# THE CONTAINER PTY LTD

TRAFFIC IMPACT ASSESSMENT REPORT FOR REZONING PROPOSAL FOR RESIDENTIAL APPARTMENTS AT 48 TO 54 PARADISE BEACH ROAD SANCTUARY POINT, NSW.

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Job No.: 1162-22

Report No.: 14/22

**JUNE 2022** 

# CONTENTS

1.0	INTRODUCTION	3
1.1	Background	.3
1.2	Scope of Report	.3
2.0	EXISTING TRAFFIC CONDITIONS	4
2.1	Site Description	.4
2.2	Road Inventory	.4
2.3	Traffic Volumes in Paradise Beach Road	
2.4	Vehicular Access to Site	.4
3.0	THE PROPOSED DEVELOPMENT	5
3.1	Description of the Proposal	.5
3.2	Parking Provisions and Requirements	
3.3	Driveway Access to Site	.5
3.4	Parking Layout and Inbound Circulation	.5
3.5	Traffic Generation	
4.0	TRAFFIC IMPACTS OF PROPOSED REZONING	7
4.1	Impact on Frontage Road Traffic	.7
4.2	Impact on Street Parking	.7
4.3	Safety	
4.4	Security	
5.0	SUMMARY	

FIGURES Figure 1 Locality Map Figure 2 Aerial Map

# APPENDICES

APPENDIX A						
Drawings Prepared by Kannfinch Group Pty Ltd 25/5/2022						
Project Statistics and Notes	SK00.00					
3D View	SK00.00A					
Basement 2 Plan	SK00.02					
Basement Floor Plan	SK00.03					
Ground Floor Plan	SK00.04					
Level 1-2 Floor Plan	SK00.05					
Level 3 Floor Plan	SK00.06					
Sections	SK01.01					

# 1.0 INTRODUCTION

# 1.1 Background

A rezoning application for a residential development comprising 34 apartments in a 4 level building at 48-54 Paradise Beach Road Road, Sanctuary Point is to be made to Shoalhaven City Council. The site is shown in **Figure 1 Locality Map**. The adjacent area is occupied by detached residential dwelling houses, sporting fields and a golf course.

# 1.2 Scope of Report

This report has been prepared on behalf of the applicant to address the following issues: -

- Driveway location and access
- Car parking provision and DCP requirement
- Traffic generation
- Impacts on frontage road traffic



# 2.0 EXISTING TRAFFIC CONDITIONS

## 2.1 Site Description

The site comprises residential allotments at Nos 48 to 52 and 54 on the south eastern side of Paradise Beach Road. The land has a frontage to Paradise Beach Road of approximately 60 metres. There are two detached dwelling houses and ancillary outbuildings on the site.

# 2.2 Road Inventory

Paradise Beach Road is 12.8 metres wide and has a kerbside parking lane and one lane for moving traffic in each direction. Kerbside parking is not time restricted. Paradise Beach Road is a collector road. The Regional Road network is shown in **Figure 2**, an aerial map.

# 2.3 Traffic Volumes in Paradise Beach Road

Shoalhaven City Council has provided the following data from traffic counts made in December 2014 at a location 110 metres east of Kerry Street and approximately 480 metres west of Kingsford Smith Crescent.

Average Daily (AD): 6141 (Both directions) Average Weekday (AWD): 6392 Busiest weekday (BWD): 6967 85<sup>th</sup> Percentile Speed: 46.1 km/hr Heavy vehicles (Class 3 and above): 3.3% Eastbound traffic 49.3%

Peak hour traffic volumes in the morning and afternoon commuter peak hours may be assumed to be 10% of the daily traffic volume. This amounts to about 350 vehs/hr in each direction.

# 2.4 Vehicular Access to Site

The dwelling houses on the site have vehicular access to Paradise Beach Road.



ntine Rd-

Tomeronghe Forest Rd

Wirin Wirra 💽

The Woods 🤗 Farm Jervis Bay Int-Re

Sports Ground

ew

Island Point Rd opp St Georges Rd

Paradise Beach Rd.opp Sanctuary...

The Wool Rd

Rd Vincentia Shopping Village...

HomeCo Vincentia

at the

Worrowing Old Erowal Heights Bay

Nava/C

**Erowal Bay** 

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# FIGURE 2 **REGIONAL ROAD NETWORK**



# 3.0 THE PROPOSED DEVELOPMENT

## 3.1 Description of the Proposal

The proposed residential building has 30/2 bedroom and 4/3 bedroom apartments at ground and Levels 1, 2 and 3, 2 levels of basement car parking with separate ingress and egress from Paradise Beach Road and landscaped grounds surrounding the site. The proposal is detailed on the architects' drawings prepared by Kannfinch Pty Ltd that are included in **Appendix A**.

## 3.2 Parking Provision and Requirement

There are two parking levels in Basement one with 36 car spaces including 2 spaces for persons with a disability and Basement two with 18 car spaces and a total of 54 spaces.

The minimum parking requirement for residential flat buildings is set out in Chapter G21 in *Shoalhaven DCP 2014*. The rate is 1.5 spaces per 2 bedroom unit and 2 spaces per 3 bedroom unit. The total requirement for 30/2 bedroom units and 4/3 bedroom units is 53 spaces and includes visitor parking. Two lifts provide convenient access to the disabled parking spaces and operate from basement two to residential Level 3.

### 3.3 Driveway Access to Site

Separate ingress and egress driveways have been provided as required in Clause A 10.3 and A 10.4 in the *Shoalhaven DCP 2014*. The ingress or entrance driveway is located at the eastern end of the building and the egress or exit driveway is located at the western end of the building. The driveways are set back from the site boundaries and meet the sight distance requirements for pedestrians on the frontage footpath.

The driveway gradients can be adjusted to comply with Clause 2.5.3 b) in *AS/NZS 2890.1* and Clause 3.3. The driveways are 3.6 metres wide between 300mm wide kerbs and comply with Clause 2.5.2 a) i) and Figure 2.8 in *AS/NZS 2890.1*.

The straight road alignment provides adequate sight distance of 69 metres for a desirable 5 second gap and a frontage road speed of 50 km/hour.

### 3.4 Parking Layout and Internal Circulation

The 90 degree angle parking spaces are 5.4m long by 2.4m wide and the aisle width is 5.8m. the geometric layout complies with User Class 1A for residential parking in *AS/NZS* 2890.1.

# (3.4 continued.)

End parking spaces adjacent to walls at RL 12.5, RL 13.1 and RL 9.7 need to be widened to 2.7 metres. The entry ramp descends to RL 12.5 and circulation past car parking is clockwise to a short up ramp from RL 12.5 to RL 13.1. From the upramp circulation past parking spaces at RL 13.1 is clockwise to the down ramp to RL 12.5 at the eastern end. From RL 12.5 vehicles travel west to the exit ramp to street level.

Vehicles seeking access to Basement 2 at RL 9.70 travel west along the aisle at RL 12.5 to the down ramp at the western lift, thence to RL 9.7 and travel clockwise along the parking aisle past the parking spaces. The up ramp takes vehicles to RL 12.5 where they exit on the ramp to the frontage street.

# 3.5 Traffic Generation

The building has 34 units and is therefore classed as a high density residential development in the *RTA Guide to Traffic Generating Developments*. However, the complex is not located near public transport and has much higher parking provision per unit then the high density units in the RTA surveys.

It is expected that traffic generation rates in the am and pm peak hours would be similar to medium density residential flat buildings in regional NSW. A peak hour rate of 0.65 vehicular trips per unit has been assumed. The directional distribution in the am peak hour is 75% out and 25% in and in the pm peak hour 67% of trips in and 33% out. The estimated peak hour weekday traffic generation is as shown in **Table 3.5**.

No of	Peak Hour		Traffic Generation		
Dwelling Units	Peak Hour	Generation Rate	IN	OUT	TOTAL
34	7 - 9am	0.65/Unit	5.5	16.6	22.1
	4 - 6pm	0.65/Unit	14.8	7.3	22.1

The development is a low traffic generator. Based upon the available busiest weekday two directional peak hour flow of 750 veh/hour the increase is 2.70% above the two existing detached dwellings.

# 4.0 TRAFFIC IMPACTS OF PROPOSED REZONING

# 4.1 Impact on Frontage Road Traffic

The increased traffic generation of 20.1 vehicular trips in the weekday am and pm peak hours will have insignificant impact on the Level of Service which is expected to remain at Level of Service A in the 4 lane road with occasional parking in the kerbside lanes.

The ingress and egress driveways have adequate sight distance to approaching traffic in Paradise Beach Road and the design standards comply with *AS/NSW 2890.1* and the Shoalhaven DCP 2014.

### 4.2 Impact on Street Parking

The proposed development has 54 parking spaces compared with the DCP requirement of 53 parking spaces. The number of driveway crossings is the same as existing so no on-street parking spaces will be lost.

### 4.3 Safety

The sight distance from the exit driveway to passing vehicles and pedestrian complies with the relevant Australian Standards and Shoalhaven DCP14.

The 85<sup>th</sup> percentile traffic speed is 46.1 km/hour compared with the 50 km/jour signposted speed limit. A traffic roundabout at the intersection of Kingsford Smith Crescent and Paradise Beach Road some 100 metres east of the subject site allows east bound vehicles to turn into the westbound carriageway with safety.

## 4.4 Security

It is assumed that automatic gates will be provide in both entrance and exit driveways to prevent unauthorized vehicle and pedestrian access and that a security system will be installed at the entrance to both pedestrian entry lobbies.

### 5.0 SUMMARY

- 1. It is assumed that some minor design requirements identified in this report can and will be made at Development Application Stage.
- 2. The proposed development is supported on traffic and parking grounds.

APPENDIX A

# ADG COMPLIANCE

## SOLAR ACCESS

	3hr+	Nil	Total
Ground	4	1	8
L1	7	1	10
L2	7	1	10
L3	6		6
Total:	24	3	34
Percentage	70.59%	8.82%	

#### **CROSS-VENTILATION**

	Cross - Ventilation	Total
Ground	6	8
L1	6	10
L2	6	10
L3	6	6
Total:	24	34
Percentage	2:	71%

# GFA CALCULATIONS

COMMUNAL SPACE

#### DEEP SOIL (6m)

#### PROPOSED CAR PARKING

THOI OSED CAN TANKING						
	DCP RATES / REQUIRED PARKING					
	1B	2B	3B	VISITORS		
RATE	1	1.5	2	INCLUDED		
REQUIRED						
		2B	3B	TOTAL		
		48	4	52		
PROVIDED						
<b>B1</b> 3			37			
		B2	18			
TOTAL 55				55		



#### Location Plan

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Sheet No	Sheet Name	Revision
SK00.00	PROJECT STATISTICS & NOTES	
SK00.00A	3D VIEW	
SK00.01	SITE PLAN	
SK00.02	BASEMENT 2- FLOOR PLAN	
SK00.03	BASEMENT 1- FLOOR PLAN	
SK00.04	GROUND- FLOOR PLAN	
SK00.06	LEVEL 3 FLOOR PLAN	
SK01.01	SECTIONS	
SK02.01	ELEVATIONS	
SK02.02	HEIGHT PLANE CONTROL	

#### PROPOSED ACCOMMODATION

Yield

2 Bed
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Ground	8	F	8
01	10	-	10
02	10	н	10
03	4	2	6
TOTAL	32	2	34
	32	2	
Mix	94%	6%	



# RESIDENTIAL DEVELOPMENT

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

PROJECT STATISTICS & NOTES

# SK00.00

Project No. @ A3 25/05/2022 10:53:32 AM :Plot Date

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# RESIDENTIAL DEVELOPMENT

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

3D VIEW

# SK00.00A

Project No. @ A3 25/05/2022 10:56:21 AM :Plot Date

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# **RESIDENTIAL DEVELOPMENT**

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

**BASEMENT 2- FLOOR PLAN** 







Project No. 1:200 @ A3 25/05/2022 10:53:39 AM :Plot Date

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RESIDENTIAL DEVELOPMENT

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

BASEMENT 1- FLOOR PLAN





# SK00.03

Project No. 1:200 @ A3 : 200 @ A3 25/05/2022 10:53:40 AM :Plot Date

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#### PARADISE BEACH ROAD





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# **RESIDENTIAL DEVELOPMENT**

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

GROUND- FLOOR PLAN

OPTION B

Scale 1:200 0 1m 2m 5m



# SK00.04

Project No. 1:200 @ A3 25/05/2022 10:53:43 AM :Plot Date

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**RESIDENTIAL DEVELOPMENT** 

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

LEVEL 1-2 FLOOR PLAN





# Sk00.05

Project No. 1:200 @ A3 25/05/2022 10:53:45 AM :Plot Date

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**RESIDENTIAL DEVELOPMENT** 

48-54 PARADISE BEACH ROAD, SANCTUARY POINT, NSW

LEVEL 3 FLOOR PLAN

Scale 1:200 0 1m 2m 5m



# SK00.06

Project No. 1:200 @ A3 25/05/2022 10:53:46 AM :Plot Date

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