1	Building Envelope	14
6.3.2	Building Orientation	15
6.3.3	Landscape and Hardscape	15
6.3.4	Signage.....	15
7	CONCLUSION.....	16

TABLES

Table 1:	Certificate of Title details	2
Table 2:	Design statement of compliance against SPP 7.0 Design Principles.	11
Table 3:	Land Use Definitions.....	12
Table 4:	LPS 10 Parking Requirements	13
Table 5:	Proposed parking bays	13
Table 6:	Town Centre Design Guidelines development standards.....	14

FIGURES

Figure 1:	Aerial Locality Plan	1
Figure 2:	Aerial Photograph	2
Figure 3:	Old Perth Road Street View	2

APPENDICES

Appendix A	Development Plans
Appendix B	Certificate of Title
Appendix C	Transport Impact Statement
Appendix D	Stantec Parking Study
Appendix E	Acoustic Report



1 INTRODUCTION

1.1 Purpose

This report has been prepared by Harley Dykstra in support of an application for the development of a proposed “Tavern” & “Microbrewery” at Lot 145 (No. 73) Old Perth Road, Bassendean (the subject site). A copy of the development plans are attached at **Appendix A**.

This report includes the details of the proposed development, the subject site and a planning assessment that addresses all relevant statutory compliance, policy requirements and planning considerations.

The proposed development intends to provide an innovative addition to the local community by establishing a unique shared model of service that incorporates a variety of local players. The tavern will predominately serve its own beverages, including its own unique draught to be brewed on-site in its state-of-the-art brewing facilities.

However, in a break from tradition, it proposes to not offer its own food, and instead provide its customers menus to nearby restaurants, and allow food to be delivered on-site and consumed at the venue as part of a joint agreement between local owners. In addition to this model, the proposed development also makes provisions for two fixed food truck bays within its rear alfresco area. This will allow a variety of food trucks to rotate through and operate in tandem with the tavern to provide their service in a safe and cohesive manner. Not only will this progressive model help to foster strong relationships with local businesses and stimulate economic activity in the town centre, but ultimately it will contribute to an enhanced sense of local identity and pride by providing a space where the community feels welcome.

1.2 Background

In accordance with the City’s Local Planning Scheme No. 10 (LPS 10), the Bassendean Town Centre has been zoned as a ‘Town Centre’ which has the function of promoting the town centre zone as the principal focus of the district in terms of shopping, professional, administrative, cultural, entertainment and other business activities.

To help guide subdivision, land use, development, and infrastructure provision for the Bassendean Town Centre, the City prepared its Local Planning Policy 1 - Bassendean Town Centre Strategy and Guidelines (LPP 1) in 2008 in accordance with State Planning Policies. The strategic objectives outlined in the plan aim to transform the area into a mixed-use town centre that is safe, visually attractive, and sufficiently robust to enable it to evolve over time.



2 LAND DESCRIPTION

2.1 Land Ownership Details

The details of the subject property are identified as follows in **Table 1**:

LOT NUMBER:	PLAN:	VOLUME/FOLIO:	LOT AREA:	REGISTERED PROPRIETOR:
145	1786	1650/349	1085m ²	Lorena Rossi Saint Alia Nikoloski

Table 1: Certificate of Title details

Copies of the Certificates of Title are included at **Appendix B**.

2.2 Location and Context

The subject site is located within the suburb of Bassendean and is situated approximately twelve (12) kilometres east of the Perth Central Business District (CBD), and five (5) kilometers north of the Perth International Airport. The site is bounded by Old Perth Road to the north and Hamilton Street to the west, with adjacent residential developments to the east and south of the site.

Development in Bassendean and the surrounding suburbs of Ashfield and Eden Hill are largely comprised of residential single-dwelling houses and include a significant number of heritage listed sites. The area is further bounded by the Swan River and associated foreshore reserves to the south, which prohibit development from extending further in that direction. Ample public open space is provided across the locale and is further supplemented by the regional reserves located along the foreshore.

2.3 Site Description

Lot 145 currently contains a vacant premises located on the northern portion of the lot, with the remainder of the lot currently accommodating an area of parking.

The site is clear of any remnant vegetation as a result of previous development of the site. However, there are two existing mature trees located within the road reserve along Old Perth Road which are to be retained and incorporated into the proposed alfresco area as part of this proposal.

In addition to the above, an Aerial Locality Plan is provided below at **Figure 1**, depicting the site in its context to nearby, surrounding development, while an aerial photograph has been included at **Figure 2**, and a street view capture has been included at **Figure 3**.



Figure 1: Aerial Locality Plan

Development Application: Proposed Tavern & Microbrewery
Lot 145 (No. 73) Old Perth Road



Figure 2: Aerial Photograph



Figure 3: Old Perth Road Street View

Development Application: Proposed Tavern & Microbrewery
Lot 145 (No. 73) Old Perth Road



3 PROPOSED DEVELOPMENT

3.1 Development Summary

This proposal is for the development of a new landmark Tavern and Microbrewery to be located on the corner of Old Perth Road and Hamilton Street within the City's 'Town Centre' zone. To facilitate this development, the existing building on the site is to be retained and redeveloped to accommodate a bar, lounge, staff office, and microbrewing facilities.

The proposed development has been designed to actively engage with the Old Perth Road frontage by incorporating landscaping and outdoor alfresco areas with existing pedestrian networks in accordance with the Town Centre's main street principles. Careful consideration has been taken to ensure that the development facilitates a high level of visual interest as viewed from the streetscape through the use of innovative building articulation and high-quality finishes.

Approval of this development will facilitate the construction of a landmark Brew House, optimally located on a prominent corner-site within the City's 'drive-by' commercial precinct. This valuable addition to the neighbourhood will act as a significant attractor for local residents, drawing them into the area and enhancing economic and social activity while serving as a valuable meeting point for the wider community.

The proposed improvements to the site are presented on the attached Development Plan set prepared by Bond Architecture, including a Development Site Plan, Floor Plans, and Elevations. Architectural impressions prepared by Fratelle have also been included to demonstrate the attractive design features and aesthetic look of the proposed development. Development plans are included at **Appendix A**.

3.2 Site Layout & Design

The proposed tavern comprises a Bar, Lounge and Brewing area of 330m²; two outdoor alfresco areas with a combined area of 685m²; and a staff office and facilities area of 37m². Seven carparking bays have been provided to the rear of the lot with access provided from the southern entrance to the secondary street (Hamilton Street). There are also two additional parking bays for the use of local food trucks (more details provided below). Amenities block and waste storage area have also been provided at the south-eastern corner of the lot. Finally, a loading bay for the use of commercial vehicles has been provided to the rear of the building to be accessed from the northern entrance to the secondary street (Hamilton Street). Details in relation to parking and access have been included in the Traffic impact Statement (TIS) prepared by Stantec as attached at **Appendix C** and within Section 4.3.3 of this report.

The entrance to the building is clearly identifiable and accessible from the primary street frontage (Old Perth Road) ensuring that connection is maintained with existing pedestrian linkages.

3.3 Building Design and Rationale

The proposed development has been designed to celebrate its location on a visually prominent street corner. At the same time, the design acknowledges and sensitively responds to the amenity of the area and nearby residential land uses. The prominent location of the site and its location in the town centre ensures that development, within this context should represent a high-quality built form that activates the streetscape. The proposal achieves this via architectural design and by virtue of the land use itself. The design approach for the project is set out in the SPP 7.0 assessment contained in section 5.1 and has been assessed against the provisions of the Bassendean Town Centre Strategy and Guidelines, detailed further in subsequent sections of this report.



3.4 Development Operations and Staffing

3.4.1 General Operations

The proposed development will operate as a tavern and microbrewery for the patronage of residents in the local area. A local draught beer is to be brewed on-site in the proposed brewing facilities, as demonstrated on the development plans at **Appendix A**. This will be served to patrons to consume on premises but will also be available as a takeaway purchase from the bar. While no kitchen is proposed for the development, patrons will be able to order food from one of the local food trucks parked in the allocated bays in the courtyard. Additionally, patrons will also have the option of ordering food from nearby restaurants via interaction with QR codes to be integrated throughout the proposed alfresco and seating areas.

3.4.2 Tavern Operations and Staffing

The proposed tavern will operate with an average of five staff members at any one time and is envisioned to require a maximum of eight (8) staff to accommodate for peak occupancy. The proposed operating hours for the tavern are as follows:

OPENING HOURS:

Mon	noon till 10pm
Tue	noon till 10pm
Wed	noon till 10pm
Thurs	noon till 10pm
Fri	noon till 12am
Sat	noon till 12am
Sun	noon till 10pm

While the proposed tavern is unlikely to remain open across all seven days, a flexibility in approved opening hours will allow the development to better determine its optimal trading days/hours based on the observed attendance and demand from local residents.

3.4.3 Microbrewery Operations and Staffing

The proposed microbrewing facilities will consist of two (2) 1200L fermentation vessels and six (6) 1200L conditioning tanks. The vessels and tanks have an average diameter of 1.5m and approximate height of 2m. The facilities will be located behind the bar area and will be further separated from patron interference by the provision of a suitable barrier.

The facilities will have a maximum production capacity of 55,000L per annum, however, actual production carried out on-site will vary according to demand.

Deliveries of supplies required to produce the draught beer will occur outside of regular operating hours, and will be facilitated by the provision of a commercial loading bay to the rear of the proposed development, as demonstrated on the development plans at **Appendix A**.

The proposed microbrewing facilities will be operated by a maximum of two dedicated staff members at any one time. The proposed operating hours for the production processes associated with the microbrewing facilities are as follows.

OPERATING HOURS:

Mon	8am till noon
Tue	8am till noon
Wed	8am till noon
Thurs	8am till noon
Fri	8am till noon

This will include all of the maintenance and servicing of facilities. It is noted that the proposed microbrewing facilities emit very low levels of noise during operation and servicing, as this is a requirement of the facilities due to their location within the bar/public area.



3.5 General Site Development

This proposal has been designed in a manner that is cohesive and in accordance with the provisions set out in the City's Local Planning Scheme No. 10 (LPS 10) which is the defining document regarding development standards for this proposal.

The following provides a summary of the general site development principles included throughout this proposal.

3.5.1 Vehicle Movements

Vehicle movements are accommodated by the provision of two (2) crossovers into the site to allow for full traffic movement with minimal impact to surrounding residents and businesses. The main crossover is located at the north-west portion of the site, with access onto Hamilton Street, and the second crossover (for the use of staff) is located just south of the main crossover, with access also onto Hamilton Street. All crossovers meet the minimum requirements in accordance with LPS 10, with the northern accessway (Hamilton Street) being 7.2m wide and the southern accessway (Hamilton Street) 5m in width. Internal traffic movements within the site will be minimal as only staff carparking bays are proposed.

In order to confirm the above, a Traffic Impact Assessment (TIA) has been completed by Cardno now Stantec, indicating that the internal movement network can accommodate all vehicle movements and there is sufficient space for vehicles to exit onto Hamilton Street in forward gear. The findings of their assessment are included at **Appendix C**.

3.5.2 Vehicle Parking

A total of nine (9) parking bays including seven (7) staff parking and two (2) for the use of food trucks, have been proposed for this development.

Due to site constraints and in accordance with the principles of SPP 4.2 Activity Centres and Liveable Neighbourhoods 2015; which encourages the reduction of car-dependency within transit-oriented developments (TOD); no public parking has been proposed for use within this site. To justify this shortfall, a comprehensive parking study has been conducted by Stantec to define the likely generation of parking attributable to the proposed use, the potential extent of parking overspill into adjacent on-street parking, and the availability of such parking within a reasonable catchment area. The findings of this study are included within the TIA and are attached separately at **Appendix D** for reference.

Whilst a summary of the study and a breakdown of vehicle parking compliance has been provided below, it should be noted here that all parking bays are appropriately sized and located in accordance with the relevant Australian Standard.

3.5.3 Landscaping

Landscaping has been depicted nominally across the site, but it should be noted that that the final landscaping design can be subject to a condition of development approval. Significant landscaping is proposed for the external perimeter of the proposed acoustic barrier to soften the impact of blank facades on the surrounding amenity. Landscaping is also proposed to be integrated throughout alfresco seating areas, including the retention of two mature trees within the streetscape of Old Perth road. This will enhance the amenity and sustainability of the popular commercial strip by providing valuable canopy cover to pedestrians and reducing the impacts of the Urban Heat Island (UHI) effect caused by the lack of green cover across urban areas.

3.5.4 Acoustic Considerations

To ensure that the proposed development complies with the allowable noise levels prescribed by the *Environmental Protection (Noise) Regulations 1997*, a Noise Impact Assessment (NIA) was conducted by Herring Storer acoustic consultants. The results of the assessment conditioned the need for a 3m high acoustic barrier to run along the western and southern boundaries of the development to prevent noise pollution from impacting the amenity of the surrounding area. A



further condition was also imposed relating to the use of music in the rear courtyard, which must remain at background/conservation levels and not be utilised after 10pm or prior to 7am (Monday to Friday) and 9am (Sundays/Public holidays). In compliance with the above conditions, the assessment confirms that noise level emissions associated with the tavern and microbrewery are able to comply with the relevant assigned noise levels stipulated by the Environmental Protection (Noise) Regulations 1997. The results of the NIA are attached at **Appendix E**.

3.5.5 Building Bulk and Scale

The building height of the proposed development has been designed to respect the existing topography and built form of the surrounding area while also reflecting its role on a prominent corner site of the City's Town Centre. In keeping with this, the maximum height of the development has been proposed for approximately 5.5m high. This will ensure that solar access and view corridors are maintained for existing residences while still activating and framing the streetscape along Old Perth road.

Innovative design elements such as the use of open-glaze windows, canopy overhangs and a unique building articulation have been integrated into the design of the proposed development to help reduce building massing and provide for an aesthetically pleasing addition to the neighbourhood without dominating the visual landscape.

3.5.6 Residential Interface

The subject site is currently bounded by residential areas to the south. As such, the elevation of the proposed development has been designed to appropriately address adjacent residents and ensure that visual amenity is not negatively affected by the proposed development. Furthermore, a 3m high acoustic barrier has been included across the southern boundary of the site to prevent noise pollution from impacting nearby residence. The ability of the acoustic barrier to sufficiently protect the nearby residential amenity is confirmed in the acoustic report conducted by Herring Storer, attached at **Appendix E**.

The provision of the proposed development will provide a valuable meeting place for the local community, allowing social connections to prosper and a stronger, more communal sense of identity to be formed. This in turn will encourage greater investment and pride in the wider precinct, therefore stimulating economic activity.

3.5.7 Drainage and Water Management

The existing drainage and water management conditions will be retained for the new development.

3.5.8 Waste Management

Waste management, including the storage and movement of bins has been considered in the design of the development. A waste storage area has been included at the south-east corner of the site and is suitably screened from view of the alfresco areas and surrounding residences by the provision of a 3m high acoustic barrier. This will ensure that any unpleasant sights or smells are prevented from negatively impacting the amenity of the development and surrounding area.

Due to the proposed model of food service that foregoes the need for the proposed development to provide a kitchen or food preparation area, minimal waste is likely to be generated on-site. As a result, the 2.8m x 6m waste storage area provided is considered acceptable in meeting the expected waste generation for the proposed development.

Given some details regarding bin movement and collection are still to be finalised, it is expected that a condition of development approval would require the preparation of a Waste Management Plan that appropriately responds to the operation of the development.

3.5.9 Signage

Minimal signage has been proposed for this development, with just one sign to be integrated into the primary façade the street corner between Old Perth Road and Hamilton Street, as shown on the perspective plans attached at **Appendix A**. Careful consideration has been taken to ensure that the



signage and entranceway are clearly visible from the main street and that the design reflects the aesthetic style and character of surrounding developments via the selection of locally favoured materials and colours.



4 PLANNING FRAMEWORK & RATIONALE

4.1 State Planning Framework

4.1.1 Metropolitan Region Scheme

The subject land is primarily zoned 'Urban' under the Metropolitan Region Scheme (MRS) and adjoins other properties also zoned 'Urban'. The purpose of the Urban zone is to accommodate a range of uses, including commercial development, as proposed by this application.

4.1.2 State Planning Strategy

The State Planning Strategy (SPS) is the highest-level strategic planning document in WA and sets out the key planning-related principles.

Specifically, the Strategy provides an overall guide to the management and provision of key matters related to the environment, community, economy, infrastructure, regional development, and government. The Strategy provides the overall vision which is to be articulated and reflected through subsequent planning instruments in the framework.

The key planning considerations relating to the City of Bassendean include:

- Providing spaces and places focused on supporting the local economy.
- Focusing on infrastructure that contributes to economic and population growth.

4.1.3 Perth and Peel @ 3.5 Million

Perth and Peel @ 3.5 Million provides the overarching spatial framework and strategic plan for the Perth and Peel region for the next 35 years. This document is important as it provides guidance and detailed planning regarding the delivery of housing, infrastructure, and other key services to accommodate future growth through the designation of four sub-regional frameworks. The subject site for this proposal is located within the Central Sub-Regional Planning Framework.

4.1.4 Central Sub-Regional Planning Framework

The Framework provides the next level of detail in respect of the planned pattern of growth in the sub region. From a high-level perspective, the Framework seeks to optimise the use of land within and in proximity to activity centres through increases to housing density and diversity, and an intensification of business, commercial and community activity in places such as the City of Bassendean. There is a general preference for focused development and transformation of existing activity centres to ensure vibrant, mixed-use community hubs that are integrated with high-quality public transport connections.

The Frameworks identify Bassendean as a 'District Centre' within the activity centre framework hierarchy, further details in relation to this are included in 4.1.6 below.

4.1.5 State Planning Policy 7.0 – Design of the Built Environment

The State Planning Policy 7.0 Design of the Built Environment (SPP 7.0) sets out ten design principles to inform and guide landowners, proponents, designers, and decision-makers to achieve good design outcomes in the built environment. It encourages early and ongoing discussion of design quality matters, during the concept, pre-lodgement, and determination stages of a proposal.

In order to demonstrate compliance with SPP 7.0, a preliminary design review of the submitted development plans were assessed against the principles the above principles, with the results detailed below in section 5.1.



4.2 Local Planning Framework

4.2.1 City of Bassendean's Local Planning Strategy

The City's local planning strategy and incorporated Commercial Strategy promotes the Bassendean Town Centre as the primary commercial retail and civic centre of the municipality. To achieve this, a prime objective is to revitalise the traditional main street pedestrian based commercial retail precinct at the west end of Old Perth Road, without undermining the overall importance of the Bassendean Village Shopping Centre located at the east end of Old Perth Road.

To coordinate development in this manner, the Local Planning Policy 1 - Bassendean Town Centre Strategy and Guidelines (LPP 1) was formed to act as the defining document for development in this area. The relevant site requirements and design standards for this site are therefore contained within the guidelines, as detailed below in section 4.2.3.

4.2.2 City of Bassendean's Local Planning Scheme No. 10

The subject site is zoned "Town Centre" under the City of Bassendean's Town Planning Scheme No. 10 (LPS 10).

In addition to the zoning under the Scheme, LPP 1 sets the development requirements for the Bassendean Town Centre and will therefore serve as the primary control in relation to this proposal.

Further details regarding zoning, use permissibility and additional scheme requirements are included in section 6.0.

4.2.3 Local Planning Policy 1 – Bassendean Town Centre Strategy and Guidelines

This policy provides design guidelines and standards for all developments proposed within the 'Town Centre' zone in accordance with the City's LPS 10.

To coordinate commercial development within the zone, the areas along Old Perth Road have been further delineated into three distinct sub-precincts:

- The west end between Guilford road and Wilson street - Traditional "Main Street" pedestrian based commercial/retail;
- The central area between Wilson street and Whitfield street - "Drive-by" commercial with interspersed retail and civic uses; and
- The east end between Whitfield street and West road - Car based retail in the Bassendean Village Shopping Centre at the corner of Old Perth Road and West Road.

The proposed development is located within the central area which according to the strategy, requires a softer, more residential and landscape character than the 'main street' oriented west end. Additionally, the strategy provides for a small retail node to develop at the bend on Old Perth Road (south side) and the intersection of Hamilton Street (the location of the proposed development).

In accordance with the above provisions, the proposed development is optimally suited for its proposed location. Not only will it suit the residential character of the area as a mid-sized, community-friendly establishment, but it will also act as a desirable location and drawcard for local residents, further facilitating the City's aim in creating a small retail node in this location.

Further details concerning the design standards and site requirements set out in the guidelines are discussed in relation to the proposed development in section 6.3 below.



5 DESIGN REVIEW

5.1 Design Assessment of Proposal with SPP7.0 Principles

This section demonstrates statement of compliance with the design principles contained within the State Planning Policy – Design of the Built Environment 7.0 (SPP 7.0). To ensure that all the principles have been suitably addressed, a preliminary review has been conducted by our planning consultants and included in **Table 2** below.

DESIGN PRINCIPLES	DESIGN REVIEW
<p>1. Context & Character <i>Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.</i></p>	<p>This development proposes a colour and material palette that will respond to the built form elements of the local area and contribute to a sense of place. Architectural features include exposed brickwork, modern rendering and sympathetic colour selection.</p>
<p>2. Landscape Quality <i>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.</i></p>	<p>Significant landscaping has been integrated throughout the site to help foster a connection to and enhance the local amenity of the area. This includes the retention and integration of two mature trees within the front alfresco area.</p>
<p>3. Built Form and Scale <i>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.</i></p>	<p>Building bulk and orientation has been carefully designed to prevent building mass from dominating the visual amenity of the area. This was achieved through innovative design techniques such as high permeable windowpanes and a development height that matches adjacent residential uses.</p>
<p>4. Functionality & Build Quality <i>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.</i></p>	<p>The proposed development has been designed to include practical features and elements to ensure the long-term functionality and lifespan of the proposed uses. This includes air conditioning throughout the development, a staff room with appropriate facilities, sufficient parking bays for the loading/unloading of commercial vehicles, transportable amenities block to allow for adaptability to future modifications or proposed changes.</p>
<p>5. Sustainability <i>Good design optimises the sustainability of the built environment, delivering positive environmental, social, and economic outcomes.</i></p>	<p>The proposed development has been oriented to capitalise on the greatest level of solar access possible, which is further facilitated by the inclusion of large clear Perspex windows that allow increased solar permutation.</p>
<p>6. Amenity <i>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.</i></p>	<p>The proposed development has been designed to ensure that it meets the occupants needs while protecting the amenity of nearby residents through the inclusion of features such as a 3m high acoustic barrier to prevent noise pollution. The amenity of the local area is further improved by the retention of the mature trees in the road frontage on Old Perth road, which will contribute to the level of canopy cover provided and enhance local connection with the natural environment.</p>



<p>7. Legibility <i>Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.</i></p>	<p>The proposed development has been designed to ensure that major entrances are clearly identifiable and are integrated into existing pedestrian linkages along Old Perth Road. Similarly, vehicular access and staff parking areas are clearly identifiable by the proposed landscaping and crossovers.</p>
<p>8. Safety <i>Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.</i></p>	<p>The proposed development provides for a high level of passive surveillance along the main street frontages of Old Perth Road and Hamilton street due to the siting of external alfresco areas and high, permeable windows. This will work in conjunction with the increased levels of activity along the street frontage to reduce opportunities for anti-social behaviour. Feature lighting will also be incorporated into the facades to provide for an improved level of safety and visibility.</p>
<p>9. Community <i>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.</i></p>	<p>This proposal will provide a valuable addition for the local community by establishing a unique model of food delivery that utilises local restaurants and food trucks to provide food for the proposed development. This will foster strong connections and relationships with local businesses and will contribute to an enhanced sense of local identity and pride.</p>
<p>10. Aesthetics <i>Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.</i></p>	<p>The architectural features, materials, and colour palette selected have provided for an attractive and visually interesting design that acts as a drawcard for local residents while being careful not to detract from the existing residential amenity of the surrounding area.</p>

Table 2: Design statement of compliance against SPP 7.0 Design Principles.

In light of the statements included in the table above, this proposal has sufficiently addressed the design principles contained within SPP 7.0.



6 ZONING

6.1 Land Use Permissibility

The use proposed in this application has been cross-referenced against the City's LPS No. 10 and LPP 1. **Table 3** below summarises the various land use definitions that pertain to this proposal:

PROPOSED USE	LPS NO. 10 USE DEFINITION
Tavern	Tavern
Microbrewery	Use not listed

Table 3: Land Use Definitions

The following provides a summary of the land use in the context of the land use definition prescribed by LPS No.10:

Tavern

The proposed Tavern is considered to best fit the definition of "Tavern" as defined within LPS No. 10:

"means premises licensed as a tavern under the Liquor Licensing Act 1988 and used to sell liquor for consumption on the premises"

Tavern is classified as an "A" use within the Town Centre Zone, ensuring the use is permitted providing the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the deemed provisions.

Microbrewery

The proposed Microbrewery is considered as a 'use not listed' as it cannot reasonably be determined as falling within the type, class, or genus of activity of any other use category included in the LPS 10 zoning table.

In accordance with clause 3.4.2 of the LPS 10, when a proposed use is not included in the zoning table and does not reasonably fit under any other uses, the local government may exercise its discretion in determining whether to approve the application.

The proposed 'microbrewery' use is considered to comply with the objectives of the "Town Centre" zone as it provides an additional level of entertainment to the retail and commercial function of the proposed tavern. This unique addition serves to differentiate the proposed tavern from similar developments in the area and will therefore act as a significant attractor for the town centres' central sub-precinct. This coincides with the strategic intent of the zone which aims to establish a small retail node at the location of the subject site, to act as a buffer between the "pedestrian-friendly" sub-precinct to the west, and "car-based" sub-precinct to the east.

6.2 Vehicle Parking

6.2.1 Local Planning Scheme No. 10 – Parking Requirements

Vehicle parking requirements are defined within Part 4 of LPS No. 10 where it provides parking bay rates for a number of land uses within a table and requires that parking requirements for all other land uses, not listed within that table, to be determined by Council. In that instance Council must have regard for the nature of the development and the number of employees likely to be on the site amongst others.

On the basis of the above, and Part 4 of the Scheme, the following parking calculation is provided in **Table 4**.



PROPOSED USE	LPS NO. 10 PARKING REQUIREMENT	PARKING REQUIRED
Tavern	1 per bedroom plus 1 space for every 3m2 of bar and public area	327 bays

Table 4: LPS 10 Parking Requirements

However, during recent discussions with the City, it was suggested that the above requirement is considered outdated and likely to be modified in their upcoming Local Planning Scheme No. 11 (LPS 11), which is currently in the process of being formed.

In light of these discussions, this proposal intends submit a significant variation to the parking requirements contained within LPS 10. Justification for this variation is provided in the following sections in relation to the City’s recent *Local Integrated Transport Plan – Part 2*, and the findings of the TIA by Stantec.

While the parking provisions for patrons of the proposed development are discussed further below, the following parking bays have been proposed for the use of staff and ancillary uses of the development as demonstrated in **Table 5** below:

PARKING ALLOCATED FOR	NO. OF BAYS
Staff	Seven (7) bays including one (1) universal
Food Trucks	Two (2) marked bays
Commercial Delivery	One (1) loading bay

Table 5: Proposed parking bays

6.2.2 City of Bassendean Local Integrated Transport Plan – Part 2

As part of the research process into the upcoming LPS 11 and DRAFT Local Planning Strategy (currently under review), the City has released Part 2 of their Local Integrated Transport Plan to help set criteria for the efficient and effective supply and management of parking in the Town of Bassendean, especially for the town centre and surrounds.

The following opportunities relevant to this proposed development are identified in the plan as follows:

- Transit Oriented Development (TOD) opportunity on the existing Wilson street public parking site;
- Potential for parking supply and management reform through Scheme revisions: especially in the town centre;
- Including car share and ride-hailing parking provisions in local planning strategy and policy.

The plan demonstrates the progressive nature of the local council through its willingness to invest into innovative forms of transport and parking management, therefore taking tangible steps towards achieving the vision set out in the states’ decade old Perth and Peel @ 3.5 Million strategy.

This is particularly relevant in regards to the use proposed in this proposal, as the way that people access and interact with developments of this nature, especially those that involve the consumption of alcohol, has transformed significantly in recent years due to the rise of ride-sharing technology.

Not only are there far less patrons who regularly drive their cars to licensed venues; there has also been a shift in the demographics of the people these developments typically serve, with more



families attending than was the case when the above provisions were established in the current scheme.

As a result, and in keeping with the City's strategic aims for a consolidated, attractive, and walkable town centre, this development has proposed to include zero (0) parking bays for the exclusive use of patrons.

In support of this proposal, Stantec have been engaged to prepare a comprehensive parking strategy in order to justify this number. The results of this study are attached at **Appendix D** and summarised below.

6.2.3 Stantec Parking Study – Results and Recommendations

To determine the potential demand for parking generated by the proposed development, a comprehensive parking study was conducted by Stantec to determine the availability of public transport infrastructure, pedestrian/cycle networks, and public carparking facilities in the surrounding area.

Based on an anticipated capacity of 335 patrons at a rate of 1 bay per 4 persons (restaurant use adopted by sub-consultants in lieu of outdated tavern parking requirement), an estimated 84 bays would be required.

However, the surveys conducted during the study found there was ample supply of on-street parking to accommodate the expected demand, with at least 62 vacant on-street bays located within the surveyed area. This on-street supply is further supplemented by a considerable quantum of off-street parking in close proximity to the Site.

The existing parking demand for the surrounding precinct is also noted to decline substantially in the afternoon and evening, with a total of 102 on-street and 130 off-street bays unoccupied and available at 7:00pm (when the Site is likely to be approaching its peak demand period).

In conclusion, the report suggests that the proposed development is not expected to result in an undue impact on the availability of parking for other current or future land uses.

In light of these findings, and for the other reasons stated above, we affirm that the requirement to provide parking for patrons of the proposed development is both unnecessary, and at odds with the expressed strategic vision of the City for its 'Town Centre' zone.

Therefore, in considering the parking requirements for the proposed development, we respectfully request that the requirements stipulated in LPS 10 be waived in this case.

6.3 Additional Requirements/Guidelines

The Bassendean Town Centre Design Guidelines provides a number of additional recommendations for development within the Town Centre zone. The following provides a summary and indication of development compliance with the relevant guidelines.

6.3.1 Building Envelope

While there are no specific requirements for building arrangement within the Town Centre zone, section 7.5 of the guidelines does provide the following general standards to help coordinate development at a 'precinct' level:

DEVELOPMENT STANDARD	REQUIREMENT
Street Setback	nil
Lot Boundary Setback	nil
Minimum Height	3 storeys or 10m

Table 6: Town Centre Design Guidelines development standards.



The proposed development meets the guidelines for setbacks as set out in the above table. While the minimum height is slightly short of the preferred three storeys, this is due to the existing building being retained as part of the proposed development. However, careful consideration has been taken to ensure the development appropriately frames and activates the streetscape by way of design elements such as parapets, awnings, and integrated alfresco areas.

6.3.2 Building Orientation

Further to above, section 7.6 suggests that buildings should have their primary entrance address and frontage on, or clearly identifiable from the primary street; and promotes the use of courtyards to provide solar access in deeper buildings.

The proposed development complies with the abovementioned provisions as the entrance is located directly adjacent to the primary street frontage and has been designed to be clearly visible and integrated into the local pedestrian networks, as demonstrated in Elevations Plans attached at **Appendix A**.

6.3.3 Landscape and Hardscape

Although no specific requirements exist for landscaping, section 8.9 of the guidelines specifies the following provisions as relevant in the assessment for all new developments:

- All outdoor areas are to be landscaped and maintained to a high quality;
- Mature trees of appropriate species should be retained where possible;
- Plant selection should prioritise water-wise and indigenous plant species;
- Integration of shade trees and water elements to improve microclimate of courtyards and other urban spaces.

The above provisions have all been included in the proposed development as demonstrated in the development plans attached at **Appendix A**.

6.3.4 Signage

In accordance with the City's Local Planning Policy No. 16 – Advertising and Signage (LPP 16), section 8.9 provides the following additional provisions to coordinate the implementation of signage for new development:

- All building signage will be of a high standard and generally not exceed 5% of the building wall area to which it is fixed;
- Pylon signs will not generally be permitted;
- Signage designed as part of the building and themed to complement development is encouraged and if a building has numerous tenants, consolidated signage is preferred;
- Signage suspended below awnings, canopies or balconies or cantilevered will have a minimum clearance above footpath level of 2.7m;
- Signage erected above rooflines will not be permitted
- Signage shall not obscure display windows by more than 5% area.

Careful consideration has been taken to ensure the design complements the architectural features of both the proposed development and surrounding character, while ensuring that it does not extend above the roofline or deviate from the building façade. No pylon signs have been proposed and all signage has been integrated into the design of the building façade. All proposed locations and specifications for signage have been detailed within this report and can be seen on the attached plans at **Appendix A**.



7 CONCLUSION

The proposed development of the Bassendean Tavern & Microbrewery at Lot 145 (No. 73) Old Perth Road is consistent with the objectives and requirements of the zoning under the MRS, LPS No.10 and the Bassendean Town Centre Strategy and Guidelines, including all relevant state and local planning policies.

The proposed development has been designed with a high level of architectural merit to ensure that it enhances the aesthetic and functional amenity of the wider area, and adequately addresses the design principles in SPP 7.0.

All services to the site have been previously established and are not intended to be significantly altered within this proposal. Drainage will continue to be appropriately managed on-site and through the provided infrastructure within the road reserve.

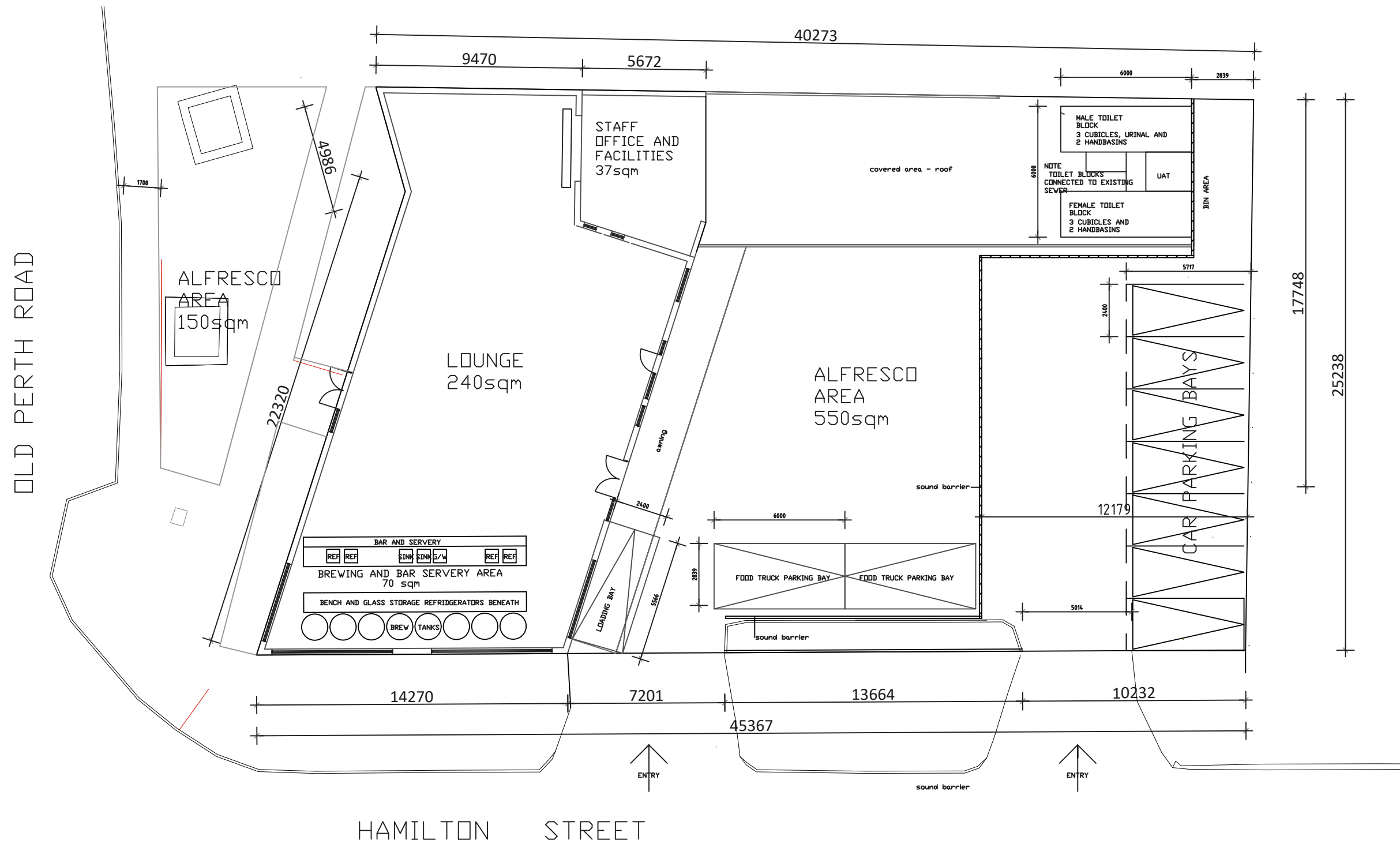
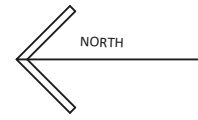
Given the above assessment, it is considered that the proposal is compliant with all applicable statutory policy requirements. The proposed addition to the Bassendean Town Centre will provide a significant contribution to the local community and help to steer the development of a thriving 'Main Street', further stimulating local economic activity and acting as an attractive drawcard for residents and visitors alike.

In view of the attributes of this proposal and potential benefits to the City as outlined in the report, it is requested that the proposed tavern development at Lot 145 (No. 73) Old Perth Road be approved.

Should you have any further queries or require any additional information to support this proposal, please do not hesitate to contact this office.



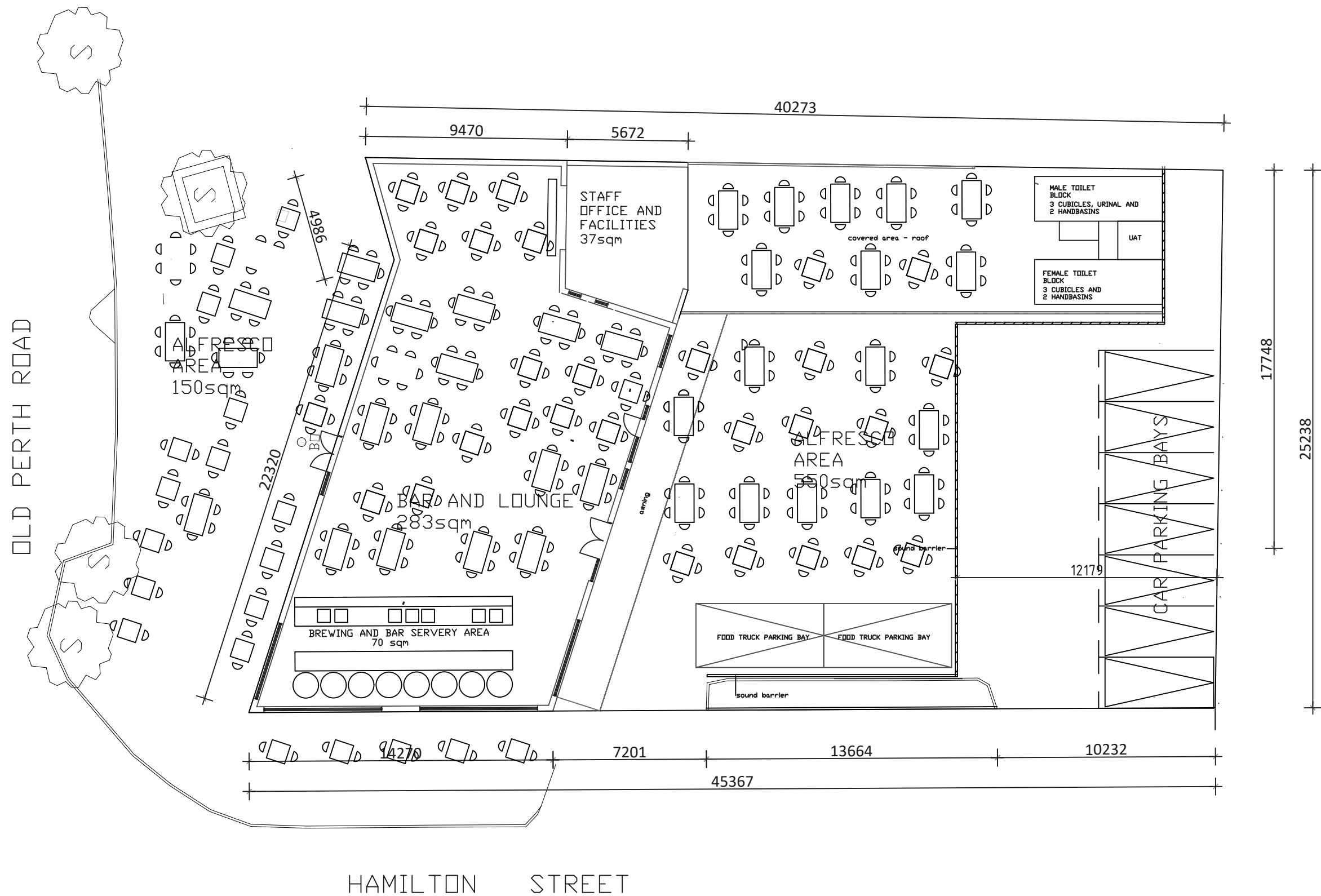
Appendix A Development Plans



BASSENDEAN BREW HOUSE
 LOT 145 OLD PERTH ROAD
 BASSENDEAN

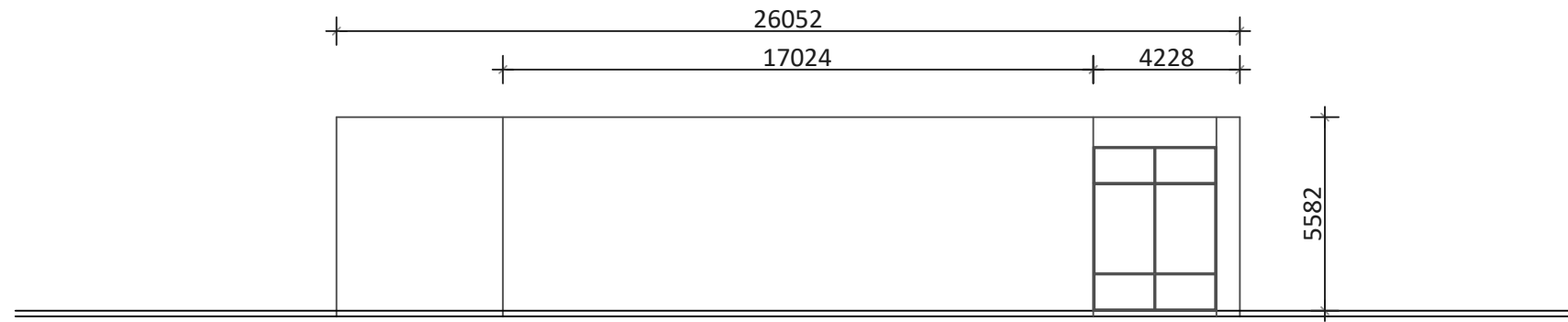
SITE PLAN

DRAWN R A B	DRAWING NO. A.01	REDUCTION
SCALE 1:100 @ A1		0 25
DATE AUG 2022		

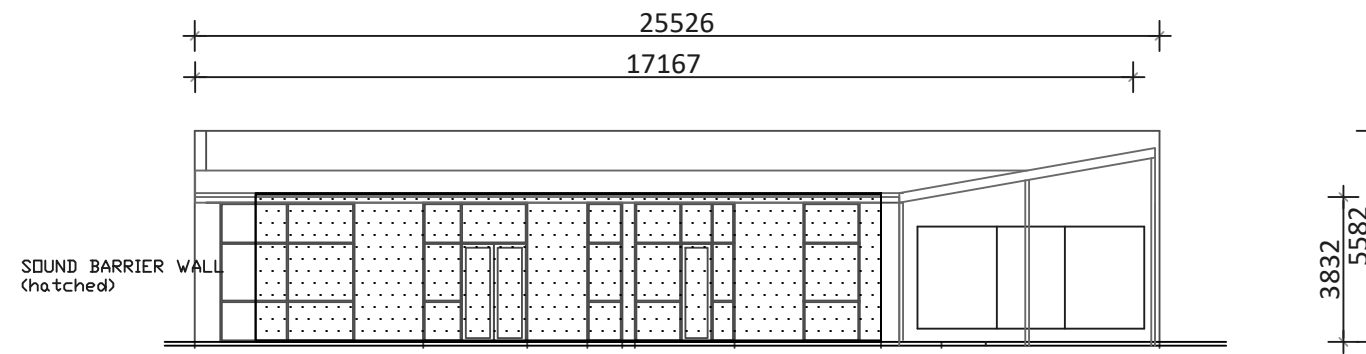


BASSENDEAN BREW HOUSE
 LOT 145 OLD PERTH ROAD
 BASSENDEAN

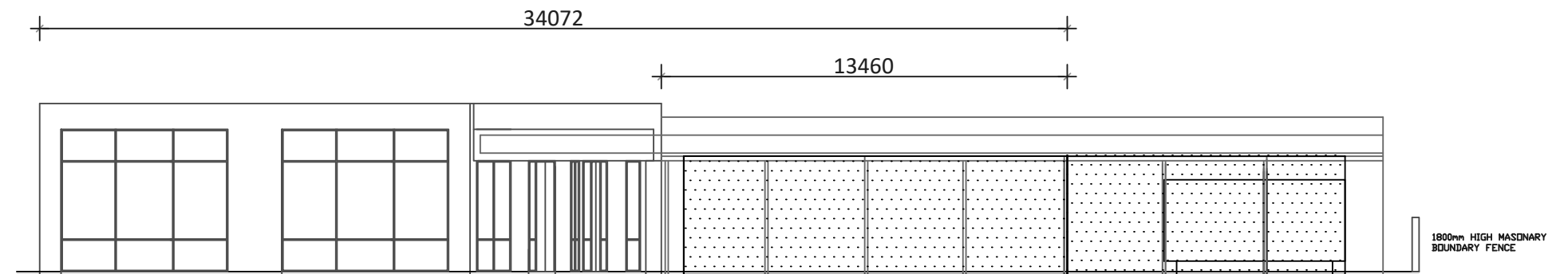
DRAWN R A B	DRAWING NO. A.01	REDUCTION
SCALE 1:100 @ A1		0 25
DATE AUG 2022		



BASSENDEAN ROAD (NORTH) ELEVATION



REAR (SOUTH) ELEVATION



HAMILTON STREET (WEST) ELEVATION

BASSENDEAN BREW HOUSE

DRAWN R A B	DRAWING NO. A.01	REDUCTION
SCALE 1:200 @ A3		0 25
DATE AUG 2022		



BASSEDEAN BREW HOUSE.
PERSPECTIVE 02

SITE DETAILS
73 Old Perth Rd, Bassendean

PREPARED FOR
LCB

0

@A3

PROJECT NO.
22063

DATE
21/09/2022

ISSUE
A

REV	DATE	BY	CHKD	REVISION DESCRIPTION
				Suite 11, 99-101 Francis Street, Northbridge, 6003, Western Australia P: 9328 6655 F: 9328 5056 E: enquire@fratellegroup.com.au W: www.fratellegroup.com.au

Fratelle.



BASSENDAN BREW HOUSE.
PERSPECTIVE 01

SITE DETAILS
73 Old Perth Rd, Bassendean

PREPARED FOR
LCB

0

@ A3

PROJECT NO.
22063

DATE
21/09/2022

ISSUE
A

REV	DATE	BY	CHKD	REVISION DESCRIPTION
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Fratelle.



Appendix B Certificate of Title

WESTERN



AUSTRALIA

REGISTER NUMBER 145/P1786	
DUPLICATE EDITION 3	DATE DUPLICATE ISSUED 29/8/2018

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 1650 FOLIO 349

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



LAND DESCRIPTION:

LOT 145 ON PLAN 1786

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

LORENA ROSSI SAINT OF 39 OLD PERTH ROAD BASSENDEAN WA 6054
ALIA NIKOLOSKI OF 43 NORTH ROAD BASSENDEAN WA 6054
AS JOINT TENANTS

(T N973968) REGISTERED 28/8/2018

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

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: 1650-349 (145/P1786)
PREVIOUS TITLE: 720-17
PROPERTY STREET ADDRESS: 73 OLD PERTH RD, BASSENDEAN.
LOCAL GOVERNMENT AUTHORITY: TOWN OF BASSENDEAN



Appendix C Transport Impact Assessment

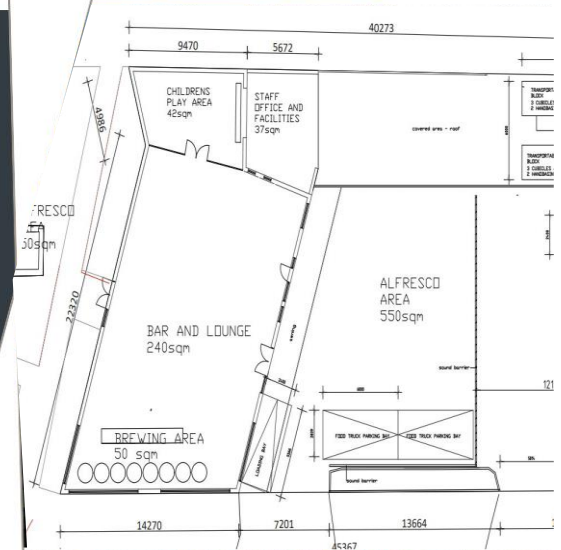
Transport Impact Assessment

Proposed Brewery - No. 73 Old Perth Road, Bassendean

CW1200319 / 304900716

Prepared for
Co Lab Brewery

12 October 2022



now



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Table of Contents

1	Introduction	1
	1.1 Background	1
2	Existing Situation	2
	2.1 Existing Site Context	2
	2.2 Surrounding Land Uses	3
	2.3 Existing Road Network	3
	2.4 Existing Traffic Volumes	5
	2.5 Existing Public Transport Facilities	5
	2.6 Existing Pedestrian/Cycle Network Facilities	6
	2.7 Crash Assessment	7
3	Development Proposal	9
	3.1 Proposed Development	9
	3.2 Access Arrangements	9
	3.3 Parking Provision	10
	3.4 Provision of Service Vehicles	11
	3.5 Swept Path Analysis	12
4	Changes to Surrounding Area	13
	4.1 Road Network	13
	4.2 Pedestrian/Cycle Networks	13
	4.3 Public Transport Services	13
5	Integration with Surrounding Area	14
	5.1 Surrounding Attractors/Generators	14
6	Analysis of Transport Network	15
	6.1 Assessment Years and Time Period	15
	6.2 Key Intersections	15
	6.3 Trip Generation	15
	6.4 Trip Distribution	16
	6.5 Key Assumptions	19
	6.6 Intersection Performance	19
	6.7 SIDRA Analysis Results	20
7	Summary	23

Appendices

Appendix A WAPC Checklist

Appendix B Site Plan

Appendix C Swept Paths

Tables

Table 2-1	Road Network Classification	4
Table 2-2	Daily Traffic Volumes	5
Table 2-3	Bus Route and Train Frequency	6
Table 2-4	Total Crashes	7
Table 2-5	Midblock Crashes	7
Table 3-1	Car Parking Provisions and Requirements	10
Table 6-1	Trip Generation Rate – Peak Hour Generator	15
Table 6-2	Directional Distribution	15
Table 6-3	Total Trip Generation	15
Table 6-4	Level of Service (LoS) Performance Criteria	20
Table 6-5	Old Perth Road/ Hamilton Street – Scenario 1	21
Table 6-6	Old Perth Road/ Hamilton Street – Scenario 2	21
Table 6-7	Old Perth Road/ Hamilton Street – Scenario 3	22

Figures

Figure 2-1	Site Location	2
Figure 2-2	Town of Bassendean Zoning	3
Figure 2-3	Road Hierarchy	4
Figure 2-4	Public Transport Facilities	5
Figure 2-5	Pedestrian/Cycle Facilities	6
Figure 2-6	Crash Locations	7
Figure 3-1	Site Plan	9
Figure 3-2	Access Arrangements	9
Figure 3-3	Existing Parking within the Surrounding Area of the Site.	10
Figure 3-4	Parking Occupancy Percentage	11
Figure 3-5	Swept Path – 6.4m Waste Vehicle	11
Figure 3-6	Swept Path – B85 / B99	12
Figure 3-7	Swept Path – B85 / B99	12
Figure 6-1	Inbound Trips	16
Figure 6-2	Outbound Trips	16
Figure 6-3	2022 Traffic	17
Figure 6-4	Development Traffic	17
Figure 6-5	Year 2023 Traffic with Development Traffic	18
Figure 6-6	Year 2033 Traffic with Development Traffic	18
Figure 6-7	SIDRA Layout of Old Perth Road/ Hamilton Street	20

1 Introduction

1.1 Background

Cardno now Stantec was commissioned by Co-Lab Brewery (“the Client”) to prepare a Transport Impact Assessment (TIA) for a proposed Brewery development at No. 73 Old Perth Road, Bassendean.

This report aims to assess the impact of the development upon the adjacent road network. The report will also discuss access, public transport, pedestrian and cycle networks, circulation and car parking requirements.

This TIA has been prepared in accordance with the *Western Australian Planning Commission (WAPC) Transport Impact Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016)* and the checklist is included in **Appendix A**.

2 Existing Situation

2.1 Existing Site Context

The Site is located 11.5km from the Perth CBD, to the east of Bassendean station, within the Town of Bassendean. **Figure 2-1** illustrates the Site location and local surroundings.

Figure 2-1 Site Location

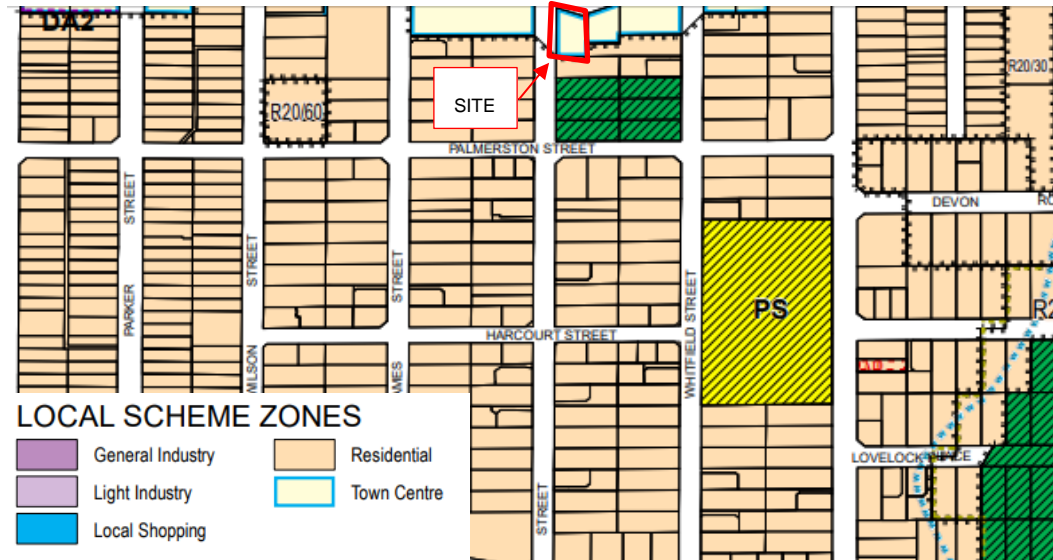


Source: Metromap (2022)

2.2 Surrounding Land Uses

Puursuant to the provision of the *Town of Bassendean Local Planning Scheme No. 10 (DPS3)*, the Site is zoned “Town Centre” as shown in **Figure 2-2**. The Site is surrounded by other town centre land uses to the east and west, with residential land uses to the north.

Figure 2-2 Town of Bassendean Zoning



Source: Town of Bassendean

2.3 Existing Road Network

Road classifications are defined in the Main Roads Functional Hierarchy as follows:

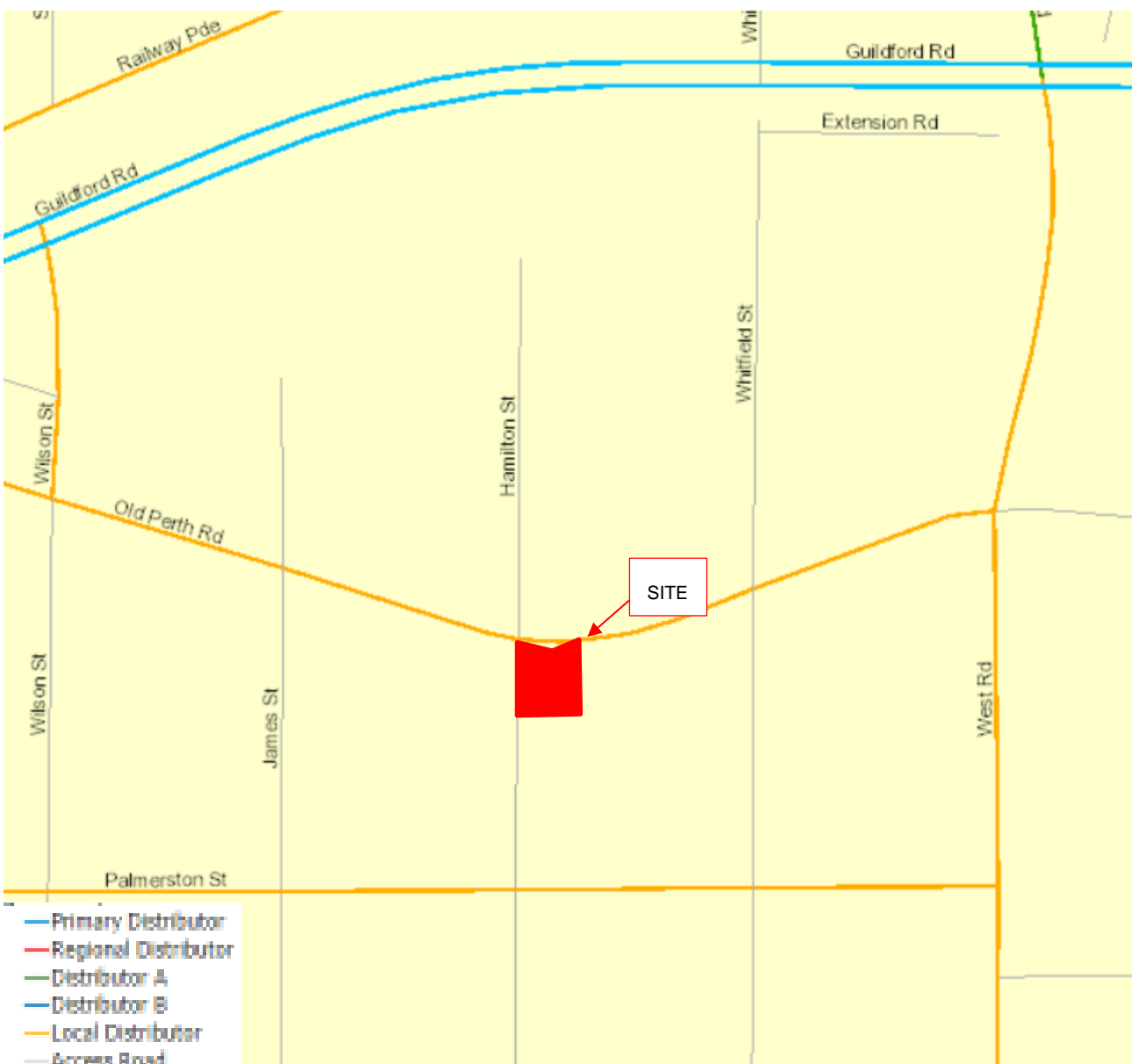
- > **Primary Distributors (light blue):** Form the regional and inter-regional grid of MRWA traffic routes and carry large volumes of fast-moving traffic. Some are strategic freight routes, and all are National or State Roads.
- > **Regional Distributors (red):** Roads that are not Primary Distributors, but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by Local Government
- > **District Distributor A (green):** These carry traffic between industrial, commercial and residential areas and connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining properties. They are managed by Local Government.
- > **Distributor B (dark blue):** perform a similar function to District Distributor A but with reduced capacity due to flow restrictions from access to and roadside parking alongside adjoining property. These are often older roads with traffic demand in excess of that originally intended. District Distributor A and B roads run between land-use cells and not through them, forming a grid that would ideally be around 1.5 kilometres apart. They are managed by Local Government.
- > **Local Distributors (orange):** Carry traffic within a cell and link District Distributors at the boundary to access roads. The route of the Local Distributor discourages through traffic so that the cell formed by the grid of District Distributors only carries traffic belonging to or serving the area. These roads should accommodate buses but discourage trucks. They are managed by Local Government.
- > **Access Roads (grey):** Provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by Local Government.

The Site is bounded by Old Perth Road to the north and Hamilton Street to the west. The surrounding road network is further described in **Table 2-1** shows the road hierarchy as per the Main Roads WA Road Information Mapping System and **Figure 2-3** shows the road hierarchy.

Table 2-1 Road Network Classification

Street Names	Road Hierarchy		Road Network			
	Road Hierarchy	Jurisdiction	No. of Lanes	No. of Footpaths	Width (m)	Speed Limit
Old Perth Road	Local Distributor	Local Government	2	2	11m (1.5m median)	40 km/h
Hamilton Street	Access Road	Local Government	2	1	7m	50 km/h
Palmerston Street	Local Distributor	Local Government	2	1	7m	50 km/h

Figure 2-3 Road Hierarchy



Source: Road Information Mapping System

2.4 Existing Traffic Volumes

The most recent traffic volumes for the roads in the vicinity of the Site were obtained from the Town of Bassendean and summarised below in **Table 2-2**.

Table 2-2 Daily Traffic Volumes

Road Names	Year	Average Daily Volumes	HV %
Old Perth Road (between Hamilton – Whitfield Street)	2017	4,507	5.8%
Old Perth Road (between Whitfield Street – West Road)	2017	4,460	5%

2.5 Existing Public Transport Facilities

The nearest bus stop to the Site located on Old Perth Road approximately 60m west of the Site (the contraflow route bus stop is located along James Street approximately 190m west of the Site). Bus Route 55 which travels from Elizabeth Quay and terminates at Bassendean Town Centre operates at these stops.

The Bassendean Train Station is located approximately 450m from the Site, which is serviced by trains along the Midland Line with services operating every 10 minutes and serves major locations such as Guildford and the Perth CBD. The station also provides connecting Transperth bus services for Routes 340, 341, 342, 353, 654, 901 and 955.

Figure 2-4 illustrates the nearest public transport stops to the Site and **Table 2-3** shows the frequency of the bus route 55 and the Midland Train Line.

Public transport within the surrounding area of the Site is considered to be good. Though the immediately adjacent bus service operates at low frequencies, the location of Bassendean Station provides access to numerous other train and bus services with the main disadvantage being a 7 minute walk to the station.

Figure 2-4 Public Transport Facilities



Source: Transperth (2022)

Table 2-3 Bus Route and Train Frequency

Route	Route Description	Frequency	
		Weekdays	Weekends
Bus Route 55	Perth to Bassendean	20-60 minutes (5:40AM-11:50PM)	30-60 minutes (7:10AM – 11:55PM)
Midland Train Line	To Perth	10-60 minutes (5:43AM – 3:11AM)	15-60 minutes (6:21AM – 3.11AM)
	To Midland	5-60 minutes (5:29AM – 2.21AM)	10-60 minutes (5:33AM – 2:21AM)

2.6 Existing Pedestrian/Cycle Network Facilities

The Site is surrounded by a number of facilities for people walking and cycling. **Figure 2-5** illustrates the nature of these walking and cycling routes and facilities within a 10-minute walk from the Site which includes:

- > Principal Shared Path (PSP) running along Guildford Road leading to Perth City (heading west) or towards Midland (heading east);
- > Whitfield Street is a Safe Active Street running from Guildford Road to the Sandy Beach reserve;
- > The area near the Site is pedestrian and bike friendly as it is along the main street within Bassendean town centre, and within close proximity to the train station;
- > In addition to the close proximity to the Midland Train Line PSP, a network of local bicycle friendly routes is present, running along Old Perth Road, North Road, Wilson Street and Palmerston Street.

Overall, the Site has excellent pedestrian and cycle connectivity.

Figure 2-5 Pedestrian/Cycle Facilities



Source: Department of Transport (2016)

2.7 Crash Assessment

A crash assessment for the surrounding road network of the Site has been completed using the *Main Roads WA Reporting Centre*. The assessment covers all the recorded accidents between 1 January 2017 and 31 December 2021 and the results are summarised in **Table 2-4** and **Table 2-5**.

Table 2-4 Total Crashes

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Head On	-	-	-	-	1	1
Rear End	-	-	-	3	-	3
Sideswipe Same Direction	-	-	-	1	-	1
Unspecified	-	-	-	2	1	3
Total	-	-	-	6	2	8

Table 2-5 Midblock Crashes

Road Name	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Hamilton St	-	-	-	-	1	1
Old Perth Rd	-	-	-	6	1	7
Total	-	-	-	6	2	8

Figure 2-6 illustrates the crash locations and their intensity along Stirling Highway and Glyde Street.

Figure 2-6 Crash Locations



A summary of the crash data is as follows:

- > There were no fatal accidents recorded;
- > There were no accidents requiring hospital and medical attention recorded;
- > 7 crashes were recorded along Old Perth Rd (James St to Whitfield Street) and 1 crash reported at Hamilton Street (North) that resulted to major and minor property damages

It is very unlikely that this development would have any material impact on road safety in the area due to its small scale.

3 Development Proposal

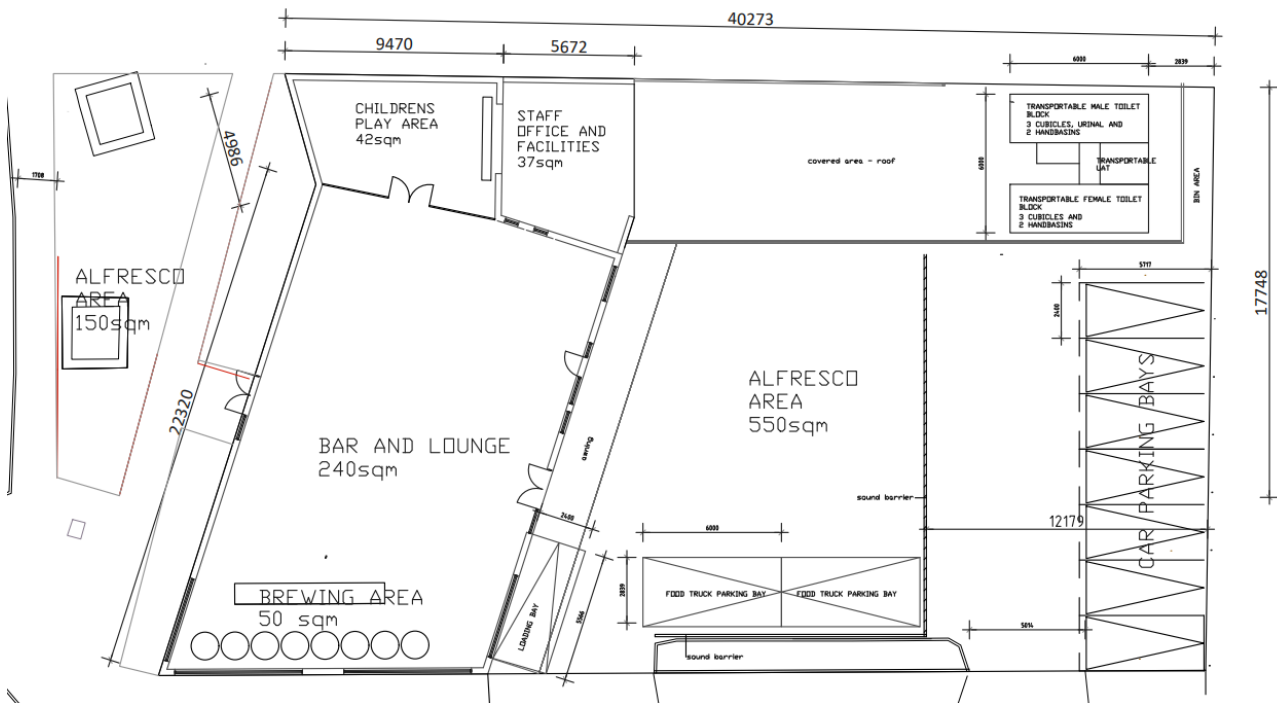
3.1 Proposed Development

The proposal is for a Brewery at the Site, comprising of the following site-specific design components:

- > Approximately 990 m² brewery;
- > 7 car parking bays;
- > 1 loading bay; and
- > 2 food truck bays.

The layout of the proposed brewery at the Site is shown below in **Figure 3-1**. Please note, larger versions are included in **Appendix B**.

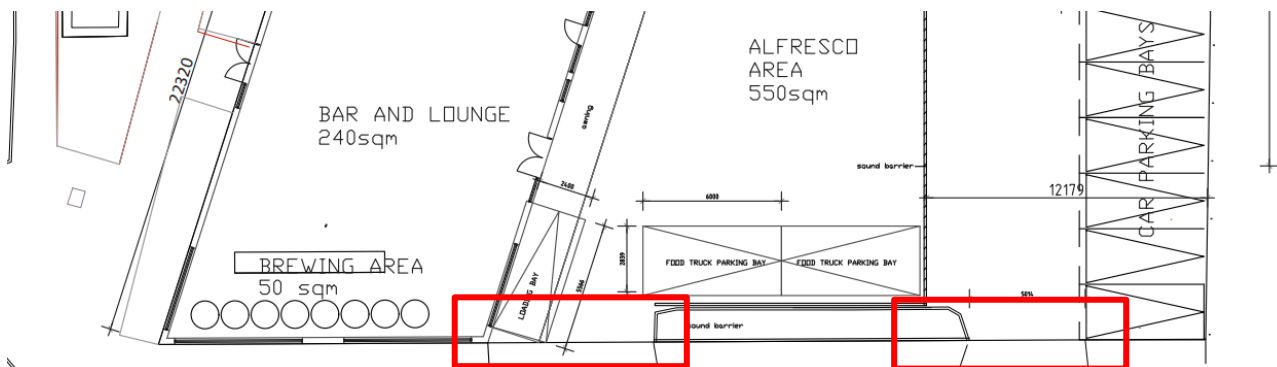
Figure 3-1 Site Plan



3.2 Access Arrangements

Vehicular access to/from the Site is proposed via two existing crossovers along Hamilton Street, as shown in **Figure 3-2**.

Figure 3-2 Access Arrangements



3.3 Parking Provision

The Statutory parking requirements, in accordance with the *Town of Bassendean Local Planning Policy No. 8 – Car Parking and End-of-Trip-Facilities (LPP8)* have been considered in the context of the proposed development and summarised below in **Table 3-1**.

Table 3-1 Car Parking Provisions and Requirements

Proposed Land Use	Requirements	Yield	Parking Required	Parking Provided
Restaurant	1 bay for every 4 persons at the facility is designed to accommodate	335 patrons	84 bays	7 bays (staff)
Total			84 bays	7 bays
Shortfall				77 bays

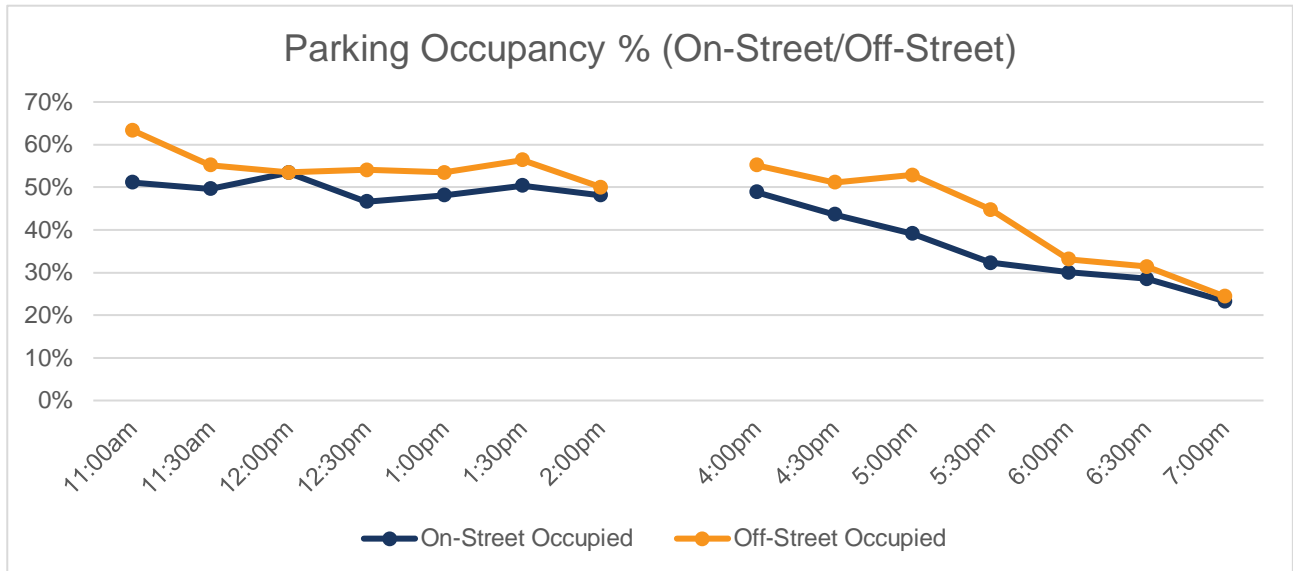
Based on an anticipated maximum of 335 patrons, there is a 77 bay shortfall. However, public on-street and off-street parking within the surrounding area as shown in **Figure 3-3**.

Figure 3-3 Existing Parking within the Surrounding Area of the Site.



A parking occupancy survey was also conducted to determine the current availability of parking within the surrounding area. **Figure 3-4** provides a summary of the parking occupancy during the midday and evening coinciding with the anticipated operating hours for the proposed development. Note that the impacts of development traffic during the AM peak will be negligible as the Site will likely be closed during the morning peak period.

Figure 3-4 Parking Occupancy Percentage



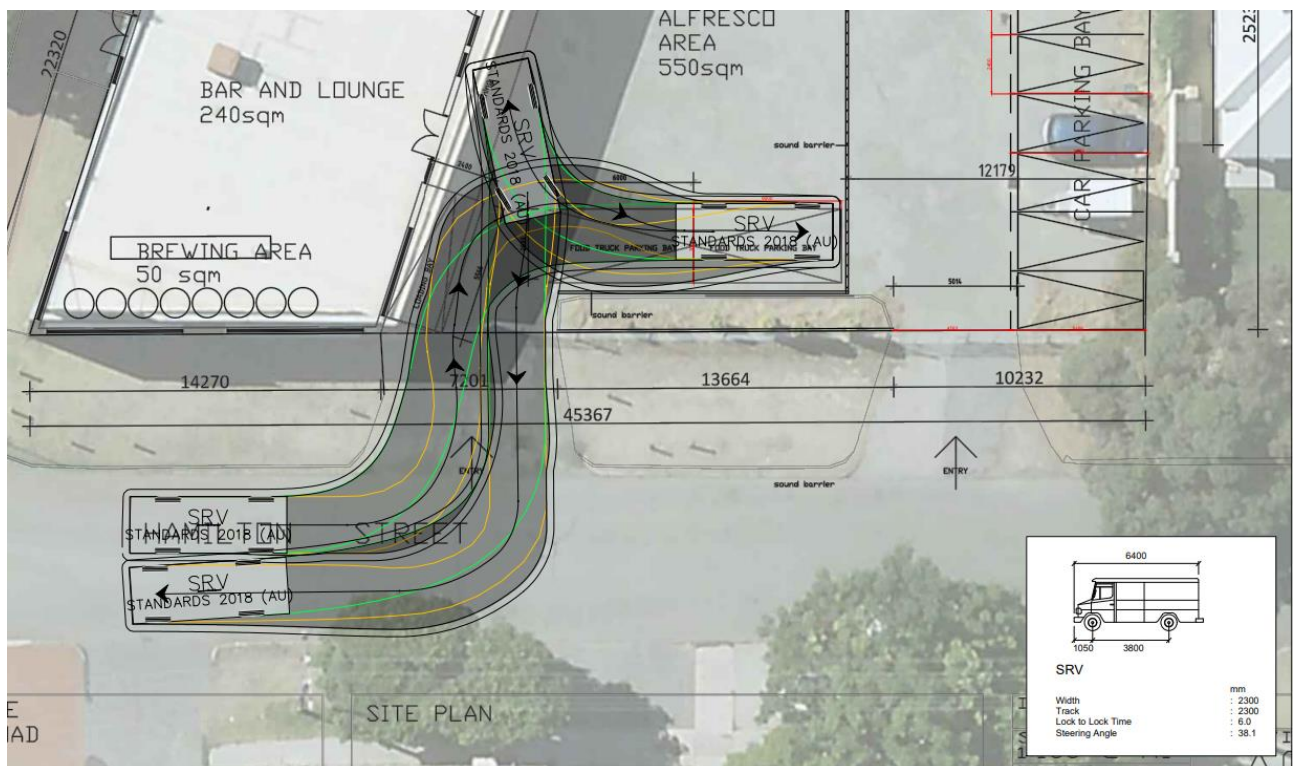
These results show that at all times during the proposed Site operation, the nearby parking is less than 50-60% full. In addition, parking demand declines significantly during the evening, when the tavern Site is expected to be at its busiest (especially along the northern section of Hamilton Road where it remained relatively unused during the evening). Note that the anticipated parking demand for the proposed development is likely to be reduced as walking trips are expected to be common by locals that reside nearby (and should be encouraged).

The seven (7) parking bays provided are intended to accommodate the expected staff requirements for the Site.

3.4 Provision of Service Vehicles

Waste collection is proposed at the Site using a 6.4m waste vehicle, as shown in **Figure 3-5**. The waste vehicle will enter the Site via Hamilton Street and exit the Site in forward gear via Hamilton Street.

Figure 3-5 Swept Path – 6.4m Waste Vehicle



3.5 Swept Path Analysis

A swept path assessment was conducted using a B85 and B99 design vehicle as illustrated in **Figure 3-6** and **Figure 3-7**. Please refer to **Appendix C** for larger versions.

Figure 3-6 Swept Path – B85 / B99

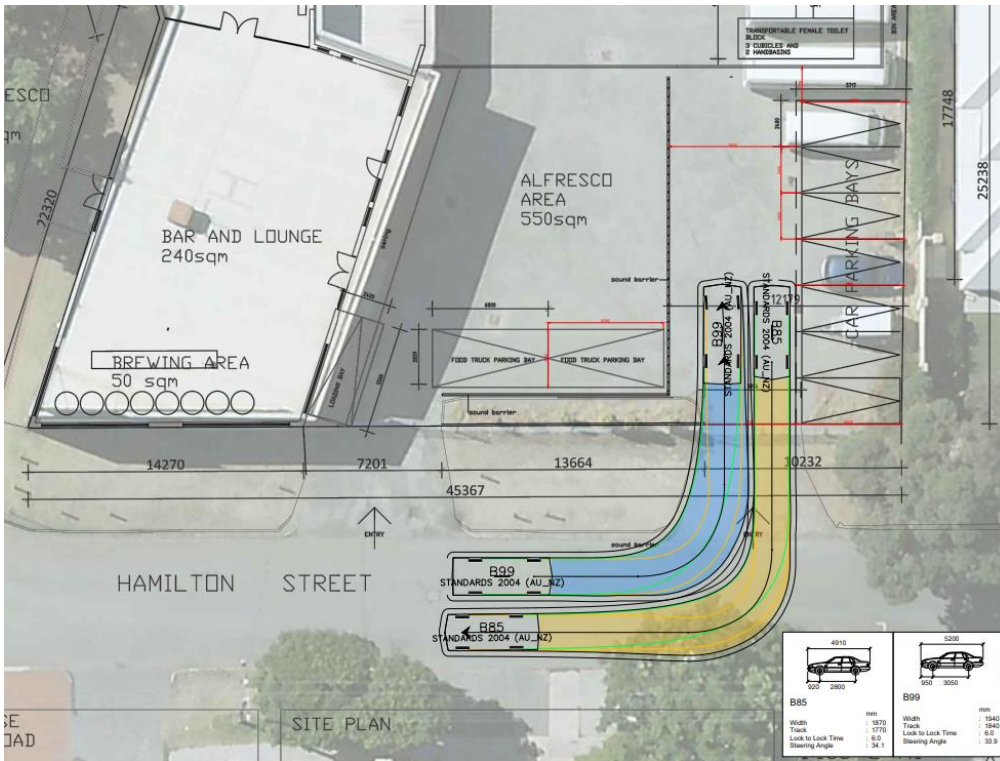
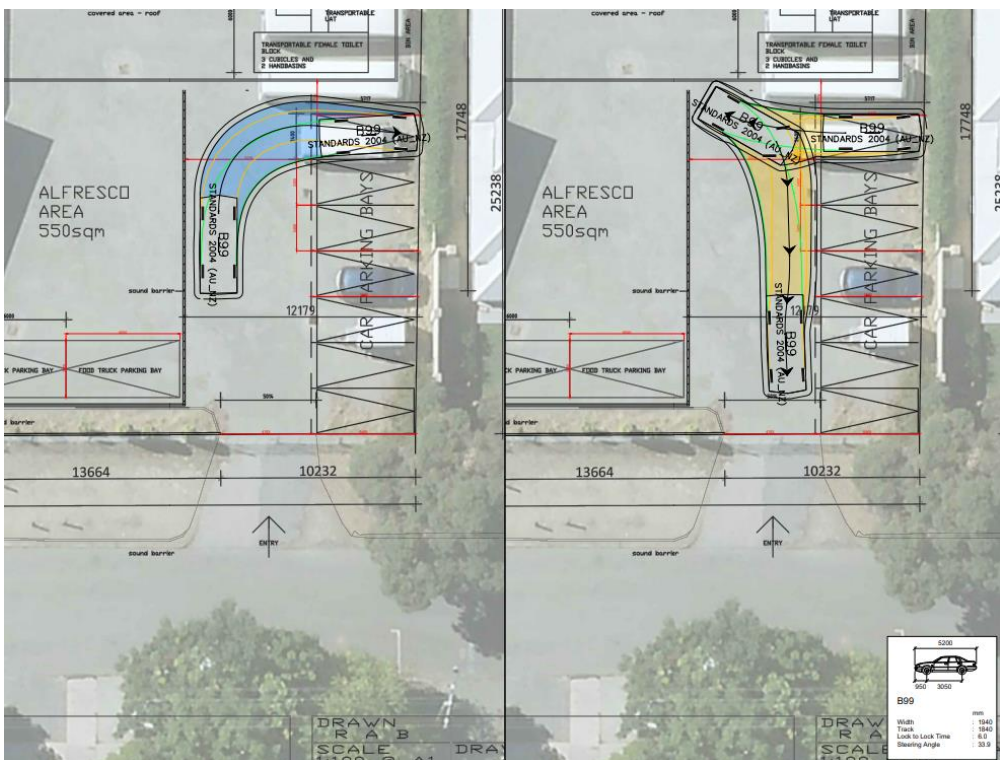


Figure 3-7 Swept Path – B85 / B99



4 Changes to Surrounding Area

4.1 Road Network

No changes are proposed to the existing road network within close proximity to the Site in the short term.

4.2 Pedestrian/Cycle Networks

Cardno now Stantec contacted the Town of Bassendean and were not made aware of any major changes to the pedestrian or cycling networks in the vicinity of the Site in the short term.

4.3 Public Transport Services

Cardno now Stantec contacted the Public Transport Authority and were not made aware of any major changes to the existing public transport networks in the vicinity of the Site in the short term.

5 Integration with Surrounding Area

5.1 Surrounding Attractors/Generators

The Site is located within the Bassendean Town Centre and is surrounded by numerous attractors/generators including the following:

- > Bassendean Shopping Centre;
- > Casa Mia Montessori School;
- > Bassendean Bowling Club;
- > St. Joseph's Roman Catholic Community Church;
- > St. Michael's School Bassendean;
- > Aegis Bassendean Aged Care;
- > Bassendean Primary School; and
- > Various restaurants/cafes.

6 Analysis of Transport Network

6.1 Assessment Years and Time Period

The peak times selected are 8:00 AM to 9:00 AM and 3:00 PM to 4:00 PM respectively for the morning and afternoon peak periods on weekdays.

The following model scenarios have therefore been analysed as part of this assessment:

- > Scenario 1 – 2022 Existing Traffic without Development (AM and PM Peak);
- > Scenario 2 – 2023 Traffic with Development (AM and PM Peak); and
- > Scenario 3 – 2033 Traffic with Development (AM and PM Peak).

6.2 Key Intersections

The key intersections analysed are as listed below:

- > Old Perth Road/ Hamilton Street

6.3 Trip Generation

Trip generation has been calculated for the proposed development utilising trip generation rates from the *Transport Impact Assessment Guidelines: Volume 5 Technical Guidelines*. The following tables summarise the directional distribution and the estimated total trips to be generated by the proposed development.

Table 6-1 provides the trip generation rates for the AM and PM peak hour periods. **Table 6-2** outlines the directional distribution and **Table 6-3** indicates the total trips projected to be generated by the proposed development. This projection is considered to be conservative, given the lack of activity on-site during the morning peak, and the proximity of the development to both the Bassendean Town Centre and the Bassendean Station, both of which can be expected to reduce vehicle trip generation.

Table 6-1 Trip Generation Rate – Peak Hour Generator

Land Use	ITE CODE	Yield	AM Peak Rate	PM Peak Rate
F&B Retail	WAPC Vol 5	990 sqm	2.5 trips per 100 sqm	10 trips per 100 sqm

Table 6-2 Directional Distribution

Land Use	AM		PM	
	IN	OUT	IN	OUT
F&B Retail	80%	20%	50%	50%

Table 6-3 Total Trip Generation

Land Use	AM		PM	
	IN	OUT	IN	OUT
F&B Retail	20	5	50	50
Total	25		100	

6.4 Trip Distribution

The overall trip distribution for the inbound and outbound vehicle trips are detailed in **Figure 6-1** and Error! Reference source not found., respectively. The trip distribution was based on the existing traffic distribution at the intersection.

Figure 6-1 Inbound Trips



Figure 6-2 Outbound Trips



6.4.2 Background and Development Traffic Volumes

The traffic volumes used in the assessment of all scenarios are provided in **Figure 6-3** to **Figure 6-6**.

Figure 6-3 2022 Traffic

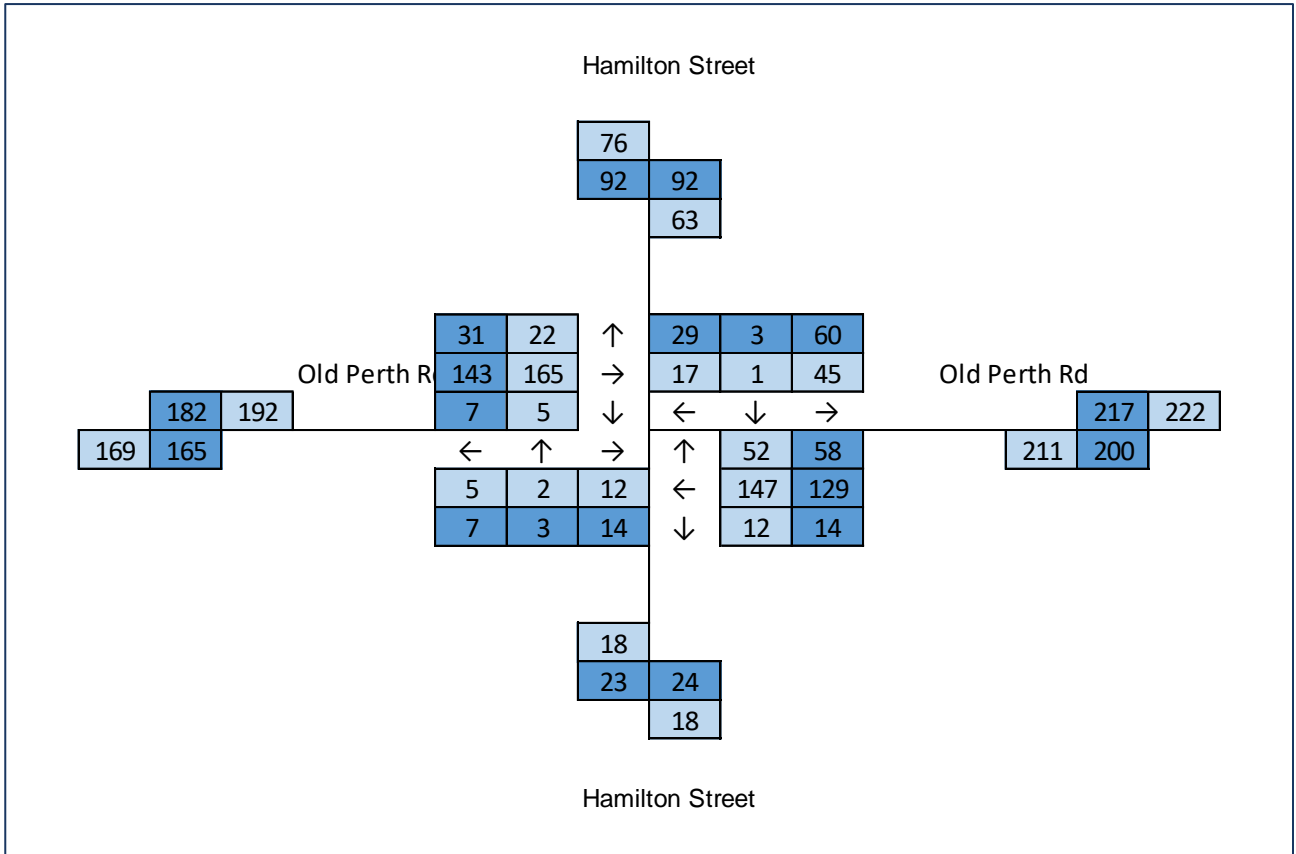


Figure 6-4 Development Traffic

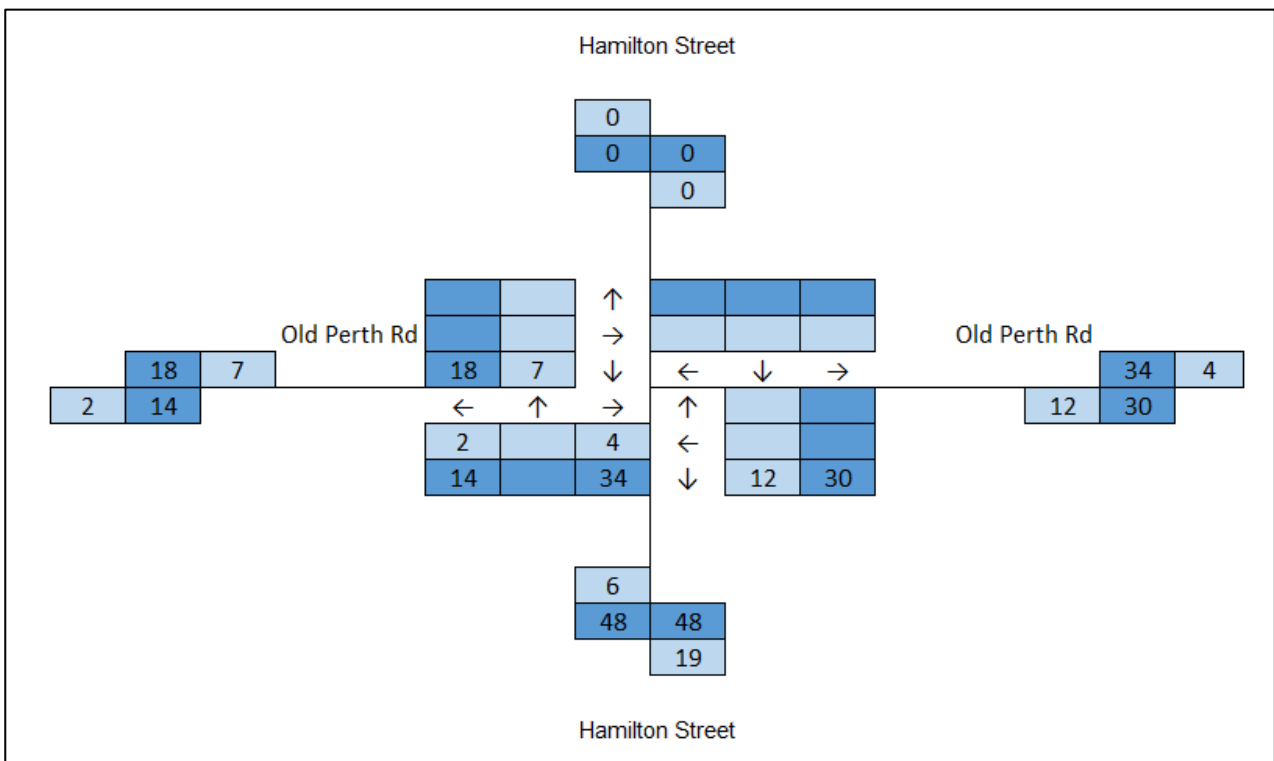


Figure 6-5 Year 2023 Traffic with Development Traffic

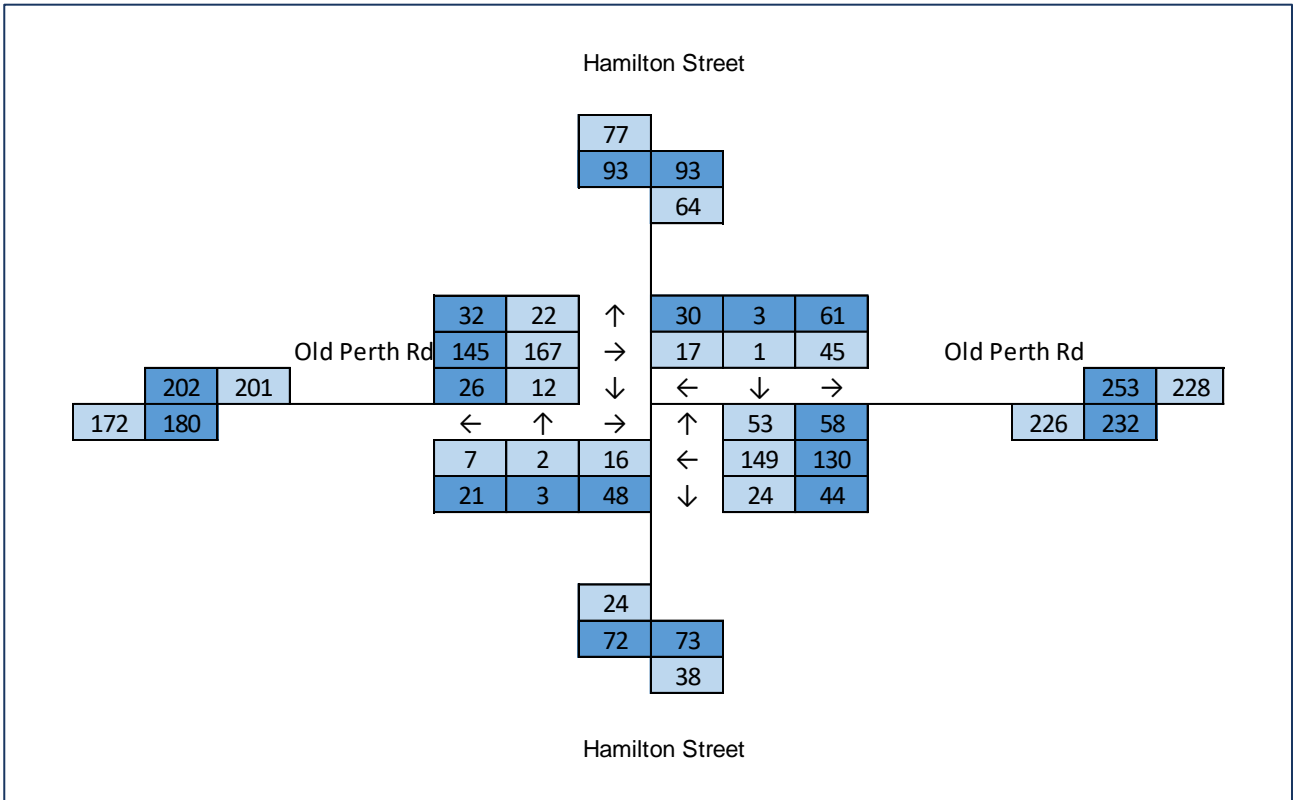
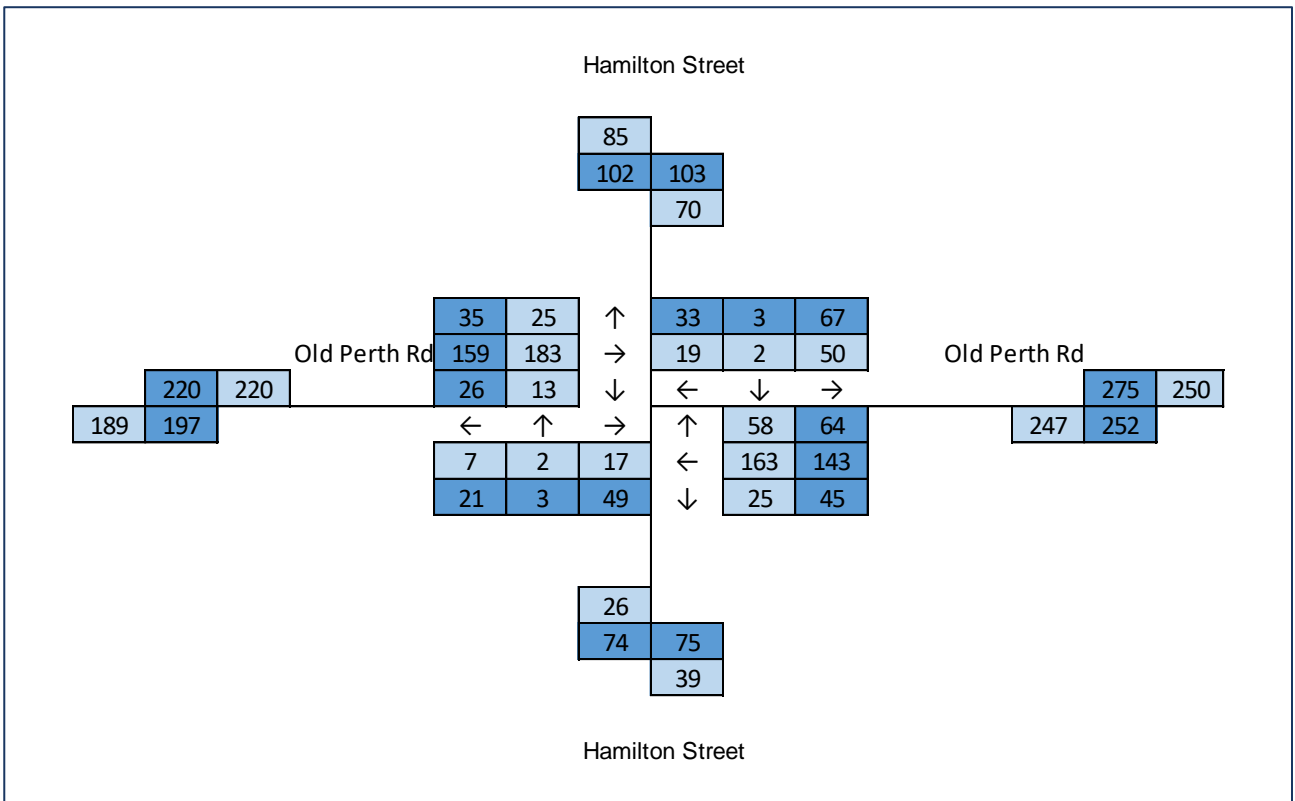


Figure 6-6 Year 2033 Traffic with Development Traffic



6.5 Key Assumptions

The following assumptions were made for the analysis:

- > As per traffic data information, the peak activity period occurs from 8:00 AM to 9:00 AM during the weekday morning peak, 3:00PM to 4:00PM on weekday evening peak period.
- > The volumes sourced from the Town of Bassendean (counts taken in 2017) were calibrated to the year 2022 based on the observed historical traffic growth rate of growth rate of 0.33% per annum.
- > The surrounding area is generally full developed - as such, a relatively low annual growth rate of 1% per annum was used to estimate the future traffic growth within the surrounding road network. It is noted that this rate exceeds the recent growth observed between 2017 and 2022.
- > The traffic volumes at the Old Perth Road/Hamilton Road were estimated using the following approach:
 - The traffic volumes along Old Perth Road were provided by the Town of Bassendean.
 - The traffic volumes along Hamilton Road were estimated using a first principles approach where the trip generation was calculated for the sections of Hamilton Road north and south of Old Perth Road based on the land uses along each of these sections.
 - Lastly, a simple gravity model was used to determine the turning movement volumes at the intersection
- > Turning movements distributions for the proposed development at the assessed intersection are calculated based on existing traffic distributions. However, no trips were distributed to the north of Hamilton Street as it is a cul-de-sac and no vehicle trips is anticipated to travel in this direction.
- > Dimensions of all intersection elements (e.g., lane width, median width, etc.) were measured from the latest Metromap images.
- > Approach and exit speeds were based on speed limits from MRWA Road Information Mapping System.
- > Intersection controls are anticipated to remain the same for future scenarios.

6.6 Intersection Performance

Analysis of the traffic impacts of the proposed development has been carried out for the following intersections:

- > Old Perth Road / Hamilton Street

The identified intersections have been analysed using the SIDRA analysis program. This program calculates the performance of intersections based on input parameters, including geometry and traffic volumes. As an output SIDRA provides values for the Degree of Saturation (DOS), queue lengths, delays, level of service, and 95th Percentile Queue. These parameters are defined as follows:

- > Degree of Saturation (DOS): is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The theoretical intersection capacity is exceeded for an un-signalized intersection where $DOS > 0.80$;
- > 95% Queue: is the statistical estimate of the queue length up to or below which 95% of all observed queues would be expected;
- > Average Delay: is the average of all travel time delays for vehicles through the intersection. An un-signalised intersection can be considered to be operating at capacity where the average delay exceeds 40 seconds for any movement; and
- > Level of Service (LOS): is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. The different levels of service can generally be described as shown in **Table 6-4**.

Table 6-4 Level of Service (LoS) Performance Criteria

LOS	Description	Signalised Intersection	Unsignalised Intersection
A	Free-flow operations (best condition)	≤10 sec	≤10 sec
B	Reasonable free-flow operations	10-20 sec	10-15 sec
C	At or near free-flow operations	20-35 sec	15-25 sec
D	Decreasing free-flow levels	35-55 sec	25-35 sec
E	Operations at capacity	55-80 sec	35-50 sec
F	A breakdown in vehicular flow (worst condition)	≥80 sec	≥50 sec

A LOS exceeding these values indicates that the road section is exceeding its practical capacity. Above these values, users of the intersection are likely to experience unsatisfactory queueing and delays during the peak hour periods.

6.7 SIDRA Analysis Results

6.7.1 Scenario 1 – 2022 Existing Traffic without Development (AM and PM Peak)

The SIDRA layout for the intersections of Old Perth Road/ Hamilton Street is illustrated in **Figure 6-7**. The result of the analysis is tabulated in **Table 6-5**.

Figure 6-7 SIDRA Layout of Old Perth Road/ Hamilton Street

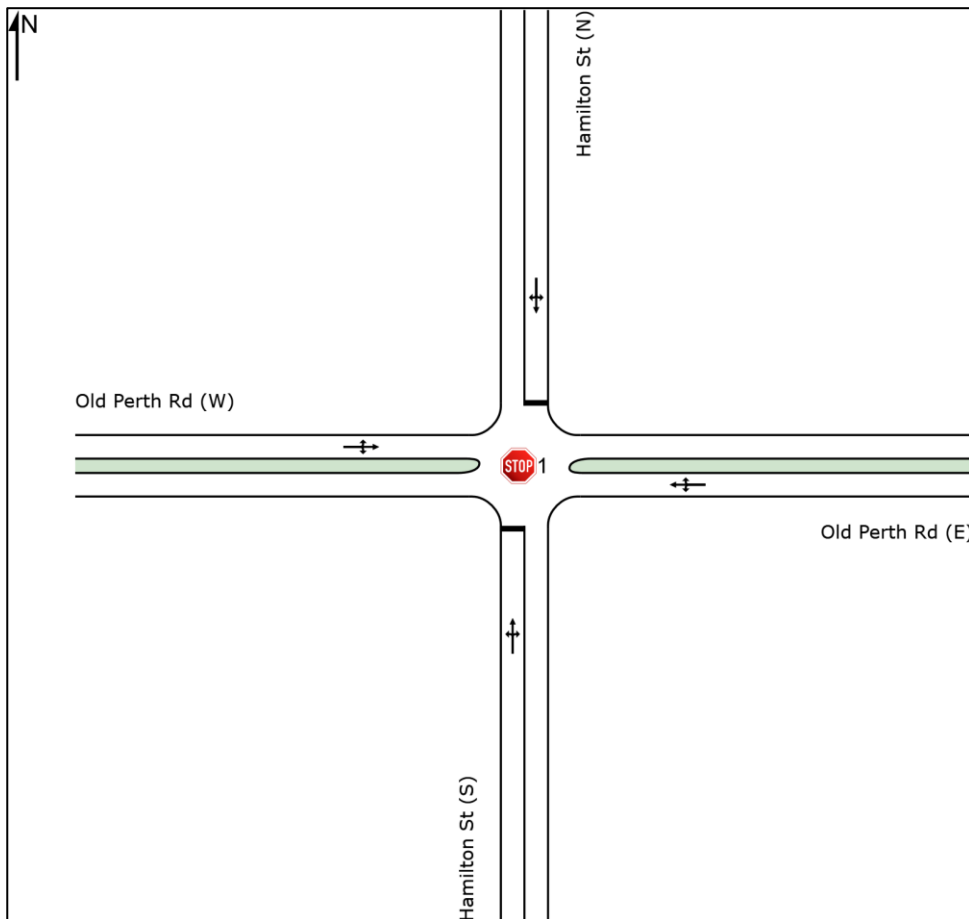


Table 6-5 Old Perth Road/ Hamilton Street – Scenario 1

Intersection Approach		AM peak				PM Peak			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
South: Hamilton St (S)	L	0.028	8	A	0.7	0.034	7.9	A	0.8
	T	0.028	9.5	A	0.7	0.034	9.3	A	0.8
	R	0.028	10	A	0.7	0.034	9.9	A	0.8
East: Old Perth Rd (E)	L	0.126	4	A	3.1	0.121	4	A	3.2
	T	0.126	0.3	A	3.1	0.121	0.3	A	3.2
	R	0.126	4.2	A	3.1	0.121	4.2	A	3.2
North: Hamilton St (N)	L	0.069	8.1	A	1.9	0.102	8.1	A	2.8
	T	0.069	9.6	A	1.9	0.102	9.5	A	2.8
	R	0.069	9.9	A	1.9	0.102	9.7	A	2.8
West: Old Perth Rd (W)	L	0.111	3.5	A	0.4	0.104	3.5	A	0.5
	T	0.111	0	A	0.4	0.104	0	A	0.5
	R	0.111	4.1	A	0.4	0.104	4	A	0.5
All Vehicles		0.126	2.3	A	3.1	0.121	3	A	3.2

6.7.2 Scenario 2 – 2023 Traffic with Development (AM and PM Peaks)

The intersection remains unchanged with the layout shown in Figure 6-7. The results of the analysis are tabulated in Table 6-6.

Table 6-6 Old Perth Road/ Hamilton Street – Scenario 2

Intersection Approach		AM peak				PM Peak			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
South: Hamilton St (S)	L	0.037	8	A	0.9	0.108	8	A	2.8
	T	0.037	9.6	A	0.9	0.108	9.8	A	2.8
	R	0.037	10.2	B	0.9	0.108	10.5	B	2.8
East: Old Perth Rd (E)	L	0.135	4	A	3.3	0.139	3.9	A	3.7
	T	0.135	0.3	A	3.3	0.139	0.3	A	3.7
	R	0.135	4.3	A	3.3	0.139	4.2	A	3.7
North: Hamilton St (N)	L	0.069	8.2	A	1.9	0.107	8.1	A	3
	T	0.069	9.8	A	1.9	0.107	9.9	A	3
	R	0.069	10	A	1.9	0.107	10.1	B	3
West: Old Perth Rd (W)	L	0.117	3.6	A	0.9	0.119	3.7	A	1.9
	T	0.117	0.1	A	0.9	0.119	0.1	A	1.9
	R	0.117	4.2	A	0.9	0.119	4.2	A	1.9
All Vehicles		0.135	2.5	A	3.3	0.139	3.7	A	3.7

6.7.3 Scenario 3 – 2033 Traffic with Development (AM and PM Peaks)

The layout remains unchanged from the figure shown in **Figure 6-7**. The results of the analysis are tabulated in **Table 6-7**.

Table 6-7 Old Perth Road/ Hamilton Street – Scenario 3

Intersection Approach	AM peak					PM Peak			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
South: Hamilton St (S)	L	0.041	8.1	A	1	0.115	8	A	3
	T	0.041	10	A	1	0.115	10.1	B	3
	R	0.041	10.7	B	1	0.115	11	B	3
East: Old Perth Rd (E)	L	0.148	4.1	A	3.7	0.151	4	A	4.2
	T	0.148	0.3	A	3.7	0.151	0.3	A	4.2
	R	0.148	4.3	A	3.7	0.151	4.3	A	4.2
North: Hamilton St (N)	L	0.081	8.2	A	2.2	0.121	8.1	A	3.4
	T	0.081	10.2	B	2.2	0.121	10.3	B	3.4
	R	0.081	10.4	B	2.2	0.121	10.5	B	3.4
West: Old Perth Rd (W)	L	0.128	3.7	A	1	0.129	3.8	A	1.9
	T	0.128	0.1	A	1	0.129	0.1	A	1.9
	R	0.128	4.2	A	1	0.129	4.2	A	1.9
All Vehicles		0.148	2.6	A	3.7	0.151	3.7	A	4.2

6.7.4 SIDRA Results Summary

- > The existing intersections are currently operating well below capacity with a level of service of 'A' for both morning and evening peak hours.
- > With the inclusion of the proposed development traffic, it is anticipated that the intersection of Old Perth Rd/ Hamilton Street will continue to operate without capacity issues with an average delay of 2.5 sec during the AM peak and 3.7 seconds of delay during the PM peak.
- > For the 10-year assessment, the intersection continues to operate with an overall level of service A with minimal delays and queues.

7 Summary

The Transport Impact Assessment outlines the transport aspects of the proposed redevelopment focusing on traffic operations, access and car parking. Discussion regarding pedestrian, cycle parking and public transport considerations are also provided.

This assessment has been prepared in accordance with the *WAPC Transport Impact Assessment Guidelines Volume 4: Individual Developments (2016)* for lodgement with the development application.

The following conclusions have been made in regard to the proposed development:

- > The proposal is for a brewery which will anticipate to accommodate 335 patrons;
- > 7 car parking bays are provided on-site, but ample parking is available within a short walking catchment – more than sufficient to accommodate peak demand.
- > The Site is located approximately 60m away from Bus Route 55, which operates along Old Perth Road, and is well within a reasonable walking distance to the Bassendean Station;
- > The potential number of trips generated by the development is 25 trips and 100 trips in the AM peak and PM peak, respectively.
- > The SIDRA analysis of Hamilton/ Old Perth Rd intersections has been undertaken. The results show that under Scenario 2 (2023 traffic with development) and Scenario 3 (2033 traffic with development), the intersection will perform satisfactorily. No upgrades are required in the 2023 opening year.

Overall, the proposed development is not anticipated to have a material impact on the traffic operations of the surrounding road network

Proposed Brewery - No. 73 Old Perth
Road, Bassendean

APPENDIX

A

WAPC CHECKLIST



now



Item	Status	Comments/Proposals
Proposed development		
proposed land use	Section 3	
existing land uses	Section 1	
context with surrounds	Section 1	
Vehicular access and parking		
access arrangements	Section 3	
public, private, disabled parking set down / pick up	Section 3	
Service vehicles (non-residential)		
access arrangements	Section 3	
on/off-site loading facilities	Section 3	
Service vehicles (residential)		
Rubbish collection and emergency vehicle access	Section 3	
Hours of operation (non-residential only)		
	N/A	
Traffic volumes		
daily or peak traffic volumes	Section 1	
type of vehicles (e.g. cars, trucks)	Section 1	
Traffic management on frontage streets		
Public transport access		
nearest bus/train routes	Section 2	
nearest bus stops/train stations	Section 2	
pedestrian/cycle links to bus stops/train station	Section 2	
Pedestrian access/facilities		
existing pedestrian facilities within the development (if any)	Section 3	
proposed pedestrian facilities within development	Section 3	
existing pedestrian facilities on surrounding roads	Section 3	
proposals to improve pedestrian access	Section 3	
Cycle access/facilities		
existing cycle facilities within the development (if any)	Section 3	
proposed cycle facilities within the development	N/A	
existing cycle facilities on surrounding roads	Section 3	
proposals to improve cycle access	N/A	
Site specific issues		
	N/A	
Safety issues		
identify issues	N/A	
remedial measures	N/A	

Proposed Brewery - No. 73 Old Perth
Road, Bassendean

APPENDIX

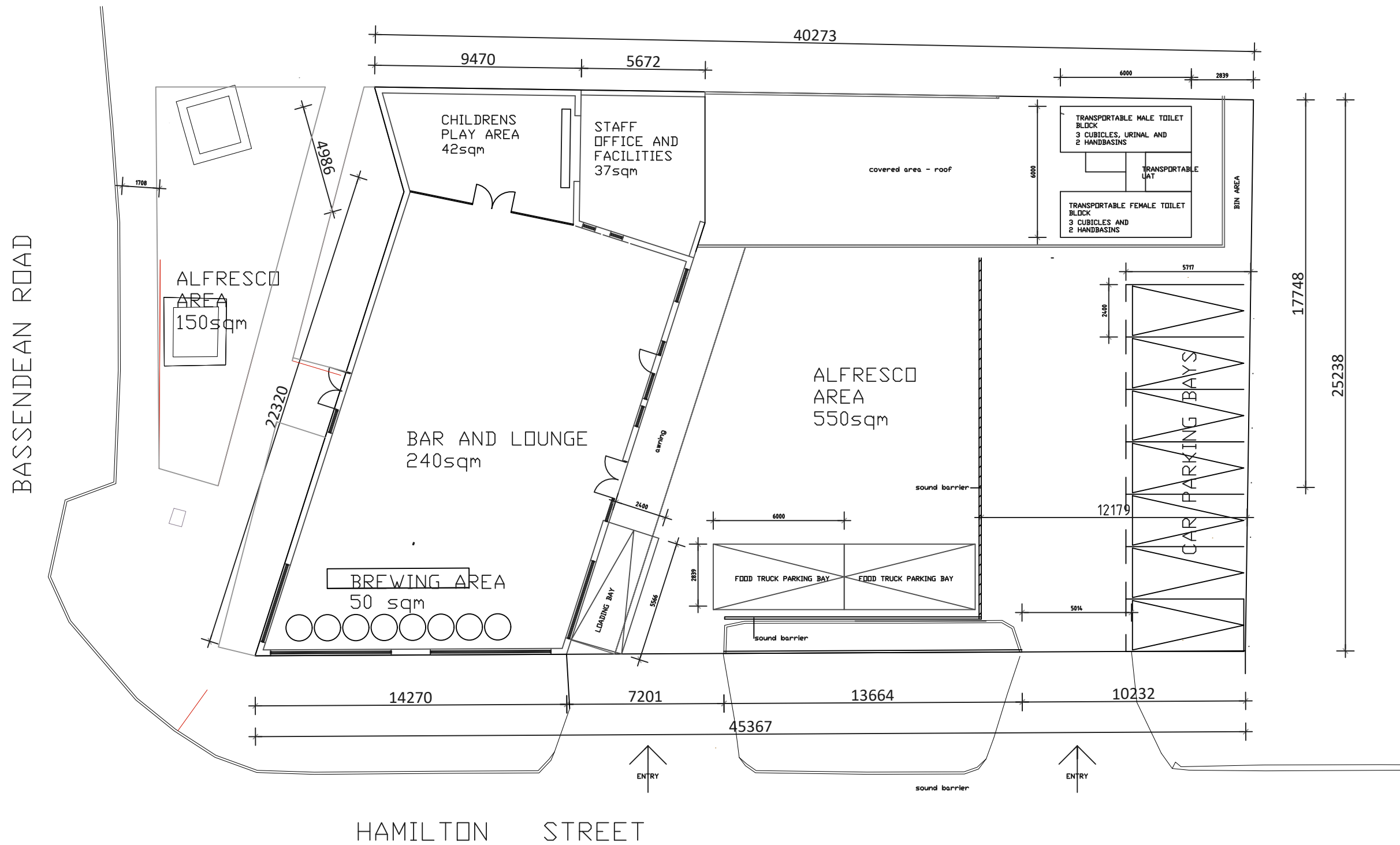
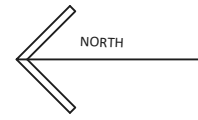
B

SITE PLAN



now





BASSEDEAN BREW HOUSE
 LOT 145 BASSEDEAN ROAD
 BASSEDEAN

SITE PLAN

DRAWN
 R A B
 SCALE
 1:100 @ A1
 DATE
 AUG 2022

DRAWING NO.
 A.01

REDUCTION
 0 25

Proposed Brewery - No. 73 Old Perth
Road, Bassendean

APPENDIX

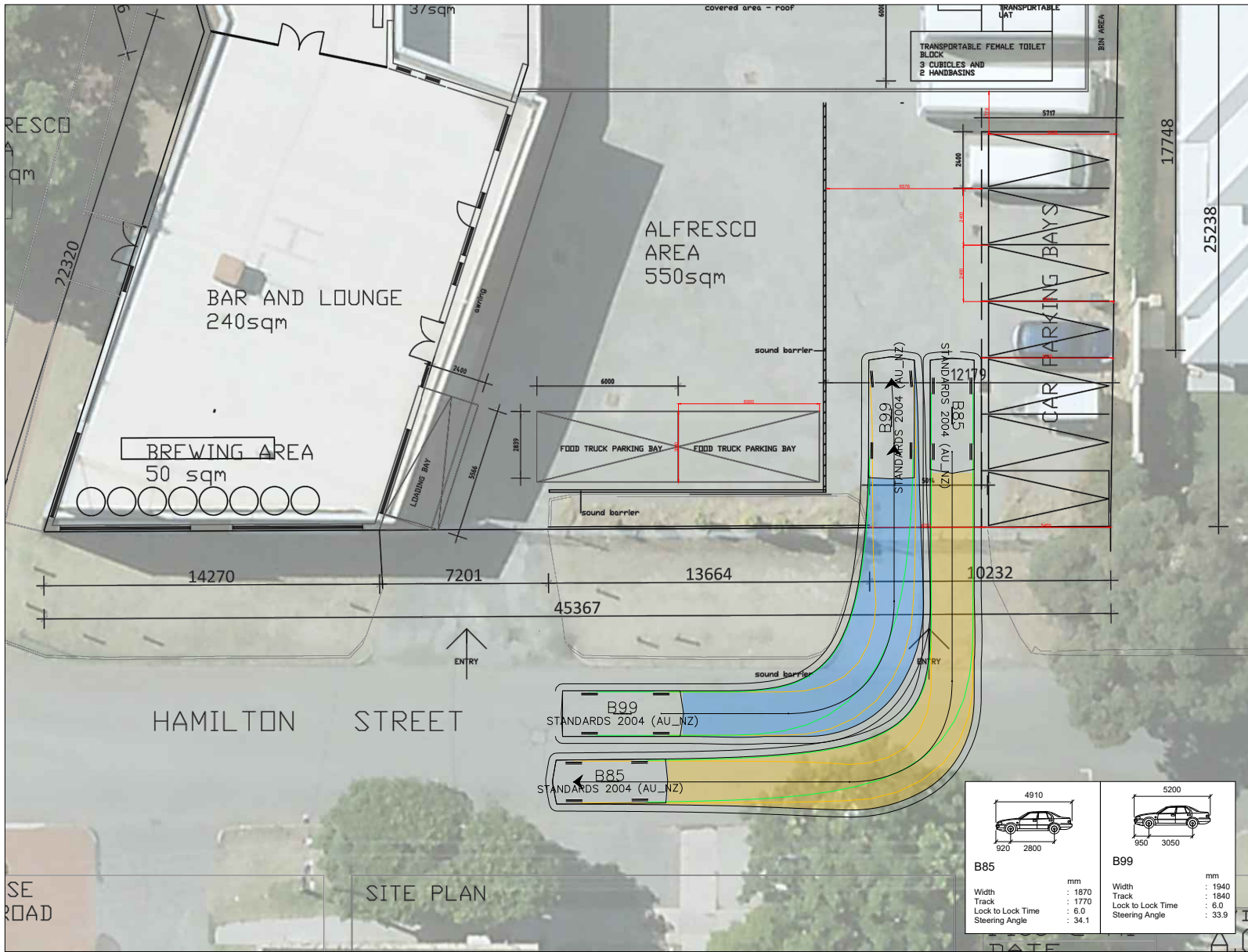
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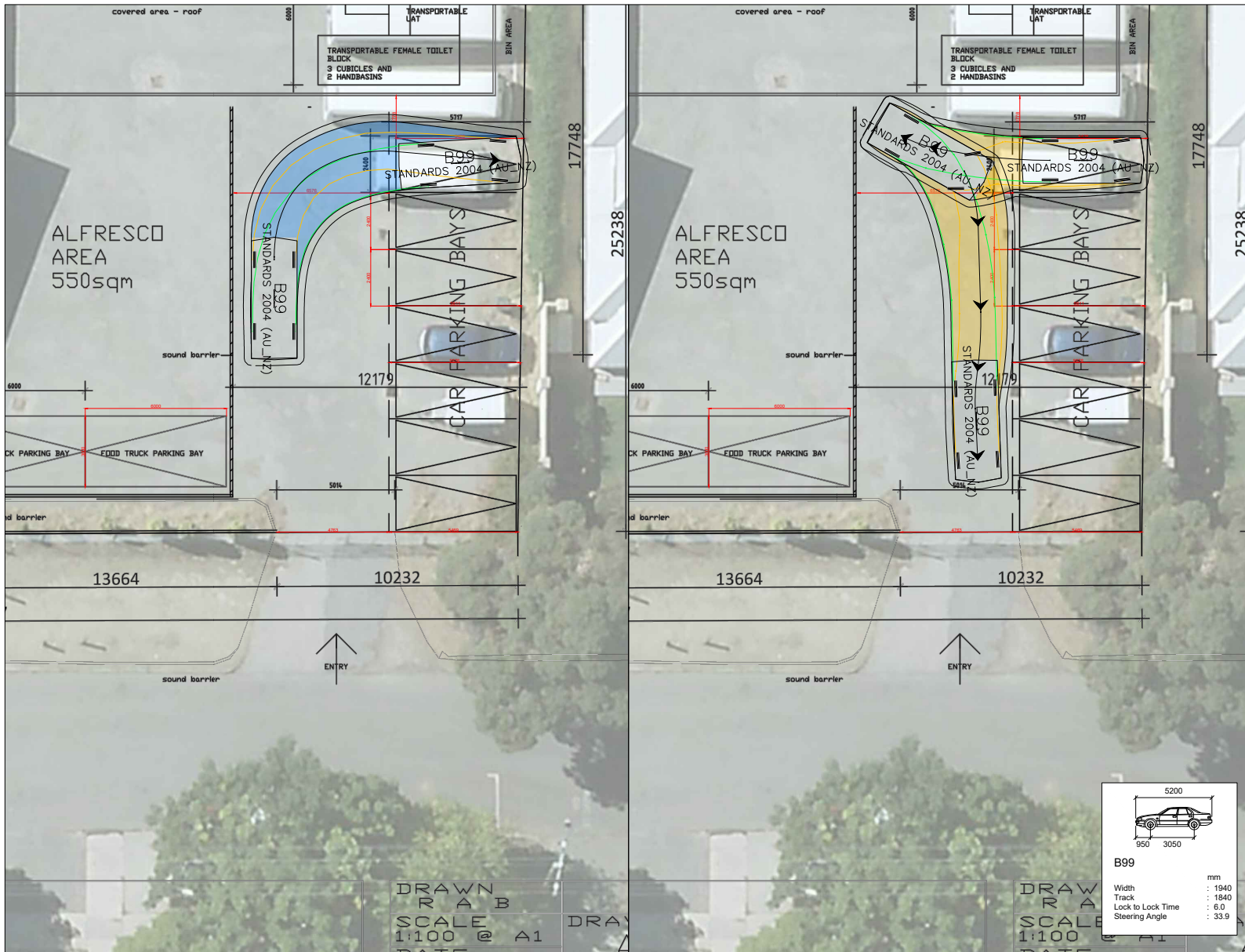
SWEPT PATHS

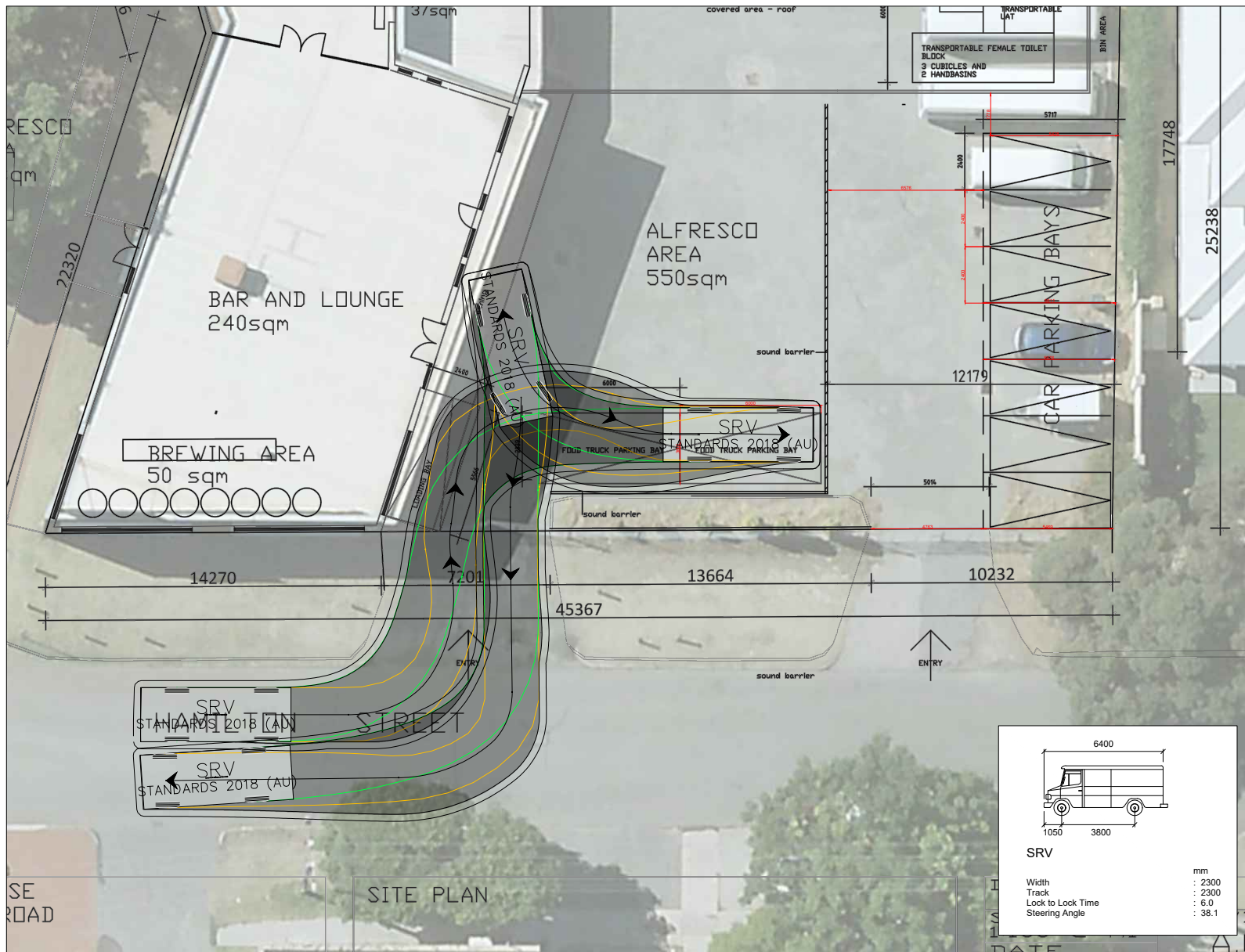


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SITE PLAN

DATE: _____



Appendix D Stantec Parking Study

Title	No. 73 Old Perth Road, Bassendean		
Client	Co-Lab Brewery	Project No	CW1200319
Status	Rev A	Date	19 July 2022
Author	Dana Romic	Reviewer	Jacob Martin

1 Introduction

This Technical Note details the results of a Parking Study conducted on behalf of Co-Lab Brewery to determine the parking impact of the proposed tavern venue located at No. 73 Old Perth Road, Bassendean.

This Parking Study defines the likely generation of parking attributable to the proposed use, the potential extent of parking overspill into adjacent on-street parking and the availability of such parking within a reasonable catchment area.

1.1 Site Context

The Site is located 11.5km from the Perth CBD, to the east of Bassendean Station, within the Town of Bassendean. **Figure 1-1** illustrates the Site location and local surroundings.

The Site is bounded by Old Perth Road to the north and Hamilton Street to the west, and in close proximity to a number of shopping, educational and commercial establishments around Bassendean.

Figure 1-1 Site Location



Source: Metromap (2022)

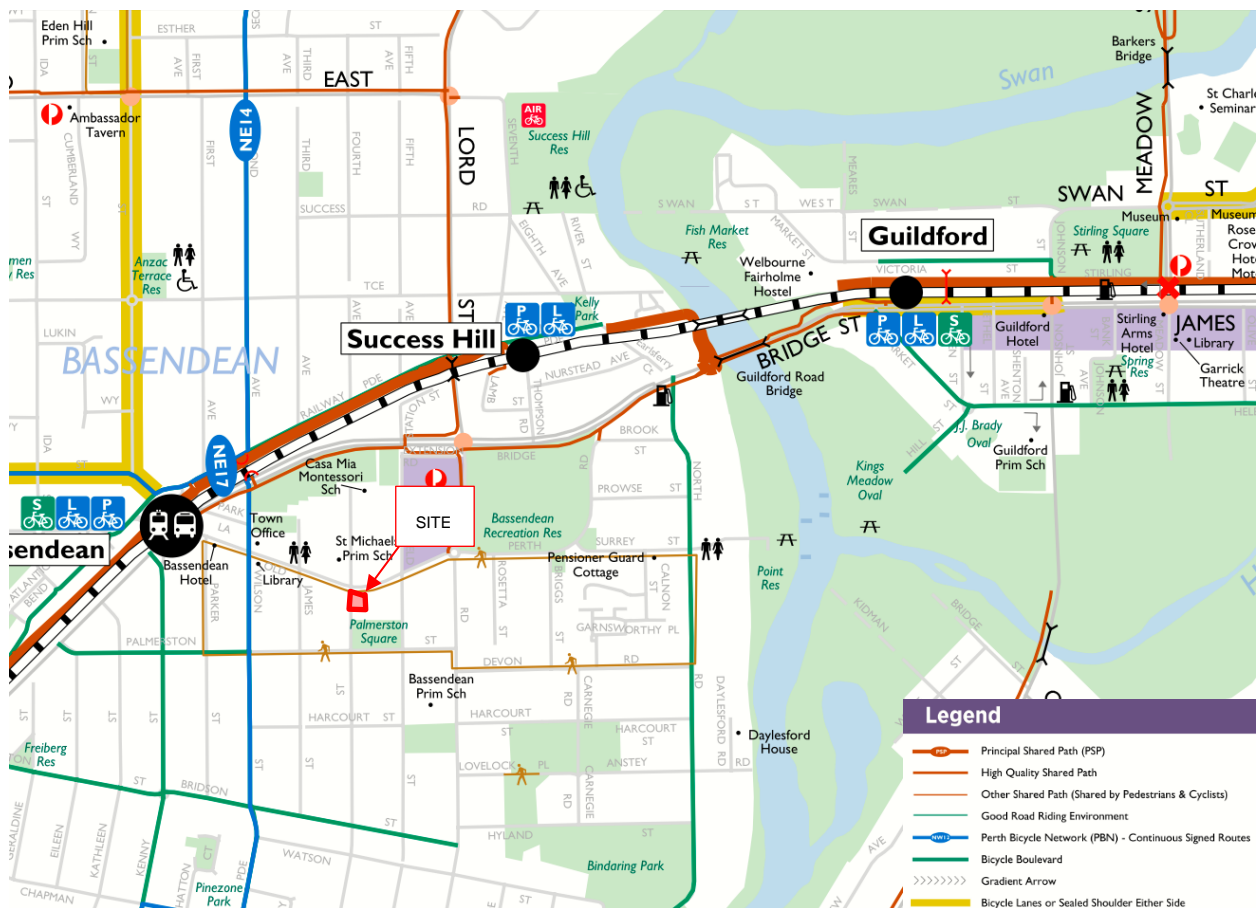
1.2 Existing Pedestrian/Cycle Networks and Facilities

The Site is surrounded by a number of facilities for people walking and cycling. **Figure 1-2** illustrates the nature of these walking and cycling routes and facilities within a 10-minute walk from the Site which includes:

- > Principal Shared Path (PSP) running along Guildford Road leading to Perth City (heading west) or towards Midland (heading east);
- > The area near the Site is pedestrian and bike friendly as it is along the main street within the Bassendean town centre, and within close proximity of the train station; and
- > In addition to close proximity to the Midland Train Line PSP, a network of local bicycle friendly routes is present, running along Old Perth Road, North Road, Wilson Street and Palmerston Street.

Overall, the Site has excellent pedestrian and cycle connectivity.

Figure 1-2 Pedestrian/Cycle Facilities



Source: Department of Transport Comprehensive Cycle Maps (2016)

1.3 Existing Public Transport Facilities

The Site is in a prime location when it comes to public transport. The nearest bus stop to the Site is *Old Perth Road After Hamilton Street* located approximately 60m away along Old Perth Road, serviced by Bus Route 55 which travels from Elizabeth Quay and terminates at Bassendean Town Centre.

The Bassendean Train Station is located approximately 450m from the Site, which is serviced by trains along the Midland Line, which operates every 10 minutes and serves major locations such as Guildford and the Perth CBD. The station additionally serves Transperth Bus Routes 340, 341, 342, 353, 654, 901 and 955.

Figure 1-3 illustrates the nearest public transport stops to the Site and **Table 1-1** shows the frequency of the bus route 55 and the Midland Train Line.

Figure 1-3 Public Transport Facilities



Source: Public Transport Authority Network Maps

Table 1-1 Bus Route and Train Frequency

Route	Route Description	Frequency	
		Weekdays	Weekends
Bus Route 55	Perth to Bassendean	20-60 minutes (5:40AM-11:50PM)	30-60 minutes (7:10AM – 11:55PM)
Midland Train Line	To Perth	10-60 minutes (5:43AM - 3:11AM)	15-60 minutes (6:21AM – 3:11AM)
	To Midland	5-60 minutes (5:29AM – 2:21AM)	10-60 minutes (5:33AM – 2:21 AM)

2 Supply Analysis

The Statutory parking requirements, in accordance with the *Town of Bassendean Local Planning Policy No. 8 – Car Parking and End-of-Trip-Facilities (LPP8)*, defines a requirement of 1 bay per 3 square metres of bar area. The layout of the proposed venue is currently undergoing preliminary planning, but an indicative capacity has been established, comprising 335 patrons.

As such, this analysis has applied the ‘Restaurant’ parking requirements under LPP8, as it directly references maximum occupancy as the appropriate performance metric.

Table 2-1 Town of Bassendean LPP8

Land Use	Parking Requirement
Restaurant	1 bay for every 4 persons at the facility is designed to accommodate

The proposed use constitutes 335 patrons at the Site, resulting in a policy requirement of 84 bays.

Table 2-2 Parking Breakdown

Land Use	Quantity	Requirement
Tavern	335 people	84 bays

The Site is located in the Bassendean Town Centre and there are numerous on-street and off-street parking options available in the vicinity. **Table 2-2** illustrates the on-street/off-street parking available near the Site.

Figure 2-2 Bassendean Parking Map



There are an estimated 133 on-street parking bays in the immediate vicinity of the Site, as summarised in **Table 2-3**. Note that additional parking is available further to the south and along parallel roads. However, these identified spaces largely function as ‘public’ rather than ‘residential’ and are therefore ideal for the purpose of visitation to the proposed venue.

Table 2-3 On-street parking within close proximity to Site

Location	Number of Parking Bays
Hamilton St (north of Old Perth Road)	50
Hamilton St (south of Old Perth Road)	8
Old Perth Road (west of Hamilton St)	6
Old Perth Road (between Hamilton St and Whitfield St)	21
Old Perth Road (east of Whitfield St)	6
Whitfield St (north of Old Perth Road)	30
Whitfield St (south of Old Perth Road)	12

In addition to these on-street parking spaces, 174 publicly accessible off-street parking spaces are also available within close proximity to the Site, including as shown in **Table 2-4**. These have been surveyed to assess the maximum occupancy of adjacent land uses during peak periods, and to assess whether occasional use by Site patrons would impose upon their operation.

Table 2-4 Off-street parking within close proximity to Site

Location	Number of Parking Bays
3A James St (Shopping Centre Parking)	64
The Bigger Bassendean Shopping Centre	110

3 Parking Availability

To determine the available parking supply during the projected peak period, Cardno now Stantec undertook occupancy surveys of parking available in the vicinity of the Site. This survey was completed on Thursday 16 June during the hours of 12:00pm-2:00pm and 5:00pm-7:00pm. During this survey period a very high degree of parking vacancy was observed, as shown in **Figure 3-1**, **Figure 3-2** and **Figure 3-3** (taken at 5pm, Thursday 16 June).

Figure 3-1 Parking Available along Hamilton Street



Figure 3-2 Parking Available along Hamilton Street



Figure 3-3 Parking Available at Bassendean Shopping Centre



The results of these surveys are shown in Error! Reference source not found. and

Table 3-1 Parking Occupancy

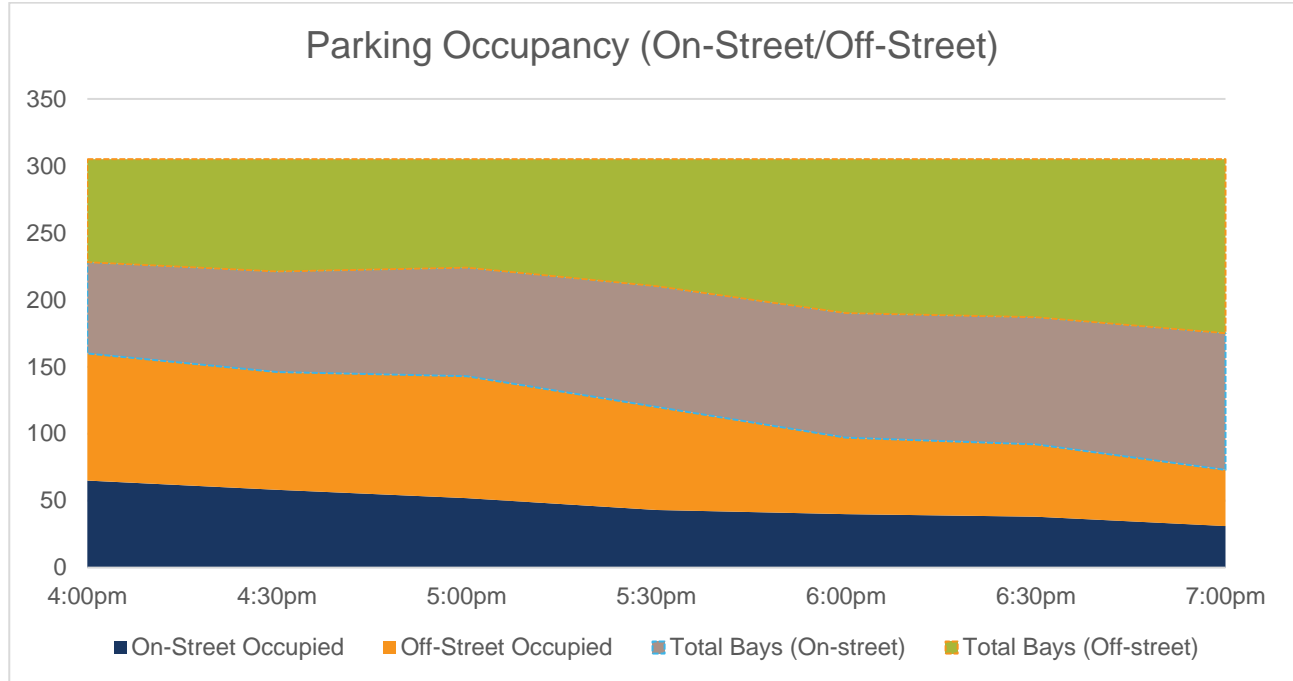
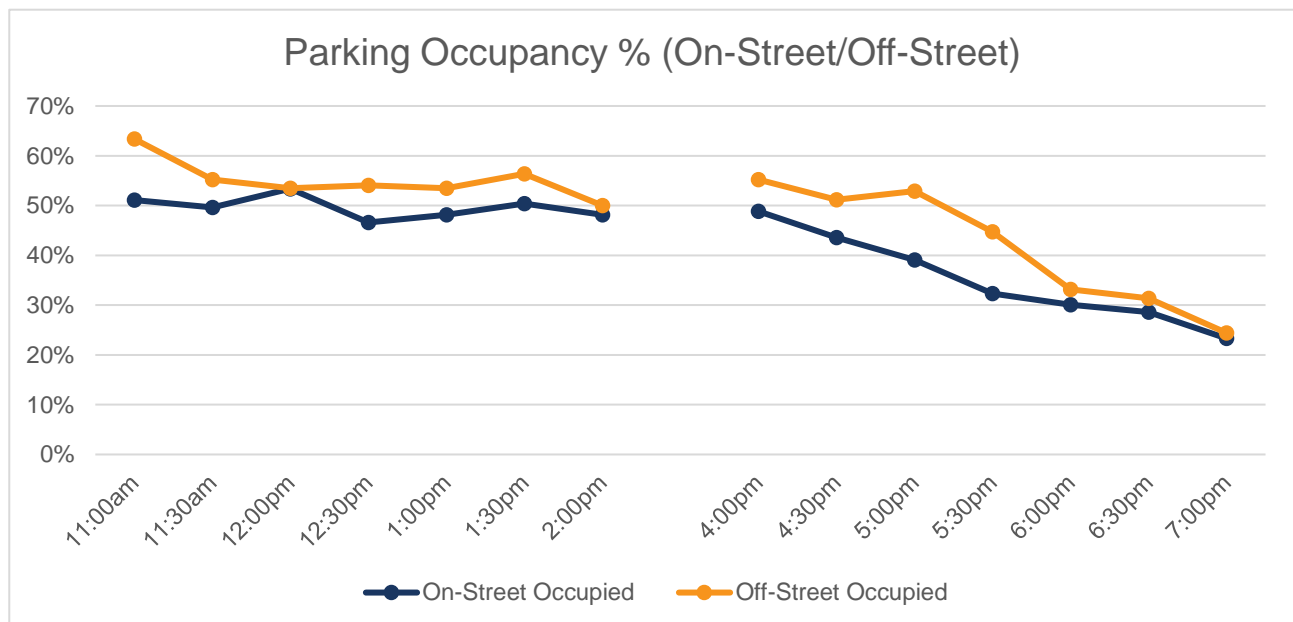


Table 3-2 Parking Occupancy Percentage



These results show that at all times during the proposed Site operation, the nearby parking is less than 50-60% full. In addition, parking demand declines significantly during the evening, when the tavern Site is expected to be at its busiest.

4 Conclusion

Cardno now Stantec, has completed an evaluation of the parking requirements and expected trip generation from the proposed tavern development, to be located at No. 74 Old Perth Road, Bassendean.

Applying the Town's parking rates for a restaurant development, at 1 parking space per 4 persons, and assuming that the venue is operating at its full 335-person capacity, the development could be expected to require 84 parking bays.

To assess the availability of parking supply within the walkable catchment, Cardno now Stantec undertook two surveys which indicated that there is ample on-street parking to accommodate the projected demand, with at least 62 vacant on-street bays located within the surveyed area. This on-street supply is supplemented by a considerable quantum of off-street parking in close proximity to the Site.

The existing parking demand for the surrounding precinct declines substantially in the afternoon and evening, with a total of 102 on-street and 130 off-street bays unoccupied and available at 7:00pm (when the Site is likely to be approaching its peak demand period).

The proposed development is therefore not expected to result in an undue impact on the availability of parking for other current or future land uses. As such, issues related to parking should not constitute an impediment to development approval.



Appendix E Acoustic Assessment



HARLEY DYKSTRA

**TAVERN AND MICROBREWERY
73 OLD PERTH ROAD, BASSENDEAN**

NOISE IMPACT ASSESSMENT

OCTOBER 2022

OUR REFERENCE: 29967-2-22234



DOCUMENT CONTROL PAGE

ACOUSTIC ASSESSMENT
TAVERN AND MICROBREWERY
BASSENDEAN

Job No: 22234

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FOR

HARLEY DYKSTRA

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CONTENTS

1.	INTRODUCTION	1
2.	CRITERIA	1
3.	METHODOLOGY	3
4.	RESULTS	4
5.	ASSESSMENT	4
6.	CONDITIONS FOR COMPLIANCE TO BE ACHIEVED	5
7.	CONCLUSION	6

APPENDICIES

A	Development Application Plans
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EXECUTIVE SUMMARY

Herring Storer Acoustics have been commissioned to undertake a noise impact assessment of the proposed tavern and micro brewery at 73 Old Perth Road, Bassendean.

This preliminary assessment considers noise levels associated with the tavern, noting that noise levels associated within the internal area, associated with the brewery process, is of low, insignificant noise levels, relative to the tavern operations.

Mechanical services have not been considered at this stage, as selections/design are not known as yet and would form part of the design development phase of the project. An assessment of these noise sources would be expected to be conditions of development approval; however, it is noted that with minimal screening, mechanical services compliance with the *Environmental Protection (Noise) Regulations 1997* is not considered to be overly onerous.

Noise levels associated with the tavern at the proposed development have been calculated to comply with the relevant assigned noise levels under the following conditions:

- Music within the rear alfresco area to be at background/conversational level only.
- Rear alfresco area not to be utilised after 10pm. Additionally, the area is not to be utilised prior to 7am (Monday to Saturday) and 9am on Sundays/Public Holidays – if breakfast trade was to be pursued.

1. INTRODUCTION

Herring Storer Acoustics were commissioned to undertake a noise impact assessment of the proposed tavern and micro brewery at 73 Old Perth Road, Bassendean.

It is understood that this assessment is to address a development approval condition for the proposed small bar. It is also considered likely that the report will be required to accompany an application for a liquor licence to the Department of Racing Gaming and Liquor.

2. CRITERIA

The allowable noise level at the surrounding locales is prescribed by the *Environmental Protection (Noise) Regulations 1997*. Regulations 7 & 8 stipulate maximum allowable external noise levels determined by the calculation of an influencing factor, which is then added to the base levels shown below. The influencing factor is calculated for the usage of land within two circles, having radii of 100m and 450m from the premises of concern.

TABLE 1 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises	0700 - 1900 hours Monday to Saturday (Day)	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day Period)	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days (Evening)	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	35 + IF	45 + IF	55 + IF
Commercial premises	All Hours	60	75	80

Note: L_{A10} is the noise level exceeded for 10% of the time.
 L_{A1} is the noise level exceeded for 1% of the time.
 L_{Amax} is the maximum noise level.
 IF is the influencing factor.

It is a requirement that received noise be free of annoying characteristics (tonality, modulation and impulsiveness), defined below as per Regulation 9.

“impulsiveness” means a variation in the emission of a noise where the difference between L_{Apeak} and L_{Amax Slow} is more than 15 dB when determined for a single representative event;

“modulation” means a variation in the emission of noise that –

- (a) is more than 3dB L_{A Fast} or is more than 3 dB L_{A Fast} in any one-third octave band;
- (b) is present for more at least 10% of the representative assessment period; and
- (c) is regular, cyclic and audible;

“tonality” means 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 3dB 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 $L_{A\text{ Slow}}$ levels.

Where the noise emission is not music, if the above characteristics exist and cannot be practicably removed, then any measured level is adjusted according to Table 2 below.

TABLE 2 – ADJUSTMENTS TO MEASURED NOISE LEVELS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Where the noise emission is music, then any measured level is adjusted to Table 3 below.

TABLE 3 - ADJUSTMENTS TO MEASURED MUSIC NOISE LEVELS

Where impulsiveness is not present	Where impulsiveness is present
+10 dB(A)	+15 dB(A)

The influencing factor at the identified noise sensitive premises has been estimated as follows:

Major Road within the outer circle;

Guildford Road + 6 dB

Commercial Premises within the inner circle;

30% + 1.5 dB

Commercial Premises within the outer circle;

20% + 1.0 dB

Hence, the influencing factor is estimated at + 8 dB.



FIGURE 1 – AREA MAP

The locations above have been selected for assessment based on the proximity to the proposed small bar and are considered representative of the most affected premises.

Accordingly, the Assigned Noise Levels are as per Table 4 below.

TABLE 4 - ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Residential Premises	0700 – 1900 hours Monday to Saturday	53	63	73
	0900 - 1900 hours Sunday and Public Holidays	48	58	73
	1900 – 2200 hours all days	48	58	63
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	43	53	63

Notes: L_{A10} is the noise level exceeded for 10% of the time.
 L_{A1} is the noise level exceeded for 1% of the time.
 L_{Amax} is the maximum noise level.
 IF is the influencing factor.

3. METHODOLOGY

Noise modelling of the noise propagation from the proposed development was carried out using the environmental noise modelling computer program, “SoundPlan”.

Input data for computer modelling included:

- Sketch design of development as per drawings in Appendix A.
- EPA standard weather condition for the day and night periods (see Table 3.1).
- Sound power levels, as summarised in Table 3.2 and noise levels attributable to music played externally in the rear alfresco area.

TABLE 3.1 - WEATHER CONDITIONS

Condition	Day Period	Night Period
Temperature	20 °C	15 °C
Relative humidity	50%	50%
Pasquil Stability Class	E	F
Wind speed	4 m/s*	3 m/s*

* From source to receiver

TABLE 3.2 – SOUND POWER LEVELS OF NOISE SOURCES

DESCRIPTION	dB(A)
Patrons	66/m2
Amplified Acoustic Music	99

The amplified acoustic music utilised in the noise modelling is based upon measurements undertaken at a tavern in an external area – hence, is considered to be representative of what is proposed. The sound power level relates to a sound pressure level of 89 dB(A) at a distance of 4 metres from the speaker.

The noise levels associated with the patrons are akin to noise levels from a beer garden, which, in the context of what is proposed in this instance, is considered highly likely to be a conservative assessment of noise levels (i.e. over estimate).

It is noted that for patrons only with the alfresco area, background music can be played, however, it must be at conversational level to ensure that patron noise is the most significant noise emission from the area.

For the above sound power levels, single point calculations were undertaken for the following scenarios:

Scenario 1: Music being played in the rear alfresco area.

Scenario 2: Patrons filling external areas (rear alfresco).

Notes:

- 1 Mechanical plant have been excluded from our assessment at this stage in the development process, as locations and design will not be undertaken until the design development phase of the project, however, given the distances and likely sizes of plant for the venue, mechanical plant noise emissions is not considered to be a significant issue to overcome. It is considered appropriate that a noise impact assessment associated with such items would be the subject of a development approval condition.
- 2 Initial calculations indicated the need for barriers to be in place. The barrier to the south (behind the proposed locations for the food vans) has been set at 3.5m above ground level, with a barrier to Hamilton Street being 2m high. In both instances the construction of the barrier has been assumed to be at least 14 kg/m² surface density. The location of the barriers have been included in the latest set of drawings included in Appendix A.

4. RESULTS

Noise levels at the identified noise sensitive premise associated with the proposed tavern and microbrewery centre operations are as listed below in Table 4.1.

TABLE 4.1 – CALCULATED NOISE LEVELS AT NOISE SENSITIVE PREMISES

Location	Scenario	
	1: Music in rear alfresco	2: Patrons in rear alfresco
R1	59	48
R2	62	47

5. ASSESSMENT

Noise levels associated with the various scenarios considered have been examined for the potential to contain annoying characteristics in accordance with the *Environmental Protection (Noise) Regulations 1997*.

Scenario 1 is considered as being “music” at the nearest noise sensitive premises.

Hence, the following adjusted calculated noise level emissions are applicable for assessment purposes, noting scenario 1 includes a + 10 dB adjustment for containing music. Patrons noise only is not considered to contain annoying characteristics,

TABLE 5.1 – ADJUSTED CALCULATED NOISE LEVELS AT NOISE SENSITIVE PREMISES

Location	Scenario	
	1: Music in alfresco area	2: Patrons in rear alfresco
R1	69	48
R2	72	47

Therefore, Tables 5.2 – 5.3 summarises the assessment of the calculated noise levels against the pertinent Assigned Noise Levels.

TABLE 5.2 – ASSESSMENT – SCENARIO 1

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable L _{A10} Assigned Level (dB)	Exceedance to Assigned Noise Level (dB)
R1	69	Day	53	+ 16 dB
		Sunday / Public Holiday Day Period	48	+ 21 dB
		Evening	48	+ 21 dB
		Night	43	+ 26 dB
R2	72	Day	53	+ 19 dB
		Sunday / Public Holiday Day Period	48	+ 24 dB
		Evening	48	+ 24 dB
		Night	43	+ 29 dB

TABLE 5.3 – ASSESSMENT – SCENARIO 2

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable L _{A10} Assigned Level (dB)	Exceedance to Assigned Noise Level (dB)
R1	48	Day	53	Complies
		Sunday / Public Holiday Day Period	48	Complies
		Evening	48	Complies
		Night	43	+ 5 dB
R2	47	Day	53	Complies
		Sunday / Public Holiday Day Period	48	Complies
		Evening	48	Complies
		Night	43	+ 4 dB

6. CONDITIONS FOR COMPLIANCE TO BE ACHIEVED

As can be seen from the assessment in Section 5, noise level emissions associated with the proposed microbrewery and tavern are capable of complying with the relevant stipulated assigned noise levels, under the following conditions:

Music

Music within the rear alfresco area is to be at a conversational/background noise level only.

Patrons in Rear Alfresco Area

Noise emissions associated with patrons in the external rear alfresco area are calculated to be compliant at all times, with the exception of the night period.

Hence, the rear area is to be vacated at/before 10pm each night. It is also noted that the rear area could not similarly be used prior to 7am Monday to Saturday, and prior to 9am on Sundays/Public Holidays (if breakfast trade was to be considered).

7. CONCLUSION

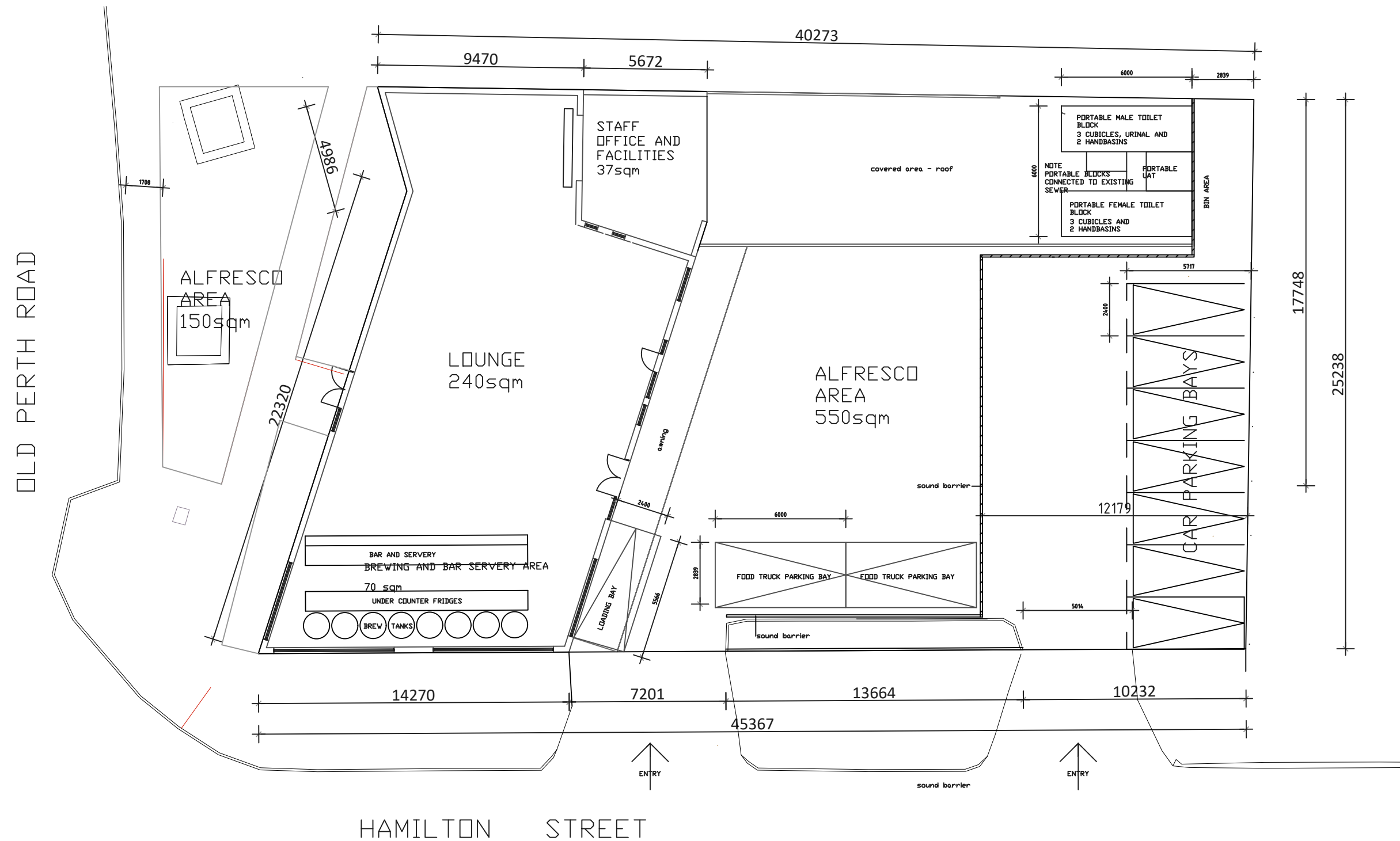
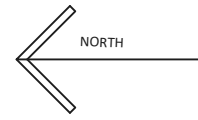
Based on the above assessment, noise level emissions associated with the tavern and microbrewery are able to comply with the relevant assigned noise levels stipulated by the *Environmental Protection (Noise) Regulations 1997*.

It is noted that for the above finding to hold true, the operational restrictions listed above must be followed.

Noise level emissions associated with mechanical plant have not been addressed at this stage of the project, as they have not been selected, and would need to be addressed during the detailed design phase of the development and are considered likely development approval conditions. With minimal screening of the mechanical plant, compliance with the *Environmental Protection (Noise) Regulations 1997* is not expected to be onerous.

APPENDIX A

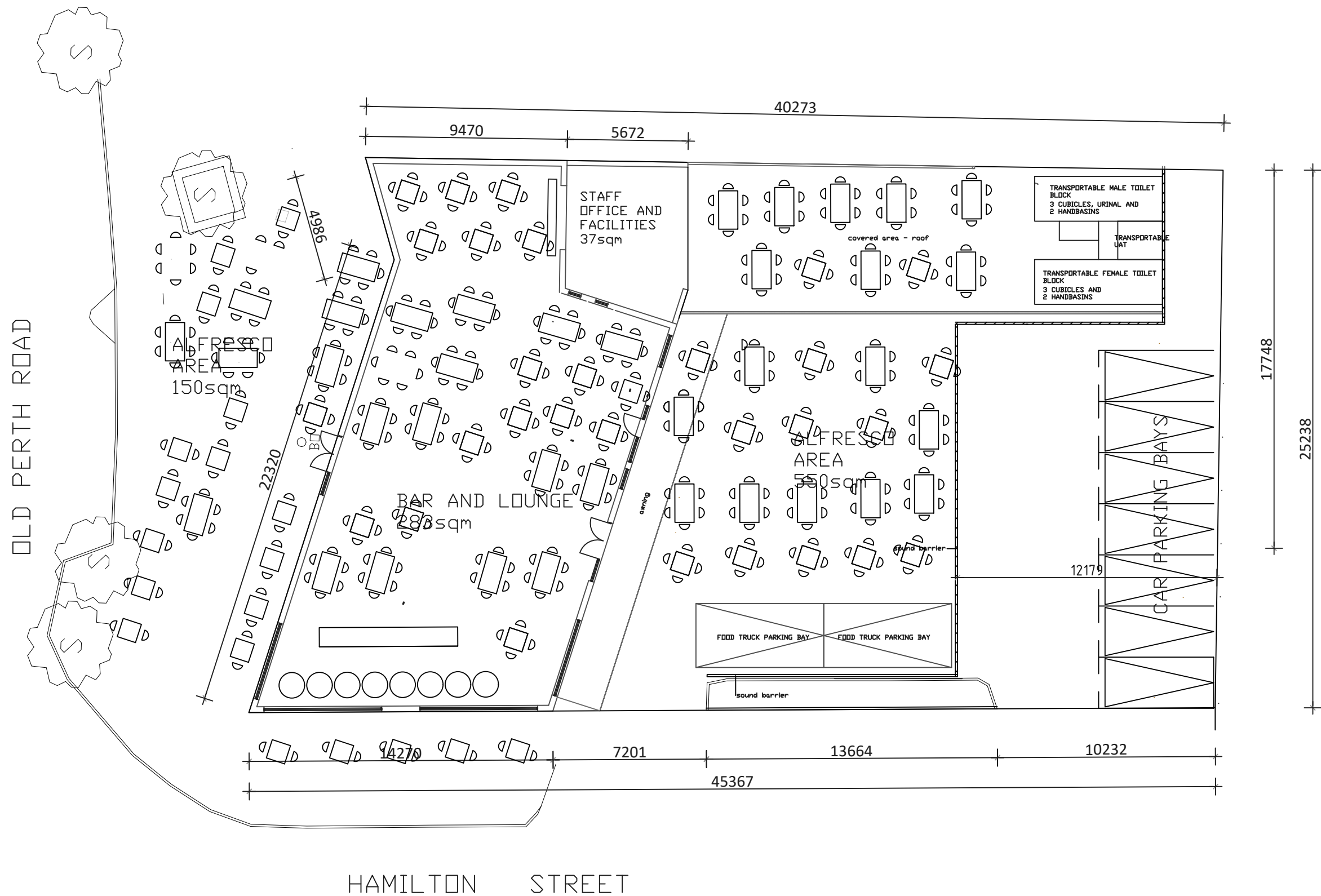
DEVELOPMENT APPLICATION PLANS



BASSENDEAN BREW HOUSE
 LOT 145 OLD PERTH ROAD
 BASSENDEAN

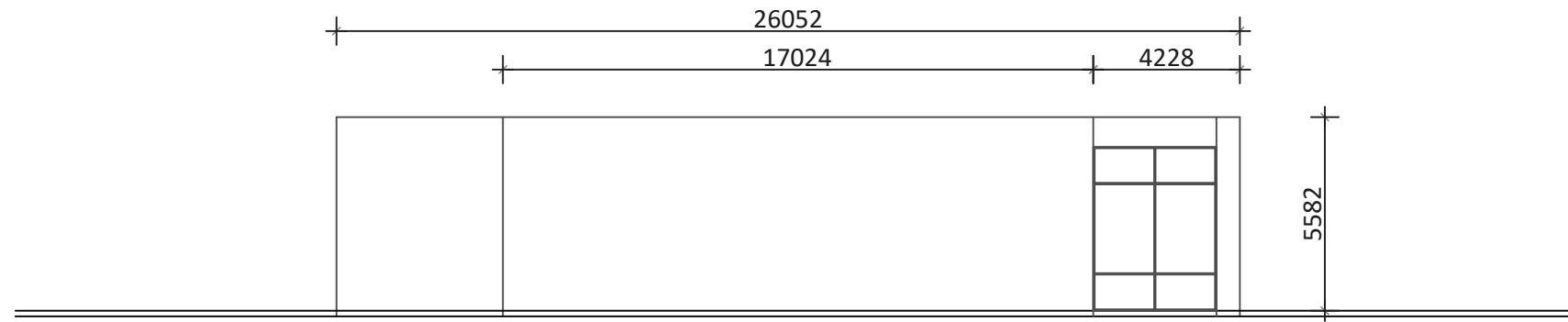
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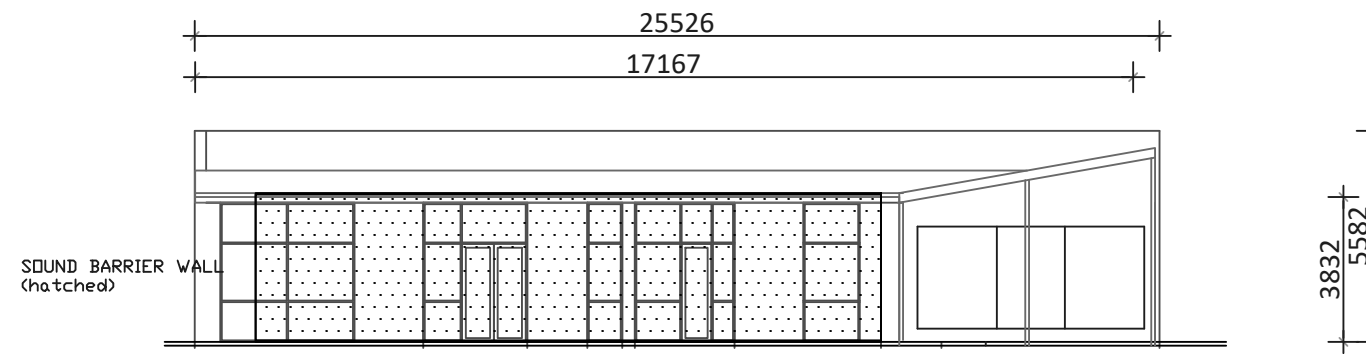


BASSENDEAN BREW HOUSE
 LOT 145 OLD PERTH ROAD
 BASSENDEAN

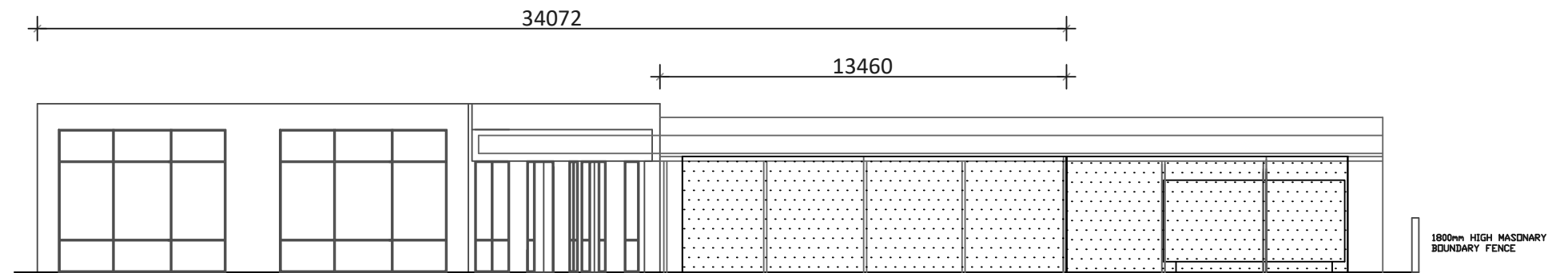
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SCALE 1:100 @ A1		0 25
DATE AUG 2022		



OLD PERTH ROAD (NORTH) ELEVATION



REAR (SOUTH) ELEVATION



HAMILTON STREET (WEST) ELEVATION

BASSENDAN BREW HOUSE
 LOT 145 OLD PERTH ROAD
 BASSENDEAN

DRAWN R A B	DRAWING NO. A.01	REDUCTION
SCALE 1:200 @ A3		0 25
DATE AUG 2022		