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Sustainable Transport. Safe Solutions

96 Capel Drive, Capel

Proposed Mixed-Use Development

TRANSPORT IMPACT STATEMENT

Prepared for:

Ocean Gardens Pty Ltd

November 2025

96 Capel Drive, Capel

Prepared for: Ocean Gardens Pty Ltd
Prepared by: Paul Ghantous
Date: 3 November 2025
Project number: U25.089

Version control

Version No.	Date	Prepared by	Revision description	Issued to
U25.089.r01	01/10/25	Paul Ghantous	DRAFT	Doepel Marsh Architects
U25.089.r01a	16/10/25	Paul Ghantous	FINAL	Doepel Marsh Architects
U25.089.r01b	29/10/25	Paul Ghantous	REVISED FINAL	Doepel Marsh Architects
U25.089.r01c	03/11/25	Paul Ghantous	REVISED FINAL	Doepel Marsh Architects

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1 Introduction

This Transport Impact Statement has been prepared by Urbii on behalf of Ocean Gardens Pty Ltd with regards to the proposed mixed-use development, located at 96 Capel Drive, Capel.

The subject site is situated at the corner of Capel Drive and Forrest Road, as shown in Figure 1. The site has frontage on Capel Drive, Forrest Road and Roe Road. It presently accommodates Capel Tavern and associated car parking, with the remaining portion of land presently vacant (Figure 2).

The site is within Capel Town Centre and is surrounded by a mix of residential, commercial, civic and retail land uses. The Shire offices and Capel Park are located on the opposite side of Forrest Road, to the west of the site.

It is proposed to develop the site into a mixed-use development providing short stay accommodation, over 55s residential units and a mixed-use building with a commercial tenancy on ground level, with residential apartments on upper levels. The Capel Tavern will be retained and is outside the scope of the proposed development works.

The key issues that will be addressed in this report include the traffic generation and distribution of the proposed development, access and egress movement patterns, car parking and access to the site for alternative modes of transport.

This Transport Impact Statement has been updated following pre-lodgement advice received from Main Roads Western Australia (MRWA). The advice identified the need to contain all works within the subject lot boundaries, review vehicle access arrangements along Forrest Road, and address potential queuing and sightline impacts near the crossover.

In response, the development layout has been refined to maintain two-way circulation while designating the parking bays closest to the Forrest Road crossover as staff parking only to reduce turnover and minimise conflict near the access. A queuing analysis has been undertaken to confirm that vehicle storage at the short-stay access gate is sufficient to contain queues entirely within the site, and the on-street parking bay on Forrest Road has been removed to maintain clear sightlines for vehicles exiting the site.

These refinements ensure the updated TIS accurately reflects the revised development plans and appropriately responds to MRWA's access and traffic management advice.

Figure 1: Subject site location

Figure 2: Existing site use

Source: Google Streetview Image dated June 2023

2 Scope of work

The WAPC *Transport Assessment Guidelines 2016* identifies the proposed development as being “Moderate Impact” (Figure 3). Accordingly, a Transport Impact Statement (TIS) has been prepared to support a robust Development Application and to assist the LGA with demonstration of traffic impact.

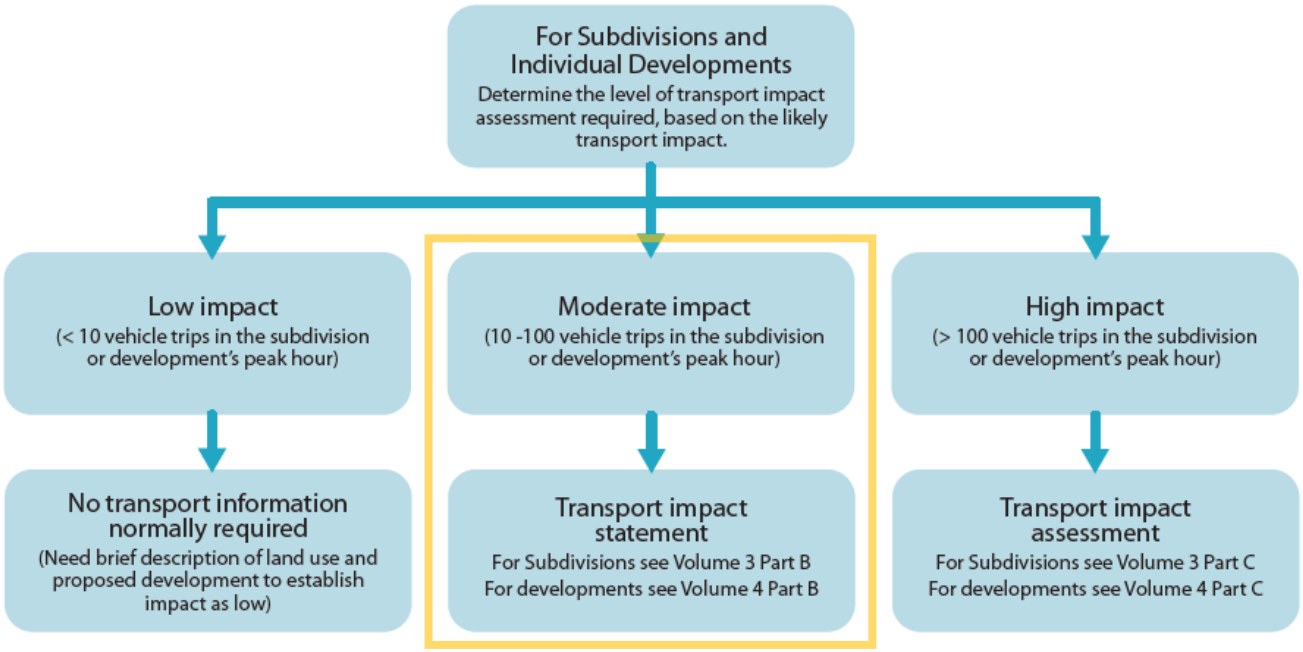

Figure 3: WAPC Transport Assessment Guidelines – reporting requirements

3 Proposed development

The proposal for the subject site is for a mixed-use residential and commercial development.

The proposed development plans are still being refined and may be subject to minor changes. However, the development is expected to comprise:

Short stay accommodation

- Total of 35 accommodation units including:
  - 31 x 1-bed units
  - 4 x 2-bed units
- 36 car parking bays (including 2 x ACROD bays)
- 2 visitor/service bay
- 4 motorcycle bays
- 8 x e-bikes provided for guest hire
- 18 x bicycle parking spaces for guest use
- 4 x bicycle parking spaces for visitors
- 3 buggy parking spaces
- Short stay recreation room and facilities
- Dedicated bin store.

Over 55s residential

- Total of 52 accommodation units including:
  - 8 x 1-bed units
  - 39 x 2-bed units
  - 5 x 3-bed units
- 56 resident car parking bays
- 15 visitor car parking bays (including 2 x ACROD bays)
- 1 service bay
- 8 motorcycle bays
- 20 x bicycle parking spaces placed around the clubhouse and other facilities, for residents to ride around the site. Visitors and residents share these spaces.
- Each dwelling is allocated an extra 1m^2 in their storeroom for the secure storage of bicycles
- Parking for buggies, caravans and trailers
- Short stay recreation room and facilities
- Consolidated bin store

Lot 12 mixed-use building

- 90m^2 commercial tenancy on the ground level
- A total of 8 residential apartment units:
  - 4 x 1-bed units
  - 4 x 2-bed units
- 3 commercial parking bays, including one ACROD bay
- 8 car parking bays in a secured area for residents
- 6 resident bicycle parking spaces
- 1 commercial bicycle space
- 3 bicycle parking spaces for residential visitors
- Commercial end of trip facilities including lockers, a shower and change room
- Separate residential and commercial bin stores.

Tavern

- Retention of the existing tavern building (no net increase in floor area)
- Refresh of the existing car park pavement and line marking
- 28 parking bays (including 1 x ACROD bay) reserved for tavern use
- 1 loading/service bay
- Drive through order pickup
- 3 motorcycle bays
- 2 bicycle parking spaces
- Bin store

Vehicle access to the site is proposed via one crossover on Forrest Road and two crossovers on Roe Road. An internal road network is proposed to facilitate vehicle circulation between different parking areas.

People walking and cycling will access the development from the external path network abutting the site. An extensive walking and cycling network is provided internally, to provide convenient accessibility between residential units, communal facilities and car parks.

Waste collection is proposed to be undertaken internally within the site.

The proposed development plans are included for reference in Appendix A.

4 Vehicle access and parking

4.1 Existing vehicle access

As detailed in Figure 4, the subject site presently has one crossover on Capel Drive and two crossovers on Forrest Road, which provide vehicular access for the existing tavern.

Figure 4: Existing vehicle access – Capel Drive & Forrest Road

4.2 Proposed vehicle access

As detailed in the proposed development plans and Figure 5, vehicle access to the site is proposed to be consolidated to one crossover on Forrest Road and two crossovers on Roe Road. The existing crossover on Capel Drive and one existing crossover on Forrest Road are proposed to be removed as part of this development.

The development consolidates vehicle access on Capel Drive and Forrest Road to one shared crossover, which reduces impact on the streetscape, reduces conflicts with people walking and cycling and promotes efficient traffic movements.

An internal circulation road network is provided, to facilitate access between different parking areas. Internally, security/access gates will be used to segregate different land uses.

Figure 5: Proposed development vehicle access

4.3 Tavern/short stay driveway queuing analysis

Reference was made to AS2890.1 for guidance on queuing requirements at a car park entrance with control points (Figure 6). The short stay, Lot 12 and tavern provide less than 100 car parking spaces combined. Only the short stay and Lot 12 car parking is behind a secured control point (53 vehicle parking spaces, with a minimum queue length of 2 cars required.

TABLE 3.3

MINIMUM QUEUING LENGTH AT A CAR PARK WITH CONTROL POINTS AT ENTRANCES

Capacity of car park (Note 1)	Peak hourly in-flow of traffic	
	Up to 75% of capacity (Note 2)	More than 75% of capacity (Note 3)
Not more than 100 cars	The greater of a minimum of 2 cars or 3% of capacity	The greater of a minimum of 2 cars or 4% of capacity
More than 100 cars	1st 100 cars: 3% of capacity 2nd 100 cars: 2% of capacity Additional cars: 1% of capacity A minimum queuing length of 3 cars/lane	1st 100 cars: 4% of capacity 2nd 100 cars: 2% of capacity Additional cars: 1.5% of capacity A minimum queuing length of 3 cars/lane

NOTES:

1 Equal to the total number of parking spaces served by the entrance (proportioned where several entrances service a common parking area).

2 Generally casual (short-staying) and mixed patronage.

3 Tidal traffic typical of car parking for a special event.

Figure 6: AS2890.1 – guidance on queuing requirements in off-street car parks

To assess the likely queuing at the vehicle access control point, a Poisson queuing analysis has been undertaken. The anticipated peak hour **entry** traffic volume generated by the short stay, and Lot 12 land uses is 23 vehicles per hour (vph). AS2890.1 states that entry points controlled by a card reader have a maximum flow capacity of 400 vehicles/hour/lane. The queuing analysis conservatively assumes a much lower service rate of only 300 vehicles/hour/lane.

As demonstrated in Figure 7, analysis indicates that the 95th percentile queue at the entry gate during the peak hour is only one vehicle. Based on the expected traffic volumes, there will be no vehicle stopped at the entry gate for 92% of the time during the peak hour. The maximum queue will be one car waiting for the gate to open.

Figure 8 shows that a vehicle waiting for the entry gate to open will be stopped clear of the tavern car park circulation aisle. Tavern traffic is able to easily circulate within the car park with no obstruction from the entry gate (short stay and Lot 12 traffic).

In addition, the designation of the first four bays near the crossover as STAFF ONLY PARKING further reduces parking turnover and manoeuvring activity in proximity to the site access, improving operational efficiency and safety. With these measures in place, the car park layout provides sufficient capacity, queuing space and internal circulation for both tavern and short-stay users. Accordingly, a redesign of the tavern car park is not required, as the proposed

management measures effectively address the concerns raised by Main Roads WA and maintain appropriate access performance.

M/M/s - Entry Queuing Analysis (Poisson Arrival and Service Rates)

M/M/s

	vph	vps
Arrival rate	23	0.006389
Service rate	300	0.083333
Number of servers	1	1
	70	

Utilization	**7.67%**		**7.67%**	
P(0), probability that the system is empty	**0.9233**		**0.9233**	
Lq, expected queue length	**0.0064**	(cars)	**6.0000**	(metres)
L, expected number in system	**0.0830**	(cars)	**6.0000**	(metres)
Wq, expected time in queue	**0.0003**	(hours)	**0.9964**	(seconds)
W, expected total time in system	**0.0036**	(hours)	**12.9964**	(seconds)
Probability that a customer waits	**0.0767**		**0.0767**	
95% Queue	**1.0000**	(cars)	**6.0000**	(metres)

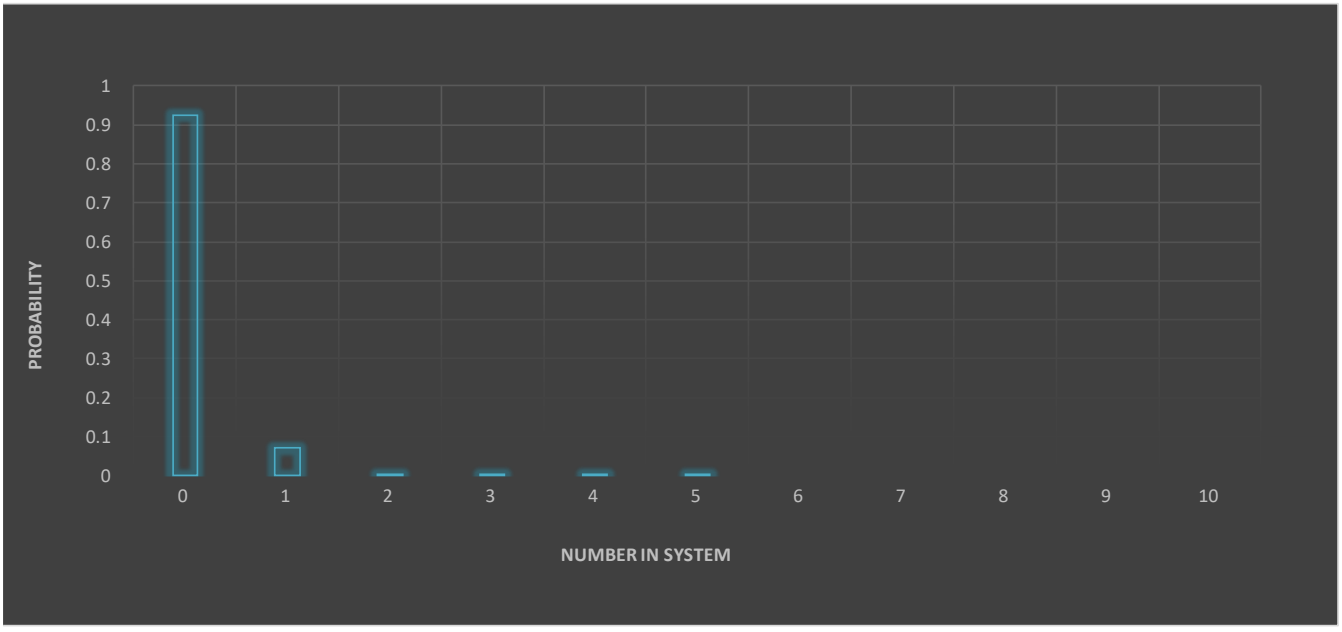

Figure 7: Entry gate queuing analysis

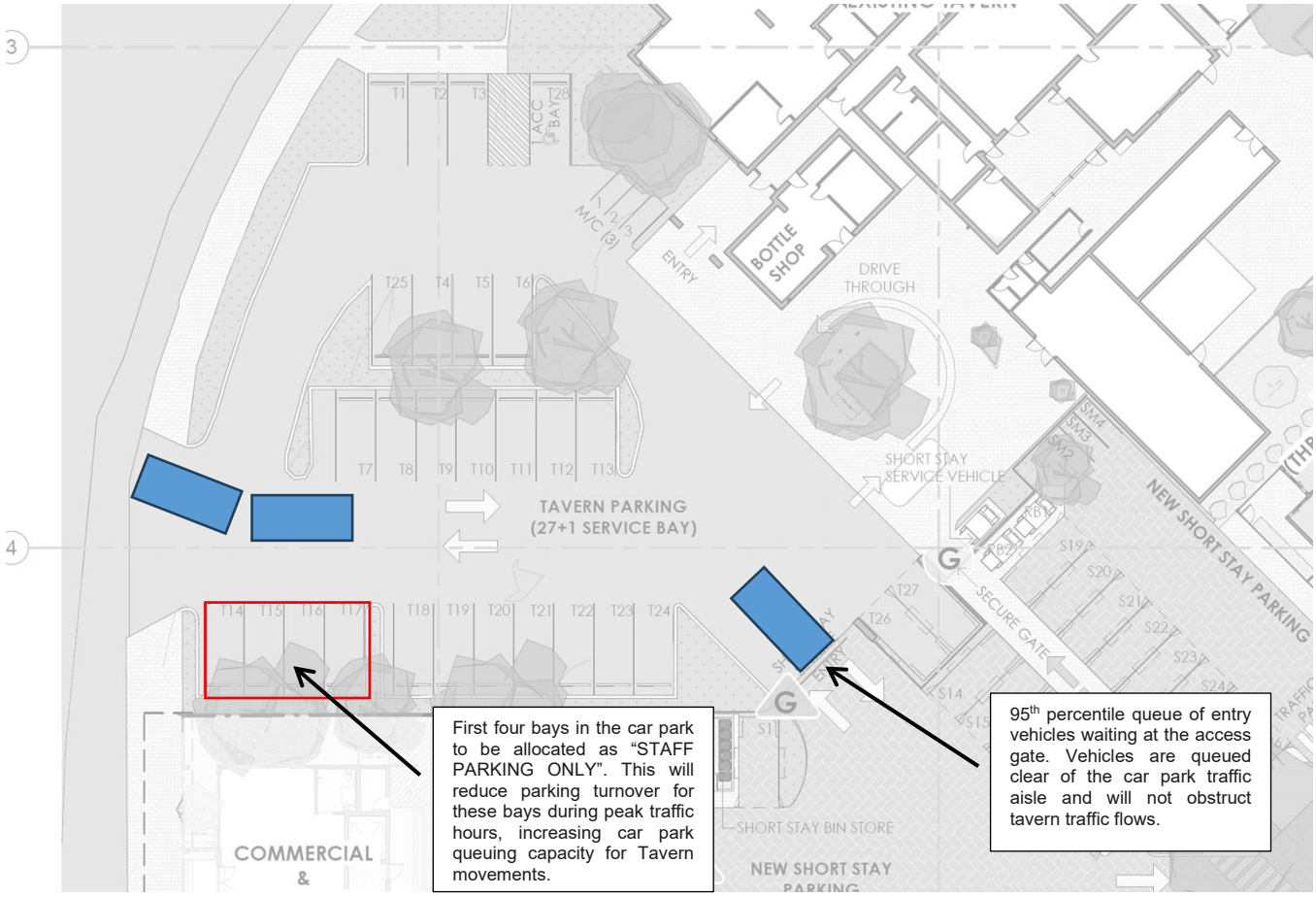

Figure 8: Tavern car park traffic flow management

4.4 Parking supply and allocation

The following parking supply and allocation is proposed for the development:

4.4.1 Tavern

- 28 parking bays (including 1 x ACROD bay) reserved for tavern use
- 1 loading/service bay
- 3 motorcycle bays
- 2 bicycle parking spaces

4.4.2 Short stay

- 36 car parking bays (including 2 x ACROD bays)
- 2 visitor/service bay
- 4 motorcycle bays
- 8 x e-bikes provided for guest hire
- 18 x bicycle parking spaces for guest use
- 4 x bicycle parking spaces for visitors
- 3 buggy parking spaces

Reference was made to the Institute of Transport Engineers (ITE) *Parking Generation Manual* for peak parking demand rates for short stay accommodation. The best fitting rates are for the 'motel' land use.

Short-stay parking has been conservatively assessed **per room**. The 35 units comprise **39 rooms.**

As detailed in Table 1, a peak parking demand of **29 bays** is estimated for the short stay accommodation.

The proposed parking provision for the short stay development component exceeds the anticipated demand.

Table 1: Peak parking generation for short stay accommodation

Land use	Reference	Quantity	Rate	Peak Parking Demand
Short stay	ITE Motel (320)	39 (rooms)	0.72 bays per room	29 bays

4.4.3 Lot 12 Mixed-use

- 3 commercial parking bays, including one ACROD bay
- 8 car parking bays in a secured area for residents
- 1 visitor car parking bay on Forrest Road fronting the site
- 6 resident bicycle parking spaces
- 1 commercial bicycle space
- 3 bicycle parking spaces for residential visitors
- Commercial end of trip facilities including lockers, a shower and change room

The applicable parking requirements under R-Codes and the planning scheme are set out in Table 2. The parking provisions for Lot 12 are compliant with the applicable requirements and are satisfactory for meeting the practical needs of the development.

Table 2: Parking requirements for Lot 12

CAR PARKING REQUIREMENTS				
COMMERCIAL	REQUIRED		PROVIDED	
90m²	2+1 ACCESSIBLE PARKING		2+1 ACCESSIBLE PARKING	
RESIDENTIAL	RESIDENT	VISITOR	RESIDENT	VISITOR
	8	1	8	1

RECIPROCAL AFTER- HOURS USE OF COMMERCIAL FOR RESIDENTIAL

BICYCLE REQUIREMENTS				
COMMERCIAL	REQUIRED		PROVIDED	
	1		1	
RESIDENTIAL	RESIDENT	VISITOR	RESIDENT	VISITOR
	4	1	6	3

UNIT 1,4,5,6 & 8 HAVE SPACE FOR A BIKE IN THEIR STORE

4.4.4 Over 55's residential

- 56 resident car parking bays
- 15 visitor car parking bays (including 2 x ACROD bays)
- 1 service bay
- 8 motorcycle bays
- 20 x bicycle parking spaces placed around the clubhouse and other facilities, for residents to ride around the site. Visitors and residents share these spaces.
- Each dwelling is allocated an extra 1m^2 in their storeroom for the secure storage of bicycles
- Parking for buggies, caravans and trailers

There is ample parking provided for cars, motorcycles, bicycles, caravans, trailers and buggies. The parking provision is expected to satisfy the practical needs of the over 55's residential units.

5 Provision for service vehicles

Swept path analysis has been undertaken for waste trucks and 12.5m Heavy Rigid Vehicles (HRVs), to model emergency vehicle access.

Service vehicles can enter and exit the site in forward gear. Swept path analysis confirms satisfactory service vehicle movements and is presented in Appendix B.

6 Hours of operation

The commercial use on Lot 12 is expected to operate during standard business hours (9am to 5pm).

The short stay accommodation will provide flexible options for check-in/check-out, with traffic spread out across the day.

Over 55's accommodation is less likely to generate typical commuter peak hour traffic flows. However, the peak traffic hours for residential uses are generally 7am to 9am and 4pm to 6pm on weekdays.

7 Daily traffic volumes and vehicle types

7.1 Traffic generation

The traffic volume that will be generated by the proposed development has been estimated using trip generation rates derived with reference to the following sources:

- Transport for New South Wales (TfNSW) *Guide to Transport Impact Assessment* (2024).
- Institute of Transportation Engineers (ITE) *Trip Generation Manual 10th Edition*.

The trip generation rates adopted are detailed in Table 3.

Table 3: Adopted trip rates for traffic generation

Land use	Trip rate source	Daily rate	AM rate	PM rate	AM in	AM out	PM in	PM out
Residential	TfNSW - Medium density residential (Regional)	3.67	0.41	0.6	25%	75%	65%	35%
Small Shop	TfNSW - Small shopping centre <1,000m2	2.022	0.192	0.259	50%	50%	50%	50%
Short stay	ITE Motel (320)	3.350	0.430	0.440	40%	60%	55%	45%

The estimated traffic generation of the proposed development is detailed in Table 4. The proposed development is estimated to generate 519 vehicles per day (vpd), with 57 vehicles per hour (vph) and 74 vph generated during the AM and PM peak hours, respectively.

These trips include both inbound and outbound vehicle movements. It is anticipated that most of the vehicle types would be passenger cars and SUVs.

Table 4: Development traffic generation – Weekday AM and PM peak hour

Land use	Quantity	Daily Trips	AM Trips	PM Trips	AM Peak Trips		PM Peak Trips	
					IN	OUT	IN	OUT
Residential	60	220	25	36	6	19	23	13
Small Shop	90	182	17	23	8	9	12	11
Short stay	35	117	15	15	6	9	8	7
Total		**519**	**57**	**74**	**20**	**37**	**43**	**31**

7.2 Impact on surrounding roads

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provides the following guidance on the assessment of traffic impacts:

"As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis."

The proposed development will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph to warrant further analysis.

8 Traffic management on the frontage roads

Information from online mapping services, Main Roads WA, Local Government, and/or site visits was collected to assess the existing traffic management on frontage roads.

8.1.1 Capel Drive

Capel Drive near the subject site is an approximately 8m wide, two-lane undivided road. A path for walking and cycling is provided along both sides of the road. The road features painted edge lines and a single solid separator line.

Capel Drive is classified as a *Primary Distributor* road in the Main Roads WA road hierarchy (Figure 9) and operates under a speed limit of 60km/h (Figure 10). Primary Distributor roads are the responsibility of Main Roads Western Australia and are typically for the movement of inter-regional and/or cross town/city traffic.

Traffic data obtained from Main Roads WA indicates that Capel Drive (east of Bussell Highway) carried approximately 3,500 vehicles per day in December 2024.

Capel Drive provides the main east–west movement corridor for the town and the key regional connection to Bunbury and Busselton. Through the town centre, Capel Drive functions as both the main commercial street and a regional traffic route.

8.1.2 Forrest Road

Forrest Road near the subject site is an approximately 13.3m wide, two-lane divided road. A red asphalt flush median is provided to separate traffic flows and reduce the width of traffic lanes. A path for walking and cycling is provided along both sides of the road.

On-street parallel parking embayments are provided on both sides of the road. The flush median and friction due to on-street parking movements assists with calming traffic speeds on the road.

Forrest Road is classified as a *Primary Distributor* road in the Main Roads WA road hierarchy (Figure 9) and operates under a speed limit of 40km/h (Figure 10). The lower speed limit reflects the built-up environment and the need to support safe walking and cycling activities. Primary Distributor roads are the responsibility of Main Roads Western Australia and are typically for the movement of inter-regional and/or cross town/city traffic.

Forrest Road provides an important link between Capel Drive and areas to the north and south, while also serving as the key access route to residential neighbourhoods, the Capel Primary School, and community facilities.

8.1.3 Roe Road

Roe Road near the subject site is an approximately 6.5m wide, two-lane undivided road. No footpaths are provided along this road.

Roe Road is classified as an *Access* road in the Main Roads WA road hierarchy (Figure 9) and operates under a speed limit of 50km/h (Figure 10). Access roads are the responsibility of Local Government and are for the provision of vehicle access to abutting properties. (Figure 11).

Traffic data obtained from Main Roads WA indicates that Roe Road carried less than 100 vehicles per day in 2022.

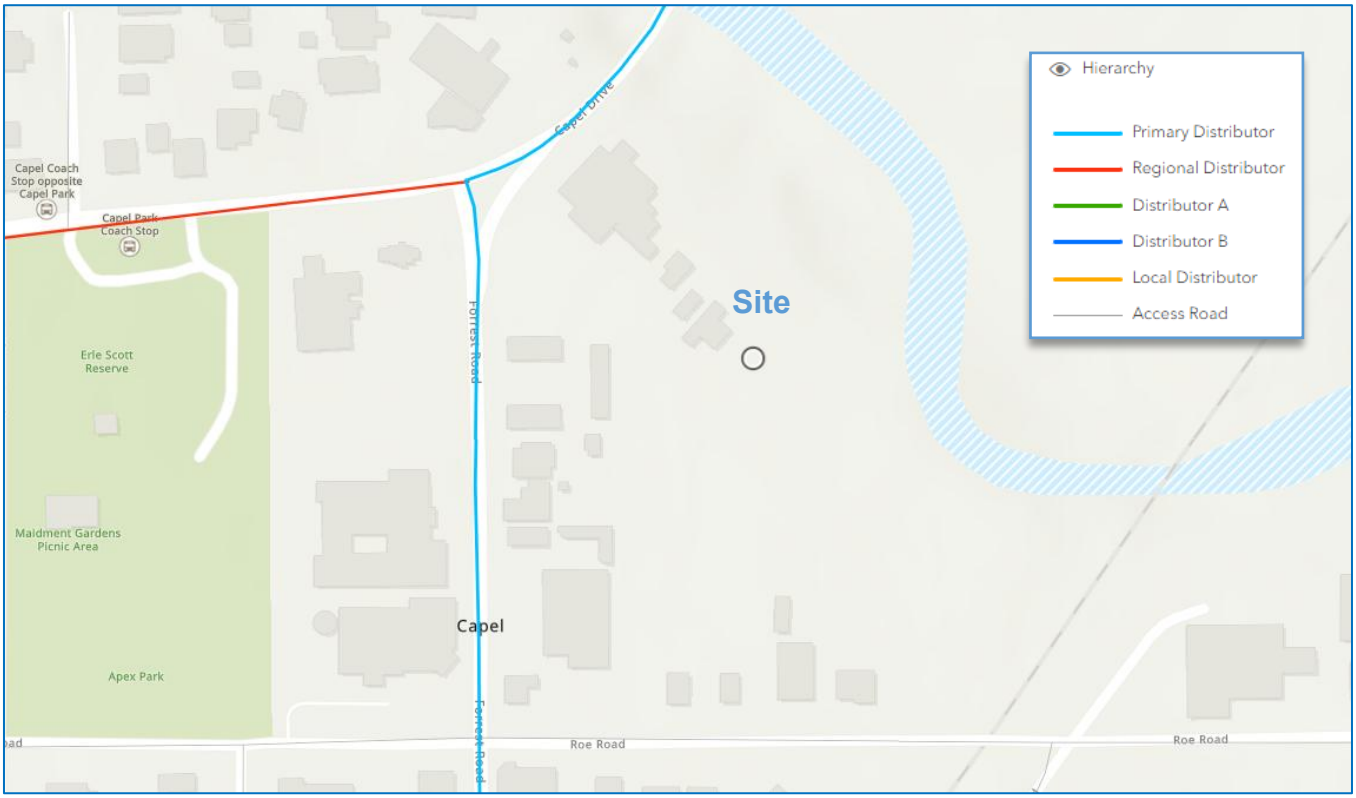

Figure 9: Main Roads WA road hierarchy plan

Source: Main Roads WA Road Information Mapping System (RIM)

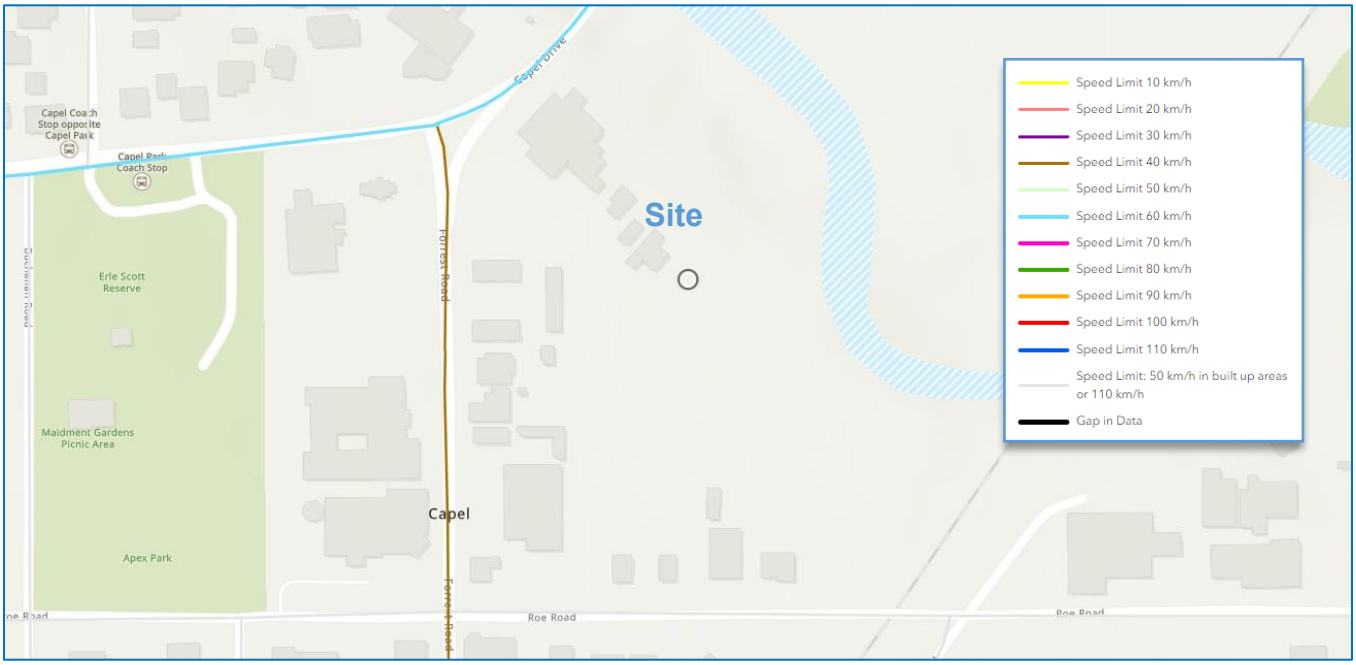

Figure 10: Main Roads WA road speed zoning plan

Source: Main Roads WA Road Information Mapping System (RIM)

ROAD HIERARCHY FOR WESTERN AUSTRALIA
ROAD TYPES AND CRITERIA (see Note 1)

CRITERIA	PRIMARY DISTRIBUTOR (PD) (see Note 2)	DISTRICT DISTRIBUTOR A (DA)	DISTRICT DISTRIBUTOR B (DB)	REGIONAL DISTRIBUTOR (RD)	LOCAL DISTRIBUTOR (LD)	ACCESS ROAD (A)
Primary Criteria						
1. Location (see Note 3)	All of WA incl. BUA	Only Built Up Area.	Only Built Up Area.	Only Non Built Up Area. (see Note 4)	All of WA incl. BUA	All of WA incl. BUA
2. Responsibility	Main Roads Western Australia.	Local Government.	Local Government.	Local Government.	Local Government.	Local Government.
3. Degree of Connectivity	High. Connects to other Primary and Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	Medium. Minor Network Role Connects to Distributors and Access Roads.	Low. Provides mainly for property access.
4. Predominant Purpose	Movement of inter regional and/or cross town/city traffic, e.g. freeways, highways and main roads.	High capacity traffic movements between industrial, commercial and residential areas.	Reduced capacity but high traffic volumes travelling between industrial, commercial and residential areas.	Roads linking significant destinations and designed for efficient movement of people and goods between and within regions.	Movement of traffic within local areas and connect access roads to higher order Distributors.	Provision of vehicle access to abutting properties
Secondary Criteria						
5. Indicative Traffic Volume (AADT)	In accordance with Classification Assessment Guidelines.	Above 8 000 vpd	Above 6 000 vpd.	Greater than 100 vpd	Built Up Area - Maximum desirable volume 6 000 vpd. Non Built Up Area – up to 100 vpd.	Built Up Area - Maximum desirable volume 3 000 vpd. Non Built Up Area – up to 75 vpd.
6. Recommended Operating Speed	60 – 110 km/h (depending on design characteristics).	60 – 80 km/h.	60 – 70 km/h.	50 – 110 km/h (depending on design characteristics).	Built Up Area 50 - 60 km/h (desired speed) Non Built Up Area 60 – 110 km/h (depending on design characteristics).	Built Up Area 50 km/h (desired speed). Non Built Up Area 50 – 110 km/h (depending on design characteristics).
7. Heavy Vehicles permitted	Yes.	Yes.	Yes.	Yes.	Yes, but preferably only to service properties.	Only to service properties.
8. Intersection treatments	Controlled with appropriate measures e.g. high speed traffic management, signing, line marking, grade separation.	Controlled with appropriate measures e.g. traffic signals.	Controlled with appropriate Local Area Traffic Management.	Controlled with measures such as signing and line marking of intersections.	Controlled with minor Local Area Traffic Management or measures such as signing.	Self controlling with minor measures.
9. Frontage Access	None on Controlled Access Roads. On other routes, preferably none, but limited access is acceptable to service individual properties.	Prefer not to have residential access. Limited commercial access, generally via service roads.	Residential and commercial access due to its historic status Prefer to limit when and where possible.	Prefer not to have property access. Limited commercial access, generally via lesser roads.	Yes, for property and commercial access due to its historic status. Prefer to limit whenever possible. Side entry is preferred.	Yes.
10. Pedestrians	Preferably none. Crossing should be controlled where possible.	With positive measures for control and safety e.g. pedestrian signals.	With appropriate measures for control and safety e.g. median/islands refuges.	Measures for control and safety such as careful siteing of school bus stops and rest areas.	Yes, with minor safety measures where necessary.	Yes.
11. Buses	Yes.	Yes.	Yes.	Yes.	Yes.	If necessary (see Note 5)
12. On-Road Parking	No (emergency parking on shoulders only).	Generally no. Clearways where necessary.	Not preferred. Clearways where necessary.	No – emergency parking on shoulders – encourage parking in off road rest areas where possible.	Built Up Area – yes, where sufficient width and sight distance allow safe passing. Non Built Up Area – no. Emergency parking on shoulders.	Yes, where sufficient width and sight distance allow safe passing.
13. Signs & Linemarking	Centrelines, speed signs, guide and service signs to highway standard.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs and guide signs.	Speed and guide signs.	Urban areas – generally not applicable. Rural areas - Guide signs.
14. Rest Areas/Parking Bays	In accordance with Main Roads' *Roadside Stopping Places Policy*.	Not Applicable.	Not Applicable.	Parking Bays/Rest Areas. Desired at 60km spacing.	Not Applicable.	Not Applicable.

Figure 11: Road types and criteria for Western Australia

Source: Main Roads Western Australia D10#10992

9 Public transport access

Capel is a small regional town located within the Shire of Capel. Unlike larger regional centres such as Bunbury or Busselton, Capel is not serviced by a conventional town bus network. The Public Transport Authority's TransRegional services do not extend into Capel, and there are no intra-town public bus services available.

The only form of public transport access is through TransWA regional coach services, which operate infrequently and are primarily intended for long-distance travel between Perth, Bunbury, Pemberton and other South West towns.

The absence of public transport in Capel is consistent with its settlement size, rural context and travel patterns. Residents and visitors are predominantly reliant on private vehicles, with local roads designed to accommodate this demand.

Capel functions as a low-density regional centre where private car ownership is the norm. The scale of the township does not generate sufficient demand to sustain local bus services.

The subject site is centrally located within Capel, providing convenient access by walking or cycling to local shops, schools and community facilities. For short-distance trips within the town, active transport modes remain a viable option.

Given that the development is expected to generate trips consistent with the car-oriented nature of the settlement, the absence of public transport will not create additional pressure on the road network beyond that which is already anticipated in a regional town context.

10 Pedestrian access

Information from online mapping services, Main Roads WA, Local Government, and site visits was collected to assess the pedestrian access for the proposed development.

10.1.1 Pedestrian facilities and level of service

Footpaths are provided on Cape Drive and Forrest Road adjacent to the site. Pedestrian crossing facilities, including kerb ramps and refuge islands, are provided at nearby intersections, which promotes improved access for bicycles, wheelchairs and prams.

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provide warrants for installing pedestrian priority crossing facilities. This is based on the volume of traffic as the key factor determining if pedestrians can safely cross a road. The guidelines recommend pedestrian priority crossing facilities be considered once the peak hour traffic exceeds the volumes detailed in Table 5.

The traffic volumes in this table are based on a maximum delay of 45 seconds for pedestrians, equivalent to Level of Service E. The pedestrian crossing facilities on adjacent roads near the site are sufficient and within the traffic volume thresholds.

Table 5: Traffic volume thresholds for pedestrian crossings

Road cross-section	Maximum traffic volumes providing safe pedestrian gap
2-lane undivided	1,100 vehicles per hour
2-lane divided (with refuge)	2,800 vehicles per hour
4-lane undivided*	700 vehicles per hour
4-lane divided (with refuge)*	1,600 vehicles per hour

11 Bicycle access

Information from online mapping services, Department of Transport, Local Government, and/or site visits was collected to assess bicycle access for the proposed development.

11.1 Bicycle network

The cycling network within Capel is limited, reflecting the small-town and low-density character of the settlement. The townsite is relatively flat, which is favourable for cycling, and the compact urban form allows most key destinations such as shops, schools and community facilities to be reached within a short riding distance.

The existing local street network operates at low traffic volumes and has posted speed limits of 50km/h or less, providing a generally safe and comfortable environment for cyclists. Forrest Road through the town centre is subject to a 40 km/h limit, which further supports shared use by cyclists and vehicles in that location.

Shared paths are provided in limited sections, particularly adjacent to parks, schools and community facilities, and footpaths along Capel Drive offer informal opportunities for younger and less-confident people to travel by bicycle.

11.2 Bicycle parking and end of trip facilities

As detailed in Section 4.4 of this report, extensive bicycle parking facilities are provided for all components of the development. This includes 8 e-bikes available for hire for short stay guests, who may not bring their own bicycles when travelling to Capel.

The provision of these facilities, combined with the short cycling distances to local shops, parks, schools and community attractions within Capel, will encourage residents and visitors to adopt cycling as a convenient mode of transport. This integration of high-quality end-of-trip facilities with the town's compact layout supports active transport for most local trips and reduces reliance on private vehicle use for short journeys.

11.3 Sustainable transport catchment

As detailed in Figure 12, the sustainable transport catchment encompasses a wide range of local destinations including schools, parks, community facilities, shops, and coastal attractions such as Peppermint Grove Beach.

These destinations can be comfortably accessed within a short 20-minute cycling or micromobility journey, meaning that a considerable proportion of daily trips can be undertaken without reliance on private vehicles.

The provision of extensive bicycle parking and e-bikes within the development ensures that residents, guests and staff are well supported to take advantage of these opportunities. Importantly, this outcome is consistent with State Planning Policy objectives to encourage active and sustainable transport, reduce car dependency, and integrate land use with transport choices.

The growing role of e-bikes and micromobility devices also broadens the accessibility of cycling by extending the effective catchment for older users and those less able to travel longer distances on a conventional bicycle.

The site is therefore well placed to promote active transport for local trips and remains future-proofed to benefit from any improvements to the regional cycling network.

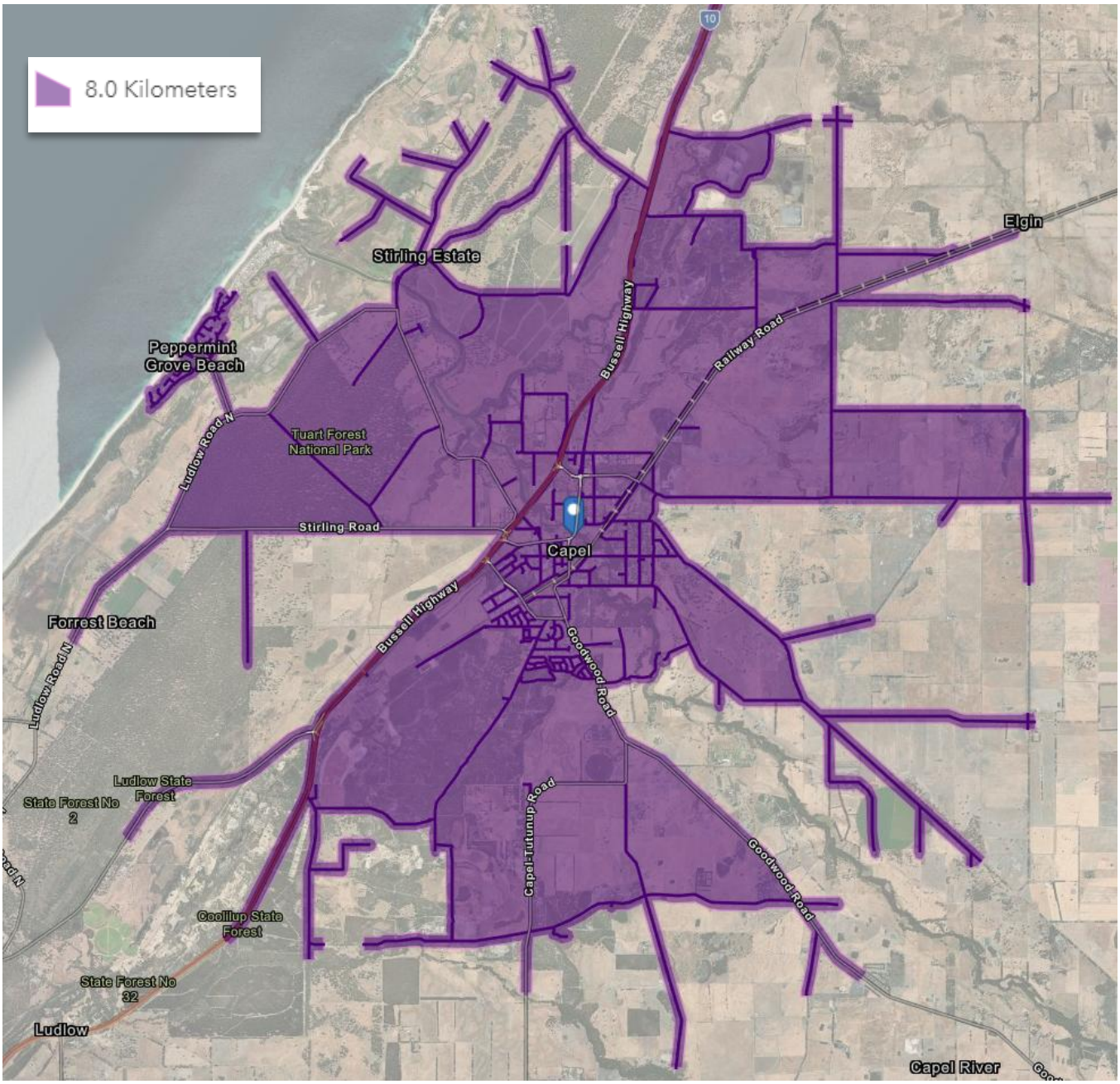

Figure 12: Cycling and micro-mobility catchment

12 Site specific issues

No additional site-specific issues were identified within the scope of this assessment.

13 Safety issues

The five-year crash history in the vicinity of the site was obtained from Main Roads WA. As detailed in Figure 13, one crash was recorded at the intersection of Capel Drive and Forrest Road in the last five years. The detailed crash history is presented in Table 6.

The moderate traffic generation of the proposed development is unlikely to impact traffic safety in the area.

Figure 13: 5-year crash map in the locality (2020-2024)

Source: MRWA crash mapping tool

Table 6: 5-year crash history in the locality (2020-2024)

Severity	No.	%
Fatal	0	0
Hospital	0	0
Medical	0	0
PDO Major	1	100.00
PDO Minor	0	0

Year	No.	%
2024	1	100.00

Nature	No.	%
Head On	0	0
Hit Animal	0	0
Hit Object	0	0
Hit Pedestrian	0	0
Non Collision	0	0
Not Known	0	0
Rear End	0	0
Right Angle	0	0
Right Turn Thru	0	0
Sideswipe Opposite Dirn	0	0
Sideswipe Same Dirn	1	100.00

Light	No.	%
Dark - Street Lights Not Provided	0	0
Dark - Street Lights Off	0	0
Dark - Street Lights On	0	0
Dawn Or Dusk	0	0
Daylight	1	100.00
Not Known	0	0

Conditions	No.	%
Dry	1	100.00
Not Known	0	0
Wet	0	0

Alignment	No.	%
Curve	0	0
Not Known	0	0
Other / Unknown	1	100.00
Straight	0	0

Total	1

14 Conclusion

This Transport Impact Statement has been prepared by Urbii on behalf of Ocean Gardens Pty Ltd with regards to the proposed mixed-use development, located at 96 Capel Drive, Capel.

The subject site is situated at the corner of Capel Drive and Forrest Road. The site is within Capel Town Centre and is surrounded by a mix of residential, commercial, civic and retail land uses.

It is proposed to develop the site into a mixed-use development providing short stay accommodation, over 55s residential units and a mixed-use building with a commercial tenancy on ground level, with residential apartments on upper levels. The Capel Tavern will be retained and is outside the scope of the proposed development works.

The site features good connectivity with the existing road, cycling and walking network.

The traffic analysis undertaken in this report shows that the traffic generation of the proposed development is moderate (less than 100vph on any lane) and as such would have no material impact on the surrounding road network.

The proposed car parking provision meets the practical needs of the development.

The updated TIS reflects refinements made to the development layout following pre-lodgement consultation with Main Roads Western Australia (MRWA). In response to that advice, the parking and access design has been reviewed to ensure all activity is contained within the subject lot boundaries and to improve operational efficiency near the Forrest Road frontage. The on-street parking bay previously shown on Forrest Road has been removed to maintain clear sightlines for vehicles exiting the site.

A detailed queuing analysis of the short-stay car park entry gate was undertaken in accordance with AS2890.1 and demonstrated that queuing can be fully contained within the site under 95th-percentile peak-hour conditions. This confirms that entry operations will not obstruct Forrest Road or internal circulation associated with the Capel Tavern. To further enhance efficiency, the parking bays closest to the Forrest Road crossover have been allocated as staff-only parking, reducing vehicle turnover and potential conflict near the site entry.

The results of the updated analysis confirm that the revised layout provides adequate queuing capacity, maintains safe sightlines, and supports efficient internal circulation without requiring a redesign of the tavern car park. The proposed internal management measures address MRWA's traffic concerns and ensure that the development operates safely and effectively within the existing road network.

Overall, the findings of this Transport Impact Statement demonstrate that the proposed development can be accommodated within the capacity of the surrounding transport network, with no material impact on road safety or traffic operations. The proposal aligns with State and local planning objectives promoting sustainable and well-integrated transport outcomes and is therefore supported on traffic and transport grounds.

Appendices

Appendix A: Proposed development plans

DOEPEL MARSH architects

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ABN 73 883 655 197 W www.doepelmarsh.com.au

PROJECT NAME
MIXED USE DEVELOPMENT - CAPEL

ADDRESS
LOT 12, 28 & 165 CAPEL DRIVE, FORREST & ROE ROAD

PROJECT STATUS
DEVELOPMENT APPROVAL

DATE
31/10/2025 11:15:59 AM

TITLE
PROPOSED MASTERPLAN

0 5 10 20 50 100m
SCALE 1:500

24.034	
DA100	A

LEGEND

PARKING SCHEDULE

TAVERN

PARKING	PROVIDED
SERVICE (BUGGY PARKING)	01 BAY
PASSENGER VEHICLE (EXISTING) (INC. ACCESSIBLE)	28 BAYS (01 BAY)
MOTORCYCLE	03 BAYS
BICYCLE	2 BAYS

SHORT STAY

CARPARK E	PROVIDED
PASSENGER VEHICLE	36 BAYS
(INC. ACCESSIBLE)	(02 BAYS)
VISITOR/ SERVICE	02 BAYS
MOTOR BIKE/SCOOTER	04 BAYS
ADDITIONAL	**PROVIDED**
E- BIKES (STORAGE)	08 BAYS
BIKES (RESIDENT)	18 BAYS
BIKES (VISITORS)	04 BAYS
BUGGY	03 BAYS

CONTROLLED ACCESS

- G — CONTROLLED GATE (SECURE PEDESTRIAN GATE)
- G — EMERGENCY VEHICLE ACCESS GATE
- G — CONTROLLED GATE (SECURE VEHICLE MAIN ENTRY)
- B — BIKE PARKING
- VEHICULAR ROAD
- PEDESTRIAN / SHARED

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PROJECT NAME
MIXED USE DEVELOPMENT - CAPEL
ADDRESS
LOT 12, 28 & 165 CAPEL DRIVE, FORREST & ROE ROAD

PROJECT STATUS
DEVELOPMENT APPROVAL
DATE
31/10/2025 11:16:24 AM

TITLE
SHORT STAY- PARKING & PEDESTRIAN MOVEMENTS
SCALE 1:250

24.034
DA122
A

LEGEND

PARKING SCHEDULE

OVER 55'S

RES. PARKING	PROVIDED
CARPARK A	08 BAYS
CARPARK B	18 BAYS
CARPARK C	16 BAYS
CARPARK D	14 BAYS
MOTOR BIKE/SCOOTER	08 BAYS

CARPARK TR	PROVIDED
TRAILER	02 BAYS
CARAVAN	06 BAYS

CARPARK V	PROVIDED
WASTE TRUCK	01 BAY
VISITOR'S BAY (INC. ACCESSIBLE)	15 BAYS (02 BAY)
SERVICE BAY	01 BAY
BICYCLE	20 BAYS
RES. BICYCLE	52 BAYS (SPACE IN EACH STORE)
BUGGY (STORAGE)	16 BAYS
BUGGY (TEMP PARKING)	14 BAYS
(EACH UNIT HAS BUGGY PARKING PROVISION)	45 BAYS

ROAD HIERARCHY & PATHWAYS

- 2 WAY ROAD SYSTEM
- 2 WAY ROAD SYSTEM
- TRAFFICABLE 1.5m & 2.5m SHARED PATHWAYS
- 1.2m PRIVATE PATHWAYS
- BUGGY PARKING
- RESIDENT PARKING

CONTROLLED ACCESS

- G — CONTROLLED GATE (SECURE PEDESTRIAN GATE)
- G — EMERGENCY VEHICLE ACCESS GATE
- G — CONTROLLED GATE (SECURE VEHICLE MAIN ENTRY)
- B — BIKE PARKING
- X — SHARED BUGGY PARKING
- VEHICULAR ROAD
- PEDESTRIAN / SHARED

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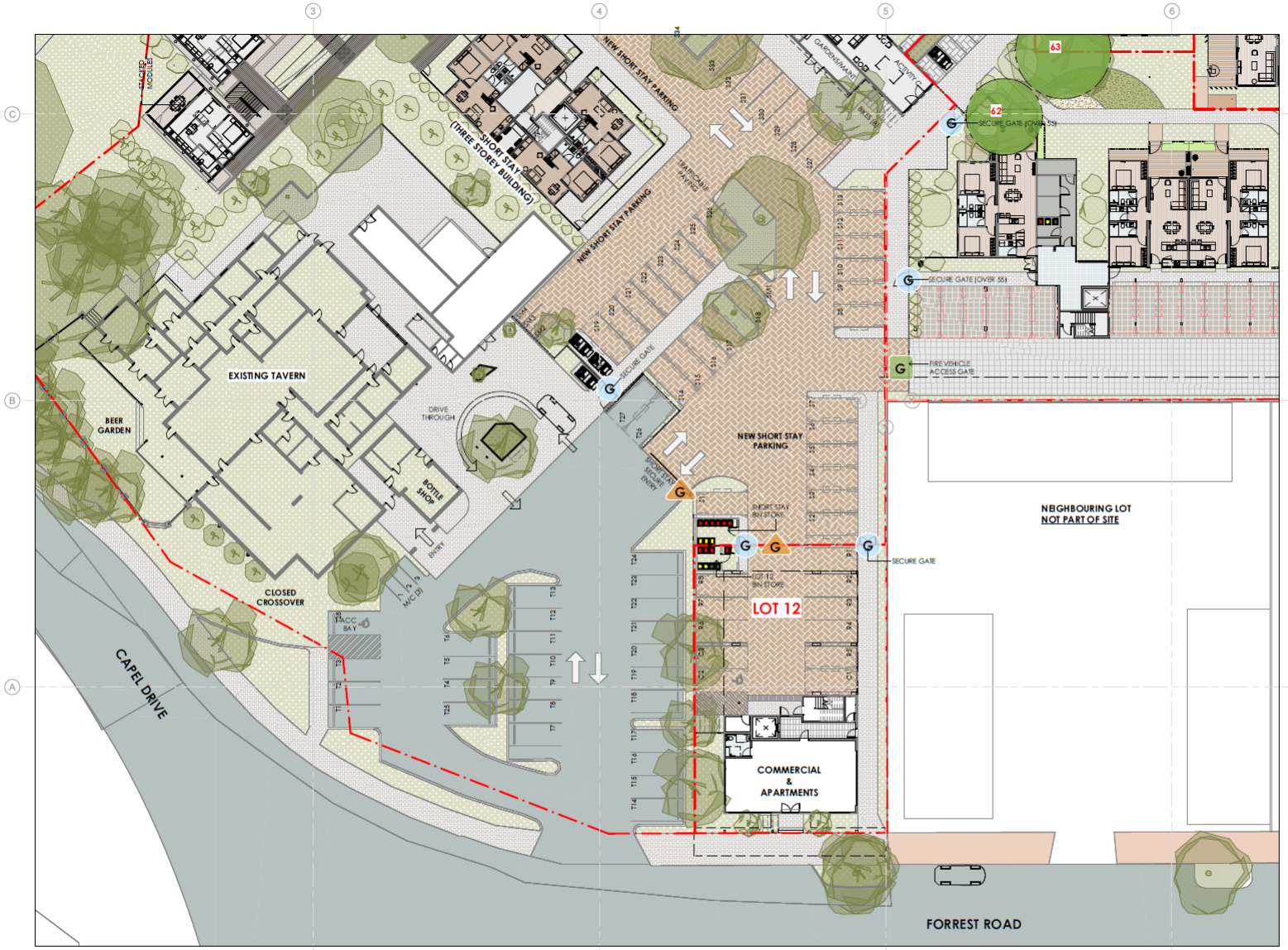
PROJECT NAME
MIXED USE DEVELOPMENT - CAPEL
ADDRESS
LOT 12, 28 & 165 CAPEL DRIVE, FORREST & ROE ROAD

PROJECT STATUS
DEVELOPMENT APPROVAL
DATE
31/10/2025 11:16:36 AM

TITLE
OVER 55 - PARKING & PEDESTRIAN
SCALE 1:400

24.034	
DA142	A



LEGEND

PARKING SCHEDULE

LOT 12 MIXED USE

CARPARK F	PROVIDED
COMMERCIAL CAR BAYS (INC. ACCESSIBLE)	03 BAYS (01 BAY)
RESIDENT CAR BAYS	08 BAYS
RESIDENT VISITOR'S BAY	RECIPRICOL
COMMERCIAL BICYCLE	01 BAYS
RESI VISITOR BICYCLE	03 BAYS
RESIDENTIAL BICYCLE	6+5* BAYS (* IN STORE)

CONTROLLED ACCESS

- G — CONTROLLED GATE (SECURE PEDESTRIAN GATE)
- G — EMERGENCY VEHICLE ACCESS GATE
- G — CONTROLLED GATE (SECURE VEHICLE MAIN ENTRY)
- B — BIKE PARKING
- VEHICULAR ROAD
- PEDESTRIAN / SHARED

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ADDRESS
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PROJECT STATUS
DEVELOPMENT APPROVAL
DATE
31/10/2025 11:16:42 AM

TITLE
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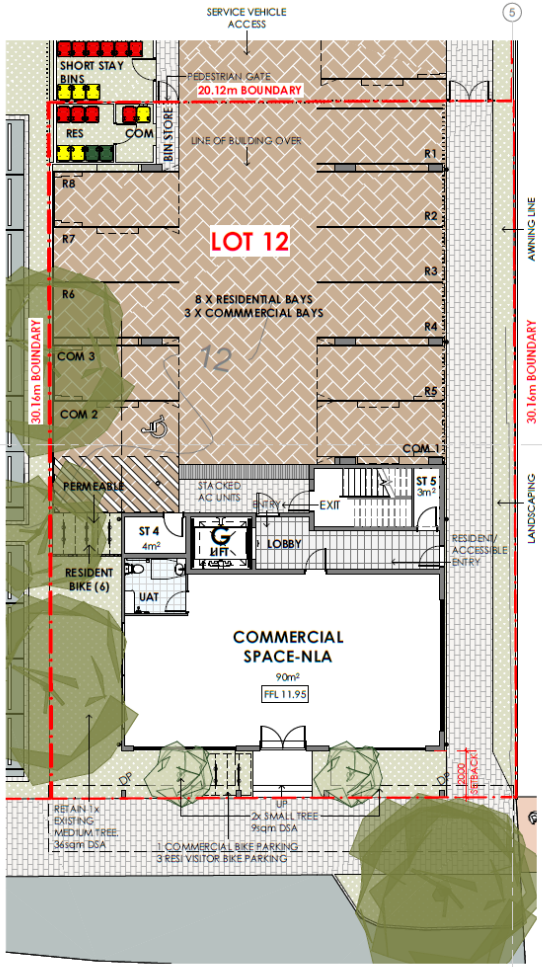
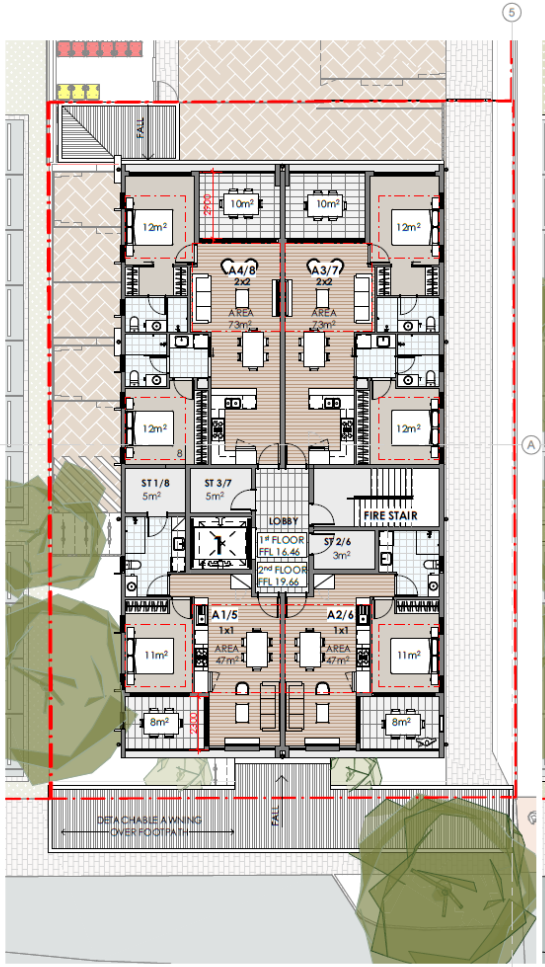
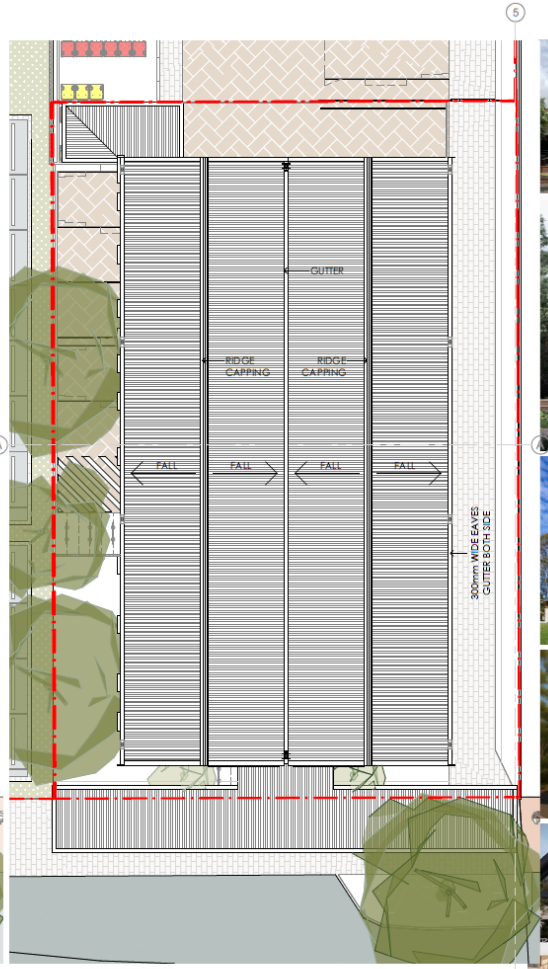
SCALE 1:200

24.034
DA160
A







FORREST STREET

1 SITE & GROUND FLOOR PLAN
SCALE: 1 : 100

2 FIRST & SECOND FLOOR PLAN
SCALE: 1 : 100

3 ROOF PLAN
SCALE: 1 : 100

DWELLING SUMMARY

TYPES	APT NUMBERS	TOTAL	STORE			
1 BED x 1 BATH	1, 2, 5, 6	4	1	2	5	6
			5m²	3m²	3m²	3m²
2 BED x 2 BATH	3, 4, 7, 8	4	3	4	7	8
			5m²	4m²	5m²	5m²

CAR PARKING REQUIREMENTS

COMMERCIAL	REQUIRED		PROVIDED	
90m²	2+1ACCESSIBLE PARKING		2+1ACCESSIBLE PARKING	
RESIDENTIAL	RESIDENT	VISITOR	RESIDENT	VISITOR
	8	1	8	0

RECIPROCAL AFTER- HOURS USE OF COMMERCIAL FOR RESIDENTIAL

BICYCLE REQUIREMENTS

COMMERCIAL	REQUIRED		PROVIDED	
	1		1	
RESIDENTIAL	RESIDENT	VISITOR	RESIDENT	VISITOR
	4	1	6	3

UNIT 1,3,7&8 HAVE SPACE FOR A BIKE IN THEIR STORE

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TITLE
LOT 12- MIXED USE DEVELOPMENT- CAPEL PLANS
0 2 5 10 20m
SCALE 1:100

24.034
DA161 **A**

Appendix B: Swept path diagrams

DOEPEL MARSH architects

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PROJECT STATUS
DEVELOPMENT APPROVAL

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TITLE
TRAFFIC SWEPT PATH ANALYSIS- (FIRE & RUBBISH TRUCKS)

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SCALE 1:500

24.034

DA103 **A**