

SITE ANALYSIS
Proposed Subdivision at: 14 Mirrool St (Lot 9), North Narrabeen NSW 2101

1. INTRODUCTION

This analysis document is based on visual inspection of the site and adjacent land and study of the following documents and to accompany Site Analysis Diagrams submitted:

- a) Survey by Adam Clerke Surveyors Pty Ltd
Details and Levels over Lot 9 in D.P. 18515 and part of Lot 1 in D.P. 815540
12-14 Mirrool St, North Narrabeen
Date: 17/06/2022 Ref. 28597
Sheet 1 & 2
- b) Proposed Subdivision Proposal (dwg Part "A" and "B" Rev A14A dated 12/01/23 and A12A dated 13/03/23), prepared by Bo Piotrowski M.ARCH.
- c) Proposed Driveway Construction
14 Mirrool St, North Narrabeen
Driveway layout, sections and earthwork proposal prepared by Henry and Hyman
Date: Nov 2021, Revision B & C issued: 19.01.2023
Drawings: 21P54_CC_C000, 21P54_CC_C010, 21P54_CC_C101, 21P54_CC_C102,
21P54_CC_C150, 21P54_CC_C151 & 21P54_CC_BE01 rev C.
- d) Set of drawings for Lot 3 (9C) Proposed new dwelling, prepared by Bo Piotrowski M.ARCH.
- e) Set of drawings for Lot 1 (9A) Proposed Alterations and Additions (modifications to DA N0336/09/S96/1) prepared by Bo Piotrowski M.ARCH.
- f) Site Analysis Diagrams prepared by Bo Piotrowski M.ARCH.

2. PROPOSED WORKS

In this DA it is proposed to subdivide the land into three blocks of similar size, with the middle block being slightly larger than the other two. The shapes of Lot 1 and Lot 2 are irregular as the boundary between them follows the natural configuration of the land.

Vehicular access is to be provided via driveway built over the road reserve that borders the site.

The concept is for a residence to be constructed within each block. The Northern Beaches Council has already granted a development approval DA 336/09/S96/1 for the garage/gymnasium building located within Lot 1 that is currently under construction as well as an approval for a proposed dwelling within Lot 2 (DA 336/09) also currently under construction.

A separate DA will be required for a new dwelling within Lot 3 (the north end of the site) as well as another Section 96 Alterations and Additions (or a new DA?) to convert the existing garage/gymnasium structure on Lot 1 into a residence.

The scope of this DA pertains to:

- subdivision of 14 Mirrool St North Narrabeen into three (3) lots

- converting the existing garage/gymnasium under construction (DA 336/09/S96/1 into a separate residence by layout changes and adding an additional story on the top of the building
- provision of an access way within Mirrool St (not formed) road reserve.

3. GENERAL SITE INFORMATION

The site is located on the high north side of Mirrool Street, it is rectangular in shape and covers an area of approximately 3565 m². The east/west boundary is 30.48 m and north/south boundary is 116.98 m approximately.

The land is sloping towards south/east with moderate to steep topography. The highest RL58m is in the north/west corner and the lowest RL18.7 approximately is located in the south/east corner.

There are three large and one medium eucalyptus trees on site and one large tree (number 1) is located just outside the south boundary. Two of these trees number 3 and number 4 are approved for removal under current DA 336/09 and a portion of their rootball has already been removed. Trees 1 and 2 are not affected by the development and approximately 10% of TPZ of tree 9 could be affected by a future parking stand within lot 3.

For more detailed description please refer to the Arboricultural Impact Assessment Report.

The other vegetation on site seems to be mostly common weeds and grasses.

4. SIGNIFICANT SITE FEATURES

a) Rock outcrops

The main feature of the land is a large rocky outcrop that runs diagonally across the land from the western boundary (starting 16.5m approximately from the south boundary) extending towards north/east ending in the adjacent road reserve short distance from the east boundary and some 67m from the south boundary. This high, rocky range divides the land into two parts with the part located towards the south of the range being considerably lower than the rest of the land.

Due to this natural barrier no vehicular access within site would be possible from the southern end to the north side of the site until past this point (some 67m from the south boundary).



Photograph 1. Looking from Lot 1 towards north.



Photograph 2. North/east extension of the range pictured in photo 1. View towards north/west

b) Views



Photograph 3. The middle and upper north portions of the site enjoy uninterrupted south/east view towards Narrabeen Lagoon.

Neither the current DA 336/09 residence being constructed on Lot 2 or the proposed new dwellings on Lot 1 and Lot 3 will block the view of any neighbouring properties, as **all (except 12 Mirrool St) of these properties are located on a level that is significantly above the top of the roof ridge (RL56) of Lot 3 proposed residence** that is located highest of the three proposed subdivision dwellings.

The site is bordered to the north by 105 and 107, to the north/west by 109 Woorarra Avenue, to the west by 11 Woorarra Avenue and to the south by 12 Mirrool Street.

Levels listed below are sourced from the survey by A. Clerke, and distance between houses refers to a distance between each of the neighbouring properties to the proposed residence within Lot 3.

105 Woorarra Ave – lower deck RL65 (**9m above the ridge**) and approx. 39m between the houses
 107 Woorarra Ave – ground floor bottom of window RL64.9, balcony above RL67.7 (**8.9m above the ridge**) and approx. 36m between the houses
 109 Woorarra Ave – timber deck RL66.9 (**10.9m above the ridge**) and approx. 25m between the houses
 111 Woorarra Ave – ground level timber balcony RL57.56, top of the window RL59.65 (**1.56m above the ridge**) and approx. 11.5m between the houses

12 Mirrool St is located to the south of 14 Mirrool St, so no views could be blocked.



Photograph 4. From left to right 107 and 105 Woorarra Ave respectively

In summary none of the neighbouring properties will have their views affected by the proposed development.

c) **Gradient**

The land is sloping toward south and east with an average gradient of 32.49% (the lowest point RL 18.72 in the south/east corner and the highest RL 58 appropriately in the north/west corner).

As mentioned above it is proposed to subdivide the site into three lots.

Lot 1 – 1100.18m² - located at the south end of the site. It has an irregular shape as its north boundary follows the high, rocky range that borders it (photographs 1 and 2).

To calculate the gradient, I excluded the rock range area and used RL 29 as the highest level and RL 18.72 as the lowest level. Using this method, the “usable” portion of lot 1 would be 16.5m wide and 30.48m deep - **gradient for lot 1 would be 29.66%.**

However, gradient of this lot does not have much relevance as there already is a built structure on site and the proposal is to convert the existing garage/gymnasium building under construction (DA number 336/09/S96/1) into a new dwelling by upper story modifications and addition of one story to the back of the structure.

Only the footprint of the existing building is to be used, no additional excavation would be required.

Lot 2 – the middle block (1295.00m²) is also irregular in shape as its south boundary follows the same rock outcrop and its north boundary is shaped to allow for vehicular access to lot 3 minimising the use of public road reserve.

For the purpose of calculating the gradient of this lot a diagonal of a rectangle 30.81m x 30.48m was used, the lowest level of this area being RL 36.54 and the highest RL 49. **Gradient for lot 2 = 28.75%**

This lot already has an active development consent upon the land for a dwelling DA 336/09 under construction.

Lot 3 – north end block 1169.82 m² – Concept dwelling for this lot is designed over five levels that follow the slope of the land and comfortably fit under the 8.5m height controls, in fact considerable portion of the house is single story to blend with the surrounding landscape.

Earthworks

The house structure itself requires minimal excavation (a total of 12.36 m³), deepest being 1.2 m or less, however a bit more excavation would be required for the storage room under the house (18.1 m³) that also serves as access to the lift, however this still would be within a lower range for this kind of topography.

The deepest point of the Storeroom excavation would be approximately 1.7 m in the north/west corner, however this is reduced to 0.5 m in the south/west corner and to 0.7 m approximately in the north/east corner.

The maximum depth of the fill would be less than 1.5 m deep and only material excavated on site will be used, meaning that cut and fill will be equal, the rest would be suspended floors.

Excavation Cut and Fill Plan is supplied.

Dwellings on Lot 1 and Lot 2 are existing structures under construction under development approval 336/09 and 336/09/S96/1 respectively. No additional excavation or filling will be required.

For the purpose of calculating the gradient of this lot a diagonal of a rectangle 42m x 30.48m was used, the lowest level of this area being RL 40 and the highest RL 58. **Gradient for lot 3 = 34.68%**

4. Privacy and overshadowing

As could be seen from the levels and distances between the proposed development and the **neighbouring Woorarra Ave houses**, listed under Views paragraph, it is evident that because they are located so far away from and so much above the Lot 3 proposed residence, **they will not be affected by privacy loss or overshadowing**. Lot 3 dwelling Shadow Diagrams for 21 June have been supplied.

Regarding **12 Mirrool St** - it is located approximately 9.6m south from the existing garage/gymnasium structure under construction. The current approval includes one south facing window. The new Alterations and Additions plans propose to convert the existing structure to a dwelling, which would have three windows facing south, however two of these windows are bedroom windows, one is a TV room window, and all are located on the upper ground level that is well below the 12 Mirrool St balcony.

The considerable distance between the properties (9.6m) combined with the function of the rooms and the lower level of the proposed new windows indicate that there would be no loss of privacy for number 12.

The main outdoor living space of the new building is to be located on a timber deck behind the house and will not overlook any indoor or outdoor areas of the neighbouring dwelling.

To increase the privacy level there is also proposed to plant dense shrubs along southern and western boundary. Proposed planting to western (rear) boundary also will protect from undesirable winter cold winds blowing towards the dwelling (see Site Analysis diagram).

In regard to overshadowing there will be not much change from the current situation. Although the new Alterations and Additions propose to add additional story to the gymnasium structure, it is to be located well towards the back of the existing building that combined with the considerable distance between the properties would not produce much additional overshadowing. Lot 1 dwelling Shadow Diagrams for 21 June have been provided.

In accordance with Site Analysis Diagram (Part A) and winter Shadow Diagram (21st June 9am) there is clearly shown that the shadow caused by proposed new dwelling at lot 1 (9A) is very limited (from 9am to 10:30am only) means that the property No 12 receives more than 3 hours minimum of natural light access between 9am and 3 pm in midwinter day as per DCP prescribed measures.

5. Access Driveway within the Mirrool St road reserve

The design of the driveway has been substantially modified by comparison with the previous design presented at the Pre-lodgement meeting conducted on 22 March 2022.

The use of public road reserve has been significantly reduced by designing a future driveway to access the dwelling on lot 3 over the private land rather than over the road reserve.

This DA include only the section of the access way located over the public road reserve. The section located within lot 3 is only provided as an indication of possible future development.

The driveway designed by **Henry&Hymas** is 6m wide in the south end section up to just past crossover to lot 1 and then narrows to 4m and 3.5m at crossover points to lot 2 and lot 3.

As is evident from Driveway Sections plans (drawings 21P54_CC_C150 version C and 21P54_CC_151 v. C the driveway levels generally follow the existing slope of the land with occasional maximum excavation to approximately 1m with fill up to around 1.5m in the uppermost section of the drive, however it is proposed the earthworks are to provide a uniform subgrade, rather than representing vertical cuts that would require future support.

There are approximately 16 trees in or just outside the road reserve however most of them are listed weeds in NSW such as privet or highly undesirable species such as Indian Coral. Some of them have been recommended for removal by the Arborist irrespective of the proposal and to be replaced by native species. See the Arboricultural Impact Assessment Report.

Prepared by:

Bo Piotrowski (M.Arch)
(April 2023)

