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19 March 2014

Our ref: SD1403-008 Your ref.: DA 2006/0339

General Manager Warringah Council 725 Pittwater Rd Dee Why NSW 2099 Australia

## FINAL STRUCTURAL ENGINEERING COMPLIANCE CERTIFICATE

Re: Lot 1039 Oxford Falls Road - Modification of DA 2006/0339 to Modify Car Parking Configuration.

### 1. Introduction

# a. Changes to Car Parking Configuration.

Car spaces 22 & 23 and the associated driveway (from Mod2011/2069) are to be deleted. These are to be moved to the proposed locations of disabled car spaces 22 & 23.

Reason: previously approved disabled car spaces will not be compliant due to the gradient of the approaching driveway. The dotted areas adjacent proposed car spaces 22 & 23 (not to be marked) indicate the shared areas required by AS 2890.6.

Car spaces 8 - 10 (from Mod 2011/0269) are to have their angles reconfigured and car space 26 is to be deleted. These are proposed to become spaces 8 - 11.

Reason: the angle of parking needs to change to avoid the adjacent trees & the area can then accommodate 4 rather than 3 car spaces.

Car Space No.	Dimensions	Reason
1 - 7	5.4m x 2.4m	Allocated staff parking. User Class 1 as per 2890.1. It is considered safer to have short term parking on one side only.
8 – 9, 24 - 26	5.4m x 2.6m	Allocated staff parking due to separation from the collected group. (There are 14 staff nominated for the facility).
12 & 17	5.0 x 2.6m	Allocated small car spaces, as per AS2890.1, due to proximity of tree & light pole (to be adequately protected).
10 - 11, 13 -16, 18 -21	5.4m x 2.6m	Short term parking. User Class 3 as per AS 2890.1
22 -23	5.4m x 2.4m	Disabled parking as per AS2890.6. Shared area is shown dotted (not to marked).

Please, refer to Figure 1

S96 Parking Report140319 19/03/2014 12:09 PM

## 2. Certification

We hereby certify that the car park layout associated with the property above mentioned address have been designed, checked and inspected by VDM using the following Australian Standards and references;

- ⇒ AS/NZS 1170.0:2002: Structural design actions General principles,
- ⇒ AS/NZS 1170.1:2002: Structural design actions Permanent, imposed and other actions,
- ⇒ AS 2890.1-2004: Parking facilities Part 1: Off-street car parking,
- ⇒ AS 2890.2-2002: Parking facilities Part 2: Off-street commercial vehicle facilities,
- ⇒ AS 2890.2-2002: Parking facilities Part 6: Off-street commercial vehicle facilities for people with disabilities,
- ⇒ Building Code of Australia (BCA),
- ⇒ Warringah Council conditions,
- ⇒ Principles of civil engineering.

This report, assessment, analyses and certification has been based on areas examined, any attempt to place these comments elsewhere shall require further analysis to ensure the adequacy is maintain.

I am appropriately qualified to certify this component of the project and a member of the Institution of Engineers, Australia, also have pertinent experience and competence in the relevant field.

This certificate shall not construe as relieving any other party of their responsibilities, liabilities or contractual obligations.

#### CERTIFICATION

Responsibility for this report is acknowledged as follows:

Name of person signing – Mario F. Benitez

B.E.(Struct), CPEng., M.I.E. Aust. (418917), MIPENZ(111943)

Position - Senior Structural Engineer

Name of responsible firm

for and on behalf of person is signing for - VDM Consulting Engineers Pty. Ltd.

Address of firm - 94 Bassett Street, Mona Vale, NSW 2103

Signature

S96 Parking Report140319 19/03/2014 12:09 PM

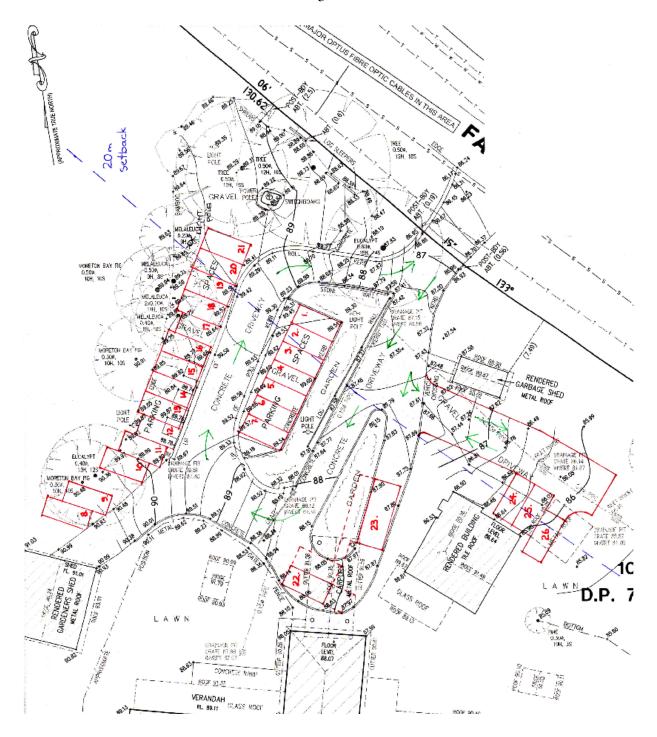


Figure 1 – Proposed car parking layout.

S96 Parking Report140319 19/03/2014 12:09 PM