Townsville Waterpark, Hotel and Beach Club Project

Preliminary Noise Assessment

BNC Planning

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Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
0.1	19 March 2025	Louisa Cheung	Logan Le Petit	Tim Trewin
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Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with BNC Planning (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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Appendix A Noise Contour Maps

1.0 Introduction

SLR Consulting Australia Pty Ltd (SLR) was engaged by BNC Planning Pty Ltd to undertake a preliminary noise impact assessment for the proposed Townsville Waterpark, Hotel and Beach Club Masterplan Project (the Project). The Project is located at 1-105 Racecourse Road, Cluden QLD 4811 with the sites locality shown in **Figure 1**.

This preliminary noise impact assessment has been undertaken to confirm that noise emissions from the proposed development can be controlled to the applicable limits found within the Townsville City Plan and The Queensland Environmental Protection (Noise) Policy.

Figure 1 Site locality

2.0 Proposed Description

2.1 The Project

The Project is located at 1-105 Racecourse Road, Cluden QLD, property address 1SP101275, adjacent to Cluden Racecourse. The current site is vacant and zoned ‘sport and recreation’ as per the Townsville City Plan, shown in **Figure 2**.

The Project is to comprise of the following proposed uses:

- Waterpark
- Commercial uses such as retail, fast food and tavern
- Residential accommodation
- Beach Club (entertainment).

The Project site is expected to operate 7-days a week with each use operating at varying hours. The proposed hours of operation will be 6:00 am to 6:00 pm for the water park and 9:00 am to 10:00 pm at the beach club indoor and outdoor with internal operations continuing until midnight. The fast-food joints are proposed to be operating 24-hours a day 7 days a week. Retail is expected to operate between 6:00 am to 10:00 pm.

The waterpark and beach club are designed to have a 3,000-person capacity.

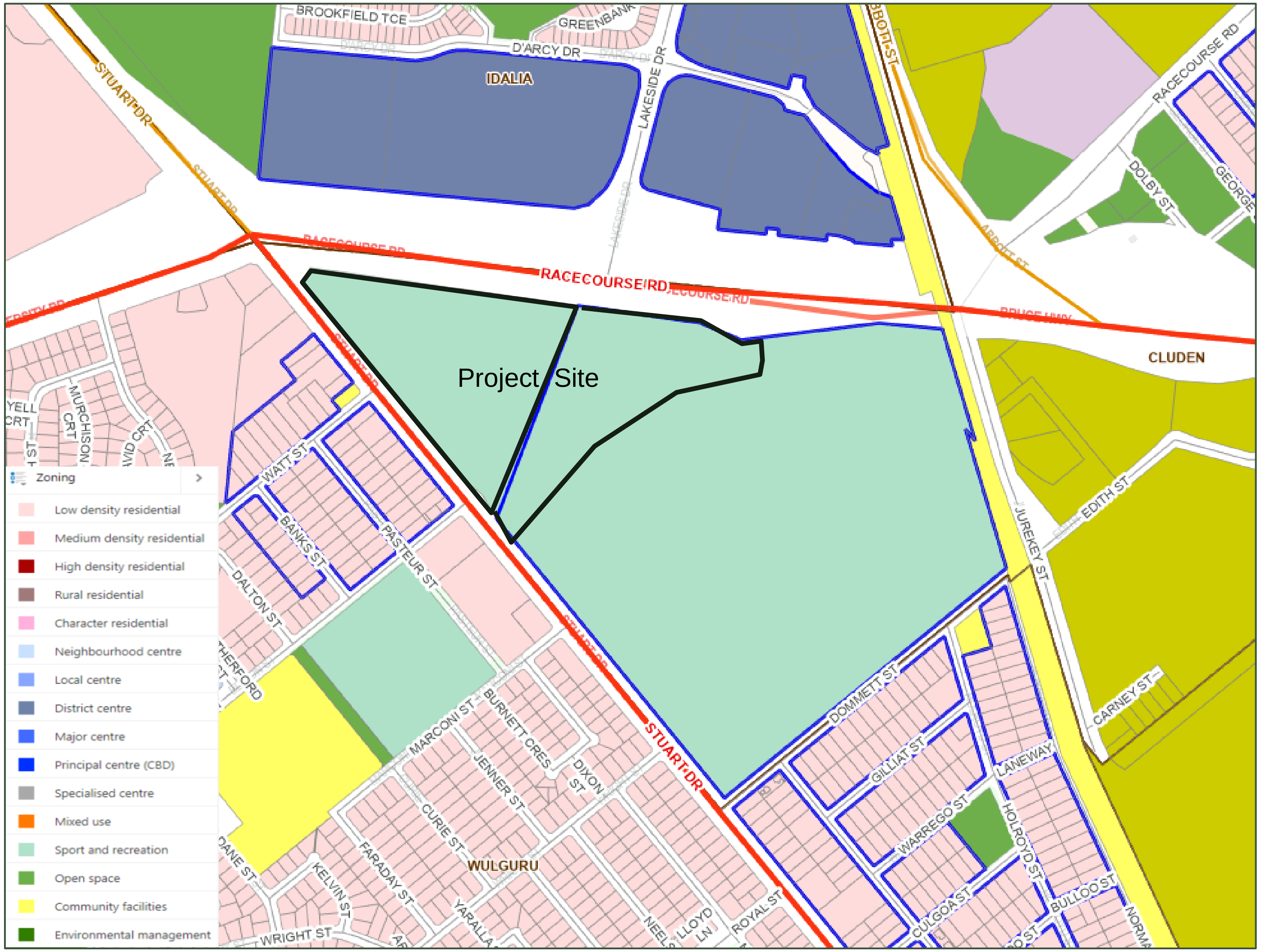
The Project is in ‘preliminary design stage’ and the exact details of the proposed land uses are subject to change. Development Site 1 and 2 are intended for commercial or retail development in the future.

The mixed use portion of the site is designed to be a 2 storey tavern with 12-15 storey residential development above. The rest of the building proposed on site are of maximum 2-storey height.

On site noise generating activities are expected to include patron vehicle movements, patron noise, amplified music, truck movements including delivery, mechanical plant and refuse collection.

The preliminary Project masterplan is shown in **Figure 3**.

Figure 2 Townsville City Plan Land Use Zoning



2407 TSV Hotel & Water Park

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Masterplan - Town Planning

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Shaun McCarthy 1 : 2000 @ A3

0 20 40 60 80 100m Scale 1:2000

2.2 Noise Sensitive Receptors

2.2.1 Residential Receptors

The nearest offsite noise sensitive receptors to the Project are the first row of existing residential receptors along Stuart Drive immediately opposite the proposed waterpark carpark and are located approximately 40 m from the southwestern boundary of the site. These noise sensitive receptors have been considered as the driver for noise compliance and have therefore been assessed to determine whether or not the Project complies with the adopted noise criteria.

The nearest residential noise sensitive receptors assessed are shown in **Figure 4** and outlined in **Table 1.**

Figure 4 Sensitive Receivers Location

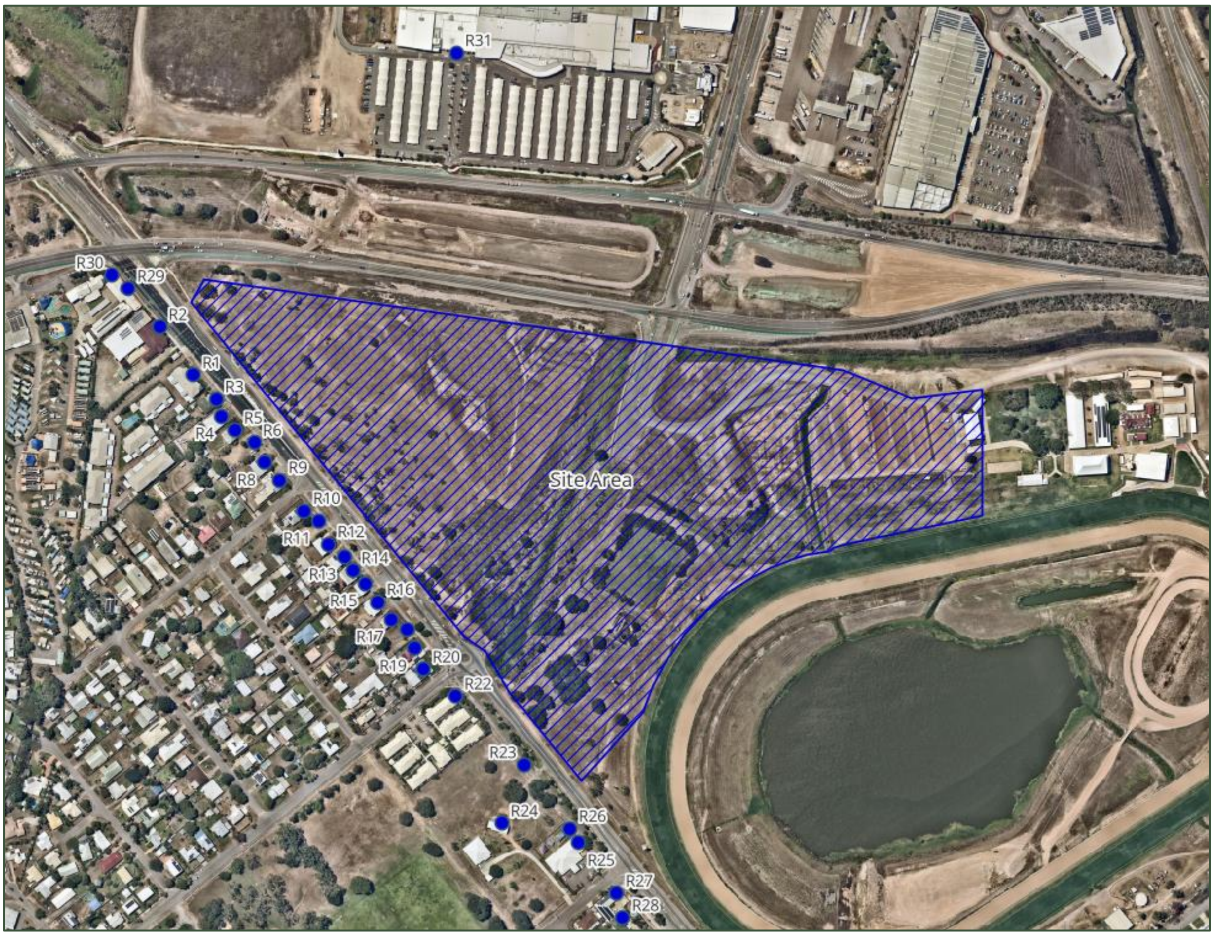


Table 1 Nearest residential sensitive (NSR) receptors

NSR ID	Address	Number of Storey
R1	Quadrant Apartments	2
R3	161 Stuart Drive	1
R4	163 Stuart Drive	1
R5	165 Stuart Drive	1
R6	167 Stuart Drive	1
R8	169 Stuart Drive	1
R10	173 Stuart Drive	1
R11	175 Stuart Drive	1
R12	175 Stuart Drive	2
R13	179 Stuart Drive	2
R14	181 Stuart Drive	2
R15	183 Stuart Drive	2
R16	185 Stuart Drive	1
R17	187 Stuart Drive	1
R18	189 Stuart Drive	1
R19	191 Stuart Drive	1
R20	U1/1 Edison Street	1
R22	195 Stuart Drive - Eureka Care Communities Wulguru	2
R23	201 Stuart Drive	2
R24	211 Stuart Drive	1
R32	Residential Houses at Darcy Drive	1

2.2.2 Commercial Receptors

The nearest identified commercial receptors are described in the **Table 2** and shown in **Figure 4**.

Table 2 Nearest commercial sensitive receptors

NSR no.	Address	Number of Storey
R2	Fairfield Baptist Church	2
R9	171 Stuart Dr- Fire Station	1
R25 & R26	217 Stuart Dr- Guppy's Early Learning Centre – Wulguru	1
R31	Fairfield Central Commercial Centre	1

2.2.3 Other Receptors

Other nearest identified receptors (hotels or accommodations) are described in the Table 3and shown in **Figure 4**.

Table 3 Other nearest sensitive receptors

NSR no.	Address	Number of Storey
R27 & R28	219 Stuart Dr - Raceview Lodge	2
R29 & R30	149 Stuart Dr - Townsville Holiday Park & Motor Inn	2

3.0 Existing Environment

In absence of noise monitoring conducted during the preliminary stage of the Project, SLR has instead referred to the acoustic report part of Development Application MCU22/0035 dated 12 September 2022 for nearby noise monitoring data captured in 2021 at Dommett Street, to the south of Cluden Racecourse, to quantify the existing noise environment. It should be noted that SLR expects that the existing noise environment to be equal to or have increased since the 2021 monitoring. **Table 4** below summarises the noise monitoring results for reference.

Table 4 Summary of measured 15-minute ambient noise levels, 14th to 20th October 2021

Parameter	Period	Noise Level (dBA)
L_{A1}	Average Daytime (7:00 am-6:00 pm)	62
	Average Evening (6:00 pm-10:00 pm)	57
	Average Night (10:00 pm-7:00 am)	55
L_{Aeq}	Log Average Daytime (7:00 am-6:00 pm)	55
	Log Average Evening (6:00 pm-10:00 pm)	51
	Log Average Night (10:00 pm-7:00 am)	50

The ambient acoustic environment on site was characterised by frequent road traffic events on Dommett Street, road traffic on Stuart Drive to the West, freight rail events from the Queensland Rail corridor at the end of Dommett Street, 300 m to the east and noise from activities at the existing Cluden Park Racecourse.

The ambient acoustic environment at the proposed site is expected to be similar with more traffic noise contribution from Racecourse Road and less contribution from freight rail events from the Queensland Rail corridor. The existing acoustic environment is also expected to consist of noise from Cluden Park Racecourse and distant operational noise from Fairfield Central Shopping Centre.

4.0 Noise Assessment Criteria

Under the current Townsville City Plan (Version 2024/01), the residential sensitives receivers are zoned as low density residential while the commercial sensitive receivers are zoned as industrial.

The site is situated in a sport and recreation zone. Under Townsville City Plan 6.4.1 Sports and recreation zone code Table 6.4.1.3, no acceptable outcome is nominated for noise. The two tables are extracted below:

6.4.1 Sports and recreation zone

Table 6.4.1.3-Accepted development subject to requirements and assessable development (Part)

Performance outcomes	**Acceptable outcomes**
For assessable development	
Amenity	
PO12 Development maintains a high level of general amenity within the site and for surrounding areas, having regard to: 1. noise; 2. hours of operation; 3. traffic; 4. visual impact; 5. signage; 6. odour and emissions; 7. lighting; 8. access to sunlight; 9. privacy; and 10. outlook. **Editor's note—**Applicants may be required to engage specialists to provide detailed investigations into the above matters in order to demonstrate compliance with this performance criterion.	No acceptable outcome is nominated.

4.1 Townsville City Plan, SC6.4.19 Noise and Vibration

In order to address the information request from Council, in particular item 3 – noise impact assessment, to demonstrate compliance with the Townsville City Plan, this assessment is assessed against Townsville City Plan, SC6.4.19 Noise and Vibration. The section states the following criterion.

4.1.1 Intrusive Noise Level

Intrusive noise levels require that $L_{Aeq,15\ minute}$ noise levels from the site during the relevant operational periods (i.e., day, evening and night) do not exceed the rating background level by more than 5 dB. The intrusive criteria outlined was established primarily to deal with individual development applications. In the case of multiple developments, such as a new industrial area, a strategic approach should be implemented to ensure equitable share of the remaining available allocation of noise for each industrial development is achieved.

4.1.2 Amenity Noise Level

Assessment of amenity is based on noise level specific to the land use as per the table ‘maximum Recommended Amenity of Noise Levels’. The ambient noise level within an area from all industrial noise sources combined should remain below the recommended amenity noise levels where feasible and reasonable specified in Table SC6.4.19.1. To ensure that industrial noise levels (existing and new) remain within the recommended amenity noise levels for an area, the amenity noise level applies for each new source of industrial noise as follows:

Amenity Noise level for industrial developments = recommended amenity noise level listed in Table SC6.4.19.1 minus 5 dBA.

Table SC6.4.19.1 – Maximum Recommended Amenity of Noise Levels for All Sources

Receiver	Noise Amenity Area	Time of Day	Maximum recommended amenity noise level for all sources $L_{Aeq\ 15\ minutes}$, dBA
Residence At most-affected point on or within the residential property boundary or, within 30 m of the residence	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55
		Evening	45
		Night	40
	Urban (in area where traffic flow is continuous and noise from industrial sources is inaudible or difficult to measure due to a high level of road traffic noise, and where the LAeq(period), traffic noise level is more than 10dB above the amenity noise criteria levels, the amenity noise criteria is replaced by LAeq, (period), traffic minus 10dB)	Day	60
		Evening	50
		Night	40
Hotels, motels, caretakers’ quarters,	See column 4	See column 4	5 dBA above the recommended amenity

Receiver	Noise Amenity Area	Time of Day	Maximum recommended amenity noise level for all sources $L_{Aeq\ 15\ minutes}$, dBA
holiday accommodation, permanent resident caravan parks			noise level for a residence for the relevant noise amenity area and time of day.
Commercial premises	All	When in use	65
Industrial premises	All	When in use	70
Industrial interface (applicable only to residential noise amenity areas)	All	All	Add 5 dBA to recommended noise amenity area

4.1.3 Project Noise Trigger Level

The project noise trigger level is the lower (i.e., the more stringent) value of the intrusiveness noise level and amenity noise level. The L_{Aeq} is determined over a 15-minute period for both intrusive and amenity noise levels and over an assessment period (day, evening and night). To standardise the time period for the intrusive and amenity noise levels, this policy assumes that the $L_{Aeq,15\ minutes}$ will be taken to be equal to the L_{Aeq} period +3 dB, unless robust evidence is provided for an alternative approach for the particular project being considered.

4.1.4 Potential For Sleep Disturbance

The potential for sleep disturbance from maximum noise level events from a premises during the night-time period needs to be considered, Sleep disturbance is considered to be both awakenings and disturbance to sleep stages,

LAmax assessment only applies to 'specified noise sources' which are defined as impact noises such as; hammering, loading/unloading, dropping items, beepers, alarms, bells, phones, sirens, power tools, valve releases, air brakes, door slamming, however, noting people noise and vehicle pass-by noise (engine, exhaust, induction, tyres) are specifically excluded. Where the subject development can satisfy the following three maximum noise level event trigger levels no additional assessment or evaluation of sleep disturbance is required:

(a) $L_{Aeq,15min}$ 40 dBA 1 metre from the façade or the existing rating background level plus 5 dB, whichever is the greater.

(b) The arithmetic average of the maximum levels from up to 15 single events over a given night-time period L_{AFmax} 52 dBA 1 metre from the façade or the existing rating background level plus 15 dB, whichever is the greater.

(c) The absolute highest L_{AFmax} 60 dBA 1 metre from the façade or background level plus 15 dB, whichever is the greater.

4.1.5 Project Specific Noise Criteria

In absence of recent background noise monitoring due to the preliminary design stage of the Project, the noise assessment has referenced previous noise monitoring data captured in 2021 by SLR nearby the Project site to quantify the existing environment (refer to **Section 3.0**).

The Project site and surrounding noise sensitive receptors are located adjacent to a transport noise corridor, being Racecourse Road (governed by Department of Transport and Main Roads, TMR), as well as, Stuart Drive and other surrounding commercial uses, which is expected to elevate the background noise onto the surrounding community.

The adopted noise amenity level for the Project has been classed as suburban and therefore, the adopted noise assessment criteria for the Project is summarised in **Table 5**.

Table 5 Project specific noise criteria under SC6.4.19

Usage	Time of day	Trigger Level, $L_{Aeq\ 15\ minutes}$, dBA	LAmax	Reference
Residential (Noise amenity area – Suburban)	Day	55	--	Suburban
	Evening	45	--	Suburban
	Night	40	60dBA	Suburban and absolute max
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	Day	60	--	5 dBA above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day.
	Evening	50	--	
	Night	45	60dBA	
Commercial premises (When in use)	Day/ evening/ night	60/56/55	--	Intrusive level (background +5) is lower than amenity level.

4.2 Environmental Protection (Noise) Policy 2019

Noise from commercial and industrial activity is commonly regulated by the Queensland Environmental Protection (Noise) Policy 2019 (EPP Noise). The Acoustic Quality Objectives (AQO) from the EPP Noise have been applied as the assessment criteria for noise emissions associated with the Project site.

Where the overall noise levels are above the AQO noise limits outlined in **Table 6**, from all sources excluding road and rail transport noise, it triggers the investigation of reasonable and practicable measures to maintain and preserve acoustic amenity and health and wellbeing.

Table 6 Acoustic quality objectives for sensitive receptors

Sensitive receptor	Time of day	Acoustic Quality Objectives[2], dBA			Environmental value
		$L_{Aeq,adj,1hr}$	$L_{A10,adj,1hr}$	$L_{A1,adj,1hr}$	
Residence (outdoors)	Daytime and evening	50	55	65	Health and wellbeing
	Night-time	37[1]	42[1]	47[1]	Health and wellbeing, in relation to the ability to sleep

Sensitive receptor	Time of day	Acoustic Quality Objectives[2], dBA			Environmental value
		$L_{Aeq,adj,1hr}$	$L_{A10,adj,1hr}$	$L_{A1,adj,1hr}$	
Residence (indoors)	Daytime and evening	35	40	45	Health and wellbeing
	Night-time	30	35	40	Health and wellbeing, in relation to the ability to sleep
Commercial and retail activity (for indoors)	When the activity is open for business	45 indoor 52 outdoor[1]	-	-	Health and wellbeing, in relation to the ability to converse
Childcare centre or kindergarten (for indoors)	When open for business, other than when the children usually sleep	35 indoor 42 outdoor[1]	-	-	health and wellbeing
Childcare centre or kindergarten (for indoors)	when the children usually sleep	30 indoor 37 outdoor[1]	-	-	health and wellbeing, in relation to the ability to sleep
School or playground (for outdoors)	when the children usually play outside	55	-	-	health and wellbeing, and community amenity

Source Environmental Protection (Noise) Policy 2019.

1 As stated in Noise and vibration—EIS information guideline, an outdoor to indoor attenuation value of 7dB, which is appropriate for typical Queensland buildings with open windows, is used to calculate the outdoor objectives from the indoor objectives.

The daytime & evening outdoor AQO and corrected night-time outdoor AQO will be adopted in the following assessment as outlined below:

- Dwelling (outdoor) daytime/evening sound level of $L_{Aeq,Adj,1hr}$ 50 dBA, $L_{A10,Adj,1hr}$ 55 dBA and $L_{A1,Adj,1hr}$ 65 dBA (considering windows open).
- Dwelling (outdoor) night-time sound level of $L_{Aeq,Adj,1hr}$ 37 dBA, $L_{A10,Adj,1hr}$ 42 dBA and $L_{A1,Adj,1hr}$ 47 dBA (considering windows open).
- Commercial (outdoor) sound level when in use of $L_{Aeq,Adj,1hr}$ 52 dBA (considering windows open).
- Childcare (outdoor) sound level outside the building when in use of $L_{Aeq,Adj,1hr}$ 37 dBA, considering windows open. $L_{Aeq,Adj,1hr}$ 55 dBA adopted for the outdoor play area.

5.0 Noise Assessment Methodology

To assess the operational noise impacts from the proposed development, a SoundPLAN (v8.2) computer noise model was developed to predict airborne noise levels at the identified sensitive receptors. SoundPLAN is a software package which enables compilation of a sophisticated 3D computer model comprising a digitised ground map (containing ground contours), the location of critical noise sources on site and their acoustic sound power levels, ground cover, shielding by barriers and/or adjacent buildings, atmospheric information and the location of sensitive receptors for assessment purposes.

The model considers the spectral composition of the sound sources, distance attenuation, ground topography, ground absorption, air absorption, building/barrier screening, sound reflection effects and meteorological conditions. The noise propagation algorithm described in ISO 9613-2:2024 Acoustics — Attenuation of sound during propagation outdoors — Part 2: General method of calculation as implemented within SoundPLAN.

Ground absorption coefficient for different ground surfaces utilised within the noise model are defined below:

- For all the development area, water bodies trafficable areas and roads, a 'hard surface' absorption coefficient of 0 has been used.
- For all other areas, the model has assumed a ground absorption of 1 since the remaining areas are predominately 'soft ground'.

The noise modelling details are discussed in the following sections.

5.1 Digital Elevation Model (DEM)

Topographic contours were imported into the model. These contours were created using Queensland Government provided LiDAR survey from 2018.

5.2 Noise Source Inputs and Assumptions

The design of the Project is yet to be finalised (preliminary stage), therefore, this preliminary noise assessment has made the following assumptions in the noise model based on the information provided to date.

The operation and site activities described in **Section 2.1** have been modelled as a series of noise sources and assessed in either of the following operational periods being day, evening and night-time scenario's.

The proposed hours of operation assessed for the Project are:

- All areas of the Project site are expected to operate 7-days a week.
- Waterpark - 6:00 am to 6:00 pm (general hours from 9:00 am to 6:00 pm with occasion activities at wave pool from 6:00 am to 9:00 am),
- Beach Club - 9:00 am to midnight and 9:00 am to 10:00 pm at the VIP area.
- Fast food – 24-hours.
- Commercial/Retail - 6:00 am to 10:00 pm

The two (2) development site land uses are not yet known at the time of the preliminary noise assessment; however, it is envisioned that they will consist of commercial land use. Therefore, the noise assessment has assumed truck movements around the rear boundary of each site, assuming there will be unloading and loading of deliveries. The detailed noise assessment will be required to consider the noise emissions further from these development sites once the proposed uses are known.

The waterpark detail is preliminary in nature and has assumed a maximum waterslide height of up to 5.0 m, with up to five waterslides reaching this height. The noise model has considered patron 'excitement' noise from joy at the top of the waterslides in conjunction with general waterpark patron noise.

Table 7 Noise sources – patron noise from water park and VIP zone

Item	Modelled Occurrence	Source height	Sound power level L_{WA} per item, dBA
Patron noise at water park (area source)	100% during normal operation hours (9:00 am to 6:00 pm) 20% during pre- operation hours (6:00 am to 9:00 am)	1.5 m	95 L_{WAeq} 100 L_{WAMax} (Rumble 2008)
Patron's excitement noise at Waterslides (elevated point sources)	Averaged 2s per patron, 355 persons at design capacity at each location	5.0 m	105 L_{WAeq}, very loud voice effort (SoundPlan Library)
VIP area live entertainment (area source)	100% during operation hours (9:00 am to 10:00 pm)	1.5 m	95 L_{WAeq}
Patron with background music at Beach Club (area source, indoor)	100% during operation hours (9:00 am to 12 midnight)	1.2 m (seated position)	82 L_{WAeq} at indoor (SoundPlan Library)
Note: Noise level for patron noise for the waterpark is reference to the noise impact assessment report (Rumble 2008) for the Aussie Worth Redevelopment on the Sunshine Coast.			

The assumed site traffic includes the patrons parking and passenger vehicle movements within the development, deliveries and servicing and waste collection. The assumptions are summarised in **Table 8**.

Table 8 Noise sources – site traffic

Item	Modelled Occurrence	Source height	Sound power level L_{WA} per item, dBA
Slow moving car (line source)	100% of time between 7:00 am to 10:00 pm 50% of time thereafter	0.5 m	84
Car parking (including car door close and car start) (point source)	10 seconds per 15-minute period/40 seconds per hour	0.5 m	65
Delivery Truck (line source)	20% of time between 7:00 am to 6:00 pm	1.5 m	98
Bin truck (line source)	20% of time between 7:00 am to 6:00 pm	1.5 m	95

The Project site is expected to include a fast-food outlet and therefore, two speaker boxes have been considered at the drive-thru of the fast food outlet.

Sound power levels are shown in **Table 9**. Noise data obtained from the SLR in-house source noise measurement database.

Table 9 Noise sources – speaker box at fast food outlet

Item	Modelled Occurrence	Source height	Sound power level L_{WA} per item, dBA
Drive thru speaker box (point source)	40% of the time between 7:00 am to 10:00 pm 20% of the time between10:00 pm to 7:00 am	0.5 m	71

No specific mechanical plant selections have been provided for the project at this stage. Mechanical plant items have therefore been modelled based on experience with similar previous applications. The noise level of major mechanical plant is determined as limiting sound power from the modelling. The noise levels of other mechanical plants are either from reference catalogue, industrial guidelines or SLR database and summarised in **Table 10**. The assumed mechanical plant operation pattern is summarised in **Table 11**.

Table 10 Mechanical plant sound power levels

Noise Source	Location	Quantity	Sound power level L_{WA} per item, dBA
Major Mechanical Plant	Roof top of buildings and exterior of water park	2 on each building	93 (limiting sound power)
VRV outdoor units	External wall/ Roof	1 at each Fast food outlet	83 (reference catalogue)
Kitchen Exhaust Fan	Roof	2 at each Fast food outlet	70 (AAAC)
Toilet Exhaust Fan	Walls / Roof	1 at each Fast food outlet	65 (AAAC)
Refrigeration Condenser	Roof	1 at each Fast food outlet	85 (SLR database)

Modern mechanical plants are considered to be free from intrusive characteristics at distanced receivers. Therefore, no tonality or impulsiveness adjustment were applied to predicted noise levels.

Table 11 Mechanical plant operation pattern

Noise Source	Building/Usage	Modelled Operation Pattern
VRV outdoor units (reference catalogue) & Mechanical Plant	All	100% 7:00 am to 7:00 pm 40% 7:00 pm to 10:00 pm 10% 10:00 pm to 7:00 am
Kitchen Exhaust Fan (AAAC)	All	100% during opening time
Toilet Exhaust Fan (AAAC)	All	100% during opening time
Refrigeration Condenser (SLR database)	All	100% 7:00 am to 6:00 pm 40% 6:00 pm to 10:00 pm 10% 10:00 pm to 7:00 am

Indicative locations of the assessed noise sources are shown in **Figure 5** and a 3D noise model graphic is shown in **Figure 6** (for example).

Figure 5 Locations of noise sources

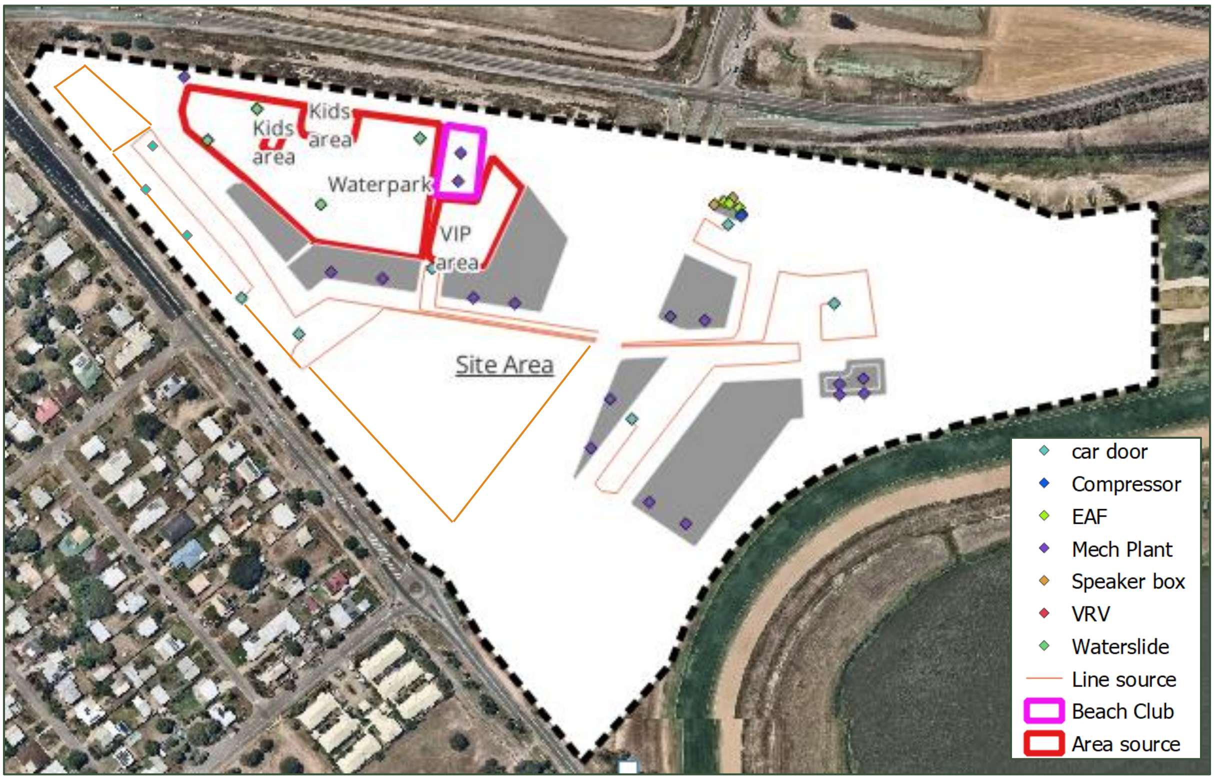
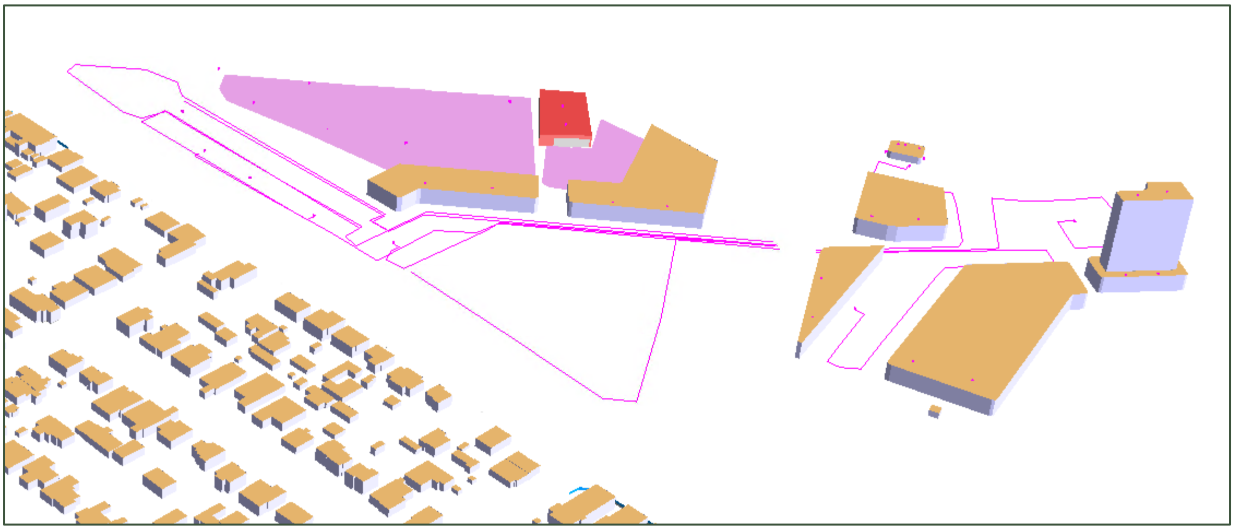


Figure 6 3D Noise Model Overview (Example)



Note the 3-D terrain model is 'hidden' in the above image.

6.0 Noise Assessment Results

The following sections presents the noise levels predicted at each identified noise sensitive receptors and predicted noise contour maps are included in **Appendix A**.

The $L_{Aeq,1hr}$ was modelled in all scenarios and the $L_{A01,1hr}$ has conservatively been modelled in SoundPLAN as the L_{Amax}. For all events occurring during a 15-minute period were also then extrapolated to a 1-hour period to represent the worst scenarios.

6.1 Predicted Noise Levels Considering Patron's Excitement (Worst-case, No Barrier)

Table 12 presents the predicted noise levels from the operation of all sites with the inclusion of elevated patron noise 'from excitement' at the waterpark. This is considered to be the 'worst-case' scenario, which includes excessive patron noise while enjoying the water park facilities (e.g. going down waterslides). Predictions focus on L_{Aeq} and L_{Amax} metrics. Where compliance is achieved for these, compliance is also expected to L_{A1} and L_{A10} metrics.

Table 12 Predicted noise levels with patron's excitement

NSR ID & Floor	Usage	Noise Criteria	$L_{Aeq,T}$			LAmax
			Day	Evening	Night	
25	Childcare	EPP 2019	36	23	21	44
26	Childcare outdoor play area	$L_{Aeq,Adj,1hr}$ 37 dBA $L_{Aeq,Adj,1hr}$ 55 dBA at outdoor play area When in use	36	23	21	44
2- GF	Commercial	EPP 2019	47	31	29	49
2- F1		$L_{Aeq,Adj,1hr}$ 52 dBA	47	31	29	50
9		When in use	50	27	31	52
31		SC6.4.19 LAeq, 15 mins day 60	46	29	28	51
27	Hotel/ Hostel	EPP 2019	35	23	20	42
28- GF		Day/Evening time $L_{Aeq,Adj,1hr}$ 50 dBA and $L_{A1,Adj,1hr}$ 65	32	21	18	42
28- F1		Nighttime $L_{Aeq,Adj,1hr}$ 37 dBA and	35	23	20	42
29- GF		$L_{A1,Adj,1hr}$ 47 dBA	45	30	27	48
29-F1		SC6.4.19	47	31	27	49
30- GF		$L_{Aeq,\ 15\ mins}$ day 60 /evening 50/ night 45	31	15	20	35
30-F1		L_{Amax} night – 60dBA	38	21	26	41
1- GF	Residential	EPP 2019	49	32	30	51
1-F1		Day/Evening time	49	33	30	52
3		$L_{Aeq,Adj,1hr}$ 50 dBA and $L_{A1,Adj,1hr}$ 65	50	33	31	52
4		Night time $L_{Aeq,Adj,1hr}$ 37 dBA and $L_{A1,Adj,1hr}$ 47 dBA	**51**	33	31	54
5			**51**	32	31	55
6			**51**	32	32	56
8			**51**	29	31	56

NSR ID & Floor	Usage	Noise Criteria	$L_{Aeq,T}$			LAmax
			Day	Evening	Night	
10		SC6.4.19 $L_{Aeq,\ 15\ mins}$ day 55/ evening 45/ night 40 L_{Amax}, night – 60dBA	48	28	30	54
11			46	28	29	50
12- GF			48	29	30	54
12-F1			46	28	29	50
13- GF			45	29	28	50
13-F1			46	29	29	50
14- GF			45	30	28	50
14-F1			45	30	28	50
15- GF			44	30	27	50
15-F1			44	30	28	50
16			43	31	27	49
17			43	31	26	47
18			42	31	25	48
19			42	31	25	47
20			41	30	25	47
23			38	25	23	46
24			38	25	23	47
32			36	24	21	44
22- GF	Residential/ Elderly Living		40	25	22	43
22-F1			39	28	24	47

The noise predictions in **Table 12** have predominantly shown the Project is able to comply with the applicable noise criteria with the exception of four (4) receptors, which have precited a marginal 1 dBA exceedance above the $L_{Aeq,Adj,1hr}$ 50 dBA criteria. These four residential receptors along Stuart Drive would require noise mitigation in the form of a noise barrier to reach compliance. Therefore, SLR has investigated preliminary noise barrier options to address these exceedances and found a 2.5 m noise barrier along the waterpark carpark boundary adjacent to Stuart Drive is able to mitigate the noise emissions in order to achieve compliance with the applicable noise criteria.

See **Figure 7** for preliminary noise barrier location and refer to **Section 6.2** for the noise prediction results with the inclusion of the acoustic fence.

Figure 7 Preliminary Noise Barrier Design

6.2 Predicted Noise Levels Considering Patron's Excitement (Worst-case) with Preliminary Noise Barrier Design

Table 13 presents the predicted noise levels from the operation of all sites with the inclusion of elevated patron noise 'from excitement' at the waterpark considering a 2.5 m acoustic fence to treat the noise exceedances.

Table 13 Predicted noise levels with patron's excitement

NSR ID & Floor	Usage	Noise Criteria	$L_{Aeq,T}$			LAmax
			Day	Evening	Night	
25	Childcare	EPP 2019 LAeq,Adj,1hr 37 dBA LAeq,Adj,1hr 55 dBA at outdoor play area When in use	36	23	21	44
26	Childcare outdoor play area		36	23	21	44
2- GF	Commercial	EPP 2019 $L_{Aeq,Adj,1hr}$ 52 dBA When in use SC6.4.19 LAeq, 15 mins day 60	47	31	29	49
2- F1			47	31	29	50
9			49	26	31	52
31			46	29	28	51
27	Hotel/ Hostel	EPP 2019 Day/Evening time $L_{Aeq,Adj,1hr}$ 50 dBA and $L_{A1,Adj,1hr}$ 65 Nighttime $L_{Aeq,Adj,1hr}$ 37 dBA and $L_{A1,Adj,1hr}$ 47 dBA SC6.4.19 $L_{Aeq,\ 15\ mins}$ day 60 /evening 50/ night 45 LAmax, night – 60dBA	35	23	20	42
28- GF			32	21	18	42
28- F1			35	23	20	42
29- GF			45	30	27	48
29-F1			47	31	27	49
30- GF			31	15	20	35
30-F1			38	21	26	41
1- GF	Residential	EPP 2019 Day/Evening time $L_{Aeq,Adj,1hr}$ 50 dBA and $L_{A1,Adj,1hr}$ 65 Night time $L_{Aeq,Adj,1hr}$ 37 dBA and $L_{A1,Adj,1hr}$ 47 dBA SC6.4.19 LAeq, 15 mins day 55/ evening 45/ night 40 LAmax, night – 60dBA	49	30	30	51
1-F1			49	32	30	52
3			50	31	30	52
4			50	31	30	54
5			50	30	31	55
6			50	28	31	55
8			50	27	31	56
10			48	27	30	54
11			47	28	29	53
12- GF			46	28	29	50
12-F1			46	28	29	50
13- GF			45	29	28	50
13-F1			46	29	28	50

NSR ID & Floor	Usage	Noise Criteria	$L_{Aeq,T}$			LAmax
			Day	Evening	Night	
14- GF			45	29	28	50
14-F1			45	29	28	50
15- GF			44	30	27	50
15-F1			44	30	28	50
16			43	31	27	49
17			43	31	26	47
18			42	31	25	48
19			42	31	25	47
20			41	30	25	47
23			38	25	23	46
24			38	25	23	47
32			36	24	21	44
22- GF	Residential/ Elderly Living		40	25	22	43
22-F1			39	28	24	47

Compliance is expected to be achieved at all surrounding noise sensitive receptors from the Project considering the inclusion of a 2.5 m acoustic fence. Given the noise assessment is preliminary in nature, the extents of the acoustic fence may be subject to change. Additional noise mitigation measures/controls to be considered for the Project are outlined in **Section 7.0**.

7.0 Noise Mitigation Measures and Control Strategies

Based on the findings of the noise assessment, SLR recommends the following noise mitigation measures to be implemented in order to achieve the compliant noise levels described in **Section 4.0**.

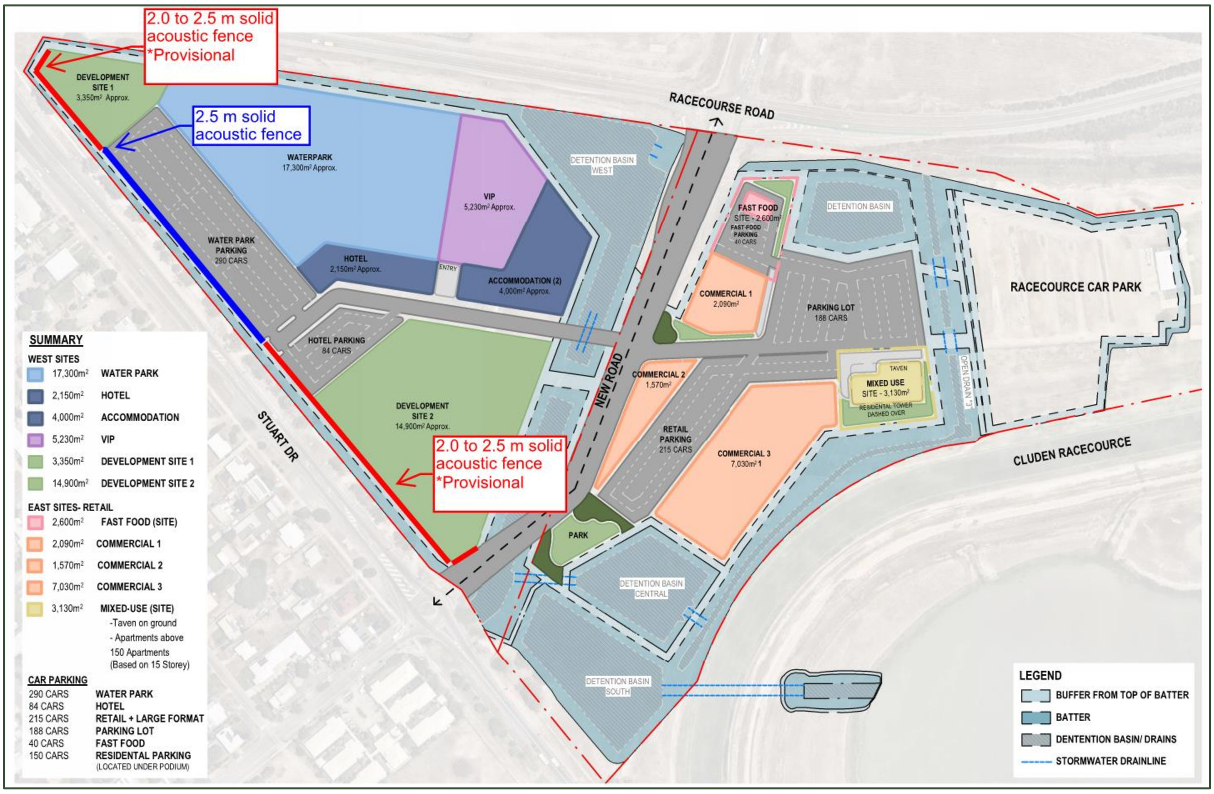
7.1 Mandatory Measures

The below noise control strategies form the basis of this assessment; therefore, **are mandatory** measures:

- A detailed acoustic assessment is to be produced at design stage to confirm whether the finalised project layout and design meets the noise criteria stated in **Section 4.0**. The preliminary noise assessment has determined that compliance is expected to be achieved, however, amendments to the final acoustic fence extents and height maybe subject to change (during detailed design stage). The future detailed assessment should include assessment of noise intrusion to any noise sensitive uses on site such as residential accommodation in their final proposed location. Acoustic facade mitigation may be required at these on site receptors such as acoustic rated glazing.
- A 2.5 m acoustic barrier/fence has been determined in the preliminary design stage and is to be located along the waterpark carpark southern boundary, adjacent to Stuart Drive (as shown in **Figure 8**). The acoustic fence is required to be impervious from the ground to the recommended minimum height of 2.5 m and contain no gaps that would allow the passage of sound. Minimum surface density is 12.5 kg/m^2. Suitable materials are expected to include, but are not limited to, 25.0 mm lapped and capped pine palings, 9.0 mm fibrous cement sheeting, or 75.0 mm thick Hebel.
- Due to the unknown site usage of development sites 1 and 2, SLR has also recommended that acoustic fences be provisioned for these sites pending the noise assessment outcomes during detailed design stage. The approximate extents for these acoustic fences are shown in **Figure 8** and would be expected to be in the order of 2.0 m to 2.5 m if deemed required (however, subject to the site uses and corresponding noise sources).
- For externally located mechanical plant:
    - It is assumed mechanical plant will be located on dedicated rooftop plant platforms positioned centrally on the roof.
    - External mechanical plant should be acoustically treated to achieve a sound power level of no greater than 85 dBA for each plant item (assuming no more than 2 rooftop items per building). Sound power level to be reduced proportionally for increased number of plant items. If the limiting sound power were to be exceeded, then an acoustic screen would potentially be required. Acoustic screen (same parameters as the acoustic fence, see above) would typically need to be at least 800 mm taller than the tallest top of the plant.
    - Any general extraction systems are to be constructed such that the outlet is either shielded from the noise sensitive premises and/or is pointing in a direction at least 90 degrees away from the nearest residences.
    - Mechanical plant to be positioned to avoid direct line of sight from noise sensitive receivers both at roof or and/or at the exterior of buildings.
- Waterslides themselves should generally be provided with high sides or be fully enclosed (such as tubes) to assist with acoustic attenuation of patron noise.

- The VIP Club shall close all doors and windows during internal (only) operation between 10:00 pm to midnight. These openings should include acoustic seals (gap free).

Figure 8 Preliminary Noise Barrier Locations



7.2 Good Practice Measures

Notwithstanding the compliant findings (after considering the implementation of a 2.5 m acoustic fence, waterpark slides and mechanical plant screening as well as detailed acoustic assessment), SLR recommends the following good practice noise management measures to minimize noise from the Project:

- Operator of waterpark to introduce management practices to minimise excessive patron noise while waiting for rides, especially at high level (5.0 m).
- Signage to be installed on waterpark slides to inform patrons on minimising 'excessive' noise.
- Should there be any complaints or queries from the nearby community around environmental noise, or interest in operating outside normal business hours, consider implementation of an operational noise management plan.
- A 10 km/h speed limit is set for the on-site carpark vehicle movements.
- Metal grates and man-hole covers be well fixed to avoid rattling.
- Excessive idling of engines be avoided, eg during loading/deliveries. Engines to be turned off, namely trucks upon deliveries. Signage to be installed to this effect.

8.0 Conclusion

An operational preliminary noise assessment has been conducted for the proposed Townsville Waterpark, Hotel and Beach Club Masterplan Project at 1-105 Racecourse Road, Cluden QLD 4811 in order to determine whether the Project is expected to comply with the applicable noise criteria outlined in **Section 4.0**.

The preliminary noise assessment has been conducted utilising a 3-D noise model developed based on the inputs provided at the time of the assessment and assumptions listed in **Section 5.2** to predict the noise levels at the nearest noise sensitive receptors to the Project.

The preliminary noise assessment has determined that the operation of the development during the assessed 'worst-case' scenarios for day, evening and night-time noise emission are predicted to comply against the relevant Townsville City Plan and EPP Acoustic Quality Objective criteria when considering the following mandatory noise control measures:

- Detailed acoustic assessment of the finalised proposed Project to confirm that operation compliance is still expected.
- Implementation of a 2.5 m acoustic fence installed on the waterpark carpark southern boundary, adjacent to Stuart Drive (as shown in **Figure 7**).
- Waterslides themselves should generally be provided with high sides or be fully enclosed (such as tubes) to assist with acoustic attenuation of patron noise.
- Mechanical plant to achieve a sound power level of no greater than 85 dBA for each plant item (assuming no more than 2 rooftop items per building) and be screened from direct line of sight from any noise sensitive receivers both at roof and/or at the exterior of buildings.
- The VIP Club shall close all doors and windows during internal (only) operation between 10:00 pm to midnight. These openings should include acoustic seals (gap free).

The complaint findings are based on the preliminary Project design and corresponding noise assessment. These acoustic outcomes are subject to 'potentially' change depending on the detailed Project design (such as Project layout and land use changes, etc). The Project is expected to be able to operate in accordance with the relevant noise criteria and may require amendments to the final noise mitigation measures and control recommendations.

Appendix A Noise Contour Maps

Townsville Waterpark, Hotel and Beach Club Project

Preliminary Noise Assessment

BNC Planning

SLR Project No.: 620.041994.00001

26 March 2025

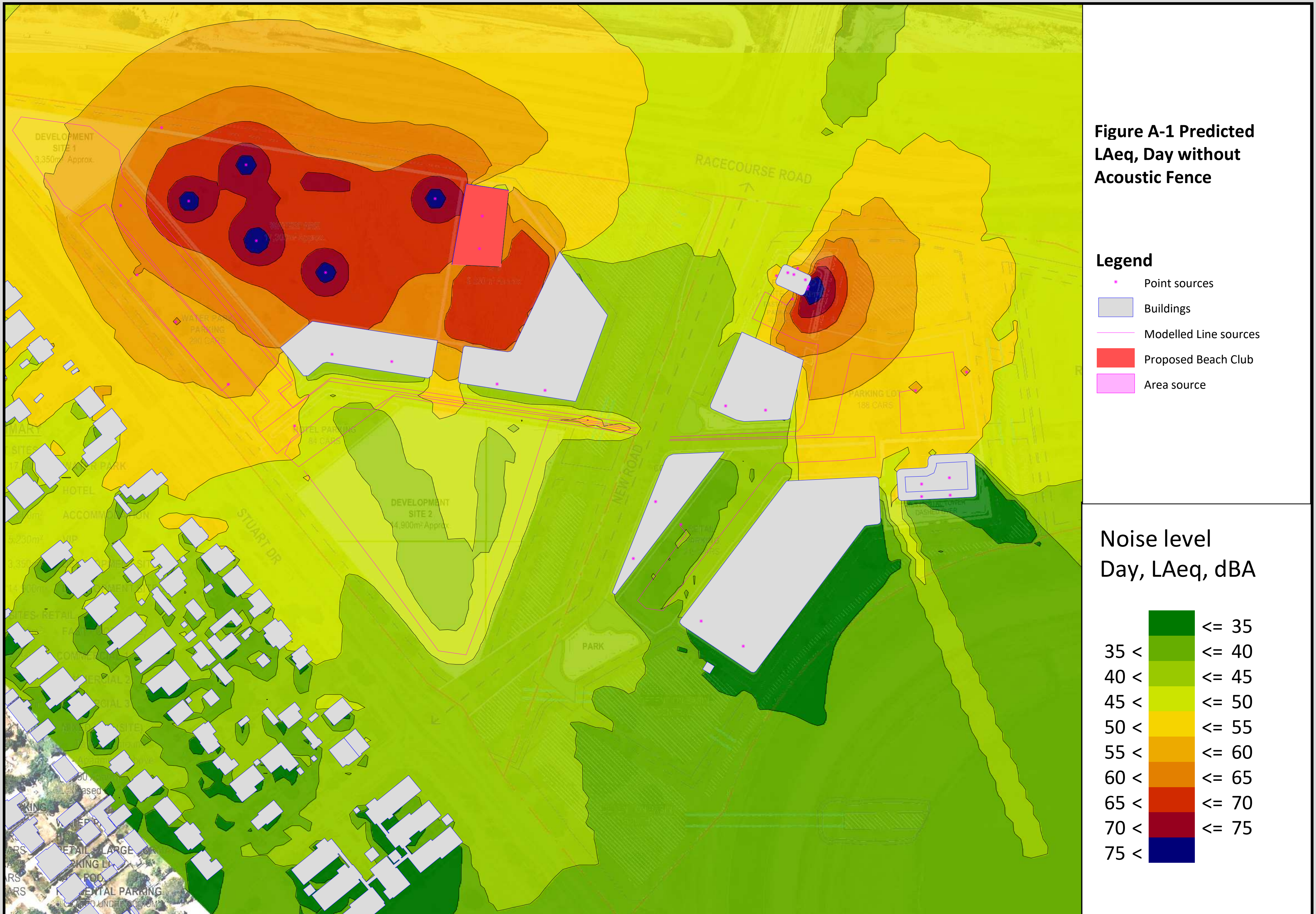


Figure A-1 Predicted LAeq, Day without Acoustic Fence

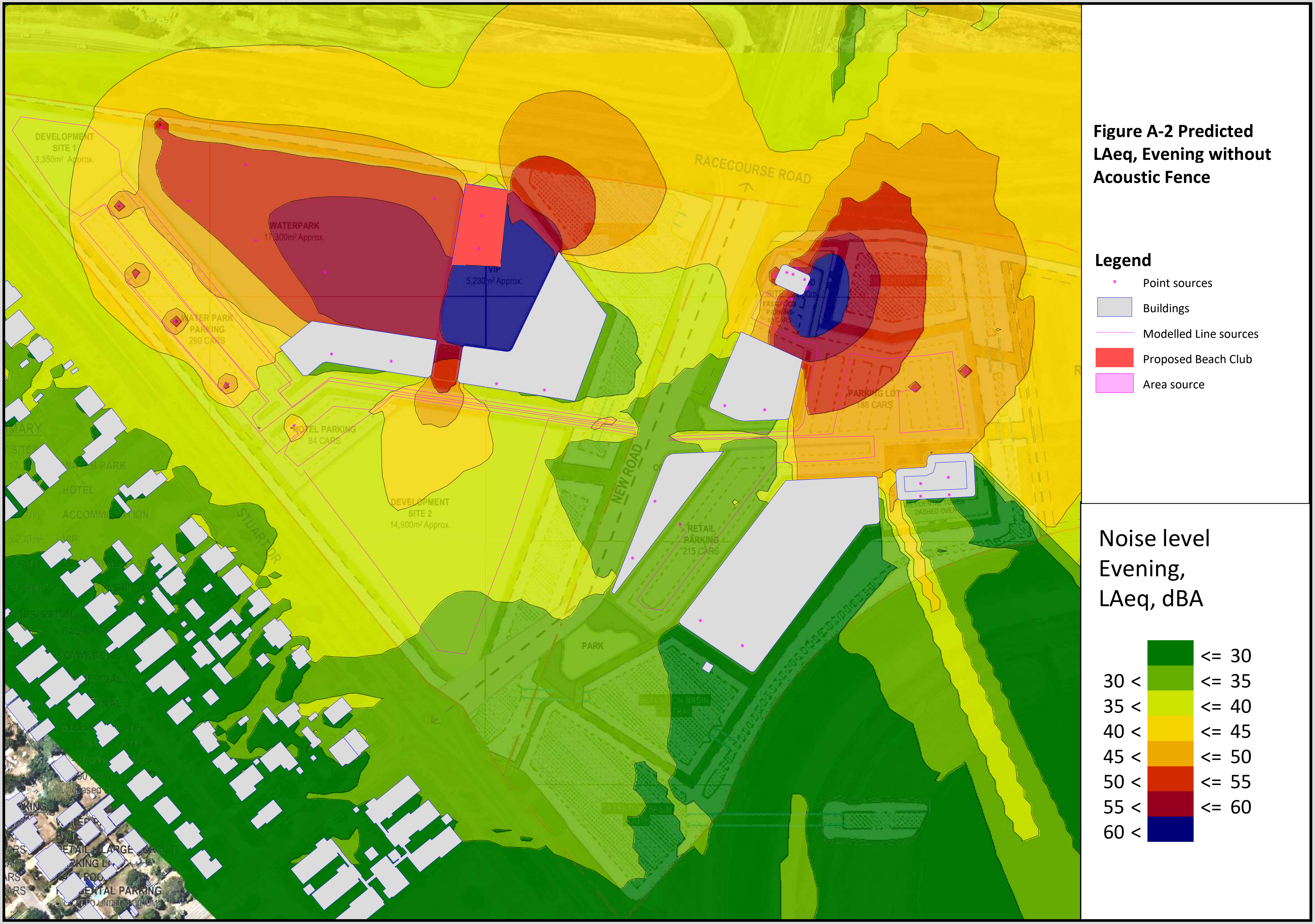


Figure A-2 Predicted LAeq, Evening without Acoustic Fence
Legend
Point sources
Buildings
Modelled Line sources
Proposed Beach Club
Area source
Noise level Evening, LAeq, dBA
<= 30
30 < <= 35
35 < <= 40
40 < <= 45
45 < <= 50
50 < <= 55
55 < <= 60
60 <
RACECOURSE ROAD
NEW ROAD
WATERPARK
VIP
DEVELOPMENT SITE 1
DEVELOPMENT SITE 2
HOTEL PARKING
RETAIL PARKING
PARK

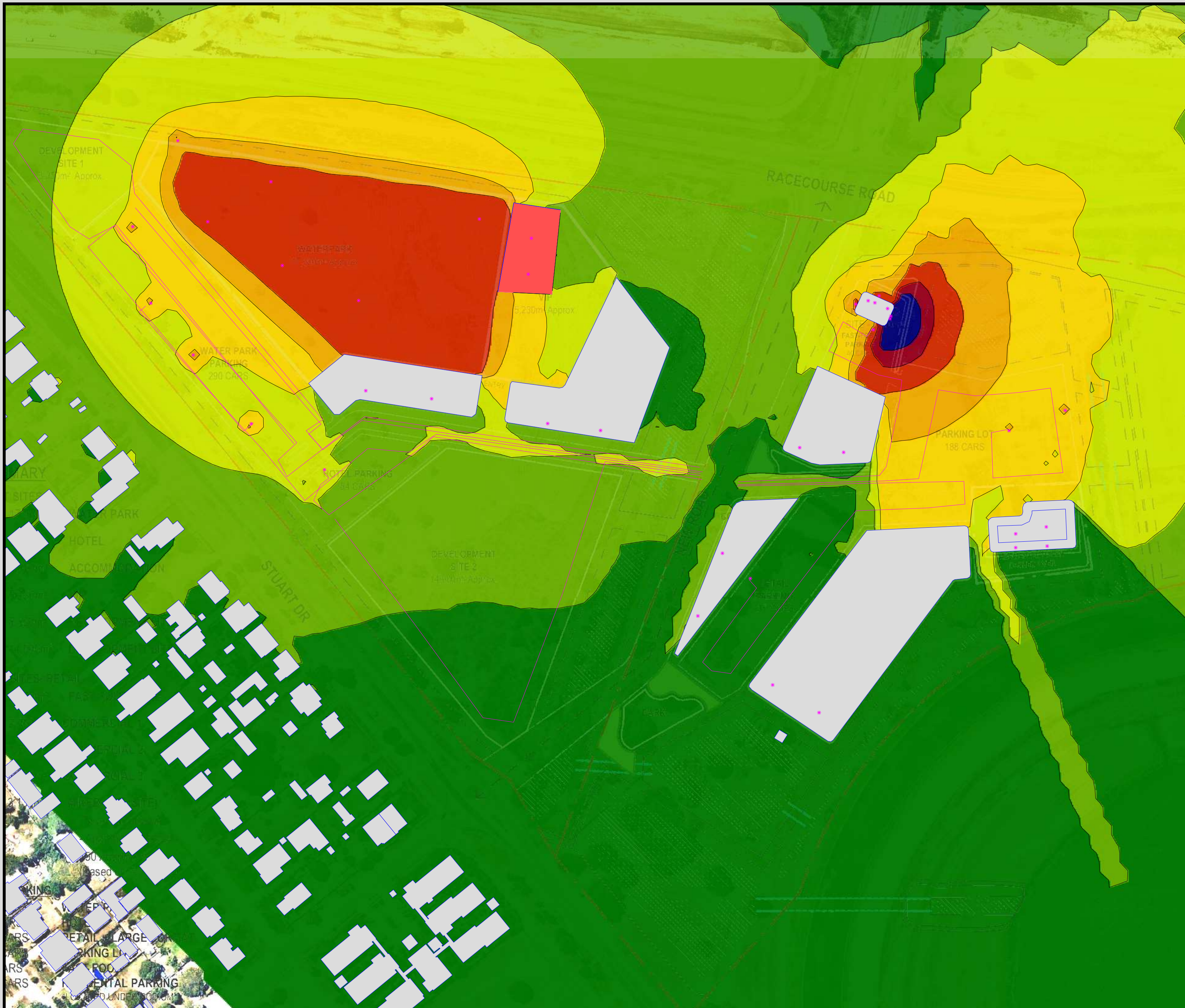


Figure A-3 Predicted LAeq, Night without Acoustic Fence

Legend

- Point sources
- Buildings
- Modelled Line sources
- Proposed Beach Club
- Area source

Noise level Night, LAeq, dBA

	<= 30
30 <	<= 35
35 <	<= 40
40 <	<= 45
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	

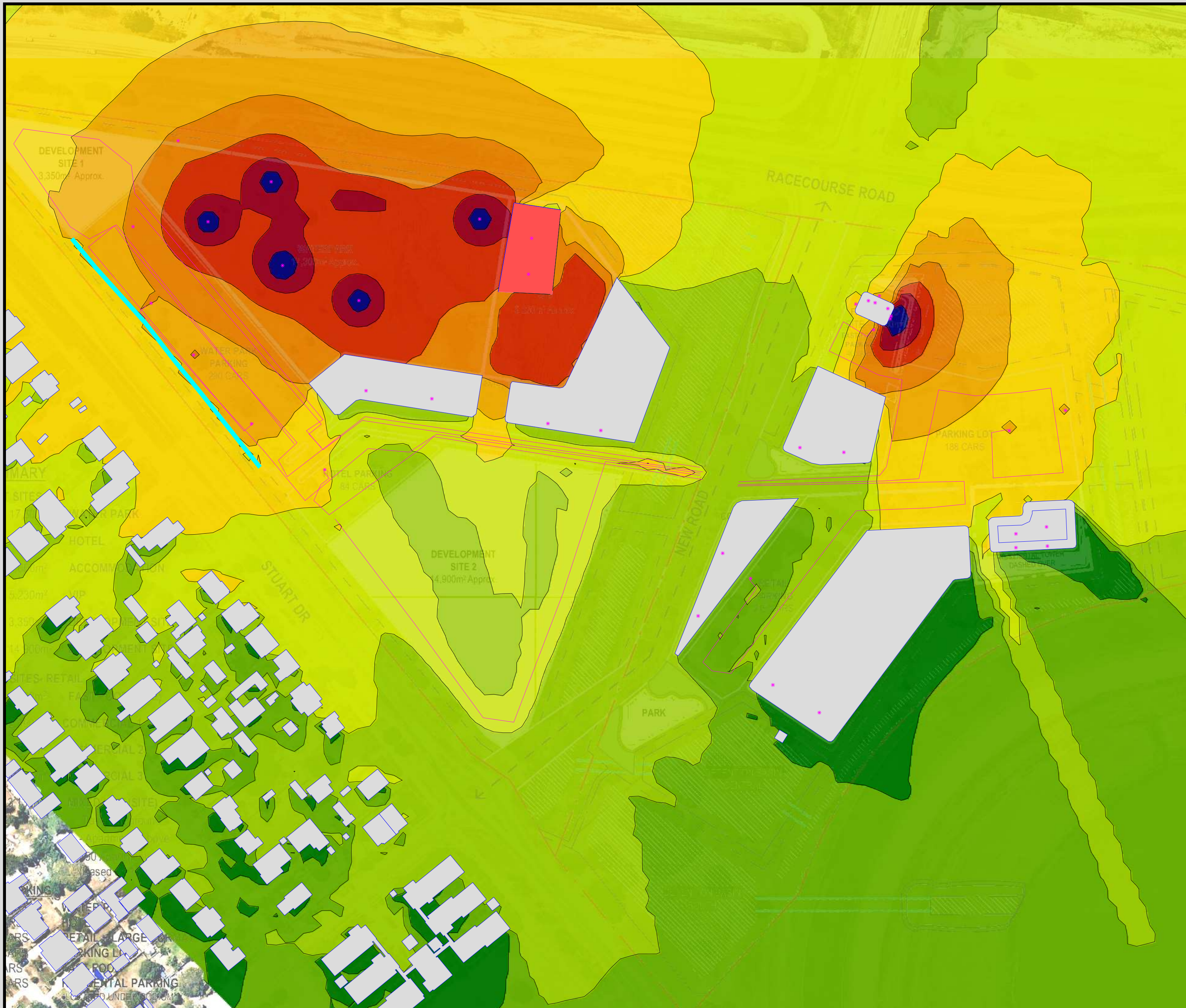


Figure A-4 Predicted LAeq, Day with 2.5m Acoustic Fence

Legend

- Point sources
- Buildings
- Modelled Line sources
- Proposed Beach Club
- Area source
- Proposed 2.5m Acoustic Fence

Noise level
Day, LAeq, dBA

	<= 35
35 <	<= 40
40 <	<= 45
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	<= 65
65 <	<= 70
70 <	<= 75
75 <	

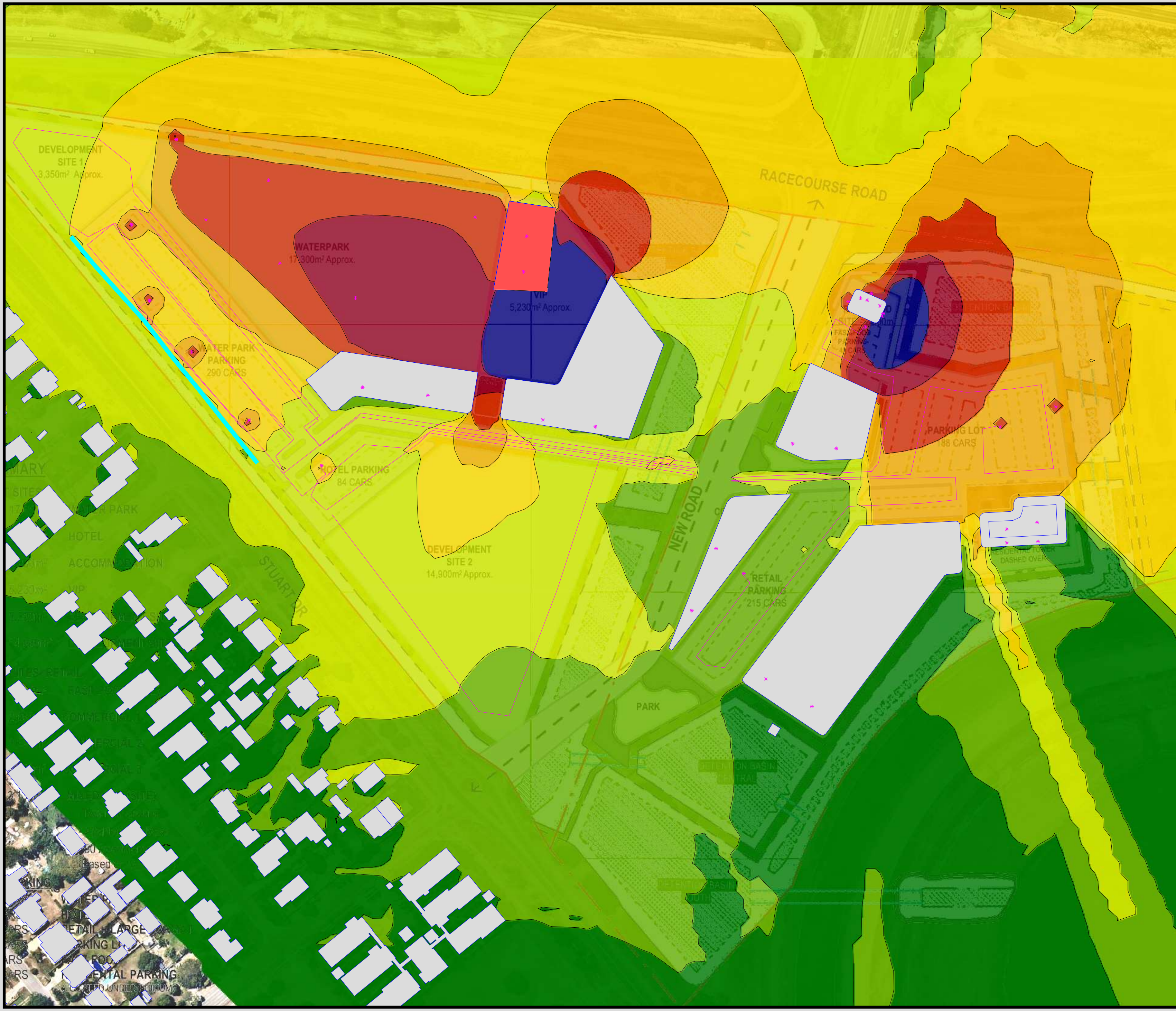


Figure A-5 Predicted LAeq, Evening with Acoustic Fence

Legend

- Point sources
- Buildings
- Modelled Line sources
- Proposed Beach Club
- Area source
- Proposed 2.5m Acoustic Fence

Noise level Evening, LAeq, dBA

	<= 30
30 <	<= 35
35 <	<= 40
40 <	<= 45
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	

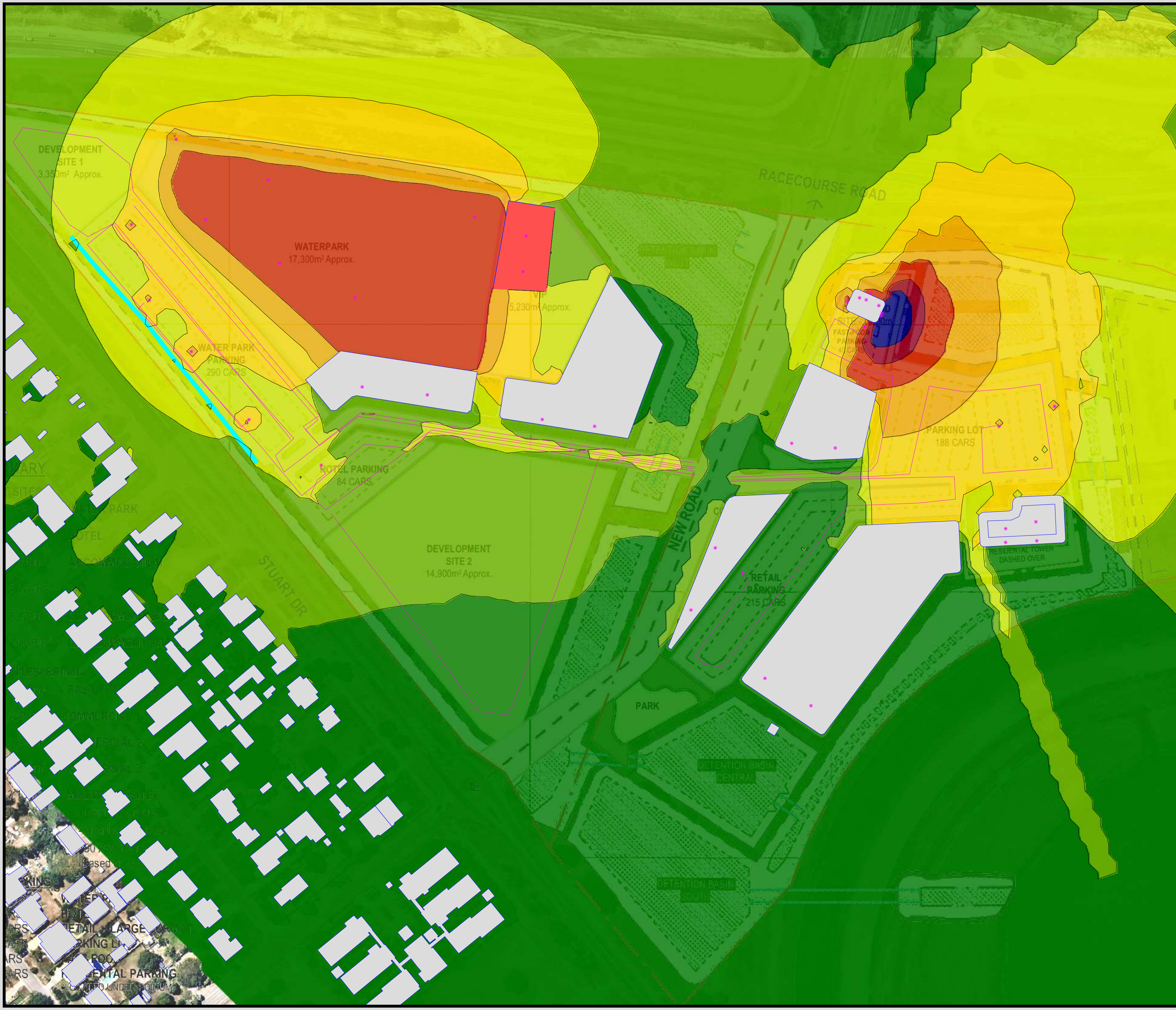


Figure A-6 Predicted LAeq, Night with Acoustic Fence

Legend

- Point sources
- Buildings
- Modelled Line sources
- Proposed Beach Club
- Area source
- Proposed 2.5m Acoustic Fence

Noise level
Night,
LAeq, dBA

	<= 30
30 <	<= 35
35 <	<= 40
40 <	<= 45
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	

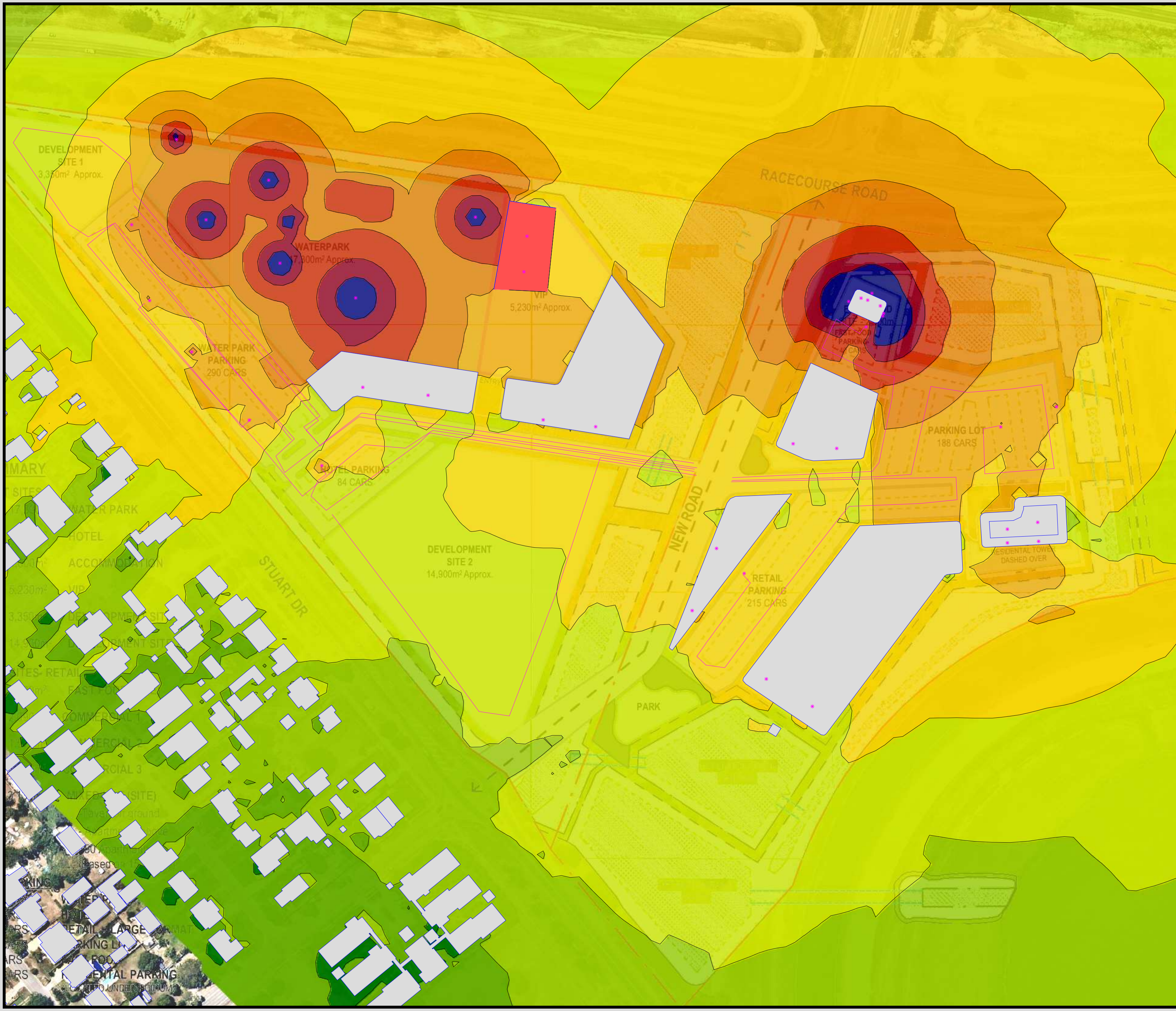


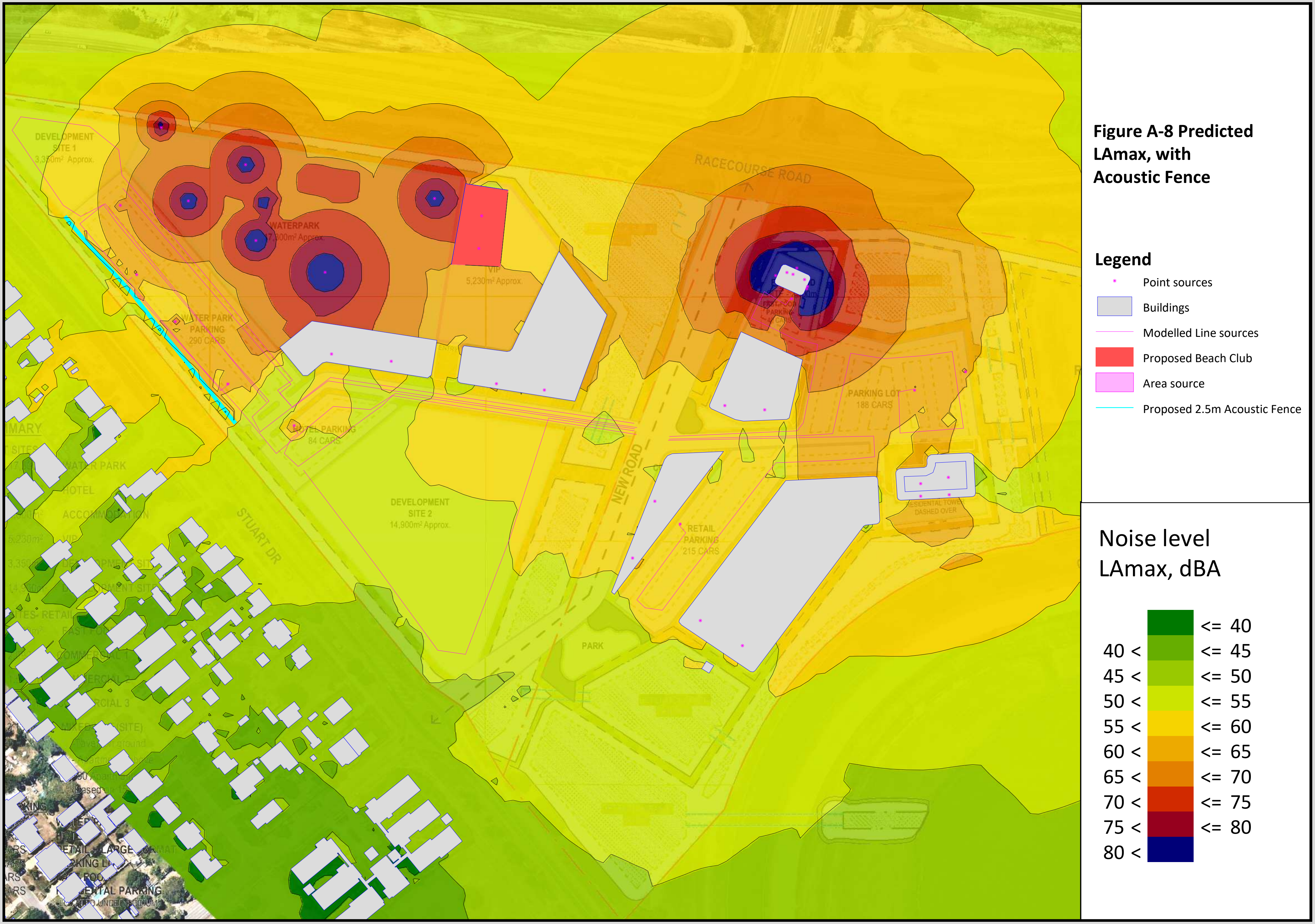
Figure A-7 Predicted LAmax, with Acoustic Fence

Legend

- Point sources
- Buildings
- Modelled Line sources
- Proposed Beach Club
- Area source

Noise level LAmax, dBA

	<= 40
40 <	<= 45
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	<= 65
65 <	<= 70
70 <	<= 75
75 <	<= 80
80 <	



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Making Sustainability Happen

November 2024

Townsville Waterpark, Queensland

Market Potential Assessment

Prepared for BNC Planning

locationiq.com.au

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Introduction

This report presents an independent analysis of the future market potential for large format retail, fast food takeaway and a tavern as part of the Townsville Waterpark development, located in the southern suburbs of the Townsville urban area, 7.3 km south of the Townsville Central Business District.

This report is structured and presented **in six (6) sections** as follows:

- **Section 1** reviews the regional and local context of the planned Townsville Waterpark and provides a summary of the proposed development.
- **Section 2** details the trade area likely to be served by large format retail, fast food takeaway, and a tavern as part of the Townsville Waterpark development, including current and projected population and retail spending levels over the period to 2046. The socio-economic profile of the trade area population is also outlined.
- **Section 3** considers the market potential for large format retail floorspace at the subject site.
- **Section 4** assesses the market potential for fast food at the subject site.
- **Section 5** reviews the market potential for a tavern at the subject site.
- **Section 6** presents a summary of the potential for the planned uses.

1 Centre Location & Performance

This section of the report reviews the regional and local context of the Townsville Waterpark and provides a summary of the proposed development.

1.1. Regional Context

i. Townsville is the major hub for North Queensland and is 350 km south of Cairns, 390 km north of Mackay, and 1,100 km north of Brisbane (refer Map 1.1).

ii. Townsville is the largest urban centre north of Brisbane and is one of the fastest growing non-metropolitan areas in Queensland. Townsville serves as the unofficial capital of North Queensland, home to many government, administrative, sporting, and business offices/headquarters.

iii. Townsville is one of the strongest non-metropolitan cities in Australia, which is attributable to the area's diverse economy, which includes a broad range of strong industry sectors, including:

- **Military**: Townsville is home to the highest number of residents with miliary service at around 14,200 army personnel (~6% of the Townsville LGA population) including 8,700 veterans and 5,500 current-serving ADF members. The industry contributes to around 9% of the Townsville Gross Regional Product (GRP).
- **Education and training:** James Cook University and CQUniversity, accounting for around 6% of GRP.
- **Tourism**, given the nearby Magnetic Island.
- **Resources**, with various activities relating to mining and other resource sectors.

iv. The largest industries of employment within the Townsville LGA are Health Care and Social Assistance (18.4%); Public Administration and Safety (13.3%); Education and Training (10.1%); and Retail Trade (9.7%). These four industries make up around half of total employment across the region and each has grown by at least 10% since 2013/14.

v. Gross Regional Product (GRP) for the Townsville LGA is estimated at $15.1 billion. GRP has been broadly flat since around 2012, and most recently increased by 4.78% to 2022/23 (the largest increase since 2006/07) Economic growth has broadly followed that of the broader Queensland economy over the long term.

vi. The unemployment rate in Townsville peaked at almost 11% at the end of 2016 but has since returned to levels (3.7% June 2024) that are below the Queensland state benchmark (4.1% June 2024). Preliminary data shows the unemployment rate in Townsville has continued to decrease over the COVID-19 period, likely due to the limited number of days in lockdown.

vii. Major industries, projects, and investment in the region include:

- Townsville's $193 million port upgrade (11.1 km to the north-east of Stockland Townsville) is currently under way with construction on the 2.2 km protective rock wall, which will ultimately pave the way for up to six new berths. The upgrade will be the Port's largest ever expansion in its 156-year history. Cruise and commercial vessels up to 300 metres in length will be able to safely access the Port of Townsville which is expected to generate a number of new jobs and investment opportunities the project is a staged upgrade, with ultimate completion expected 2040.

  The channel upgrade due to be complete in 2024, enables the port to accommodate larger vessels up to 300 metres long. This includes cruise ships capable of carrying more than 2,000 passengers. P&O Cruises will add Townsville to its line-up of port calls from 2025. The Pacific Encounter and Pacific Explorer will be the biggest cruise ships Townsville has ever seen, carrying more than 4,500 passengers and almost 2,000 crew between them. These two vessels are proof that the upgrade is going to deliver prosperity directly into North Queensland businesses, with $2.25 million expected to flow into the city during their visits.

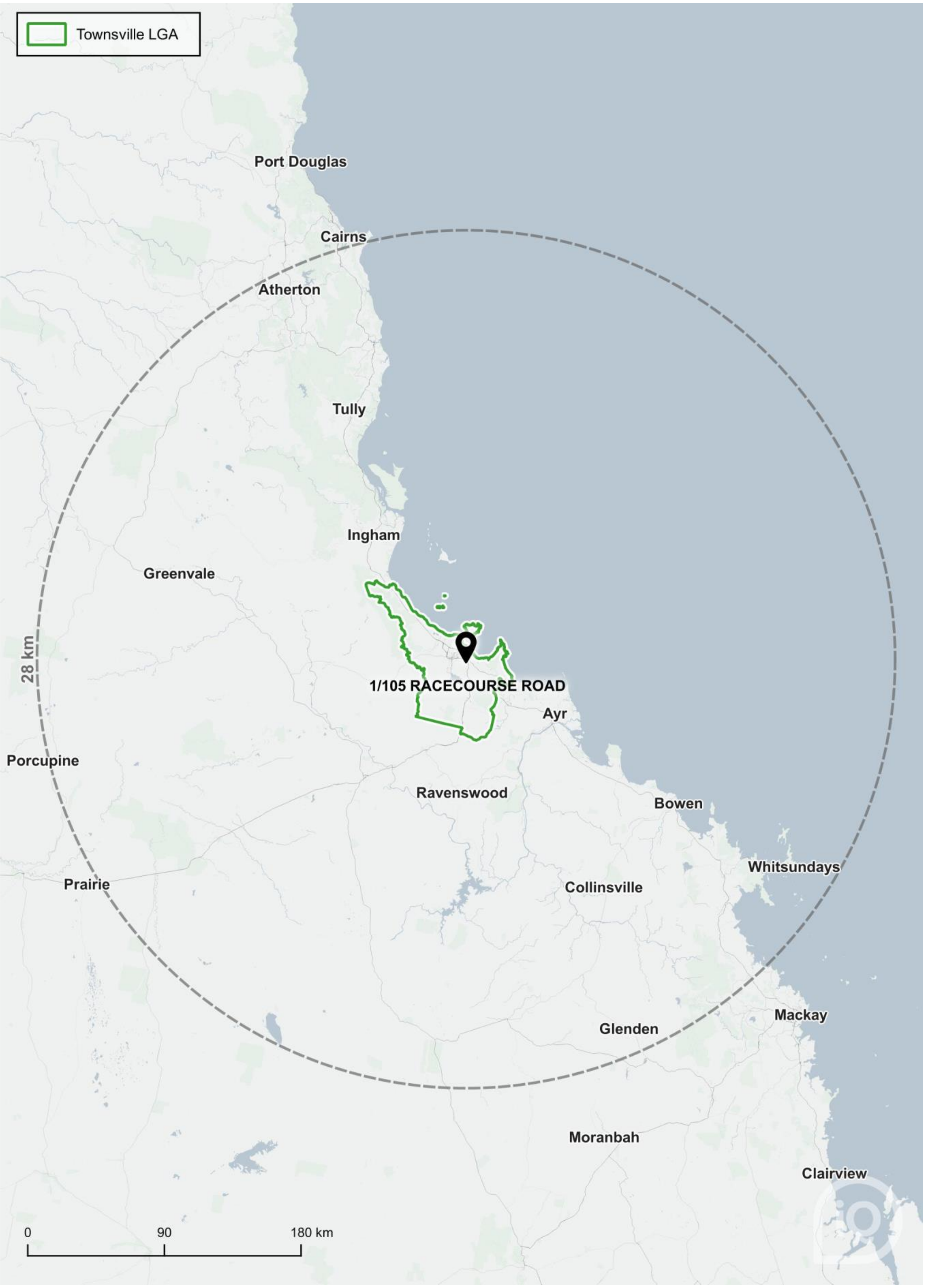
- The Queensland Government will invest $530 million to deliver a major expansion of the Townsville University Hospital, as part of the largest investment in new hospitals and new beds in Queensland's history. The expansion would deliver around 143 additional beds as well as other upgrades to critical infrastructure. This major expansion of the Townsville University Hospital is expected to deliver the extra beds to the region by 2026, creating around 1,276 constructions jobs.

- A $40 million expansion and redevelopment of the Kirwan Health Campus will include the development of a new two-storey facility and a refurbishment of the existing buildings. Construction commenced in October 2023 and is forecast to reach practical completion by early 2026.

- The Queensland Government has allocated $75 million for common user infrastructure to support the development, extraction, and production of critical minerals. The Queensland Government is currently welcoming interest from the private sector in the future use of the facility. Located at the Cleveland Bay Industrial Park in Townsville the facility will be a hub to trial production processes for commercialisation, enabling prospective miners to begin producing mineral samples at scale. The aim is to accelerate the development of commercial mining projects, promote investment in advanced mineral manufacturing opportunities and enable development of supply chain.

- Weststate Private Hospital ($60.5 million) is nearing completion 7.7 km north of the Townsville Waterpark site. The new private hospital is planned to open shortly, with the project expected to create around 180 jobs during construction and 170 full-time positions when open. The five-storey hospital will include four operating theatres, a separate procedure room, 22 overnight beds, 19-day surgery beds and a four-bed intensive care facility, plus facilities for pathology, pharmacy, physiotherapy, and radiology.

MAP 1.1. REGIONAL CONTEXT



1.2. Local Context

i. The site of Townsville Waterpark is within the suburb of Cluden, which is on the southern fringe of the Townsville urban area, some 8 km south of the Townsville City Centre. The subject site is situated at the south of the major intersection of the Racecourse Road (old Bruce Highway) and Lakeside Drive.

ii. Racecourse Road is the major arterial route into the Townsville urban area, providing access to growth areas such as Elliot Springs and more rural townships such as Giru, Ayr, and Home Hill.

iii. Traffic counts recorded in 2023 reinforce the high-profile location of the site including:

- Traffic count along Racecourse Road (north of the subject site) indicates an Annual Average Daily Traffic (AADT) of 23,066 vehicles. This reflects exposure to some 8.4 million vehicles along Racecourse Road per annum.
- Sturt Drive (south of the subject site) traffic count indicates an Annual Average Daily Traffic (AADT) of 13,633 vehicles. This reflects exposure to approximately 5.0 million vehicles along Sturt Drive per annum.

iv. Map 1.2 illustrates the local context of Townsville Waterpark, with key points to note including:

- Cluden Park is to the immediate east of the subject site and is a heritage-listed, multipurpose venue home to more than 36 race meets each year.
- A BP Truckstop and EG Ampol service Stations are north of Racecourse Road.
- Fairfield Central to the north and includes a Kmart, Woolworths, Coles and an outdoor dining precinct fronting the car park the centre also includes a number of fast-food pad sites including Zarraffa's and Guzman y Gomez.
- Fairfield & Co is a large format retail centre north of Bunnings and includes a range of tenants including Beacon Lighting, Pillow Talk, Haymans, World Gym and more.
- A church and holiday parks are at the south-west intersection of Sturt Drive and Racecourse Road.

v. Townsville Waterpark enjoys a high-profile location with a range of accommodation, and complementary convenience retail facilities situated in the immediate area that reinforce the attraction of the subject site.

MAP 1.2. LOCAL CONTEXT

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1.3. Proposed Development

i. BNC Planning is proposing a development at 1/105 Racecourse Road in Condon. The development is known as Townsville Waterpark, Beach Club & Hotel and is planned to include a range of uses across three main precincts as illustrated on Figure 1.1 and are as follows:

- Precinct One: is proposed to include a range of retail and Food catering floorspace as well as a tavern.
- Precinct Two: may comprise units or large format retail floorspace.
- Precinct Three: Will include 3,000-person capacity waterpark including a designated VIP area as well as a Hotel (200 rooms - 15 storey) featuring dedicated conference and event facilities capable of accommodating up to 600-seat banquet style.

ii. Overall, the site totals around 14 hectares, including Precinct One (~2.9 hectares), Precinct Two (~2.2 hectares) and Precinct Three (~8.8 hectares). However, due to flooding around 110,000 sq.m will be developable land.

iii. The project is estimated to cost around $550 million in total and is expected to be designed similar to Wet ‘n’ Wild on the Gold Coast. The estimated investment for the waterpark, beach club, and hotel component is $250 million, with an additional $300 million required to develop the apartment complexes and address the housing supply needs of the Townsville region.

iv. The operational phase of the development would generate approximately 715 jobs, of which 500 would be direct and 215 through flow-on effects

v. The developable retail land (i.e. Precincts One and Two) is in the order of 52,000 sq.m. Assuming a single level development, and a 30% - 40% built form ratio that allows for at grade car parking, this would mean around 15,600 sq.m - 20,800 sq.m (GLA) - excluding public amenity - could be provided.

vi. The proposed development would offer a high level of customer amenity for the growing local population and would be easily accessible, with excellent car parking.

FIGURE 1.1. EXISTING CENTRE LAYOUT

2 Trade Area Analysis

This section of the report provides a review of the trade area served by Townsville Waterpark, including current and projected population and retail spending levels over the period to 2046. A review of the socio-economic profile of the trade area population is also provided.

2.1. Trade Area Definition

i. The Townsville Waterpark trade area has been defined taking into consideration the following:

- Azira mobile phone visitation data for the existing Fairfield Shopping Centre, Fairfield & Co (large format retail centre) as well as Bunnings Fairfield (October 2024 – October 2024).
- Regional and local accessibility.
- The scale and composition of the centre
- The pattern of urban development throughout the region, including major residential estates which are underway or planned.
- Significant physical barriers such as roads, waterways, and parkland.
- The provision of existing and planned competitive facilities throughout the surrounding area.

ii. Map 2.1 illustrates the Azira mobile phone data, which has been utilised to examine the existing patterns of visitation to the centre over the period from October 2023 to October 2024. The data is described as:

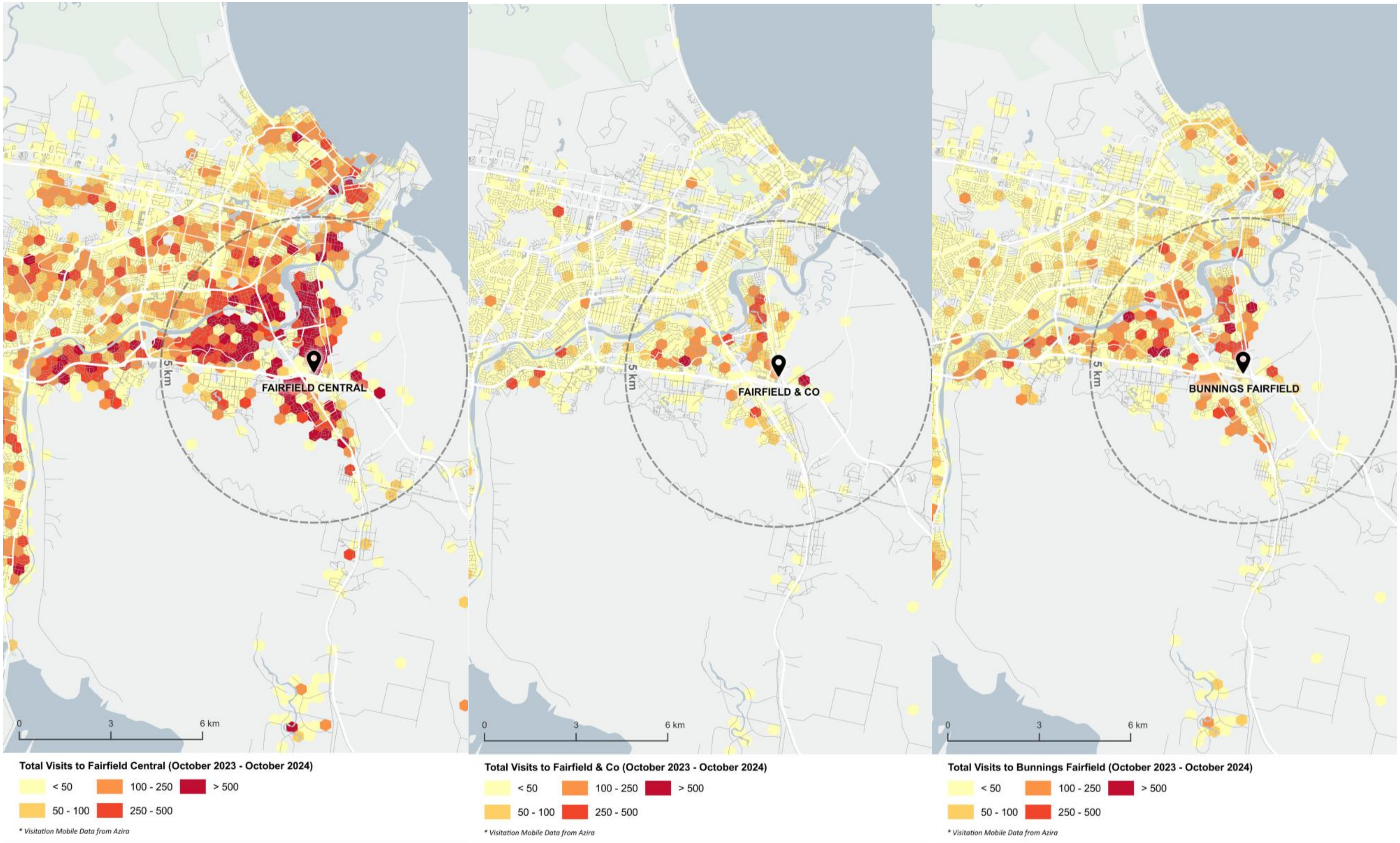
> *'Azira data uses aggregated mobile phone location data from a variety of high-quality sources, including software development kits (SDKs) and mobile advertising SDKs. Near ingests, interprets, and analyses petabytes of geospatial data, including cell phone geolocation 'pings' all over the world – to enable an accurate, current view of the people visiting a location. Using the ping data, the place of residence of customers visiting the Areas of Interest (AOI) can be determined at an anonymised and aggregated at an H3 level (a standard geographic boundary).'*

iii. Map 2.2 illustrates the defined trade area for Townsville Waterpark. The Townsville Waterpark trade area is defined to include one primary sector and two secondary sectors.

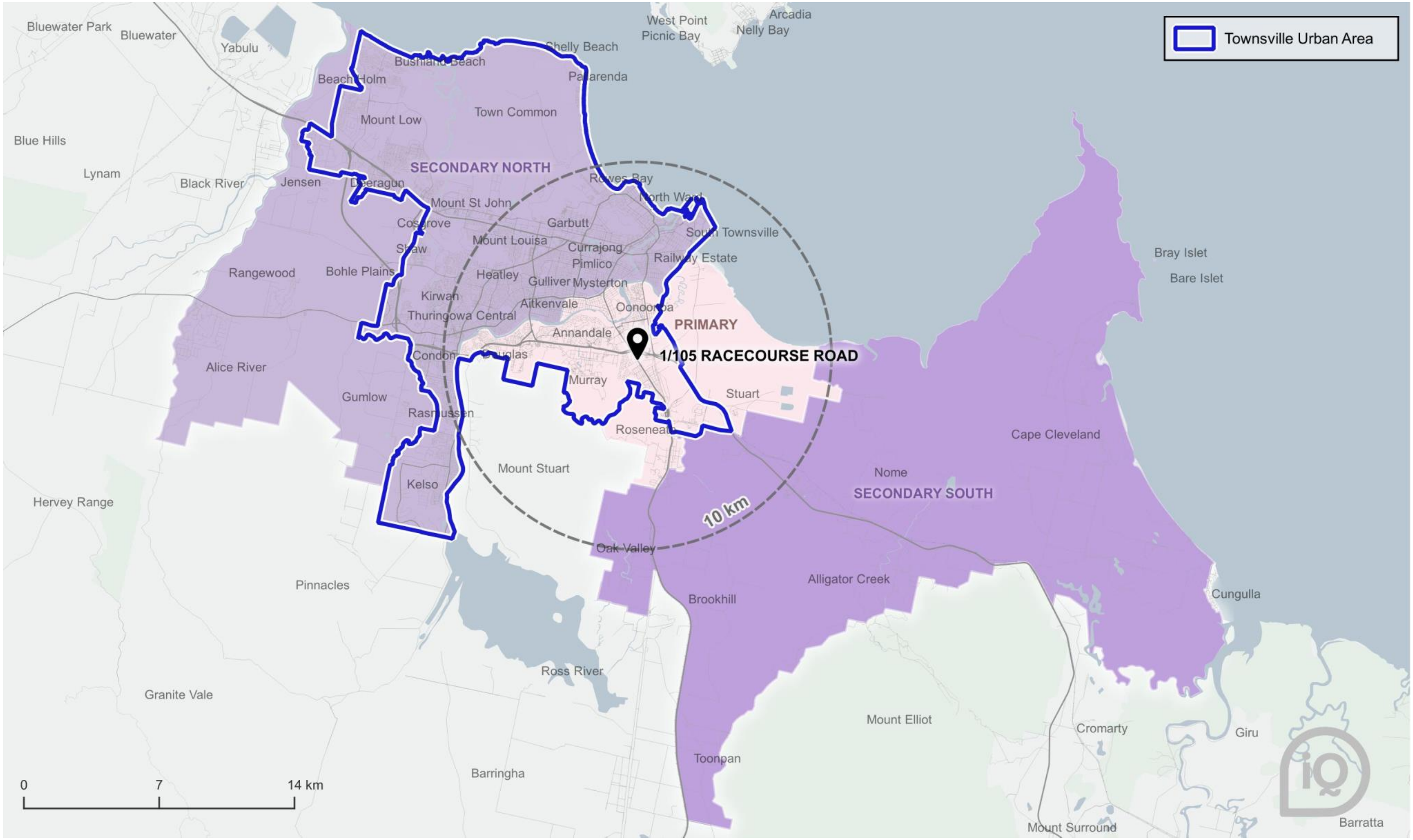
iv. The combination of the primary and secondary sectors is referred to as the Townsville Waterpark main trade area throughout the remainder of this report. The main trade area encompasses the Townsville urban area and extends 34 km to the south and 22 km to the north of the Townsville Waterpark site.

v. Based on the Azira mobile phone data, the existing Fairfield Central, Fairfield & Co and Bunnings attract around 40%-50% of customer visitation from within the defined primary sector, 30% - 35% from the secondary north sector, 4% - 6.5% from the secondary south sector and 10 – 15% from beyond the defined main trade area.

MAP 2.1. AZIRA MOBLE PHONE DATA



MAP 2.2. TOWNSVILLE WATERPARK MAIN TRADE AREA & SUBURBS



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2.2. Main Trade Area Population

i. Table 2.2 details the current and projected Townsville Waterpark main trade area population levels by sector. This information is sourced from the following:

- The 2011, 2016, and 2021 Census of Population and Housing undertaken by the Australian Bureau of Statistics (ABS).
- New dwelling approvals statistics from the ABS from 2011/12 to 2023/24 (refer Chart 2.1), which indicate an average of 713 new dwellings were approved for the main trade area annually over this timeframe. This includes an average of 91 across the primary sector.
- The latest population projections prepared at a Statistical Area 2 (SA2) level by Queensland Government Statistician's Office.
- Investigations by this office into new residential developments in the region.

ii. The Townsville Waterpark main trade area population is currently estimated at 190,730, including 37,459 persons in the primary sector.

iii. Future population growth throughout the main trade area will primarily by driven by greenfield development in the secondary sectors, with key residential estates including (Map 2.3):

Primary Sector

- The subject site is planned to include ~400 residential apartments.
- Geon Property have also lodged a development application for a 294-unit build-to-rent development in Idalia as part of the Fairfield & Co development.

Secondary North Sector

- **Harris Crossing Estate** is a master planned residential estate that has been under construction since 2017, and upon completion, is expected to yield 900 lots (i.e., ~2,700 persons) including a 260-lot land lease community. Approximately 600 homes (1,800 persons) have been built. Based on information from Maidment Group all remaining lots are expected to be sold in the next 2 - 3 years, with construction to follow within 12 months of lot sale.
- **The Reserve** will comprise of approximately 221 dwellings upon completion, construction commenced in 2022 with the estate expected to be completed by 2031.
- **Willowbend** is approved for 600 lots. Construction has yet to commence, with development expected from 2025.
- First homes at **Greater Ascot** commenced prior to 2014 and on completion, the estate will include around 3,000 dwellings (9,000 persons). Currently, around 500 homes have been completed to date.

- **Riverstone estate** is assumed to yield some 1,300 dwellings, or approximately 3,300 people upon completion. Discussions with Elements NQ indicate that first residents are expected at the development by 2025. Construction to occur at a rate of up to ~70 dwellings per annum.

- **Bluewattle Estate** (now known as **Somers & Hervey Estate**) is located immediately east of the Riverstone estate site encompassing around 98 hectares. The development land was sold to Urbex in 2022 with construction commenced from July 2023. The estate was expected to yield some 850 dwellings upon completion.

- **Mount Margaret**: will include 850 lots, to date, over 300 homes have been completed.

Secondary South Sector

- **Elliot Springs** comprises 1,654 hectares of land located 15 km south of the Townsville City Centre. Construction commenced in 2018, with the development expected to ultimately include education facilities, commercial and retail precincts and open space. Elliot Springs is assumed to reach completion around 2050, including approximately 10,600 dwellings (26,000 residents). **The Village** residential estate is currently under construction and expected to yield 1,000 dwellings upon completion. Since construction commenced in 2012, approximately 500 dwellings have been completed, with an additional 600 dwellings assumed for completion over the period to 2031.

iv. Taking into the above into consideration, the Townsville Waterpark main trade area population is projected to increase to 238,030 by 2046, representing an average annual growth of 1.0%, or around 2,150 persons.

TABLE 2.1. MAIN TRADE AREA POPULATION, 2011 – 2046

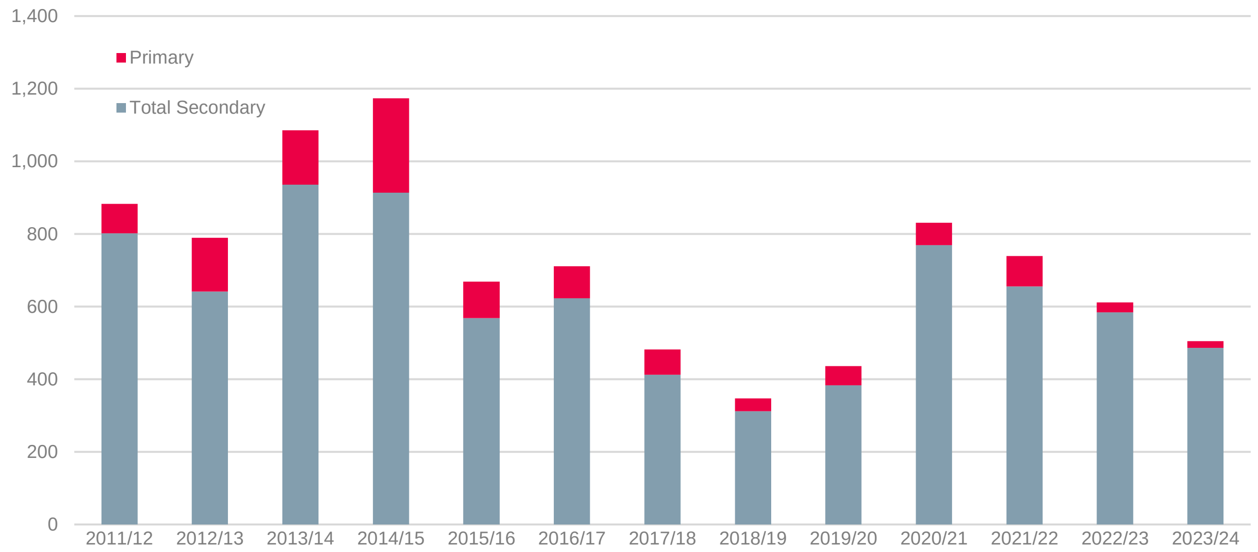
Population	Actual			Forecast						*Change*
	2011	2016	2021	2024	2026	2031	2036	2041	2046	*2024-46*
Primary Sector	34,395	36,655	36,709	37,459	37,959	39,209	40,459	41,459	42,459	5,000
Secondary Sectors										
• North	133,121	141,493	144,616	149,116	152,116	160,116	168,616	177,116	185,616	36,500
• South	3,040	3,285	3,703	4,153	4,453	5,453	6,953	8,453	9,953	5,800
Total Secondary	136,161	144,778	148,319	153,269	156,569	165,569	175,569	185,569	195,569	42,300
Main Trade Area	**170,556**	**181,433**	**185,028**	**190,728**	**194,528**	**204,778**	**216,028**	**227,028**	**238,028**	**47,300**

Average Annual Change (No.)	Actual		Forecast						*Change*
	2011-16	2016-21	2021-24	2024-26	2026-31	2031-36	2036-41	2041-46	*2024-46*
Primary Sector	452	11	250	250	250	250	200	200	*227*
Secondary Sectors									
• North	1,674	625	1,500	1,500	1,600	1,700	1,700	1,700	*1,659*
• South	49	84	150	150	200	300	300	300	*264*
Total Secondary	1,723	708	1,650	1,650	1,800	2,000	2,000	2,000	*1,923*
Main Trade Area	**2,175**	**719**	**1,900**	**1,900**	**2,050**	**2,250**	**2,200**	**2,200**	***2,150***

Average Annual Change (%)	Actual		Forecast						*Change*
	2011-16	2016-21	2021-24	2024-26	2026-31	2031-36	2036-41	2041-46	*2024-46*
Primary Sector	1.3%	0.0%	0.7%	0.7%	0.7%	0.6%	0.5%	0.5%	*0.6%*
Secondary Sectors									
• North	1.2%	0.4%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	*1.0%*
• South	1.6%	2.4%	3.9%	3.5%	4.1%	5.0%	4.0%	3.3%	*4.1%*
Total Secondary	1.2%	0.5%	1.1%	1.1%	1.1%	1.2%	1.1%	1.1%	*1.1%*
Main Trade Area	**1.2%**	**0.4%**	**1.0%**	**1.0%**	**1.0%**	**1.1%**	**1.0%**	**1.0%**	***1.0%***
Rest of Qld	*1.3%*	*1.2%*	*1.7%*	*1.6%*	*1.5%*	*1.5%*	*1.5%*	*1.4%*	*1.5%*
Australian Average	*1.6%*	*1.2%*	*2.1%*	*1.8%*	*1.6%*	*1.3%*	*1.2%*	*1.1%*	*1.4%*

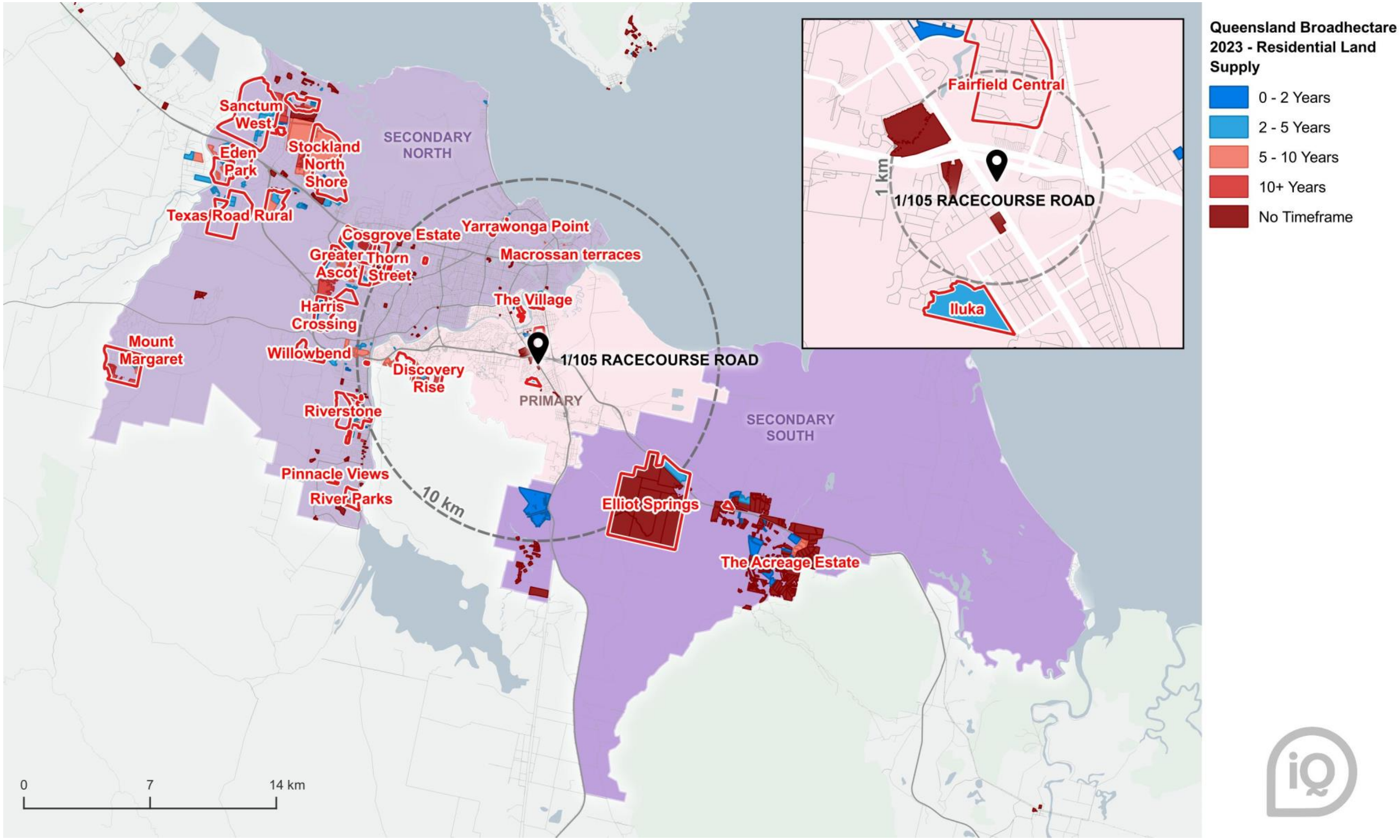
All figures as at June and based on 2021 SA1 boundary definition.
Sources : ABS; QGSO

CHART 2.1. NEW DWELLING APPROVALS BY SECTOR, 2011/12 – 2023/24



Source: ABS

MAP 2.3. TRADE AREA AND RESIDENTIAL GROWTH AREAS



2.3. Socio-economic Profile

i. Table 2.4 summarises the socio-economic characteristics of the Townsville Waterpark main trade area population by sector, compared with the Rest of Queensland benchmark. This information is based on the 2021 Census of Population and Housing. Key points to note include:

- The average age of residents is younger than the benchmark, with the youngest in the primary sector (36.6) and the oldest population in the secondary south sector (40.9). The Rest of Queensland average age is 40.7 years.
- There is a higher proportion of Australian born residents across all sectors compared to benchmark.
- The family structure of main trade area residents includes a higher proportion of couples with dependent children, reflecting the popularity of the region with families.
- Residents earn average per capita and household income levels that are ~7.5% higher than the Rest of Queensland benchmark.
- A high proportion (92.6%) of home ownership across the secondary south sectors and a lower proportion across the primary and secondary north sectors (~60%) compared to the benchmark of 66.6%.

ii. Overall, the socio-economic profile of the main trade area population is characterised as a young, Australian born, family-based market, who earn higher than average income levels.

iii. Table 3.4 compares the key socio-economic changes within the main trade area over the 2011 – 2021 Census periods with the Rest of Queensland benchmark. This indicates that the age distribution has remained younger when compared with the benchmark, and per capita and average household income levels have consistently remained higher than the benchmarks.

iv. With continued residential development and population growth, the socio-economic profile of the main trade area is expected to continue to reflect a younger, Australian born, traditional family-based population.

TABLE 2.2. MAIN TRADE AREA SOCIO-ECONOMIC PROFILE, 2021 CENSUS

Characteristic	Primary Sector	Secondary Sectors North	Secondary Sectors South	Main TA	Rest of Qld Average
People					
Age Distribution (% of Pop'n)					
Aged 0-14	15.7%	20.0%	17.3%	**19.1%**	18.1%
Aged 15-19	8.2%	6.4%	5.4%	**6.7%**	5.9%
Aged 20-29	21.3%	14.6%	10.4%	**15.8%**	11.9%
Aged 30-39	13.2%	14.3%	12.6%	**14.0%**	12.7%
Aged 40-49	12.2%	12.9%	13.8%	**12.8%**	12.7%
Aged 50-59	11.8%	12.4%	15.6%	**12.4%**	13.2%
Aged 60+	17.7%	19.4%	24.9%	**19.2%**	25.5%
Average Age	36.6	37.3	40.9	**37.2**	40.7
Birthplace (% of Pop'n)					
Australian	83.2%	87.0%	89.3%	**86.3%**	81.5%
Overseas	16.8%	13.0%	10.7%	**13.7%**	18.5%
• Asia	6.4%	3.2%	1.2%	**3.8%**	4.1%
• Europe	3.5%	3.8%	5.1%	**3.7%**	5.8%
• Other	7.0%	6.0%	4.4%	**6.2%**	8.6%
Family					
Average Household Size	2.2	2.5	2.6	**2.4**	2.4
Family Type (% of Pop'n)					
Couple with dep't children	42.7%	41.3%	44.6%	**41.6%**	40.1%
Couple with non-dep't child.	6.2%	6.0%	8.4%	**6.1%**	6.7%
Couple without children	25.3%	23.6%	31.7%	**24.0%**	27.0%
Single with dep't child.	9.6%	12.5%	5.6%	**11.9%**	10.1%
Single with non-dep't child.	3.3%	3.9%	2.7%	**3.8%**	3.9%
Other family	1.4%	1.2%	0.5%	**1.2%**	1.0%
Lone person	11.5%	11.5%	6.4%	**11.4%**	11.2%
Employment					
Income Levels					
Average Per Capita Income	$56,483	$53,728	$57,472	**$54,343**	$50,592
Per Capita Income Variation	11.6%	6.2%	13.6%	**7.4%**	n.a.
Average Household Income	$112,707	$103,026	$118,911	**$105,105**	$97,780
Household Income Variation	15.3%	5.4%	21.6%	**7.5%**	n.a.
Housing					
Tenure Type (% of Dwellings)					
Owned	60.3%	60.4%	92.6%	**61.0%**	66.6%
Rented	39.1%	38.2%	6.5%	**37.8%**	31.3%
Other Tenure Type	0.6%	1.4%	0.9%	**1.2%**	2.1%

Sources: ABS Census of Population and Housing 2021

TABLE 2.3. MAIN TRADE AREA SOCIO-ECONOMIC PROFILE CHANGES, 2011 - 2021 CENSUS

Characteristic	Townsville Waterpark MTA			Change (%)			Rest of Qld			Change (%)		
	2011	2016	2021	2011-16	2016-21	2011-21	2011	2016	2021	2011-16	2016-21	2011-21
People												
Average Age	34.3	35.7	37.2	0.8%	0.9%	0.8%	37.9	39.4	40.7	0.8%	0.6%	0.7%
Birthplace (% of Pop'n)												
Australian	85.9%	86.5%	86.3%	0.6%	-0.2%	0.5%	82.2%	82.4%	81.5%	0.3%	-0.9%	-0.6%
Overseas	14.1%	13.5%	13.7%	-0.6%	0.2%	-0.5%	17.8%	17.6%	18.5%	-0.3%	0.9%	0.6%
• Asia	2.6%	3.2%	3.8%	0.6%	0.6%	1.2%	2.6%	3.5%	4.1%	0.9%	0.6%	1.5%
• Europe	4.8%	4.0%	3.7%	-0.8%	-0.3%	-1.1%	6.8%	6.0%	5.8%	-0.8%	-0.2%	-1.0%
• Other	6.8%	6.3%	6.2%	-0.4%	-0.1%	-0.6%	8.4%	8.1%	8.6%	-0.3%	0.5%	0.2%
Family												
Average Household Size	2.6	2.6	2.4	-0.4%	-1.2%	-0.8%	2.5	2.5	2.4	-0.5%	0.0%	-0.3%
Family Type (% of Pop'n)												
Couple with dep't children	46.6%	44.3%	41.6%	-2.2%	-2.7%	-4.9%	43.3%	41.7%	40.1%	-1.6%	-1.6%	-3.2%
Couple with non-dep't child.	6.0%	6.0%	6.1%	0.0%	0.1%	0.1%	6.3%	6.7%	6.7%	0.3%	0.0%	0.3%
Couple without children	22.5%	22.9%	24.0%	0.4%	1.1%	1.5%	25.9%	26.1%	27.0%	0.2%	1.0%	1.2%
Single with dep't child.	11.3%	12.0%	11.9%	0.7%	-0.1%	0.5%	10.3%	10.3%	10.1%	0.1%	-0.2%	-0.1%
Single with non-dep't child.	3.0%	3.4%	3.8%	0.3%	0.4%	0.7%	3.1%	3.5%	3.9%	0.4%	0.3%	0.8%
Other family	1.3%	1.2%	1.2%	-0.1%	0.1%	-0.1%	0.9%	0.9%	1.0%	0.0%	0.1%	0.0%
Lone person	9.2%	10.2%	11.4%	1.0%	1.2%	2.2%	10.2%	10.8%	11.2%	0.6%	0.4%	1.0%
Employment												
Income Levels												
Average Per Capita Income	$42,096	$45,433	$54,343	1.5%	3.6%	2.6%	$37,707	$42,985	$50,592	2.7%	3.3%	3.0%
Per Capita Income Variation	11.6%	5.7%	7.4%	-5.9%	1.7%	-4.2%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average Household Income	$84,556	$89,081	$105,105	1.0%	3.4%	2.2%	$72,738	$82,797	$97,780	2.6%	3.4%	3.0%
Household Income Variation	16.2%	7.6%	7.5%	-8.7%	-0.1%	-8.8%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: ABS Census of Population and Housing 2011, 2016 & 2021

higher | lower than benchmark

2.4. Passing Traffic

i. The proposed Townsville Waterpark would service a significant passing traffic market along Racecourse Road (Old Bruce Highway).

ii. Map 2.4 illustrates the daily traffic counts at various points across the Townsville region as measured by the Queensland Department of Transport and Main Roads. Showing that Racecourse Road (Old Bruce Highway) is one of the busiest roads within the region.

iii. The nearest traffic count along Racecourse Road (north of the subject site) indicates an Annual Average Daily Traffic (AADT) of 23,066 vehicles (2023). This reflects exposure to some 8.4 million vehicles along Racecourse Road per annum.

iv. The subject site will also have access to Sturt Drive (south of the subject site) where the latest (2023) traffic count indicates an Annual Average Daily Traffic (AADT) of 13,633 vehicles. This reflects exposure to approximately 5.0 million vehicles along Sturt Drive per annum.

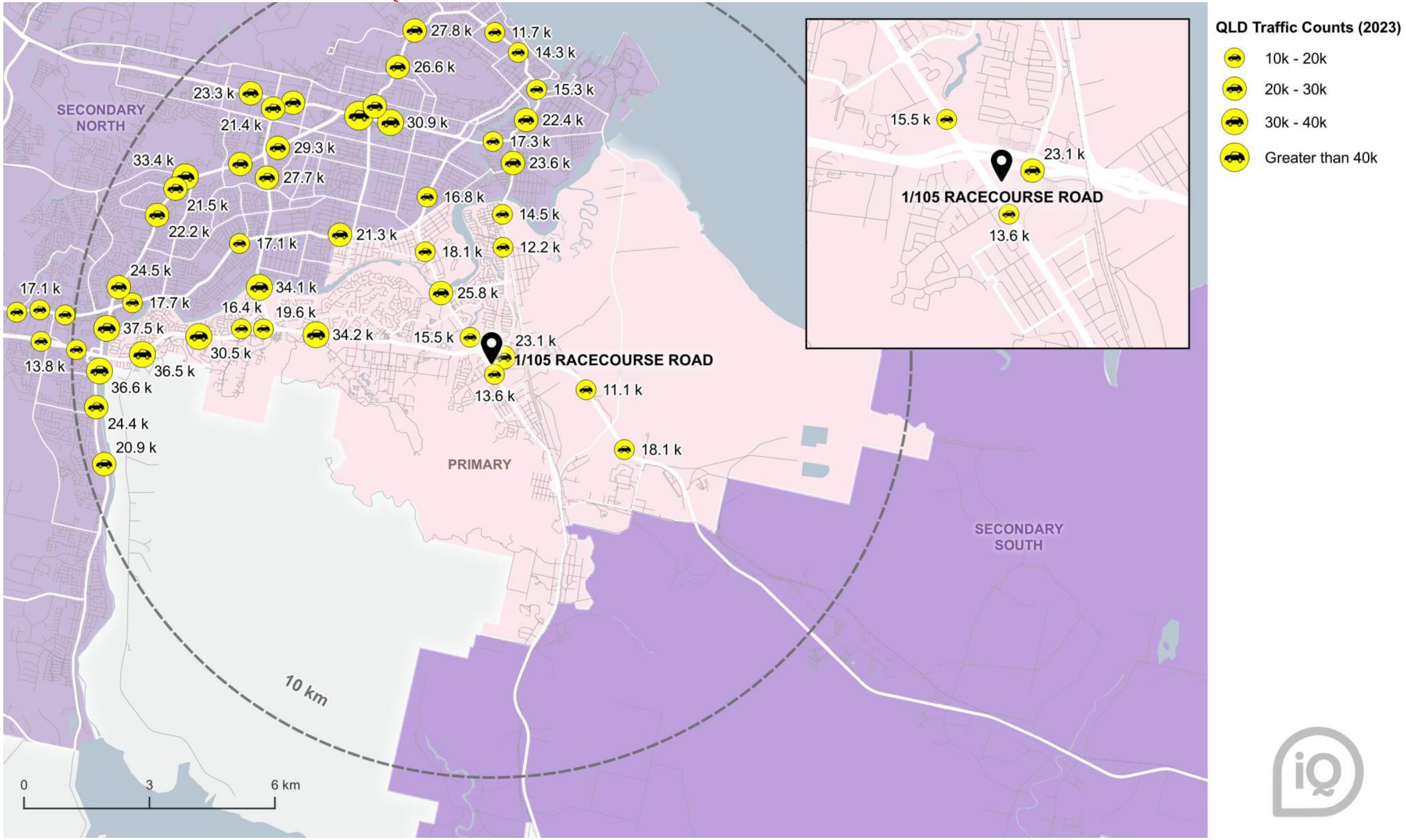
2.5. Waterpark Visitors

i. Other waterparks in Australia such as Wet N Wild and Jamberoo Action Park have annual visitation levels at around 1 million and 360,000 visitors per year, respectively. The Townsville Waterpark has capacity for around 3,000 persons per day.

ii. Given Wet N Wild services the Brisbane and Gold Coast regions (i.e. a more significant population than Townsville) the Townsville Waterpark visitation levels are assumed similar to that of Jamberoo Action Park which is located south of Wollongong in New South Wales.

iii. The Townsville Waterpark would attract visitors and tourist to the Townsville Region from beyond the defined main trade area and would also likely increase draw to the primary sector from the secondary north sector specifically (most populous sector of the main trade area).

MAP 2.4. ANNUAL AVERAGE DAILY TRAFFIC - QUEENSLAND DEPARTMENT OF TRANSPORT AND MAIN ROADS



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3 Large Format Retail

3.1. Overview

i. Large format retailing has evolved in recent years in Australia and incorporates bulky goods and retail showroom uses. Large format retailing includes a range of categories, but generally covers items of a bulky nature that require a large area for handling, display or storage, or direct vehicle access for loading.

ii. Large format retail centres typically serve broad geographic trade areas due to infrequent purchase habits. In recent times, the tenants looking to locate in bulky goods/large format areas has expanded, given that retail tenants such as sporting goods, toy stores, camping equipment, etc. trade in a similar manner, attracting low market shares across broad regions.

iii. Consequently, 'retail showroom' and mini-major tenants (retail tenants with floorspace of 400 sq.m or greater) are suited to locations like bulky goods centres, which are typically in extremely high profile, main road locations and, therefore, receive excellent exposure to passing traffic and are easily accessible from both a local and regional perspective.

iv. The co-location of facilities in a single centre or precinct generally results in a benefit to the consumer as well, with customers preferring to cross-shop, to compare prices and products more easily. This has been an increasing trend within the Australian retail environment.

v. Large format retail/homemaker centres, as an asset class, have experienced significant growth over the past decade with the population and housing boom in Australia.

vi. Large format retail/homemaker expenditure is defined to include categories such as:

- Outdoor Furniture and BBQ Stores
- Household Appliance Stores
- Computer and Electronic Stores
- Windows, Doors and Lighting Stores
- Hardware and Home Maintenance Supplies
- Furniture Stores
- Home Decoration
- Baby Goods Stores
- Manchester Stores
- Outdoor Adventure
- Sporting Goods Stores
- Motor Vehicle Accessories
- Pet Stores
- Toy Stores

vii. The provision (number) of large format retail operators varies between different chains, with Table 3.1 outlining key national large format retail brands represented throughout each sector (noting there are no large format retail operators within the secondary south sector and the primary sector facilities offer residents in this sector the closest large format retail options), the Townsville LGA (main trade area), and Rest of Queensland. As indicated, the provision of large format retail brands ranges between 50,000 to more than 200,000 persons dependent on the brand. This analysis is indicative only, given that there are likely gaps within each brands network across such a large geographical area.

viii. As shown, there are limited operators that do not currently operate within the Townsville market and also limited national operators who typically operate two stores in a region with around 200,000 persons.

3.2. Large Format Retail Expenditure

i. Chart 3.1 highlights the large format retail spend per capita by category with Toy Stores, Baby Goods Stores, Manchester Stores, Sporting Goods, Outdoor Adventure, and Pet Stores per capita spend higher across the primary sector than the Rest of Queensland benchmark. Overall, the per capital large format retail expenditure across the primary sector ($3,223) and main trade area ($3,145) is slightly lower than the Rest of Queensland benchmark ($3,394).

ii. Table 3.2 outlines the total level of large format retail/homemaker retail spending by trade area sector. As shown, total large format retail expenditure is currently estimated at $596.8 million and is projected to increase at an average annual growth rate of 3.0% to $1.15 billion by 2046.

iii. Table 3.3 provides a breakdown of the large format retail/homemaker retail spending by category. As shown, Hardware Home Maintenance Supplies comprise the largest component of the large format retail/homemaker retail spending market at $170.5 million (29% of total).

3.3. Existing Facilities

i. Table 3.4 details the provision of major large format retail/showroom locations within the main trade area, with Map 3.1 illustrating the location of facilities. As shown, there is a wide range of large format retail centres and other large format retailers dispersed throughout the Townsville urban area.

ii. Across the Townsville Urban Area, the most significant provision of large format retail facilities are located within two key precincts, namely Garbutt and Idalia. Main centres within these precincts include:

Idalia

- Fairfield & Co. (6,000 sq.m) includes large format tenants, Beacon Lighting, Lincraft, Petbarn, Pillow Talk, Lifeline, Rivers, Totally Toy, TradeLink, Nutrition Warehouse, Haymans Electrical, and City Cave. The centre also comprises a range of entertainment and non-retail showroom uses such as World Gym, GreenCross Vets, Queensland X-Ray, Chipmunks (expected to open soon), Fish N Flips swim school, Urban Climb, X-Golf, FitStop, and Lighten Up Yoga.

- Bunnings Warehouse is adjacent Fairfield & Co.

- Bridgestone Select and Reece Plumbing on a small side street off Lakeside Drive.

Garbutt

- Domain Central (52,700 sq.m) is anchored by Harvey Norman, The Good Guys, JB Hi-Fi and Nick Scali. A total of 21 tenants are provided.

- A range of other large format retail tenants are also provided opposite Domain Central including Bunnings Warehouse, Amart Furniture, Snooze, Pets Domain and RSEA Safety.

- Townsville Mega Centre (9,500 sq.m) is anchored by Beacon Lighting, Rebel Sport and Pet Barn.

- Spotlight Centre (7,200 sq.m) is anchored by Spotlight, Anaconda, and Road Tech Marine.

- A large format strip along Dalrymple Road, containing tenants Clark Rubber, Repco, Party Time and Carpet One.

iii. Additionally, several smaller large format retail precincts or strips are also provided within the main trade area, including:

- Office works, and Super Cheap Auto are provided on **Charters Towers Road**.

- **Woolcock Street** includes Fantastic Furniture, Toyworld, Betta Home Living, Chipmunks and more.

- **Ingham Road,** which includes large format retailers, Mitre 10, Carpet Court, Jaycar Electronics and Solomon Flooring.

- Harvey Norman Commercial, Hayman's Electrical Kirwan, Petbarn, Super Cheap Auto and Repco are provided in **Thuringowa/Kirwan**, around 13.0 km west of the subject site.

iv. Other large format retail facilities are located more than 15 km from the subject site and are of limited competitive relevance.

3.4. Proposed Facilities

i. Within the primary sector there is only one planned large format retail development of relevance to the subject site, namely future stages of Fairfield & Co.

ii. Fairfield & Co. have recently finished stage 4 and Stage 5 including the recently opened KFC, soon to be open Banjo's Bakery, and AEIOU Childcare, however, have yet to commence stage 3 (which includes 6,500 sq.m of large format retail floorspace). A new development application has been lodged for a BTR residential development on the site previously approved for stage 3, therefore stage 3 may not include the same level of large format retail floorspace and could more likely include ground level retail tenancies. Stage 6 has committed tenants including, Toyota and Lexus showrooms as well as tenancies ranging from 200 sq.m and upwards. Fairfield & Co is provided ~0.5 km by road to the north of the subject site.

iii. PetStock is currently under construction at Fairfield Central and is expected to open early 2025.

iv. Other Large format retail and showroom developments planned within the remainder of the Townsville Urban Area (main trade area) include:

- Hervey Range Road Thuringowa Central have submitted a development application for an industrial and commercial building comprising of two warehouses (1,730 sq.m).
- Market Garden Plaza is currently under construction opposite North Shore Marketplace (~18.5 metres to the north-west) the centre is planned to include an Aldi supermarket (1,797 sq.m), large format retail tenants (2,166 sq.m - proposed tenants currently include Petstock and My Car Service Centre.), a childcare centre, as well as a Krispy Kreme and KFC with drive thru. The first full year is assumed to be 2026/27.

3.5. Large Format Supply and Demand

i. As highlighted in Table 3.5, large format retail floorspace within the Townsville Waterpark primary sector is estimated at ~21,000 sq.m. This represents a primary sector provision of ~0.56 sq.m per person, which is below with the Australian provision of 0.7 sq.m of large format retail floorspace per person, reflecting the location of the subject site within the Townsville Urban Area. The main trade area is estimated to comprise ~175,000 sq.m of large format retail floorspace which represents a provision of ~0.9 sq.m per person, (above the Australian provision) reflecting the established nature of the Townsville region within northern Queensland.

3.6. Recommendation

i. Within the Townsville Waterpark primary sector LFR floorspace is estimated at ~21,000 sq.m. This represents a primary sector provision of ~0.56 sq.m per person, which is below with the Australian provision of 0.7 sq.m of large format retail floorspace per person, reflecting the location of the subject site within the Townsville Urban Area.

ii. The main trade area is estimated to comprise ~175,000 sq.m of large format retail floorspace which represents a provision of ~0.9 sq.m per person, (above the Australian provision) reflecting the established nature of the Townsville region within northern Queensland.

iii. The provision of large format retail brands ranges between 50,000 to more than 200,000 persons dependent on the brand. Currently, there are limited national brands that do not currently operate within the Townsville market and also limited national brands who would typically operate two stores in a region with around 200,000 persons.

iv. Over the period to 2046, the primary sector undersupply would increase to over 8,000 sq.m, which could indicate potential for large format retail floorspace at the subject site however this would be highly dependent on securing operators, given the number of operators currently located within the Townsville market.

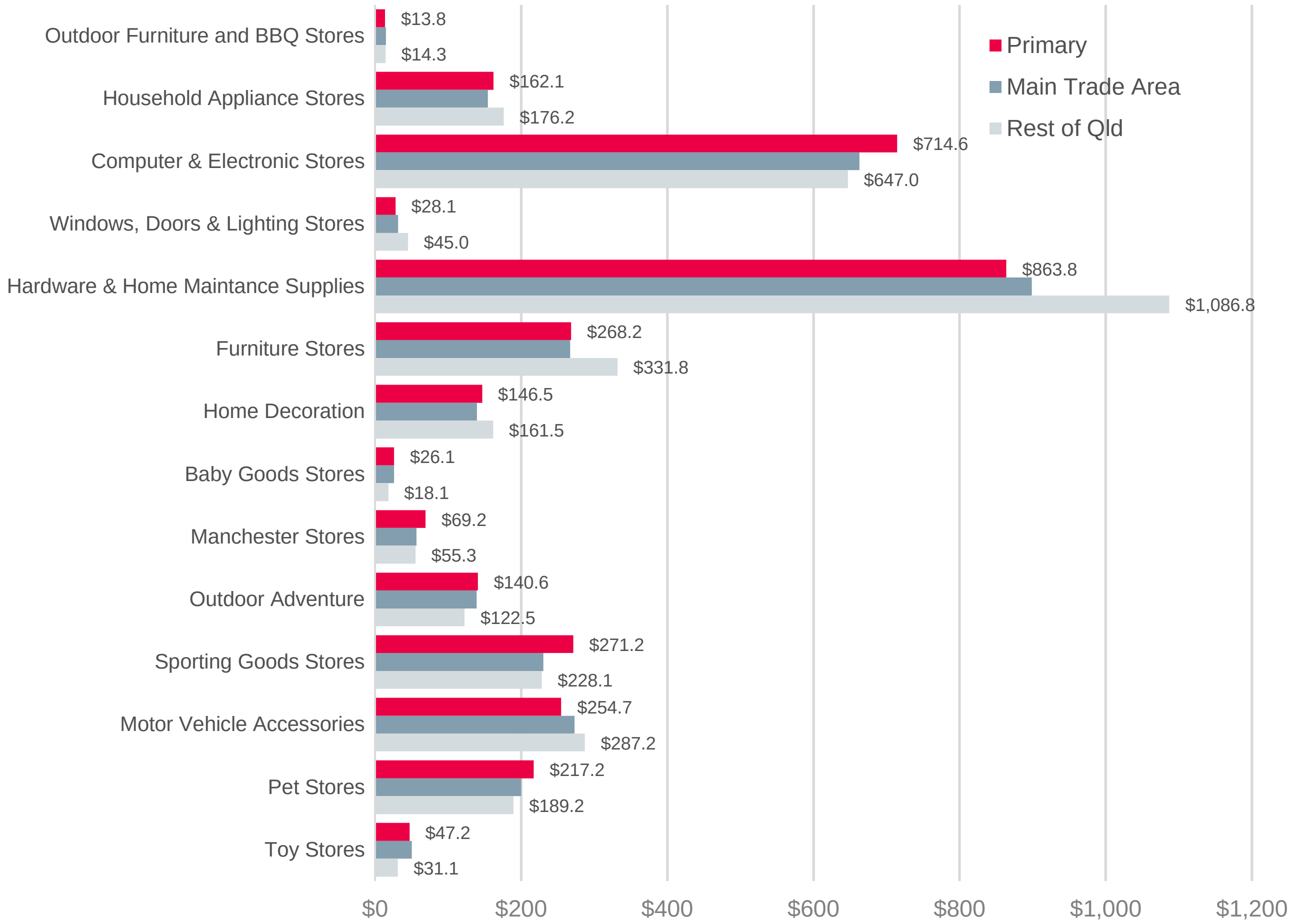
v. Alternatively, complementary leisure or apparel stores could be targeted such as City Beach, RipCurl, Rebel, a surf shop or even large format non-retail/entertainment uses such as a gym, bowling, or golf to complement the waterpark facility.

TABLE 3.1. MIAN TRADE AREA AND REST OF QUEENSLAND LAARGE FORMAT RETAIL PROVISION

Brand	Primary & Sec. South Sectors		Secondary North Sector		Townsville LGA (MTA)		Rest of Qld	
	No of Stores	Persons Per Store	No of Stores	Persons Per Store	No of Stores	Persons Per Store	No of Stores	Persons Per Store
Auto								
Repco	0	n.a.	2	74,600	2	100,700	48	57,400
Super Cheap Auto	0	n.a.	4	37,300	4	50,400	46	59,900
Autobarn	0	n.a.	1	149,100	1	201,400	19	144,900
Auto Pro	0	n.a.	0	n.a.	0	n.a.	9	305,900
Auto One	0	n.a.	1	149,100	1	201,400	n.a.	n.a.
Electrical								
Harvey Norman	0	n.a.	1	149,100	1	201,400	28	98,300
Betta Home Living	0	n.a.	0	n.a.	0	n.a.	35	78,700
Beacon Lighting	1	41,600	1	149,100	2	100,700	15	183,600
The Good Guys	0	n.a.	1	149,100	1	201,400	13	211,800
Jaycar Electronics	0	n.a.	1	149,100	1	201,400	18	153,000
Bedding								
Forty Winks	0	n.a.	1	149,100	1	201,400	10	275,300
Snooze	0	n.a.	1	149,100	1	201,400	8	344,200
Furniture								
Fantastic Furniture	0	n.a.	1	149,100	1	201,400	11	250,300
Amart Furniture	0	n.a.	1	149,100	1	201,400	10	275,300
Nick Scali Furniture	0	n.a.	1	149,100	1	201,400	7	393,400
Freedom Furniture	0	n.a.	0	n.a.	0	n.a.	4	688,400
Hardware								
Bunnings Warehouse	1	41,600	2	74,600	3	67,100	36	76,500
Mitre 10	0	n.a.	0	n.a.	0	n.a.	68	40,500
Home Timber & Hardware	0	n.a.	0	n.a.	0	n.a.	23	119,700
Thrifty Link	0	n.a.	0	n.a.	0	n.a.	6	458,900
Homewares								
Carpet Court	0	n.a.	1	149,100	1	201,400	17	162,000
Adairs	0	n.a.	3	49,700	3	67,100	20	137,700
Choices Flooring	0	n.a.	0	n.a.	0	n.a.	13	211,800
Carpet Call	0	n.a.	1	149,100	1	201,400	7	393,400
Miscellaneous								
Petbarn	1	41,600	3	49,700	4	50,400	26	105,900
Officeworks	0	n.a.	1	149,100	1	201,400	14	196,700
Pet Stock	0	n.a.	1	149,100	1	201,400	18	153,000
Spotlight	0	n.a.	1	149,100	1	201,400	15	183,600
Barbeques Galore	0	n.a.	1	149,100	1	201,400	13	211,800
Clark Rubber	0	n.a.	1	149,100	1	201,400	8	344,200
Outdoor								
BCF	0	n.a.	2	74,600	2	100,700	25	110,100
Anaconda	0	n.a.	1	149,100	1	201,400	13	211,800
Macpac	0	n.a.	0	n.a.	0	n.a.	1	2,753,500
Total LFR Provision	**3**	**13,870**	**35**	**1,190**	**38**	**5,300**	**604**	**4,600**

Source: Location IQ Database

CHART 3.1. LARGE FORMAT RETAIL EXPENDITURE PER CAPITA, 2023/24



Source: CommBank iQ; Location IQ

TABLE 3.2. MAIN TRADE AREA LARGE FORMAT RETAIL EXPENDITURE, 2024 – 2046

Y/E June	Primary Sector	Secondary Sectors North	Secondary Sectors South	Main TA
2024	120.3	458.7	17.7	**596.8**
2026	125.6	482.2	19.6	**627.4**
2028	132.5	512.1	22.1	**666.6**
2031	143.4	560.6	26.4	**730.3**
2036	163.4	652.0	37.1	**852.5**
2041	185.1	756.8	50.0	**991.9**
2046	209.4	876.3	65.3	**1,151.0**
Expenditure Growth				
2024-46	89.1	417.5	47.6	**554.2**
Average Annual Growth Rate				
2024-46	2.6%	3.0%	6.1%	**3.0%**

**Inflated dollars & including GST*

Source : CommBank iQ, Location iQ

TABLE 3.3. MAIN TRADE AREA LARGE FORMAT RETAIL EXPENDITURE BY CATEGOREY

Y/E June	Outdoor Funiture & BBQ Stores	H'hold Appliance Stores	Computer & Electronic Stores	Windows, Doors & Lighting	Hardware Home Maintenance Supplies	Furniture Stores	Home Decoration	Baby Goods Stores	Manchester Stores	Outdoor Adventure	Sporting Goods Store	Motor Vehicle Accessories	Pet Store	Toy Store	Total LFR
2024	2.8	29.3	125.8	6.0	170.5	50.7	26.5	4.9	10.8	26.4	43.7	51.8	37.9	9.6	**596.8**
2026	3.0	30.8	132.2	6.3	179.3	53.3	27.8	5.2	11.3	27.8	46.0	54.4	39.9	10.1	**627.4**
2028	3.2	32.7	140.4	6.7	190.6	56.6	29.6	5.5	12.0	29.5	48.8	57.9	42.5	10.7	**666.6**
2031	3.5	35.8	153.7	7.3	209.1	61.9	32.4	6.0	13.1	32.3	53.5	63.4	46.7	11.7	**730.3**
2036	4.0	41.7	178.9	8.5	244.5	72.2	37.8	7.0	15.3	37.7	62.3	74.2	54.9	13.6	**852.5**
2041	4.7	48.4	207.7	9.9	285.1	83.8	43.9	8.2	17.7	43.8	72.4	86.4	64.2	15.8	**991.9**
2046	5.4	56.1	240.4	11.4	331.4	97.1	50.9	9.5	20.5	50.8	83.9	100.4	75.0	18.3	**1,151.0**
Expenditure Growth															
2024-46	2.6	26.8	114.6	5.5	160.9	46.4	24.4	4.5	9.8	24.4	40.1	48.6	37.0	8.7	**554.2**
Average Annual Growth Rate															
2024-46	3.0%	3.0%	3.0%	3.0%	3.1%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.1%	3.1%	3.0%	**3.0%**

**Inflated dollars & including GST*

Source : CommBank iQ, Location iQ

TABLE 3.4. LARGE FORMAT RETAIL FACILITIES

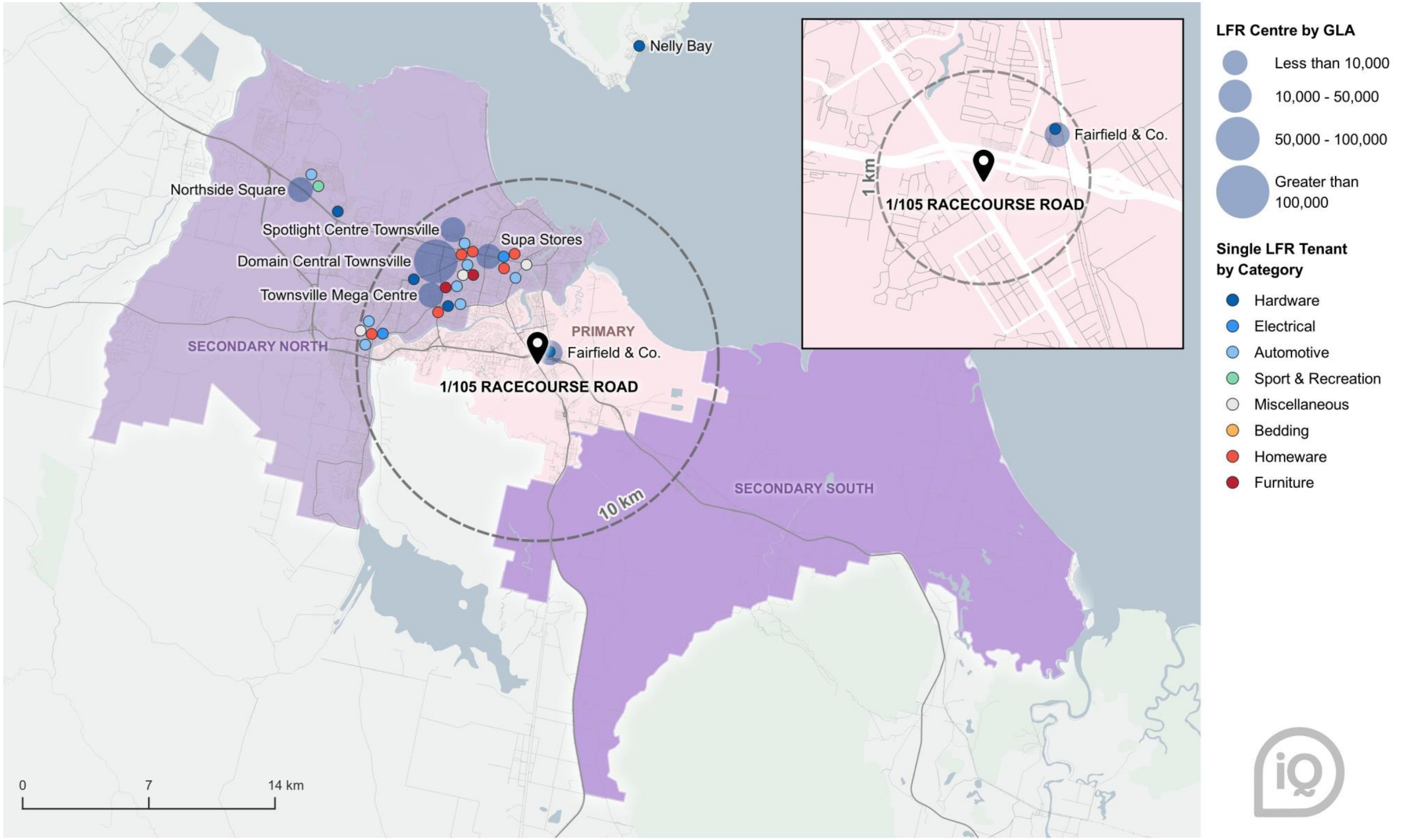
Centre	Shopfront GLA (sq.m)	Anchor Tenants	Dist. From Site (km)
Large Format Retail within the Main Trade Area			
Idalia	20,800		0.5
• Fairfield & Co	6,000	Beacon Lighting, Lincraft, Petbarn, Pillow Talk	
• Idalia	13,600	Bunnings Warehouse	
• Other	1,200	Bridgestone Select, Reece Plumbing	
Charters Towers Road	3,300	Officeworks, Supercheap Auto, Auto One	7.0
Woolcock Street	26,600		9.4
• Hyde Park SC	10,000	Betta Home Living, Tropic Living	
• Lakes Central	9,000	Playtime Adventure Land	
• Woolcock St Supa Stores	7,600	Fantastic Furniture, Intersport, 4WD Supacentre	
Garbutt	96,800		9.5
• Domain Central Townsville	52,700	Adairs, Baby Bunting, Barbeques Galore, BCF, Bedshed, Curtain Wonderland, Early Settler Furniture, Eureka Street Furniture, Forty Winks, TK Maxx, Sleepys, Harvey Norman, JB Hi-Fi, Toyworld, Total Tools, Snooze, Pet Stock, Pillow Talk, Plush, Autobarn, Robins Kitchen, The Good Guys	
• Townsville Mega Centre	9,500	Beacon Lighting, Rebel Sport, Petbarn, Supercheap Auto	
• Spotlight Centre	9,600	Anaconda, Spotlight, RTM - Road Tech Marine Townsville	
• Other	25,000	Amart Furniture, Auto One, Bunnings Warehouse, Carpet Call, Repco, Tradelink, Sydney Tools, Reece Bathroom	
Thuringowa/Kirwan	6,000		13.0
• Ryland Place	3,400	Harvey Norman Commercial, Haymans Electrical Kirwan	
• Other	2,600	Petbarn, Supercheap Auto, Repco, Reece Plumbing Bridgestone Select	
Burdell	14,000	Bunnings	18.3
Northside Square	8,000	Petbarn, BCF, Supercheap Auto	20.4

Source: Location IQ Database

TABLE 3.5. LARGE FORMAT RETAIL FLOORSPACE SUPPLY AND DEMAND

			Financial Year				Diff.
	2024	2026	2031	2036	2041	2046	2024-46
Population							
Primary Sector	37,459	37,959	38,959	39,959	40,709	41,459	**4,000**
Main Trade Area	190,728	194,528	204,528	215,528	226,278	237,028	**46,300**
Large Format Retail Floorspace Demand (@0.7 sq.m per person)							
Primary Sector	26,221	26,571	27,271	27,971	28,496	29,021	**2,800**
Main Trade Area	133,510	136,170	143,170	150,870	158,395	165,920	**32,410**
Large Format Retail Estimated Supply (sq.m)							
Primary Sector	20,800		6,500				
Main Trade Area	175,500		10,396				
Large Format Retail Under/Over Supply (sq.m)							
Primary Sector	-5,421	-5,771	29	-671	-7,696	-8,221	**-2,800**
Main Trade Area	41,990	39,330	42,726	35,026	27,501	19,976	**-22,014**

MAP 3.1. LARGE FORMAT RETAIL FACILITIES



4 Fast Food

4.1. Overview

i. In Australia, the food catering market (comprising fast food and take-away food stores) is a $25.3 billion industry, comprising in excess of 26,600 businesses. There are a range of competitors within the market, of which the major ones include:

- **McDonald's Australia**: operate around 1,000 stores and holds an estimated 22.5% market share ($5.7 billion revenue).
- **Competitive Foods Australia**: ~460 Hungry Jacks stores and holds an 9.5% market share ($2.4 billion revenue).
- **Yum! Restaurants**: include approximately 430 KFC stores, with an estimated 8.7% market share ($2.2 billion revenue).
- **Domino's Pizza**: franchisor of Domino's Pizza stores with a 4.9% market share ($1.2 billion revenue).
- **Collins Foods**: operate around 280 KFC stores and 30 Taco Bell stores with a market share of more than 4.9% ($1.2 billion revenue).
- **Craveable Brands:** include stores across the Red Rooster, Chicken Treat, and Oporto brands that combine for a market share of around 3.9% ($978.4 million revenue).
- **Subway:** franchisor for over 1,000 Subway stores across Australia with a market share of 3.3% ($838.3 million revenue).

ii. IBISWorld (August 2024) estimate that by 2027/28, the fast food and takeaway market will exceed $26.0 billion in revenue across 27,017 businesses (37,413 establishments) and some 239,438 employees ($7.3 billion in wages).

iii. The operational aspects of each brand/group vary with some of the key points including:

- **Hours of trade:** the largest chains, such as McDonald's, often trade 24-hours, 7-days a week, offering specific breakfast, lunch, and dinner menus. With a substantial number of other traders having limited trading hours, providing only breakfast/lunch or lunch/dinner offerings.
- **Home delivery:** technological advancements, the pandemic, and other delivery services (Uber Eats, Deliveroo, Menulog etc) have driven a rapid increase in online delivery within the industry. This was previously more associated with pizza chains, but now extends to all major operators and even smaller stores, offering them the opportunity to deliver to their customer's homes. These services and platforms have boosted industry revenue, however, have also restricted profit margins – given major partners charge high commission in the order of 35% of the total order value.

- **In-store seating:** several operators provide in-store seating while other facilities have a relatively limited offering. Some brands have begun experimenting with drive-thru/pick up only (no seating) stores in Australia, as well as dark kitchens – which offer delivery services only (no access for the general public).

- **Drive-thru facilities:** an increasingly important element of food catering restaurants, with up to 70% of a restaurant's sales coming through these facilities. This reinforces their proposition as convenience-based facilities, particularly in the midst of competition from popular food delivery services (Uber Eats, Deliveroo, Menulog etc).

- **Price Point:** the prices that operators charge varies, with fast food facilities typically charging between $5 - $15 per meal. By way of comparison, more traditional cafes and restaurants charging between $15 - $25 per meal, while more expensive restaurants and hotels/taverns typically charging in excess of $25.

- **Licensed premises** – in Australia, most of the major food catering chains do not include the provision of alcohol, while a range of restaurants and other competing facilities contain licensed premises or offer bring your own (BYO) services.

iv. The vast difference in offerings between the various brands and groups means that the customer segments each store services can vary significantly depending on location, meal-time, the group who people are dining with (family vs. friends vs. alone), and day of the week.

v. The provision (number) of food catering operators varies between different chains, with Table 4.1 outlining key national fast-food brands represented throughout each sector (noting there are no fast-food operators within the secondary south sector and the primary sector facilities offer them the closest fast-food options), the Townsville LGA (main trade area), and Rest of Queensland. As indicated, the provision of fast-food restaurants ranges between 20,000 to more than 100,000 persons dependent on the brand. This analysis is indicative only, given that there are likely gaps within each brands network across such a large geographical area.

vi. As shown the primary and secondary south sectors major national tenants that could be targeted now include McDonalds, Domino's, and Boost Juice, other tenants that may consider the subject site in the medium to longer term include, Red Rooster and Oporto - who does not currently have a drive through store in Townsville.

4.2. Food Catering Expenditure

i. Chart 4.1 details the primary sector and main trade area per capita spending on food catering, as compared with the Rest of Queensland average for 2023/24. As shown, the primary sector food catering spending is around 15.7% higher than the benchmark and the main trade area food catering spending is 7.9% higher than the benchmark.

ii. Table 4.2 details the size of the food catering market for both the primary sector and main trade area. The food catering spend market is $83.6 million across the primary sector and $411.8 million across the main trade area. All figures presented in this report are in inflated dollars and include GST. Over the period to 2046 food catering expenditure is projected to increase to $165.1 million and $899.1 million across the primary sector and main trade area respectively.

iii. Table 4.3 highlights expenditure for key food catering categories for the main trade area. Over the period to 2046 expenditure is projected to increase at an average annual growth rate of 4.0% per annum.

4.3. Food Catering Competition

i. Map 4.1 illustrates the location of key major fast-food operators, indicating there are a number of facilities throughout the primary sector, with a range of tenants focused in and around Fairfield Central, The Precinct, as well as along major arterial routes. In the broader Townsville Urban Area, the largest concentration of fast-food operators are provided at the major shopping centres and within the Townsville CBA (Map 4.2).

i. The subject site is in proximity to entertainment and convenient retail facilities, provided to the north. These types of facilities help activate the site and serve the broader region.

ii. Food catering floorspace should aim to provide a convenience-based offer with easy access to passing traffic and morning through lunchtime meal services. Food catering tenants generally prefer to locate within dining precincts in larger shopping centres or along busy retail strips - with easy access to passing pedestrian traffic and after-hours meal services (i.e. outside regular trading hours), also benefiting from excellent accessibility and visibility.

iii. On average across the Townsville LGA, one nationally branded fast-food restaurant (represented brands) is provided for approximately every 2,100 persons, indicating that the primary sector and main trade area can support around 18 and 90, based on a population level of 37,459 and 190,728, respectively. By 2046, the primary sector and main trade area could support up to 20 and 112 nationally branded fast-food operators. Workers and visitors to the region would add to this demand.

iv. Zarraffa's Coffee and Guzman y Gomez are PAD sites at Fairfield Central and KFC on the corner of Lakeside Drive and Darcy Drive which has recently opened are the nearest drive through fast food tenants, to the subject site. Banjo's Bakery Café is also under construction north of the KFC and is expected to open mid-December.

v. Given the location of the development, additional food catering tenants as well as fast food tenants who operate PAD sites could be targeted. Food catering tenants such as McDonald's, Oporto, and a drive through coffee shop could be targeted. Boost Juice also operates a drive-thru site in Garbutt and could also be considered for the Townsville Waterpark site.

4.4. Recommendation

i. On average across the Townsville LGA, one nationally branded fast-food restaurant (represented brands) is provided for approximately every 2,100 persons.

ii. The primary sector and main trade area can support around 18 and 90, based on a population level of 37,459 and 190,728, respectively. By 2046, the primary sector and main trade area could support up to 20 and 113 nationally branded fast-food operators. Workers and visitors to the region would add to this demand.

iii. There is strong potential for fast food (drive-thru) uses at the subject site given the current undersupply across the primary sector, planned population growth in the region, and the solid passing traffic volumes along Racecourse Road and Sturt Drive.

iv. Three - Four drive-thru facilities, with a combined GLA of 600 – 900 sq.m are considered supportable at the subject site. The key tenant to attract would be McDonalds, given they only operate one store in the primary and secondary south sectors combined. Other major national tenants that could be targeted include Domino's, and Boost Juice.

v. Other tenants that may consider the subject site in the medium to longer term include, Red Rooster and Oporto (who currently do not operate a drive thru store in Townsville).

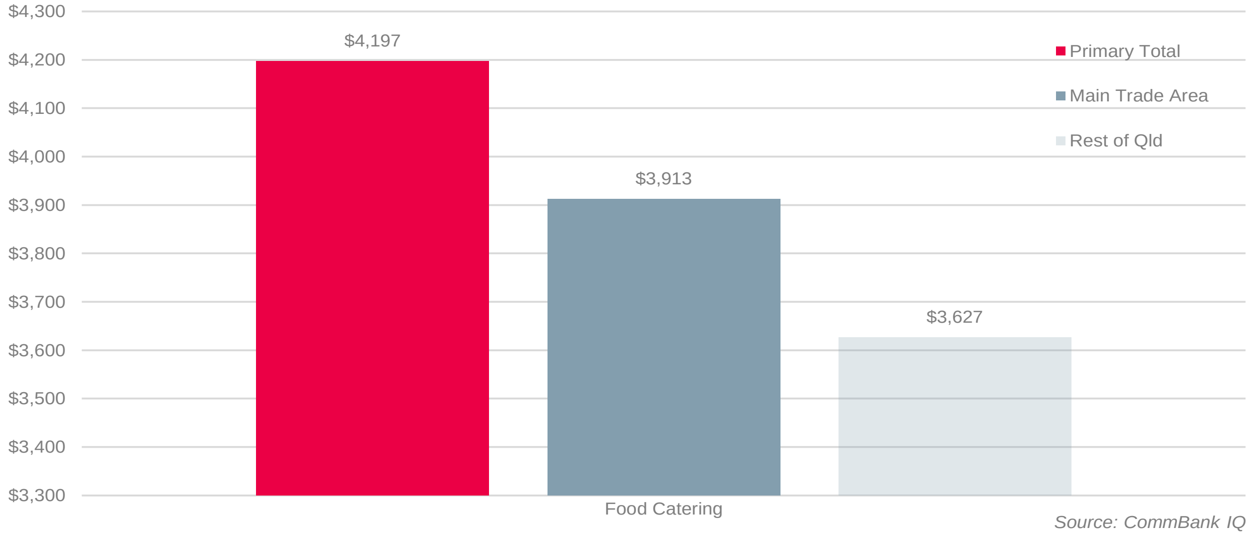
vi. Independent operators could also be considered such as a drive thru coffee shop as well as cafes and restaurants to create a dining precinct, similar to The Precinct .in Fairfield Waters

TABLE 4.1. MIAN TRADE AREA AND REST OF QUEENSLAND FAST FOOD PROVISION

Brand	Primary & Sec. South Sectors		Secondary North Sector		Townsville LGA (MTA)		Rest of Qld	
	No of Stores	Persons Per Store	No of Stores	Persons Per Store	No of Stores	Persons Per Store	No of Stores	Persons Per Store
Subway	4	10,400	10	14,900	14	14,400	150	18,400
McDonald's	1	41,600	9	16,600	10	20,100	122	22,600
Domino's Pizza	1	41,600	8	18,600	9	22,400	100	27,500
Boost Juice	0	n.a.	4	37,300	4	50,400	35	78,700
KFC	2	20,800	7	21,300	10	20,100	87	31,600
Red Rooster	1	41,600	6	24,900	7	28,800	61	45,100
Hungry Jacks	2	20,800	4	37,300	6	33,600	54	51,000
Pizza Hut	1	41,600	3	49,700	4	50,400	42	65,600
The Coffee Club	0	n.a.	5	29,800	5	40,300	50	55,100
Zambrero	2	20,800	5	29,800	7	28,800	32	86,000
Oporto	0	n.a.	1	149,100	1	201,400	12	229,500
Guzman Y Gomez	1	41,600	3	49,700	4	50,400	30	91,800
Gloria Jean's Coffee	0	n.a.	0	n.a.	0	n.a.	17	162,000
Grill'd	1	41,600	2	74,600	3	67,100	16	172,100
Sushi Sushi	0	n.a.	3	49,700	3	67,100	10	275,300
Nando's	1	41,600	0	n.a.	1	201,400	7	393,400
Soul Origin	0	n.a.	1	149,100	0	n.a.	4	688,400
Crust	0	n.a.	1	149,100	1	201,400	3	917,800
Roll'd	0	n.a.	0	n.a.	0	n.a.	7	393,400
Jamaica Blue	0	n.a.	1	149,100	1	201,400	18	153,000
Baskin Robbins	0	n.a.	2	74,600	2	100,700	21	131,100
Zarraffa's Coffee	2	20,800	2	74,600	4	50,400	32	86,000
Mad Mex	0	n.a.	0	n.a.	0	n.a.	1	2,753,500
Schnitz	0	n.a.	0	n.a.	0	n.a.	5	550,700
Sushi Train	0	n.a.	0	n.a.	0	n.a.	17	162,000
Carl's Jr	0	n.a.	0	n.a.	0	n.a.	4	688,400
Rashay's	0	n.a.	0	n.a.	0	n.a.	1	2,753,500
Taco Bell	0	n.a.	0	n.a.	0	n.a.	1	2,753,500
La Porchetta's	0	n.a.	0	n.a.	0	n.a.	2	1,376,700
Hog's Breath Café	0	n.a.	0	n.a.	1	201,400	11	250,300
Shingle Inn	0	n.a.	0	n.a.	0	n.a.	3	917,800
Max Brenner's Chocolate Bar	0	n.a.	0	n.a.	0	n.a.	4	688,400
Pizza Capers	0	n.a.	0	n.a.	0	n.a.	3	917,800
Salsa's Fresh Mexican	0	n.a.	0	n.a.	0	n.a.	0	n.a.
Stellarossa	0	n.a.	0	n.a.	0	n.a.	5	550,700
SumoSalad	0	n.a.	0	n.a.	0	n.a.	1	2,753,500
Total Fast Food Provision	**19**	**1,840**	**77**	**540**	**97**	**2,100**	**974**	**2,800**

Source: Location IQ Database

CHART 4.1. AVERAGE PER CAPITA FOOD CATERING SPENDING, 2023/24



Source: CommBank IQ

TABLE 4.2. FOOD CATERING EXPENDITURE, 2024 – 2046

Y/E June	Primary Sector	Main Trade Area
2024	83.6	**411.8**
2026	89.8	**445.7**
2028	95.6	**478.1**
2031	105.1	**531.4**
2036	122.7	**635.1**
2041	142.4	**756.7**
2046	165.1	**899.1**
Expenditure Growth		
2024-46	81.6	**487.3**
Average Annual Growth Rate		
2024-46	3.1%	**3.6%**

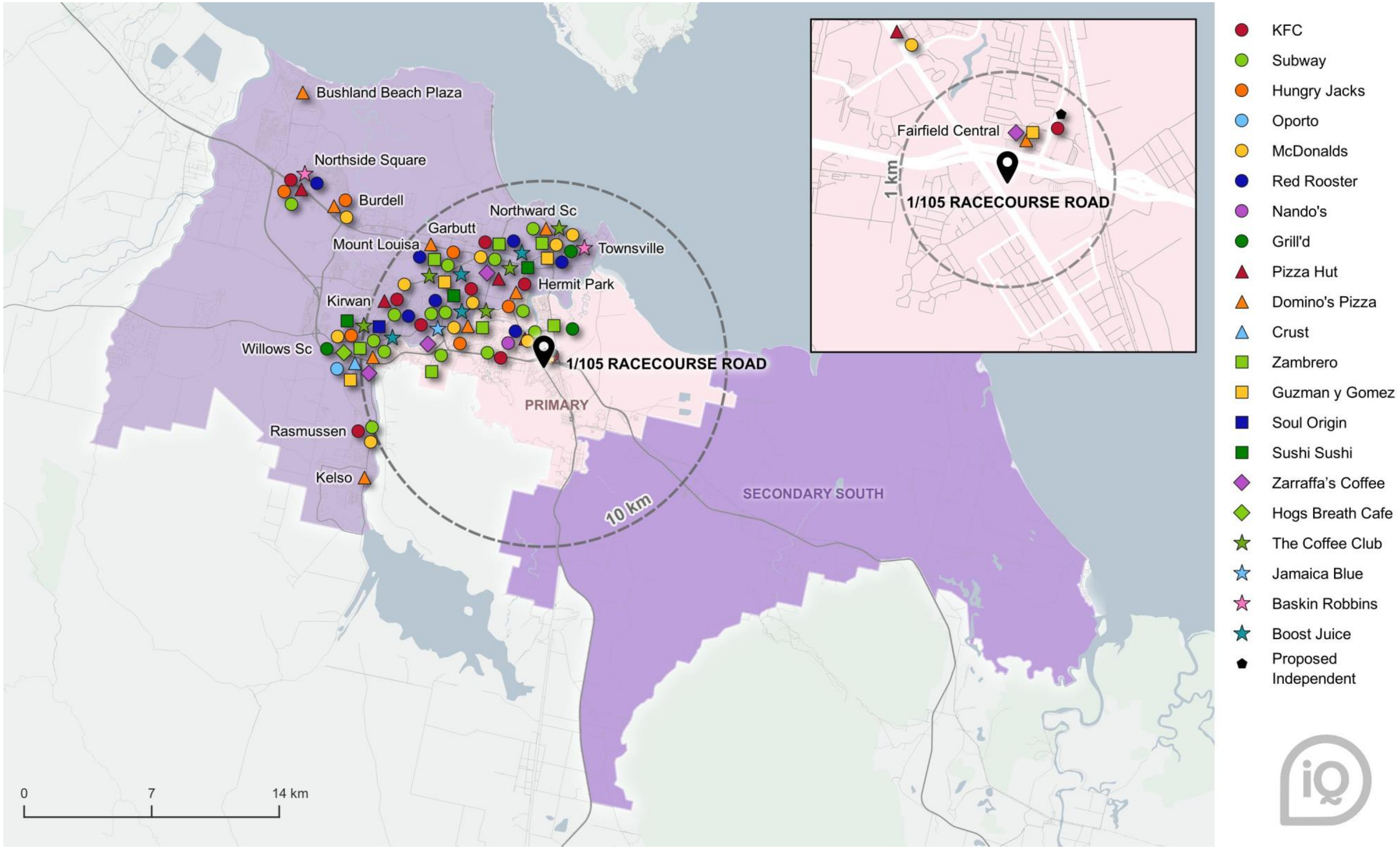
**Inflated dollars & including GST*
Source : CommBank iQ, Location iQ

TABLE 4.3. MAIN TRADE AREA KEY FOOD CATERING CATEGORIES EXPENDITURE, 2024 – 2046

Y/E June	Cafes & Restaurants	Takeaway Food	Pubs, Taverns and Bars	Food Delivery Services
2024	242.5	270.4	163.2	62.4
2026	262.3	292.5	176.6	67.5
2028	284.0	316.7	191.3	73.0
2031	320.1	356.9	215.7	82.2
2036	391.3	436.2	264.0	100.2
2041	476.8	531.5	322.0	121.8
2046	579.7	646.0	391.7	147.7
Expenditure Growth				
2024-46	337.2	375.6	228.5	85.2
Average Annual Growth Rate				
2024-46	4.0%	4.0%	4.1%	4.0%

**Inflated dollars & including GST*
Source : CommBank iQ, Location iQ

MAP 4.1. FAST FOOD TENANTS



MAP 4.2. FOOD CATERING TOWNSVILLE

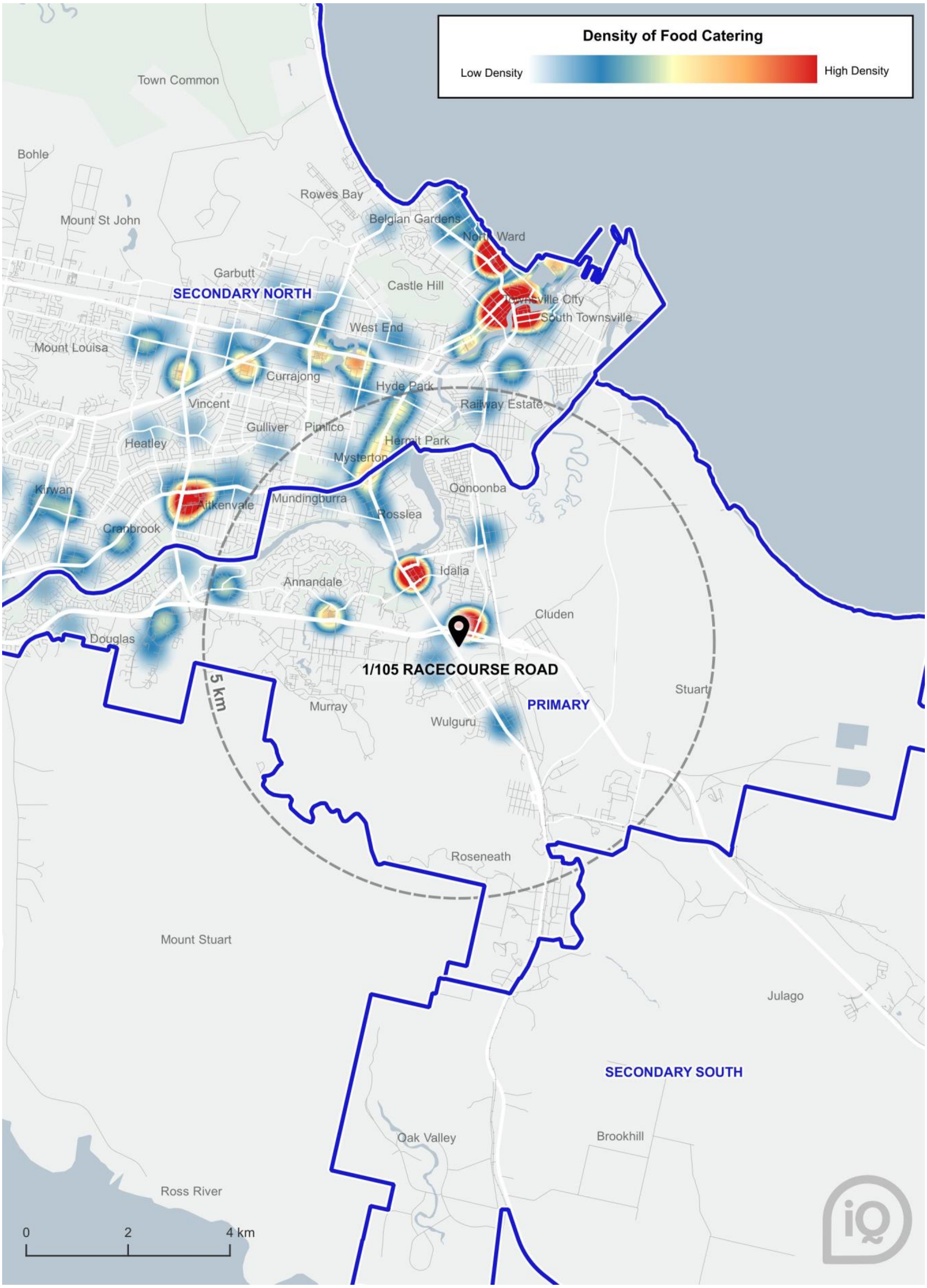


TABLE 4.4. PRIMARY SECTOR FOOD CATERING FACILITIES

Location	Fast Food Outlets	Distance* From Site (km)
Within the Primary Sector		
Idalia		
• Fairfield & Co	KFC, Banjo's Bakery Café (opening mid-Dec)	0.7
• Fairfield central	Donut King, Specialty Coffee Trader, Grill'd, Café Bambini, Guzman y Gomez, Muffin Break, Sandwich Chefs, Three Leaves Bakehouse, Wara Sushi, Zambrero, Zarraffa's Coffee, HappyTea, Domino's, Bap & Roll, Annee's Caphe Sua Da, Motto Motto	0.7
• The Precinct	McDonald's, Red Rooster, Getta Betta, Tori&Co, Italian Job, Summerie's Thai, The Spirited Goat, Nando's, Subway, Cach Song Townsville, Noodle Box, Pizza Hut	2.3
Annandale		3.7
• Annandale Central	KFC, Hungry Jack's, Subway, Angelina's Fine Food	
Mundingburra	Hungry Jack's, Subway	5.4
Douglas		7.3
• Angus Smith Drive	CK Biryanis, Zarraffa's Coffee,	
• Medilink Centra	Zambrero, Subway, The Daily Grindz, Sushi Jenga	
• James Cook University	Campus Coffee, Juliette's Espresso, Aroma Café, K-STREET, Canto Kitchen & Bar, Big Love Expresso, JCU Uni BAR	
• Riverside Boulevard	Riverview Tavern, IDK Coffee Shop	

** Distance measured by road*

Based on desktop survey November 2024

Red text indicates drive thru format

5 Tavern

5.1. Competition

i. Taverns are often located adjacent or nearby large retail hubs and vary in size from around 300 sq.m to larger taverns of around 2,000 sq.m.

ii. Taverns typically require a population of around 10,000 persons in suburban areas to be supportable, which would indicate the primary sector could support up to four over the forecast period, there are currently four taverns within the key primary sector, however, two are located on the edge of the primary sector and would largely service residents from the secondary north sector.

iii. Map 5.1 illustrates the location of taverns within the surrounding region, with four operational facilities currently within the main trade area.

iv. Recently a development application has been approved for a Tavern and Dan Murphys at Fairfield Central. Dan Murphys is planned as a freestanding tenant on the site adjacent the Coles end of the centre and the tavern is planed immediately north of that and will be service by an extension to the existing parking lot.

v. If the approved tavern at Fairfield Central was to proceed it may be difficult for an additional tavern to be approved at the subject site or attract a traditional tavern tenant.

vi. Popular restaurants and bars tend to attract customers from a broad region, particularly residents aged under 35 years. The attraction of the Townsville Waterpark, in combination with the racetrack may be attractive to a range of tenants. Attracting a portion of this wider population is highly reliant on securing popular/high profile restaurants and bars, as well as the creation of an active and engaging precinct. Providing a quality local bar operator at the site would also help to elevate the cultural association with the development, as well as providing after-hours activation.

vii. Similar uses currently being developed around Australia include on-site microbreweries, which also provide a unique offer with destinational appeal.

5.2. Recommendation

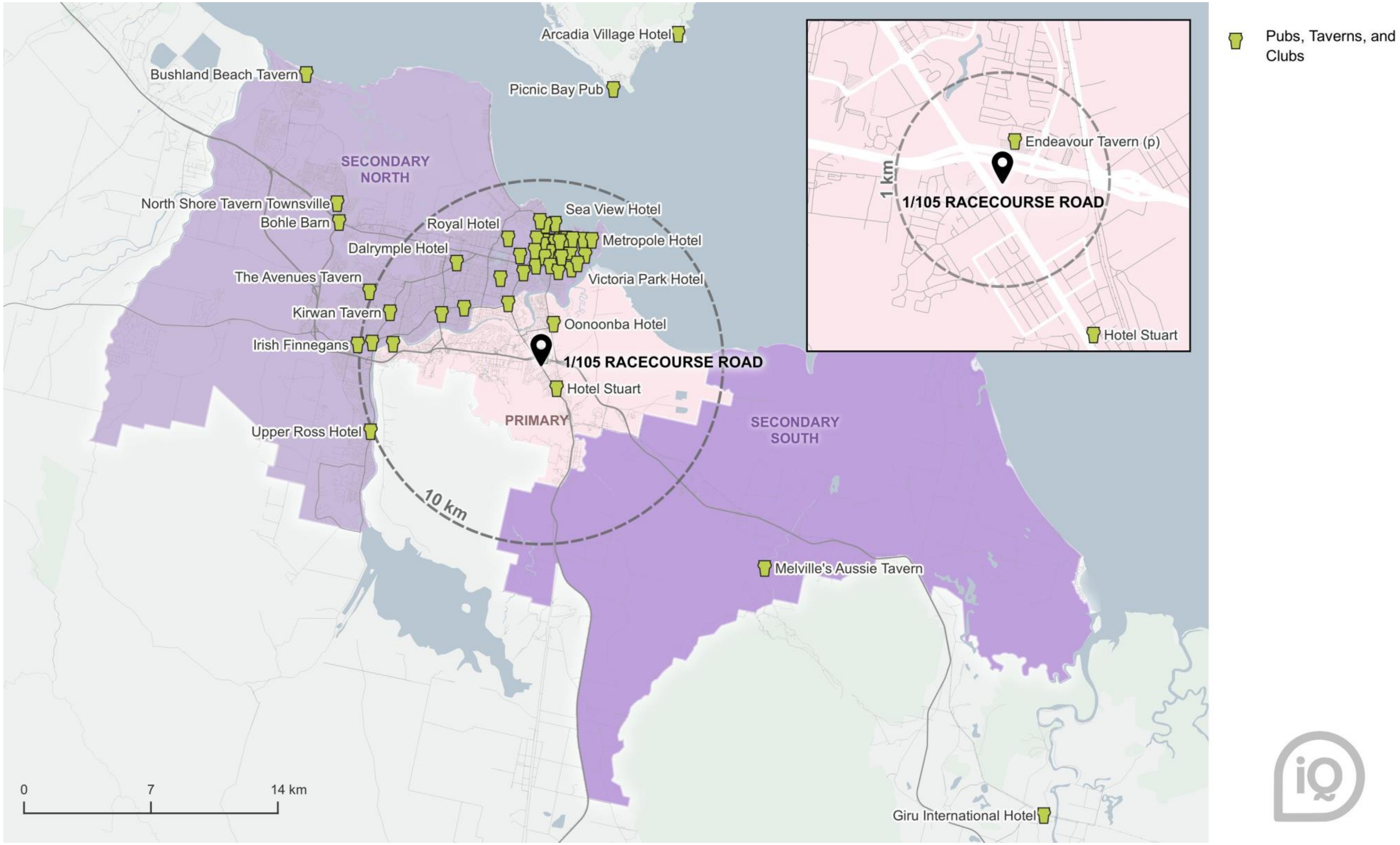
i. Taverns typically require a population of around 10,000 persons in suburban areas to be supportable.

ii. Based on this primary sector could support up to four over the forecast period, there are currently four taverns within the key primary sector, however, two are located on the edge of the primary sector and would largely service residents from the secondary north sector.

iii. If the approved tavern at Fairfield Central was to proceed it may be difficult for an additional tavern to be approved at the subject site or attract a traditional tavern tenant.

iv. The attraction of the Townsville Waterpark, in combination with the racetrack may be attractive to a range of tenants such as an on-site microbrewery, which would also provide a unique offer with destinational appeal.

MAP 5.1. TAVERNS



6 Summary of Potential

This section of the report provides a summary of the potential for retail uses as part of the Townsville Waterpark site in Condon. The Location iQ summary of potential is outlined in Table 6.1.

i. BNC Planning is proposing a development at 1/105 Racecourse Road in Condon a suburb within the Townsville LGA, which is the major hub for North Queensland, 350 km south of Cairns, 390 km north of Mackay, and 1,100 km north of Brisbane.

ii. The development is known as Townsville Waterpark and is planned to include a range of uses across three main precincts as follows:

   - Precinct One: is proposed to include a range of retail and Food catering floorspace as well as a tavern.
   - Precinct Two: may comprise units or large format retail floorspace.
   - Precinct Three: Will include 3,000-person capacity waterpark including a designated VIP area as well as a Hotel (200 rooms - 15 storey) featuring dedicated conference and event facilities capable of accommodating up to 600-seat banquet style.

iii. Overall, the site totals around 14 hectares, including Precinct One (~2.9 hectares), Precinct Two (~2.2 hectares) and Precinct Three (~8.8 hectares). However, due to flooding around 110,000 sq.m will be developable land.

iv. The project is estimated to cost around $550 million in total and is expected to be designed similar to Wet 'n' Wild on the Gold Coast. The estimated investment for the waterpark, beach club, and hotel component is $250 million, with an additional $300 million required to develop the apartment complexes and address the housing supply needs of the Townsville region.

v. The operational phase of the development would generate approximately 715 jobs, of which 500 would be direct and 215 through flow-on effects

vi. The developable retail land (i.e. Precincts One and Two) is in the order of 52,000 sq.m. Assuming a single level development, and a 30% - 40% built form ratio that allows for at grade car parking, this would mean around 15,600 sq.m - 20,800 sq.m (GLA) - excluding public amenity - could be provided.

vii. The defined main trade area population is currently estimated at 190,730, including 37,459 persons in the primary sector. Over the period to 2046, the Townsville Waterpark main trade area population is projected to increase to 337,030, representing an average annual growth of 1.0%, or around 2,100 persons. The Rest of Queensland average annual growth rate over the same period is 1.3%.

viii. The potential for a range of uses at the subject site are summarised as follows:

Large Format Retail

- Within the Townsville Waterpark primary sector LFR floorspace is estimated at ~21,000 sq.m. This represents a primary sector provision of ~0.56 sq.m per person, which is below with the Australian provision of 0.7 sq.m of large format retail floorspace per person, reflecting the location of the subject site within the Townsville Urban Area.

- The main trade area is estimated to comprise ~175,000 sq.m of large format retail floorspace which represents a provision of ~0.9 sq.m per person, (above the Australian provision) reflecting the established nature of the Townsville region within northern Queensland.

- The provision of large format retail brands ranges between 50,000 to more than 200,000 persons dependent on the brand. Currently, there are limited national brands that do not currently operate within the Townsville market and also limited national brands who would typically operate two stores in a region with around 200,000 persons.

- Over the period to 2046, the primary sector undersupply would increase to over 8,000 sq.m, which could indicate potential for large format retail floorspace at the subject site however this would be highly dependent on securing operators, given the number of operators currently located within the Townsville market.

- Alternatively, complementary leisure or apparel stores could be targeted such as City Beach, RipCurl, Rebel, a surf shop or even large format non-retail/entertainment uses such as a gym, bowling, or golf to complement the waterpark facility.

Fast Food

- On average across the Townsville LGA, one nationally branded fast-food restaurant (represented brands) is provided for approximately every 2,100 persons.

- The primary sector and main trade area can support around 18 and 90, based on a population level of 37,459 and 190,728, respectively. By 2046, the primary sector and main trade area could support up to 20 and 113 nationally branded fast-food operators. Workers and visitors to the region would add to this demand.

- There is strong potential for fast food (drive-thru) uses at the subject site given the current undersupply across the primary sector, planned population growth in the region, and the solid passing traffic volumes along Racecourse Road and Sturt Drive.

- Three - Four drive-thru facilities, with a combined GLA of 600 – 900 sq.m are considered supportable at the subject site. The key tenant to attract would be McDonalds, given they only operate one store in the primary and secondary south sectors combined. Other major national tenants that could be targeted include Domino’s, and Boost Juice.

- Other tenants that may consider the subject site in the medium to longer term include, Red Rooster and Oporto (who currently do not operate a drive thru store in Townsville).

- Independent operators could also be considered such as a drive thru coffee shop as well as cafes and restaurants to create a dining precinct, similar to The Precinct .in Fairfield Waters.

Tavern

- Taverns typically require a population of around 10,000 persons in suburban areas to be supportable.
- Based on this primary sector could support up to four over the forecast period, there are currently four taverns within the key primary sector, however, two are located on the edge of the primary sector and would largely service residents from the secondary north sector.
- If the approved tavern at Fairfield Central was to proceed it may be difficult for an additional tavern to be approved at the subject site or attract a traditional tavern tenant.
- The attraction of the Townsville Waterpark, in combination with the racetrack may be attractive to a range of tenants such as an on-site microbrewery, which would also provide a unique offer with destinational appeal.

ix. Overall, the potential for large format retail and a tavern is limited in the short term, the proposed development plan outlines Precinct Two may include units and this would likely be a better option for the site unless large format retail tenants can be secured. A brewery should be considered instead of a Tavern given the approval of a Tavern and Dam Murphy's at Fairfield Central. A brewery or similar would provide a unique offer to the Townsville Waterpark development and add to the destinational appeal.

TABLE 6.1. LOCATION IQ SUMMARY OF POTENTIAL

Uses	Potential	Indicative Tenant GLA (sq.m)	Indicative Total Development GLA (sq.m)
Fast Food	High	180 - 250	600 - 900
Large Format Retail	Low - Moderate	500 - 2,000	5,000 - 10,000
Tavern	Low	300 - 2,000	800 - 1,500
Mircobrewery	Moderate	300 - 2,000	800 - 1,500
Total			**7,200 - 13,900**

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