

ENARES PTY LTD

TRAFFIC AND TRANSPORT
STUDY FOR PROPOSED
ALTERATIONS AND ADDITIONS
TO THE GLADESVILLE BRIDGE
MARINA

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1. INTRODUCTION

1.1 Colston Budd Rogers and Kafes Pty Ltd has been commissioned by Enares Pty Ltd to prepare a traffic and transport report for the proposed alterations and additions to the Gladesville Bridge Marina at 380 Victoria Place, Drummoyne. The marina location is shown in Figure 1.

1.2 The existing marina provides for 99 vessels, including 50 fixed berths, 44 swing moorings and five on-shore cradles. It is proposed to extend the marina to provide for 130 vessels, comprising 115 fixed berths and 15 swing moorings.

1.3 The Secretary's Environmental Assessment Requirements, dated 15 November 2018, include the following:

- **traffic and transport** – including:
 - details of road transport routes and access to the site;
 - road traffic predictions for the development during construction and operation;
 - an assessment of impacts to the safety and function of the road network;
 - a description of carpark arrangement for the development

1.4 This report assesses the traffic and transport implications of the proposed alterations and additions, including addressing the SEARs, through the following chapters:

- Chapter 2 - describing existing conditions; and
 - Chapter 3 - assessing the traffic and transport implications of the proposed development.
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2. EXISTING CONDITIONS

Site Location and Road Network

- 2.1 Gladesville Bridge Marina is at 380 Victoria Place, Drummoyne, as shown in Figure 1. It provides for 99 vessels, including 50 fixed berths, 44 swing moorings and five on-shore cradles. On site facilities include office, kiosk area, slip way and workshop.
- 2.2 Road access to the marina is provided via a driveway from Victoria Place. 11 parking spaces are provided, including six spaces within the crown lease and five spaces within the site. Vehicles are also able to park on the ramp from Victoria Place.
- 2.3 Surrounding land uses include low to medium density residential development in Victoria Place and commercial uses further south. Five Dock Point and Howley Park are adjacent to the site at the end of Victoria Place.
- 2.4 Victoria Place runs north from Westbourne Street and is a dead end at its northern end, adjacent to the marina. It provides for one traffic lane and one parking lane in each direction, clear of intersections. On-street parking is generally unrestricted. Victoria Place forms part of a bus route, south of Drummoyne Avenue.

Traffic Flows

- 2.5 Traffic counts undertaken in Victoria Place, between Drummoyne Avenue and the marina, found the following:
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- average weekday flows of some 725 vehicles two-way (sum of both directions);
- average weekend flows of some 800 vehicles two-way;
- peak hour flows of some 50 to 70 vehicles per hour two-way on weekdays and some 60 to 100 vehicles per hour two-way on the weekend.

2.6 These are low flows, being less than the RMS desirable and maximum flows of 200 and 300 vehicles per hour two-way respectively for local residential streets. They reflect the fact that Victoria Place is a dead end and that the adjacent land uses have low traffic generations.

Parking Conditions

2.7 We have undertaken counts of the number of vehicles parked in Victoria Place (between Drummoyne Avenue and the northern end) and on-site at the marina, including on Saturday 19th January, Sunday 20th January, Saturday 8th June and Monday 10th June 2019 (public holiday). The results of the surveys are summarized in Table 2.1, which shows that:

- on 19 January, on-street parking ranged from 88 to 97 spaces, with parking at the marina ranging from seven to nine spaces;
 - on 20 January, on-street parking ranged from 88 to 102 spaces, with parking at the marina ranging from nine to 12 spaces;
 - on 8 June, on-street parking ranged from 90 to 100 spaces, with parking at the marina ranging from eight to 11 spaces; and
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- on 10 June, on-street parking ranged from 84 to 100 spaces, with parking at the marina ranging from six to 10 spaces.

Table 2.1: Number of parked vehicles

Time	Saturday 19 January		Sunday 20 January		Saturday 8 June		Monday 10 June	
	On street	Marina	On street	Marina	On street	Marina	On street	Marina
6:00 am					93	8	98	6
6:30					94	8	100	6
7:00					95	8	98	6
7:30					93	8	97	6
8:00					93	8	98	6
8:30					91	8	94	7
9:00					90	9	90	7
9:30					91	10	90	6
10:00	88	7	92	10	93	11	90	8
10:30	93	7	88	9	93	10	90	8
11:00	94	7	89	11	92	11	92	8
11:30	94	9	95	11	93	10	89	9
12:00 pm	92	7	90	12	93	10	87	10
12:30	93	9	101	11	92	10	90	9
1:00	89	9	102	10	92	10	89	9
1:30	91	9	101	11	95	9	88	9
2:00	97	8	99	12	96	11	86	10
2:30	99	8	102	12	95	10	87	8
3:00	99	9	102	12	100	9	84	9
3:30	96	7	98	11	97	9	87	8
4:00	98	8	98	10	98	9	89	9
Supply	102	14¹	102	14¹	102	14¹	102	14¹

¹Supply of 14 spaces includes 11 spaces as described in paragraph 2.2 plus parking for three cars on the access ramp.

- 2.8 The survey results show that on-street parking in the northern part of Victoria Place is generally well used, with little significant variation over the day. Parking spaces were always available at the marina on all survey days. These two factors suggest that on-street parking is generally unrelated to the marina.
- 2.9 With 99 berths, the parking survey results indicate a peak parking rate for the marina of some 0.09 to 0.12 spaces per berth on any day.
- 2.10 These results are consistent with those found by Christopher Hallam & Associates Pty Ltd¹ in 2015 of some 0.09 to 0.15 spaces per berth. They compare to data for the marina back to 1999 which found parking demands of 0.09 to 0.11 spaces per berth.

Public Transport

- 2.11 Local bus services are provided by Sydney Buses. Route 508 connects Drummoyne with Town Hall. Four services operate on weekday mornings to the city, with a return service in the afternoon.
- 2.12 A number of other services operate along Westbourne Street and Victoria Road, close to the site.

¹ Traffic and Parking Impact Assessment of Proposed Changes to Gladesville Bridge Marina, 380 Victoria Place, Drummoyne NSW, 23 September 2015.

3. IMPLICATIONS OF PROPOSED DEVELOPMENT

3.1 It is proposed to extend the marina to provide for 130 vessels, comprising 115 fixed berths and 15 swing moorings. The proposed alterations and additions would therefore cater for an increase of 31 vessels, compared to today. Additional on-site parking is proposed.

3.2 This chapter assesses the traffic and transport implications of the proposed alterations and additions through the following sections:

- ❑ parking provision;
- ❑ access and internal layout;
- ❑ traffic effects;
- ❑ construction traffic management;
- ❑ matters raised in SEARs; and
- ❑ summary.

Parking Provision

3.3 With regards to parking provision for marinas, Part C of the City of Canada Bay Development Control Plan includes the following:

If a survey of a similar existing development has not been undertaken, the following figures may serve as a general guide:

- 0.6 spaces per wet berth
 - 0.2 spaces per dry storage berth
 - 0.2 spaces per swing mooring
 - 0.5 spaces per marina employee
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3.4 These rates are the same as those set out the RMS “Guide to Traffic Generating Developments”, which also notes their applicability when a survey has not been conducted.

3.5 The above rates are also similar to those in the Australian Standard Guidelines for Design of Marinas, AS 3962-2001, which notes as follows:

In the absence of traffic and parking studies, the following car parking requirements have been found to be acceptable:

- (i) Spaces to be provided per wet berth designed for boats.....0.3 – 0.6
- (ii) Spaces to be provided per dry berth.....0.2 – 0.4
- (iii) Spaces to be provided per swing mooring.....0.3 – 0.6
- (iv) Spaces to be provided per employee.....0.5

3.6 It should be noted that there is a draft Australian Standard, AS 3962 (Marina Design), which has taken account of a number of studies of the parking demands of marinas, and which includes the following:

A traffic and planning study should be used to determine boat storage parking. In the absence of traffic and parking studies, the following car parking guidelines may be used for boat storage only:

- (i) Spaces to be provided per wet berth designed for vessels.....0.25
 - (ii) Spaces to be provided per dry berth.....0.25
 - (iii) Spaces to be provided per swing mooring.....0.25
 - (iv) Spaces to be provided per employee.....0.5
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- 3.7 All four documents, therefore (the DCP, RMS guidelines, current Australian Standard and draft Australian Standard), either make provision for or recommend that parking requirements be determined based on surveys. The draft standard also includes lower parking rates than the DCP, RMS guidelines and current standard, based on surveys of other marinas.
- 3.8 As noted in Chapter 2, our surveys of the existing marina and previous surveys undertaken by others have found parking demands of up to 0.15 spaces per berth. By comparison, the draft standard recommends a rate of 0.25 spaces per berth.
- 3.9 With 31 additional boat spaces proposed, the parking requirement is five (based on surveys of the existing facility) to eight (based on the draft standard) spaces.
- 3.10 Eight additional parking spaces are proposed to be provided on the site, in a stacked arrangement to be valet parked. The proposed parking provision is therefore satisfies the requirements of both the draft Australian Standard, and the surveyed requirement of the existing marina. The proposed parking provision is therefore appropriate.

Access and Internal Layout

- 3.11 No changes to the existing vehicular access arrangements from Victoria Place are proposed.
- 3.12 As noted above, the additional car parking would be provided in a stacked arrangement, with vehicles to be valet parked. Spaces will be 5.4 metres long by 2.4 metres wide, in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street car parking), AS 2890.1:2004.
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Traffic Effects

- 3.13 The proposed alterations and additions would result in a very small increase in traffic in Victoria Place of less than five vehicles per hour (two-way) during peak periods. Such a very small increase would not have noticeable effects on the operation of the surrounding road network. It is within the existing variation in traffic flows on Victoria Place. Flows would remain less than the RMS desirable and maximum flows of 200 and 300 vehicles per hour two-way respectively for local residential streets.

Construction Traffic Management

- 3.14 At this stage in the planning process, the construction methodology, process and staging has not been precisely defined. However, the marina related construction activity will generally occur from the water.
- 3.15 For a small component of the work, including the new parking spaces, employees and equipment will be transported to the site by road. Employees will be able to park on the site, with the construction equipment and materials also located on the site.
- 3.16 As a principle, the construction management plan will include the following:
- vehicle access to the site from Victoria Place;
 - existing pedestrian routes in Victoria Place to be retained;
 - access to adjacent properties in Victoria Place to be retained;
 - construction employee parking to be provided on the site;
 - construction activity to be confined to the approved hours of construction;
 - on-street parking in Victoria Place to be maintained.
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- 3.17 The number of vehicles generated during of construction is likely to be low, at some 10 per day. This is a very low number which would not be noticeable on Victoria Place and the surrounding road network. It is within the variation of daily flows on Victoria Place.

Matters Raised in SEARs

- 3.18 The matters raised in the SEARs are discussed below.

- *details of road transport routes and access to the site;*

- 3.19 Victoria Place will be used by people visiting the marina (once operational) and during construction. The existing access arrangements to the site are not proposed to change in association with the alterations and additions.

- 3.20 As noted in paragraph 3.14, the majority of construction activity will occur from the water.

- *road traffic predictions for the development during construction and operation;*
- *an assessment of impacts to the safety and function of the road network;*

- 3.21 These matters are discussed in paragraphs 3.13 and 3.17.

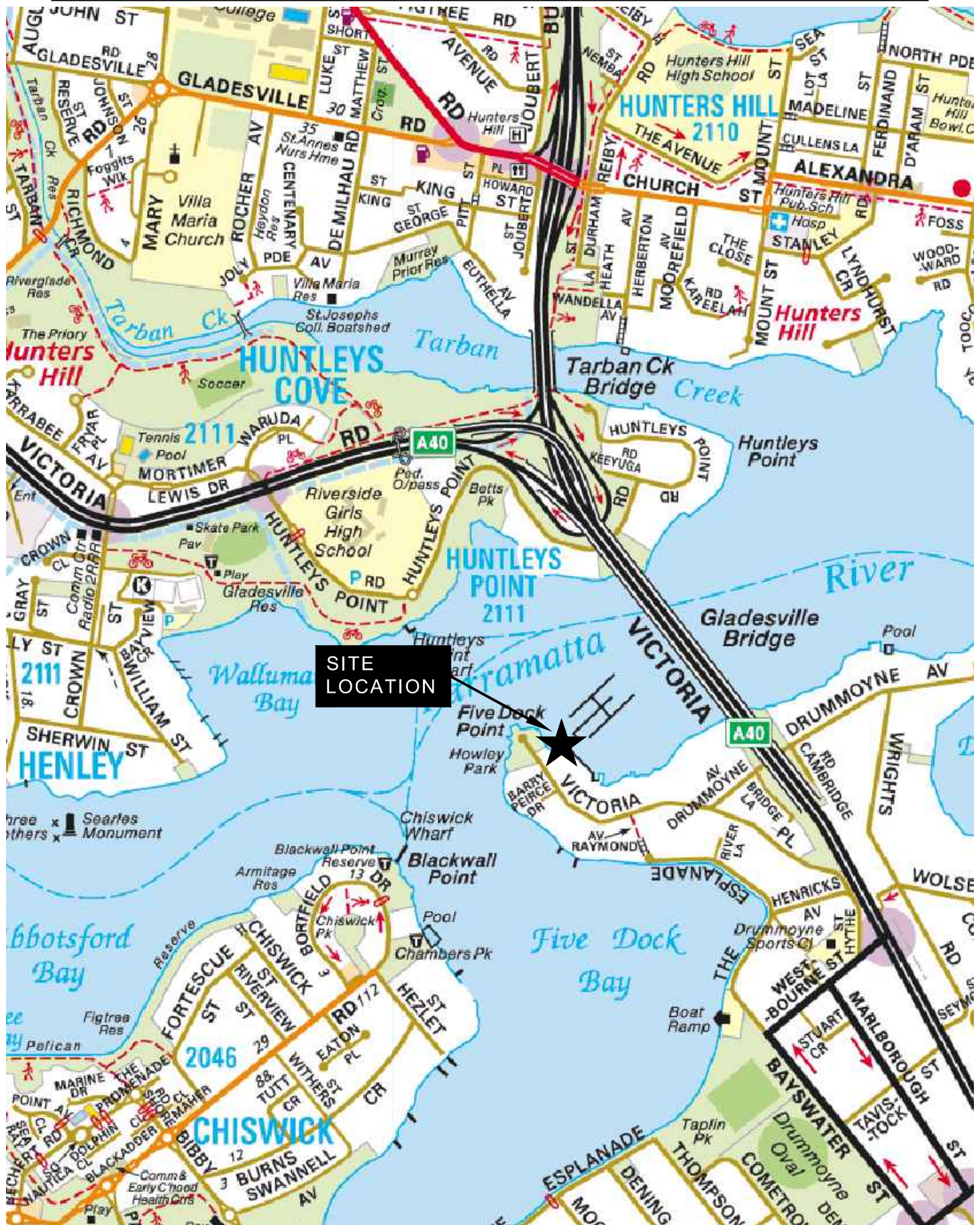
- *a description of carpark arrangement for the development*

- 3.22 Parking provision is discussed in paragraphs 3.3 to 3.10.
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Summary

3.23 In summary, the main points relating to the traffic and transport implications of the proposed marina alterations and additions are as follows:

- i) the proposed alterations and additions would provide for an additional 31 vessels, compared to today;
- ii) the proposed parking provision is appropriate;
- iii) access and internal layout are appropriate;
- iv) traffic generation, both during construction and operation, would not be noticeable on Victoria Place or the surrounding road network; and
- v) matters raised in the SEARs are addressed in paragraphs 3.18 to 3.22.



Location Plan