APP | Property and Infrastructure Specialists

STRATEGY > DEFINITION > DELIVERY > TRANSITION

SEAFORTH PLANNING PROPOSAL

APP Corporation Pty Limited

June 2019

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This report has been prepared and reviewed in accordance with our quality control system. The report is a preliminary draft unless it is signed below.

This report has been prepared by: Josh Owen

Signature 25/06/2019 Date

This report has been reviewed by: Elise Crameri

Signature 25/06/2019 Date

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1. Introduction

This planning proposal is submitted to Northern Beaches Council (Council) in support of an amendment to Manly Local Environmental Plan 2013 (Manly LEP 2013). The proposal relates to a 1.9 hectare (ha) parcel of land at 21 Dalwood Avenue, Seaforth (hereafter referred to as the site). The site is currently zoned part SP2 Infrastructure (Health Services Facilities) and part E2 Environmental Conservation under Manly LEP 2013.

The southern portion of the site has been identified by the NSW Ministry of Health as surplus land. It is proposed to rezone this portion of the site to part E4 Environmental Living and part R2 Low Density Residential for future residential purposes.

The proposal does not seek to change the existing zoning or use of the northern portion of the site, upon which the Dalwood Family Care Centre and Dalwood Spilstead Service facility is situated. The northern portion of the site will remain SP2 Infrastructure (Health Services Facilities) and will continue to provide local health services and facilities (refer to Figure 1).

The proposal represents an orderly and efficient use of land. It will provide additional homes within walking distance to the Seaforth Town Centre. Divestment of the southern portion of the site for future housing will generate funds for new and / or upgraded local health services and facilities on the site.

Figure 1 Proposed Concept Layout Plan

This report has been prepared by APP Corporation Pty Ltd (APP) on behalf of NSW Ministry of Health and is based on plans prepared by Platform Architects and supporting technical documents (refer to Table of Contents). It has been prepared in accordance with the Department of Planning and Environment's (the Department) *'A Guide to Preparing Planning Proposals'* (December 2018) and includes the following:

- Part 1 – Objectives or the intended outcomes of the proposed rezoning and subsequent LEP amendments.
- Part 2 – A plain-English explanation of the legislative provisions that would apply to the site under the proposed instrument.
- Part 3 – Justification of the proposed amendment including the objectives, outcome and process for implementation. This part will also contain the strategic planning framework, environmental and social impact and identification and discussion of any relevant State or Commonwealth interests.
- Part 4 – Mapping to depict the proposed LEP amendment.
- Part 5 – Community Consultation that is to be undertaken in respect of the planning proposal as it progresses through to the Gateway process.
- Part 6 – Project timeline of the proposed amendment.

The planning proposal also addresses the matters that must be addressed as set out in Division 3.4 of Part 3 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

2. Background

2.1 Previous Planning Proposal (PP_2014_MANLY_003_00)

In 2014, Council prepared a planning proposal which sought to amend Manly LEP 2013 by removing the deferred status of the Manly Hospital and Dalwood Children's Home sites. In doing so, this proposal also rezoned both sites to part SP2 Infrastructure (Health Services Facility) and part E2 Environmental Conservation. The environmental zoning of part of the site was the result of Council's *Natural Assets Study* **(**July 2011, prepared by Ecological Australia) prepared to inform the then Draft Manly Local Environmental Plan 2011.

2.2 Consultation with Council

A pre-lodgement meeting was held on 1 April 2019 to discuss the planning proposal. A copy of the meeting minutes is provided at **Appendix A**.

3. Site Analysis

3.1 Site Location

The site is located within the suburb of Seaforth in the Northern Beaches Local Government Area (LGA). Seaforth is approximately 6km north of North Sydney CBD and 5km south of the new Northern Beaches Hospital at Frenchs Forest.

The site is located on the western side of Dalwood Avenue / Clontarf Street and south of Callicoma Road. It is approximately 1.1 km to the north-west of the Seaforth Town Centre (refer to Figure 2). The surrounding area is characterised by predominantly residential development, namely 1-2 storey detached dwellings on generally 600-770m^2 lots and bushland.

The site forms part of a larger land holding commonly referred to as the 'Dalwood Home' site. Existing development on the site and larger land holding comprises the Dalwood Family Care Centre and Dalwood Spilstead Service facility.

The land to which the planning proposal relates (the site) comprises cleared and vegetated areas. No areas of hard stand or built structures exist on the site.

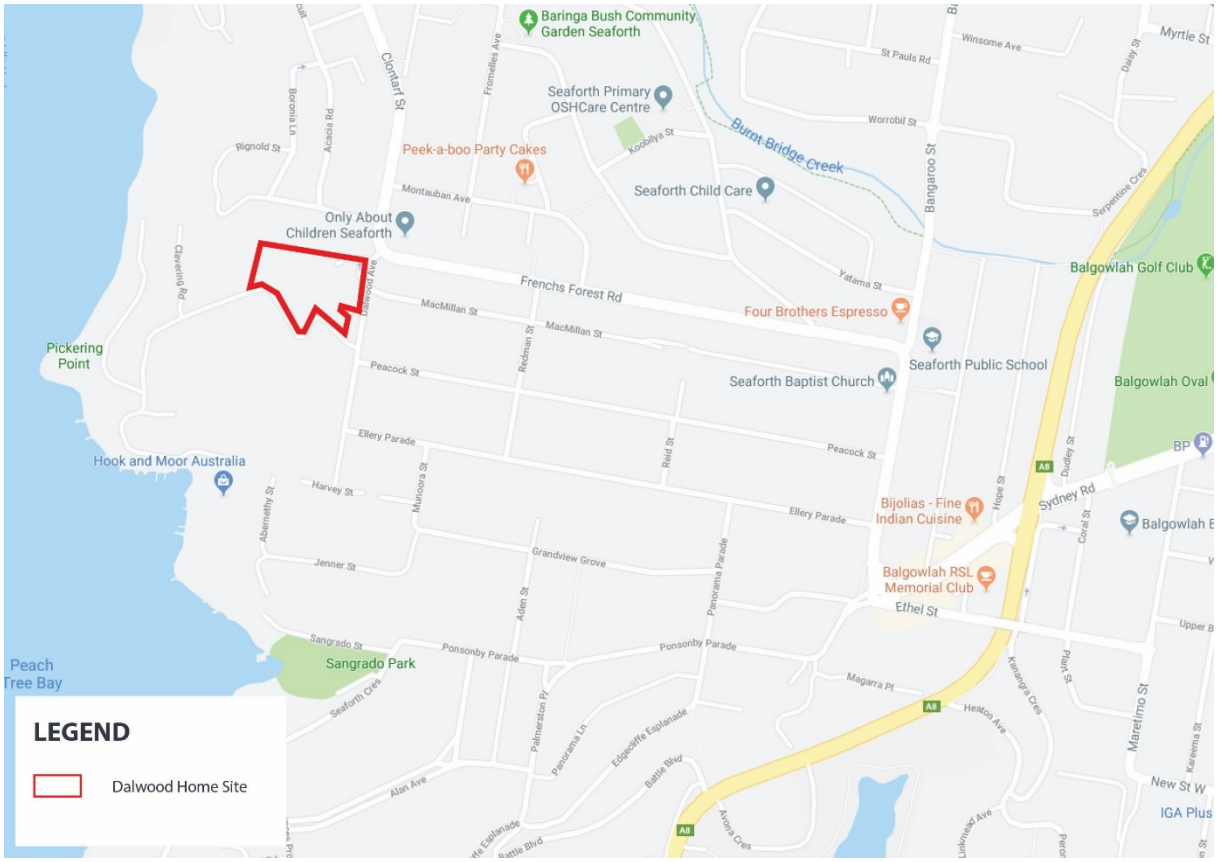


Figure 2 Location Plan

3.2 Surrounding Development

To the north and south of the site, on the opposite side of Callicoma Road and Gurney Crescent, respectively is residential development. To the east of the site, on the opposite side of Clontarf Street / Frenchs Forest Road and Dalwood Avenue is a child care centre and residential development. To the west of the site, stepping down to Middle Harbour is residential development and large patches of bushland.

3.3 Land Ownership and Legal Description

The site and land the subject of this planning proposal is approximately 1.9 ha, is irregular in shape and comprises 7 individual allotments. The site's legal description and ownership details are provided in Table 1 and Figure 3.

Table 1 Land Ownership and Legal Description

Lot	Deposited Plan (DP)	Address	Owner
Lots 4A, 5A, 6A, 7A	17157	1 Callicoma Road, Seaforth 21 Dalwood Avenue, Seaforth	Northern Sydney Local Health District
1	325720	1 Callicoma Road, Seaforth 21 Dalwood Avenue, Seaforth	Northern Sydney Local Health District
1	325784	21 Dalwood Avenue, Seaforth	Northern Sydney Local Health District
87	666550	1 Callicoma Road, Seaforth 21 Dalwood Avenue, Seaforth	Northern Sydney Local Health District

The areas of existing lots within the south-eastern portion of the site are as follows:

- Lot 7A – 599m^2;
- Lot 6A – 467m^2;
- Lot 5A – 475m^2; and
- Lot 4A – 465m^2.

An aerial photograph showing the location of these lots is provided in Figure 3.

Figure 3 Aerial photograph showing Lot and DP nos.

3.4 Existing Land Uses and Development

There are eight buildings on the site which are currently utilised by the Dalwood Spilstead Early Years Intervention and Support Service. These facilities provide multidisciplinary health, education and support services to vulnerable families. A site plan showing the location of each building, its description and use is provided in Figure 4. The site also contains areas of hard stand, parking areas and internal accessways, bushland and lawn areas.

LEGEND

A	Byrnes Building	A single storey brick building.
B	Splistead Centre	A single storey two tone brick building with tile roof.
C	Dalwood House	Two storey sandstone Victorian Gothic style house, with parapeted entrance with Gothic pointed arch. The roof is hipped and gabled and clad in corrugated metal. The principle entrance is located within the north western elevation. The building, however, was clearly built to address the views of Middle Harbour to the south west.
D	Family Care Centre	A single storey brick building with tile roof.
E	Services Building	Two storey brick building with pitched, tiled, roof and aluminium framed doors and windows. The roof extends on the southern side over a concrete verandah.
F	Loft Building	A two storey sandstone building that may have been erected in conjunction with the main house. The roof is pitched, with gable ends, and clad in Colorbond.
G	Child and Family Services Building	Substantial two storey brick building with tiled roof.
H	Shed	Metal clad storage shed.

Figure 4 Existing Uses

3.5 Topography

The site is on an east west trending ridge and comprises both flat and moderately sloping land. The ridge enters the site from the east at approximately RL 99m and extends across the centre of the site. Surface levels fall from the ridge to the north, west and south with the lowest point being the south-western corner at RL 68m.

3.6 Hydrology

There are no permanent water bodies present on the site and no defined ephemeral drainage lines or eroded gullies occur. Given the topography of the site, in times of heavy rainfall, surface water flows to the west and south. Water that drains from the site enters the network of stormwater drains in adjacent residential streets. The runoff flows into Middle Harbour which is located 350m west of the site.

3.7 Geology

The site is underlain by Hawkesbury Sandstone which typically comprises medium to coarse grained quartz sandstone with very minor shale and laminate bands. The site is also underlain by Lambert soil landscape group, described as undulating to rolling low hills on Hawkesbury Sandstone with slopes of less than 20% and local relief of 20 – 120m. The soils on the crests of this soil landscape are described

as comprising leached sands, grey earths and gleyed podzolic soils. Potential limitations to development include high soil erosion, rock outcrops, seasonally perched water tables, shallow high permeable soils and very low soil fertility.

Douglas Partners have undertaken a geotechnical assessment of the site (refer to **Appendix B**) and have concluded that with additional site investigation and adoption of identified construction techniques, there are no serious geotechnical constraints on the site that cannot be managed as part of detailed design.

3.8 Contamination

The site has been predominantly used for health-related purposes and is considered to have low contamination risk. The southern areas of the site do not contain any buildings / hard stand areas and the likelihood of any significant contamination issue is considered low.

3.9 Heritage

The site is identified as a heritage item of local significance in Schedule 5 Part 1 (Item 270) of the Manly LEP 2013 as *'Dalwood Home (principal building and stone building to Dalwood Home)'*. The significance of Dalwood Home is associated with its historical use in providing residential care and support for women and children throughout the post-war period.

The site is not in a heritage conservation area and is not an archaeological site in Manly LEP 2013.

The site is in proximity to two heritage items, namely:

- Stone House, 8 Clavering Road, Seaforth (Item 277); and
- Dry Stone Wall, Clavering Road, Seaforth (Item 269).

Two buildings on the site are listed on the NSW Office of Environmental and Heritage State Heritage Inventory (established under s170 of the NSW Heritage Act 1977) as properties which NSW Health has identified as being of heritage significance. These are.

- 'Principal Building', Dalwood Avenue, Seaforth; and
- 'Stone Out Building', Dalwood Avenue, Seaforth.

These buildings are a rare example of a Victorian sandstone villa and out building in the Manly area that have an association with philanthropy.

The site is also listed on the non-statutory National Trust of Australia (NSW) heritage registers:

- 'Dalwood's Children's Home, formerly Clavering' Frenchs Forest Road, Seaforth. Classified; and
- Manly Urban Conservation Area Precinct 5 Seaforth.

The planning proposal does not propose to rezone or change the use of land upon which the above items are situated. No items of heritage significance are situated on the southern portion of the site, the subject of the planning proposal and future development.

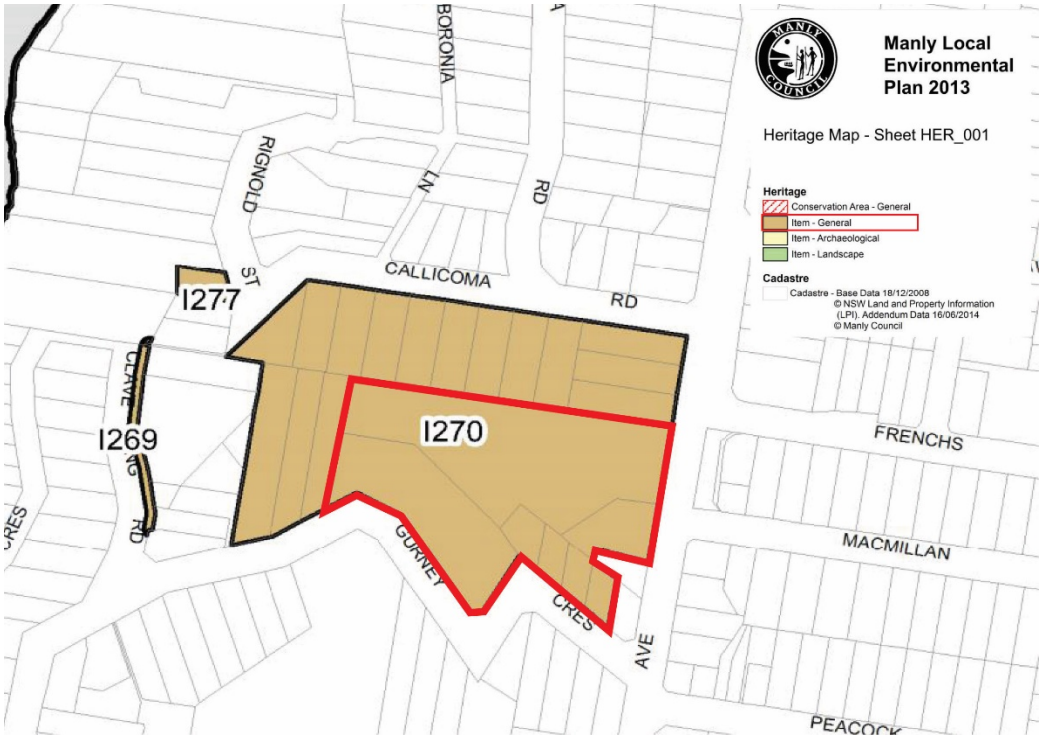


Figure 5 Extract of Heritage Map - Manly LEP 2013

3.10 Aboriginal Cultural Heritage

A search of the Office of the Environment and Heritage AHIMS data base has shown that no aboriginal places have been declared in or near the site and there was only 1 aboriginal site recorded in or near the above location.

3.11 Ecological Characteristics and Values

Biodiversity mapping under the Manly LEP 2013 indicates that a portion of the site contains an area identified as 'Biodiversity' (refer to Figure 6). A flora and fauna assessment of the site has been undertaken by Lesryk Environmental Pty Ltd (Lesryk Environmental). A copy of this assessment is included in **Appendix C**. For the purposes of this assessment, Lesryk Environmental has undertaken an assessment of both the total site which comprises 3.7ha and the smaller subject site which comprises 0.52ha within the southern portion of the site and the subject of potential future development (refer to Figure 7).

Vegetation communities on the site

Three vegetation communities are present within the larger site / study area, including:

- Red Bloodwood – Coast Myall – Scribbly Gum Woodland across a small area on the plateau in the north-west of the site;

- Sydney Peppermint – Smooth-barked Apple Open Forest across the sheltered slopes in the west and south-west of the broader site; and
- Heath/Scrub across the lower areas (refer to Figure 7).

These areas were described by Lesryk Environmental as disturbed, not supporting an intact native vegetation community but instead supporting a weedy heath/scrub composed of native and introduced species. Common taller plants to 6m are the native Cheese Tree (*Glochidion ferdinandi*) and Sweet Pittosporum and the weeds Large-leaf Privet (*Ligustrum lucidum*) and African Olive (*Olea europaea subsp. cuspidata*). Lantana (*Lantana camara*) and Crofton Weed (*Agertaina adenophora*) are common shrubs and Morning Glory (*Ipomoea indica*) occurs as a groundcover and scrambler. Fishbone Fern (*Nephrolpeis cordifolia*) and Kikuyu (*Pennisetum clandestinum*) are also common groundcover species. The flat area in the south-east of the site is dominated by the introduced Whiskey Grass (*Andropogon virginicus*), Couch (*Cynodon dactylon*) and Japanese Honeysuckle (*Lonicera japoinica*). On slightly higher ground the Common Rush (*Juncus usitatus*) and Umbrella Sedge (*Cyperus eragrostis*) was recorded.

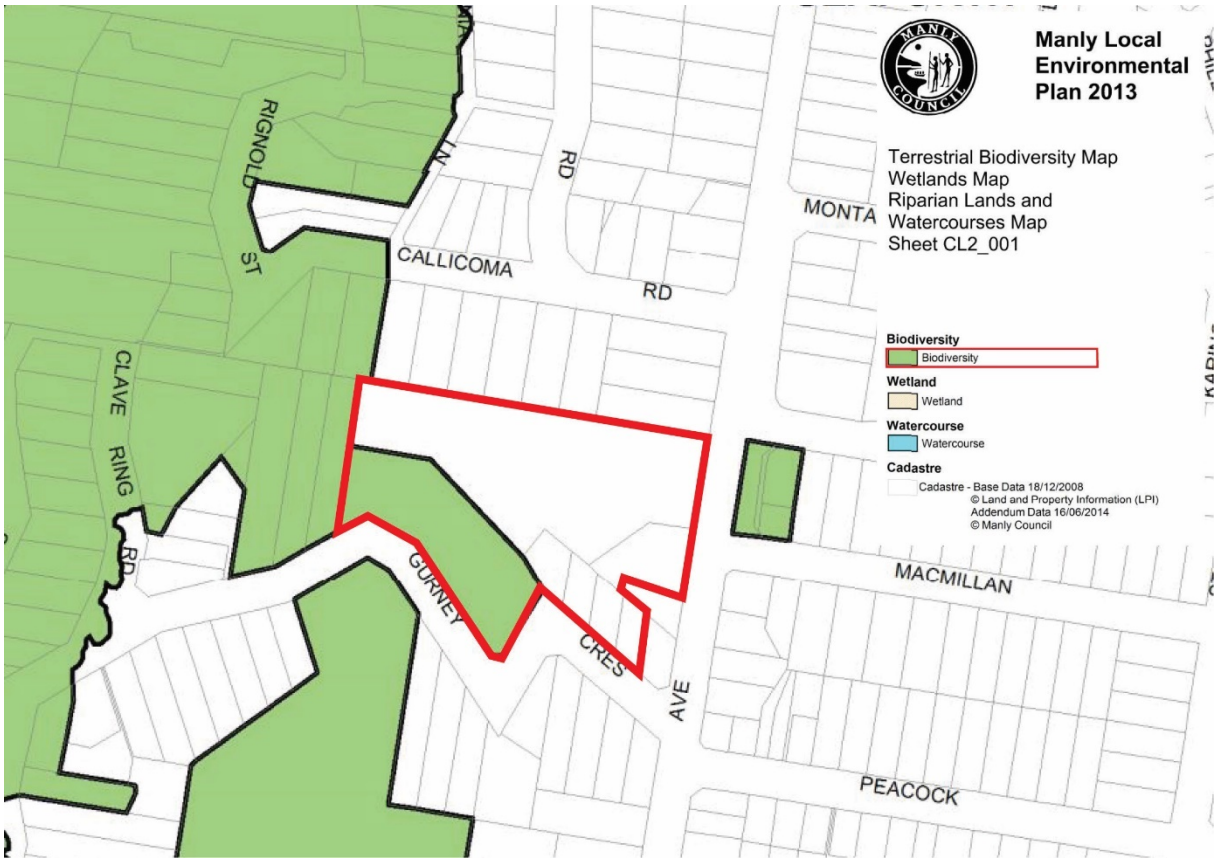
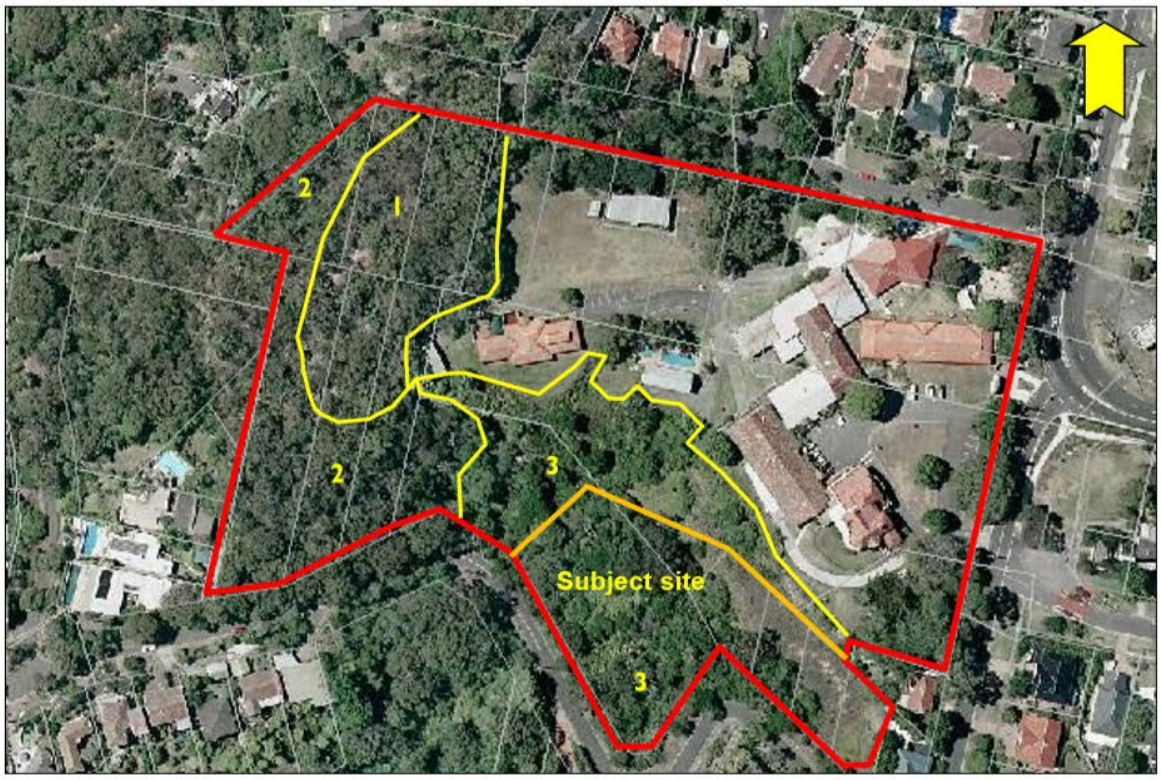


Figure 6 Extract of Biodiversity Map - Manly LEP 2013



Not to scale. Source: Lesryk (2012).

Key
1 = *Red Bloodwood – Coast Myall – Scribbly Gum Woodland*
2 = *Sydney Peppermint – Smooth-barked Apple Open Forest*
3 = *Weedy Heath/Scrub.*

Figure 7 The site (study area) and subject site

Vegetation communities within the southern portion of the site

The subject site supports two vegetation communities:

- Cleared / slashed grass land area (1,460m^2 in area). This vegetation consists mostly of introduced grasses (e.g. Whiskey Grass and Couch) with Japanese Honeysuckle on slightly higher ground and Common Rush and Umbrella Sedge in damper areas. This community is dominated by weeds and occupies the area of the site proposed to accommodate the four (4) residential lots; and
- Disturbed scrub (4,900m^2 in area). This vegetation community comprises mostly of invasive weed species, some of which are recognised Priority Weeds for the Greater Sydney region, Schedule 3 weeds of the NSW Biosecurity Regulation 2017 and Weeds of National Significance (WoNS). Scattered throughout this dense weed infestation is the occasional native species (e.g. two emergent Smooth-barked Apple, Cheese Tree and Black She-oak (*Allocasuarina littoralis*). This community occurs in the area proposed for the APZ (i.e. Lot 7A).

The two vegetation communities are shown in Figure 8.

Figure 8 Vegetation communities recorded within the southern portion of the site

Weeds

Priority weeds recorded within the subject site are identified in Table 2 below. Under the *Biosecurity Act 2015 'all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable'.* Of those introduced plant species recorded six are listed as Priority Weeds for the Greater Sydney region (DPI 2019), and three are listed under both Schedule 3 of the NSW Biosecurity Regulation 2017, and as WoNS (DPI 2019). Schedule 3 weeds must not be imported into the State or sold.

Table 2 Priority weeds recorded within the subject site

Weed	Status
African Olive (*Olea europea subsp. Cuspidata)*	Priority Weed

Weed	Status
Blackberry (*Rubus fruiticosus)*	Priority Weed, Schedule 3, WoNS
Green Cestrum (*Cestrum parqui)*	Priority Weed
Ground Asparagus (*Asparagus aethiopicus*)	Priority Weed, Schedule 3, WoNS
Lantana (*Lantana camara*)	Priority Weed, Schedule 3, WoNS
Pampas Grass (*Cortaderia selloana*)	Priority Weed

Fauna species within the site (study area) and southern portion of the site

Fauna species recorded as part of recent and previous investigations on the larger site (study area) and subject site are shown in Table 3. Of those species detected – the White-bellied Sea-eagle (*Haliaeetus leucogaster*) is listed as 'Vulnerable' under the *Biodiversity Conservation Act 2016* (the BC Act). During previous investigations undertaken by Lesryk Environmental in 2012, this species was observed flying over the site. However, no characteristic Sea-eagle nests were observed, and no individuals of this animal were seen foraging or roosting within the site at this time.

The White-bellied Sea-eagle was not recorded as part of the current assessment (May 2019). No raptor nests were observed within the site and study area. The site is not considered habitat for this species and the White-bellied Sea-eagle would not be reliant upon the resources present within, or adjacent to the site.

A range of mammals, birds, reptiles and amphibians were recorded on site including the Short-beaked Echidna, Common Ringtail Possum, Common Brushtail Possum, Swamp Wallaby, Long-nosed Bandicoot, Australian Brush Turkey, White-browed Scrubwren, Eastern Whipbird and introduced Cat, Fox and Black Rat.

The native species recorded during the current study are protected, as defined by the BC Act, but considered to be common to abundant throughout both the nearby network of State and local government reserves and surrounding urban areas.

No species recorded on site during the ecological investigations are listed, or currently being considered for listing, under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act).

Table 3 Fauna Species recorded within the subject site and broader study area

Common Name	Scientific Name	Method of Detection	Recorded
MAMMALS			
Short-beaked Echidna	*Tachyglossus aculeatus*	Infrared camera	1
Long-nosed Bandicoot	*Perameles nasuta*	Infrared camera/hair analysis Characteristic diggings observed	1 2

Common Name	Scientific Name	Method of Detection	Recorded
Common Ringtail Possum	*Pseudocheirus peregrinus*	Infrared camera/hair analysis Observed	1 2
Common Brushtail Possum	*Trichosurus vulpecula*	Infrared camera	1
Swamp Wallaby	*Wallabia bicolor*	Infrared camera/hair analysis Observed	1 2
* Rabbit	*Oryctolagus cuniculus*	Characteristic scats observed	1,2,3
* Cat (domestic – collars evident)	*Felis catus*	Infrared camera	1
* Fox	*Vulpes vulpes*	Infrared camera	1
* Black Rat (based on tail being longer than body)	*Rattus rattus*	Infrared camera	1
BIRDS			
Australian Brush Turkey	*Alectura lathami*	Infrared camera, Observed	1
Masked Lapwing	*Vanellus miles*	Observed	2, 3
V White-bellied Sea-eagle	*Haliaeetus leucogaster*	Observed	2
* Rock Dove	*Columba livia*	Observed	1
* Spotted Dove	*Streptopelia chinensis*	Heard	2, 3
Sulphur-crested Cockatoo	*Cacatua galerita*	Heard	1, 2
Musk Lorikeet	*Glossopsitta concinna*	Heard	1, 2
Rainbow Lorikeet	*Trichoglossus haematodus*	Heard	1, 3
Laughing Kookaburra	*Dacelo naxaeguineae*	Heard	1, 2
Superb Fairy-wren	*Malurus cyaneus*	Observed	1, 2
White-browed Scrubwren	*Sericornis frontalis*	Infrared camera, Observed	1
Spotted Pardalote	*Pardalotus punctatus*	Heard	1,2,3
Brown Thornbill	*Acanthiza pusilla*	Observed	2, 3
Red Wattlebird	*Anthochaera carunculata*	Heard	1,2,3
Noisy Miner	*Manorina melanocephala*	Heard	1,2,3
Lewin's Honeyeater	*Meliphaga lewinii*	Observed	1

Common Name	Scientific Name	Method of Detection	Recorded
Eastern Spinebill	*Acanthorhynchus tenuirostris*	Observed	1
Eastern Whipbird	*Psophodes olivaceus*	Infrared camera, Heard	1,2,3
Golden Whistler	*Pachycephala pectoralis*	Observed	2
Grey Fantail	*Rhipidura fuliginosa*	Heard	2
Willie Wagtail	*Rhipidura leucophrys*	Observed	2
Black-faced Cuckoo-shrike	*Coracina novaehollandiae*	Observed	3
Grey Butcherbird	*Cracticus torquatus*	Heard	1, 2
Australian Magpie	*Gymnorhina tibicen*	Heard	1, 2
Pied Currawong	*Strepera graculina*	Heard	1, 3
Australian Raven	*Corvus coronoides*	Heard	1, 2
Magpie-lark	*Grallina cyanoleuca*	Heard	1
Silvereye	*Zosterops lateralis*	Observed	1
Welcome Swallow	*Hirundo neoxena*	Observed	1,2,3
* Red-whiskered Bulbul	*Pycnonotus jocosus*	Heard	1, 2
* Common Starling	*Sturnus vulgaris*	Observed	1
REPTILES			
Broad-tailed Gecko	*Phyllurus platurus*	Observed	1
Dark-flecked Garden Sun-skink	*Lampropholis delicata*	Observed	1
AMPHIBIANS			
Common Eastern Froglet	*Crinia signifera*	Heard	1, 2

Habitat types available for native fauna species

Two habitat types available to native fauna were recorded within the study area, these being:

- Exotic grassland – this habitat is present on the bench that appears to have been formed by previous land use practices (quarrying). The grassland is dominated by exotic species up to 0.5m in height (depending on the environment's maintenance regime). Remnant small trees and shrubs up to 3m in height are also present. No caves or suitable sheltering ledges occur in association with the 'cliff'/quarry face. Due to ground water seepage, portions of this habitat type are damp underfoot.

- Shrubland – this community is present downslope of the levelled bench and supports plants that are up to 4m in height. Where not affected by a high-density infestation of bamboo (i.e. primarily within the eastern portion of the subject site) the native shrubs are of a medium to high density. The ground cover is sparse and composed primarily of weeds. Leaf litter and ground debris is common, as is the occasional rock outcrop. Associated with these are some ledges and overhangs. Investigations did not reveal the presence of the utilisation or sheltering of any mammals.

Several emergent native trees and tall shrubs were recorded in the shrubland present within this habitat type, these being to 10m in height. Two of the Smooth-barked Apples present were noted to be hollow-bearing; the locations of these plants are identified in Figure 7.

Corridor linkages

Due to the presence of the quarry cliff face, connectivity in a north to north-easterly direction for ground traversing species is limited. Species tolerant of negotiating urban infrastructure and residential areas would be able to traverse the area in an easterly direction.

3.12 Bushfire

The site is shown on the Northern Beaches Bushfire Prone Land Map (refer to Figure 9) to be within a combination of Category 1 vegetation (shown red) and Category 1 vegetation buffer zone (shown yellow). Vegetation Category 1 is the highest risk for bush fire and is given a 100m buffer. This vegetation category has the highest combustibility and likelihood of forming fully developed fires including heavy ember production.

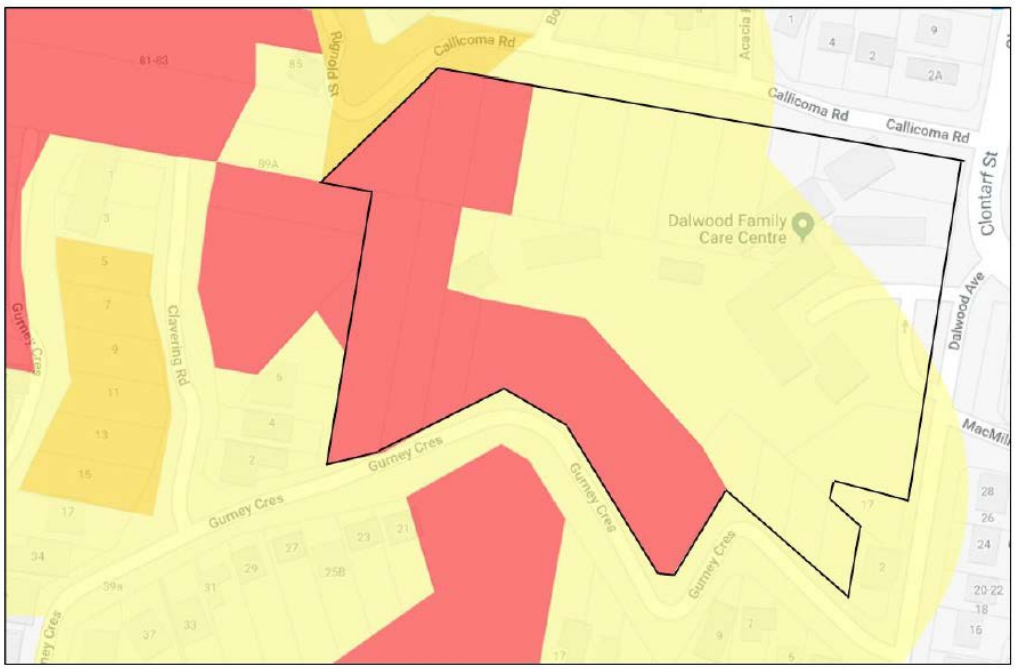


Figure 9 Bushfire Prone Land Map (Source: Northern Beaches LGA)

3.13 Access

Vehicular access to the site is available from Dalwood Avenue / Clontaff Street and Callicoma Road.

3.14 Existing Planning Framework

Zoning and Objectives

The site is zoned part SP2 Health Services Facility and part E2 Environmental Conservation under Manly LEP 2013 (refer to Figure 10).

The objectives of the SP2 Health Services Facility zone are to:

- provide for infrastructure and related uses.
- prevent development that is not compatible with or that may detract from the provision of infrastructure.
- minimise loss of views to, from and within heritage items and minimising intrusion on the heritage landscape and visual curtilage of heritage items.

The objectives of the E2 Environmental Conservation zone are to:

- protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- prevent development that could destroy, damage or otherwise have an adverse effect on those values.

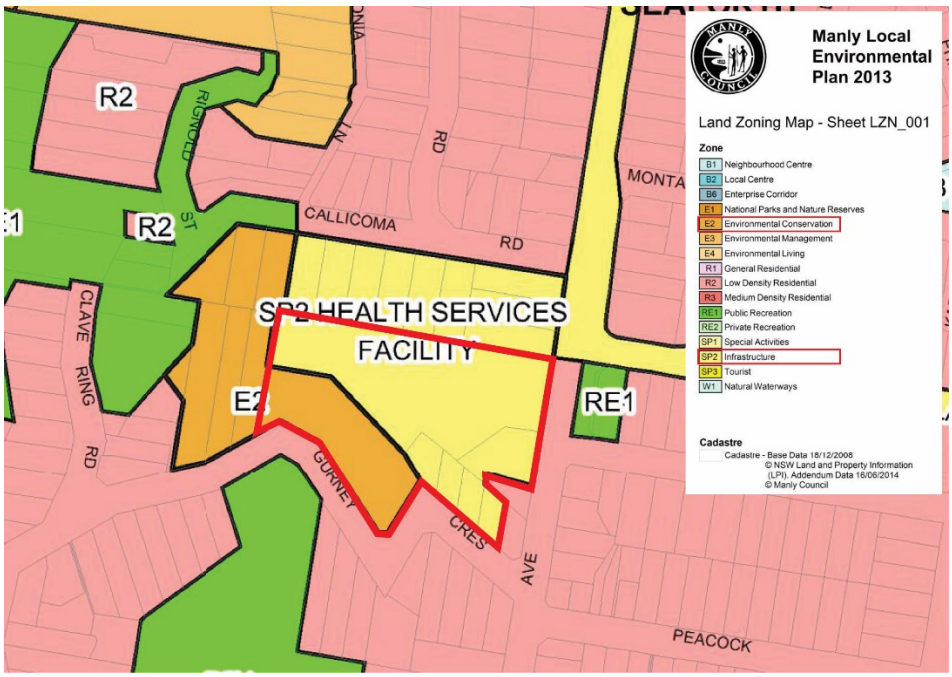


Figure 10 Extract of Zoning Map - Manly LEP 2013

Current permissible uses

Within the SP2 Infrastructure zone, the following development is permitted with consent *"Aquaculture; Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose"*. All other development is prohibited within the SP2 Infrastructure zone.

Within the E2 Environmental Conservation zone, the following development is permitted with consent *"Eco-tourist facilities; Environmental protection works; Flood mitigation works; Oyster aquaculture Roads; Water recycling facilities; Water reticulation systems; Water storage facilities"*. All other development is prohibited within the E2 Environmental Conservation zone.

Manly LEP 2013 does not establish development standards for the SP2 Infrastructure zone given the unique nature of such sites. Accordingly, no heights or FSRs are expressed for the site.

3.15 Surrounding Zones and Development Standards

The site adjoins land zoned both R2 Low Density Residential and RE1 Public Open Space under Manly LEP 2013. The surrounding context to the north, east and south of the site is zoned R2 Low Density Residential. The objectives of the R2 Low Density zone are to pro□ide for the housing needs of the co□ □unity within a low density residential en□iron□ent and to ena□le other land uses that pro□ide facilities or ser□ices to □eet the day to day needs of residents.

The surrounding R2 Low Density zoned land has an FSR development standard of either 0.40: 1 or 0.45:1, a building height of 8.5m and minimum lot sizes of 500m^2 to the north and east, 750m^2 to the north-west and south and 950 m^2 and 1,150m^2 lots to the south-west.

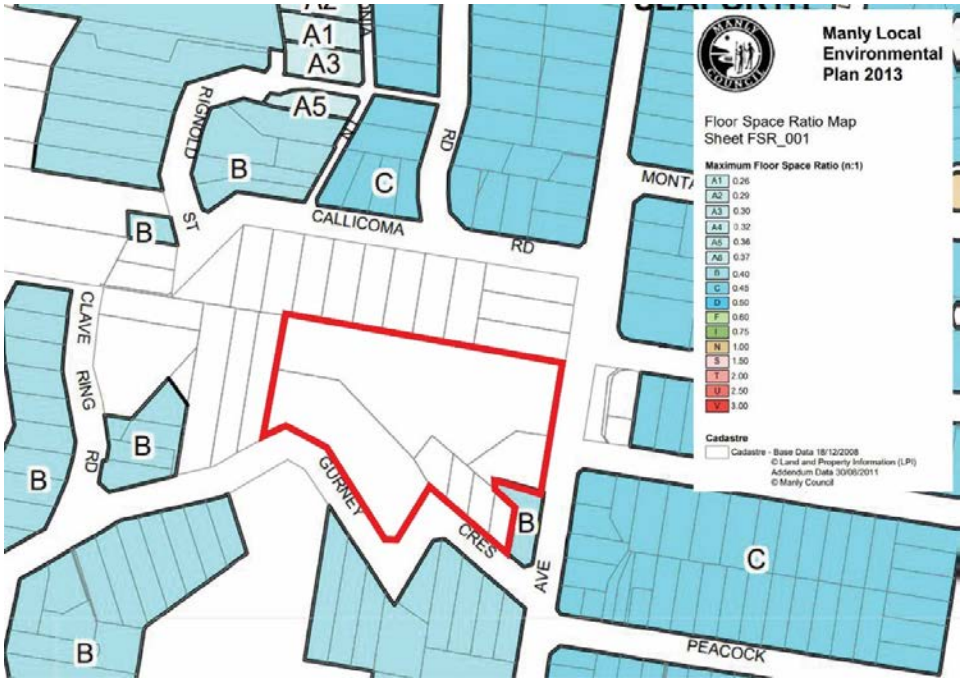


Figure 11 Extract of FSR Map - Manly LEP 2013

Figure 12 Extract of Height of Buildings Map - Manly LEP 2013

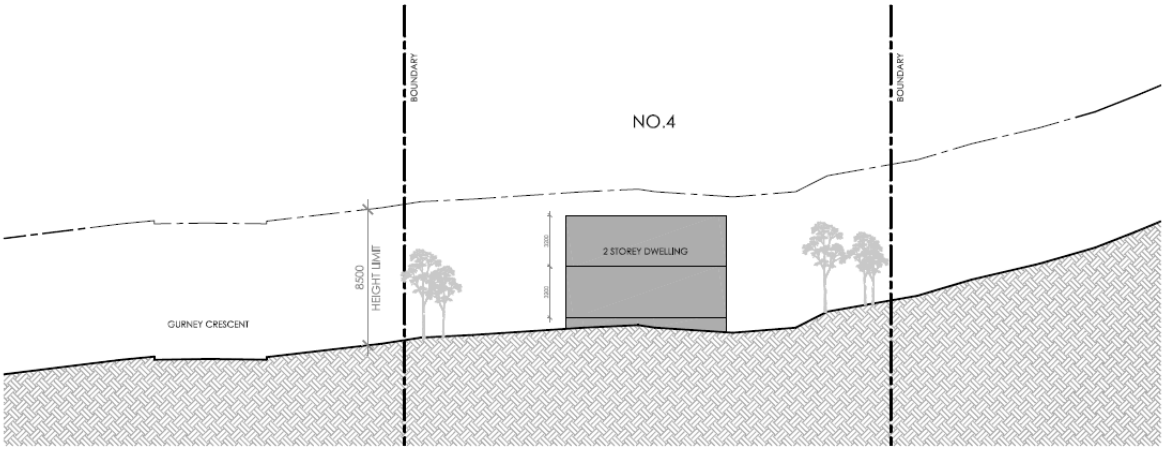
Figure 13 Extract of Lot Size Map - Manly LEP 2013

4. Concept Plan

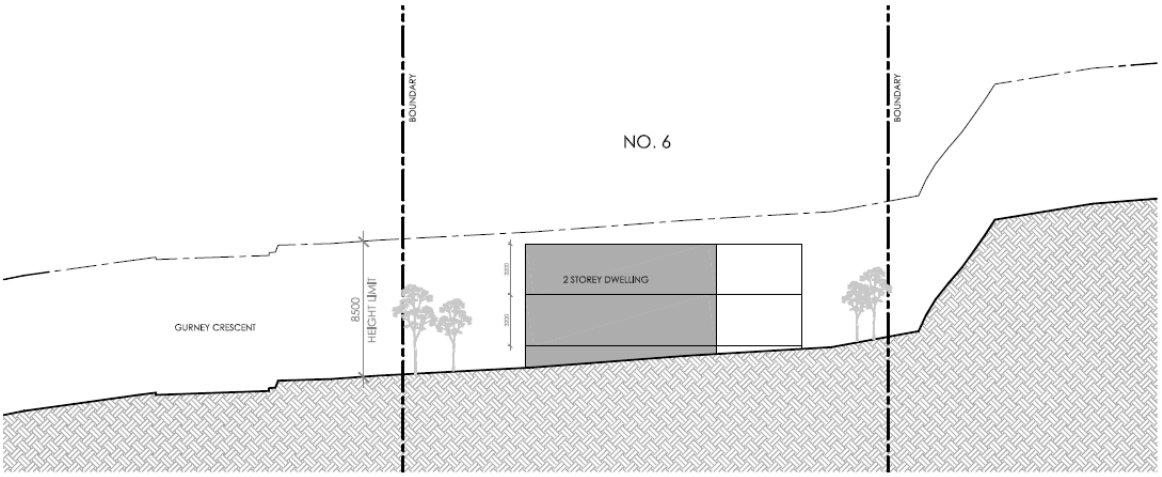
A concept plan for the site and indicative sections has been prepared by Platform Architects to demonstrate the capability of the site to accommodate the proposal and to guide future planning (refer to Figures 14 and 15). The key features of the concept plan are:

- Approx. 13,300m^2 of SP2 Infrastructure (Health Services Facility) zoned land;
- Approx. 2,200m^2 of E2 Environmental Conservation zoned land;
- Approx. 2,006m^2 of R2 Low Density residential land;
- Approx. 3,065m^2 of E4 Environmental Living zoned land;
- 4 residential lots ranging in area from 465m^2 to approx. 3,800m^2;
- 50m bushfire APZ to the west; and
- New vehicular access from Gurney Crescent.

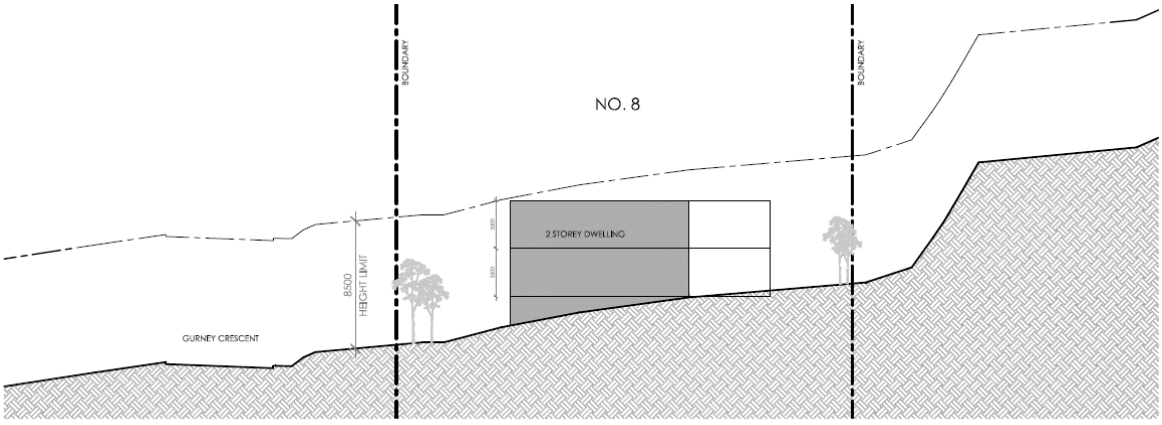
Figure 14 Indicative Concept Plan



SECTION AA



SECTION AA



SECTION CC

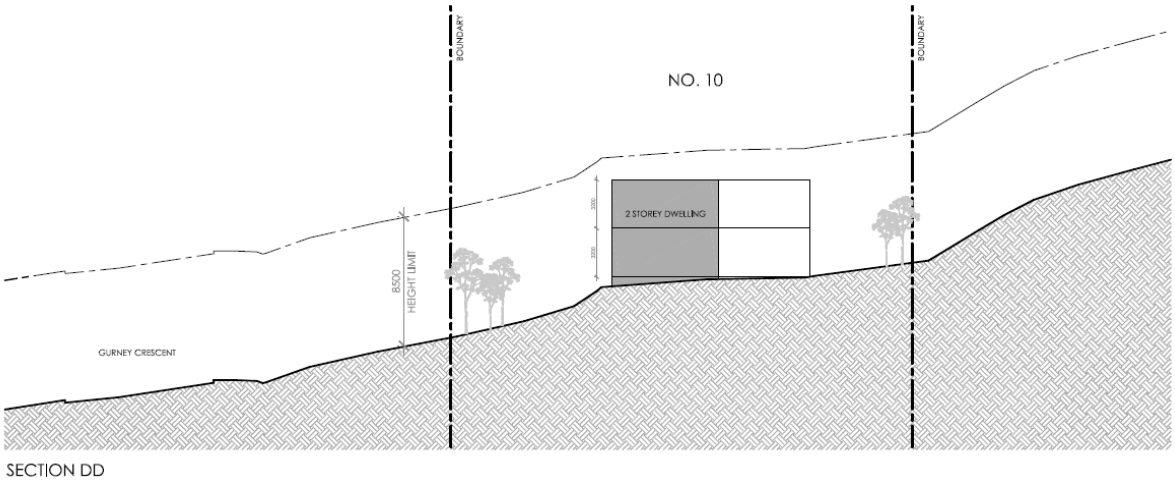


Figure 15 Indicative Sections

The concept plan and indicative sections are provided in **Appendix D**.

Future Boundary Adjustment

Lot 1 in DP 325720, Lot 1 in DP 325784 and Lot 7A in DP 17157 will be the subject of a future subdivision application to reflect the revised concept plan for the site. Lot 7A is proposed to have a split zoning comprising both R2 Low Density Residential and E4 Environmental Living. The required 50m APZ for future residential development will be accommodated within Lot 7A on that part of the lot proposed to be zoned E4 (refer to Figure 16). Lot 7A will increase in area from 599m^2 to approximately 3,800m^2.

A positive covenant on Lot 7A will require the registered owner of this lot to maintain the whole of the required APZ including the removal of understorey vegetation in accordance with fuel load requirements and restricting the placement of combustible materials, buildings or improvements, complying with the requirements of the NSW Rural Fire Service (RFS).

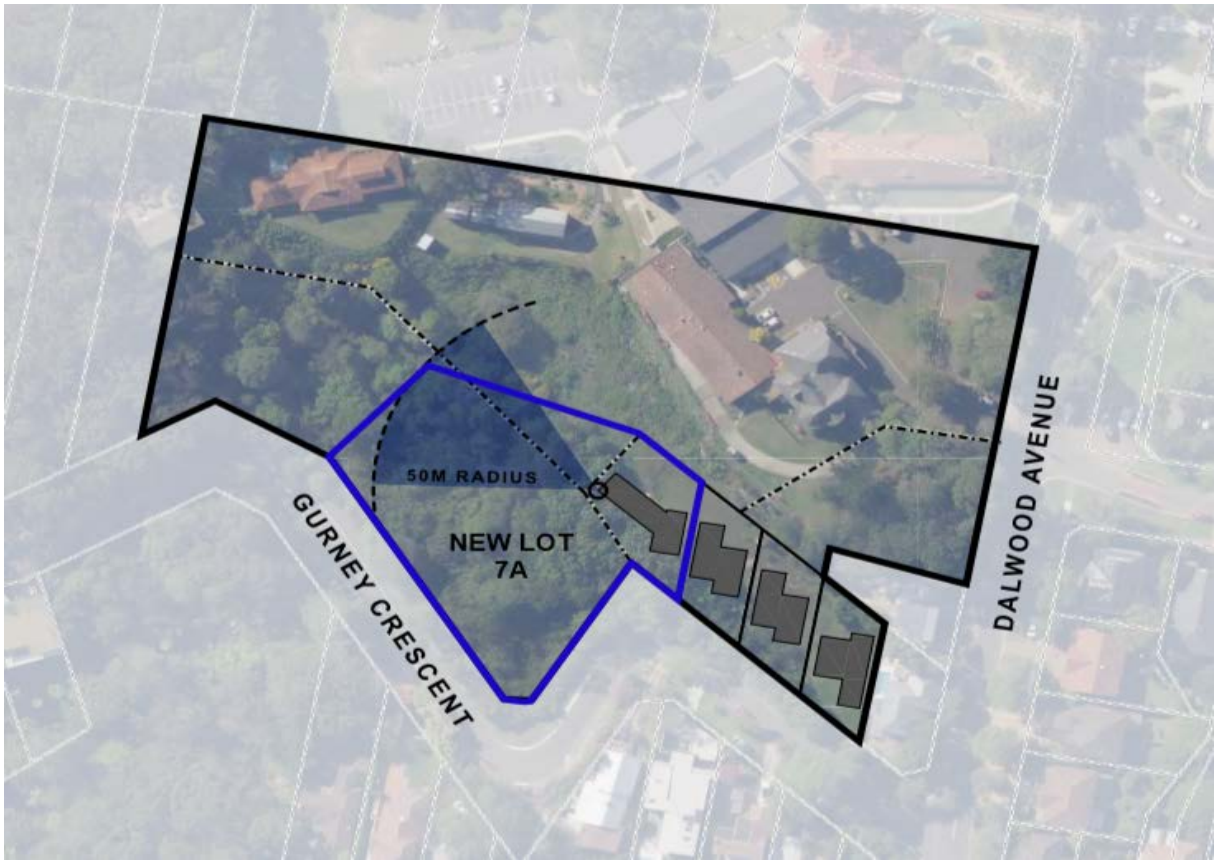


Figure 16 New Lot 7A Layout

In accordance with clause 6.14 of Manly LEP 2013, an amendment to Manly Development Control Plan 2013 will be prepared to guide future development on the proposed R2 Low Density Residential and E4 Environmental Living zoned portions of the site. The DCP amendment will contain more detailed specific controls for future housing and will be prepared following the issue of a Gateway Determination.

5. Proposed LEP Amendment

5.1 Land to which the LEP will apply

A draft Land Application Map is provided in Figure 17. The draft Land Application Map illustrates the land that is to be included in the LEP Amendment.

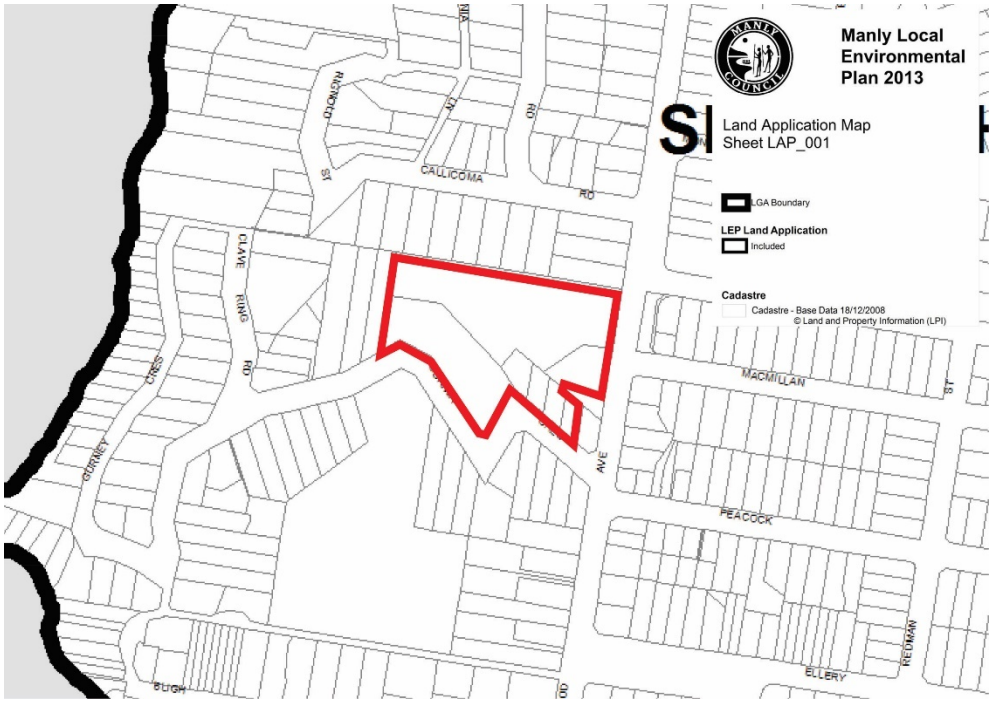


Figure 17 Draft Land Application Map

5.2 Proposed Land Use Zones

It is proposed to rezone the southern portion of the site from SP2 Infrastructure R2 Low Density Residential generally consistent with the site's existing cadastre boundaries (Lots 4A to 7A). The existing lots are of a sufficient size and shape to facilitate rational building and development boundaries for future development.

It is also proposed to rezone approximately 3,065m² of the southern portion of the site from E2 Environmental Conservation to part E4 Environmental Living to provide a transition between future residential development on the proposed R2 Low Density zoned land and the E2 Environmental Conservation zoned land within the remainder and to the south-west of the site. The E4 Environmental Living zoned land accommodates the required Bushfire Asset Protection Zone (APZ). Lot 7A will have a split zoning – comprising both R2 Low Density Residential and E4 Environmental Living. A draft Land Zoning Map is provided at Figure 18.

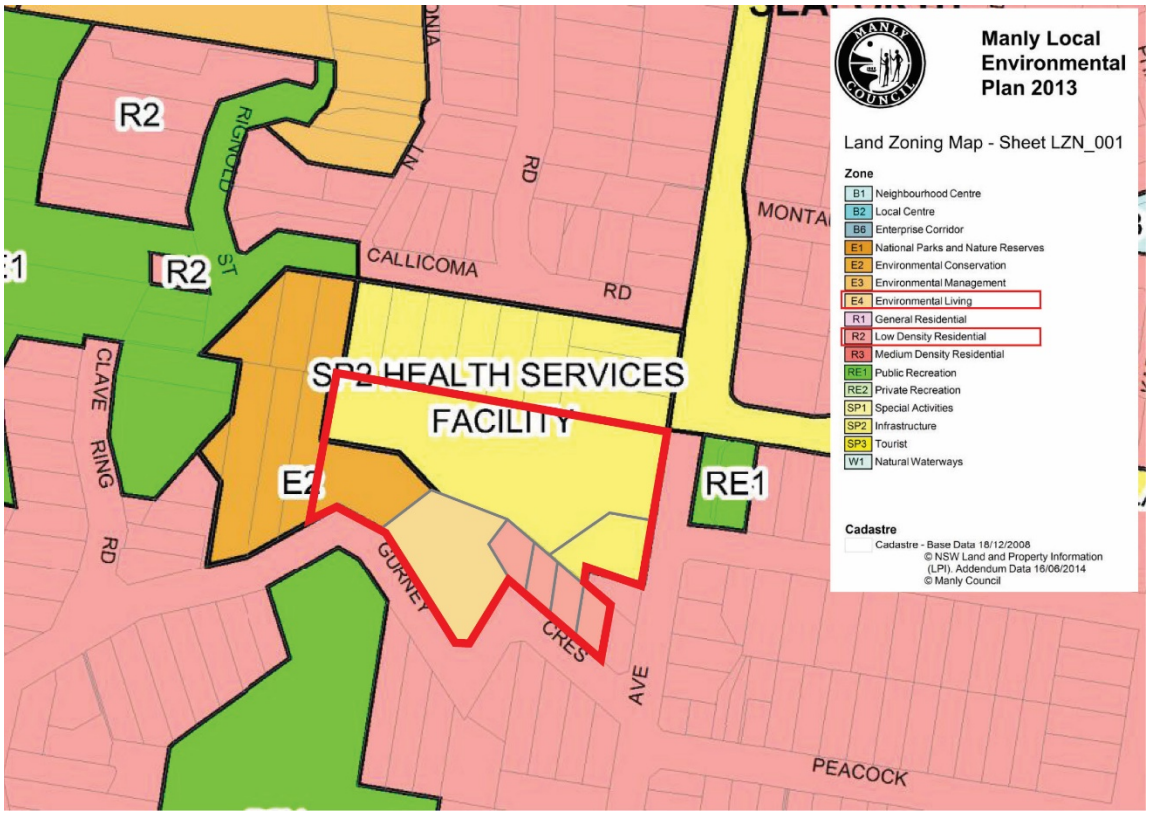


Figure 18 Draft Zoning Map

5.3 Amendments to the SP2 Infrastructure and E2 Environmental Conservation Zones

It is proposed to remove the SP2 Infrastructure zone to accommodate 4 residential lots, consistent with the existing cadastre boundaries within this part of the site. This land has been identified by NSW Health as surplus to its needs. Its divestment will generate funds for new and / or upgraded local health services and facilities on the remaining portion of the site.

It is proposed to rezone part of the site currently zoned E2 Environment Conservation zone to E4 Environmental Living for the following reasons:

- The E2 Environmental Conservation zone is for areas of high ecological, scientific, cultural or aesthetic values outside national parks and nature reserves. The zone provides the highest level of protection, management and restoration for such lands. As stated within LEP Practice Note PN 09-002, it is anticipated that many councils will generally have limited areas displaying the characteristics suitable for the application of the E2 zone. In applying an E2 Environment Conservation zone an environmental study that demonstrates the high status of this land should be undertaken.

  A detailed assessment of the biodiversity values of this part of the site has been undertaken by Lesryk Environmental (refer to **Appendix C**). Vegetation on this part of the site is in a highly disturbed condition, having been heavily impacted and degraded as a result of historic use and edge effects from existing surrounding residential uses (e.g. encroachment of weeds, disturbance

by humans). No ecological communities, flora or fauna species, or their populations, listed, or currently being considered for listing, under the EPBC or BC Acts were recorded on the site. Similarly, none are expected to rely upon the habitats proposed to be disturbed for any of their necessary or significant lifecycle requirements. This part of the site does not contain vegetation of high ecological or aesthetic value. For the above reasons, the removal of part of the E2 Environmental Conservation zone and replacement with E4 Environmental Living is considered reasonable.

- Approximately 12% of the site (or 2,200m^2) will remain E2 Environmental Conservation and will continue to allow for the movement patterns of any fauna species that currently traverse the corridor linkage from the west and south of the site.

5.4 Principal Development Standards

5.4.1 Minimum Lot Sizes

It is proposed to introduce a minimum lot size of 500m^2 consistent with the minimum lot size of surrounding R2 Low Density Residential zoned land. It is noted that the existing 4 lots currently zoned SP2 Infrastructure are below the 500m^2 minimum lot size. Rather than applying a minimum lot size that corresponds with the area of each existing lot thereby creating a patchwork of different lot sizes, a blanket minimum lot size 500m^2 lot size is proposed. This will also discourage the potential for re-subdivision into lots less than those existing in the future. A draft Minimum Lot Size Map is included at Figure 19.

Figure 19 Draft Minimum Lot Size Map

5.4.2 Height of Buildings

It is proposed to apply a maximum height of building of 8.5 m consistent with the maximum height of buildings development standard of surrounding R2 Low Density Residential zoned land. A draft Building Height Map is included at Figure 20.

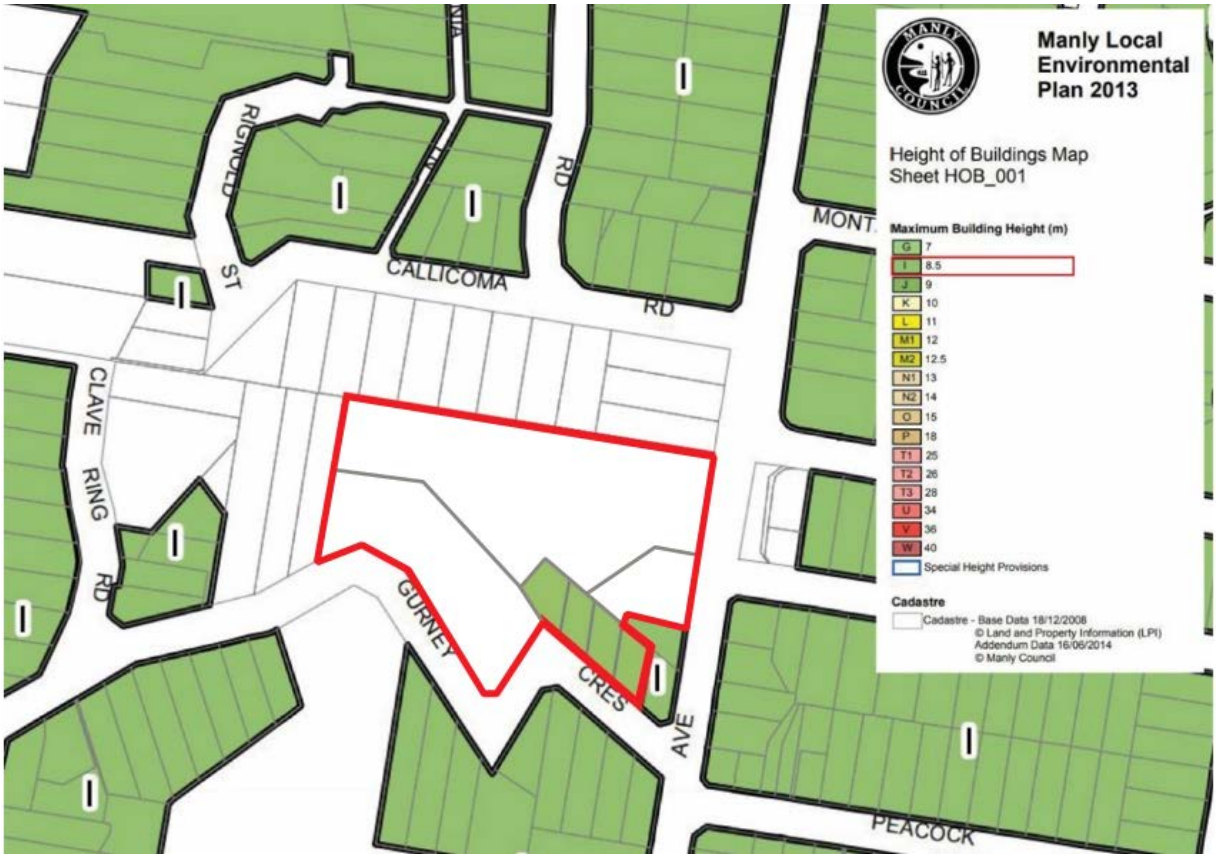


Figure 20 Draft Building Height Map

5.4.3 Floor Space Ratio

It is proposed to apply a maximum FSR of 0.45:1 consistent with the maximum FSR development standard of surrounding R2 Low Density Residential zoned land. A draft Floor Space Ratio Map is included at Figure 21.

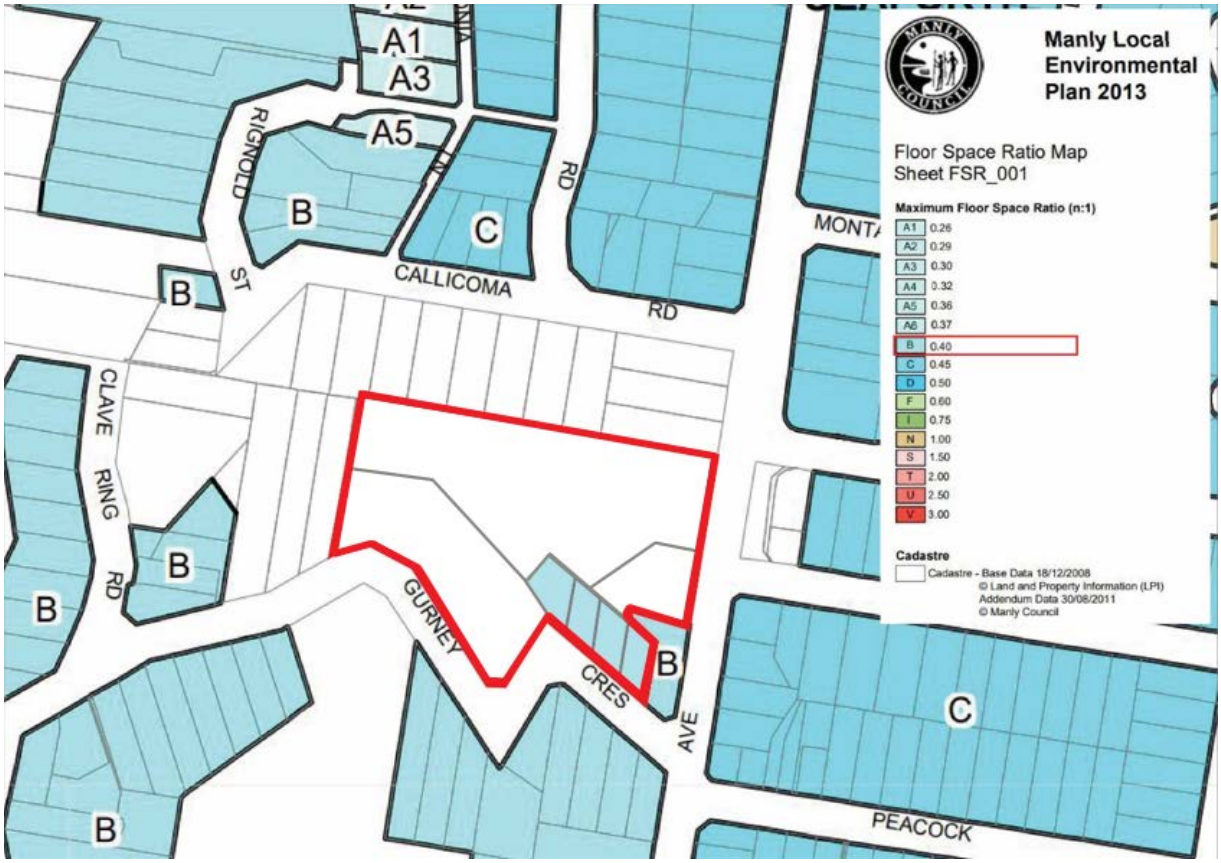


Figure 21 Draft Floor Space Ratio

6. Strategic Justification

6.1 Greater Sydney Regional Plan 'A Metropolis of Three Cites – connecting people' 2018.

The Greater Sydney Regional Plan (the Plan) was prepared by the Department in March 2018 and is the strategic planning framework setting the long-term vision for broader Sydney's anticipated growth. The plan is based on the vision of three cities including the Western Parkland City, the Central River City and the Eastern Harbour City (which includes the site). Together these cities aim to achieve the broader vision for Sydney.

By 2056, the population of Greater Sydney is expected to increase by an additional 1.7 million people and by 2036, it is estimated that an additional 725,000 homes will be required to support this growth. In meeting housing targets, the Plan is very much built on the concept of a '30-minute city' whereby residents live within 30 minutes of their jobs, education, services and great places, integrating land use and infrastructure to promote liveability, productivity and sustainability.

The proposal is consistent with the Eastern Harbour City vision to build on its recognised economic strength, addressing liveability and sustainability. As stated in the Plan, the Eastern Harbour City is a mature mix of well-established communities, from traditional suburban neighbourhoods to Australia's most highly urban areas. Growth will bring urban renewal with increased infrastructure and services, open spaces and public places. Sympathetic infill development will focus on improved local connections. The proposal is an orderly and efficient use of land and will provide additional homes within walking distance to the Seaforth Town Centre. The site also has good public transport access to Sydney CBD and the future strategic centre at Frenchs Forest. Divestment of part of the site will generate funds for new and / or upgraded local health services and facilities – services which are essential to support future growth within the Eastern Harbour City.

Ten strategic directives underpin the Plan. This planning proposal is consistent with the following:

- **Infrastructure supporting developments -** The planning proposal will provide additional housing within proximity to the Seaforth Town Centre. The site has good public transport access to Sydney CBD and the future strategic centre at Frenchs Forest.
- **Giving people housing choices** – the proposal provides additional housing in the right location. The proposal will contribute to the minimum 5 year dwelling target of 3,400 dwellings required in Manly LGA envisaged by 2036 and overall dwelling targets for the Greater Sydney region. The existing lots which are proposed to be rezoned for low density residential purposes are of a sufficient size and shape to provide housing diversity and choice, meeting the requirements of people with different housing needs and lifecycles.
- **A city for people** – this is achieved on the site by respecting the natural features and scenic qualities of the land and providing additional housing within reasonable walking and public transport access to local centres (Seaforth Town Centre, Sydney CBD and the future strategic centre at Frenchs Forest).
- **Creating a city of great places** - by retaining land for environmental conservation.
- **A well-connected city** - providing additional homes only a short bike, bus and / or car journey to Seaforth Town Centre, Sydney CBD and the future strategic centre at Frenchs Forest.

- **A city in its landscape -** valuing green spaces and landscape by retaining land for environmental conservation, protecting scenic and cultural landscapes and providing opportunities to enhance currently weed infested natural vegetation within the western portion of the site.
- **An efficient city** which uses resources wisely.

6.2 North District Plan 2018

The North District Plan provides a 20-year plan to manage growth and achieve the 40-year vision, while enhancing Greater Sydney's liveability, productivity and sustainability into the future. The proposal is aligned with the planning priorities within the Northern District Plan including:

- The divestment of surplus lands will generate funds to provide or upgrade services and social infrastructure to meet people's changing needs;
- The proposed infill development has the potential to contribute to healthy, creative and culturally rich and socially connected communities;
- Providing additional housing with good access to jobs, services and public transport;
- Increasing urban tree canopy by retaining land zoned E2 Environmental Conservation and prescribing lot sizes and development controls which provide areas for mature tree planting within front and rear yards; and
- Implementing WSUD and asset protection zones to manage the impact of natural hazards and climate change on the site.

The outstanding location and amenity of the site lends itself to residential development. The site's future redevelopment has the potential to make a positive contribution to the built form of the local area.

6.3 State Environmental Planning Policies

6.3.1 State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)

In accordance with Clause 6 of SEPP 55, a planning authority is to consider whether the land to which a planning proposal relates is contaminated and if the land is contaminated, the planning authority is satisfied that the land is suitable in its contaminated state or will be suitable after remediation for the purposes for which the land is proposed to be used.

The site has been predominantly used for health-related purposes and is considered to have low contamination risk. The southern areas of the site do not contain any buildings / hard stand areas and likelihood of any significant contamination is considered low.

6.4 Section 9.1 Ministerial Directions

An assessment of the proposal in relation to the relevant Section 9.1 Ministerial Directions is provided in **Appendix E**.

6.5 Shape 2028 Northern Beaches Community Strategic Plan 2017-2028

Council's Community Strategic Plan for the Northern Beaches sets out the vision and direction for the LGA over the next 10 years. The proposal is consistent with the vision for the Northern Beaches in that it provides infill housing in an existing urban area which sits within a natural bushland setting. The site and future residents will have good connections (walk, cycle, bus and car) to services and facilities within the Seaforth Town Centre, the future strategic centre at Frenchs Forest and access to a number of high quality passive and active recreation opportunities. The proposal is in balance with the environment. The proposal is not inconsistent with the priorities for the local government area in that:

- Protection of the environment – No critical habitat, threatened species, populations, ecological communities or their habitats will be adversely affected as a result of the proposal. A detailed flora and fauna investigation of the site has confirmed that no ecological communities, flora or fauna species, or their populations, listed, or currently being considered for listing, under the EPBC or BC Acts have been recorded on the site. Similarly, none are expected to rely upon the habitats proposed to be disturbed for any of their necessary or significant lifecycle requirements. Vegetation on the site comprises predominantly exotic species and is weed infested. The site is not considered to constitute potential or core koala habitat. No ecological constraints to the proposal have been identified or considered likely to occur. The proposal retains approximately 2,200m² of the site as E2 Environmental Conservation and 1.1 ha of E2 land as part of the larger Dalwood Homes site. The proposal will result in positive environmental outcomes:
  - no hollow bearing trees will be removed;
  - a Vegetation Management Plan (VMP) will be developed that includes the removal and treatment of bamboo infestation on the site and larger Dalwood Homes site, the ongoing removal of exotic plants and replacement with native species and ongoing monitoring for a period of two years after the establishment of future dwellings to determine if any exotic plants have spread into the adjacent native area.
  - implementation of weed management measures.
  - the creation of future residential lots which are of a sufficient size and shape to accommodate a dwelling with generous areas in the front and rear yards for the planting of native vegetation.
  - establishment of an APZ and its maintenance in perpetuity to minimise the risk to life and property from bushfires.
- Environmental sustainability – future residential development on the site will be required to demonstrate compliance with Council's requirements in terms greenhouse energy efficiency, thermal performance and water sensitive urban design set out in Part 3 of Manly DCP 2013.
- Places for People and Community and belonging – the proposal will provide accommodation for an additional four (4) households within a short walk, cycle, bus or car trip to cafes, shops and a wide range of sporting and recreational facilities in the local area. The divestment of surplus land will generate funds for new / upgraded local health service and facilities for the local community.
- Vibrant local economy – the proposal will not adversely impact upon the local economy.
- Transport, infrastructure and connectivity – the site is within a short walk, cycle, bus or car trip from the Seaforth Town Centre, the future strategic centre at Frenchs Forest and Sydney CBD.

6.6 Northern Beaches Council Affordable Housing Policy

Council is committed to increasing the range and supply of affordable housing in the Northern Beaches to meet the growing and changing needs of its community and particularly, key workers. The policy comprises principles and policy statements that together will guide Council's actions to support affordable housing. In accordance with Council's affordable housing policy, Council is committed to a 10% affordable rental housing target for all strategic plans and planning proposals for urban renewal or greenfield development. The proposal does not propose a component of affordable housing. The proposal is infill development only and the lots already exist. Only four (4) future residential lots will be created. The funds generated from the divestment of surplus land at the Dalwood Homes site will be re-invested in upgrading and / or providing new health and well-being services on the site and within the local area which is in the public interest.

7. Environmental, Social and Economic Impacts

This section addresses the environmental assessment of the planning proposal in respect to the relevant matters for consideration under section 3.33 of the EP&A Act.

7.1 Traffic and Transport

The proposal provides for an additional four (4) residential lots. The proposal is unlikely to result in any appreciable change in the traffic generation potential of the site. Any projected change to traffic activity as a consequence of future development will be required to demonstrate that the proposal has acceptable traffic implications.

7.2 Heritage

A Heritage Assessment has been prepared by Weir Phillips and is included at **Appendix F**. The assessment concluded that the proposal will have acceptable impact on surrounding heritage items within the larger Dalwood Homes site and the items along Clavering Road, Seaforth.

Impact of the future boundary adjustment

The future boundary adjustment to Lot 7A will have no impact on the heritage significance of the site as the whole site contains numerous lots across several deposited plans. Understanding the boundaries of each of the individual lots within the existing site boundaries lies in historic records only and does not contribute to the ability to understand the significance of the site. The lot boundaries of this lot (i.e. Lot 1 in DP 325784) appear arbitrary rather than historically significant and determined by a subdivision (the Loch Lomond Estate) that was only partially realised. Changing the lot boundaries will not impact on significant fabric or view corridors.

Impact of the proposed rezoning

The proposal will have an acceptable impact on the heritage significance of the site for the following reasons:

- These lots are located outside of the reduced curtilage recommended above.
- These lots are well below the level of Dalwood House, which, even when these lots are built upon, will continue to have unobstructed views towards Middle Harbour. Views from Middle Harbour will similarly remain unobstructed. If the roof tops of future housing are visible, they will be read in conjunction with other rooftops within the tree line below Dalwood House.
- Buildings upon these lots of the scale governed by the proposed planning controls will not block significant view corridors into the site or within the site.
- Development of these lots in line with the proposed R2 Low Density Residential zoning is in line with the character of the area immediately surrounding the site. Future building(s) constructed on these lots will sit comfortably within the established character of the surrounding area.
- The building areas within each future lot are located within already cleared land. The majority of the new Lot 7A will retain an E4 Environmental Living zoning and hence the majority of its vegetation cover.

Impacts on heritage items in the vicinity of the site

The heritage items within the vicinity of the site are sufficiently removed from the area of proposed future works. As such there will be no impact on their setting or view corridor. There will be no impact on the ability to understand their significance.

7.3 Services and Utilities

The site is linked by direct road access and public entrances. The site is located within already established urban and environmental realms with appropriate public infrastructure and amenities.

7.4 Bushfire

A Bushfire Hazard Assessment has been undertaken by Control Line Consulting, a copy of which is included in **Appendix G**. The assessment conducted considered the building footprints for dwellings located on the lots in accordance with the Concept Layout Plan (see Figure 1). On the basis of the vegetation and slope conditions Control Line Consulting have identified the need for a 50m APZ measured from the edge of the future indicative dwelling on Lot 7A. This APZ area has been incorporated into the expanded Lot 7A. The ongoing management and maintenance of this APZ area will be the ultimate responsibility of the future land owner of Lot 7A.

The APZ will include an Inner Protection Area with a tree canopy cover of less than 15% with trees located greater than 2m from any part of the roof line of a future dwelling. Other measures to manage ground covers and shrubs will form part of a management plan and positive covenant imposed on the title of Lot 7A.

Adherence to the requirements of the APZ in accordance with Planning for Bushfire Protection 2006 will ensure that future dwellings are constructed to a BAL 29 standard in accordance with the BCA and Planning for Bushfire Protection 2006. Impacts and risk of bushfire to future dwellings can therefore be suitably managed.

7.5 Ecology

As discussed in section 3.11, an ecological constraints analysis of the site was undertaken by Lesryk. In relation to flora, targeted surveys were undertaken for those native species and ecological communities of State and/or national conservation concern that are known, or expected to occur, in the locality and weeds of significance that would require treatment. A list of native and exotic species recorded is provided in Appendix 3 of the ecological report (refer to **Appendix E** of this planning proposal). In relation to those plants recorded on the site, no listed or currently being considered for listing under the EPBC or BC Act were found on the site. No rare or threatened Australian plant was also recorded on the site.

As no threatened plants are adversely impacted by the proposal, the conducting of assessments referring to the EPBC Act's Significant Impact Guidelines and/or Section 7.3 of the BC Act is not required.

In relation to fauna, none of the native animals recorded during the current or previous ecological investigations are listed, or currently being considered for listing, under the Schedules to the EPBC Act. However, native species recorded on the site are protected under the BC Act.

Potential impacts of the planning proposal

Future development of part of the site for residential purposes will require the removal of cleared / slashed grassland and removal / under scrubbing of 3,065m^2 of densely weed infested vegetation across proposed Lot 7A to establish the required Bushfire APZ. Lesryk Environmental has considered the impact of the future development proposal of biodiversity on the site and make the following conclusions:

- No ecological communities, flora or fauna species, or their populations, listed under the EPBC Act were recorded within, or in close proximity to, the subject site. Similarly, none are expected to rely upon the habitats to be disturbed for any of their necessary lifecycle requirements. As such, it is not considered necessary that any assessments referring to the EPBC Act's Significant Impact Guidelines are required. The proposed development would not have a significant impact on any ecological communities, flora or fauna species of national conservation significance. Therefore, it is considered that the proposed action does not require referral to the Federal Minister for the Environment and Energy for further consideration or approval.
- No ecological communities, flora or fauna species, or their populations, listed under the BC Act were recorded within, or in close proximity to, the subject site. Similarly, none, including the White-bellied Sea-eagle which was previously observed flying above the subject site, were considered likely to occur within, or be reliant upon, the habitats present.
- Whilst the native species recorded during the current study are protected under the BC Act, they are common to abundant throughout both the nearby network of State and local government reserves and surrounding urban areas. Within the surrounding region, these species have been recorded in association with a range of woodland and forest habitats, as well as urban environments. The species recorded would not be solely reliant upon those habitats present within, or in close proximity to, the subject site, such that the removal or further disturbance of these would threaten the 'local' occurrence of these animals. The species recorded are all expected to utilise and occupy the proposed E4 Environmental Living zoned land, other parts of the broader study area and surrounding locality post-development. None of the native animals recorded during the current or previous ecological investigations are listed, or currently being considered for listing, under the Schedules to the EPBC Act. The two Smooth-barked Apples hollow-bearing trees are located within the proposed E4 Environmental Living zoned land and are not required or proposed to be removed as part of any future physical work. The proposed development would not be likely to have a significant effect on any threatened species, population, ecological communities, or their habitats listed under the BC Act; as such, the preparation of a Biodiversity Development Assessment Report (BDAR) that further considers the impacts of the proposal on State significant matters is not required.
- Due to the presence of the quarry cliff face, connectivity in a north to north-easterly direction for ground traversing species is limited. Species tolerant of negotiating urban infrastructure and residential areas would be able to traverse the area in an easterly direction. Development of the subject site would not present any additional barriers to the easterly movement of native species. Flying species would be able to traverse the subject site post-development. As with the surrounding/nearby residential areas, development of the subject site will not compromise the objectives of the 'Connected Corridors for Biodiversity initiative'. Movement along the Priority Habitat corridor that occurs to the west of the subject site would not be altered by the future development proposal. No barriers to the movement patterns of any species that currently

traverse that corridor linkage would be erected. The development of the subject site will not isolate or fragment any habitat areas, nor will it have an adverse cumulative impact when associated with the surrounding residential areas and network of urban roads.

- The proposed E4 Environmental Living zoned land (this incorporating the required APZ) and retained E2 Environmental Conservation lands present along the eastern edge of a Priority Habitat corridor are to be retained, with weed management and some light vegetation removal occurring. The presence of these portions of the subject site will provide vegetation that permits the movement of native species. Treatment of the bamboo infestation and regeneration with endemic native species would also provide foraging opportunities not current available within these portions of the subject site.
- The Biodiversity Conservation Regulation 2017 sets out threshold levels for when the BOS would be triggered. The threshold has two elements:
  - whether the amount of native vegetation being cleared exceeds a threshold area set out under Section 7.2 of the Regulation
  - whether the impacts occur on an area mapped on the Biodiversity Values map published by the Minister for the Environment.

  If clearing and other impacts exceeds either trigger, the BOS applies to the proposed development including biodiversity impacts prescribed by clause 6.1 of the Biodiversity Regulation 2017. In relation to the subject site, the amount of native vegetation likely to be cleared (i.e. 1,460m^2 of cleared / slashed grassland and removal / under scrubbing of 4,900m^2 of densely weed infested vegetation across the entire development area) in association with this proposal would not exceed the threshold above which the BAM and offsets scheme apply (i.e. potential for 0.5 ha over 1 to < 40 ha). Furthermore, the subject site has not been identified on the Biodiversity Vales Map and Threshold Tool (BVMTT) (NSW Government 2019b) as land of high biodiversity value that is particularly sensitive to impacts from development and clearing. The proposal would not trigger the requirement for assessment in accordance with Part 6 (the BOS) of the BC Act. Hence, the application of the BAM (as per Division 2, Part 6 of the BC Act) is not required. Therefore, the preparation of a BDAR does not need to be undertaken as part of the proposal.
- Within the study area, two eucalypt species were recorded, however, neither are listed under Schedule 2 of State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP 44) as a Koala Feed Tree. As such, the subject site would not be considered Potential or Core Koala habitat as defined in the Policy. A Koala Plan of Management is not required to accompany any future Development Application.
- No wetlands or littoral rainforest are present within the study area; as such, the proposal is not considered to have an adverse impact on those features/items listed under Clauses 10(1) and 11(1) of SEPP (Coastal Management) 2018.

Mitigation Measures

The following recommendations are provided:

- No hollow-bearing trees should be removed from the proposed APZ area.
- Clearing of native vegetation should be limited to the minimum needed to meet the objectives of the development layout.

- The number of mature trees requiring removal should be limited to the minimum needed to meet the objectives of both the project's development layout and APZ requirements for inner protection areas under Planning for Bushfire Protection.
- A Vegetation Management Plan (VMP) should be developed that includes the removal and treatment of the bamboo infestation:
  - a component of the VMP should be the establishment of endemic native species
  - a maintenance schedule which includes the ongoing removal of exotic plants and replacement of any native species that die or exhibit disease should also form a component of the VMP.
  - the VMP should be prepared and implemented by a qualified bush regeneration firm.
  - the VMP should be prepared in consultation with an engaged project ecologist to ensure the life cycle needs of those native species present or potentially occurring are considered.
- Areas downslope of the proposed development should be regularly monitored (bi-yearly) during, and for a period of two years after, the establishment of the dwellings to determine if any exotic plants have spread into the adjacent woodland. In these instances, weed management measures should be implemented.
- Limits of clearing should be provided to the construction contractor and identified on maps/plans and on site through the erection of temporary fencing, bunting or similar.
- An ecologist or suitably qualified wildlife contractor should be present on site during the clearing works to collect and relocate any native species (primarily ground-dwelling animals) that are exposed.
- Any animals injured during the clearing work should be collected and taken to a local veterinarian or wildlife carer.

8. Considerations in Accordance with the NSW Government's Guide to Preparing Planning Proposals

8.1 Part 1 – Objectives or the intended outcomes of the proposed rezoning and subsequent LEP amendments

The objective of this planning proposal is to amend Manly LEP 2013 to enable the redevelopment of surplus lands within the site by:

- Rezoning land from part SP2 Infrastructure to R2 Low Density Residential.
- Rezoning land from part E2 Environmental Conservation to E4 Environmental Living.
- Amending the Height of Building (HOB), Floor Space Ratio (FSR) and Lot Size (LSZ) maps relating to the proposed R2 Low Density Residential land to correspond with the adjoining controls applying to R2 Low Density Residential zoned land.

The proposed amendment will enable rational building and development boundaries on the land for future development, provide additional housing within close proximity to the Seaforth Town Centre. The divestment of surplus land will generate additional funds for new and upgraded local health services and facilities on the larger Dalwood Homes site and local area.

8.2 Part 2 - A plain-English explanation of the legislative provisions that would apply to the site under the proposed instrument

The objectives of this planning proposal would be facilitated by the following legislative provisions. A detailed explanation of the legislative provisions is provided in section 5 of this planning proposal.

1. Amend the Manly LEP 2013 Land Zoning (LZN) Map – **Sheet LZN_001** to rezone part SP2 Infrastructure to R2 Low Density Residential on Lots 4A, 5A, 6A and 7A in DP 17157, Seaforth.

2. Amend the Manly LEP 2013 Land Zoning (LZN) Map – **Sheet LZN_001** to rezone part E2 Environmental Conservation to E4 Environmental Living on Part Lot 1 in DP 325720, Seaforth.

3. Amend the Manly LEP 2013 Height of Building (HOB) Map – **Sheet HOB_001** to apply a height limit of 8.5 metres to the rezoned land on Lots 4A, 5A, 6A and 7A in DP 17157, Seaforth, consistent with development standards for R2 Low Density Residential zoned land in Manly LEP 2013.

4. Amend the Manly LEP 2013 Floor Space Ratio (FSR) Map – **Sheet FSR_001** to apply an FSR of 0.45:1 to the rezoned land on Lots 4A, 5A, 6A and 7A in DP 17157, Seaforth, consistent with development standards for R2 Low Density Residential zoned land in Manly LEP 2013.

5. Amend the Manly LEP 2013 Lot Size Map (LSZ) Map – **Sheet LSZ_001** to apply a minimum lot size of 500m^2 to the rezoned land on Lots 4A, 5A, 6A and 7A in DP 17157, Seaforth - consistent with development standards for R2 Low Density Residential zoned land in Manly LEP 2013.

8.3 Part 3 –Justification

This part of the Planning Proposal describes the reasons for the proposed outcomes and development standards of the Planning Proposal.

Section A – The need for the Planning Proposal

Is the Planning Proposal a result of any strategic study or report?

This planning proposal is not the direct result of any strategic study or report. The majority of the site is zoned for SP2 infrastructure purposes, with a relatively small area that is currently zoned E2 Environmental Conservation.

A single zoning will facilitate practical development on the land.

Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

A planning proposal seeking to amend Manly LEP 2013 is the most effective way of achieving the objective and intended outcomes. An amendment to the zoning and development standard controls will help to facilitate efficient use of and building outcome on the land, contribute to the NSW Government's strategic directives on housing supply that is being sought in Greater Sydney including the Northern Beaches LGA.

Section B – Relationship to strategic planning framework

Is the Planning Proposal consistent with the objective and actions of the applicable regional, sub-regional or district plan or strategy?

This planning proposal is consistent with the objectives and actions of the Greater Sydney Regional Plan, North District Plan, Section 9.1 Ministerial Directions and Shape 2028 Northern Beaches Community Strategic Plan 2017-2028. A detailed discussion of the planning proposal in relation to the Regional Strategy is provided is section 6 of this planning proposal.

Is the Planning Proposal consistent with Council's local strategy or other local strategic plan?

This planning proposal is consistent with Council's strategic plan - Shape 2028 Northern Beaches Community Strategic Plan 2017-2028. A detailed discussion of the proposal in relation to this strategy is provided in section 6 of this planning proposal.

Is the Planning Proposal consistent with applicable State Environmental Planning Policies?

State Environmental Planning Policies (SEPP) relevant to this planning proposal include SEPP No.55 – Remediation of land. A detailed discussion of the planning proposal in relation to its consistency with SEPP 55 is provided in section 6 of this report.

Is the Planning Proposal consistent with applicable Ministerial Directions (s.9.1 Directions)?

A detailed discussion of the planning proposals consistency with the relevant s.9.1 Ministerial Directions is included in **Appendix E**. In summary, this planning proposal is not inconsistent with any relevant s.9.1 Ministerial Directions.

Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No critical habitat, threatened species, populations, ecological communities or their habitats will be adversely affected as a result of the proposal. A detailed discussion of the proposal's impact on biodiversity is included in section 7 of this report and the flora and fauna assessment included in **Appendix C**.

Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

An environmental assessment of the planning proposal in relation to European Heritage and Aboriginal Heritage was also undertaken. No land proposed to be rezoned is of European or Aboriginal heritage significance. The proposal is unlikely to result in any appreciable change in the traffic generation potential of the site and that any projected change to traffic activity as a consequence of the development will not have unacceptable traffic implications.

Has the planning proposal adequately addressed any social and economic effects?

This planning proposal seeks to provide additional housing on land identified as surplus to NSW Health. The funds generated from the divestment of part of the site will be used to provide new and / or upgraded facilities on the larger Dalwood Homes site. The proposal is in the public interest.

Is there adequate public infrastructure for the project?

The site is linked by direct road access and public entrances. The site is located within an already established urban area with appropriate public infrastructure and amenities.

What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway Determination?

No State or Commonwealth authorities have been notified throughout the preparation of this Planning Proposal. Consultation with State and Commonwealth agencies will be undertaken in accordance with Section 3.34 of EP&A Act.

9. Conclusion

This planning proposal is submitted to Council in support of an amendment to Manly LEP 2013. The proposal seeks to rezone the southern part of the Dalwood Home Site from SP2 Infrastructure and E2 Environmental Conservation to R2 Low Density Residential and E4 Environmental Living as detailed in this report to allow for future divestment of 4 residential lots.

The land has been identified by the NSW Ministry of Health as being surplus to their needs. The sale of the lots will provide necessary funds for new and / or upgraded local health services and facilities on the site to support longer-term operations.

Comprehensive investigations into heritage, bushfire, biodiversity and geotechnical conditions have been undertaken for the site subject of the rezoning and future residential development. Indicative footprints and dwelling cross sections that accord to the surrounding development standards and controls have also been prepared by Platform Architects to demonstrate the capabilities of the lots to support future residential development. The investigations have confirmed the suitability of the land for residential purposes subject to the preparation of a VMP and establishment of APZs to manage impacts to existing trees and bushfire threat to future dwellings. The requirement for a 50m APZ will necessitate a boundary adjustment between existing Lot 1 in DP 325720, Lot 1 in DP 325784 and Lot 7A in DP 17157 to increase the size of Lot 7A from 599m^2 to approximately 3,800m^2 as shown on the Concept Layout Plan (refer to Figure 1).

The proposal represents an orderly and efficient use of land. It will provide additional homes within walking distance to the Seaforth Town Centre. As assessed and considered in section 6 of this report the proposal is consistent with the planning priorities for the North District and the Northern Beaches Community Strategic Plan.

Section 8 of this report also sufficiently addresses the relevant matters for consideration under the Guidelines for Planning Proposals. It is suitably justified in that it is consistent with the relevant strategic planning framework, State environmental planning policies and local plans and policies. The proposal will have negligible impacts on the natural environment and will generate necessary funds to support the ongoing viable operations of the Dalwood Home Children's site and is therefore in the public interest.

Appendices

Appendix A. Pre-lodgement Meeting Notes

northern beaches council

Notes from Pre-lodgement Meeting Planning Proposal associated with redevelopment of 21 Dalwood Avenue, SEAFORTH

Application No:	PLM2019/047 (doc TRIM2019/134843)
Meeting Date:	01/04/2019 3pm- 4pm
Doc ref.	TRIM2019/202239
Property Address:	21 Dalwood Avenue, SEAFORTH Lots 4A, 5A, 6A & 7A in DP17157 and Lots 6, 7 & 8 in DP620 and part of Lot 1 in DP325720
Proposal:	To amend Manly LEP 2013 to rezone certain lands within the Dalwood Home Site (Children's Service Facility) at 21 Dalwood Avenue, Seaforth deemed to be surplus lands by the NSW Ministry of Health, from SP2 – Infrastructure and E2 Environmental Protection to R2 – Low Density Residential Development for future residential purposes.
Owner:	NSW Ministry of Health (Represented by APP Corporation Pty Ltd)
Attendees for Council:	Neil Cocks Manager Strategic and Place Planning Paul Christmas Principal Strategic Planner Rodney Piggott Manager Development Assessment Brendan Smith Team Leader Biodiversity & Planning
Attendees for applicant:	Josh Owen APP Corporation Pty Ltd Diana Khoury APP Corporation Pty Ltd Rory Harper NSW Health Bryson Wilson NSW Health

INTRODUCTION

These notes are based on discussion in the pre-lodgement meeting including general information on the Planning Proposal and Site Map submitted by the Applicant's documentation. The comments provided are intended as a guide should you decide to pursue the proposal. The meeting was held to discuss the possibility of a planning proposal for the rezoning of certain land identified within the Dalwood Homes site (identified in the Site Map below) for residential redevelopment.

DESCRIPTION OF PLANNING PROPOSAL:

Objectives or Intended Outcomes

To amend the Manly Local Environmental Plan 2013

- to enable the redevelopment of surplus lands within the Dalwood Home Site (Children's Service Facility) at 21 Dalwood Avenue, Seaforth.
- The land to be subject of rezoning is currently zoned SP2 – Infrastructure and E2 Environmental Protection and it is proposed to zone these lands to R2 – Low Density Residential Development for residential purposes.

Explanation of Provisions

The objective of the Planning Proposal is to amend Manly LEP 2013 to permit Residential Accommodation. The proposed R2 zone would also permit a range of other land uses identified in the LEP as follows:

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Boat launching ramps; Boat sheds; Centre-based child care facilities; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Flood mitigation works; Group homes; Health consulting rooms; Home businesses; Home industries; Hostels; Information and education facilities; Jetties; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Recreation facilities (indoor); Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Shop top housing; Signage; Tank-based aquaculture; Water recreation structures; Water recycling facilities; Water supply systems

Figure: Site Map

SITE DETAILS

Site Improvements

The land the subject of the Planning proposal is generally void of site improvements. The land adjacent Callicoma Road Seaforth at the northern edge of the side contains vegetation and a carpark. The remaining land off Gurney Crescent contains vegetation, partly recognised for its environmental values for conservation.

Zoning

The Dalwood Home Site (Children's Service Facility) at 21 Dalwood Avenue, Seaforth is currently zoned part SP2 – Infrastructure and part E2 Environmental Protection under the Manly LEP 2013. The LEP as originally published identified various sites including the subject site as 'deferred area'. As 'deferred' land the site retained zoning contained in Manly LEP 1988; Special Uses – Children's Home.

On 1 April 2016 the site was included in Manly LEP 2013 and zoned part SP2 – Infrastructure and Part E2 Environmental Protection (see Zone Map below under Manly LEP 2013 (Amendment 7) 'NSW Health Sites'). The following provisions was also made to permit certain development without the need for a Development Control Plan:

Clause 6.14 Requirement for development control plans
Insert after clause 6.14 (5) (d):
(e) a change of use of an existing building on land identified as "Manly Hospital site, Manly" or "Dalwood Children's Home site, Seaforth" on the Key Sites Map from one type of health services facility to another type of health services facility, being development carried out by or on behalf of the NSW Health Service.

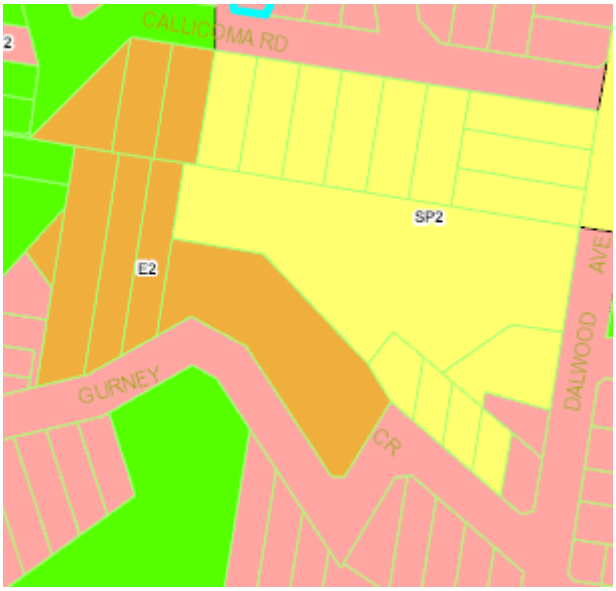


Figure: Land Use Zoning Manly LEP 2013

APPLICANTS JUSTIFICATION FOR PLANNING PROPOSAL

The applicant did not provide detailed justification for the Planning Proposal prior to the meeting but indicated that a range of investigations will support any future Planning Proposal, including:

- Bushfire Prone Land Risk Assessment
- Ecological Assessment
- Geotechnical Reports
- Heritage Conservation and Management Report

It is understood that the abovementioned studies will take into account work undertaken by respective consultant teams a number of years ago in the preparation and assessment of a Development Application for redevelopment of the existing health services facility.

In relation to the strategic planning framework, the applicant must address a number of plans, polices and strategies in justifying the Planning Proposal, including:

Consideration of relevant strategic planning framework	Details of relationship to Planning Proposal
Greater Sydney Regional Plan 'A Metropolis of Three Cites – connecting people' 2018.	The proposal would particularly respond to Eastern Harbour City visions in relation to Liveability and Sustainability. The plan recognises that the city as 'a mature mix of well-established communities' and that 'Growth will bring urban renewal with increased infrastructure and services, open space and public places'. In terms of sustainability consideration will be given to the Sydney Green Grid.
North District Plan 2018	Planning Directions under the North District include the following: • A city for people • Housing the City • A city of great places • A well connected city • A city in its landscape • A resilient city Council notes that in terms of the Plan's 5-year housing supply target of 3,400 dwellings in the Northern Beaches, it is anticipated that this target can be readily met with current land zoning and development settings.
Shape 2028 Northern Beaches Community Strategic Plan 2017-2028	The Northern Beaches Community Strategic Plan articulates community visions and priorities for the local government area.
Environment Protection and Biodiversity Conservation Act 1999	For consideration as applicable
Environmental Planning and Assessment Act 1979	Legislative requirements and procedures for Planning Proposal. Assessment requirements by Council's Local Planning Panel also noted
Heritage Act 1977	No State listing, see Manly LEP Schedule 5
State Environmental Planning (SEPP) - Design of Quality Residential Apartment Development	Not applicable for Planning Proposal involving low density residential development.
SEPP – Affordable Housing (Revised Schemes) (SEPP 70)	The site is located within an LGA to which this SEPP applies. Council's Affordable Housing Policy establishes a target of 10% affordable rental housing where "spot" up-zoning of land occurs, subject to feasibility. The applicant should address this requirement in any Planning Proposal submission.

SEPP – (Affordable Rental Housing) 2009 (Affordable Rental Housing SEPP)	There is no indication at this stage that this SEPP would be applicable to future redevelopment under the Planning Proposal.
SEPP (BASIX) 2004	To be considered at future DA stage
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	Not within mapped foreshore area
Manly Local Environmental Plan 2013 – Zoning	LEP Zone SP2 Infrastructure provides for 'Health Services Facility' at the site and seeks to prevent development that is not compatible with or that may detract from the provision of infrastructure. Part of the site identified as Lot 1 of DP 325720 is zoned E2 (Environmental Conservation). The following objectives of E2 (Environmental Conservation) apply to the lot: • To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values. • To prevent development that could destroy, damage or otherwise have an adverse effect on those values.
Manly Local Environmental Plan 2013 – Local Provisions	Clause 6.5 - Terrestrial biodiversity applies to land zoned E2 and is subject to objectives to maintain terrestrial biodiversity by: (a) protecting native fauna and flora, and (b) protecting the ecological processes necessary for their continued existence, and (c) encouraging the conservation and recovery of native fauna and flora and their habitats. Clause 6.14 - Requirement for development control plans. The site is identified on the LEP Key Sites map as land for which 'Development consent must not be granted …unless a development control plan that provides for detailed development controls has been prepared for the land'. Clause 6.14(4) outlines a range of provisions for the DCP. While the use of the site for Health Service Facilities is exempt under this clause (cl.6.14 (5)(e)), the Planning Proposal will trigger the activation of this clause, requiring a DCP to be prepared with detailed development controls prior to a DA. Whilst not made explicit in the Pre Lodgement Meeting, a draft DCP would be

	required to accompany the Planning Proposal outlining specific controls for the land. The meeting made reference to site specific DCP controls existing for other nearby sites (see Manly DCP clause 5.6.2) and other matters that may require site specific controls e.g. APZ management (see comments from Biodiversity Officer following) Clause 6.9 - Foreshore scenic protection area seeks to protect visual aesthetic amenity and views to and from Sydney Harbour, the Pacific Ocean and the foreshore. As the site is contained in this area the proposal must ensure that future development consent may be granted considering impacts to the visual amenity of the foreshore, any loss of views from a public place to the foreshore, and measures to protect and improve scenic qualities of the coastline. Clause 4.3 - Height of Buildings: The site is not subject to existing building height limitations. Land in the vicinity of the site is subject to a maximum of 8.5m building height Clause 4.4 – Floor space ratio: The site is not subject to existing FSR limitations. Land in the vicinity of the site is subject to a maximum 0.4:1 FSR The provision of appropriate development standards including height and FSR are relevant considerations for the Planning Proposal. Clause 4.6 – Exceptions to Development Standards: See Development Assessment Manager comments. Clause 5.10 – Heritage Conservation: Preparation of Heritage Report noted
Manly Development Control Plan 2013	See above regards DCP requirements. General provisions and guidelines for residential development apply accordingly.

SPECIFIC ISSUES RAISED FOR DISCUSSION

Issue/s Raised	Councils Response

Rezoning of Land zoned E2 Environment Conservation under Manly LEP 2013 (Amendment 7) in 2016.	The applicant should refer to Council's Planning Proposal and associated documentation and consultations for the E2 Environment Conservation zoning for this site when preparing any Planning Proposal - located at http://leptracking.planning.nsw.gov.au/proposaldetails.php?rid=1838 It may be difficult to support a proposed rezoning to residential for part of the land if the circumstances and arguments outlined for this LEP amendment are unchanged.
Biodiversity Values of Land zoned E2 Environment Conservation	See Council's Bushland and Biodiversity Team Comments below.
Future redevelopment of land under R2 Low Density Residential Zone	See Council's DA Assessment Team Comments below.

OTHER RELEVANT COUNCIL GENERIC STRATEGIES

Relevant Provisions	Discussion
Northern Beaches Affordable Housing Policy	Northern Beaches Council adopted an Affordable Housing Policy at its meeting on 30 May 2017. The Policy adopts a 10% affordable rental housing target for areas of proposed up-zoning. Any planning proposal must address this policy requirement. Council advises that the proposed rezoning is considered a form of 'up-zoning'.

ENVIRONMENTAL SOCIAL AND ECONOMIC IMPACT

Impact Discussed	Discussion
Habitat or threatened species, populations or ecological communities, or their habitats	Preparation of Planning Proposal to include Biodiversity Assessment and Reporting. See also Council's Biodiversity Officer comments below.
Likely environmental social and economic effects	Council requests that consideration be given to loss of land zoned SP2 Infrastructure in the context of long established social infrastructure facilities and services on the site. Such consideration may be a higher level review, discussing social infrastructure

Impact Discussed	Discussion
	supply and demand in terms of local health service facilities.
Traffic and Parking	Consider future vehicle driveway locations on Gurney Crescent for access to future residential development.
Local amenity	Council raised concern in relation to the impacts of the creation of residential lots that may impact on local amenity including visual impact, loss of trees and bushland, streetscape character. (see DA Manager Comments)

COUNCIL CONSULTATIONS

REFERRAL COMMENTS FROM RELEVENT BUSINESS UNITS PREPARED	
Referral Body	**Comments**
Bushland and Biodiversity	This advice relates only to Lot 1 of DP 325720 currently zoned E2 (Environmental Conservation): Wildlife Corridor and Fauna Habitat: The lot represents a component of a broader vegetative corridor linking the Council-owned Gurney Crescent bushland reserve to the south with large areas of higher quality bushland to the north and north-east, including Crown Land adjoining Seaforth Oval, Manly Warringah War Memorial Park ('Manly Dam'), and Garigal National Park. The contribution of the lot to this broader vegetative corridor is identified in the Sydney Coastal Councils Group's (SCCG) 'Connected Corridors for Biodiversity' mapping, in which the subject lot is classified as 'Priority Habitat' and 'Supporting Habitat'. Furthermore, vegetation on the subject lot and within its immediate vicinity is broadly contiguous with the 'Middle Harbour Valley Fauna Area', an area identified as 'highest value fauna habitat' under the Rapid Fauna Habitat Assessment of the Sydney Metropolitan CMA Area (NSW DECC, 2008). The Middle Harbour Valley is one of only 13 sites within the Sydney Metropolitan Area assessed as representing the highest value fauna habitat. Key fauna/habitat values identified in the study for the Middle Harbour Valley include:

REFERRAL COMMENTS FROM RELEVENT BUSINESS UNITS PREPARED	
	• High fauna diversity; • Presence of heath and bushland; • Roost habitat for the threatened grey-headed flying-fox; • Habitat and records of the threatened southern brown bandicoot. <u>Vegetation Structure and Condition</u>: Vegetation on the western portion of the subject lot is mapped under the 'Native Vegetation of the Sydney Metropolitan Area' study as 'Plant Community Type' (PCT) 164 - Coastal Sandstone Foreshores Forest. This PCT is found on sheltered sandstone slopes along the foreshores of Sydney's major waterways and coastal escarpments. It is an open forest with a moist shrub layer and a ground cover of ferns, rushes and grasses. <u>Bushfire Risk</u>: The subject lot is identified as Bushfire Prone Land. Future development of the land will require bushfire Asset Protection Zones which should be contained within the proposed Lot and not extend into adjoining E2 zoned land. <u>General:</u> The site is also identified in the Connected Corridors for Biodiversity (SCCG, 2019) map as constituting 'Priority Habitat' and 'Supporting Habitat' for wildlife, and contains vegetation that is broadly contiguous with vegetation of the Middle Harbour Valley 'Highest Priority' Fauna Habitat Area (NSW DECC, 2008). It is reasonable to assume that vegetation within the subject lot contributes to the functioning and connectivity of the habitat corridor linking private and public bushland (e.g. Gurney Reserve) to very high-quality bushland at Manly Dam and Garigal National Park. It therefore follows that rezoning to R2 would impact upon the functioning and connectivity of this habitat corridor. Given the site's current zoning and identified contribution to habitat connectivity within the broader landscape, the proponent is to demonstrate why it is considered that the objectives of the E2 zoning should not apply to the lot, and why rezoning to R2 is considered justified. Concern is also raised regarding the impact of any Bushfire Asset Protection Zones (APZs) which may be required to provide bushfire protection to future residential development. Should future residential development constitute a Special Fire Protection Purpose (SFPP) development, the requisite APZs are likely to involve extensive vegetation modification on the remaining (western) portion of the existing E2 lot.

REFERRAL COMMENTS FROM RELEVENT BUSINESS UNITS PREPARED	
	Given that this western portion (as well as adjoining lots to the west of the subject lot) include some of the higher quality habitat on the Dalwood Children Services site, the establishment of APZs on these lots would likely result in a net loss of biodiversity values on the site. The proponent should therefore provide details of any anticipated APZs resulting from the planning proposal, as well as proposed measures for avoiding, mitigating or offsetting any anticipated biodiversity impacts arising from bushfire protection activities.
Development Assessment	Concern is raised relating to the Impacts of the proposal on vegetation based on the APZ requirements. The lot configurations of the proposed northern lots may be inconsistent with the pattern of nearby lots. Unusually shaped lots should not result in developments that will result in numerical non compliances with development standards and associated amenity impacts. Based on the planning principle Parrott v Kiama Council [2004] NSWLEC 77 revised - 16/03/2004, dwelling designs should be provided to ensure it can be demonstrated that the proposed/existing lots can be developed in accordance with relevant development standards. Any significant features on site including natural bush rock etc. would need to be identified to ensure existing/proposed lots can be suitably developed. The proposed development standards for an R2 zoning should have regard to the existing Manly DCP controls, specifically 5.6.2 Gurney Crescent and Clavering Road, Seaforth

POTENTAL FUTURE COMMUNITY CONSULTATION	
Referral Body	**Comments**
Via public exhibition. Media and Communications Team databases	pre Gateway and post Gateway

General Community Consultation and Referral Practices
Following formal lodgement of any Planning Proposal, Council will place it on exhibition for a period of 14-28 days and notify nearby properties and relevant community groups. This exhibition is non-statutory and in addition to the statutory

General Community Consultation and Referral Practices
exhibition that occurs if the proposal receives Gateway approval. Relevant state agencies may also be notified and invited to provide commentary. Council's preliminary non-statutory public exhibition is likely to comprise: • A public notice in the Manly Daily notifying of the public exhibition; • Letters to any effected land owners and occupiers in the vicinity • Electronic copies of the exhibition material on Council's website. Submissions received in response to the public exhibition period will be reported to Council. In accordance with the Minister's direction signed on the 23 February 2018 under Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), planning proposals must be referred to the Northern Beaches Local Planning Panel for advice before being forward to the Minister. Planning Proposals must go to the Panel unless the council's general manager determines that the proposal relates to: (a) the correction of an obvious error in a local environmental plan, (b) matters that are consequential, transitional, machinery or other minor nature, or (c) matters that council's general manager considers will not have any significant adverse impact on the environment or adjoining land. This direction took effect on 1 June 2018 and applies to planning proposals prepared, but not submitted to the Minister, before 1 June 2018. It is therefore highly likely that any Planning Proposal will be referred to the Northern Beaches Planning Panel for advice. This advice will accompany the officer's report to Council on the Planning Proposal. If the application is supported by Council, the Planning Proposal will be forwarded to the Department of Planning and Environment. The Gateway Determination will confirm the public consultation that must be undertake and requirements for a statutory exhibition at that stage.

PRIVACY AND PERSONAL INFORMATION

You are advised that Council is obliged to make Planning Proposal applications and supporting documents available for public inspection. We do this via the Customer Service Centre and by placing copies of the documents on Council's website (under the Your Say Northern Beaches page.)

LODGEMENT REQUIREMENTS

Documentation to accompany the Planning Proposal
Under Council's Fees and Charges it is likely a Planning Proposal would be classed as 'involving one lot or no environmental study required' and will incur a fee as detailed Fees required the class of Planning Proposal to be lodged are in accordance with the current Northern Beaches Council Fees and Charges. In this regard the Planning Proposal Fee is $30,000 up until 30 June 2019. Consult Council's website to confirm the fees applicable if lodged after 30 June 2019.https://www.northernbeaches.nsw.gov.au/council/rates-and-council-fees/fees-and-charges Additionally, in accordance with Clause 11 of the Environmental Planning and Assessment Regulations, additional charges may apply. In relation to prescribed fees for DCP Amendments ($30,000), Council confirms that any DCP amendments submitted with the Planning Proposal would not be subject to a separate fee. **Documentation to accompany the Planning Proposal are as follows:** In summary, agreement was reached in the meeting that the Planning Proposal will address matters as particularly discusses as follows: • The reduction in overall site area for health services facilities being a loss of important social / community assets • The impact to native vegetation to accommodate residential development and APZs needs to be thoroughly considered and assessed – including the impact on wildlife corridors. • Architectural drawings will need to demonstrate the capability of the lots to support dwellings in line with Council's standards and development controls. Building envelopes will need to respond to site conditions and demonstrate general compliance. • The history behind the rezoning of the site is to be investigated and discussed as part of the reporting. With particular regard to the future redevelopment of the subject land, consideration is to be given to appropriate development standards and development control (DCP provisions) to accompany and proposed rezoning as detailed in the notes. With particular regard to comments raised by Council's Bushland and Biodiversity Team, the following comments are made: • A detailed statement is required addressing why it is considered that the objectives of E2 should not apply to the lot, and why the proposed rezoning is considered appropriate; • This statement should be supported by an Ecological Assessment Report prepared by a suitably qualified ecologist in accordance with accepted survey methods. The report is to take into account any anticipated APZs and be submitted with the proposal documentation;

Documentation to accompany the Planning Proposal

• Details of proposed measures to avoid, mitigate and/or offset any anticipated biodiversity impacts arising from the proposal (including any anticipated bushfire protection activities) must be provided;
• Details as to how the residual portion of the E2 zoned land on the Dalwood property would be managed and restored, consistent with the objectives of the E2 zone.
 	
An indicative list of documents required to support a Planning Proposal is as follows:
• five printed copies of the Planning Proposal, including all supporting information and reports, are to be provided to Council for public exhibition. One electronic copy on a USB is also required.
• Completed Planning Proposal Application form in accordance with NSW Department of Planning and Environment's *Guide to Preparing Local Environmental Plans* and *Guide to Preparing Planning Proposals.* http://www.planning.nsw.gov.au/~/media/Files/DPE/Guidelines/guide-to-preparing-planning-proposals-2016-08.ashx
• Concept Plans to include as applicable:
  • Assessment against DCP
  • Shadow diagrams;
  • View impact analysis;
  • Photo montages and visual site context analysis;
  • Landscape and Bushland Management Plan;
  • Waste Management Plan;
  • Stormwater Management Plan;
  • Colour and Materials Schedule;
• Traffic and Parking Report;
• Statement of Heritage Impact
Failure to provide the required supporting documentation may result in a staff recommendation for refusal based on insufficient information. Please note that Council does not necessarily accept the provision of additional information after the Planning Proposal has been formally lodged with Council.

Concluding Comments
These Minutes are in response to a pre-lodgement meeting to discuss the lodgement of a planning proposal. In conclusion it is recommended that a Planning Proposal involving land zoned LEP E2 Environment Conservation should be reconsidered for the following reasons: • Insufficient evidence that future redevelopment of the site as envisaged by the Planning Proposal would satisfy objectives set for this land under Manly LEP (Amendment 7) in 2016. • Council's Planning Proposal for Manly LEP (Amendment 7) in 2016 and earlier preparation and consultations under the draft Manly LEP 13 as exhibited in 2011 • Council's Biodiversity Comments

Concluding Comments
In light of the lack of details about the Planning Proposal and the concerns raised by Council staff, it is strongly recommended that a Planning Proposal is not submitted until a further pre-lodgement meeting is held to consider the reports and assessments currently being prepared and draft DCP amendments.

General Comments/Limitations of these notes
These notes are an account of the specific issues discussed and conclusions reached at the meeting. They are not a complete set of planning and related comments for the proposed development. A fuller assessment can only be made following the lodgement, assessment and preliminary exhibition (pre Gateway Determination) of the Planning Proposal. In addition to the comments made within these notes, it is a requirement of the applicant to address ALL relevant pieces of legislation including (but not limited to) any SEPP, relevant Clauses of the MLEP 2013 and MDCP 2013 within the supporting documentation of the Planning Proposal. You are advised to carefully review these notes. If there is an area of concern or non-compliance that cannot be supported, you are strongly advised to review and reconsider the appropriateness of any Planning proposal for your site.

Appendix B. Geotechnical Assessment

Douglas Partners

Geotechnics / Environment / Groundwater

Integrated Practical Solutions

Report on Geotechnical Assessment

Dalwood House Site
21 Dalwood Avenue, Seaforth

Prepared for
NSW Ministry of Health

Project 73029.01
May 2019

Douglas Partners
Geotechnics / Environment / Groundwater

Docu□ent History

Docu□ent details

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	Signature	Date
Author		20 May 2019
Re□iewer		20 May 2019

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Douglas Partners Pty Ltd
ABN □5 053 980 11□
www.douglaspartners.co□.au
9□Her□itage Road
West Ryde NSW 2114
PO Bo□4□2
West Ryde NSW 1□85
Phone □02□9809 0□□□
Fa□ □02□9809 4095

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Appendix A: About This Report
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This report details the results of a desktop geotechnical study for a proposed strategic site utilisation of the Dalwood Site at Dalwood A□enue□Seaforth. The assess□ ent is to assist in deter□ ining long ter□ health needs□how they are to □e acco□ □ odated and potentially e□panded and to identify opportunities to dispose land surplus to health and co□ □ unity needs. The assess□ ent was co□ □ issioned □y APP on □ehalf of NSW Ministry of Health □Health□and carried out in accordance with Douglas Partners Pty Ltd □DP□proposal Ref: SYD1902□1.P.001.Re□0 dated 12 March 2019.

A pre□ious report was originally prepared in 2012 for the Master Plan □eing considered at that ti□ e. Recently□the Master Plan has □een updated to consider a re□oning of land fro□ SP2 – Infrastructure and E2 En□iron□ ental Conser□ation □one to R2 Low Density Residential De□elop□ ent □one for future residential purposes and E4 En□iron□ ental Li□ing □the Proposal□

This updated assess□ ent has □een carried out to pro□ide preli□ inary geotechnical infor□ ation for the Proposal.

Douglas Partners has carried out a nu□ □er of geotechnical in□estigations in the general area and the infor□ ation fro□ these in□estigations has □een used to prepare this assess□ ent. Intrusi□e geotechnical in□estigation for the proposed rede□elop□ ent of the site has not □een carried out for the present report □ut is considered necessary to deter□ ine actual su□surface conditions and properties for future detailed design purposes.

2□ □□□□ D□□□r□□□□□

The Dalwood Ho□ e site is located on the western side of Dalwood A□enue□Seaforth □etween Callico□ a Road and Gurney Crescent □ ainly within a residential area as shown in Figure 1. The site is an irregular shaped area of 3.□ ha□□ easuring appro□i□ ately 250 □ long and a□out 150 □ wide located on the end of an east west trending ridge. The ridge enters the site fro□ the east at a□out RL 99 □ and e□tends across the centre of the site. Surface le□els fall fro□ the ridge to the north□west and south with the lowest point □eing the south□western corner at RL □8 □.

A portion of the site contains a range of historic and newer □uildings and are used for health and co□ □ unity purposes. The re□ ainder of the site has □een landscaped with so□ e open areas or is hea□ily □egetated.

A 2012 sur□ey plan and the Proposal ha□e □een used in preparing the drawings for this report and are included in Appendi□ B as Drawings 1 and □. The 2012 sur□ey plan in Drawing 1 does not include the changes to the site to date which include carpark to the northeast of Building D□the new Building G□the reno□ated Building C and additional structures at Building F. Figure 1 □elow is the latest satellite i□ age

of the site.

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The area to the south east corner of the site is the area su□ect to re□oning as shown on Figure 1 a□o□e.

□□ □□□□□□□□□□□□□□□□□□

The site is □apped on the Sydney 1:100□000 Series Geological Sheet which indicates that it is underlain □y Hawkes□ury Sandstone which typically co□prises □ediu□ to coarse grained □uart□sandstone with □ery □inor shale and la□inite □ands. An e□cerpt fro□ the Geological Series sheet is shown on Drawing 2 in Appendi□B.

The Soil Conser□ation Ser□ice of NSW Soil Landscape Series Sheet for Sydney indicates that the site is underlain □y La□ □ert soil landscape group. Drawing 3 in Appendi□B reproduces the rele□ant section of the Soil Landscape Series Sheet. The La□ □ert landscape is descri□ed as undulating to rolling low hills on Hawkes□ury Sandstone with slopes of less than 20□ and local relief of 20 – 120 □. The soils on the crests of this soil landscape unit are descri□ed as co□prising leached sands□grey earths and gleyed pod□olic soils. Li□itations to de□elop□ent include high soil erosion□rock outcrops□seasonally perched water ta□les□shallow high per□ea□le soils and □ery low soil fertility.

□□ □□□r□□□□□□

A walko□er of the site was carried out on 22 No□e□ □er 2012 and recently on 21 March 2019. So□e of the features noted are listed □elow□with photos in Appendi□C:

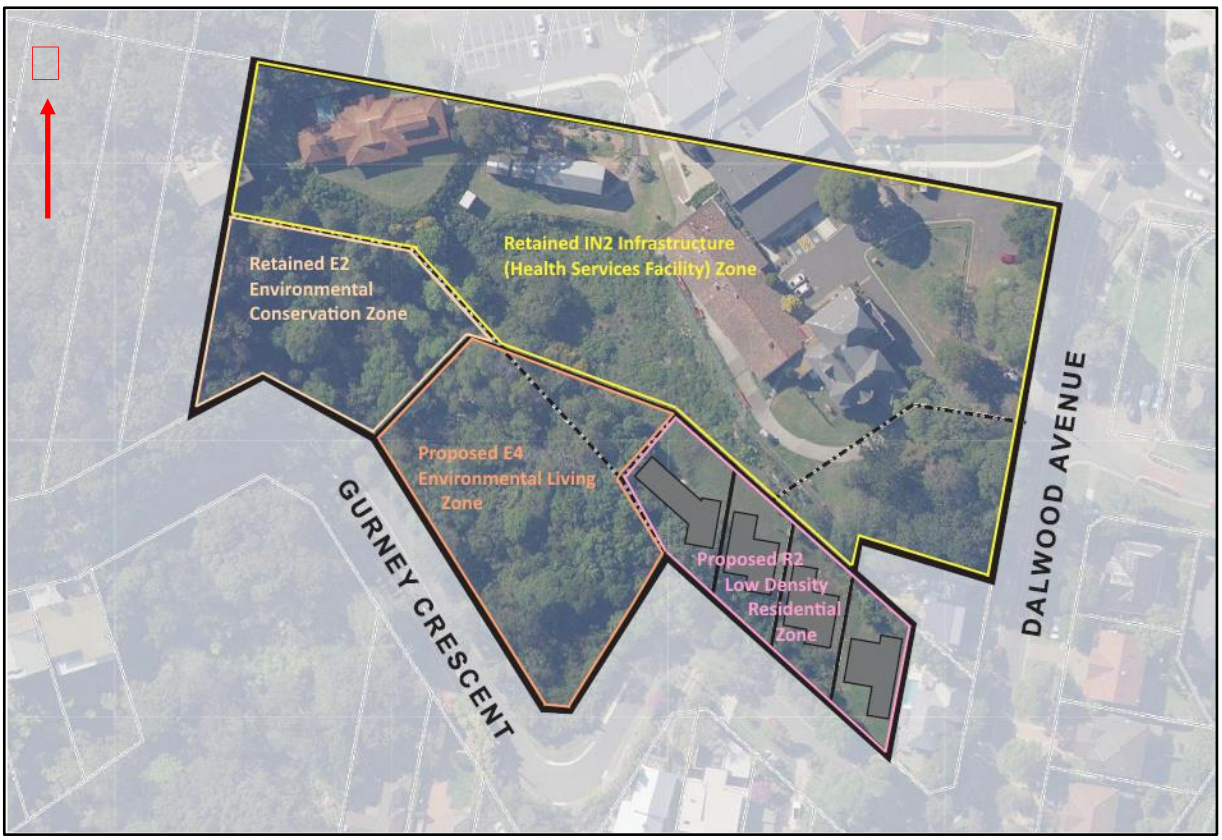
- There are se□eral □uildings constructed on the flatter areas of the site which are □ainly located on the top of the ridge toward the eastern e□tre□ity of the site. I□ □ediate areas around the □uildings ha□e generally □een i□pro□ed with landscaping and pa□e□ents which ha□e co□ered the natural features of the area. Refer to Figure 1 on page 2.
- There are se□eral sandstone outcrops on the site including:
  - a □ □ high cliff at the □ack of the Dalwood Ho□e □uilding which e□tends to Dalwood A□enue at the eastern end of the site □see Photo 1 in Appendi□C□□
  - at the □ack of the Fa□ily Care Centre in a s□all cutting □Photo 2□□
  - a flat □egetated area at the western end of the site □Photo 3□□
  - a cliff at the western end of the site □Photo 4□□and
  - possi□ly □ore cliffs in the hea□ily □egetated section of the south□western corner of the site.
- Filling has □een used to pro□ide or e□pand relati□ely le□el areas. Such locations include the area □ehind Dalwood Ho□e on top of the cliff where there is a cri□ wall □ehind cri□ wall in Photo 1□the open lawn area towards the northern □oundary □near Photo 5□□and the area south of the Fa□ily Care Centre □Photo □□.
- Associated with so□e filled areas are relati□ely steep slopes on the edge of the filling. These include the area south of the Fa□ily Care Centre and the filling near the northern □oundary.
- In the steep slope in filling near the Fa□ily Care Centre□a landslide had occurred lea□ing a se□erely distur□ed scar □Photo □□.
- The western and □uch of the southern portions of the site ha□e □een left unde□eloped and are generally co□ered in hea□y □egetation on flat to □oderate slopes □Photo 8□.
- A sandstone □lock □uilding □Building F on Drawing 1□has so□e cracking which is considered to □e due to differential settle□ent of the footings which are pro□a□ly not on rock.
- The 21 March 2019 site □isit was carried out to o□ser□e the areas to the north of Buildings D□F and G and the "surplus lands" located to the south of the site. The site features descri□ed a□o□e are generally unchanged e□cept for a new carpark located to the northeast of Building D and a new Building G located to the east of the new carpark. □see Photo 9 in Appendi□C□ Hea□y □egetation was o□ser□ed in the surplus lands with rock outcrops □isi□le fro□ the road □see Photo 10 in Appendi□C□.

So□e of the features □entioned a□o□e are □arked on Drawing 4 in Appendi□B.

□□ □r□□□□□d D□□□□□□□ □□□

The planning proposal is for an a□end□ent to Manly Local En□iron□ental Plan 2013 on □ehalf of NSW Ministry of Health. It seeks to re□one Lots 4A□5A□□A and □A in DP 1□15□□Part of Lot 1 in DP 325□20 and Part of Lot 1 in DP 325□84 fro□ part SP2 Infrastructure □Health Ser□ices Facilities□and part E2 En□iron□ental Conser□ation to part R2 Low Density Residential and part E4 En□iron□ental Li□ing. The re□oning will acco□ □odate the future esta□lish□ent of four dwellings on each of the lots.

The planning proposal is supported □y a Concept Layout Plan □CLP□which de□onstrates a □oundary ad□ust□ent □etween Lot □A DP 1□15□□Lot 1 DP 325□20 and Lot 1 DP 325□84 to e□pand Lot □A. The CLP shows the future indicati□e locations for each of the four dwellings□as shown on Figure 2 □elow.



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This assess□ent indicates that there are no serious geotechnical constraints on the site de□elop□ent. Relati□ely straight forward techni□ues can □e adopted □ut each indi□idual structure will re□uire a site□ specific in□estigation so that all the constraints are recognised and dealt with in the final design.

The purpose of this present assess□ent is to pro□ide infor□ation for the de□elop□ent of the proposed CLP. The following co□□ents are □ased on a site inspection and desktop re□iew of a□aila□le infor□ation. Therefore, they are preli□inary in nature and intended as a guide to geotechnical constraints associated with future de□elop□ent at the site.

For detailed design, co□prehensi□e geotechnical in□estigations should □e undertaken to pro□ide infor□ation on the su□surface profile in order to □ore accurately deter□ine design issues and para□eters for specific locations and structures.

6□2 Geological Mod el

The Hawkes□ury Sandstone profile generally co□prises residual sandy clay or clayey sand o□er shallow sandstone generally within a few □etres of the surface. Sandstone is e□pected to □e found o□er the entire site and is e□posed at the surface in so□e locations.

Hawkes□ury sandstone tends to weather and erode in □locks lea□ing □enches and near □ertical cliffs. O□er ti□e, slope de□ris including soil and rock □oulders□often known as talus, collects on the □enches and for□s slopes □etween the □ertical cliffs. The western □uarter of the site, which is hea□ily □egetated, is considered to □e an area of s□all cliffs and talus.

There are so□e areas of filling on the site generally associated with pre□ious de□elop□ent and so□e of the□ are shown on Drawing 4. There are also three cross sections of the site showing the surface le□els which are reproduced in Drawing 6.

6.3 Slope Stability

The areas ear□arked for residential de□elop□ent in the CLP is generally located on the flatter areas of the site. Slope sta□ility should not □e a □a□or issue and should □e ade□uately addressed □y □atters and engineering designed retaining walls. Indi□idual slope sta□ility assess□ents can □e carried out at specific locations on re□uest and any slope sta□ility issues would □e addressed during the geotechnical in□estigation for site specific de□elop□ents.

6.4 □□□ Prepa ration

Due to the relati□ely flat areas proposed to □e rede□eloped for residential dwellings, it is anticipated that only □inor cutting and filling will □e used to for□ le□el working □enches for de□elop□ent of the site. In addition, there □ay □e so□e e□ca□ation for □ase□ents. Interpolation of e□isting infor□ation suggests that sandy clay□clayey sand □ay □e encountered within the first 1 – 2 m of e□ca□ation□howe□er deeper e□ca□ation □ay encounter sandstone. This □ust □e confir□ed □y drilling and testing during the geotechnical in□estigation stage for detailed design purposes. The clays should □e readily re□o□ed using e□ca□ators and the rock will pro□a□ly need large rippers and possi□ly rock □reakers to re□o□e.

Su□□ect to re□iew on site, it is e□pected that e□ca□ated □aterial fro□ site could generally □e reused as filling. Filling should □e placed in layers and co□pacted in accordance with AS 3798-2007 “Guidelines on earthworks for commercial and residential developments”. Filling should only be placed on areas which ha□e □een suita□ly prepared □y re□o□ing any □egetation, organic topsoils and other unsuita□le

□aterial and pro□iding relati□ely le□el □enched areas.

Batters □ay □e re□uired on the site and these should generally □e no steeper than 2H:1□ in soil and □ery low to low strength rock. Steeper □atters □ay □e feasi□le in rock□howe□er all □atters should □e reassessed when the layout is finalised. Where there is inade□uate space for □atters□retaining walls will □e re□uired and these should □e designed □y an engineer taking into account the slope □ehind the wall and any surcharge loading.

The groundwater ta□le is not e□pected to □e encountered within the area of proposed rede□elop□ ent□ howe□er so□ e water seepage out of slopes should □e e□pected especially after periods of rain. Ade□uate surface and su□soil drainage will ha□e to □e pro□ided to pre□ent accu□ ulation of water on the surface and water logging.

□□□ R□□□□□□□□□ □ □□□□

If retaining walls are to □e used on site□each case should □e indi□idually assessed. For relati□ely low walls□say up to 4 □ high□cantile□er walls □ay □e possi□le where so□ e □o□e□ ent of the wall and □aterial □ehind the wall can □e tolerated. Earth pressures acting on the cantile□ered free□draining retaining walls can □e calculated using a triangular pressure distri□ution □ased on an earth pressure coefficient of 0.3 for a le□el surface □ehind the wall and using an a□erage □ulk unit weight of 20 kN□□ ^{3} for the filling and soil.

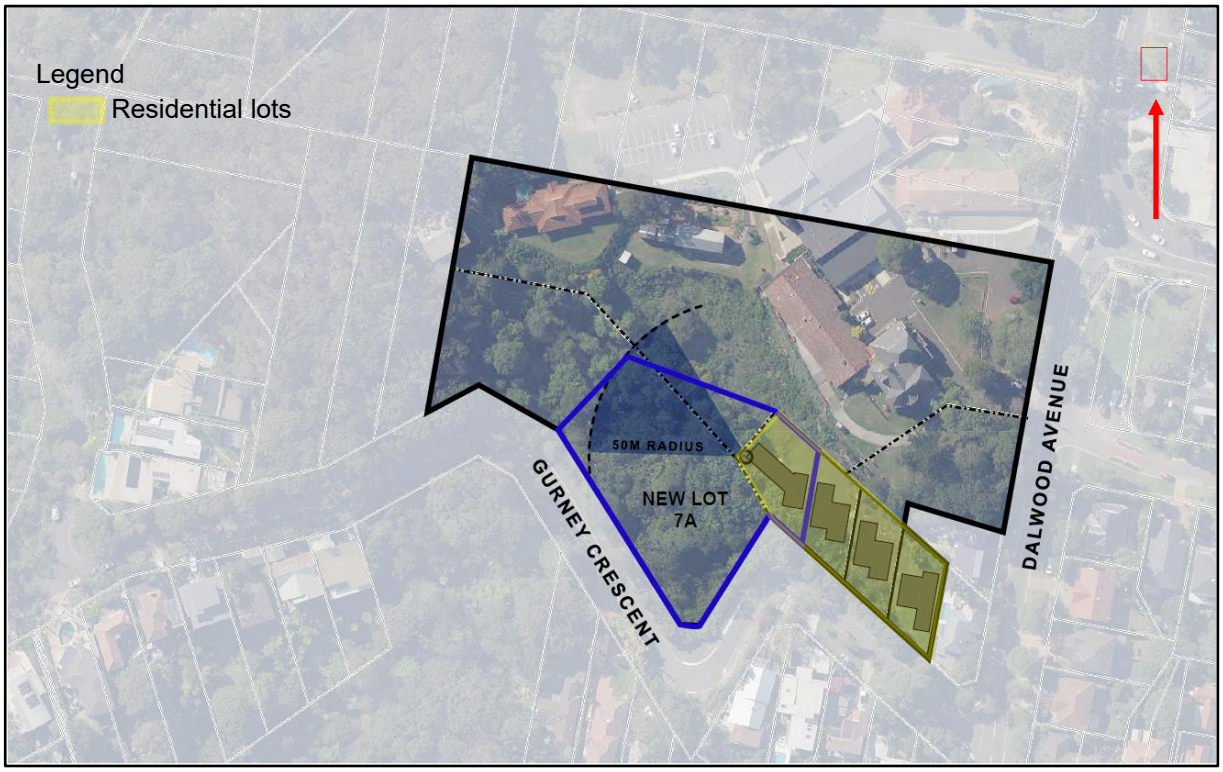
Different type retaining walls types such as cri□ walls or reinforced soil walls □ay □e re□uired for higher walls and these can □e indi□idually assessed for each slope as re□uired.

□□□ □□□□d□□□□□

It is generally prefera□le to found footings on the sa□ e □earing stratu□ to reduce differential settle□ ents. Due to the anticipated shallow depth to rock o□er □ost of the areas proposed to □e de□eloped□it is suggested that all □a□or structures are founded on rock. Footing types could co□ prise shallow pad□ strip or raft footings. Where the depth to rock increases □ored piers or a co□ □ination of shallow and deeper footings could □e adopted. It is e□pected that the □a□ority of the rock on site will acco□ □ odate allowa□le □earing pressures well in e□cess of 1500 kPa.

□□□ R□□d□□□□□□□□□□

The CLP identifies lots within the site which are proposed to □e de□eloped for residential purposes. There are four lots on the southern side accessed fro□ Gurney Crescent which are proposed to acco□ □ odate future dwellings□see Figure 3 □elow.



Figu re 3: Res dential Lots

These lots on the southern side are located on a rock ledge at the ase of a sandstone cliff. Rock is e pected to e close to the surface which is considered good founding conditions, ut hard e ca ation conditions for installing underground ser ices and le elling the ground surface. In terms of "AS 28 0 Residential Slabs and Footings", the individual lots would pro a ly ha e a site classification of Class A due to the presence of rock close to the surface.

6.8 Fu rthe r Inves igation

Intrusi e geotechnical in estigation for the proposed de elop ent site has not een carried out for this report ut is considered necessary to deter ine actual su surface conditions and soil properties when de elop ent details are further ad anced and prior to detailed design i.e. as part of a DA for future dwellings)

7. Conclusions

Based on DP site o ser ations, preli inary geotechnical odel, and e perience on si ilar pro ects, the proposed residential lots at the south east corner of the site is considered feasi le fro a geotechnical perspecti e pro ided that appropriate additional site in estigation is carried out to pro ide the infor ation necessary for detailed design purposes.

[illegible]

DP has prepared this report of the Dalwood Site in accordance with DP's proposal dated 12 March 2019. The report is provided for the exclusive use of NSW Ministry of Health for this project only and for the purposes described in the report. It should not be used for other projects or by a third party. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the surface conditions only at the specific observation locations and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of anthropogenic influences. Such changes may occur after DP's field work has been completed.

DP's advice is based upon the conditions encountered during this assessment. The accuracy of the advice provided by DP in this report may be limited by undetected variations in ground conditions between sampling locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached notes and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion given in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

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About This Report

About this Report

Douglas Partners

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These notes ha□e □een pro□ided to a□plify DP□s report in regard to classification □ethods□ field procedures and the co□□ents section. Not all are necessarily rele□ant to all reports.

DP□s reports are □ased on infor□ation gained fro□ li□ited su□surface e□ca□ations and sa□pling□ supple□ented □y knowledge of local geology and e□perience. For this reason□ they □ust □e regarded as interpreti□e rather than factual docu□ents□li□ited to so□e e□tent □y the scope of infor□ation on which they rely.

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This report is the property of Douglas Partners Pty Ltd. The report □ay only □e used for the purpose for which it was co□□issioned and in accordance with the Conditions of Engage□ent for the co□□ission supplied at the ti□e of proposal. □nauthorised use of this report in any for□ whatsoe□er is prohi□ited.

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The □orehole and test pit logs presented in this report are an engineering and□or geological interpretation of the su□surface conditions□ and their relia□ility will depend to so□e e□tent on fre□uency of sa□pling and the □ethod of drilling or e□ca□ation. Ideally□ continuous undistur□ed sa□pling or core drilling will pro□ide the □ost relia□le assess□ent□ □ut this is not always practica□le or possi□le to □ustify on econo□ic grounds. In any case the □oreholes and test pits represent only a □ery s□all sa□ple of the total su□surface profile.

Interpretation of the infor□ation and its application to design and construction should therefore take into account the spacing of □oreholes or pits□the fre□uency of sa□pling□and the possi□ility of other than □straight line□ □ariations □etween the test locations.

□r□□□d□ □□□r

Where groundwater le□els are □easured in □oreholes there are se□eral potential pro□le□s□ na□ely:

- In low per□ea□ility soils groundwater □ay enter the hole □ery slowly or perhaps not at all during the ti□e the hole is left open□
- A localised□perched water ta□le □ay lead to an erroneous indication of the true water ta□le□
- Water ta□le le□els will □ary fro□ ti□e to ti□e with seasons or recent weather changes. They □ay not □e the sa□e at the ti□e of construction as are indicated in the report□ and
- The use of water or □ud as a drilling fluid will □ask any groundwater inflow. Water has to □e □lown out of the hole and drilling □ud □ust first □e washed out of the hole if water □easure□ents are to □e □ade.

More relia□le □easure□ents can □e □ade □y installing standpipes which are read at inter□als o□er se□eral days□ or perhaps weeks for low per□ea□ility soils. Pie□o□eters□ sealed in a particular stratu□□ □ay □e ad□isa□le in low per□ea□ility soils or where there □ay □e interference fro□ a perched water ta□le.

R□□□r□□

The report has □een prepared □y □ualified personnel□is □ased on the infor□ation o□tained fro□ field and la□oratory testing□and has □een undertaken to current engineering standards of interpretation and analysis. Where the report has □een prepared for a specific design proposal□the infor□ation and interpretation □ay not □e rele□ant if the design proposal is changed. If this happens□ DP will □e pleased to re□iew the report and the sufficiency of the in□estigation work.

E□ery care is taken with the report as it relates to interpretation of su□surface conditions□discussion of geotechnical and en□iron□ental aspects□and reco□□endations or suggestions for design and construction. Howe□er□ DP cannot always anticipate or assu□e responsi□ility for:

- □ne□pected □ariations in ground conditions. The potential for this will depend partly on □orehole or pit spacing and sa□pling fre□uency□
- Changes in policy or interpretations of policy □y statutory authorities□or
- The actions of contractors responding to co□□ercial pressures.

If these occur□DP will □e pleased to assist with in□estigations or ad□ice to resol□e the □atter.

About this Report

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In the e□ent that conditions encountered on site during construction appear to □ary fro□ those which were e□pected fro□ the infor□ation contained in the report□ DP re□uests that it □e i□□ediately notified. Most pro□le□s are □uch □ore readily resol□ed when conditions are e□posed rather than at so□e later stage□well after the e□ent.

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Where infor□ation o□tained fro□ this report is pro□ided for tendering purposes□ it is reco□□ended that all infor□ation□ including the written report and discussion□□e □ade a□aila□le. In circu□stances where the discussion or co□□ents section is not rele□ant to the contractual situation□ it □ay □e appropriate to prepare a specially edited docu□ent. DP would □e pleased to assist in this regard and□or to □ake additional report copies a□aila□le for contract purposes at a no□inal charge.

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The co□pany will always □e pleased to pro□ide engineering inspection ser□ices for geotechnical and en□iron□ental aspects of work to which this report is related. This could range fro□ a site □isit to confir□ that conditions e□posed are as e□pected□ to full ti□e engineering presence on site.

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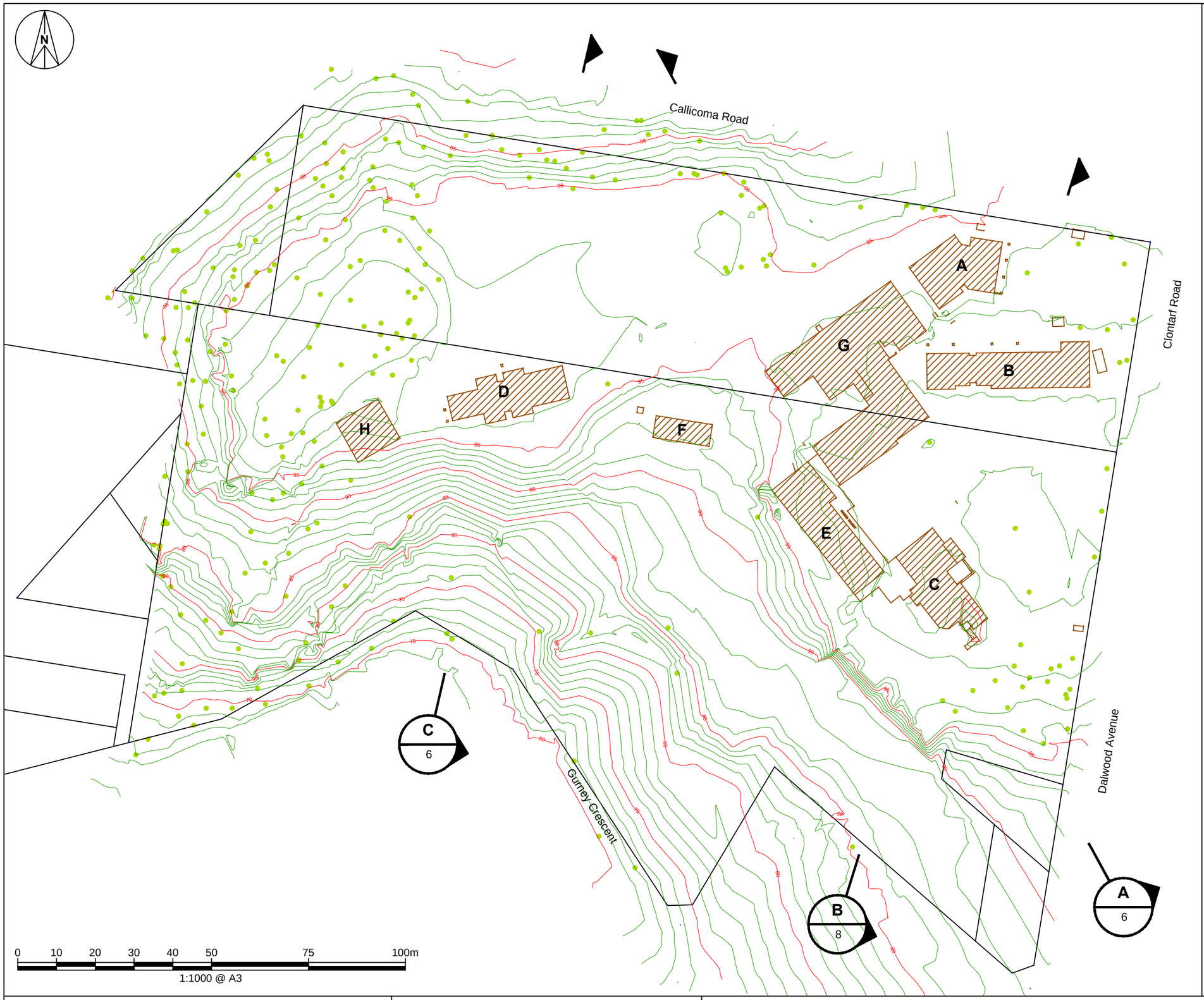
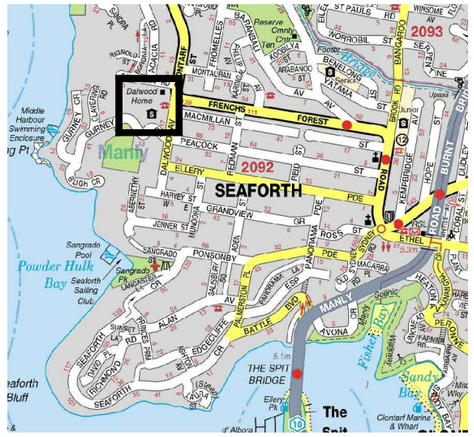
Drawings





Location plan

Legend

- Building
- 95 Existing contour (5m)
- Existing contour (1m)
- Vegetation
- Cadastral
- A / 7 Section location

Buildlings

A. Child Care Centre
B. Spilstead Centre
C. Dalwood Home
D. Family Care Centre
E. Brick Building
F. Store Building
G. Brick Building
H. Shed

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: NSW Ministry of Health		TITLE: **2012 Site Survey**	PROJECT No: 73029.01
OFFICE: Sydney	DRAWN BY: JCP/DS	**Dalwood Site**	DRAWING No: 1
SCALE: As shown	DATE: May 2019	**Dalwood Avenue, Seaforth**	REVISION: 0

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Legend

- Man-made fill
- Quaternary sediments
- Hawkesbury Sandstone
- water

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: NSW Ministry of Health		TITLE: **Geology Map**	PROJECT No: 73029.01
OFFICE: Sydney	DRAWN BY: JCP/DS	**Dalwood Site**	DRAWING No: 2
SCALE: Not to scale	DATE: May 2019	**Dalwood Avenue, Seaforth**	REVISION: 0

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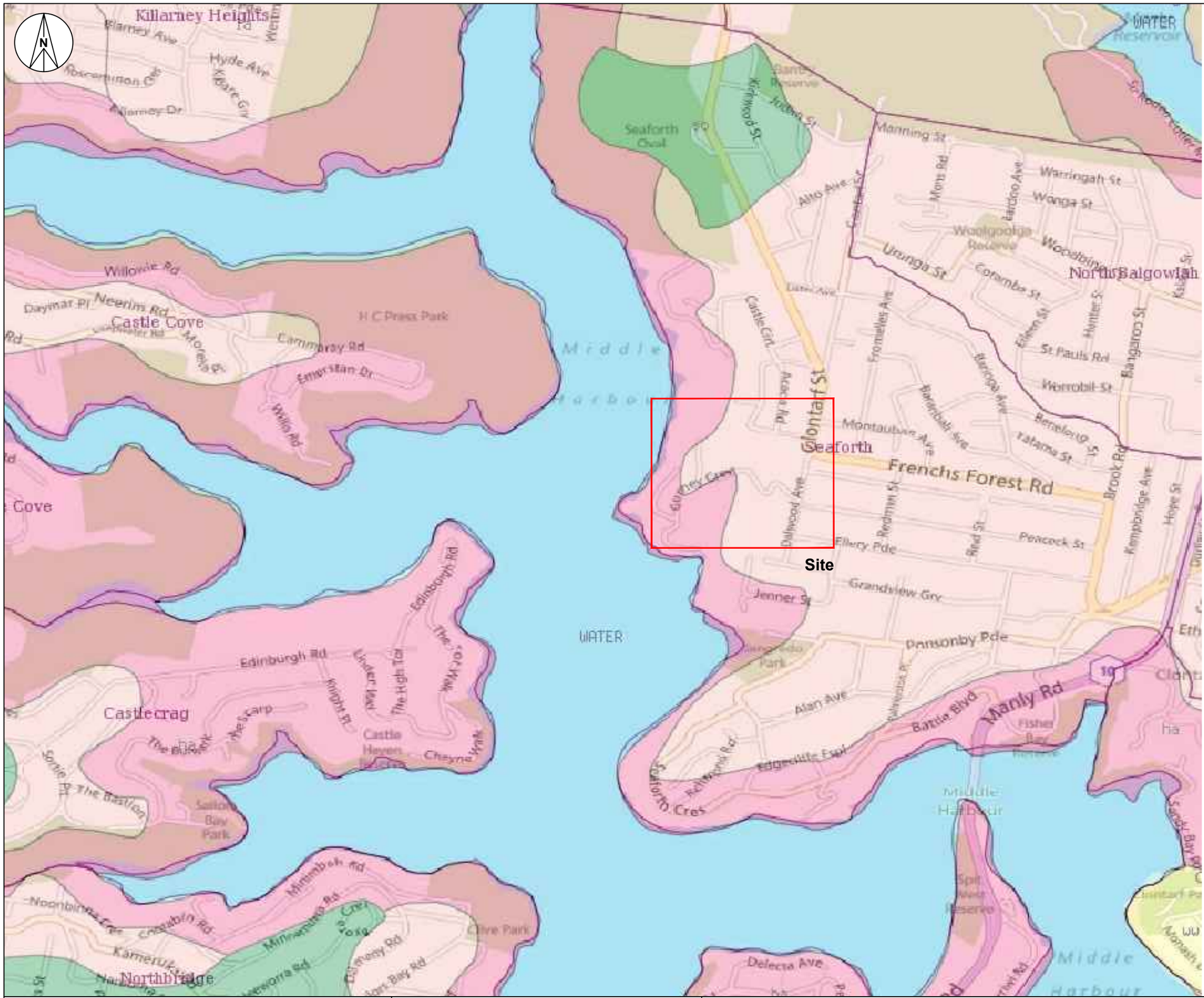

Legend

- Lambert Soil Group
- Somersby Soil Group
- Hawkesbury Soil Group
- Water

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: NSW Ministry of Health		TITLE: **Soil Landscape Map**	PROJECT No: 73029.01
OFFICE: Sydney	DRAWN BY: JCP/DS	**Dalwood Site**	DRAWING No: 3
SCALE: Not to scale	DATE: May 2019	**Dalwood Avenue, Seaforth**	REVISION: 0

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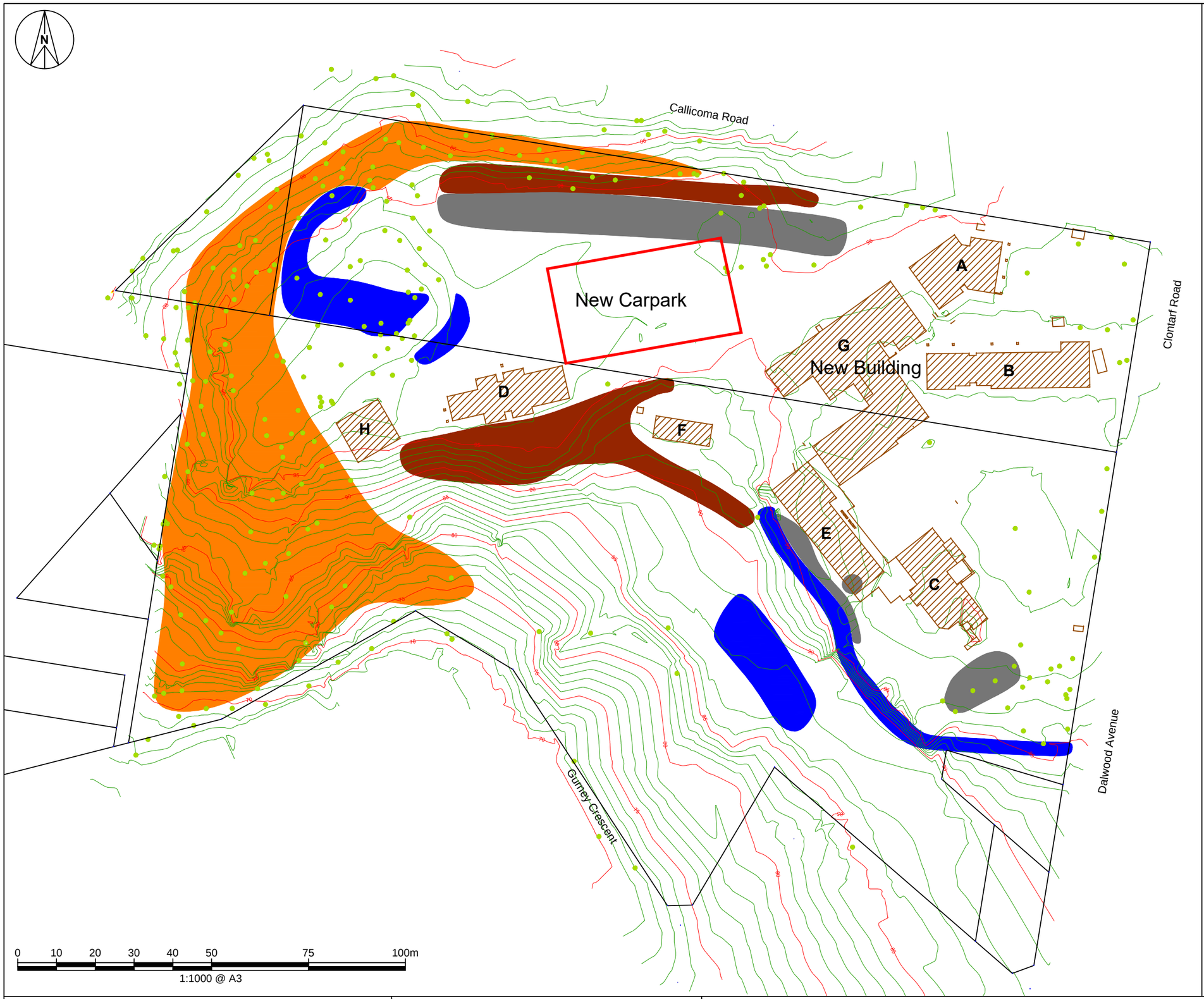

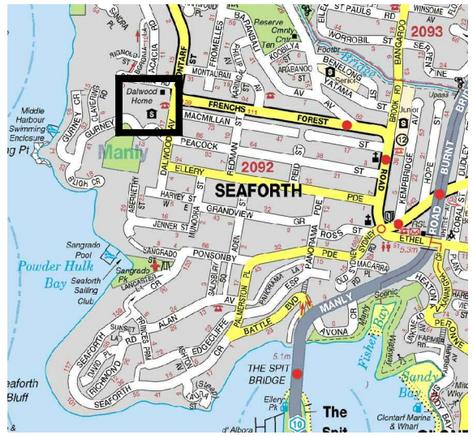

Location plan

Legend

- Building
- 95 Existing contour (5m)
- Existing contour (1m)
- Cadastral
- Outcropping rock
- Filling
- Filling and steep slopes
- Vegetated talus slopes

Buildlings

A. Child Care Centre
B. Spilstead Centre
C. Dalwood Home
D. Family Care Centre
E. Brick Building
F. Store Building
G. Brick Building
H. Shed

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: NSW Ministry of Health		TITLE: **Site Observations**	PROJECT No: 73029.01
OFFICE: Sydney	DRAWN BY: JCP/DS	**Dalwood Site**	DRAWING No: 4
SCALE: As shown	DATE: May 2019	**Dalwood Avenue, Seaforth**	REVISION: 0

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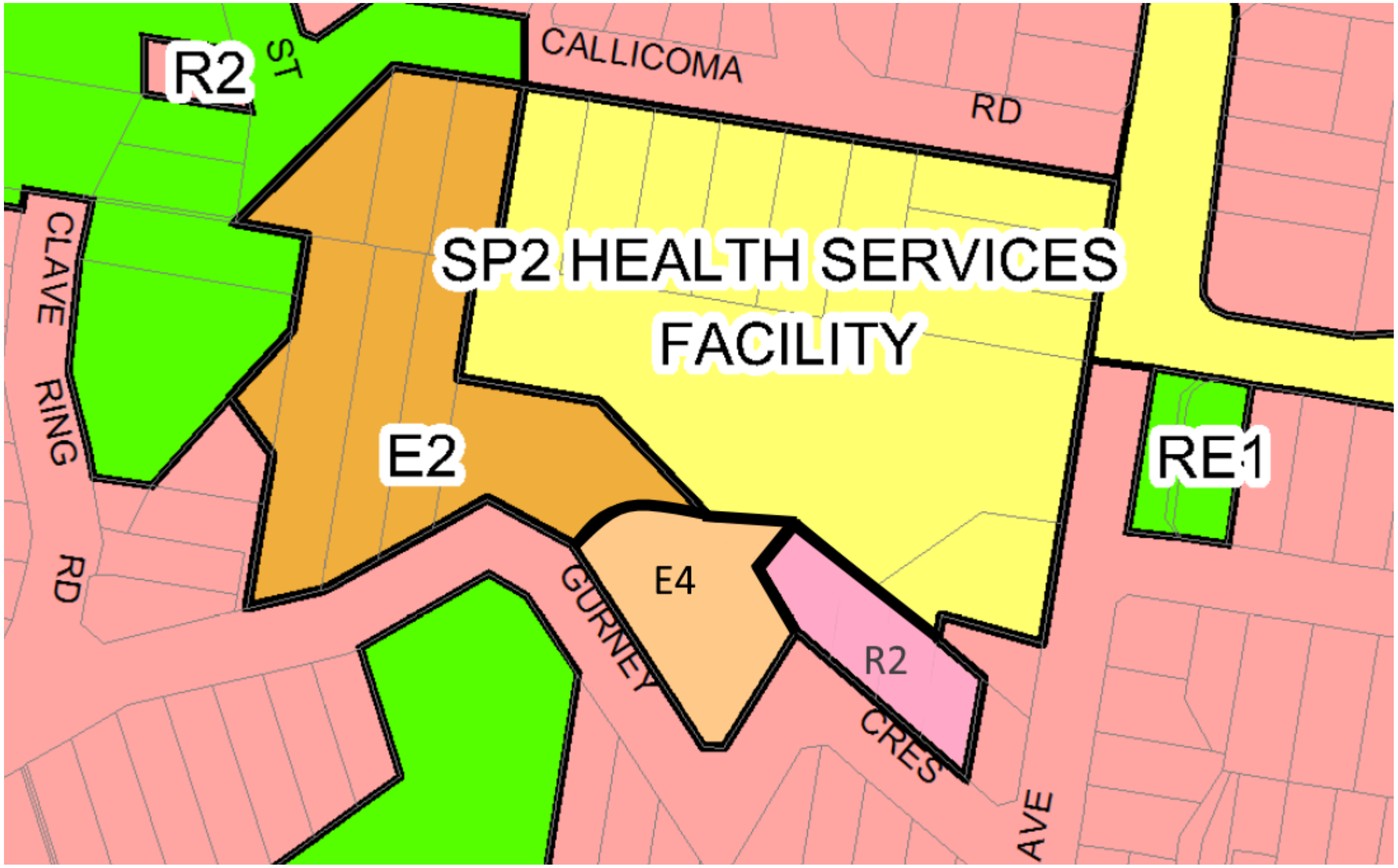

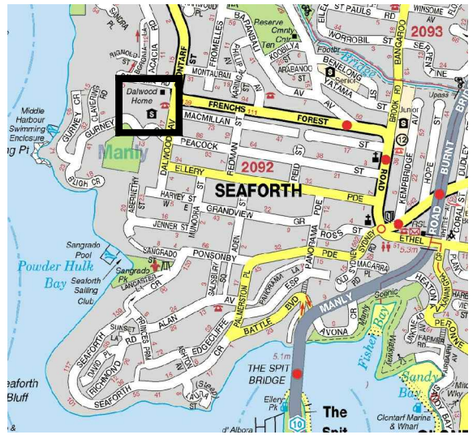

Location plan

LEGEND

□ones
SP2 □Infrastructure
E2 □En□iron□ental Conser□ation
R2 □Low Density Residential
E4 □En□iron□ental Li□ing

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: NSW Ministry of Health	TITLE: □□□□□□**Master Plan**	PROJECT No: 73029.01
	OFFICE: Sydney / DRAWN BY: JCP□DS	**Dalwood Site**	DRAWING No: 5
	SCALE: As shown / DATE: May 2019	**Dalwood Avenue, Seaforth**	REVISION: 0

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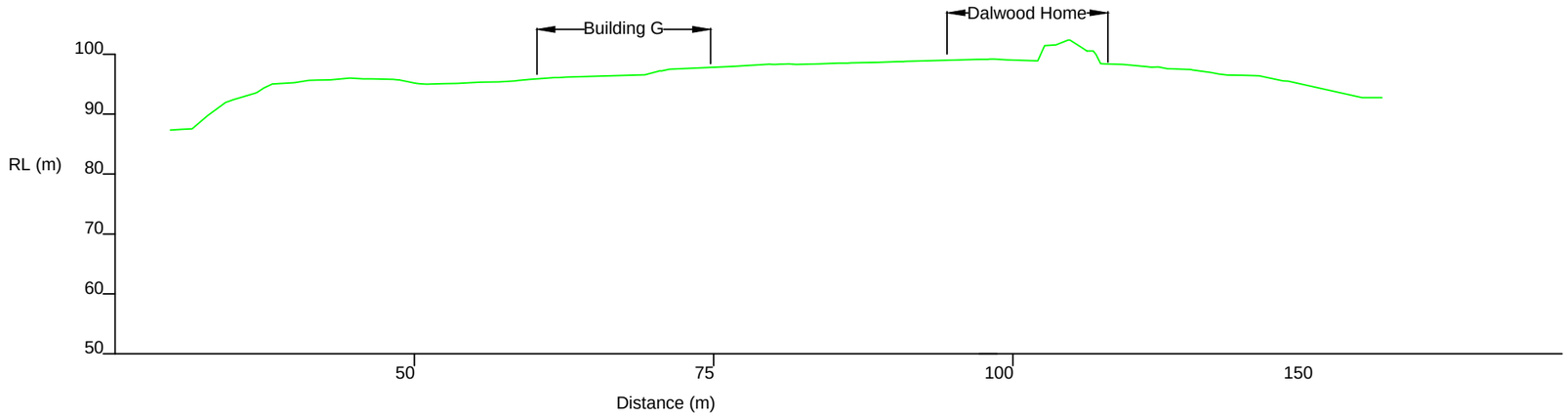

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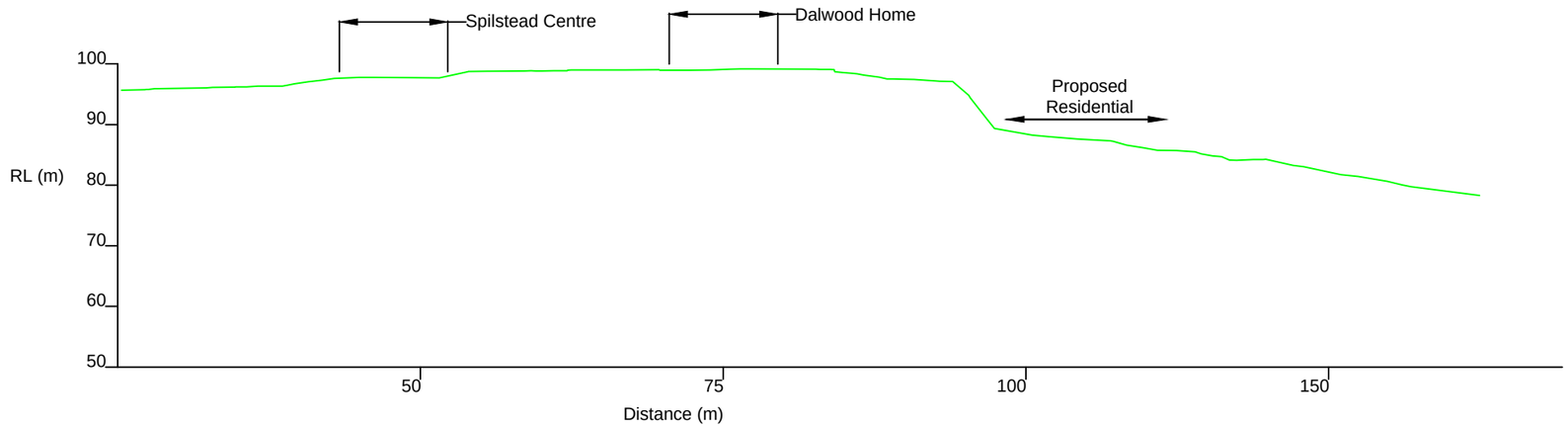

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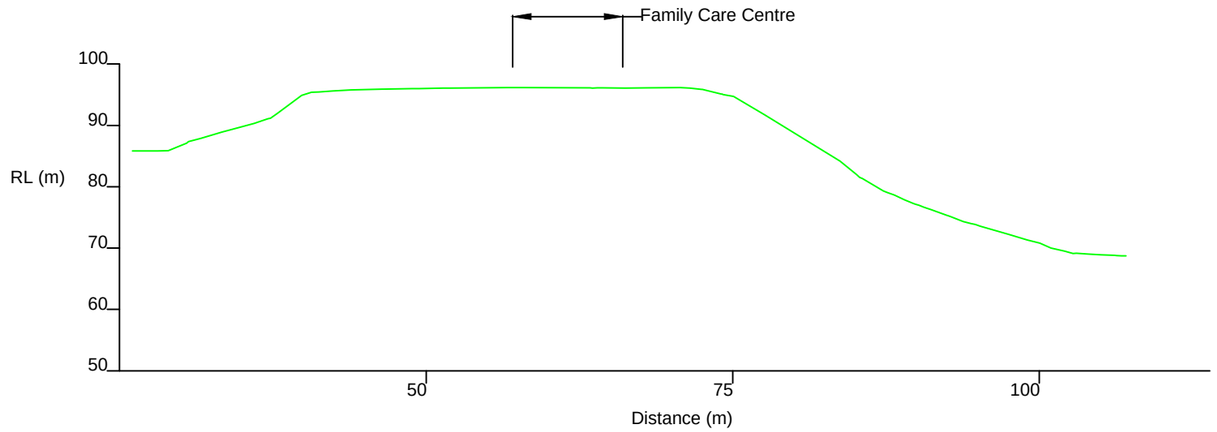

Section C

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: NSW Ministry of Health	TITLE: **Sections**	PROJECT No: 73029.01
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Site Photographs

Photo 1 □ □iew of sandstone cliff at □ack of Dalwood Ho□ e

Photo 2 □ □iew of outcropping rock at □ack of Fa□ ily Care Building

Douglas Partners Geotechnics / Environment / Groundwater	□□□□ □□□□□□r□□□□ **2012** □□r□□□□□□ □□□□ □□□□□□□□□□ **D□□□ □□d □□□□□□□□□□□□r□□**	PRO□ECT: □3029 .01 PLATE No: 1 RE□: A
	CLIENT: NSW Ministry of Health	DATE: May 2019

Photo 3 □ □iew of outcropping sandstone at western end of site

Photo 4 □ □iew of sandstone cliffs within □egetated area

Douglas Partners Geotechnics / Environment / Groundwater	□□□□ □□□□□□r□□□□ **2012** □□r□□□□□□ □□□□ □□□□□□□□□□ **D□□□ □□d □□□□□□□□□□□□r□□**	PRO□ECT:	□3029 .01
		PLATE No:	2
		RE□:	A
	CLIENT: NSW Ministry of Health	DATE:	May 2019

Photo 5 □Open lawn near northern □oundary

Photo □ □Filled slope near Fa□ ily Care Centre

Douglas Partners Geotechnics / Environment / Groundwater	□□□ □□□□□r□□□□ 2012 □□r□□□□□ □□□ □□□□□□□□□ D□□□ □□d □□□□□□□□□□□□r□□	PRO□ECT: □3029 .01 PLATE No: 3 RE□: A
	CLIENT: NSW Ministry of Health	DATE: May 2019

Photo □ □ Landslide at □ack of Fa□ ily Care Centre

Photo 8 □Hea□y □egetated natural slope at western end of site

Douglas Partners Geotechnics / Environment / Groundwater	□□□ □□□□□r□□□□ 2012 □r□□□□□ □□□ □□□□□□□□□ D□□□ □□d □□□□□□□□□□□r□□	PRO□ECT: □3029 .01 PLATE No: 4 RE□: A
	CLIENT: NSW Ministry of Health	DATE: May 2019

Photo 9 □New Carpark and New Building G

Photo 10 □Hea□y □egetated with sandstone outcrops along Gurney Crescent

Douglas Partners Geotechnics / Environment / Groundwater	□□□ □□□□□r□□□□ 2019 □□r□□□□□ □□□ □□□□□□□□□ D□□□ □□d □□□□□□□□□□□r□□	PRO□ECT:	□3029 .01
		PLATE No:	5
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	CLIENT: NSW Ministry of Health	DATE:	May 2019

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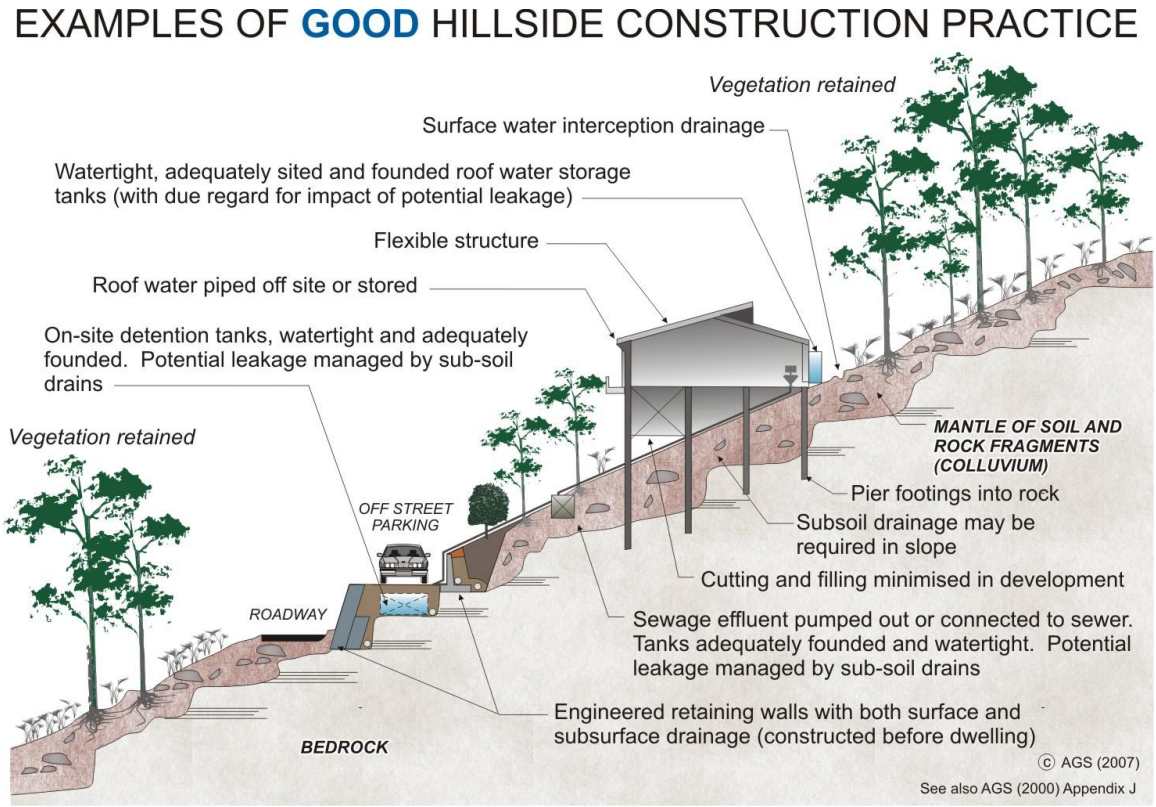
De□elop□ ent Guidelines

HILLSIDE CONSTRUCTION PRACTICE

Sensible development practices are required when building on hillsides, particularly if the hillside has more than a low risk of instability (GeoGuide LR7). Only building techniques intended to maintain, or reduce, the overall level of landslide risk should be considered. Examples of good hillside construction practice are illustrated below.



WHY ARE THESE PRACTICES GOOD?

Roadways and parking areas - are paved and incorporate kerbs which prevent water discharging straight into the hillside (GeoGuide LR5).

Cuttings - are supported by retaining walls (GeoGuide LR6).

Retaining walls - are engineer designed to withstand the lateral earth pressures and surcharges expected, and include drains to prevent water pressures developing in the backfill. Where the ground slopes steeply down towards the high side of a retaining wall, the disturbing force (see GeoGuide LR6) can be two or more times that in level ground. Retaining walls must be designed taking these forces into account.

Sewage - whether treated or not is either taken away in pipes or contained in properly founded tanks so it cannot soak into the ground.

Surface water - from roofs and other hard surfaces is piped away to a suitable discharge point rather than being allowed to infiltrate into the ground. Preferably, the discharge point will be in a natural creek where ground water exits, rather than enters, the ground. Shallow, lined, drains on the surface can fulfil the same purpose (GeoGuide LR5).

Surface loads - are minimised. No fill embankments have been built. The house is a lightweight structure. Foundation loads have been taken down below the level at which a landslide is likely to occur and, preferably, to rock. This sort of construction is probably not applicable to soil slopes (GeoGuide LR3). If you are uncertain whether your site has rock near the surface, or is essentially a soil slope, you should engage a geotechnical practitioner to find out.

Flexible structures - have been used because they can tolerate a certain amount of movement with minimal signs of distress and maintain their functionality.

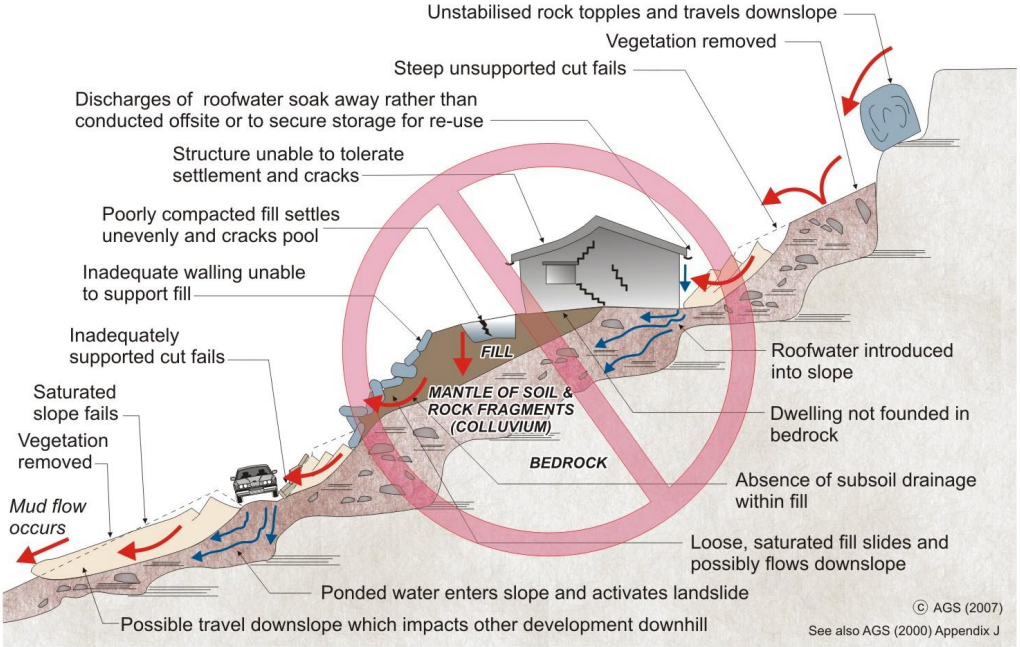
Vegetation clearance - on soil slopes has been kept to a reasonable minimum. Trees, and to a lesser extent smaller vegetation, take large quantities of water out of the ground every day. This lowers the ground water table, which in turn helps to maintain the stability of the slope. Large scale clearing can result in a rise in water table with a consequent increase in the likelihood of a landslide (GeoGuide LR5). An exception may have to be made to this rule on steep rock slopes where trees have little effect on the water table, but their roots pose a landslide hazard by dislodging boulders.

Possible effects of ignoring good construction practices are illustrated on page 2. Unfortunately, these poor construction practices are not as unusual as you might think and are often chosen because, on the face of it, they will save the developer, or owner, money. You should not lose sight of the fact that the cost and anguish associated with any one of the disasters illustrated, is likely to more than wipe out any apparent savings at the outset.

ADOPT GOOD PRACTICE ON HILLSIDE SITES

AUSTRALIAN GEOGUIDE LR8 (CONSTRUCTION PRACTICE)

EXAMPLES OF POOR HILLSIDE CONSTRUCTION PRACTICE



WHY ARE THESE PRACTICES POOR?

Roadways and parking areas - are unsurfaced and lack proper table drains (gutters) causing surface water to pond and soak into the ground.

Cut and fill - has been used to balance earthworks quantities and level the site leaving unstable cut faces and added large surface loads to the ground. Failure to compact the fill properly has led to settlement, which will probably continue for several years after completion. The house and pool have been built on the fill and have settled with it and cracked. Leakage from the cracked pool and the applied surface loads from the fill have combined to cause landslides.

Retaining walls - have been avoided, to minimise cost, and hand placed rock walls used instead. Without applying engineering design principles, the walls have failed to provide the required support to the ground and have failed, creating a very dangerous situation.

A heavy, rigid, house - has been built on shallow, conventional, footings. Not only has the brickwork cracked because of the resulting ground movements, but it has also become involved in a man-made landslide.

Soak-away drainage - has been used for sewage and surface water run-off from roofs and pavements. This water soaks into the ground and raises the water table (GeoGuide LR5). Subsoil drains that run along the contours should be avoided for the same reason. If felt necessary, subsoil drains should run steeply downhill in a chevron, or herring bone, pattern. This may conflict with the requirements for effluent and surface water disposal (GeoGuide LR9) and if so, you will need to seek professional advice.

Rock debris - from landslides higher up on the slope seems likely to pass through the site. Such locations are often referred to by geotechnical practitioners as "debris flow paths". Rock is normally even denser than ordinary fill, so even quite modest boulders are likely to weigh many tonnes and do a lot of damage once they start to roll. Boulders have been known to travel hundreds of metres downhill leaving behind a trail of destruction.

Vegetation - has been completely cleared, leading to a possible rise in the water table and increased landslide risk (GeoGuide LR5).

DON'T CUT CORNERS ON HILLSIDE SITES - OBTAIN ADVICE FROM A GEOTECHNICAL PRACTITIONER

More information relevant to your particular situation may be found in other Australian GeoGuides:

- GeoGuide LR1 - Introduction
- GeoGuide LR2 - Landslides
- GeoGuide LR3 - Landslides in Soil
- GeoGuide LR4 - Landslides in Rock
- GeoGuide LR5 - Water & Drainage
- GeoGuide LR6 - Retaining Walls
- GeoGuide LR7 - Landslide Risk
- GeoGuide LR9 - Effluent & Surface Water Disposal
- GeoGuide LR10 - Coastal Landslides
- GeoGuide LR11 - Record Keeping

The Australian GeoGuides (LR series) are a set of publications intended for property owners; local councils; planning authorities; developers; insurers; lawyers and, in fact, anyone who lives with, or has an interest in, a natural or engineered slope, a cutting, or an excavation. They are intended to help you understand why slopes and retaining structures can be a hazard and what can be done with appropriate professional advice and local council approval (if required) to remove, reduce, or minimise the risk they represent. The GeoGuides have been prepared by the Australian Geomechanics Society, a specialist technical society within Engineers Australia, the national peak body for all engineering disciplines in Australia, whose members are professional geotechnical engineers and engineering geologists with a particular interest in ground engineering. The GeoGuides have been funded under the Australian governments' National Disaster Mitigation Program.

Appendix C. Flora and Fauna Assessment

FLORA and FA□NA

sur□ey and assess□ ent

Proposed re□oning and de□elop□ ent□
Lot 4A□5A□□A and □A DP 1□15□□Part of Lot 1 in DP 325□20 and Part of Lot 1 in DP 325□84□
Gurney Crescent□Seaforth□NSW

M□□ 2019

Lesnok ENVIRONMENTAL

Co□er photographs:

Left: Character of the distur□ed scru□ that occurs within the su□□ect site.
Right: Character of the cleared□slashed grassed area that do□inates the proposed Lots.
Photo taken looking west.

Report produced at the re□uest of:

APP Corporation Pty. Li□ited

on □ehalf of the

NSW Ministry of Health

□y

Lesryk En□iron□ental Pty Ltd
PO Bo□ 3001
Bundeena NSW 2230
Telephone: □02) 9523 201 6
Mo□ile: 0408 25 8129
Ema □l: a dmin@les ryk.com □au
www.les ryk.com.au

Document Con **r**ol
File location: \ Pu□lic□Lesryk Pro□ects Current□App □Dalwood Seaforth□Report

Ve rsion	Autho rs	**R**ev ewe rs	App rove d Fo r Issue	
Draft □1	Deryk Engel □Director□, Dr Alison Hunt □Ecologist)	Deryk Engel□Alison Hunt□ Stephen Bloo□field □Senior Botanist), Kirsty Bloo□field □research assistant□	Deryk Engel	14□05□2019
Co□ □ents recei□ed fro□ client 15□05/ 9 □ 04.05p□				
Draft □2	Deryk Engel, Dr Alison Hunt	Deryk Engel□Alison Hunt□ Stephen Bloo□field, Kirsty Bloo□field	Deryk Engel	20□05□2019
Final co□ □ents recei□ed fro□ client 22/05/ 9 □ 11.12a□				
Final	Deryk Engel, Dr Alison Hunt	Deryk Engel□Alison Hunt□ Stephen Bloo□field, Kirsty Bloo□field	Deryk Engel	22□05□2019

Disc □ime r
This docu□ent has □een prepared in accordance with the infor□ation pro□ided □y APP Corporation Pty. Li□ited ('the client'□ This in□estigation has relied upon infor□ation collected during the course of a field in□estigation□and as a□aila□le in current known literature and data sources. All findings, □onclusions or reco□ □endations contained within this docu□ent are □ased upon the a□o□e□entioned circu□stances. The study has □een prepared for use □y the client, and no responsi□ility for its use □y other parties is accepted □y Lesryk En□iron□ental Pty Ltd.

Please note that□gi□en the dyna□ic nature of the rele□ant pieces of en□iron□ental legislation considered in this report, the authors consider that this report only has a 'shelf life' of six months. If a development application, review of en□iron□ental factors or state□ent of en□iron□ental effect is not su□□itted to a deter□ining authority for consideration within this ti□e fra□e, it is reco□ □ended that this report □e re□iewed and re□ised where re□uired in light of any rele□ant legislati□e listings or changes.

This report is prepared in accordance with □oth the □th Edition of the Co□ □onwealth of Australia □2002□Style Manual.

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^{0}C	Degrees Celsius
AOB□	Areas Of Outstanding Biodi□ersity □alue
AP□	Asset Protection □one
ASL	A□o□e Sea Le□el
BAM	Biodi□ersity Assess□ent Method
BC Act	NSW *Biodiversity Conservation Act 2016*
BDAR	Biodi□ersity De□elop□ent Assess□ent Report
BOS	Biodi□ersity Offsets Sche□e
CBD	Central Business District
DE	Co□□onwealth Depart□ent of the En□iron□ent □now known as the Co□□onwealth Depart□ent of the En□iron□ent and Energy□
DEC	NSW Depart□ent of En□iron□ent and Conser□ation □now known as the NSW Office of En□iron□ent and Heritage□
DECC	NSW Depart□ent of En□iron□ent and Cli□ate Change □now known as the NSW Office of En□iron□ent and Heritage□
DEE	Co□□onwealth Depart□ent of the En□iron□ent and Energy
DP	Deposited Plan
DP□E	Depart□ent of Planning and En□iron□ent
DPI	NSW Depart□ent of Pri□ary Industries
EEC	Endangered Ecological Co□□unity
EPA Act	NSW *Environmental Planning and Assessment Act 1979*
EPBC Act	Co□□onwealth *Environment Protection and Biodiversity Conservation Act 1999*
GPS	Glo□al Positioning Syste□[1]
ha	hectares
KTP	Key Threatening Process
LEP	Local En□iron□ent Plan
Lesryk	Lesryk En□iron□ental Pty Ltd
LGA	Local Go□ern□ent Area
LLS	Local Land Ser□ices
□□□c□□□□□□^{2}□k□	Milli□etres□centi□etres□□etres□s□uare □etres□kilo□etres
MNES	Matter of National En□iron□ental Significance
NP	National Park
NSW	New South Wales
OEH	NSW Office of En□iron□ent and Heritage
PCT	Plant Co□□unity Type
PMST	Protected Matters Search Tool
RoTAP	Rare of Threatened Australian Plant
SEPP	State En□iron□ental Planning Policy
□MP	□egetation Manage□ent Plan
WoNS	Weeds of National Significance

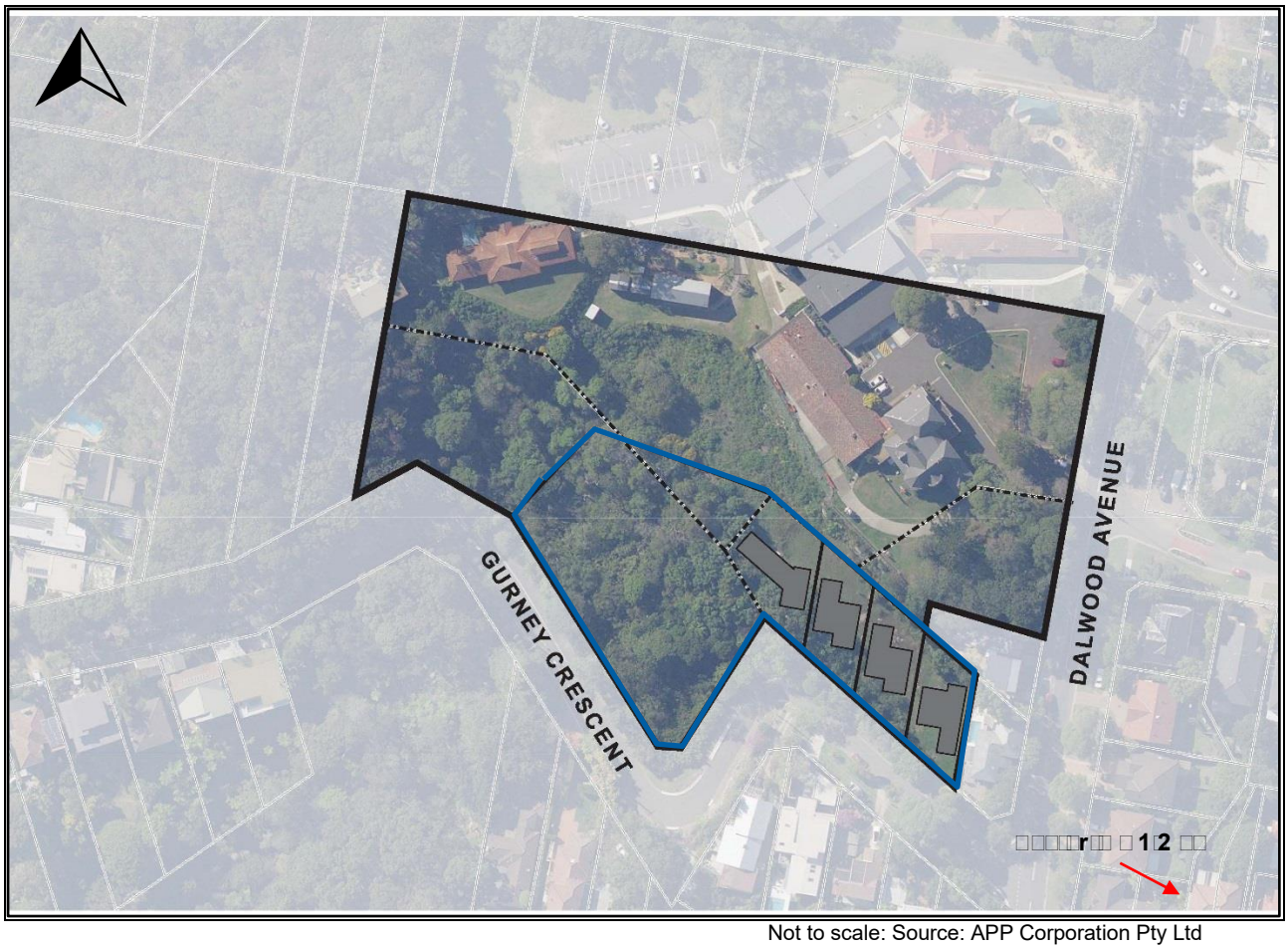
[1] Coordinate syste□ used: WGS84 □5 □ to 10 □.

For the purpose of this in□estigation:

Areas of outstanding □iodi□ersity	An area of outstanding □iodi□ersity □alue is: ○ an area i□portant at a State□national or glo□al scale□and ○ an area that □akes a significant contri□ution to the persistence of at least one of the following: i. □ultiple species or at least one threatened species or ecological co□ □unity ii. irreplacea□le □iological distincti□eness iii. ecological processes or ecological integrity i□ outstanding ecological □alue for education or scientific research. ○ The declaration of an area □ay relate□□ut is not li□ited□to protecting threatened species or ecological co□ □unities□ connecti□ity□ cli□ate refuges and □igratory species □BC Act□
I□portant population	Is a population that is necessary for a species' long□ter□ sur□i□al and reco□ery□ this □ay include populations identified as such in reco□ery plans□and□or that are: ○ key source populations either for □reeding or dispersal ○ populations that are necessary for □aintaining genetic di□ersity□and□or ○ populations that are near the li□it of the species range □DE 2013□
Local population □in regards to a threatened species□	Co□prises those indi□iduals known or likely to occur in the study area□as well as any indi□iduals occurring in ad□oining areas □contiguous or otherwise□that are known or likely to utilise ha□itats in the study area □DECC 200□□
In□asi□e species	Is an introduced species□including an introduced □translocated□nati□e species□ which out□co□petes nati□e species for space and resources□or which is a predator of nati□e species. Introducing an in□asi□e species into an area □ay result in that species □eco□ing esta□lished. An in□asi□e species □ay har□ listed threatened species or ecological co□ □unities □y direct co□petition□ □odification of ha□itat or predation.
Proposal	Is considered to include 'all activities likely to be undertaken within the subject site to achieve the objective of the proposed development' □DECC 200□□
Su□□ect site	Means the area directly affected □y the proposal. The su□□ect site includes the footprint of the proposal and any ancillary works□facilities□accesses or ha□ard reduction □ones that support the construction or operation of the de□elop□ent or acti□ity □OEH 2018□
Study area	Means the su□□ect site and any additional areas which are likely to □e affected □y the proposal□either directly or indirectly □OEH 2018□
Study region	Is considered to 'include the lands that surround the subject site for a distance of 10 km' □DECC 200□□
Direct i□pacts	Are those that directly affect the ha□itat of species and ecological co□ □unities and of indi□iduals using the study area. They include□□ut are not li□ited to□ death through predation□tra□pling□poisoning of the ani□al□plant itself and the re□o□al of suita□le ha□itat □OEH 2018□
Indirect i□pacts	Occur when pro□ect□related acti□ities affect species or ecological co□ □unities in a □anner other than direct loss within the su□□ect site. Indirect i□pacts □ay sterilise or reduce the ha□ita□ility of ad□acent or connected ha□itats. Indirect i□pacts can include loss of indi□iduals through star□ation□e□posure□predation □y do□estic and□or feral ani□als□ loss of □reeding opportunities□ loss of shade□shelter□ reduction in □a□ility of ad□acent ha□itat due to edge effects□ deleterious hydrological changes□increased soil salinity□erosion□inhi□ition of nitrogen fi□ation□weed in□asion□noise□light spill□fertiliser drift□or increased hu□an acti□ity within or directly ad□acent to sensiti□e ha□itat areas □OEH 2018□

1 Background

At the request of APP Corporation Pty. Ltd on behalf of the NSW Ministry of Health a flora and fauna investigation has been carried out across Lots 4A 5A A and A DP 1 15 Part of Lot 1 in DP 325 20 and Part of Lot 1 in DP 325 84 Gurney Crescent Seaforth NSW Figure 1 These lots are located in the southern portion of the 3. ha Dalwood House Site this being owned and managed by the Northern Sydney Local Health District. The Dalwood House site contains a range of historic and contemporary buildings utilised for child and family health services and related community purposes.



Not to scale: Source: APP Corporation Pty Ltd

Figure 1 Subject site delineated by blue lines and study area.

The investigation has been conducted in order to accompany a Planning Proposal to Northern Beaches Council in support of an amendment to Manly LEP 2013. The proposed amendment includes rezoning of the land from part SP2 Infrastructure Health Services Facilities and part E2 Environmental Conservation to part R2 Low Density Residential and part E4 Environmental Living. The rezoning will enable the establishment of four 4 new detached dwellings on each of the lots indicative footprint of each dwelling shown on Figure 1

This proposal does not trigger the BOS as it does not cover an area mapped on the Biodiversity Values Map and the amount of native vegetation likely to be cleared in association with this proposal would not exceed the threshold above which the BAM and offsets scheme apply i.e. potential for 0.5 ha over 1 to 40 ha Therefore the preparation of a BDAR does not need to be undertaken as part of the proposal.

The assessment of possible impacts associated with the proposal is based on a field investigation of the subject site a literature review of previous studies undertaken in both the region and this portion of the Northern Beaches Council LGA the consultation of standard databases and a consideration of the objectives of the EPBC Act EPA Act BC Act and any relevant SEPP.

2. [illegible]

A nu□□er of Co□□onwealth□State and local Acts□policies and docu□ents are rele□ant to the proposal and its possi□le i□pact on the ecology of □oth the su□□ect site and locality. The □ost rele□ant of these are listed in Ta□le 1.

[illegible]

Locality:	Seaforth□appro□i□ately 9 k□ north of the Sydney CBD □Figure 1□
Property si□e:	3.□ ha
Study area:	□1 ha
LGA:	Northern Beach Council
□oning □su□□ect site□:	Part SP2 – Infrastructure □Health Ser□ices Facilities□and part E2 – En□iron□ental Conser□ation
ASL:	Natural ele□ations □ary □etween □5 □ and 100 □ ASL
Soil Landscape:	La□ □ert Erosional and Hawkes□ury Collu□ial Landscapes.

The Dalwood Ho□e Site is located on a plateau a□o□e Middle Har□our□appro□i□ately 4 k□ west of the Sydney su□ur□ of Manly. Garrigal NP is located appro□i□ately 890 □ north of the su□□ect site□the re□ainder of the area co□prised of the low□density residential locality of Seaforth.

The area proposed for re□oning is located in the southern section of the Dalwood Ho□e Site □i.e. Lot 4A□5A□□A and □A DP 1□15□□Part of Lot 1 in DP 325□20 and Part of Lot 1 in DP 325□84□. These lots are □ordered □y Gurney Crescent to the south□low□density residential □uildings to the east and the □arious □uildings associated with Dalwood Ho□e to the north. The northern half of the su□□ect site□ □eing of higher ele□ation and generally flat□contains □uildings that are currently in use□whilst the southern and eastern portions consist of wooded areas on steep gradients and an escarp□ent. It is noted that the wooded area associated with Gurney Crescent is o□ergrown and is i□pacted □y weed in□asion.

For reference□a photographic record of the site has □een pro□ided □Appendi□1□.

The annual a□erage rainfall in the region is a□out 1323 □□ with the greatest falls □eing e□perienced □etween Fe□ruary and □une □Bureau of Meteorology 2019□. A□erage te□peratures range fro□ a winter low of appro□i□ately 8°C to a su□□er high of around 25.9°C □Bureau of Meteorology 2019□.

The subject site's topography is dominated by a ridge top with a flat to gentle slope and steep inclines□with rock outcropping and scarps in the south and west. Natural ele□ations within the su□□ect site range fro□ □5 □ ASL in the south to 100 □ ASL in the north□eastern portion of the area in□estigated.

The su□□ect site is located pri□arily within an ur□an catch□ent. No per□anent water □odies are present within the study area and no defined ephe□eral drainage lines or eroded gullies occur. Gi□en the topography of the site□in ti□es of hea□y rainfall there is e□pected to □e the downslope □o□e□ent of surface runoff. This runoff is e□pected to flow west and south of the escarp□ent area. Any water that drains fro□ the site would enter the network of stor□water drains that occur in association with the ad□acent residential streets. This runoff e□entually flows into Middle Har□our which is located 350 □ west of the su□□ect site.

The soils of the su□□ect site ha□e □een □apped □y Chap□an and Murphy □1989□as □eing co□prised of the La□ □ert Erosional and Hawkes□ury Collu□ial Landscapes. Both these Landscape groups are deri□ed fro□ the underlying Hawkes□ury Sandstone geology □Chap□an and Murphy 1989□. These soils predo□inantly consist of Lithosols and Siliceous Sands found in con□unction with rock outcrops□ as well as Earthy Sands□Yellow Earths and Yellow Pod□olic Soils often occurring on □enches□ fractures and □oints □Chap□an and Murphy 1989□. Where shale lenses occur□these are characterised □y □oth Yellow and Red Pod□olic Soils□while drainage lines are co□posed of Siliceous Sands and Yellow Earths □Chap□an and Murphy 1989□.

1 Summary of legislative and policy requirements

	Requirements	Requirements
Commonwealth	*Environment Protection and Biodiversity Conservation Act 1999*	Under this Act an action will require approval from the Minister if the action has will have or is likely to have a significant impact on a MNES. MNES include listed threatened species and ecological communities migratory species and wetlands of international importance protected under international agreements. Where applicable the assessment criteria relevant to this Act must be drawn upon to determine whether there would be a significant effect on these species and hence whether referral to the Federal Environment and Energy Minister is required.
State	NSW *Environmental Planning and Assessment Act 1979*	Part 4 of this Act requires that a determination be made as to whether a proposed action is likely to significantly affect threatened species or ecological communities or their habitats listed on Schedule 1 and 2 of the BC Act. Where found the assessment criteria under Section 7.3 of the BC Act (the 'Assessment of Significance') will be drawn upon to determine whether there would be a significant effect on these species and hence whether a BDAR is required.
	NSW *Biodiversity Conservation Act 2016*	The purpose of this Act is to maintain a healthy productive and resilient environment for the greatest well-being of the community now and into the future consistent with the principles of ecologically sustainable development. This Act also defines those species listed as protected in NSW.
	NSW *Biosecurity Act 2015*	Part 3, Clause 22 of this Act states 'any person who deals with biosecurity matter or a carrier and who knows or ought reasonably to know the biosecurity risk posed or likely to be posed by the biosecurity matter carrier or dealing has a biosecurity duty to ensure that so far as is reasonably practicable the biosecurity risk is prevented, eliminated or minimised'. This includes pest animal and plants species as defined under Clause 15 of the Act and anything declared by the regulations to be a pest for the purposes of this Act.
	NSW *State Environmental Planning Policy (Coastal Management) 2018*[2]	Clause 10 11 and 13 of this SEPP require consideration of whether a proposal is likely to have an adverse impact on the following respectively: • certain land within coastal wetlands and littoral rainforests area • land in proximity to coastal wetlands or littoral rainforest • land that is within the coastal environment area.

[2] *State Environmental Planning Policy (Coastal Management) 2018* updates and consolidates into one integrated policy SEPP 14 (Coastal Wetlands) SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection) including clause 5.5. of the Standard Instrument – Principal Local Environmental Plan.

State cont.	*Many Local Environmental Plan 2013*	This plan aims to make local environmental planning provisions for land in Manly in accordance with the relevant standard environmental planning instrument under Section 33A of the EPA Act. Particular aims of this plan that are relevant to the proposal are: a) to conserve and enhance terrestrial, aquatic and riparian habitats, biodiversity, wildlife habitat corridors, remnant indigenous vegetation, geodiversity and natural watercourses, b) to promote energy conservation, water cycle management, incorporating water conservation, water reuse, catchment management, stormwater pollution control and flood risk management, and water sensitive urban design, and c) to protect, enhance and manage environmentally sensitive land with special aesthetic, ecological, scientific, cultural or conservation values for the benefit of present and future generations, and d) to protect existing landforms and natural drainage systems and minimise the risk to the community in areas subject to environmental hazards, particularly flooding, bushfires, acid sulfate soils, sea level rise, tsunami and landslip, and e) to provide a framework that facilitates and encourages measures to assist the adaptation of the local environment to mitigate the impacts of climate change, and f) to give priority to retaining bushland for its own intrinsic value and as a recreational, educational and scientific resource.

Soils of the Hawkes□ury Sandstone are characterised □y □eing stony□of low fertility and are highly per□ea□le. They also ha□e a high ha□ard of soil erosion and □ass □o□e□ent□such as rock fall □Chap□an and Murphy 1989□.

Conser□ation reser□es and other protected areas that occur in the □icinity of the su□□ect site include Sydney Har□our NP □this co□ering an area of 393 ha□□Garrigal NP □2203 ha□and a nu□ □er of s□aller Council □anaged reser□es□including Gurney Crescent Reser□e □located i□ □ediately south of Gurney Crescent □Figure 2□□□Rignold Street Foreshore Reser□e □□410 □ north□west of the su□□ect site□□ Pickering Point Reser□e □□390 □ south□west□and Seaforth and Balgowlah O□als □□1.2 k□ north□.

Within the Northern Beaches LGA there is 2□8.1 ha of NP and 88.12 ha of Crown land □Manly City Council 2004□. Whilst this is the case□appro□i□ately 90□ of the □ushland in Manly is degraded to so□e e□tent due to hu□an acti□ities □Manly City Council 2004□.

With reference to the Connected Corridors for Biodi□ersity □apping□this □eing part of an initiati□e to assist Councils to increase ha□itat connecti□ity across highly ur□anised areas□it is noted that portions of the su□□ect site ha□e □een identified as Supporting Ha□itat and□to a lesser e□tent□Priority Ha□itat □Figure 2□□LLS 2019□.

Not to scale: Source: LLS □2019□

□□□□r□ **2**□Biodi□ersity Corridor □apping. Su□□ect site delineated □y red polygon.

The Priority Ha□itat pro□ides a north□south linkage □etween Gurney Crescent Reser□e and Garrigal NP □Figure 2□□□ o□e□ent along this □y ground tra□ersing□flying and ar□oreal ani□als □eing possi□le. The Supporting Ha□itat□in□con□unction with ad□acent Supporting Areas□would □eet the dispersal needs of highly tolerant ground tra□ersing species □particularly those that can negotiate ur□an infrastructure and residential dwellings□as well as flying ani□als.

Through reference to the listings pro□ided under the EPBC Act□it is noted that no ga□etted areas of critical ha□itat for any flora species□populations or co□ □unities occur within□or in the □icinity of□the study area. Si□ilarly□ none of the AOB□ listed under Part 3 of the Biodi□ersity Conser□ation Regulation 201□ occur within□or in the □icinity of□the study area.

□□ □□□r□□r□r□□□□ □□d □□□d □□d□□

Prior to undertaking any fieldwork□pre□ious studies conducted in the region and known data□ases were consulted to identify the di□ersity of ecological co□ □unities□flora and fauna species known for□ or potentially occurring in□the study region. The identification of those known or potentially occurring nati□e species and co□ □unities within this portion of the Northern Beaches LGA□particularly those listed under the Schedules to the EPBC and BC Acts□there□y per□its the tailoring of the field sur□ey strategies to the detection of these plants and ani□als□their □egetation associations and necessary ha□itat re□uire□ents. By identifying likely species□particularly any threatened plants and ani□als□ either the □ost appropriate species□specific sur□ey techni□ues □ay □e selected □should their associated □egetation co□ □unities□ha□itat re□uire□ents □e present□ or a precautionary principle adopted.

The undertaking of a literature search also ensures that the results fro□ sur□eys conducted during different cli□atic□seasonal and date periods are considered and drawn upon as re□uired. This approach therefore increases the pro□a□ility of considering the presence of□and possi□le i□pacts on□ all known and likely nati□e species□particularly any plants and ani□als that are of regional□State and/or national conservation concern. This approach also avoids issues inherent with a one off 'snap shot' study.

The studies□reports and data□ases referred to include:

- the DEE PMST □DEE 2019a□
- the OEH BioNet data□ase □Atlas of NSW Wildlife□□OEH 2019a□
- the OEH Threatened Species we□site □OEH 2019□□
- DPI WeedWise Data□ase □DPI 2019□
- a flora and fauna assess□ent□ Dalwood Opportunities and Constraints Analysis □Lesryk En□iron□ental Pty Ltd 2012□
- a flora and fauna assess□ent□Dalwood Site □Lesryk En□iron□ental Pty Ltd 2014□
- Atlas of Li□ing Australia □2019□
- Northern Beaches LEP □Many LEP 2013□□NSW Go□ern□ent 2019a□

Other reports and docu□ents referred to are pro□ided within the □i□liography section of this report.

When accessing the DEE and OEH data□ases□the search area specified was a 10 k□ □uffer around the study area. The data searches were carried out on 19□03□2019.

All these data□ases and reports were re□iewed and drawn upon where rele□ant. While re□iewing these docu□ents□particular attention was paid to identifying rele□ant ecological □atters listed under the Schedules of the EPBC and□or BC Acts□plants□ani□als and ecological co□ □unities that ha□e □een recorded in the region and which □ay occur within□or in the □icinity of□the study area.

Field guides and standard te□ts used include:

- Harden □1992□1993□2000 and 2002□□Fairley and Moore □2010□and Ro□inson □2003□□used for the identification of plants□
- Cogger □2014□□reptiles and frogs□
- Anstis □201□□□frogs□
- Churchill □2008□□flying □a□ □als□
- Si□pson and Day □2010□□□irds□
- □an Dyck and Strahan □2008□□non□flying □a□ □als□
- Triggs □199□□□identification of scats□tracks and □arkings□

The na□ing of those species recorded or known for the region follows the no□enclature presented in these te□ts□or within the EPBC and BC Acts.

It is noted that the current accepted scientific na□es for so□e of the threatened fauna species pre□iously recorded in this locality are not consistent with the na□es used□pro□ided under either the EPBC or BC Acts. In these instances, no□enclature used within this report follows the current appro□ed scientific con□entions.

Where applica□le, any EECs are classified and na□ed according to the NSW Scientific Co□ □ittee's Final and Preli□inary Deter□inations □arious dates.

The conser□ation significance of those ecological co□ □unities, plants and ani□als recorded is □ade with reference to:

- the RoTAP pu□lication □Briggs and Leigh 199□)
- the EPBC and BC Acts
- □egetation □apping of the study region □OEH 2013, To□er *et al* 2010)
- OEH's BioNet Vegetation Classification database (OEH 2019c)

4. ˙. Bio d ive r sit] Offsets Scheme Th r esho d

The *Biodiversity Conservation Regulation 2017* sets out threshold le□els for when the BOS would □e triggered. The threshold has two ele□ents:

- whether the a□ount of nati□e □egetation □eing cleared e□ceeds a threshold area set out under Section 7.2 of the Regulation
- whether the i□pacts occur on an area □apped on the Biodi□ersity □alues □ap pu□lished □y the Minister for the En□iron□ent.

If clearing and other i□pacts e□ceeds either trigger, the BOS applies to the proposed de□elop□ent including □iodi□ersity i□pacts prescri□ed □y clause 6.1 of the Biodi□ersity Regulation 201□.

In relation to the Dalwood Ho□e Site:

- the a□ount of nati□e □egetation likely to □e cleared in association with this proposal would not e□ceed the threshold a□o□e which the BAM and offsets sche□e apply i.e. potential for 0.5 ha o□er 1 to < 40 ha)
- the Dalwood Ho□e Site has not □een identified on the Biodi□ersity □ales Map and Threshold Tool □B□MTT) □NSW Go□ern□ent 2019□) as land of high □iodi□ersity □alue that is particularly sensiti□e to i□pacts fro□ de□elop□ent and clearing.

The proposal for re□oning of a portion of the southern section of the site would not trigger the re□uire□ent for assess□ent in accordance with Part 6 □the BOS) of the BC Act. Hence, the application of the BAM □as per Di□ision 2, Part 6 of the BC Act) is not re□uired. Therefore, the preparation of a BDAR does not need to □e undertaken as part of the proposal.

5. R esults of the lite r atu r e r eview

5.1. Threatened flora species

A re□iew of the DEE and OEH data□ases □DEE 2019a, OEH 2019a) identified 35 threatened plants listed under the EPBC Act and□or the Schedules of the BC Act that ha□e □een pre□iously recorded, or are considered to ha□e ha□itat, in the study region □Appendi□ 2□. Based on the consultation of standard te□ts and □egetation □apping, there is the possi□ility that the study area □ay pro□ide potential ha□itat for so□e of these species. Therefore, during the course of the field in□estigation, efforts were □ade to target these plants, populations or occurrences of their necessary □egetation associations.

5.2. Threatened Ecological Communities

There are 10 EEC's listed as occurring within the study region□a nu□ □er of which could potentially occur across the study area. These co□ □unities are:

- Blue Gu□ High Forest in the Sydney Basin Bioregion
- Coastal Salt□arsh in the NSW North Coast□Sydney Basin and South East Corner Bioregions
- Coastal □pland Swa□p in the Sydney Basin Bioregion
- Eastern Su□ur□s Banksia Scru□in the Sydney Basin Bioregion
- Littoral Rainforest in the NSW North Coast□Sydney Basin and South East Corner Bioregions
- Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions
- Shale Sandstone Transition Forest in the Sydney Basin Bioregion
- Swa□p Oak Floodplain Forest of the NSW North Coast□Sydney Basin and South East Corner Bioregions
- Sydney Turpentine□Iron□ark Forest
- Western Sydney Dry Rainforest in the Sydney Basin Bioregion

This assess□ent addresses the potential for occurrence of these co□ □unities across the site.

5.3. Vegetation mapping

At a regional scale□the □egetation of south□east NSW □To□er *et al.* 2010□synthesised □apping and classification fro□ a nu□ □er of pre□ious studies. This □apping does not indicate any nati□e □egetation occurring within the su□ect site□presu□a□ly as the area of □egetation present is s□aller than the threshold for that □apping.

At a local scale□Eco Logical Australia □2011□ground□truthed and assessed the natural assets which are located within se□eral prioritised areas of the Manly LGA. They prepared an assess□ent report that assessed the presence and □oundaries of:

- EECs
- natural assets
- potential □egetati□e corridors.

Their report pro□ided an analysis of types of species □flora and fauna□and ha□itats present□and included an assess□ent of actual degradation and potential threats to natural re□nant □egetation for proposed land use □ones where en□iron□ental protection would □e the priority.

Their report found that the □egetation that occurs in the □icinity of Gurney Crescent□this including the co□ □unities present on the su□ect site□contained an e□cellent di□ersity of plants which is do□inated □y a canopy of *Eucalyptus piperita□Corymbia gummifera* and *Angophora costata* □Eco Logical Australia 2011□ This □egetation was noted to ha□e a narrow weed □and □Eco Logical Australia 2011□ Eco Logical □apped this area as ha□ing high ha□itat □alue and reco□ery potential □Figure 3□ On the plateau in the north□west of the site they found senescent□dying tall *Acacia binervia* along with *Eucalyptus racemosa, E.piperita, Angophora costata, Banksia serrata* and *Elaeocarpus reticulatus* □id□storey and a □ery di□erse species asse□ □lage. Areas in the south of the site where weeds had in□aded were considered to ha□e a low reco□ery potential□though they are contiguous with □ushland of e□ceptional ecological □alue.

Biodi□ersity □apping under the Manly LEP 2013 indicates that a portion of the proposed new Lot □A contains an area identified as 'Biodiversity' □Figure 4□

Mapping of the Gurney Crescent ushland e tract fro Eco Logical Australia 2011

Lesryk 2012 apped the Dalwood Hospital Site and recorded three egetation co unities including Red Bloodwood – Coast Myall – Scri ly Gu Woodland across a s all area on the plateau in the north west of the Dalwood Hospital Site Sydney Pepper int – S ooth arked Apple Open Forest across the sheltered slopes in the west and south west of the roader site and Heath Scru across the lower areas e tending to the proposed re oning sites Figure 5

Lesryk 2012 descri ed this area as distur ed and not supporting an intact nati e egetation co unity ut instead supporting a weedy heath scru co posed of nati e and introduced species. Co on taller plants to are the nati e Cheese Tree *Glochidion ferdinandi* and Sweet Pittosporu and the weeds Large leaf Pri et *Ligustrum lucidum* and African Oli e *Olea europaea* su sp. *cuspidata* Lantana *Lantana camara* and Crofton Weed *Agertaina adenophora* are co on shru s and Morning Glory *Ipomoea indica* occurs as a groundco er and scra ler. Fish one Fern *Nephrolpeis cordifolia* and Kikuyu *Pennisetum clandestinum* are also co on groundco er species. There is a flat poorly drained area in the south east of the site that appears to e the result of pre ious site distur ance this resulting int eh re o al of a large a ount of sandstone aterial Here there is patchy growth of the introduced Whiskey Grass *Andropogon virginicus* Couch *Cynodon dactylon* and apanese Honeysuckle *Lonicera japoinica* on slightly higher ground with Co on Rush *Juncus usitatus* and rella Sedge *Cyperus eragrostis* in da per areas.

Not to scale. Source: NSW Government 2019a

Biodiversity

Figure 5 Biodiversity mapping of the study region. Subject site delineated by red polygon.

None of the vegetation communities mapped within the study area by Lesryk 2012 were considered to be a part of an endangered or threatened vegetation community listed for or currently being considered for listing on the Schedules to either the EPBC or BC Acts.

5.4. Threatened fauna species

Fauna species previously recorded in the vicinity of the subject site are identified in Appendix 4. Of these and with a review of the DEE database (DEE 2019a) 45 threatened fauna species listed under the Schedules of the EPBC and/or BC Acts that have been previously recorded for or are considered to have habitat in the study region (Appendix 2).

Not to scale. Source: Lesryk □2012□

□□□

1 □ *Red Bloodwood – Coast Myall – Scribbly Gum Woodland*
2 □ *Sydney Peppermint – Smooth-barked Apple Open Forest*
3 □ *Weedy Heath/Scrub*.

□□□□**r**□ □□The □egetation present within the study area.

□□ □□□□**d** □□**r**□□□ □ □□□□**d**□

Field in□estigations of the su□□ect site were carried out □etween 21 March and 13 May 2019□with the e□act dates □eing presented in Ta□le 2. Ta□le 2 also identifies the researcher present on site□sur□ey □ethod e□ployed and weather conditions e□perienced at the ti□ e of the in□estigation.

□□□□□ **2**□Sur□ey details

D□□□ □2019□	**R□□□□r□□□r**	**□□r□□□ □ □□□□d □□ □□□□d**	**□ □□□□□r □□□d□□□□□ □□□□r□□□□d**
21 March	Deryk Engel □B.En□Sc.HONS□	Bird sur□eys Identification indirect e□idence Ha□itat deter□ination	25°C□30□ cloud co□er and light winds
2 April	Alison Hunt □B..Sc.HONS□PhD□	Botanical sur□ey	war□ □23°C□and o□ercast with inter□ittent light rain
30 April	Deryk Engel	Bird sur□eys Esta□lish□ ent of infrared ca□ eras Esta□lish□ ent of hairtu□e traps Identification indirect e□idence	24°C□50□ cloud co□er and □ oderate □ree□es
14 May	Deryk Engel	Bird sur□eys Collection of e□uip□ ent Identification indirect e□idence	20°C□0□ cloud co□er and slight □ree□es

It is noted that, during the late April – early May sur□ey period, 14.6 mm of rain was recorded within the study locality □a total of 72 mm was recorded during the entire sur□ey period)

The purpose of the field in□estigation was to identify those □egetation co□ □unities, fauna ha□itats, plants and ani□als present within, and in close pro□i□ity to, the su□□ect site that are of State and□or national conser□ation significance as listed under the Schedules to the EPBC and□or BC Acts.

While conducting the ha□itat assess□ents, efforts were □ade to identify features such as known □egetation associations, geological features, feed trees, □ature trees with hollows, connecti□ity of fauna corridors, a□uatic en□iron□ents and other ha□itat features i□portant to the life cycle re□uire□ents of those threatened plants and ani□als pre□iously recorded in the study region □as listed in Appendi□ 2)

The sur□ey □ethods e□ployed during the field in□estigation were:

- the identification of those plants present within the su□□ect site, including □oth direct and indirect i□pacts
- the identification of the structure of those □egetation co□ □unities and fauna ha□itats present
- the direct o□ser□ation of those fauna species present within, or ad□acent to, the su□□ect site
- diurnal call identifications of fauna species, with all calls □eing identified in the field
- infrared ca□era photography
- hairtu□e trapping
- the identification of any indirect e□idence such as tracks, scats, scratchings and diggings that would suggest the presence of a particular fauna species
- ground de□ris, leaf litter and tree □ark searches for sheltering reptiles and a□phi□ians.

Where re□uired, a □ore detailed description on one or □ore of the sur□ey □ethods e□ployed is pro□ided □elow.

The sur□ey □ethods e□ployed and le□el of effort re□uired were generally □ased on the descriptions pro□ided in the following:

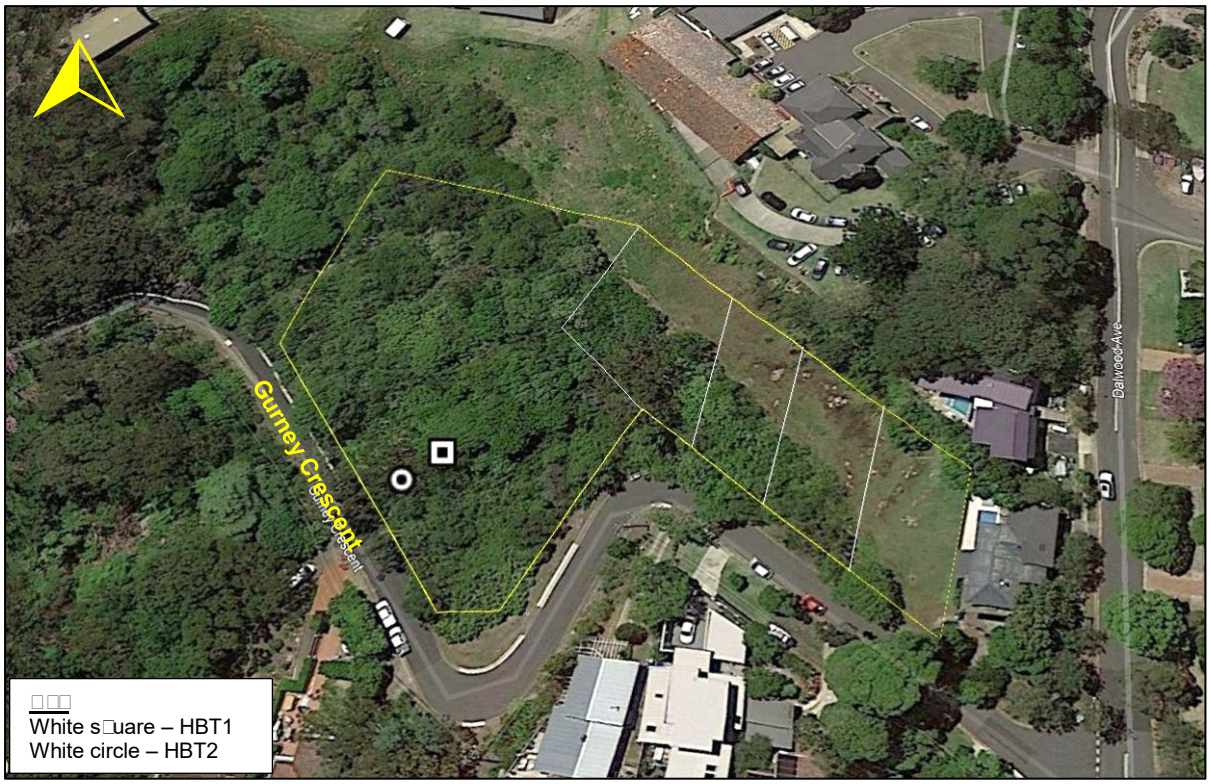
- the OEH sur□ey guidelines for threatened plants □OEH 2016)
- the DEC 2004 pu□lication
- the DEE survey guidelines for Australia's threatened ani□als □DEE □arious dates□.

Based on the o□ser□ations □ade during the diurnal in□estigation, and in consultation with the BioNet data□ase □OEH 2019a), it was not considered that the undertaking of any nocturnal sur□ey work was re□uired. Within the area of likely distur□ance, no drainage lines, ca□es or other ha□itats i□portant to nocturnal species, particularly those that are of State or national conser□ation concern□are present.

Hollow-□earing trees that could □e occupied □y State listed hollow□dependent □icrochiropteran □insecti□orous □ats) are present within the su□□ect site □Figure 6) Whilst this is the case, these plants occur □eyond the li□its of any of the residential lots proposed to □e esta□lished and would therefore not re□uire re□o□al or distur□ance. Reco□ □endations for the retention of these plants ha□e □een pro□ided □Section 10)

6.˙. Botanical su**r**vey

In association with aerial photography and the plans pro□ided, □otanical sur□eys were conducted within the su□□ect site. When sur□eying this area the 'Rando□ Meander Method' □Cropper 1993) was e□ployed. This □ethod in□ol□es conducting foot tra□erses through those sites that re□uire in□estigation, during which ti□e notes are □ade on the structure and floristic co□position of the nati□e □egetation present.



Not to scale. Source: Google Earth (2019)

Figure 2: Location of hollow-bearing trees. Indicative limits of subject site delineated by yellow line.

The 'Random Meander Method' is consistent with the stratified random sampling design as specified in section 5.1 (Stratification/sampling and replication) of the publication titled (*Threatened biodiversity survey and assessment: Guidelines for development and activities (working draft)* (DEC 2004). This method is also mentioned under sections 5.2.1 (Sampling techniques) and 5.2.[illegible] (Targeting threatened plants) of the DEC 2004 publication. The Random Meander Method is suitable for covering large areas and for locating any rare species (and their associated vegetation communities/habitat types) that may occur within a particular site.

The (Random Meander Method) is employed until no new species have been recorded for at least 30 minutes.

Numerous plant samples were collected (as per approval granted in accordance with OEH Scientific license SL100[illegible]1) for later identification using standard texts.

Based on the results of the literature review and the habitat requirements of those flora species identified as potentially occurring (see Appendix 2[illegible]) in consultation with aerial photography and those plans provided) targeted investigations were also carried out where areas of suitable habitat were observed or likely to be present.

□2□ □□r□r□d □□□ □r□ □□□□□r□□□□

Three Recony□™ infrared ca□eras were e□ployed during the course of the field in□estigation□these □eing esta□lished on 30 April and collected 14 days later. For reference□the locations of the ca□eras are identified on Figure □□the GPS coordinates of these □eing:

- Ca□era 1 – Easting □E□33□055□Northing □N□□259392
- Ca□era 2 – E33□014□N□259414
- Ca□era 3 – E33□00□□N□259390.

The ca□eras e□ploy a passi□e infrared syste□ □this re□uiring an ani□al to 'break' an invisible 'beam'. The ca□eras were set to operate diurnally and nocturnally□each □eing set to a sensiti□ity le□el of high and a photo inter□al of 3□ten seconds.

The ca□eras were secured to a tree at a height of around 0.5 □ a□o□e ground le□el□and were angled downwards.

To entice ani□als into the field of □iew of the ca□eras□a lure scented with truffle oil was used. This was placed at a distance of a□out 1 □ in front of the ca□era and secured to the ground □y a large steel peg. This distance was selected as it is within the unit's motion detector coverage range. The lure is constructed fro□ 250 □□ long P□C piping□into which has □een drilled a nu□□er of holes. Foa□ is placed into the piping and into this the truffle oil is poured.

Based on a review of the unit's date stamp, it was possible to determine that all cameras were operating at the ti□e of their collection.

By the co□pletion of the site in□estigation□5□ca□era nights had □een accu□ulated.

□□□□ □□r□□□□ □r□□□

Hairtu□e trapping□using 15 Faunatech™ hair□tu□e traps□was carried out within the su□□ect site fro□ 30 April to 14 May □Figure □□. All of the hairtu□e traps e□ployed were placed on the ground□at inter□als of around 20 □ □etween each trap□the GPS coordinates and location of these pro□ided in Ta□le 3.

□□□□□ □□Hairtu□e trap GPS locations within the study area

□□r□□□□	□□□□□□□	□□r□□□□
HT1	33□0□9	□259398
HT2	33□0□9	□25941□
HT3	33□0□3	□259381
HT4	33□0□□	□259393
HT5	33□0□3	□259403
HT□	33□04□	□259404
HT□	33□050	□259388
HT8	33□049	□259383
HT9	33□035	□259391
HT10	33□024	□259390
HT11	33□033	□259409
HT12	33□023	□259419
HT13	33□014	□259425
HT14	33□012	□259414
HT15	33□01□	□259400

The hair□tu□e traps were all □aited with the uni□ersal □i□ture □i.e. standard rolled oats□peanut □utter and honey □i□□□DE 2011a□

	Infrared camera
	Hairtube traps
	Subject site

Not to scale. Source: Google Earth 2019

Figure 3: Fauna survey locations.

Any hairs collected fro□ the hair□tube traps were sent to Ms Georgeanna Story of 'ScatsAbout' □Ma□ors Creek, NSW) for analysis.

Any unidentifia□le or carni□ore scats that contained hair □aterial were also collected and sent to Ms Story for analysis□deter□ination.

By the co□pletion of the site in□estigation□210 trap nights had □een accu□ulated.

6.4. Su**r**vey □ffo**r**t

By the co□pletion of the field in□estigation, a□out nine person hours of acti□e searches had □een accu□ulated. Gi□en the physical condition and si□e of the area in□estigated (particularly those portions that are proposed to □e de□eloped), this length of ti□e is considered □ore than ade□uate when endea□ouring to deter□ine the di□ersity of nati□e species and □egetation co□□unities present, their associated ha□itats and asse□□lages, and the conser□ation status of each of these.

6.5. Limitations

Access to all parts of the su□□ect site was possi□le, there□y ensuring that all portions of the site were sa□pled. In addition, no ad□erse weather conditions were encountered during the in□estigation.

Not all ani□als and plants can □e fully accounted for within any gi□en study area. The presence of threatened species is not static; it changes o□er ti□e often in response to longer ter□ natural forces that can, at any ti□e, □e dra□atically influenced □y hu□an-□ade distur□ances.

While targeted species□specific nocturnal sur□eys were not a co□ponent of this study □e.g. spotlighting, echolocation detection and so forth), gi□en the cleared nature of the site in□estigated, the identification of the structure of those fauna ha□itats present and the retention of those hollow□□earing trees o□ser□ed, it is not considered that the scientific rigour of the field inspection was co□pro□ised.

In order to o□erco□e any li□itations:

a) data□ase searches were conducted for threatened species, populations and ecological co□□unities known to occur within the region
b) the precautionary principle was adopted where necessary (i.e. suita□le ha□itat for those threatened species known to occur, or that ha□e □een pre□iously recorded within the surrounding locality, identified)

This report is □ased upon data ac□uired fro□ the current in□estigation; howe□er, it should □e recognised that the data gathered is indicati□e of the en□iron□ental conditions of the site at the ti□e the field work was conducted.

7. Flo**r**a **r**esults

7.˙. Flo**r**a speci□s **r**□□□**r**d□d

By the co□pletion of the field sur□ey a nu□□er of nati□e and e□otic plant species had □een recorded □Appendi□ 3) It is noted that Appendi□ 3 is not intended to □e a co□prehensi□e list of all the species present within the su□□ect site, and only represents those plants that were recorded while undertaking searches for:

- those nati□e species and ecological co□□unities of State and□or national conser□ation concern that are known, or e□pected to occur, in the locality
- weeds of significance that would re□uire treat□ent.

In regards to those plants recorded it is noted that none are:

- listed or currently being considered for listing on the Schedules to the EPBC or BC Acts
- identified as a RoTAP.

As no threatened plants are considered to be adversely impacted by the proposal the conducting of assessments referring to the EPBC Act's Significant Impact Guidelines and or Section 5.3 of the BC Act is not required.

11 Weeds

Under the *Biosecurity Act 2015* 'all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant who knows or ought to know of any biosecurity risk has a duty to ensure the risk is prevented eliminated or minimised, so far as is reasonably practicable.'

Of those introduced plant species recorded six are listed as Priority Weeds for the Greater Sydney region (DPI 2019) and three are listed under both Schedule 3 of the NSW Biosecurity Regulation 2017 and as WoNS (DPI 2019) (Table 4).

Table 4: Priority weeds recorded within subject site

Weed	Status
African Olive (*Olea europaea* subsp. *Cuspidata)*	Priority Weed
Blackberry (*Rubus fruiticosus* species aggregate)	Priority Weed Schedule 3 WoNS
Green Cestrum (*Cestrum parqui*)	Priority Weed
Ground Asparagus (*Asparagus aethiopicus*)	Priority Weed Schedule 3 WoNS
Lantana (*Lantana camara*)	Priority Weed Schedule 3 WoNS
Pampas Grass (*Cortaderia selloana*)	Priority Weed

Schedule 3 weeds 'must not be imported into the State or sold'.

12 Vegetation Communities

The subject site supports two vegetation associations:

- Cleared slashed grassed area.
- Disturbed Scrub.

A brief description of each community has been provided below whilst their approximate limits within the subject site are identified in Figure 8.

It is recommended that the following descriptions be read in conjunction with reference to the photographic record provided (Appendix 1).

Not to scale: Source: Google Earth (2019)

Figure 6: Vegetation communities recorded in the subject site.

2.1 [illegible]

This relatively flat section borders the developed area of the Dalwood Hospital site which lies to the north and residences to the east. The rock wall which forms the boundary with the Dalwood Hospital site appears to have been formed through the removal of sandstone (quarrying) from this area. This area is now maintained through slashing presumably to provide fire protection for the hospital and residences to the east. Vegetation consists mostly of introduced grasses (e.g. Whiskey Grass and Couch) with Japanese Honeysuckle on slightly higher ground and Common Rush and Umbrella Sedge in damper areas.

Occurrence Area within subject site	This community occupies areas proposed for the four dwelling lots. It is dominated by weeds and appears to be regularly slashed. 14[illegible]0 [illegible]^2
Groundcover High density 0.5 [illegible]	Dominant species present Couch (*Cynodon dactylon*) Whiskey Grass (*Andropogon virginicus*) (introduced)
Leaf litter and ground debris	No
Vegetation formation (Keith 2004) OEH (2013) PCT (OEH 2019c) EEC	N/A N/A N/A No

2.2 Disturbed [illegible]

This relatively steep densely weed infested (primarily by Fishpole Bamboo (*Phyllostachys aurea*)) portion of the subject site is about 0.49 ha in area. It grades steeply (about 20 [illegible]) slope down from the cleared/slashed grassed area to Gurney Crescent. It is likely that long term disturbances associated with the adjacent quarrying, the construction and operation of Dalwood Hospital, the adjacent residences and the construction of Gurney Crescent have impacted this area through changes in drainage, physical disturbance and the spread of weeds. It is now composed mostly of invasive weed species, some of which are recognised Priority Weeds for the Greater Sydney region, Schedule 3 weeds of the NSW Biosecurity Regulation 2017 and WoNS. Scattered throughout this dense weed infestation is the occasional native species (e.g. two emergent Smooth-barked Apple, Cheese Tree and Black Sheoak (*Allocasuarina littoralis*)) along the margins.

Occurrence	This co□ □unity occurs in the area proposed for the AP□ □New Lot 7A)
Area within su□□ect site	4900 m 2
	Nota□le species present
Canopy Low density	S□ ooth- □arked Apple □*Angophora costata*) *x 2* Black She□oak □*Allocasuarina littoralis*) Sweet Pittosporu□ □*Pittosporum undulatum*) Cheese Tree □*Glochidion ferdinandi*)
Shru□s / Mid□storey High density	Sweet Pittosporu□ □*Pittosporum undulatum*) □introduced) Large□leaf Pri□et □*Ligustrum lucidum*) □introduced) Lantana □*Lantana camara*) □introduced) Cassia □*Senna pendula* □ar. *glabrata*) □introduced) Fishpole Ba□ □oo □*Phyllostachys aurea*) □introduced)
Leaf litter and ground de□ris	Minor
□egetation for□ ation □Keith 2004)	N□A
OEH □2013)	N□A
PCT □OEH 2019c)	N□A
EEC?	No

7.3. Fauna species r□□rd□d

The fauna species recorded □y the authors within the Dalwood Ho□ e site during the current or pre□ious in□estigations□along with their detection □ethods□□are listed in Ta□le 5.

Of those species detected, one, the White- □ellied Sea□eagle □*Haliaeetus leucogaster*), is listed as □ulnera□le under the BC Act. During the 2012 in□estigation of the Dalwood Ho□ e site, this species was o□ser□ed flying o□er the su□□ect site □Lesryk 2012) During that in□estigation, no characteristic Sea□eagle nests were o□ser□ed, and no indi□iduals of this ani□al were seen foraging or roosting within the study area □Lesryk 2012)

The White- □ellied Sea□eagle was not recorded during the current in□estigation. No raptor nests were o□ser□ed within the su□□ect site and the study area is not considered ha□itat for this species. The White□□ellied Sea□eagle would not □e reliant upon the resources present within, or ad□acent to, the su□□ect site and the proposed su□di□ision would not significantly affect this threatened species or its ha□itats. With reference to the assess□ent criteria pro□ided under Section 7.3 of the BC Act □Section 8.2), the preparation of a BDAR is not re□uired.

Table 5. Fauna species recorded within □oth the su□□ect site and Dalwood Ho□ e site, and their detection □ ethod.

Key
V □species listed as □ulnera□le under the BC Act.
* - introduced species.
1 – current in□estigation
2 – Lesryk 2012 □pre□ious in□estigation of study area□
3 – Lesryk 2014 □pre□ious in□estigation of study area]

Common Name	Sci ntif c Name	**M**etho **d** of **D**etect on	**R□□□rd□d**
M□MM□□□			
Short- □eaked Echidna	*Tachyglossus aculeatus*	Infrared ca□era	1
Long□nosed Bandicoot	*Perameles nasuta*	Infrared ca□era□hair analysis Characteristic diggings o□ser□ed	1 2
Co□ □on Ringtail Possu□	*Pseudocheirus peregrinus*	Infrared ca□era□hair analysis O□ser□ed	1 2
Co□ □on Brushtail Possu□	*Trichosurus vulpecula*	Infrared ca□era	1
Swa□p Walla□y	*Wallabia bicolor*	Infrared ca□era□hair analysis O□ser□ed	1 2
*Ra□□it	*Oryctolagus cuniculus*	Characteristic scats o□ser□ed	1□2□3
*Cat □do□estic – collars e□ident)	*Felis catus*	Infrared ca□era	1
*Fo□	*Vulpes vulpes*	Infrared ca□era	1
*Black Rat (□ased on tail □eing longer than □ody)	*Rattus rattus*	Infrared ca□era	1
□□**RD**□			
Australian Brush Turkey	*Alectura lathami*	Infrared ca□era, O□ser□ed	1
Masked Lapwing	*Vanellus miles*	O□ser□ed	2□3
V White- □ellied Sea□eagle	*Haliaeetus leucogaster*	O□ser□ed	2
*Rock Do□e	*Columba livia*	O□ser□ed	1
*Spotted Do□e	*Streptopelia chinensis*	Heard	2□3
Sulphur□crested Cockatoo	*Cacatua galerita*	Heard	1□2
Musk Lorikeet	*Glossopsitta concinna*	Heard	1□2
Rain□ow Lorikeet	*Trichoglossus haematodus*	Heard	1□3
Laughing Kooka□urra	*Dacelo naxaeguineae*	Heard	1□2
Super□ Fairy□wren	*Malurus cyaneus*	O□ser□ed	1□2
White- □rowed Scru□wren	*Sericornis frontalis*	Infrared ca□era, O□ser□ed	1
Spotted Pardalote	*Pardalotus punctatus*	Heard	1□2□3
Brown Thorn□ill	*Acanthiza pusilla*	O□ser□ed	2□3
Red Wattle□ird	*Anthochaera carunculata*	Heard	1□2□3
Noisy Miner	*Manorina melanocephala*	Heard	1□2□3
Lewin□s Honeyeater	*Meliphaga lewinii*	O□ser□ed	1
Eastern Spine□ill	*Acanthorhynchus tenuirostris*	O□ser□ed	1
Eastern Whip□ird	*Psophodes olivaceus*	Infrared ca□era□Heard	1□2□3
Golden Whistler	*Pachycephala pectoralis*	O□ser□ed	2
Grey Fantail	*Rhipidura fuliginosa*	Heard	2
Willie Wagtail	*Rhipidura leucophrys*	O□ser□ed	2
Black□faced Cuckoo□shrike	*Coracina novaehollandiae*	O□ser□ed	3
Grey Butcher□ird	*Cracticus torquatus*	Heard	1□2
Australian Magpie	*Gymnorhina tibicen*	Heard	1□2
Pied Currawong	*Strepera graculina*	Heard	1□3
Australian Ra□en	*Corvus coronoides*	Heard	1□2
Magpie□ark	*Grallina cyanoleuca*	Heard	1
Sil□ereye	*Zosterops lateralis*	O□ser□ed	1
Welco□ e Swallow	*Hirundo neoxena*	O□ser□ed	1□2□3
*Red□whiskered Bul□ul	*Pycnonotus jocosus*	Heard	1□2
*Co□ □on Starling	*Sturnus vulgaris*	O□ser□ed	1
REPT □□ES			
Broad□tailed Gecko	*Phyllurus platurus*	O□ser□ed	1
Dark□flecked Garden Sun□skink	*Lampropholis delicata*	O□ser□ed	1
□**M**□□□□□□□			
Co□ □on Eastern Froglet	*Crinia signifera*	Heard	1□2

During the course of the current investigation:

- Images obtained through use of the three infrared cameras that were employed over the course of fourteen days indicated the presence of the Short-beaked Echidna, Common Ringtail Possum, Common Brushtail Possum, Swamp Wallaby, Australian Brush Turkey, White-browed Scrubwren, Eastern Whipbird and introduced Cat, Fox and Black Rat.
    - The Short-beaked Echidna was the only small to medium sized ground traversing native mammal photographed.
    - Images obtained of those Cats that accessed the subject site indicated the presence of at least two different individuals (based on coat colour), each of which had a collar.
- Hairs were present within four of the hairtube traps placed out on site. Analysis of these indicated the presence of the Long-nosed Bandicoot, Common Ringtail Possum and Swamp Wallaby.
- No characteristic (conical) bandicoot diggings or scats were observed within the subject site.
- No dreys or other nests were noted.

The native species recorded during the current study are protected (as defined by the BC Act) but considered to be common to abundant throughout both the nearby network of State and local government reserves and surrounding urban areas. Within the surrounding region, these species have been recorded in association with a range of woodland and forest habitats, as well as urban environments. The species recorded would not be solely reliant upon those habitats present within, or in close proximity to, the subject site, such that the removal or further disturbance of these would threaten the 'local' occurrence of these animals. The species recorded are all expected to utilise and occupy the APZ/E4 zoned portions of the subject site, and both the study area and surrounding locality post-development.

None of the native animals recorded during the current or previous ecological investigations are listed, or currently being considered for listing, under the Schedules to the EPBC Act.

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Two habitat types available to native fauna were recorded within the study area, these being:

- exotic grassland (corresponds to Section [illegible].2.1. of this report)
- shrubland (corresponds to Section [illegible].2.2. of this report)

For reference, descriptions of each of these are provided. It is recommended that these descriptions be read in conjunction with reference to the photographic record provided (Appendix 1).

[illegible]1 [illegible] [illegible] [illegible]d

This habitat type is present on the bench that appears to have been formed by previous land use practices (quarrying). This habitat type supports a rank grassland that is dominated by exotic species that are up to 0.5 m in height (depending on the environment's maintenance regime). Remnant small trees and shrubs are present at the base of the cliff line, these being to a maximum height of 3 m. No caves or suitable sheltering ledges occur in association with the 'cliff' (quarry face). Due to ground water seepage, portions of this habitat type are damp underfoot.

[illegible]2 [illegible]d

The shrubland is present downslope of the levelled bench and supports plants that are up to 4 m in height. Where not affected by a high density infestation of lantana (i.e. primarily within the eastern portion of the subject site), the native shrubs are of a medium to high density. The ground cover is sparse and composed primarily of weeds. Leaf litter and ground debris is common, as is the occasional rock outcrop. Associated with these are some ledges and overhangs. Investigations of these with a hand torch did not reveal the presence of any sheltering animals. Similarly, no evidence to suggest utilisation (e.g. scats, guano) was observed.

Se□eral e□ ergent nati□e trees and tall shru□s are present within this ha□itat type□these □eing to 10 □ in height. Two of the S□ ooth□□arked Apples present were noted to □e hollow□□earing□the locations of these plants are identified on Figure □□whilst their GPS coordinates are:

- HBT1 – E33□021□N□259381 □hollow dia□ eter 20 c□ □
- HBT2 – E33□014□N□2593□□ □hollow dia□ eter 10 c□ □.

Neither hollow□□earing tree will re□uire re□ o□al.

Ad□acent to Gurney Crescent□ any plants that o□er□hang the roadway ha□e □een tri□ □ed and □ aintained.

Du□ ped landfill□this including so□ e construction de□ris□is present within the northern li□ its of this ha□itat type.

No ephe□ eral or per□ anent drainage lines occur within the area in□estigated.

Treat□ ent of the □a□ □oo infestation co□ □ined with the i□ ple□ entation of re□egetation work□would pro□ide resources for nati□e species □i.e. foraging opportunities□that are currently una□aila□le.

□□□□□□ □□**rr□d□r** □□□□□□□

Due to the presence of the □uarry cliff face□connecti□ity in a north to north□easterly direction for ground tra□ersing species is li□ ited. Species tolerant of negotiating ur□an infrastructure and residential areas would □e a□le to tra□erse the area in an easterly direction. De□elop□ ent of the su□□ect site would not present any additional □arriers to the easterly □ o□e□ ent of nati□e species. Flying species would □e a□le to tra□erse the su□□ect site post□de□elop□ ent. As with the surrounding/nearby residential areas that are mapped as 'Supporting Habitat' (Figure 2□□de□elop□ ent of the su□□ect site will not co□ pro□ ise the o□□recti□es of the Connected Corridors for Biodi□ersity initiati□e.

Mo□e□ ent along the Priority Ha□itat corridor that occurs to the west of the su□□ect site would not □e altered □y the scope of work proposed. No □arriers to the □ o□e□ ent patterns of any species that currently tra□erse that corridor linkage would □e erected. The de□elop□ ent of the su□□ect site will not isolate or frag□ ent any ha□itat areas□nor will it ha□e an ad□erse cu□ ulati□e i□ pact when associated with the surrounding residential areas and network of ur□an roads.

The proposed E4 □oned land □this incorporating the re□uired AP□□and retained E2 lands are present along the eastern edge of a Priority Ha□itat corridor □Figure 2□Figure 9□ These portions of the su□□ect site are to □e retained□with weed □ anage□ ent and so□ e light □egetation re□ o□al occurring. The presence of these portions of the su□□ect site will pro□ide □egetation that per□ its the □ o□e□ ent of nati□e species. Treat□ ent of the □a□ □oo infestation and regeneration with ende□ ic nati□e species would also pro□ide foraging opportunities not current a□aila□le within these portions of the su□□ect site.

□□ □□□□□□□

Not to scale: Source: APP Corporation Pty Ltd

□□□□r□ **9**□Location of retained E2 and proposed E4 lands.

The proposed development would not have a significant impact on any ecological communities flora or fauna species of national conservation significance. Therefore it is considered that the proposed action does not require referral to the Federal Minister for the Environment and Energy for further consideration or approval.

2 *Biodiversity Conservation Act 2016*

By the completion of the field investigation no ecological communities flora or fauna species or their populations listed under this Act were recorded within or in close proximity to the subject site. Similarly none including the White-bellied Sea-eagle which was previously observed flying above the subject site were considered likely to occur within or be reliant upon the habitats present.

Considering the assessment criteria provided under Section 3 of the BC Act:

(a) in the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

> As their necessary documented habitats are not present no threatened species were recorded and none are expected to be reliant upon or occur as a resident population within the subject site. There would be no impact upon local populations of threatened species.

(b) in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction,

> No endangered populations are known or likely to use the site.

(c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

- *(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction,*
- *(ii) or is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,*

> Vegetation at the subject site is not a component of any EEC.

(d) in relation to the habitat of a threatened species, population or ecological community:

- *(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed,*
- *(ii) and whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action,*
- *(iii) and the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,*

> No threatened species were recorded and based on the identification of those habitats and vegetation communities present none are considered likely to occur. The establishment of the lots for rezoning will require the removal of 140 m^2 of cleared slashed grassland and the likely under scrubbing of densely weed infested vegetation across the proposed new Lot 3A to establish the APZ is unlikely to fragment or isolate any areas of habitat. The proposal is not considered to impact on any vegetation considered important to the long-term survival of any of the threatened species population or ecological community ies known to be present in the surrounding locality.

(e) whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly),

The site is not listed on the critical ha□itat register.

(f) whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan,

No reco□ery plans or threat a□ate□ent plans are rele□ant to the site.

(g) whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

Clearing of nati□e □egetation is identified as a KTP under Schedule 4 of the BC Act.

That stated, the proposed re□o□al□under scru□□ing of 4900 m^2 of □egetation as part of the proposed new lots and esta□lish□ent of the AP□ would not □e likely to:

□a) ad□ersely affect a threatened species or ecological co□□unities□or
□□) cause a species or ecological co□□unity□ies) that are not threatened to □eco□e threatened.

The proposed de□elop□ent would not □e likely to ha□e a significant effect on any threatened species, population, ecological co□□unities, or their ha□itats listed under the BC Act□as such, the preparation of a BDAR that further considers the i□pacts of the proposal on State significant □atters is not re□uired.

8.3. State – *State Environmental Planning Policy No.44 – Koala Habitat Protection*

Northern Beaches Council is an a□alga□ation of Manly, Pittwater and Warringah Councils, this occurring in May 201□. Of these three councils, Pittwater and Warringah are identified under Schedule 1 - LGAs of SEPP 44. This Policy seeks to encourage the proper conser□ation and □anage□ent of areas that pro□ide ha□itat for Koalas (*Phascolarctos cinereus*).

Within the study area, two eucalypt species were recorded (Appendi□ 3□□neither of which is listed under Schedule 2 of SEPP 44 as a Koala Feed Tree. As such, the su□□ect site would not □e considered Potential or Core Koala ha□itat as defined in the Policy. A Koala Plan of Manage□ent need not acco□pany the de□elop□ent application.

8.4. State – *State Environmental Planning Policy (Coastal Management) 2018*

With reference to the Coastal En□iron□ent Area Map (DP&E 2018), the su□□ect site is not □apped as Coastal Wetlands or Littoral Rainforest.

9. Conclusi□n

A flora and fauna in□estigation has □een carried out out across Lots 4A, 5A, 6 A and 7A DP 1715□, Part of Lot 1 in DP 325□20 and Part of Lot 1 in DP 325□84 Gurney Crescent, Seaforth, NSW. By the co□pletion of the in□estigation, no ecological co□□unities, flora or fauna species, or their populations, listed, or currently □eing considered for listing, under the EPBC or BC Acts were recorded. Si□ilarly, none are e□pected to rely upon the ha□itats proposed to □e distur□ed for any of their necessary or significant lifecycle re□uire□ents.

As the proposal will not have a significant impact on any MNES or State conservation matters referral to the Federal Minister for the Environment and Energy for further consideration or approval would not be necessary. Similarly the preparation of a BDAR that further assesses and considers the scope of work proposed is not required.

The subject site is not considered to constitute Potential or Core Koala habitat. As such the development application need not be accompanied by a Koala Plan of Management.

No wetlands or littoral rainforest are present within the study area as such the proposal is not considered to have an adverse impact on those features items listed under Clauses 10 1 and 11 1 of SEPP Coastal Management 2018.

With adherence to those recommendations provided in this report no ecological constraints to the proposal proceeding as planned were identified or considered likely to occur.

The adoption of those mitigation measures provided would ensure that the proposal is undertaken in an ecologically sustainable manner.

10 Recommendations

Based on the principles of Ecologically Sustainable Development as identified in Schedule 2 of the Environmental Planning and Assessment Regulation the following recommendations are provided:

- No hollow bearing trees should be removed from the proposed APZ area.

- Clearing of native vegetation should be limited to the minimum needed to meet the objectives of the development layout.

- The number of mature trees requiring removal should be limited to the minimum needed to meet the objectives of both the project's development layout and APZ requirements for outer protection areas under Planning for Bushfire Protection.

- A VMP should be developed that includes the removal and treatment of the lantana infestation.
    - a component of the VMP should be the establishment of endemic native species
    - a maintenance schedule which includes the ongoing removal of exotic plants and replacement of any native species that die or exhibit disease should also form a component of the VMP
    - the VMP should be prepared and implemented by a qualified bush regeneration firm
    - the VMP should be prepared in consultation with an engaged project ecologist to ensure the life cycle needs of those native species present or potentially occurring are considered.

- Areas downslope of the proposed development should be regularly monitored bi yearly during and for a period of two years after the establishment of the dwellings to determine if any exotic plants have spread into the adjacent woodland.
    - In these instances weed management measures should be implemented.

- Limits of clearing should be provided to the construction contractor and identified on maps plans and on site through the erection of temporary fencing flagging or similar.

- An ecologist or suitably qualified wildlife contractor should be present on site during the clearing works to collect and relocate any native species primarily ground dwelling animals that are exposed.

- Any animals injured during the clearing work should be collected and taken to a local veterinarian or wildlife carer.

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To□er□MG□Turner□K□Si□pson□C□Keith□DA□Tindall□D□Pennay□C□Si□pson□C□MacKen□ie□B□and Beukers□P 2010□*Native vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands*□*Cunninghamia* 11□3□359□40□

Triggs□B 199□□*Tracks, scats and other traces: a field guide to Australian mammals*□O□ford □ni□ersity Press□Mel□ourne□□ictoria

□an Dyck□S and Strahan□R 2008□*The Mammals of Australia* □3rd edition□□Reed New Holland□ Sydney□NSW

□□□□□ 1□Character of the Cleared□slashed grassed area. Photograph taken looking north across su□□ect site

□□□□□ 2□Character of the Cleared□slashed grassed area. Photograph taken looking north□west across su□□ect site

Plate 3. Character of the disturbed scrub.

Plate 4. Character of the disturbed scrub.

Plate 5 Character of the disturbed scrub.

Plate 6. Character of the disturbed scrub. Photograph taken looking west along Gurney Crescent.

Plate 7. Aerial shot of su□ect site □appro□i□ ate □oundaries shown in yellow) Source: Lesryk 14□05/˙9. Photograph o□tained using an un□anned aerial □ehicle.

□□□□□d□□ 2□Threatened flora and fauna species previously recorded in the study region and their ‘likelihood of occurrence’

□□□

□ □□ulnera□le E □endangered CE □critically endangered M □□igratory Ma □□arine

A State or nationally listed threatened species is considered to ha□e a:

- □□□□ likelihood of occurrence if it has □een recorded within 10 k□ of the study area and there is either suita□le ha□itat present or the potential for the species to fly o□er the site □while species □ay fly o□er□it is acknowledged that for so□ e species no suita□le ha□itat will □e present within the study area□.
- **M□d□r□□□** likelihood of occurrence if they ha□e a predicted occurrence □□ia the EPBC Act Protected Matters Search Tool or OEH geographic search□and there is either suita□le ha□itat present or the potential for the species to fly o□er the site □while species □ay fly o□er□it is acknowledged that for so□ e species no suita□le ha□itat will □e present within the study area□.
- □□□ likelihood of occurrence if suita□le ha□itat for a species is not present regardless of whether they ha□e □een recorded within 10 k□ □or ha□e a predicted occurrence.

Note: Species underlined are those which only the EPBC PMST predicted as ha□ing ha□itat in the search area. All other species ha□e □een recorded within 10 k□ of the study area.

Note: As these ha□itats are not present□no pelagic□estuarine or wetland species ha□e □een considered in the following ta□le.

□□ha□itat re□uire□ ents were generally e□tracted fro□ DEE □2019a□□OEH □2019a□□Harden □1992□2002□□Frith □200□□□Churchill □2008□□Cogger □2014□and □an Dyck and Strahan □2008□with other references used □eing identified in the □i□liography.

[illegible]	[illegible]		[illegible]	[illegible][3]
	[illegible]	[illegible]		
[illegible]				
Bynoe's Wattle *Acacia bynoeana*	[illegible]	E	Occurs in heath or dry sclerophyll forest on sandy soils.	Low. No suitable habitat present.
Downy Wattle *Acacia pubescens*	[illegible]	[illegible]	Occurs in open woodland and forest in a variety of plant communities on characteristically gravelly soils often with ironstone.	Low. No suitable habitat present.
Sunshine Wattle *Acacia terminalis* subsp. *terminalis*	E	E	Restricted to coastal scrub and dry sclerophyll woodland on sandy soils in near-coastal areas from the northern shores of Sydney Harbour south to Botany Bay.	Low. No suitable habitat present.
Allocasuarina glareicola	E	E	Only in woodland of Angophora bakeri and Eucalyptus sclerophylla.	Low. No suitable habitat present.
Allocasuarina portuensis	E	E	Shallow sandy soils in Sydney Harbour National Park.	Low. No suitable habitat present.
Asterolasia elegans	E	E	Restricted to a few gullies in the Wisemans Ferry Area where it grows on lower sheltered slopes.	Low. No suitable habitat present.
Thick-leaf Star-hair *Astrotricha crassifolia*	V	V	Restricted to metapopulations near Gosford and Sutherland.	Low. No suitable habitat present.
Thick-lipped Spider-orchid *Caladenia tessellata*	[illegible]	E	Generally found in grassy sclerophyll woodland on clay loam or sandy soils.	Low. No suitable habitat present.
Netted Bottle Brush *Callistemon linearifolius*		[illegible]	Grows in dry sclerophyll forest on the coast and adjacent ranges.	Low. No suitable habitat present.
Leafless Tongue Orchid *Cryptostylis hunteriana*	[illegible]	[illegible]	Does not appear to have well defined habitat preferences and is known from a range of communities including swamp heath and woodland. Recorded nearby on Red Rocks plateau (Cambewarra Range Nature Reserve (NPWS 2009)	Low. No suitable habitat present.
Darwinia biflora	[illegible]	[illegible]	Heath on sandstone or in the understorey of woodland on shale-capped ridges.	Low. No suitable habitat present.
Camfield's Stringybark *Eucalyptus camfieldii*	V	V	Coastal scrub heath on sandy soils on sandstone often of restricted drainage.	Low. No suitable habitat present.
Narrow-leaved Black Peppermint *Eucalyptus nicholii*	V	V	Grows in dry grassy woodland on shallow and infertile soils mainly on granite.	Low. No suitable habitat present.
Genoplesium baueri		E	Grows in sparse sclerophyll forest and moss gardens over sandstone.	Low. No suitable habitat present.
Caley's Grevillea *Grevillea caleyi*	E	E	Restricted to an 8 km square area around Terrey Hills within open forest generally dominated by *Eucalyptus sieberi* and *E. gummifera*.	Low. No suitable habitat present.
Haloragodendron lucasii	E	E	Restricted to the Hornsby-Gordon area of the northern suburbs of Sydney where it grows in low open woodland or open forest on sheltered aspects and inhabits gentle slopes below cliff lines near	Low. No suitable habitat present.

[3] For the site to support and be important for the lifecycle requirements of a locally viable population of this species.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
			creeks.	
Julian's Hibbertia *Hibbertia spanantha*	CE	CE	Se□erely restricted distri□ution. Grows in forest with canopy species including *Eucalyptus pilularis, E. resinifera, Corymbia gummifera* and *Angophora costata.* The understorey is open with species of Poaceae□ Orchidaceae□Fa□aceae and Liliaceae.	Low. No suita□le ha□itat present.
Kunzea rupestris	V	V	Se□erely restricted distri□ution. Grows in shallow depressions on large flat sandstone rock outcrops.	Low. No suita□le ha□itat present.
Lasiopetalum joyceae	V	V	Woodland and heath on clayey ridge□tops on sandstone.	Low. No suita□le ha□itat present.
Leptospermum deanei	V	V	Forested slopes near watershed of Lane Co□e Ri□er.	Low. No suita□le ha□itat present.
Bicon□e□Paper□ark *Melaleuca biconvexa*	V	V	Scattered and dispersed populations of this species are found in the □er□is Bay and the Gosford□Wyong areas. It occurs in da□p places□ often near strea□s or low□lying areas on allu□ial soils of low slopes or sheltered aspects.	Low. No suita□le ha□itat present.
Deane□s Melaleuca *Melaleuca deanei*	V	V	Woodland on □road flat ridgetops□ dry ridges and slopes on low nutrient soils.	Low. No suita□le ha□itat present.
Micromyrtus blakelyi	V	V	Restricted to areas near the Hawkes□ury Ri□er.	Low. No suita□le ha□itat present.
Microtis angusii	E	E	Known population restricted to ridgetop lateritic soils in the Duffys Forest □Terrey Hills □Ingleside and Belrose areas.	Low. No suita□le ha□itat present.
Hairy Gee□ung *Persoonia hirsuta*	E	E	Woodland and heath on clayey ridge□tops on sandstone.	Low. No suita□le ha□itat present.
Persoonia mollis su□sp. *maxima*	E	E	Highly restricted – Horns□y Heights – Mt Colah area.	Low. No suita□le ha□itat present.
Pimelea curviflora □ar. *curviflora*	V	V	□ndergrowth in woodland on sandstone.	Low. No suita□le ha□itat present.
Spiked Rice□flower *Pimelea spicata*	E	E	On the Cu□ □erland Plain it is associated with Grey Bo□ and Iron□ark on well□structured clay soils. In the Illawarra region□P. spicata is found in open woodland and also in coastal grassland co□ □unities with e□ergent shru□s.	Low. No suita□le ha□itat present.
□illous Mint□□ush *Prostanthera densa*	V	V	Generally grows in sclerophyll forest and shru□land on coastal headlands and near coastal ranges□chiefly on sandstone□and rocky slopes near the sea.	Low. No suita□le ha□itat present.
So□ ers□y Mint□ush *Prostanthera junonis*	E	E	Restricted to the So□ ers□y Plateau□Sydney Town soil landscapes□on sandstone within open forest□low woodland□open scru□.	Low. No suita□le ha□itat present.
Prostanthera marifolia	CE	CE	On ridgetops□ in clay□loa□ soils associated with ironstone and scattered shale lenses around the Duffys Forest area.	Low. No suita□le ha□itat present.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Magenta Lilly Pilly *Syzygium paniculatum*	[illegible]	E	Found only in NSW [illegible] in a narrow [illegible] linear coastal strip fro[illegible] [illegible]pper Lansdowne to Con[illegible]ola State Forest. On the south coast the Magenta Lilly Pilly occurs on grey soils o[illegible]er sandstone [illegible] restricted [illegible]ainly to re[illegible]nant stands of littoral [illegible]coastal [illegible]rainforest.	Low. No suita[illegible]le ha[illegible]itat present.
Tetratheca glandulosa	V	V	Heath and woodland on sandstone.	Low. No suita[illegible]le ha[illegible]itat present.
Triplarina imbricata	E	E	Grows in heath [illegible] often in da[illegible]p places	Low. No suita[illegible]le ha[illegible]itat present.
Zieria involucrata	V	E	Found pri[illegible]arily in sheltered forests on [illegible]id [illegible] to lower slopes and [illegible]alleys [illegible] e.g. in or ad[illegible]acent to gullies which support sheltered forest [illegible] although so[illegible]e populations e[illegible]tend upslope into drier [illegible]egetation. Also known fro[illegible] at least two atypical ridgetop locations.	Low. No suita[illegible]le ha[illegible]itat present.
M[illegible]MM[illegible]				
Spotted [illegible]tailed [illegible]uoll *Dasyurus maculatus*	E	[illegible]	Recorded across a range of ha[illegible]itat types [illegible] including rainforest [illegible] open forest [illegible] woodland [illegible] coastal heath and inland riparian forest [illegible] fro[illegible] the su[illegible]alpine [illegible]one to the coastline.	Low. Targeted [illegible] not recorded No suita[illegible]le ha[illegible]itat present.
Southern Brown Bandicoot *Isoodon obesulus obesulus*	E	E	Generally only found in heath or open forest with a heathy understorey on sandy or fria[illegible]le soils.	Low. Targeted [illegible] not recorded No suita[illegible]le ha[illegible]itat present.
Koala *Phascolarctos cinereus*	[illegible]	[illegible]	Open eucalypt forest and woodland [illegible] containing a variety of 'preferred' food tree species.	Low. No suita[illegible]le ha[illegible]itat present.
Eastern Pyg[illegible]y [illegible]possu[illegible] *Cercartetus nanus*		[illegible]	Found in a [illegible]road range of ha[illegible]itats fro[illegible] rainforest through sclerophyll [illegible]including Bo[illegible]Iron[illegible]ark [illegible] forest and woodland to heath [illegible] [illegible]ut in [illegible]ost areas woodlands and heath appear to [illegible]e preferred [illegible]e[illegible]cept in north [illegible] eastern NSW where they are [illegible]ost fre[illegible]uently encountered in rainforest. Feeds largely on nectar and pollen collected fro[illegible] [illegible]anksias [illegible] eucalypts and [illegible]ottle [illegible]rushes.	Low. No suita[illegible]le ha[illegible]itat present.
Grey [illegible]headed Flying [illegible]fo[illegible] *Pteropus poliocephalus*	[illegible]	[illegible]	Occur in su[illegible]tropical and te[illegible]perate rainforests [illegible] tall sclerophyll forests and woodlands [illegible] heaths and swa[illegible]ps as well as ur[illegible]an gardens and culti[illegible]ated fruit crops.	Moderate. May potentially fly o[illegible]er and forage within the study area [illegible] howe[illegible]er [illegible] this species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.
Yellow [illegible]ellied Sheathtail [illegible]at *Saccolaimus flaviventris*		[illegible]	Roosts singly or in groups of up to si[illegible] in tree hollows and [illegible]uildings [illegible] in treeless areas they are known to utilise [illegible]a[illegible] [illegible]al [illegible]urrows. Forages in [illegible]ost ha[illegible]itats across its [illegible]ery wide range [illegible] with and without trees [illegible] appears to defend an aerial territory.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er [illegible]as no hollow [illegible]earing trees will [illegible]e re[illegible]o[illegible]ed [illegible] this species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Large-eared Pied Bat *Chalinolobus dwyeri*	[illegible]	[illegible]	Ca[illegible]e roosting [illegible]at that forages in ti[illegible]ered woodland and dry sclerophyll forest.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er no ca[illegible]es are present within the area in[illegible]estigated the species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.
Southern Myotis *Myotis macropus*		[illegible]	Generally roost in groups of 10 [illegible]15 close to water in ca[illegible]es [illegible]ine shafts hollow[illegible]earing trees stor[illegible] water channels [illegible]uildings under [illegible]ridges and in dense foliage. Forage o[illegible]er strea[illegible]s and pools catching insects and s[illegible]all fish [illegible]y raking their feet across the water surface.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er as no hollow[illegible]earing trees will [illegible]e re[illegible]o[illegible]ed this species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.
Greater Broad-nosed Bat *Scoteanax rueppellii*		[illegible]	[illegible]tilises a [illegible]ariety of ha[illegible]itats fro[illegible] woodland through to [illegible]oist and dry eucalypt forest and rainforest though it is [illegible]ost co[illegible] only found in tall wet forest. [illegible]sually roosts in tree hollows [illegible]ut also in [illegible]uildings.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er as no hollow[illegible]earing trees will [illegible]e re[illegible]o[illegible]ed this species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.
Little Bentwing[illegible]at *Miniopterus australis*		[illegible]	Generally found in well ti[illegible]ered areas. Roost in ca[illegible]es tunnels tree hollows a[illegible]andoned [illegible]ines stor[illegible] water drains cul[illegible]erts [illegible]ridges and so[illegible]eti[illegible]es [illegible]uildings during the day.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er no ca[illegible]es are present within the area in[illegible]estigated the species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.
Eastern Bentwing[illegible]at *Miniopterus schreibersii oceanensis*		[illegible]	Ca[illegible]es are the pri[illegible]ary roosting ha[illegible]itat [illegible]ut also use derelict [illegible]ines stor[illegible] water tunnels [illegible]uildings and other [illegible]an[illegible]ade structures.	Moderate. May potentially fly o[illegible]er and forage within the study area. Howe[illegible]er no ca[illegible]es are present within the area in[illegible]estigated the species would not [illegible]e reliant on the study area for any of its life cycle re[illegible]uire[illegible]ents.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Eastern Freetail□Bat *Mormopterus norfolkensis*		□	Occur in dry sclerophyll forest□ woodland□ swa□p forests and □angro□e forests east of the Great Di□iding Range. Roost □ainly in tree hollows □ut will also roost under □ark or in □an□□ade structures.	Moderate. May potentially fly o□er and forage within the study area. Howe□er□as no hollow□□earing trees will □e re□ o□ed□this species would not □e reliant on the study area for any of its life cycle re□uire□ ents.
New Holland Mouse *Pseudomys novaehollandiae*	□		Open heathland□open woodland with a heathland understorey and □egetated sand dunes.	Low. Targeted□not recorded No suita□le ha□itat present..
□□**RD**□				
Super□ Fruit□Do□e *Ptilinopus superbus*		□	Inha□its rainforest and si□ilar closed forests where it forages high in the canopy□eating the fruits of □any tree species such as figs and pal□s. It □ay also forage in eucalypt or acacia woodland where there are fruit□□earing trees.	Low. No suita□le ha□itat present.
Wo□poo Fruit□Do□e *Ptilinopus magnificus*		□	Occurs in□or near rainforest□low ele□ation □oist eucalypt forest and □rush □o□forests.	Low. No suita□le ha□itat present.
White□throated Needletail *Hirundapus caudacutus*	M□Ma		Al□ ost e□clusi□ely aerial. Takes insects on wing o□er a range of ha□itat types. Recorded □ost often a□o□e wooded areas□ including open forest and rainforest.	Low. May potentially fly o□er the study area. Howe□er□this species would not □e reliant on the study area for any of its lifecycle re□uire□ ents.
Fork□tailed Swift *Apus pacificus*	M□Ma		Al□ ost e□clusi□ely aerial. Takes insects on wing o□er a range of ha□itat types□□ut also less than 1 □ a□o□e open areas or o□er water. Mostly occur o□er inland plains □ut so□ eti□ es a□o□e foothills or in coastal areas.	Low. May potentially fly o□er study area. Howe□er□this species would not □e reliant on the study area for any of its lifecycle re□uire□ ents.
Cattle Egret *Ardea ibis*	Ma		The Cattle Egret is a co□ □unal □ird that forages □ainly within wet pastures in groups of two to twenty plus. This □ird feeds on a □ariety of insects and□occasionally□s□ all a□uatic ani□ als. The Cattle Egret rests and nests colonially in trees and shru□ that line waterways.	Low. No suita□le ha□itat present.
Great Egret *Ardea alba*	Ma		The Great Egret is a solitary and territorial water□ird that forages within waters that are up to 30 c□ deep. Ths □ird is found throughout Australia in association with lakes□swa□ ps□ri□ers and da□ s. Though listed under the international □igratory □ird agree□ ent□the Great Egret is a sedentary □ird that does not □igrate northwards during the winter □onths. Breeding occurs □etween the □onths of Octo□er and Dece□ □er and March to May□the Great Egret constructs a stick nest within trees at a height of up to 15 □.	Low. No suita□le ha□itat present.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Eastern Reef Egret *Egretta sacra*	Ma		The Eastern Reef Egret is distri□uted throughout coastal Australia e□cept southern □ictoria and Tas□ania □reeding any ti□e of year□□ut □ostly August to April. Occupies coral reefs□tidal flats and rock platfor□s and feeds □ostly on s□all fish and occasionally crustaceans and insects.	Low. No suita□le ha□itat present.
Black Bittern *Ixobrychus flavicollis*		□	Inha□its □oth terrestrial and estuarine wetlands□generally in areas of per□anent water and dense □egetation. Where per□anent water is present□the species □ay occur in flooded grassland□forest□woodland□ rainforest and □angro□es.	Low. No suita□le ha□itat present.
Australasian Bittern *Botaurus poiciloptilus*	E	E	Occupies shallow□□egetated freshwater or □rackish swa□ps□usually do□inated □y tall□dense reed □eds of *Typha* sp.□*Juncus* sp. and *Phragmites* sp. Nests on platfor□s of reeds and rushes□usually □uilt o□er water in dense co□er.	Low. No suita□le ha□itat present.
Glossy I□is *Plegadis falcinellus*	M□Ma		Fresh water □arshes at the edges of lakes and ri□ers□lagoons□flood□ plains□wet □eadows□swa□ps□reser□oirs□sewage ponds□rice□fields and culti□ated areas under irrigation.	Low. No suita□le ha□itat present.
Eastern Osprey *Pandion cristatus*	M□Ma	□	Occur in littoral and coastal ha□itats and terrestrial wetlands of tropical and te□perate Australia and offshore islands.	Low. No suita□le ha□itat present.
S□uare□tailed Kite *Lophoictinia isura*		□	Found in a □ariety of ti□□ered ha□itats including dry woodlands and open forests. Shows a particular preference for ti□□ered watercourses.	Low. No suita□le ha□itat present.
White□□ellied Sea□Eagle *Haliaeetus leucogaster*	Ma	□	Found in coastal ha□itats □especially those close to the sea□shore□and around terrestrial wetlands in tropical and te□perate regions of □ainland Australia.	Low. May potentially fly o□er and forage within the study area□howe□er□ this species would not □e reliant on the study area for any of its life cycle re□uire□ents.
Little Eagle *Hieraaetus morphnoides*		□	Occupies open eucalypt forest□woodland or open woodland. Sheoak or *Acacia* woodlands and riparian woodlands of interior NSW are also used.	Low. May potentially fly o□er and forage within the study area□howe□er□ this species would not □e reliant on the study area for any of its life cycle re□uire□ents.
Glossy Black□cockatoo *Calyptorhynchus lathami*		□	Inha□its eucalypt woodland and feeds al□ost e□clusi□ely on Casuarina fruits.	Low. No suita□le ha□itat present.
Gang□gang Cockatoo *Callocephalon fimbriatum*		□	Prefers tall □ontane forests and woodlands□particularly in hea□ily ti□□ered and □ature wet sclerophyll forests during su□□er□these □eing at higher altitudes. In winter□occurs at lower altitudes in drier□ □ore open eucalypt forests and woodlands□or in dry forest in coastal areas.	Low. No suita□le ha□itat present.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Little Lorikeet *Glossopsitta pusilla*		[illegible]	Forages pri[illegible]arily in the open Eucalypt forest and woodland canopies[illegible] particularly along water courses[illegible] occasionally in Angophoras[illegible] Melaleucas and other tree species[illegible]also riparian ha[illegible]itats are used.	Low. No suita[illegible]le ha[illegible]itat present.
Swift Parrot *Lathamus discolor*	CE	E	Eucalypt forests. When o[illegible]er[illegible]wintering on the [illegible]ainland[illegible]this species is dependent on winter[illegible]flowering eucalypt species.	Low. No suita[illegible]le ha[illegible]itat present.
Tur[illegible]uoise Parrot *Neophema pulchella*		[illegible]	Li[illegible]es on the edges of eucalypt woodland ad[illegible]oining clearings[illegible]ti[illegible] [illegible]ered ridges and creeks in far[illegible]land.	Low. No suita[illegible]le ha[illegible]itat present.
Oriental Cuckoo *Cuculus optatus*	M[illegible]Ma		Inha[illegible]its woodland and open forest[illegible]including frag[illegible]ented re[illegible]nants and partly cleared far[illegible]land.	Low. No suita[illegible]le ha[illegible]itat present.
Powerful Owl *Ninox strenua*		[illegible]	Inha[illegible]its a range of [illegible]egetation types[illegible] fro[illegible] woodland and open sclerophyll forest to tall open wet forest and rainforest.	Low. No suita[illegible]le ha[illegible]itat present.
Barking Owl *Ninox connivens*		[illegible]	Inha[illegible]its woodland and open forest[illegible]including frag[illegible]ented re[illegible]nants and partly cleared far[illegible]land.	Low. No suita[illegible]le ha[illegible]itat present.
Sooty Owl *Tyto tenebricosa*		[illegible]	Occurs in rainforest[illegible]including dry rainforest[illegible]su[illegible]tropical and war[illegible]te[illegible]perate rainforest[illegible]as well as [illegible]oist eucalypt forests.	Low. No suita[illegible]le ha[illegible]itat present.
Regent Honeyeater *Anthochaera phrygia*	CE	CE	Inha[illegible]its dry open forest and woodland. These woodlands ha[illegible]e significantly large nu[illegible]ers of [illegible]ature trees[illegible]high canopy co[illegible]er and a[illegible]undance of [illegible]istletoes.	Low. No suita[illegible]le ha[illegible]itat present.
[illegible]aried Sittella *Daphoenositta chrysoptera*		[illegible]	Inha[illegible]its eucalypt forests and woodlands[illegible]especially those containing rough[illegible]arked species and [illegible]ature s[illegible]ooth[illegible]arked gu[illegible]s with dead [illegible]ranches[illegible]allee and *Acacia* woodland.	Low. No suita[illegible]le ha[illegible]itat present.
Dusky Woodswallow *Artamus cyanopterus cyanopterus*		[illegible]	Pri[illegible]arily inha[illegible]it dry[illegible]open eucalypt forests and woodlands[illegible]including [illegible]allee associations[illegible]with an open or sparse understorey of eucalypt saplings[illegible]acacias and other shru[illegible]s[illegible]and ground[illegible]co[illegible]er of grasses or sedges and fallen woody de[illegible]ris.	Low. No suita[illegible]le ha[illegible]itat present.
Rufous Fantail *Rhipidura rufifrons*	M[illegible]Ma		Mainly inha[illegible]its wet sclerophyll forests[illegible]often in gullies do[illegible]inated [illegible]y eucalypts.	Moderate. Potential ha[illegible]itat present. No indi[illegible]iduals o[illegible]ser[illegible]ed during study.
Satin Flycatcher *Myiagra cyanoleuca*	M[illegible]Ma		Mainly inha[illegible]it eucalypt forests[illegible]often near wetlands or watercourses.	Low. No suita[illegible]le ha[illegible]itat present.
Black[illegible]faced Monarch *Monarcha melanopsis*	M[illegible]Ma		Rainforest and wet eucalypt forest.	Moderate. Potential ha[illegible]itat present. No indi[illegible]iduals o[illegible]ser[illegible]ed during study.
Spectacled Monarch *Monarcha trivirgatus*	M[illegible]Ma		Rainforest[illegible] [illegible]angro[illegible]es and [illegible]oist gloo[illegible]y gullies of dense eucalypt forest.	Low. No suita[illegible]le ha[illegible]itat present.
Scarlet Ro[illegible]in *Petroica boodang*		[illegible]	Li[illegible]es in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shru[illegible]s.	Low. No suita[illegible]le ha[illegible]itat present.

[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]		
Dia□ond Firetail *Stagonopleura guttata*		□	Found in grassy eucalypt woodlands□including Bo□□Gu□ Woodlands and Snow Gu□ *Eucalyptus pauciflora* Woodlands. Also occurs in open forest□ □allee□ Natural Te□perate Grassland□ and in secondary grassland deri□ed fro□ other co□ □unities. Often found in riparian areas □ri□ers and creeks□□and so□eti□es in lightly wooded far□land.	Low. No suita□le ha□itat present.
R□□□□□□□				
Rosen□ergs Goanna *Varanus rosenbergi*		□	Found in heath□open forest and woodland.	Low. No suita□le ha□itat present.
□M□□□□□□				
Giant Burrowing Frog *Heleioporus australiacus*	□	□	Found in heath□woodland and open dry sclerophyll forest on a □ariety of soil types e□cept those that are clay □ased.	Low. No suita□le ha□itat present.
Red□crowned Toadlet *Pseudophryne australis*		□	Occurs in open forests□ □ostly on Hawkes□ury and Narra□een Sandstones.	Low. No suita□le ha□itat present.

[illegible] Flora species recorded during the field investigation

[illegible]
* introduced species
N – weed listed as Priority Weed and/or Schedule 3 and/or WoNS

	[illegible]	[illegible]
[illegible]		
Davalliaceae	*Nephrolepis cordifolia**	Fishbone Fern
[illegible]		
Apocynaceae	*Aruajia hortorum**	Moth Plant
Asteraceae	*Ageratina adenophora* *	Crofton Weed
	Bidens pilosa	Farmer's Friend
	Conyza bonariensis *	Fleabane
Caprifoliaceae	*Lonicera japonica**	Japanese Honeysuckle
Casuarinaceae	*Allocasuarina littoralis*	Black She-Oak
Convolvulaceae	*Ipomoea indica* * N*	Morning Glory
Euphorbiaceae	*Glochidion ferdinandi*	Cheese Tree
Fabaceae: Faboideae	*Trifolium repens* [illegible]	White Clover
Fabaceae: Caesalpinioideae	*Senna pendula var. glabrata*	Cassia
Myrtaceae	*Angophora costata*	Smooth-barked Apple
	Kunzea ambigua	Tick Bush
Oleaceae	*Ligustrum lucidum * N*	Large-leaved Privet
	*Ligustrum sinense * N*	Small-leaved Privet
	Olea europaea subsp. *cuspidata**	African Olive
Pittosporaceae	*Pittosporum undulatum*	Sweet Pittosporum
Plantaginaceae	*Plantago lanceolata**	Plantain
Rosaceae	*Rubus fruticosus* agg. spp. ** N*	Blackberry
	Cotoneaster sp.	
Solanaceae	*Cestrum parqui*	Green Cestrum
Verbenaceae	*Lantana camara*	Lantana
[illegible]		
Asparagaceae	*Asparagus aethiopicus** N	Asparagus 'Fern'
Poaceae	*Andropogon virginicus*	Whisky Grass
	Cortaderia selloana * N* [illegible]	Pampas Grass
	Cynodon dactylon *	Couch
	Paspaul urvillei *Pennisetum clandestinum* * *Phyllostachys aurea*	Vasey Grass Kikuyu Grass Fishpole Bamboo

□□□r□□ □□R□□□rd□

1 □OEH □2019□
2 □Lesryk □2001a□

□□□

A – species listed under the EPBC Act
B – species listed under the BC Act
□ – species is □ulnera□le
E – species is Endangered
C – species is Critically Endangered
F – □igratory Fa□ily listed under the EPBC Act
M – species listed as □igratory listed under the EPBC Act
Ma – species listed as □arine under the EPBC Act
□– indicates introduced species

□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□□ □□□ □	1	2
		□□RD□			
			M□□□□□d□d□□		
		Australian Brush Turkey	*Alectura lathami*	□	
			□□□□□□□□d□□		
		Stu□□le □uail	*Coturnix pectoralis*	□	
		Brown □uail	*Coturnix ypsilophora*	□	
		King □uail	*Coturnix chinensis*	□	
F			□□□□d□□		
		Black Swan	*Cygnus atratus*	□	
		Wandering Whistling□Duck	*Dendrocygna arcuata*	□	
		Plu□ed Whistling□duck	*Dendrocygna eytoni*	□	
		Australian Shelduck	*Tadorna tadornoides*	□	
		Pacific Black Duck	*Anas superciliosa*	□	
		□Mallard	*Anas platyrhynchos*	□	
		Grey Teal	*Anas gracilis*	□	
		Chestnut Teal	*Anas castanea*	□	
		Australasian Sho□eler	*Anas rhynchotis*	□	
		Hardhead	*Aythya australis*	□	
		Australian Wood Duck	*Chenonetta jubata*	□	□
			□□d□□□□□d□d□□		
		Hoary□headed Gre□e	*Poliocephalus poliocephalus*	□	
		Australasian Gre□e	*Tachybaptus novaehollandiae*	□	
			□□□□□ □□d□□		
	□	Super□ Fruit□do□e	*Ptilinopus superbus*	□	
	□	Wo□poo Fruit□do□e	*Ptilinopus magnificus*	□	
		Topknot Pigeon	*Lopholaimus antarcticus*	□	
		White□headed Pigeon	*Columba leucomela*	□	
		□Rock Do□e	*Columba livia*	□	
		□Spotted Do□e	*Streptopelia chinensis*	□	□
		Brown Cuckoo□Do□e	*Macropygia amboinensis*	□	
		Peaceful Do□e	*Geopelia striata*	□	
		Dia□ond Do□e	*Geopelia cuneata*	□	
		Bar□shouldered Do□e	*Geopelia humeralis*	□	
		E□erald Do□e	*Chalocophaps indica*	□	
		Co□□on Bron□ewing	*Phaps chalcoptera*	□	
		Brush Bron□ewing	*Phaps elegans*	□	
		Crested Pigeon	*Ocyphaps lophotes*	□	□
		Wonga Pigeon	*Leucosarcia picata*	□	
			□□d□r□□d□□		
		Tawny Frog□outh	*Podargus strigoides*	□	□

□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□ □□□ □	1	2
			□□r□□□□□□d□d□□		
		White□throated Night□ar	*Eurostopodus mystacalis*	□	
			□□□□□□□□□d□□		
		Australian Owlet□night□ar	*Aegotheles cristatus*	□	
			□□□d□d□□		
M□Ma		White□throated Needletail	*Hirundapus caudacutus*	□	
M□Ma		Fork□tailed Swift	*Apus affinis*	□	
			□□□□□□r□□□r□□d□□		
		Great Cor□ orant	*Phalacrocorax carbo*	□	
		Pied Cor□ orant	*Phalacrocorax varius*	□	
		Little Pied Cor□ orant	*Phalacrocorax melanoleucos*	□	
		Little Black Cor□ orant	*Phalacrocorax sulcirostris*	□	
			□□□□□□□□d□□		
		Australian Pelican	*Pelecanus conspicillatus*	□	□
			□rd□□d□□		
		White□necked Heron	*Ardea pacifica*	□	
		White□faced Heron	*Egretta novaehollandiae*	□	□
Ma		Cattle Egret	*Ardea ibis*	□	
Ma		Great Egret	*Ardea alba*	□	
		Inter□ ediate Egret	*Egretta intermedia*	□	
Ma		Eastern Reef Egret	*Egretta sacra*	□	
		Striated Heron	*Butorides striatus*	□	
		Nankeen Night Heron	*Nycticorax caledonicus*	□	
	□	Black Bittern	*Ixobrychus flavicollis*	□	
E	E	Australasian Bittern	*Botaurus poiciloptilus*	□	
			□□r□□□□□r□□d□□		
M□Ma		Glossy I□is	*Plegadis falcinellus*	□	
		Australian White I□is	*Threskiornis molucca*	□	
		Straw□necked I□is	*Threskiornis spinicollis*	□	
		Royal Spoon□ill	*Platalea regia*	□	
F			□□□□□□□rd□□		
		Pacific Ba□a	*Aviceda subcristata*	□	
		Black□shouldered Kite	*Elanus axillaris*	□	
M□Ma	□	Eastern Osprey	*Pandion haliaetus*	□	
	□	S□uare□tailed Kite	*Lophoictinia isura*	□	
		Black Kite	*Milvus migrans*	□	
		Whistling Kite	*Haliastur sphenurus*	□	
Ma	□	White□□ellied Sea□eagle	*Haliaeetus leucogaster*	□	
		Wedge□tailed Eagle	*Aquila audax*	□	
	□	Little Eagle	*Hieraaetus morphnoides*	□	
		Brown Goshawk	*Accipiter fasciatus*	□	
		Grey Goshawk	*Accipiter novaehollandiae*	□	
		Collared Sparrowhawk	*Accipiter cirrhocephalus*	□	
		Swa□ p Harrier	*Circus approximans*	□	
F			□□□□□□□d□□		
		Peregrine Falcon	*Falco pergrinus*	□	
		Brown Falcon	*Falco berigora*	□	
		Australian Ho□□y	*Falco longipennis*	□	
		Nankeen Kestrel	*Falco cenchroides*	□	
			R□□□d□□		
		Buff□□anded Rail	*Gallirallus phillippensis*	□	
		Lewin□s Rail	*Rallus pectoralis*	□	
		Australian Spotted Crake	*Porzana fluminea*	□	
		Spotless Crake	*Porzana tabuensis*	□	
		Dusky Moorhen	*Gallinula tenebrosa*	□	
		Purple Swa□ phen	*Porphyrio porphyrio*	□	
		Eurasian Coot	*Fulica atra*	□	

□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□ □□□ □	1	2
F			□□□r□dr□d□□		
		Masked Lapwing	*Vanellus miles*	□	
			□□r□□□d□□		
		Painted Button□□uail	*Turnix varia*	□	
		Red□chested Button□□uail	*Turnix pyrrhothorax*	□	
			□□r□d□□		
		Sil□er Gull	*Larus novaehollandiae*	□	
		Kelp Gull	*Larus dominicanus*	□	
			□□□□□□□d□□		
	□	Glossy Black□Cockatoo	*Calyptorhynchus lathami*	□	
		Yellow□tailed Black Cockatoo	*Calyptorhynchus funereus*	□	
	□	Gang□gang Cockatoo	*Callocephalon fimbriatum*	□	
		Galah	*Eolophus roseicpilla*	□	
		Long□□illed Corella	*Cacatua tenuirostris*	□	
		Little Corella	*Cacatua sanguinea*	□	
		Sulphur□crested Cockatoo	*Cacctua galerita*	□	
		Cockatiel	*Nymphicus hollandicus*	□	
			□□□□□□□□d□□		
		Rain□ow Lorikeet	*Trichoglossus haematodus*	□	□
		Scaly□□reasted Lorikeet	*Trichoglossus chlorolepidotus*	□	
		Musk Lorikeet	*Glossopsitta concinna*	□	
	□	Little Lorikeet	*Glossopsitta pusilla*	□	
		Australian King Parrot	*Alisterus scapularis*	□	
		Red□winged Parrot	*Aprosmictus erythropterus*	□	
		Budgerigar	*Melopsittacus undulatus*	□	
C□Ma	E	Swift Parrot	*Lathamus discolor*	□	
		Cri□ son Rosella	*Platycercus elegans*	□	
		Eastern Rosella	*Platycercus eximius*	□	□
		Pale□headed Rosella	*Platycercus adscitus*	□	
		Australian Ringneck	*Barnardius zonarius*	□	
	□	Tur□uoise Parrot	*Neophema pulchella*	□	
			□□□□□□d□□		
M□Ma		Oriental Cuckoo	*Culculus optatus*	□	
		Pallid Cuckoo	*Cacomantis pallidus*	□	
		Brush Cuckoo	*Cacomantis variolosus*	□	
		Fan□tailed Cuckoo	*Cacomantis flabelliformis*	□	
		Horsfield□s Bron□e□Cuckoo	*Chrysococcyx basalis*	□	
		Shining Bron□e□Cuckoo	*Chrysococcyx lucidus*	□	
		Eastern Koel	*Eudynamys scopopacea*	□	
		Channel□□illed Cuckoo	*Scythrops novaehollandiae*	□	
		Pheasant Coucal	*Centropus phasianinus*	□	
			□□r□□□d□□		
	□	Powerful Owl	*Ninox strenua*	□	
		Southern Boo□ook	*Ninox novaeseelandiae*	□	
	□	Barking Owl	*Ninox connivens*	□	
			□□□□□□d□□		
	□	Sooty Owl	*Tyto tenebricosa*	□	
		Eastern Barn Owl	*Tyto javanica*	□	
			□□□□d□□□d□□		
		A□ure Kingfisher	*Ceyx azureus*	□	
			□□□□□□□□d□□		
		Laughing Kooka□urra	*Dacelo naxaeguineae*	□	□
		Sacred Kingfisher	*Todiramphus sanctus*	□	
		Forest Kingfisher	*Todiramphus macleayii*	□	
			□□r□□□□d□□		
		Dollar□ird	*Eurystomus orientalis*	□	
			□□□□d□□		

□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□ □□□ □	1	2
		Noisy Pitta	*Pitta versicolor*	□	
			M□□□r□d□□		
		Super□Lyre□ird	*Menura novaehollandiae*	□	
			□□□□ □□□□r□d□□		
		White□throated Treecreeper	*Cormobates leucophaea*	□	
			□□□□□□r□□□□□d□□		
		Satin Bower□ird	*Ptilonorhychus violaceus*	□	
			M□□□r□d□□		
		Super□Fairy□wren	*Malurus cyaneus*	□	□
		□ariegated Fairy□wren	*Malurus lamberti*	□	
			□□□□□□□□d□□		
		Rockwar□ler	*Origma solitaria*	□	
		Large□□illed Scru□wren	*Sericornis magnirostra*	□	
		White□□rowed Scru□wren	*Sericornis frontalis*	□	□
		Yellow□throated Scru□wren	*Sericornis citreogularis*	□	
		Chestnut□ru□ped Heathwren	*Hylacola pyrrhopygia*	□	
		White□throated Gerygone	*Gerygone olivacea*	□	
		Brown Gerygone	*Gerygone mouki*	□	
		Brown Thorn□ill	*Acanthiza pusilla*	□	□
		Buff□ru□ped Thorn□ill	*Acanthiza reguloides*	□	
		Yellow Thorn□ill	*Acanthiza nana*	□	
		Striated Thorn□ill	*Acanthiza lineata*	□	
		Yellow□ru□ped Thorn□ill	*Acanthiza chrysorrhoa*	□	
		□nidentified Thorn□ill	*Acanthiza sp.*	□	
			□□**rd**□□□□□**d**□□		
		Spotted Pardalote	*Pardalotus punctatus*	□	□
		Striated Pardalote	*Pardalotus striatus*	□	
		□nidentified Pardalote	*Pardalotus sp.*	□	
			M□□□□□□□d□□		
		Red Wattle□ird	*Anthochaera carunculata*	□	□
		Little □Brush□Wattle□ird	*Anthochaera chrysoptera*	□	
		□nidentified Wattle□ird	*Anthochaera sp*	□	
		Spiny□cheeked Honeyeater	*Acanthagenys rufogularis*	□	
		Noisy Friar□ird	*Philemon corniculatus*	□	
		Noisy Miner	*Manorina melanocephala*	□	□
C	C	Regent Honeyeater	*Anthochaera phrygia*	□	
		Lewin□s Honeyeater	*Meliphaga lewinii*	□	
		Yellow□faced Honeyeater	*Lichenostomus chrysops*	□	
		White□eared Honeyeater	*Lichenostomus leucotis*	□	
		Yellow□tufted Honeyeater	*Lichenostomus melanops*	□	
		Fuscous Honeyeater	*Lichenostomus fuscus*	□	
		Brown□headed Honeyeater	*Melithreptus brevirostris*	□	
		White□naped Honeyeater	*Melithreptus lunatus*	□	
		White□cheeked Honeyeater	*Phylidonyris nigra*	□	
		White□plu□ed Honeyeater	*Lichenostomus pencillatus*	□	
		New Holland Honeyeater	*Phylidonryis novaehollandiae*	□	
		Tawny□crowned Honeyeater	*Phylidonryis melanops*	□	
		Eastern Spine□ill	*Acanthorhynchus tenuirostris*	□	
		Scarlet Honeyeater	*Myzomela sanguinolenta*	□	
			□**r**□□□□□□□□**d**□□		
		Eastern Whip□ird	*Psophodes olivaceus*	□	□
			□□□□□□□□**d**□□		
	□	□aried Sittella	*Daphoenositta chrysoptera*	□	
			□□□ □□□□□□□**d**□□		
		Black□faced Cuckoo□shrike	*Coracina novaehollandiae*	□	□
		White□□ellied Cuckoo□shrike	*Coracina papuensis*	□	
		□aried Triller	*Lalage leucomela*	□	

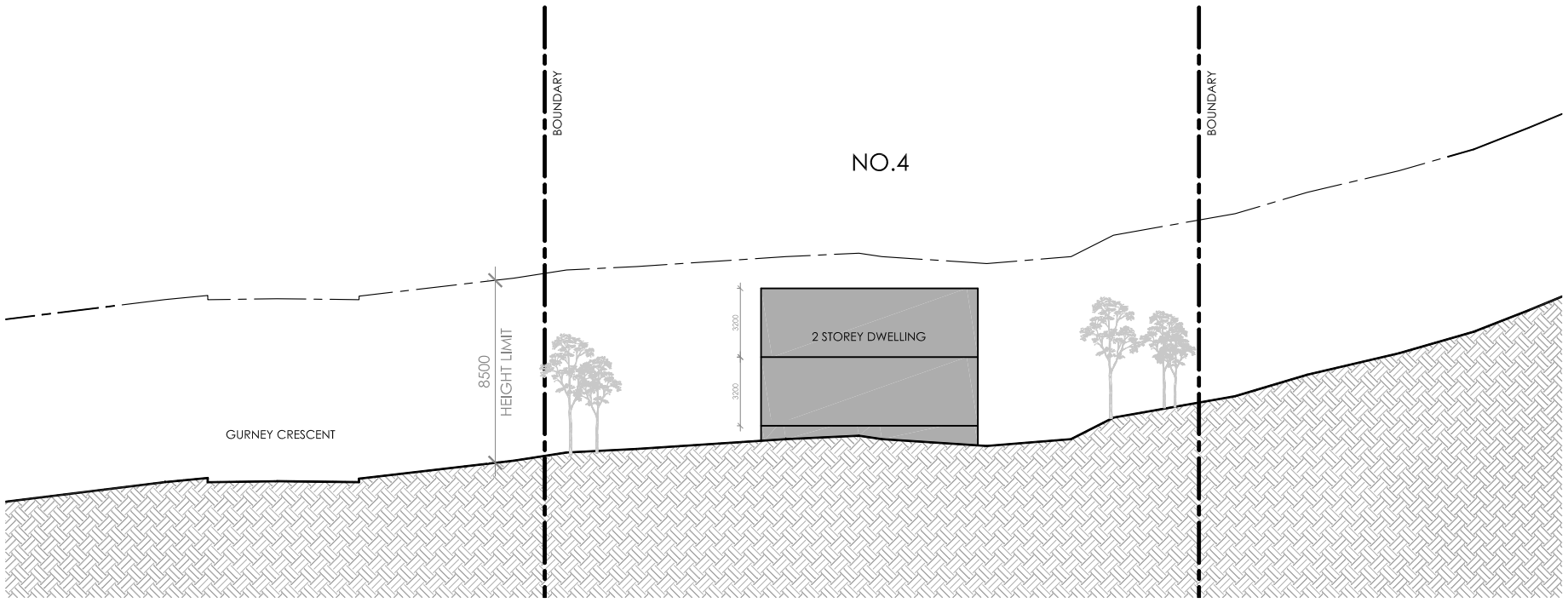
□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□ □□□ □	1	2
			□□□□□□□□□□□□d□□		
		Crested Shrike□tit	*Falcunculus frontatus*	□	
		Grey Shrike□thrush	*Colluricincla harmonica*	□	
		Golden Whistler	*Pachycephala pectoralis*	□	
		Rufous Whistler	*Pachycephala rufiventris*	□	
			□r□□□□d□□		
		Oli□e□□acked Oriole	*Oriolus sagittatus*	□	
		Australasian Fig□ird	*Sphecotheres vieilloti*	□	
			□r□□□ □d□□		
		White□□rowed Woodswallow	*Artamus superciliosus*	□	
		Masked Woodswallow	*Artamus personatus*	□	
	□	Dusky Woodswallow	*Artamus cyanopterus*	□	
		Grey Butcher□ird	*Cracticus torquatus*	□	□
		Pied Butcher□ird	*Cracticus nigrogularis*	□	
		Australian Magpie	*Gymnorhina tibicen*	□	□
		Pied Currawong	*Strepera graculina*	□	□
			D□□r□r□d□□		
		Spangled Drongo	*Dicrurus bracteatus*	□	
			R□□□□d□r□d□□		
		Grey Fantail	*Rhipidura fuliginosa*	□	□
M□Ma		Rufous Fantail	*Rhipidura rufifrons*	□	
		Willie Wagtail	*Rhipidura leucophrys*	□	
			□□r□□d□□		
		Australian Ra□en	*Corvus coronoides*	□	□
		Little Ra□en	*Corvus mellori*	□	
			M□□□r□□□d□□		
		Leaden Flycatcher	*Myiagra rubecula*	□	
M□Ma		Satin Flycatcher	*Myiagra cyanoleuca*	□	
		Restless Flycatcher	*Myiagra inquieta*	□	
M□Ma		Black□faced Monarch	*Monarcha melanopsis*	□	
M□Ma		Spectacled Monarch	*Symposiarchus trivirgatus*	□	
		Magpie Lark	*Grallina cyanoleuca*	□	□
			□□r□□r□□□d□□		
		White□winged Chough	*Corcorax melanorhamphos*	□	
			□□r□□□□d□□		
		Rose Ro□in	*Petroica rosea*	□	
	□	Scarlet Ro□in	*Petroica multicolor*	□	
		Eastern Yellow Ro□in	*Eopsaltria australis*	□	
		□acky Winter	*Microeca fascinans*	□	
			□□□□d□d□□		
		□Eurasian Skylark	*Alauda arvensis*	□	
F			□□□□□□□□d□□		
		Golden□headed Cisticola	*Cisticola exilis*	□	
F			M□□□□□r□d□□		
		Rufous Songlark	*Cincloramphus mathewsi*	□	
		Tawny Grass□ird	*Megalurus timoriensis*	□	
			□□□ □□□d□□		
		Sil□ereye	*Zosterops lateralis*	□	
			□r□□d□□□d□□		
		Welco□ e Swallow	*Hirundo neoxena*	□	□
		Tree Martin	*Petrochelidon nigricans*	□	
			□□□□□□□□d□□		
		□Red□whiskered Bul□ul	*Pycnonotus jocosus*	□	□
F			□□rd□d□□		
		Bassian Thrush	*Zoothera lunulata*	□	
		Russet□tailed Thrush	*Zoothera heinei*	□	
			□□□r□d□□		

□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□ □□□ □	1	2
		□Co□ □on Starling	*Sturnus vulgaris*	□	
		□Co□ □on Myna	*Acridotheres tristis*	□	□
			□□□□r□□□d□□		
		Mistletoe□ird	*Dicaeum hirundinaceum*	□	
			□□r□□d□d□□		
		Dou□le□□arred Finch	*Taeniopygia bichenovii*	□	
		□e□ra Finch	*Taeniopygia guttata*	□	
		Red□□rowed Finch	*Neochmia temporalis*	□	
	□	Dia□ond Firetail	*Stagonopleura guttata*	□	
		□Nut□eg Mannikin	*Lonchura puntulata*	□	
			□□□□□r□d□□		
		□House Sparrow	*Passer domesticus*	□	
			M□□□□□□d□□		
		Australasian Pipit	*Anthus naovaeseelandiae*	□	
			□r□□□□□d□□		
		□European Goldfinch	*Carduelis carduelis*	□	
		M□MM□□□			
			□□□□□□□□□d□□		
		Short□□eaked Echidna	*Tachyglossus aculeatus*	□	
			D□□□□r□d□□		
		Yellow□footed Antechinus	*Antechinus flavipes*	□	
		Brown Antechinus	*Antechinus stuartii*	□	
E	□	Spotted□tailed □uoll	*Dasyurus maculatus*	□	
			□□r□□ □□d□□		
E	E	Southern Brown Bandicoot	*Isoodon obesulus*	□	
		Long□nosed Bandicoot	*Perameles nasuta*	□	
			□□□□□□□□r□□d□□		
□	□	Koala	*Phascolarctos cinereus*	□	
			□□rr□□ □d□□		
	□	Eastern Pyg□y□possu□	*Cercartetus nanus*	□	
			□□□□□r□d□□		
		Sugar Glider	*Petaurus breviceps*	□	
			□□□□d□□□□r□d□□		
		Co□ □on Ringtail Possu□	*Pseudocheirus peregrinus*	□	□
			□□r□□□□d□□		
		Feathertail Glider	*Acrobates pygmaeus*	□	
			□□□□□□□□r□d□□		
		Co□ □on Brushtail Possu□	*Trichosurus vulpecula*	□	□
			M□□r□□□d□d□□		
		Swa□p Walla□y	*Wallabia bicolor*	□	
			□□r□□□d□d□□		
		Black Flying Fo□	*Pteropus alecto*	□	
□	□	Grey□headed Flying□fo□	*Pteropus poliocephalus*	□	
		Little Red Flying□fo□	*Pteropus scapulatus*	□	
			□□ □□□□□□r□d□□		
	□	Yellow□□ellied Sheathtail□□at	*Saccolaimus flaviventris*	□	
			R□□□□□□□d□□		
		Eastern Horseshoe Bat	*Rhinolophus megaphyllus*	□	
			□□□□□r□□□□d□□		
□	□	Large□eared Pied Bat	*Chalinolobus dwyeri*	□	
		Gould's Wattled Bat	*Chalinolobus gouldii*	□	
		Chocolate Wattled Bat	*Chalinolobus morio*	□	
	□	Southern Myotis	*Myotis macropus*	□	
		Lesser Long□eared Bat	*Nyctophilus geoffroyi*	□	
	□	Greater Broad□nosed Bat	*Scoteanax rueppellii*	□	
		Large Forest Bat	*Vespadelus darlingtoni*	□	
		Eastern Forest Bat	*Vespadelus pumilus*	□	

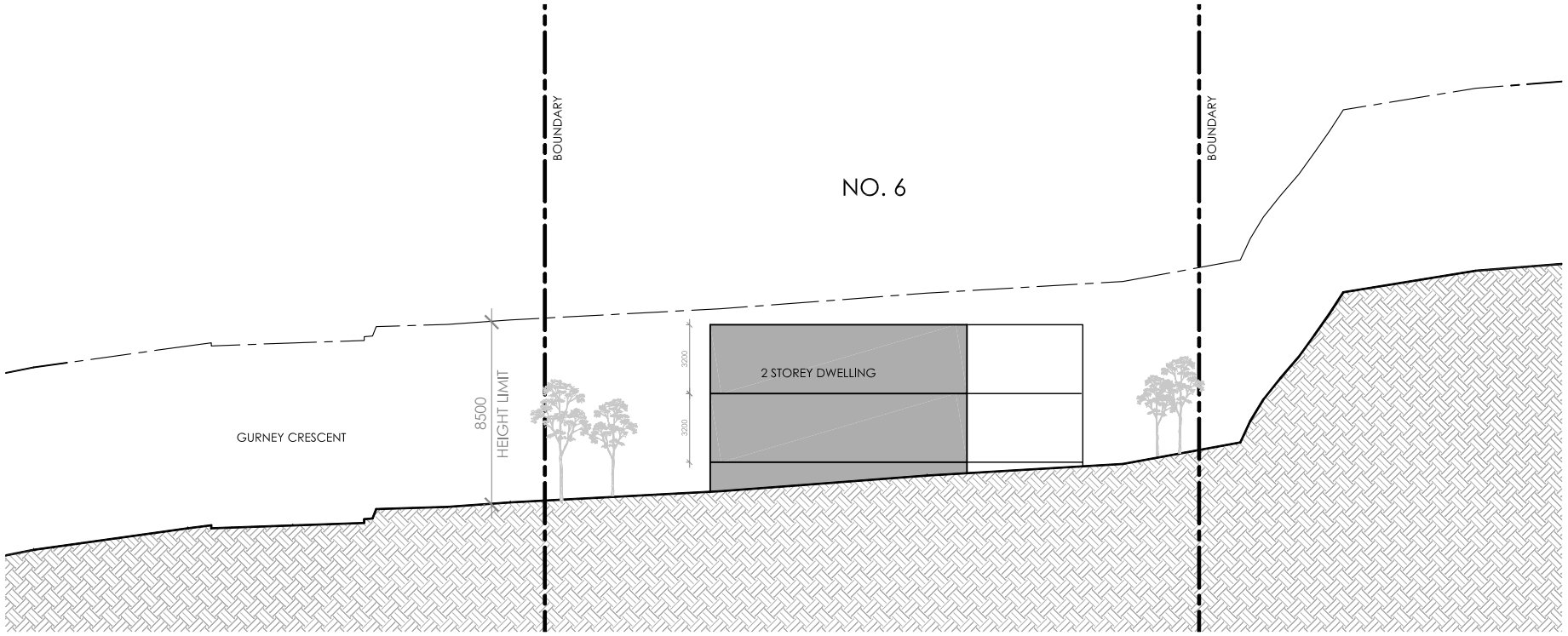
□	□	□□□ □ □□ □□□ □	□□□ □□□ □□d □□□□□□□□□□ □□□ □	1	2
		Little Forest Bat	*Vespadelus vulturnus*	□	
			M□□□□□□r□d□□		
	□	Little Bentwing□□at	*Miniopterus australis*	□	
	□	Eastern Bentwing□□at	*Miniopterus schreibersii oceanensis*	□	
			M□□□□□d□□		
		White□striped Freetail Bat	*Austronomus australis*	□	
	□	Eastern Freetail□□at	*Micronomus norfolkensis*	□	
		Eastern Freetail Bat	*Mormopterus ridei*	□	
			M□r□d□□		
□		New Holland Mouse	*Pseudomys novaehollandiae*	□	
		□House Mouse	*Mus musculus*	□	
		Bush Rat	*Rattus fuscipes*	□	
		Swa□p Rat	*Rattus lutreolus*	□	
		□Brown Rat	*Rattus norvegicus*	□	
		□Black Rat	*Rattus rattus*	□	
			□□□□**d**□□		
		□Feral Cat	*Felis catus*	□	
			□□□□**d**□□		
		□Fo□	*Vulpes vulpes*	□	□
		□Dog	*Canis familiaris*	□	□
			□□□□**r□d**□□		
		□Ra□□it	*Oryctolagus cuniculus*	□	
		□Brown Hare	*Lepus capensis*	□	
		R□□□□□□□			
			□□□□□**d**□□		
		Eastern Snake□necked Turtle	*Chelodina longicollis*	□	
			□□**r**□□□**d**□□□□□**d**□□		
		Broad□tailed Gecko	*Phyllurus platurus*	□	
		Thick□tailed Gecko	*Underwoodisaurus milii*	□	
			D□□□□d□□□□□d□□		
		Lesueur's Velvet Gecko	*Amalosia lesueurii*	□	
		Wood Gecko	*Diplodactylus vittatus*	□	
		Southern Spiny□tailed Gecko	*Strophurus intermedius*	□	□
			□□□□□□**d□d**□□		
		Burton's Snake□li□ard	*Lialis burtonis*	□	
		Co□ □on Scaly□foot	*Pygopus lepidopodus*	□	
			□□□□□**d**□□		
		Red□throated Skink	*Acritoscincus platynotus*	□	
		Wall Skink	*Cryptoblepharus virgatus*	□	
		Ro□ust Ctenotus	*Ctenotus robustus*	□	
		Copper□tailed Skink	*Ctenotus taeniolatus*	□	
		Mainland she□oak skink	*Cyclodomorphus michaeli*	□	
		Cunningham's Skink	*Egernia cunninghami*	□	
		Eastern Water Skink	*Eulamprus quoyii*	□	
		Grass Skink	*Lampropholis delicata*	□	
		Garden Skink	*Lampropholis guichenoti*	□	□
		Eastern Blue□tongued Li□ard	*Tiliqua scincoides*	□	
		Three□toed Skink	*Saiphos equalis*	□	
		Weasel Skink	*Saproscincus mustelinus*	□	
		Rain□ow Litter Skink	*Lygisaurus foliorum*	□	
			□□□□ □**d**□□		
		□acky Li□ard	*Amphibolurus muricatus*	□	
		Eastern Water Dragon	*Physignathus lesueurii*	□	
		Bearded Dragon	*Pogona barbata*	□	
			□□**r**□□□**d**□□		
		Gould's Goanna or Sand Monitor	*Varanus gouldii*	□	
	□	Rosenberg's Goanna	*Varanus rosenbergi*	□	

				1	2
		Lace Monitor	*Varanus varius*		
		Blackish Blind snake	*Ramphotyphlops nigrescens*		
		Carpet python	*Morelia spilota*		
		Brown Tree Snake	*Boiga irregularis*		
		Co on Tree Snake	*Dendrelaphis punctulata*		
		Golden crowned Snake	*Cacophis squamulosus*		
		Eastern S all eyed Snake	*Cryptophis nigrescens*		
		Yellow faced whipsnake	*Demansia psammophis*		
		Red naped Snake	*Furina diadema*		
		Marsh snake	*Hemiaspis signata*		
		Eastern Tiger Snake	*Notechis scutatus*		
		Red ellied Black Snake	*Pseudechis porphyriacus*		
		Eastern Brown Snake	*Pseudonaja textilis*		
		Bandy Bandy	*Vermicella annulata*		
		M			
		Tusked Frog	*Adelotus brevis*		
		Giant Burrowing Frog	*Heleioporus australiacus*		
		Eastern Ban o Frog	*Limnodynastes dumerilii*		
		Brown striped Frog	*Limnodynastes peronii*		
		Spotted Grass Frog	*Limnodynastes tasmaniensis*		
		Ornate Burrowing Frog	*Platyplectrum ornatum*		
			M		
		Co on Eastern Froglet	*Crinia signifera*		
		Haswell's Frog	*Paracrinia haswelli*		
		Red crowned Toadlet	*Pseudophryne australis*		
		Brown Toadlet	*Pseudophryne bibronii*		
		Green Tree Frog	*Litoria caerulea*		
		Bleating Tree Frog	*Litoria dentata*		
		Eastern Dwarf Tree Frog	*Litoria fallax*		
		Rocket Frog	*Litoria nasuta*		
		Peron's Tree Frog	*Litoria peronii*		
		Leaf Green Tree Frog	*Litoria phyllochroa*		
		erreau s Tree Frog	*Litoria verreauxii verreauxii*		

Appendix D. Concept Plans



SECTION AA



SECTION AA

IMPORTANT NOTES:
Do not scale from drawings, use figured dimensions only. Ensure that the drawings used carry the latest revision no. Read in conjunction with consultant engineers drawings - refer contract drawing list.

- All dimensions to be checked on site before commencement of work.
- All discrepancies to be brought to the attention of the Architect.
- Larger scale drawings and written dimensions take precedence.
- The Estuarine Planning Level is min 3.1m AHD. All levels to AHD.

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REV	DATE	DESCRIPTION	BY
A	14/05/19	PRELIMINARY	FB/BG

REVISION NOTES
-

CLIENT DETAILS
-

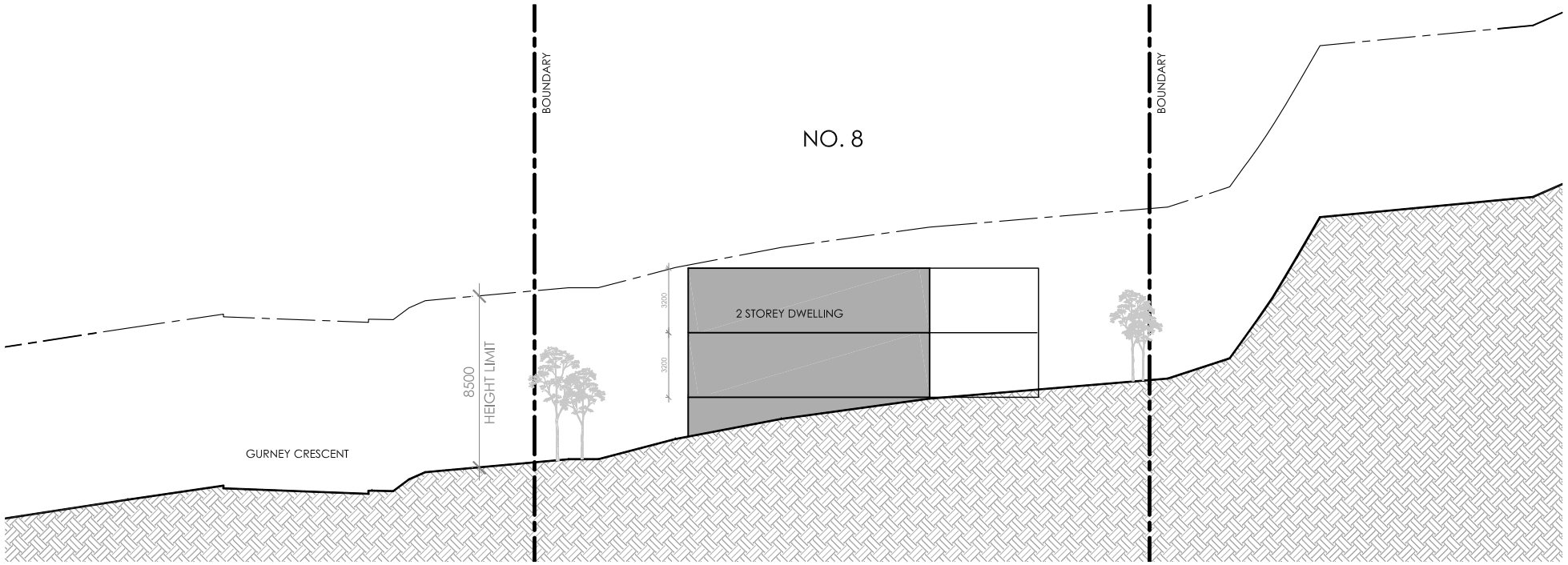
platform ARCHITECTS
Suite 503, 39 East Esplanade Manly 2095
p. 02 9976 6666 abn. 74602856157
nominated architect Blake Gough Reg No. 8280

PROJECT DETAILS
PLANNING PROPOSAL FOR REZONING

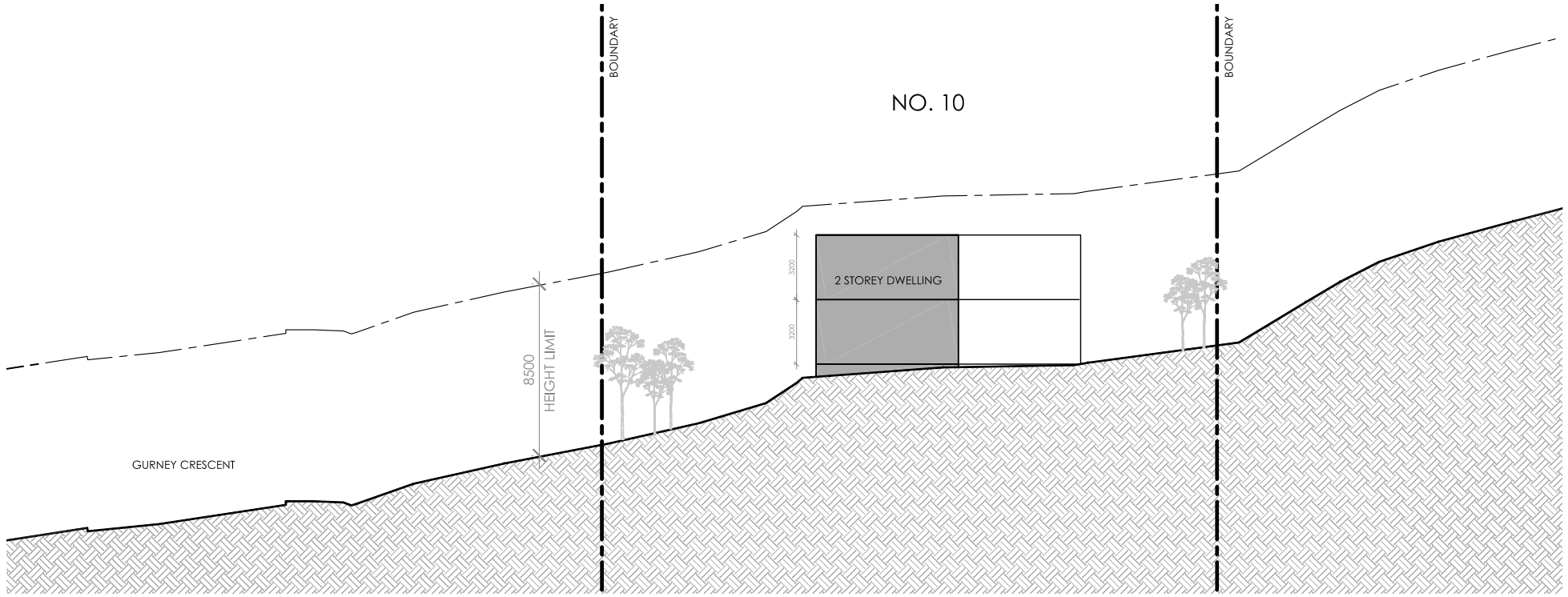
DRAWING TITLE
SECTIONS AA & BB

PROJECT
DHS

SCALE	STATUS	NUMBER	REVISION
1:300 @A3	PP	03	A



SECTION CC



SECTION DD

IMPORTANT NOTES:
Do not scale from drawings, use figured dimensions only. Ensure that the drawings used carry the latest revision no. Read in conjunction with consultant engineers drawings - refer contract drawing list.

- All dimensions to be checked on site before commencement of work.
- All discrepancies to be brought to the attention of the Architect.
- Larger scale drawings and written dimensions take precedence.
- The Estuarine Planning Level is min 3.1m AHD. All levels to AHD.

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REV	DATE	DESCRIPTION	BY
A	14/05/19	PRELIMINARY	FB/BG

REVISION NOTES
-

CLIENT DETAILS
-

platform ARCHITECTS
Suite 503, 39 East Esplanade Manly 2095
p. 02 9976 6666 abn. 74602856157
nominated architect Blake Gough Reg No. 8280

PROJECT DETAILS
PLANNING PROPOSAL FOR REZONING

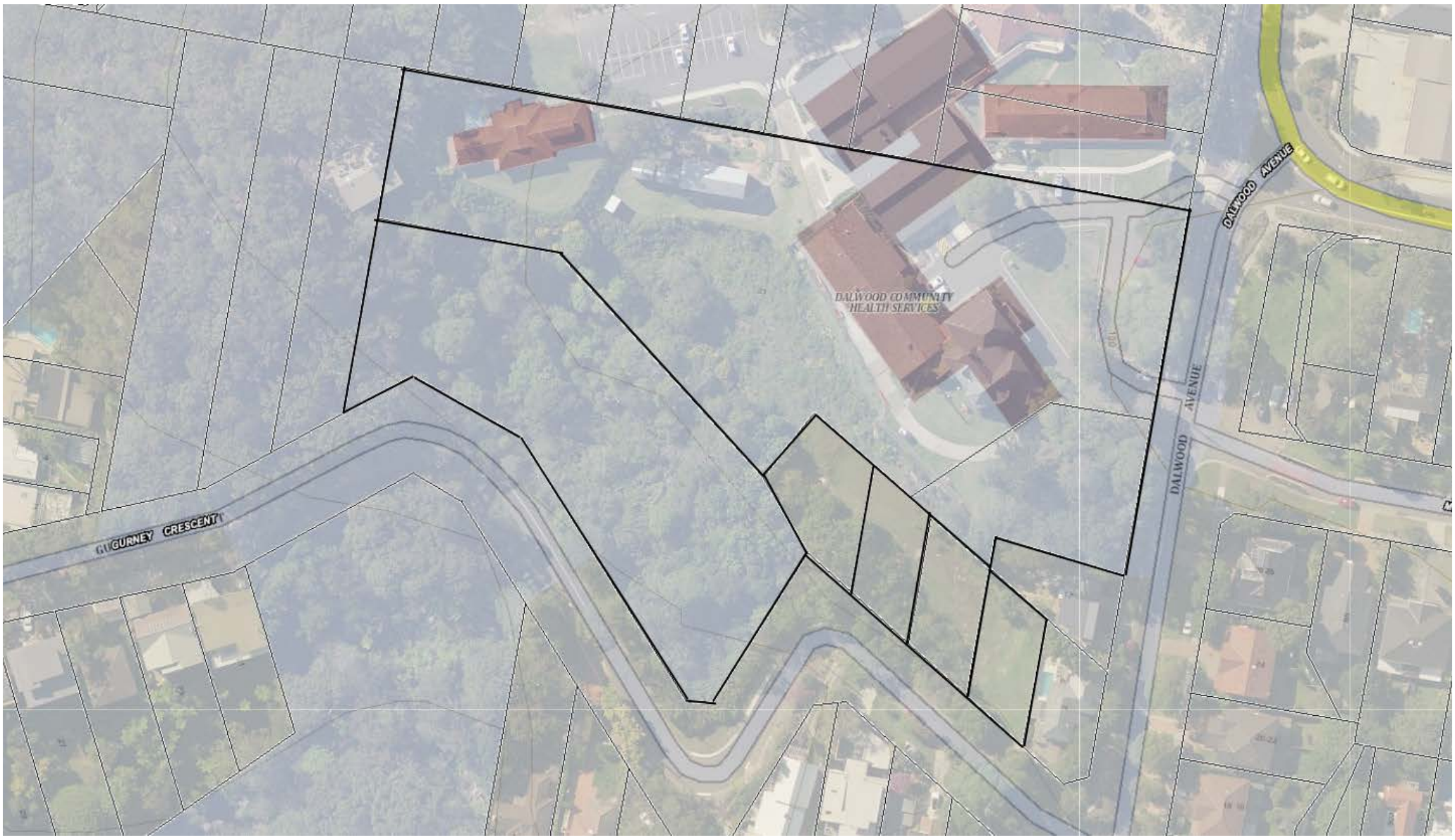
DRAWING TITLE
SECTIONS CC & DD

PROJECT
DHS

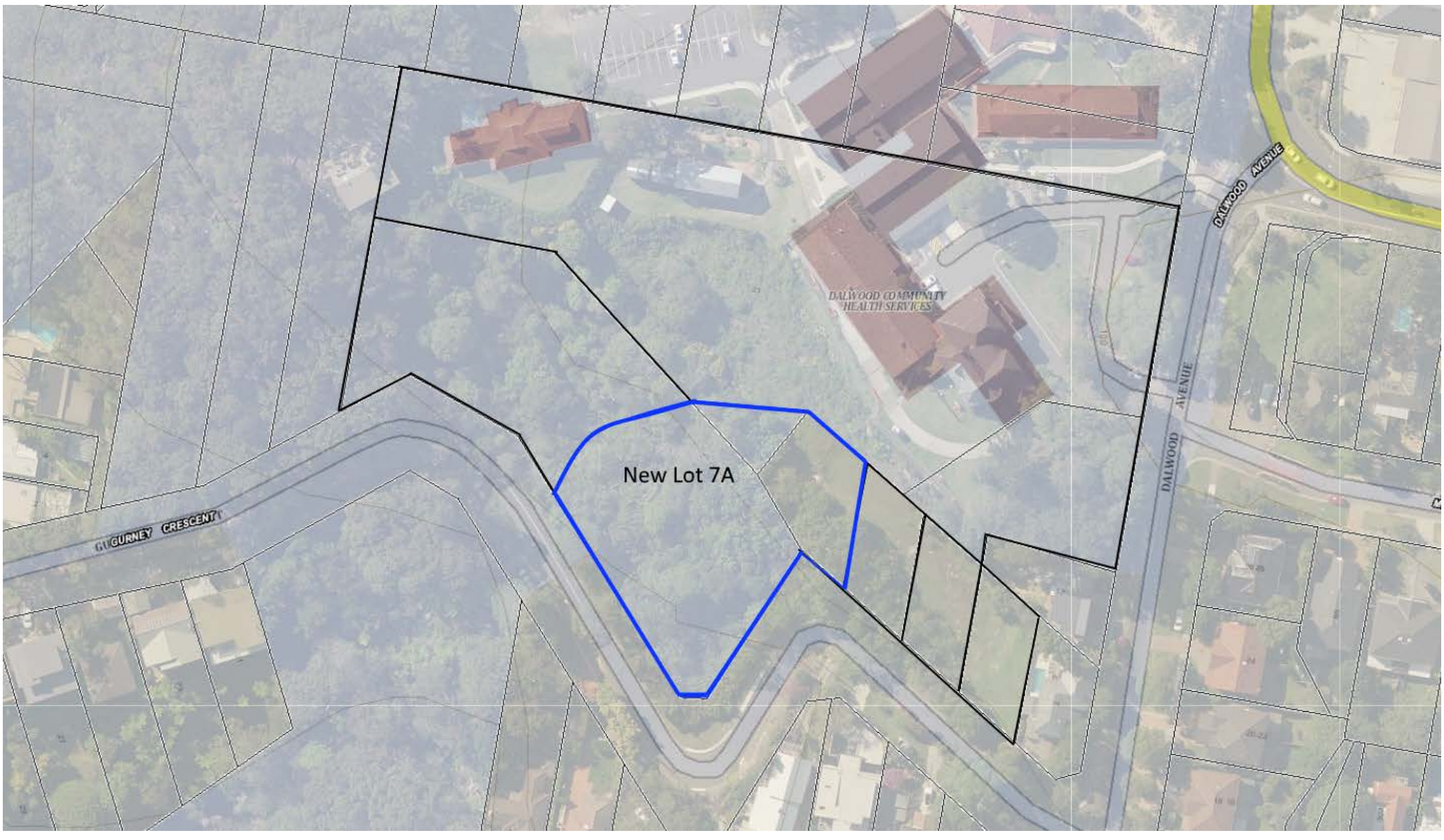
SCALE	STATUS	NUMBER	REVISION
1:300 @A3	PP	04	A

N
Retained E2
Environmental
Conservation Zone
Retained IN2 Infrastructure
(Health Services Facility) Zone
Proposed E4
Environmental Living
Zone
Proposed R2
Low Density
Residential
Zone
GURNEY CRESCENT
DALWOOD AVENUE

DALWOOD AVENUE
GURNEY CRESCENT

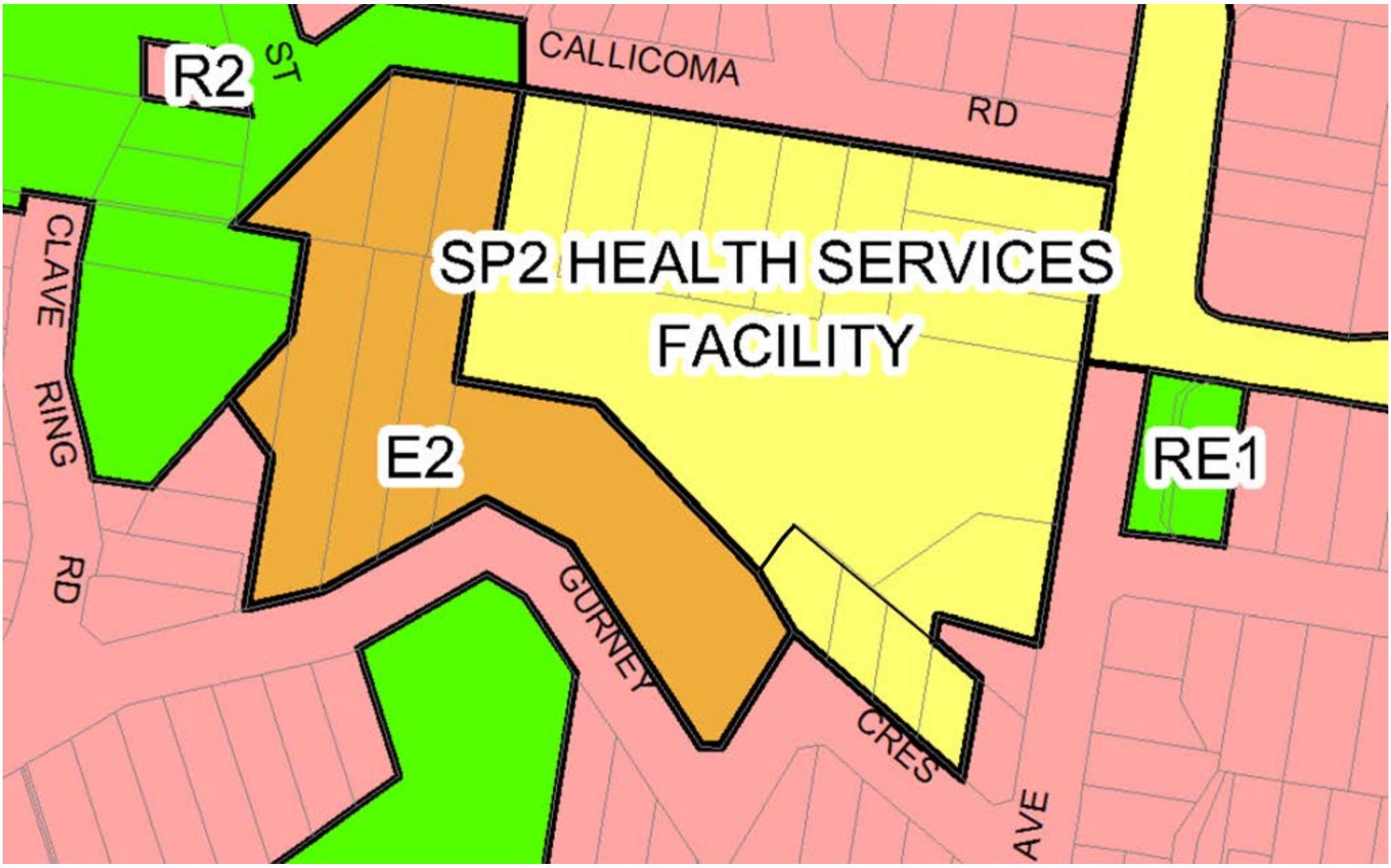


Current Lot Boundaries

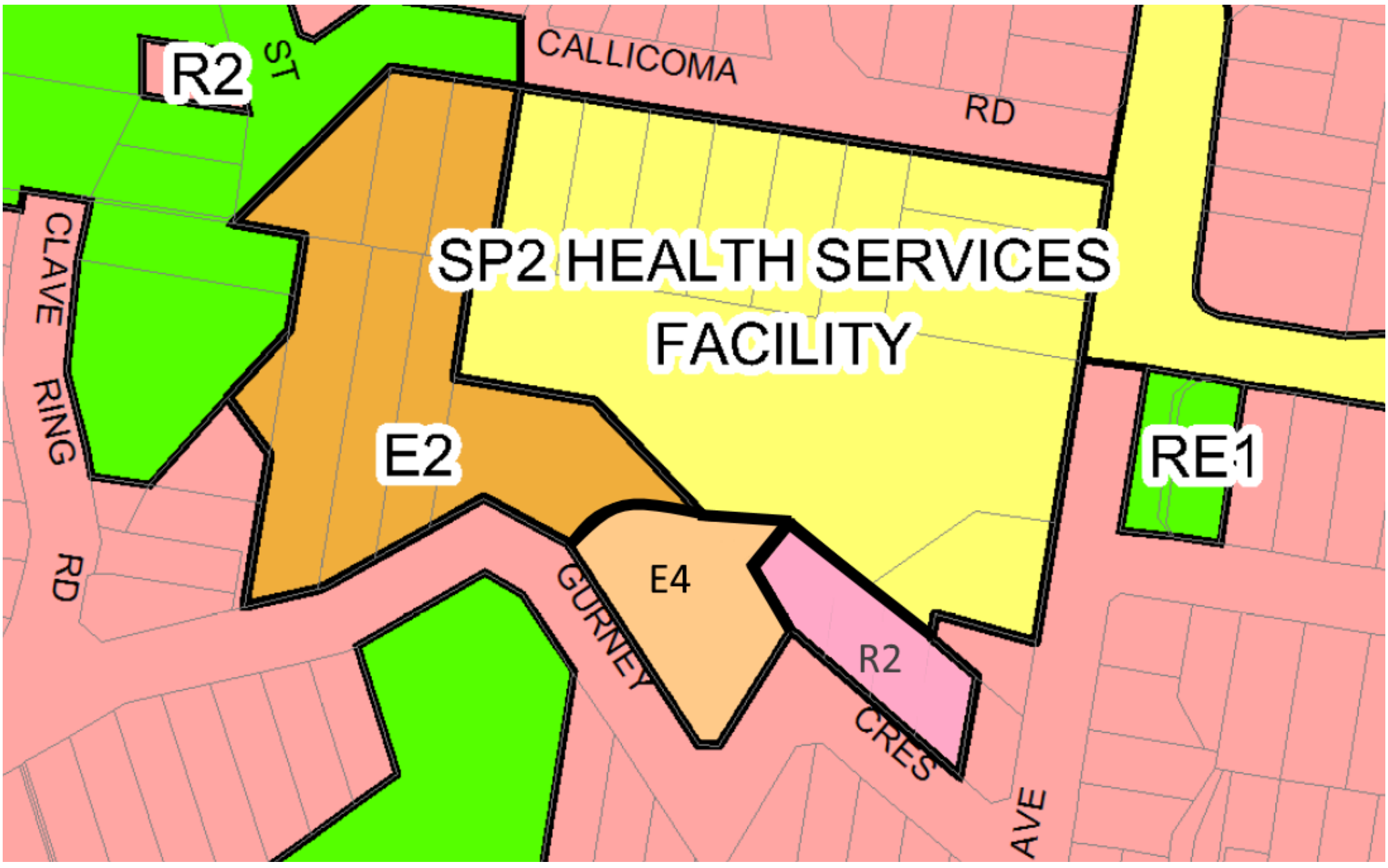


Proposed New Lot Boundaries Creating Expanded Lot 7A

50M RADIUS
GURNEY CRESCENT
DALWOOD AVENUE



Current Zoning Map



Proposed Zoning Map

Appendix E. Ministerial Directions

Table 1 – Section 9.1 Ministerial Directions

SECTION 9.1 MINISTERIAL DIRECTIONS	PLANNING PROPOSAL RESPONSE
2.1 ENVIRONMENT PROTECTION ZONES *(4) A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas.* *(5) A planning proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".* *(6) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:* *(a) justified by a strategy which:* *(i) gives consideration to the objectives of this direction,* *(ii) identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and* *(iii) is approved by the Director-General of the Department of Planning, or* *(b) justified by a study prepared in support of the planning proposal which gives consideration to the objectives of this direction, or* *(c) in accordance with the relevant Regional Strategy, Regional Plan or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or*	The E2 Environmental Conservation zone is for areas of high ecological, scientific, cultural or aesthetic values outside national parks and nature reserves. The zone provides the highest level of protection, management and restoration for such lands. As stated within LEP Practice Note PN 09-002, it is anticipated that many councils will generally have limited areas displaying the characteristics suitable for the application of the E2 zone. In applying an E2 Environment Conservation zone an environmental study that demonstrates the high status of this land should be undertaken. A detailed assessment of the biodiversity values of the site has been undertaken by Lesryk Environmental (refer to **Appendix C**). In relation to those plants recorded on the site, no listed or currently being considered for listing under the EPBC or BC Act were found on the site. No rare or threatened Australian plant was also recorded on the site. That part of the site proposed to be zoned from part E2 Environmental Conservation to part E4 Environmental is not an area of high ecological, scientific, cultural or aesthetic significance. Future development of part of the site for residential purposes will require the removal of 1,460m^2 of cleared / slashed grassland and removal / under scrubbing of 4,900m^2 of densely weed infested vegetation across proposed Lot 7A to establish the required Bushfire APZ. Lesryk Environmental has considered the impact of the future development proposal on biodiversity on the site and make the following conclusions:

SECTION 9.1 MINISTERIAL DIRECTIONS	PLANNING PROPOSAL RESPONSE
(d) is of minor significance.	▪ No ecological communities, flora or fauna species, or their populations, listed under the EPBC Act were recorded within, or in close proximity to, the subject site. Similarly, none are expected to rely upon the habitats to be disturbed for any of their necessary lifecycle requirements. As such, it is not considered necessary that any assessments referring to the EPBC Act's Significant Impact Guidelines are required. The proposed development would not have a significant impact on any ecological communities, flora or fauna species of national conservation significance. Therefore, it is considered that the proposed action does not require referral to the Federal Minister for the Environment and Energy for further consideration or approval. ▪ No ecological communities, flora or fauna species, or their populations, listed under the BC Act were recorded within, or in close proximity to, the subject site. Similarly, none, including the White-bellied Sea-eagle which was previously observed flying above the subject site, were considered likely to occur within, or be reliant upon, the habitats present. ▪ Whilst the native species recorded during the current study are protected under the BC Act, they are common to abundant throughout both the nearby network of State and local government reserves and surrounding urban areas. Within the surrounding region, these species have been recorded in association with a range of woodland and forest habitats, as well as urban environments. The species recorded would not be solely reliant upon those habitats present within, or in close proximity to, the subject site, such that the removal or further disturbance of these would threaten the 'local' occurrence of these animals. The species recorded are all expected to utilise and occupy the proposed E4 Environmental Living zoned land,

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	other parts of the broader study area and surrounding locality post-development. None of the native animals recorded during the current or previous ecological investigations are listed, or currently being considered for listing, under the Schedules to the EPBC Act. The two Smooth-barked Apples hollow-bearing trees are located within the proposed E4 Environmental Living zoned land and are not required or proposed to be removed as part of any future physical work. The proposed development would not be likely to have a significant effect on any threatened species, population, ecological communities, or their habitats listed under the BC Act; as such, the preparation of a BDAR that further considers the impacts of the proposal on State significant matters is not required. ▪ Due to the presence of the quarry cliff face, connectivity in a north to north-easterly direction for ground traversing species is limited. Species tolerant of negotiating urban infrastructure and residential areas would be able to traverse the area in an easterly direction. Development of the subject site would not present any additional barriers to the easterly movement of native species. Flying species would be able to traverse the subject site post-development. As with the surrounding/nearby residential areas, development of the site will not compromise the objectives of the 'Connected Corridors for Biodiversity initiative'. Movement along the Priority Habitat corridor that occurs to the west of the subject site would not be altered by the future development proposal. No barriers to the movement patterns of any species that currently traverse that corridor linkage would be erected. The development of the subject site will not isolate or fragment any habitat areas, nor will it have an adverse cumulative

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	impact when associated with the surrounding residential areas and network of urban roads. ▪ The proposed E4 Environmental Living zoned land (this incorporating the required APZ) and retained E2 Environmental Conservation lands present along the eastern edge of a Priority Habitat corridor are to be retained, with weed management and some light vegetation removal occurring. The presence of these portions of the subject site will provide vegetation that permits the movement of native species. Treatment of the bamboo infestation and regeneration with endemic native species would also provide foraging opportunities not current available within these portions of the subject site. ▪ The Biodiversity Conservation Regulation 2017 sets out threshold levels for when the BOS would be triggered. The threshold has two elements: - whether the amount of native vegetation being cleared exceeds a threshold area set out under Section 7.2 of the Regulation - whether the impacts occur on an area mapped on the Biodiversity Values map published by the Minister for the Environment. If clearing and other impacts exceeds either trigger, the BOS applies to the proposed development including biodiversity impacts prescribed by clause 6.1 of the Biodiversity Regulation 2017. In relation to the subject site, the amount of native vegetation likely to be cleared (i.e. 1,460m^2 of cleared / slashed grassland and removal / under scrubbing of 4,900m^2 of densely weed infested vegetation across proposed Lot 7A) in association with this proposal would not exceed the threshold above which the BAM and offsets scheme apply (i.e.

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	potential for 0.5 ha over 1 to < 40 ha). Furthermore, the subject site has not been identified on the Biodiversity Vales Map and Threshold Tool (BVMTT) (NSW Government 2019b) as land of high biodiversity value that is particularly sensitive to impacts from development and clearing. The proposal would not trigger the requirement for assessment in accordance with Part 6 (the BOS) of the BC Act. Hence, the application of the BAM (as per Division 2, Part 6 of the BC Act) is not required. Therefore, the preparation of a BDAR does not need to be undertaken as part of the proposal. ▪ Within the study area, two eucalypt species were recorded, however, neither are listed under Schedule 2 of State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP 44) as a Koala Feed Tree. As such, the subject site would not be considered Potential or Core Koala habitat as defined in the Policy. A Koala Plan of Management is not required to accompany any future Development Application. ▪ No wetlands or littoral rainforest are present within the study area; as such, the proposal is not considered to have an adverse impact on those features/items listed under Clauses 10(1) and 11(1) of SEPP (Coastal Management) 2018. For the above reasons, the proposed rezoning of part of the site zoned E2 Environmental Conservation zone and replacement with R2 Low Density Residential zone is reasonable and of minor significance.
2.2 COASTAL MANAGEMENT *(4) A planning proposal must include provisions that give effect to and are consistent with:*	The site is not identified within a coastal environmental area (i.e. coastal waters, coastal lakes and foreshores and surrounding lands) and Coastal Use Area Map (i.e. land adjacent to the coast) under the Coastal Management SEPP. This planning proposal does not seek to

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(a) the objects of the Coastal Management Act 2016 and the objectives of the relevant coastal management areas; *(b) the NSW Coastal Management Manual and associated Toolkit;* *(c) NSW Coastal Design Guidelines 2003; and* *(d) any relevant Coastal Management Program that has been certified by the Minister, or any Coastal Zone Management Plan under the Coastal Protection Act 1979 that continues to have effect under clause 4 of Schedule 3 to the Coastal Management Act 2016, that applies to the land.* *(5) A planning proposal must not rezone land which would enable increased development or more intensive land-use on land:* *(a) within a coastal vulnerability area identified by the State Environmental Planning Policy (Coastal Management) 2018; or* *(b) that has been identified as land affected by a current or future coastal hazard in a local environmental plan or development control plan, or a study or assessment undertaken:* *(i) by or on behalf of the relevant planning authority and the planning proposal authority, or* *(ii) by or on behalf of a public authority and provided to the relevant planning authority and the planning proposal authority.* *(6) A planning proposal for a Local Environmental Plan may propose to amend the following maps, including increasing or decreasing the land within these maps, under the State Environmental Planning Policy (Coastal Management) 2018:* *(a) Coastal wetlands and littoral rainforests area map;* *(b) Coastal vulnerability area map;* *(c) Coastal environment area map; and* *(d) Coastal use area map.* *Such a planning proposal must be supported by evidence in a relevant Coastal Management Program that has been certified by the Minister, or by a Coastal Zone*	amend any mapping or applicable provisions relating to coastal management.

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Management Plan under the Coastal Protection Act 1979 that continues to have effect under clause 4 of Schedule 3 to the Coastal Management Act 2016. *Note: Under section 10(2) of the Coastal Management Act 2016, any provision of an LEP that identifies a coastal management area (or part of such an area) must not be made without the recommendation of the Minister administering the Coastal Management Act 2016.* *(7) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:* *(a) justified by a study or strategy prepared in support of the planning proposal which gives consideration to the objective of this direction, or:* *(c) in accordance with the relevant Regional Strategy or District Plan, prepared under Division 3.1 of the Environmental Planning and Assessment Act 1979 by the relevant strategic planning authority, which gives consideration to the objective of this direction, or* *(d) of minor significance.*	
2.3 HERITAGE CONSERVATION *(4) A planning proposal must contain provisions that facilitate the conservation of:* *(a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area,*	A Heritage Assessment has been prepared by Weir Phillips and is included at **Appendix F**. The assessment concluded that the proposal will have acceptable impact on surrounding heritage items within the larger Dalwood Homes site and the items along Clavering Road Road, Seaforth. The future boundary adjustment to Lot 7A will have no impact on the heritage significance of the site as the whole site contains numerous lots across several deposited plans. Understanding the boundaries of each of the individual lots within the existing site boundaries lies in historic records only and does not contribute to

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(b) Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and *(c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.*	the ability to understand the significance of the site. The lot boundaries of this lot (i.e. Lot 1 in DP 325784) appear arbitrary rather than historically significant and determined by a subdivision (the Loch Lomond Estate) that was only partially realised. Changing the lot boundaries will not impact on significant fabric or view corridors. The proposal will have an acceptable impact on the heritage significance of the site for the following reasons: ▪ These lots are located outside of the reduced curtilage recommended above. ▪ These lots are well below the level of Dalwood House, which, even when these lots are built upon, will continue to have unobstructed views towards Middle Harbour. Views from Middle Harbour will similarly remain unobstructed. If the roof tops of future housing are visible, they will be read in conjunction with other rooftops within the tree line below Dalwood House. ▪ Buildings upon these lots of the scale governed by the proposed planning controls will not block significant view corridors into the site or within the site. ▪ Development of these lots in line with the proposed R2 Low Density Residential zoning is in line with the character of the area immediately surrounding the site. Future building(s) constructed on these lots will sit comfortably within the established character of the surrounding area. ▪ The building areas within each future lot are largely located within already cleared land. The majority of the new Lot 7A will retain an E4 Environmental Living zoning and hence the majority of its vegetation cover.

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	The heritage items within the vicinity of the site are sufficiently removed from the area of proposed future works. As such there will be no impact on their setting or view corridor. There will be no impact on the ability to understand their significance. A search of the Office of the Environment and Heritage AHIMS data base has shown that no aboriginal places have been declared in or near the site and there was only 1 aboriginal site recorded in or near the above location.
3.1 RESIDENTIAL ZONES *(4) A planning proposal must include provisions that encourage the provision of housing that will:* *(a) broaden the choice of building types and locations available in the housing market, and* *(b) make more efficient use of existing infrastructure and services, and* *(c) reduce the consumption of land for housing and associated urban development on the urban fringe, and* *(d) be of good design.* *(5) A planning proposal must, in relation to land to which this direction applies:* *(a) contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it), and* *(b) not contain provisions which will reduce the permissible residential density of land.* *(6) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:*	It is proposed to rezone a relatively small area of the site from part SP2 Infrastructure to R2 Low Density Residential, generally consistent with the site's existing cadastre boundary. The existing 4 lots which are proposed to be zoned R2 Low Density are of a sufficient size and shape to facilitate rational building and development boundaries for future development. The site has good access to Seaforth Town Centre, the future strategic centre at Frenchs Forest and Sydney CBD. The proposal provides housing opportunities close to existing services, jobs and infrastructure. Given the nature of the proposed amendments, it is unlikely to result in any appreciable demand on public infrastructure. Future DAs for housing will need to demonstrate that the proposal can be adequately serviced. The sites are linked by direct road access and public entrances. The sites are located within already established urban and environmental realms with appropriate public infrastructure and amenities for the sites.

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(a) justified by a strategy which: *(i) gives consideration to the objective of this direction, and* *(ii) identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and* *(iii) is approved by the Director-General of the Department of Planning, or* *(b) justified by a study prepared in support of the planning proposal which gives consideration to the objective of this direction, or* *(c) in accordance with the relevant Regional Strategy, Regional Plan or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or* *(d) of minor significance.*	
3.3 HOME OCCUPATIONS *(4) Planning proposals must permit home occupations to be carried out in dwelling houses without the need for development consent.* *(5) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent with the terms of this direction are of minor significance.*	Home occupations are permitted without consent within the R2 Low Density Residential zone under Manly LEP 2013. The planning proposal would not alter this permissibility. The proposal is therefore consistent with this direction.
3.4 INTEGRATING LAND USE & TRANSPORT *(4) A planning proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of:* *(a) Improving Transport Choice – Guidelines for planning and development (DUAP 2001), and* *(b) The Right Place for Business and Services – Planning Policy (DUAP 2001).*	The planning proposal will also provide opportunities for new housing close to existing services. Housing will be provided in an area that has good access to public transport, services and facilities, recreation areas and jobs.

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4.1 ACID SULFATE SOILS *(4) The relevant planning authority must consider the Acid Sulfate Soils Planning Guidelines adopted by the Director-General of the Department of Planning when preparing a planning proposal that applies to any land identified on the Acid Sulfate Soils Planning Maps as having a probability of acid sulfate soils being present.* *(5) When a relevant planning authority is preparing a planning proposal to introduce provisions to regulate works in acid sulfate soils, those provisions must be consistent with:* *(a) the Acid Sulfate Soils Model LEP in the Acid Sulfate Soils Planning Guidelines adopted by the Director-General, or* *(b) such other provisions provided by the Director-General of the Department of Planning that are consistent with the Acid Sulfate Soils Planning Guidelines.* *(6) A relevant planning authority must not prepare a planning proposal that proposes an intensification of land uses on land identified as having a probability of containing acid sulfate soils on the Acid Sulfate Soils Planning Maps unless the relevant planning authority has considered an acid sulfate soils study assessing the appropriateness of the change of land use given the presence of acid sulfate soils. The relevant planning authority must provide a copy of any such study to the Director-General prior to undertaking community consultation in satisfaction of section 57 of the Act.* *(7) Where provisions referred to under paragraph (5) of this direction have not been introduced and the relevant planning authority is preparing a planning proposal that proposes an intensification of land uses on land identified as having a probability of acid sulfate soils on the Acid Sulfate Soils Planning Maps, the planning proposal must contain provisions consistent with paragraph (5).*	The site comprises Class 5 Acid Sulfate soils. As part of future detailed DAs, an Acid Sulfate Management Plan will be required to support any development on the land, consistent with clause 6.1 of Manly LEP 2013.

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(8) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are: *(a) justified by a study prepared in support of the planning proposal which gives consideration to the objective of this direction, or* *(b) of minor significance.*	
4.3 FLOOD PRONE LAND *(4) A planning proposal must include provisions that give effect to and are consistent with the NSW Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas).* *(5) A planning proposal must not rezone land within the flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zones to a Residential, Business, Industrial, Special Use or Special Purpose Zone.* *(6) A planning proposal must not contain provisions that apply to the flood planning areas which:* *(a) permit development in floodway areas,* *(b) permit development that will result in significant flood impacts to other properties,* *(c) permit a significant increase in the development of that land,* *(d) are likely to result in a substantially increased requirement for government spending on flood mitigation measures, infrastructure or services, or* *(e) permit development to be carried out without development consent except for the purposes of agriculture (not including dams, drainage canals, levees, buildings or structures in floodways or high hazard areas), roads or exempt development.*	The site does not comprise flood prone land.

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(7) A planning proposal must not impose flood related development controls above the residential flood planning level for residential development on land, unless a relevant planning authority provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General). *(8) For the purposes of a planning proposal, a relevant planning authority must not determine a flood planning level that is inconsistent with the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas) unless a relevant planning authority provides adequate justification for the proposed departure from that Manual to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).*	
4.4 PLANNING FOR BUSHFIRE PROTECTION *(4) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 56 of the Act, and prior to undertaking community consultation in satisfaction of section 57 of the Act, and take into account any comments so made,* *(5) A planning proposal must:* *(a) have regard to Planning for Bushfire Protection 2006,* *(b) introduce controls that avoid placing inappropriate developments in hazardous areas, and* *(c) ensure that bushfire hazard reduction is not prohibited within the APZ.* *(6) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:*	The site is shown on the Northern Beaches Bushfire Prone Land Map to be within a combination of Category 1 vegetation and Category 1 vegetation buffer zone. The proposed concept plan provides for a 50m APZ in accordance with the recommendations from the Bushfire Assessment prepared by Control Line Consulting (refer to **Appendix G**). The identified bushfire risk on the site can be mitigated as part of any future development proposal.

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(a) provide an Asset Protection Zone (APZ) incorporating at a minimum: *(i) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and* *(ii) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,* *(b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with,* *(c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,* *(d) contain provisions for adequate water supply for firefighting purposes,* *(e) minimise the perimeter of the area of land interfacing the hazard which may be developed,* *(f) introduce controls on the placement of combustible materials in the Inner Protection Area.* *(7) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the council has obtained written advice from the Commissioner of the NSW Rural Fire Service, to the effect that, notwithstanding the non-compliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.*	
5.10 IMPLEMENTATION OF REGIONAL PLANS *(4) Planning proposals must be consistent with a Regional Plan released by the Minister for Planning.*	The proposed rezoning is consistent with the vision and goals for the Illawarra as set out in the Regional Plan. The proposal is consistent with the Eastern Harbour City vision to build on its recognised economic strength, addressing liveability and sustainability. As stated in the Plan, the Eastern Harbour City

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(5) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Secretary of the Department of Planning and Environment (or an officer of the Department nominated by the Secretary), that the extent of inconsistency with the Regional Plan: *(a) is of minor significance, and* *(b) the planning proposal achieves the overall intent of the Regional Plan and does not undermine the achievement of its vision, land use strategy, goals, directions or actions.*	is a mature mix of well-established communities, from traditional suburban neighbourhoods to Australia's most highly urban areas. Growth will bring urban renewal with increased infrastructure and services, open spaces and public places. Sympathetic infill development will focus on improved local connections. The proposal is an orderly and efficient use of land and will provide additional homes within walking distance to the Seaforth Town Centre. The site also has good public transport access to Sydney CBD and the future strategic centre at Frenchs Forest. Divestment of part of the site will generate funds for new and / or upgraded local health services and facilities – services which are essential to support future growth within the Eastern Harbour City. Ten strategic directives underpin the Plan. This planning proposal is consistent with the following: ▪ **Infrastructure supporting developments -** The planning proposal will provide additional housing within proximity to Seaforth Town Centre. The site has good public transport access to Sydney CBD and the future strategic centre at Frenchs Forest. ▪ **Giving people housing choices** – the proposal provides additional housing in the right location. The proposal will contribute to the minimum 5 year dwelling target of 3,400 dwellings required in Manly LGA envisged by 2036 and overall dwelling targets for the Greater Sydney region. The existing lots which are proposed to be rezoned for low density residential purposes are of a sufficient size and shape to provide housing diversity and choice, meeting the requirements of people with different housing needs and lifecycles.

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	▪ **A city for people** – this is achieved on the site by respecting the site's natural features and scenic qualities and providing additional housing within reasonable walking and public transport access to local centres (Seaforth Town Centre, Sydney CBD and the future strategic centre at Frenchs Forest). ▪ **Creating a city of great places** - by retaining land for environmental conservation. ▪ **A well connected city** - providing additional homes only a short bike, bus and / or car journey to Seaforth Town Centre, Sydney CBD and the future strategic centre at Frenchs Forest. ▪ **A city in its landscape -** valuing green spaces and landscape by retaining land for environmental conservation, protecting scenic and cultural landscapes and providing opportunities to enhance currently weed infested natural vegetation within the western portion of the site. ▪ **An efficient city** which uses resources wisely. An assessment of the proposal's consistency with the North District Plan, relevant SEPPs and local planning polices is included in Section 6 of this proposal.
6.1 APPROVAL AND REFERRAL REQUIREMENTS *Objective* *(1) The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.* *Where this direction applies* *(2) This direction applies to all relevant planning authorities.* *When this direction applies*	The planning proposal is not inconsistent with this direction.

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(3) This direction applies when a relevant planning authority prepares a planning proposal. *What a relevant planning authority must do if this direction applies* *(4) A planning proposal must: (a) minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and* *(b) not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of: (i) the appropriate Minister or public authority, and* *(ii) the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General), prior to undertaking community consultation in satisfaction of section 57 of the Act, and* *(c) not identify development as designated development unless the relevant planning authority: (i) can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment, and* *(ii) has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act.* *Consistency* *(5) A planning proposal must be substantially consistent with the terms of this direction.*	
6.3 SITE SPECIFIC PROVISIONS *4) A planning proposal that will amend another environmental planning instrument in order to allow a particular development proposal to be carried out must either:* *(a) allow that land use to be carried out in the zone the land is situated on, or*	This planning proposal is not inconsistent with the direction.

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(b) rezone the site to an existing zone already applying in the environmental planning instrument that allows that land use without imposing any development standards or requirements in addition to those already contained in that zone, or *(c) allow that land use on the relevant land without imposing any development standards or requirements in addition to those already contained in the principal environmental planning instrument being amended.* *(5) A planning proposal must not contain or refer to drawings that show details of the development proposal.* *(6) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are of minor significance.*	
7.1 IMPLEMENTATION OF A PLAN FOR GROWING SYDNEY *Objective* *(1) The objective of this direction is to give legal effect to the planning principles; directions; and priorities for subregions, strategic centres and transport gateways contained in A Plan for Growing Sydney.* *When this direction applies* *(3) This direction applies when a Relevant Planning Authority prepares a planning proposal.* *What a Relevant Planning Authority must do if this direction applies* *(4) Planning proposals shall be consistent with: (a) the NSW Government's A Plan for Growing Sydney published in December2014.*	This planning proposal is not inconsistent with the direction. A detailed discussion of the proposal's consistency with the Regional Plan, North District Plan, relevant SEPPs and local planning policies is included in Section 6 of the planning proposal and discussed above.

Appendix F. Heritage Assessment

HERITAGE IMPACT STATEMENT

Dalwood Home Site: Proposed *Manly LEP 2013* Amendment

21 Dalwood Avenue, Seaforth
May 2019 | J3565

Weir Phillips
Heritage and Planning

Level 19, 100 William Street, Woolloomooloo NSW 2011
Phone: (02) 8076 531

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1.0 INTRODUCTION

1.1 Preamble

This Heritage Impact Statement has been prepared to accompany a Planning Proposal for the rezoning of part of Dalwood Home Site (Children's Service Facility) at No. 21 Dalwood Avenue, Seaforth, New South Wales.

Dalwood Home Site covers an area of 3.72ha off Dalwood Avenue, Seaforth, within the newly amalgamated Northern Beaches Council area. The site is owned and managed by the. Northern Sydney Local Health District. The site is listed as a heritage item of local significance by Schedule 5 Part 1 of the *LEP 2013*, where it is identified as 'Dalwood Home (principal building and stone outbuilding to Dalwood Home),' No. 21 Dalwood Avenue, Seaforth (I270). The principal building and stone outbuilding are also listed on NSW Health's s170 Register under the auspices of the *NSW Heritage Act 1977.*

The planning proposal is for an amendment to *Manly Local Environmental Plan 2013* (*LEP 2013*). on behalf of NSW Ministry of Health. It seeks to rezone Lots 4A, 5A, 6A and 7A in D.P. 17157, part of Lot 1 in D.P. 325720 and part of Lot 1 in D.P. 325784 from part SP2 Infrastructure (Health Services Facilities) and part E2 Environmental Conservation to part R2 Low Density Residential and part E4 Environmental Living. The rezoning will accommodate the future establishment of four dwellings on each of the lots.

The planning proposal is supported by a Concept Layout Plan (CLP) which demonstrates a boundary adjustment between Lot 7A DP 17157, Lot 1 DP 325720 and Lot 1 DP 325784 to expand Lot 7A. The CLP shows the future indicative locations for each of the four dwellings.

This statement has been prepared at the request of the Ministry of Health.

1.2 Authorship

This Heritage Impact Statement (HIS) was prepared by Alice Fuller, B.App.Sc., M.Herit.Cons.(Hons.), and James Phillips, B.Sc.(Arch.), B.Arch., M.Herit.Cons.(Hons.), of Weir Phillips Architects and Heritage Consultants.

1.3 Limitations

An Aboriginal and archaeological assessment were not provided for. The buildings were in use at the time of the site visit and could not be accessed.

1.4 Physical Evidence

An inspection of the Dalwood Home Site and surrounding area took place in March 2019. Unless otherwise stated, the photographs contained in this statement were taken on these occasion.

1.5 Documentary Evidence

The following references were consulted for the preparation of this statement.

1.5.1 General References

- Allen, Jack + Cottier, *Dalwood: Master Development Control Plan 1992*. Copy provided by the client.
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- Wells, W.H., *A Geographical Dictionary or Gazetteer of the Australian Colonies*, 1848. Facsimile edition published by the Council of the Library of New South Wales, 1970. Author copy.

1.5.2 Heritage Inventory Sheets

NSW Health s170

- *Dalwood Children's Home Precinct, Principal Building*, No. 21 Dalwood Avenue, Seaforth. Preliminary Heritage and Conservation Register, Northern Sydney Area Health Service. Heritage Register No. 01/2/6/1000.
- *Dalwood Children's Home Precinct, Stone Cut Building*, No. 21 Dalwood Avenue, Seaforth. Preliminary Heritage and Conservation Register, Northern Sydney Area Health Service. Heritage Register No. 01/2/6/1001.

State Heritage Inventory

- *Dalwood- Principal Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020383.
- *Dalwood- Stone Out Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020384.
- *Principal Building,* Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 3540677.
- *Stone House*, No. 2 Rignold Avenue, Seaforth. State Heritage Inventory Database No.: 2020381.
- *Stone Out Building*, Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 3540678.

National Trust of Australia (NSW)

- *Dalwood's Children Home, formerly Clavering*, Frenches Forest Road, Seaforth. Listing I.D. S7284.

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1.5.3 Historic Plans and Photographs

- *Dalwood Home's Dairy,* undated. MML/4209, Manly Library.
- *Dalwood House*, undated. Manly Library.
- *Dalwood House*, c.1928. Photograph part of a framed pamphlet at Dalwood House.
- Fitzgerald Playroom, undated. MML/4208, Manly Library.
- Hood, Sam ,*Children at Play at Dalwood Home, 1941.* State Library of NSW.
- Hood, Sam, *Dalwood Home at Seaforth, 1930s.* Showing the later additions made by the Fund to the original house. Home and Away, 7490. State Library of NSW.
- *Hood, Sam, Restoration Work at Dalwood, 1928-1931.*Home and Way, 3112. State Library of NSW.
- NSW Lands Department, (*Aerial photograph over Dalwood House*), 1941. SIXMaps.

1.5.4 Newspaper Articles (TROVE)

- 'Dalwood Home Opened by Dr. Arthur', *The Sydney Morning Herald*, 20 February, 1928.
- 'Dalwood Rest Home Opening by Dr. Arthur, '*The Sydney Morning Herald*, 20 October, 1930.
- 'Death of Professor T.T. Gurney', *The Sydney Morning Herald*, 25 October, 1918.
- 'Food for Babies Fund', *The Sydney Morning Herald*, 24 November, 1928.
- 'For Women. Dalwood Rest Home. New Quarters Opened,' *The Sydney Morning Herald*, 16 December, 1929.
- 'Middle Harbour to Let…', *The Sydney Morning Herald*, 12 July, 1902.
- 'Mr. E.A. Dalwood…', *The Sydney Morning Herald*, 10 December, 1927.
- 'On the Highlands of Sydney's Trossachs: The Loch Lomond Estate', *The Sydney Morning Herald*, 14 January, 1922.
- 'Overlooking Sydney's Trassachs, The Loch Lomond Estate, Balgowal,' *The Sun*, 8 January, 1922.
- 'Real Estate News,' *The Sun*, 11 January, 1922, p.9.
- 'Rest for Mothers', *The Barrier Miner*, 2 April, 1928.
- 'Rest Homes for Mothers', *The Sydney Morning Herald*, 5 December, 1927.
- 'This Home at Balgowlah…,' *The Sydney Morning Herald*, 2 December, 1927, p.14.

1.5.5 NSW LPI Records

- Certificate of Title Volume 3266 Folio 162; 4399 Folio 13; 4402 Folio 195; Volume 4516 Folio 174; Volume 4909 Folio 69. NSW LPI.

1.5.6 Council Documents and Heritage Guidelines

- *Manly Local Environmental Plan 2013*.
- Marquis-Kyle, Peter and Walker, Meredith, *The Illustrated Burra Charter*, Victoria, Australia ICOMOS, 2004.
- NSW Heritage Office, *Assessment Heritage Significance*, 2001.
- NSW Heritage Office and DUAP, *Heritage Curtilages*, 1996.

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1.6 Site Location and Layout

1.6.1 Site Location

The Dalwood Home Site is located within Seaforth, approximately 9km north of Sydney Central Business District and within the newly amalgamated Northern Beaches Council area. It is located on the western side of the Manly peninsula, towards Middle Harbour.

Dalwood Avenue runs south off Frenchs Forest Road at the point where it meets Clontarf Street. The site is located on the western side of Dalwood Avenue/Clontaff Street and is bounded by Dalwood Avenue to the east, Callicoma Road to the north, Gurney Crescent to the south and private properties to the west (Figure 1).

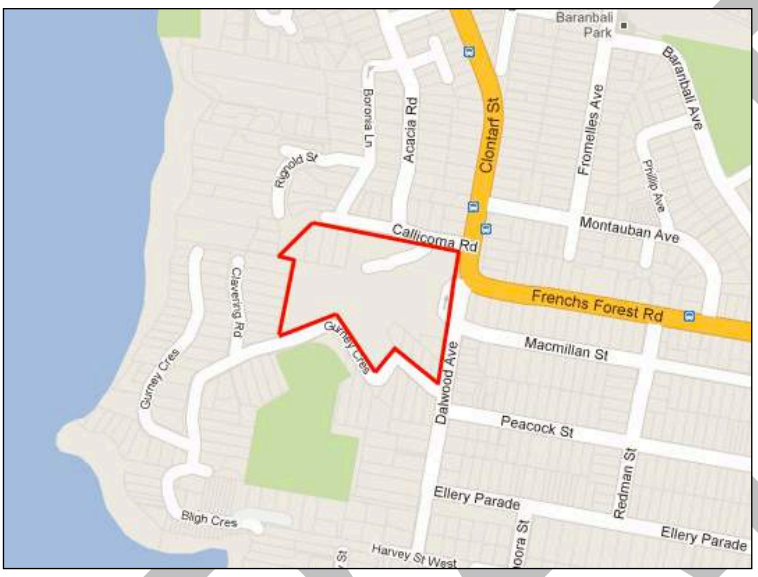

Figure 1: Site Location.
SIXMaps; annotation by WP Heritage.

1.6.2 Site Layout

The Dalwood Home Site is irregular in shape and comprises 22 individual allotments, being Lots 1-12 in Section 1 D.P. 620; Lots 76-78 D.P. 11214; Lots 4A, 5A, 6A and 7A D.P. 17157; Lot 1 D.P. 325720; Lot 1 D.P. 325784; and Lot 87 D.P. 666550 (Figure 2).

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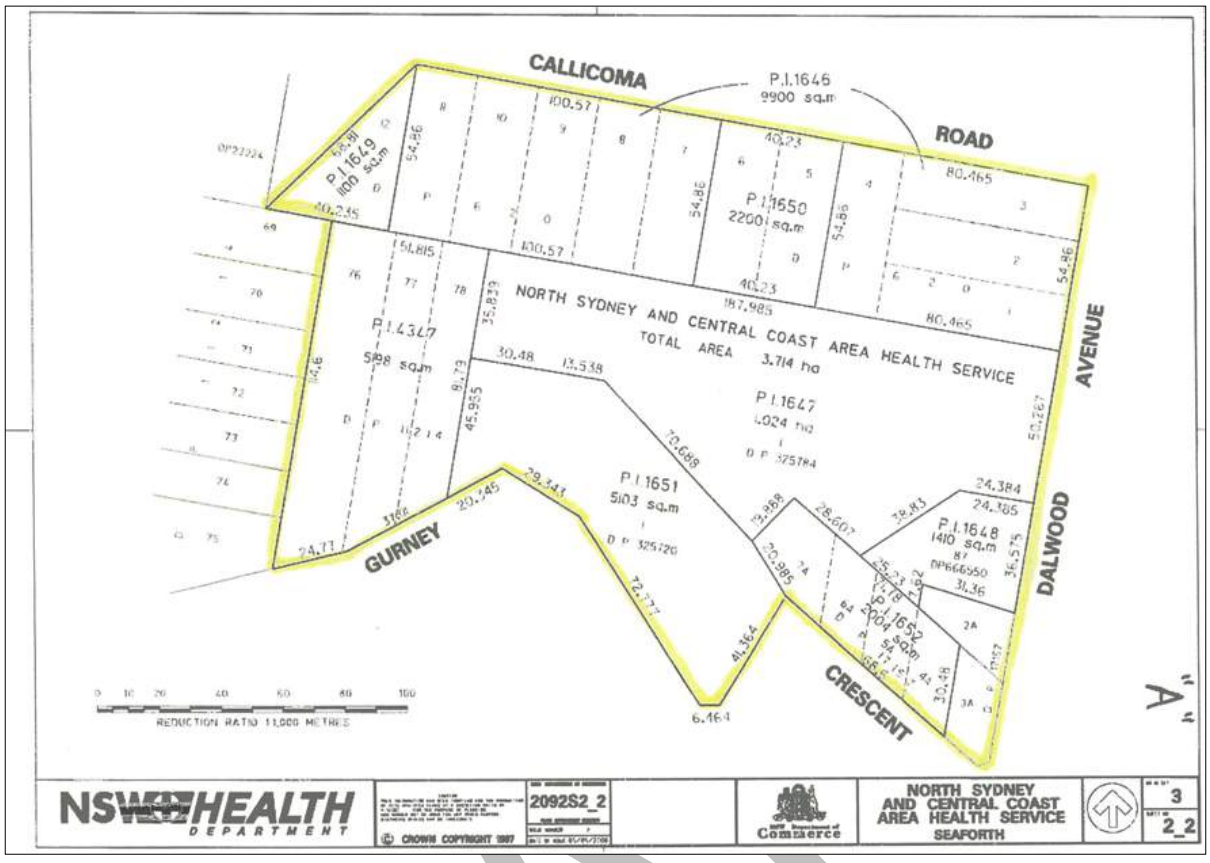

Figure 2: Showing the individual lots comprising the site.
Provided by the client.7

Figure 3 shows the site layout and identifies the principal structures on the site.

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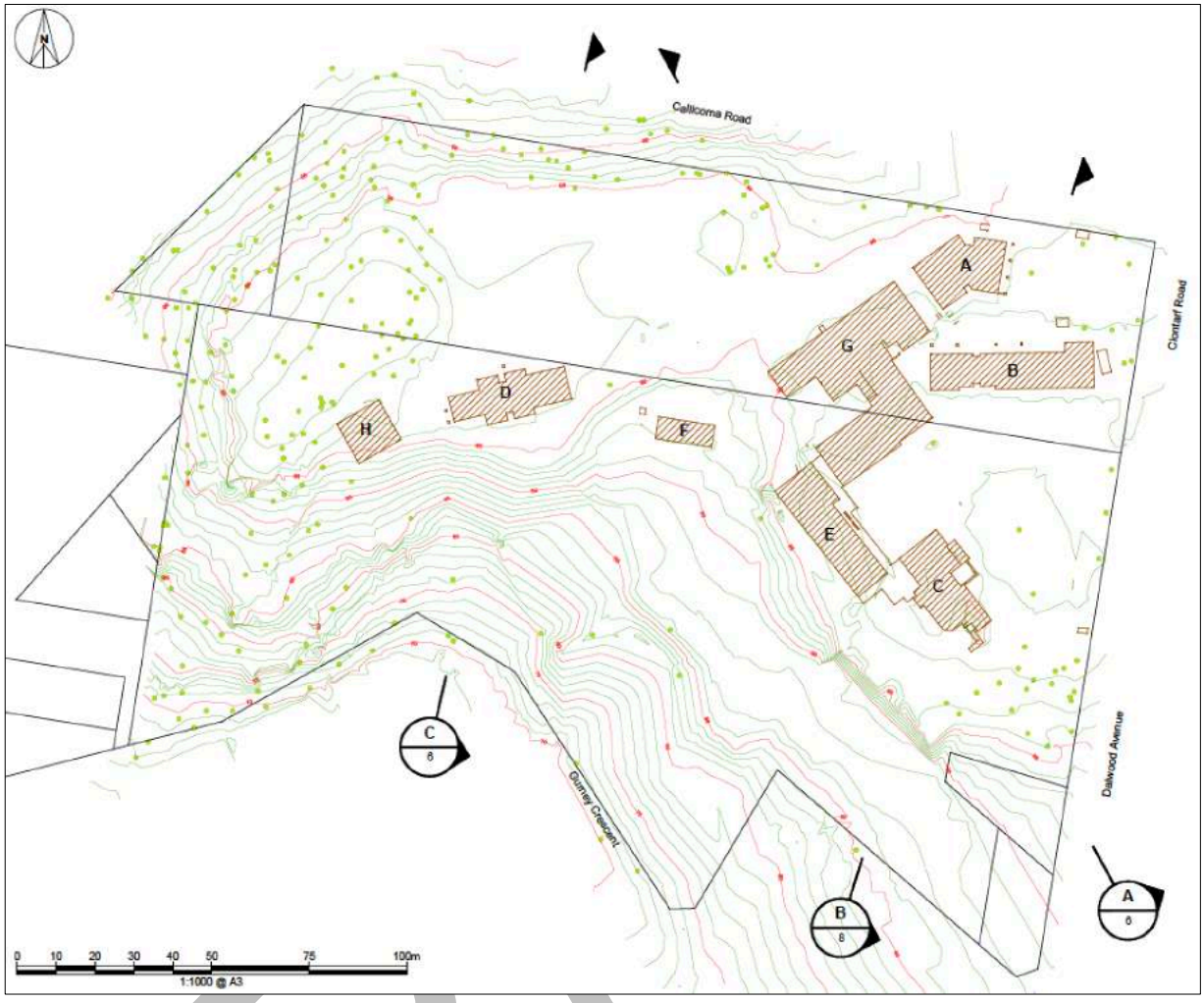

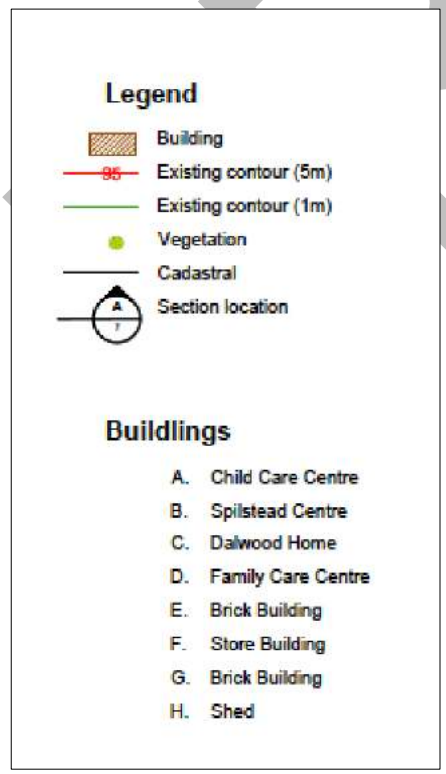

Figure 3:
Site Survey, showing buildings, vegetation and contours.
Douglas Partners. Date: 5 December, 2012.

2.0 BRIEF OUTLINE OF THE HISTORY OF DALWOOD

2.1 Aboriginal Occupation and Early European History

While an Aboriginal history is not provided for, it is acknowledged that Seaforth lies within the traditional lands of the Birrabirrigal people.

European exploration of Middle Harbour began in January 1788, soon after the establishment of the British Colony of New South Wales. Middle Harbour was used as the starting point for explorations to the north-west of Sydney. During these explorations, the steep terrain of present-day Seaforth would have been noted. The northern shores of Sydney Harbour were located well outside the first boundaries of the township of Sydney. Beyond exploration, timber getting and the collection of shells for lime, the area was largely ignored during the first period of settlement.

The first land grants in the present day Municipality of Manly were made in 1809. Nine grants, ranging in size from 17 acres to 380 acres, were made in the area before 1842. During this period, the Surveyor General Mitchell laid out the Village of North Harbour (later called Balgowlah) at the head of North Harbour (1826). The area, however, remained sparsely populated well into the mid nineteenth century. Only 29 residents were listed in the censuses of 1841 for the Manly/North Harbour area; W.H. Well's *Gazetteer of the Australian Colonies*, published in 1848, indicates that there were only 24 houses and 63 inhabitants in the whole of the Parish of Manly Cove at this time.

The first land grants in present-day Seaforth were made in the 1830s. The largest of the individual lots now comprising the Dalwood Home Site, being Lot 1 D.P. 325784 (on which the most significant buildings lie, is located on part of a grant of 35 acres originally granted to Haynes Gibbes Alleyne by Crown Grant dated 16 May, 1857.[1] The five lots which this proposal seeks to rezone were also located upon this grant.[2] Other parts of the site stand on part of 27 acres originally granted to Ebenezer Vickery on 26 October, 1859.

What Alleyne used his grant for, if anything, has not been determined for the purposes of this statement. Alleyne, a medical practitioner, had arrived in Sydney in c.1848. He was a government health officer and was a member of a number of institutional boards, such as the Benevolent Asylums Board for the Infirm and Destitute.[3]

Sometime between 1883 and 1885, Alleyne's grant was sold by the administrator of his estate to Professor Thomas Gurney (1849-1915), second Professor of Mathematics and Natural Philosophy at Sydney University, in 1857. Gurney won repute as a fine teacher. He was elected as a member of the University senate in 1894-96 and as ex office as dean of the Faculty of Arts in 1894096. In 1879, he married Joan Cornelia, a widow. The Gurneys were also active in the developing the general activities of the University, notably helping in the promotion of the Musical Society and the established of the Women's College.[4]

Although some of the grants in present-day Seaforth were occupied, there was little real development in the area at this time. The Spit provided an effective barrier to settlement. The first regular punt service, which was a private service, did not begin until the 1850s and, even then, was unreliable. The punt operator, Peter Ellery, built a rough road from the punt landing at Seaforth to the top of the escarpment in the 1850s. Hopes for improved transport were raised when the government gazetted the first road from Manly to The Spit (Middle

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[1] Original grant cited on Certificate of Title Volume 4402 Folio 195. NSW LPI.

[2] Original grant cited on Certificate of Title Volume 4909 Folio 69. NSW LPI.

[3] For further information see: Richard Refshauge, 'Allenye, H.G. (1815-1882), in Douglas Pike (gen.ed), *Australian Dictionary of Biography, Volume 1*, Victoria, Melbourne University Press, 1968.

[4] For further information see: I.S. Turner, ' Gurney, Theodore Thomas' in Douglas Pike (gen.ed), *Australian Dictionary of Biography, Volume 4*, Victoria, Melbourne University Press, 1972. Date of sale determined with reference to information contained within Kubanyi Architects, *Heritage Assessment and Statement of Heritage Impact for Dalwood, 21 Dalwood Avenue, Seaforth, NSW 2092*, p. 3. Unpublished report prepared for NSW Health dated 11 April, 2014.

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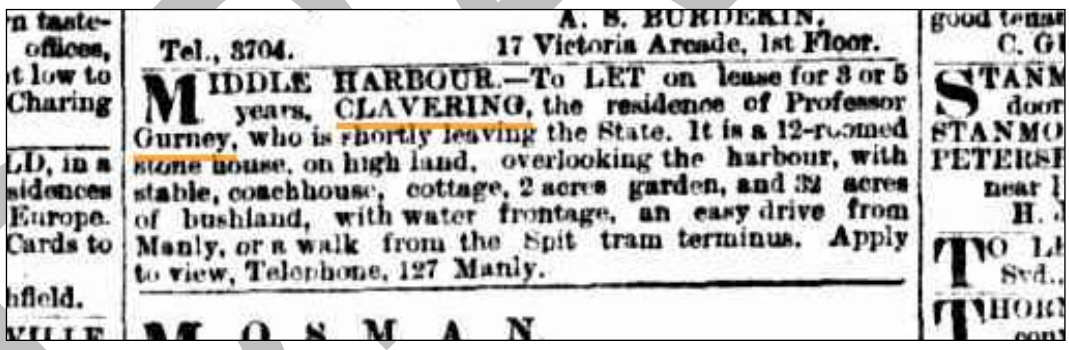
Harbour Road, later Sydney Road). During the 1880s, the government resumed control of the punt, providing a more reliable service.

2.2 Clavering

Professor Gurney built what is now Dalwood House on his land in present-day Seaforth in 1878-9, close to the time of his marriage, and called the estate 'Clavering' after the village in Essex where his father had been vicar. Clavering was isolated and only accessible via a bush track from Manly, which, while growing, was small and contained. The number of listings in *John Sands' Sydney and Directories* for the Manly area increased from 70 in 1870, to 80 in 1875 and 166 in 1880.

The Municipality of Manly was declared in 1877, bringing with it the hope that better amenities would follow. Development during the late nineteenth century was never even across the municipality; there were comparatively few buildings beyond the village centre and the surrounding high ground. Despite the development that occurred in the 1880s, Manly enjoyed a comparatively low population density when compared to other Sydney Municipalities. Manly had only 0.68 people per acre; Paddington, by contrast, had 26.38 people per acre and Darlinghurst, 44.11 people per acre. Seaforth was among those areas that remained little disturbed. The area did, however, have a church (St. Paul's Anglican Church, 1875) and public school (originally Balgowlah Public School, established 1881).

The Gurneys principally resided in Sydney, using Clavering as a weekend retreat. Gurney, while a popular and energetic teacher failed to impress upon his superiors his early promise in research and publication. In 1902, Gurney retired from Sydney University and returned to England, where he died in 1918. Gurney Crescent in Seaforth, Sydney and Gurney Way, Cambridge (UK) are named in his memory. Figure 4 reproduces an advertisement from *The Sydney Morning Herald* in this year in which Clavering is offered for lease. It provides a rare, if brief, description of the site at this time. Note the stable/coach house, likely the building now referred to as 'the Loft.'


A. S. BURDEKIN,
Tel., 3704. 17 Victoria Arcade, 1st Floor.

MIDDLE HARBOUR.—To LET on lease for 3 or 5 years, CLAVERING, the residence of Professor Gurney, who is shortly leaving the State. It is a 12-roomed stone house, on high land, overlooking the harbour, with stable, coachhouse, cottage, 2 acres garden, and 32 acres of bushland, with water frontage, an easy drive from Manly, or a walk from the Spit tram terminus. Apply to view, Telephone, 127 Manly.

Figure 4: Advertisement for *Clavering*, 1902.
The Sydney Morning Herald, 12 July, 1902.

Despite the above advertisement, Clavering remained unoccupied for many years.

2.3 The Seaforth Estate and the Early Growth of Seaforth

Soon after the Gurneys returned to England, the first subdivisions were carried out in the present-day Seaforth area, thereby laying the foundations for the present-day suburb. During the early 1900s, Henry Halloran acquired a number of the early Seaforth grants. When he subdivided his land into 350 lots and offered it for sale in 1906, he called it the Seaforth Estate, in recognition of the fine views obtained from the estate, thereby giving the area its lasting name. Halloran put in place a system of covenants to make Seaforth a 'leading suburb and a safe place to erect a good residence.' Although some lots would take years to sell because of the area's isolation, Halloran purchased additional land and offered further lots for sale in 1909 (Bluff Estate).

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The Seaforth and Bluff Estates were offered for sale during a period of expansion across Manly. During the first decade of the twentieth century Manly's population more than doubled; from 5,035 people in 1901 to 10,465 people in 1911. In 1909, 185 new buildings were constructed; in 1911 and 1921, 125 and 147 buildings were constructed respectively.[5] The population density increased accordingly, to 4.3 people per acre by 1911. By 1921, the population exceeded 18,500 people.[6]

The above rate of growth was not isolated to Manly; suburbs across Sydney boomed during this period as the population increased by almost 30%.[7] There are a number of reasons why Manly experienced a population boom at this time. One of the most significant contributory factors to Manly's growth was improved public transport service into and out of the area. Wharf facilities were upgraded and faster steamers launched from 1900; from 1906, a half hourly service ran from Manly to the Circular Quay. From January 1909, an alternative to the ferry was offered as a result of the opening of The Spit to Manly tramway. Growth is also attributable to the relaxation of the strict daytime bathing laws of the Victorian period and the advent of surfing. Manly Council appointed the first professional lifeguard in Australia in 1907. All these attributes would later make Clavering the ideal place for a rest home for women and children.

2.4 Clavering after Gurney's Death

Clavering appear to have been inherited by members of Gurney's family after his death in 1918. The first Certificate of Title issued for Clavering is dated 29 December, 1921. The owners, as joint tenants, at this time were Henry Gurney Brewer (of Seaford, Sussex, England, school proprietor) and Grace Theophila Brewer (of Eastborn, Sussex, spinster).[8] Figure 5 shows the boundaries of Clavering at this time. The property fronted Clontarf Street. Note: The lots on the northern boundary, part of D.P. 620. These lots form part of E. Vickery's grant. Lots in this subdivision would later become part of the Dalwood Home Site (not investigated for the purposes of this statement).

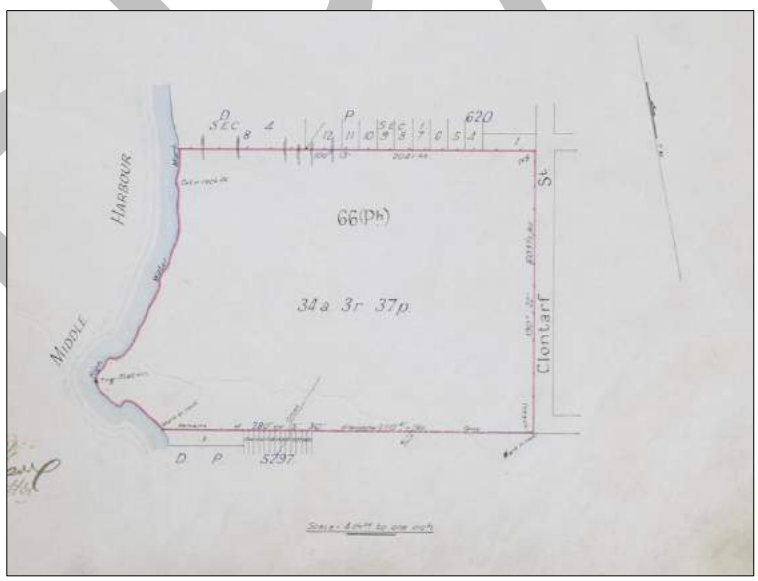

Figure 5:
The boundaries of Clavering in 1921.
C.T. Volume 3266-162 dated 29 December, 1921. NSW LPI.

[5] Pauline Curby, *Seven Miles From Sydney: A History of Manly*, NSW, Manly Council, 2001, p.178.
[6] Kate Blackmore and Associated Consultants, *Heritage Study: Municipality of Manly: Volume 2*, p.106. Unpublished report prepared for Manly Council and the Department of Environment and Planning, April, 1986.
[7] Pauline Curby, *op.cit.*, p.178.
[8] Certificate of Title Volume 3266 Folio 162. NSW LPI.

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The Brewers did not take long to sell their Australian inheritance. In January 1922, they sold Clavering to the Sydney Supply Company, of which Albert Edwin Dalwood (1863-1948) was Managing Director, for £3,750.[9]

2.5 Albert Edwin Dalwood and the Loch Lomond Estate

Dalwood, born in England, arrived in Australia at the age of 20, becoming is successful land and property owner. Dalwood also held directorships in a number of companies. Dalwood subdivided much of his Seaforth estate in 1922, advertising it under the name of the Loch Lomond Estate or Gurney's Choice Estate. The main auctions occurred after February 192. It would appear, however, that Dalwood had tried to sell at least some of the land prior to this time. On 11 January 1922, the *Sun* noted the upcoming sale of the Loch Lomond Estate noting that the 'greater number' of the 26 harbour side allotments had been offered collectively 'for some time.'[10] The 'vast panorama of glorious middle harbour scenery' offered by the Estate were highlighted in advertisements, as was the growing suburbanisation of the area, which, in Dalwood's opinion, meant rising property values. One advertisement, in the *Sun* 9 January, 1922 stated:

> 'Overlooking Sydney's Trossachs
> The Loch Lomond Estate
> Balgowlah
> All the delightful Middle Harbour Scenery,
> And vast panoramas of nature's consummate beauty
> Lie open to the view from this gorgeous choice estate.
> Lying in the path of necessitous suburban expansion….
> Attractive Water Frontages,
> Undulating slopes,
> Shady retreats.
> All alluring portion of nature's lavish beauty offered to the home builder on
> Easy terms.'[11]

Clavering stood on Lot 87 of Dalwood's subdivision, an area of 3 acres, 0 roods and 17 ¼ perches of land. Although Dalwood retained ownership this land, he never occupied it. Lots from the Estate were slow to sell. Sales continued into the Post World War II era.

2.6 The Opening of Dalwood Rest Home

In 1927, Dalwood leased his 'house on the hill' to the Food for Babies Fund for use as a holiday home for children and a rest home for mothers for a nominal rent (Figures 6 and 7). The Fund, which appears to have been established in the mid 1920s, was one of many organisations established during the late nineteenth and early twentieth centuries concerned with infant and child welfare.

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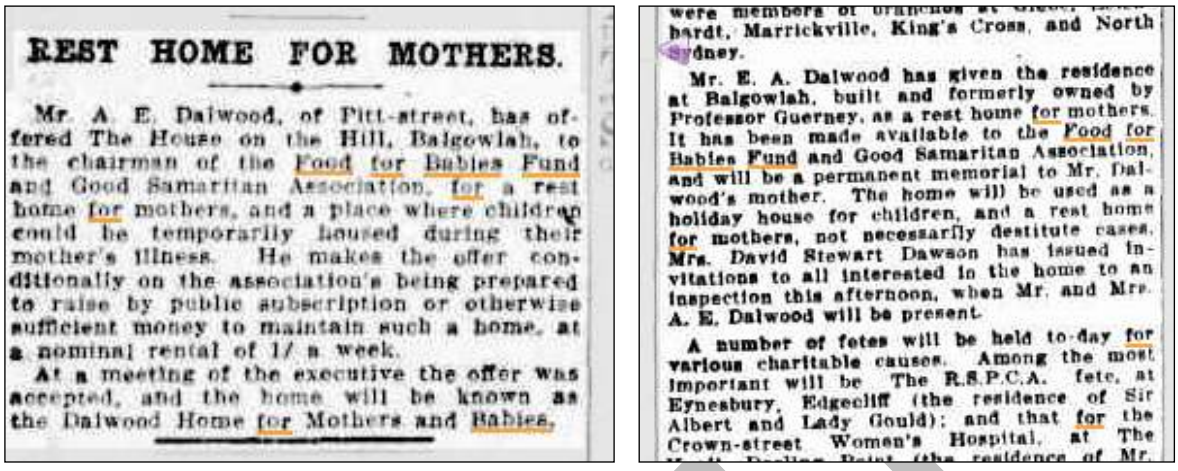
[9] Transfer attached to Certificate of Title Volume 3266 Folio 162. NSW LPI.
[10] 'Real Estate News,' *The Sun*, 11 January, 1922, p.9.
[11] 'Overlooking Sydney's Trassachs, The Loch Lomond Estate, Balgowal,' *The Sun*, 8 January, 1922, p.9.



REST HOME FOR MOTHERS.

Mr. A. E. Dalwood, of Pitt-street, has offered The House on the Hill, Balgowlah, to the chairman of the Food for Babies Fund and Good Samaritan Association, for a rest home for mothers, and a place where children could be temporarily housed during their mother's illness. He makes the offer conditionally on the association's being prepared to raise by public subscription or otherwise sufficient money to maintain such a home, at a nominal rental of 1/ a week.

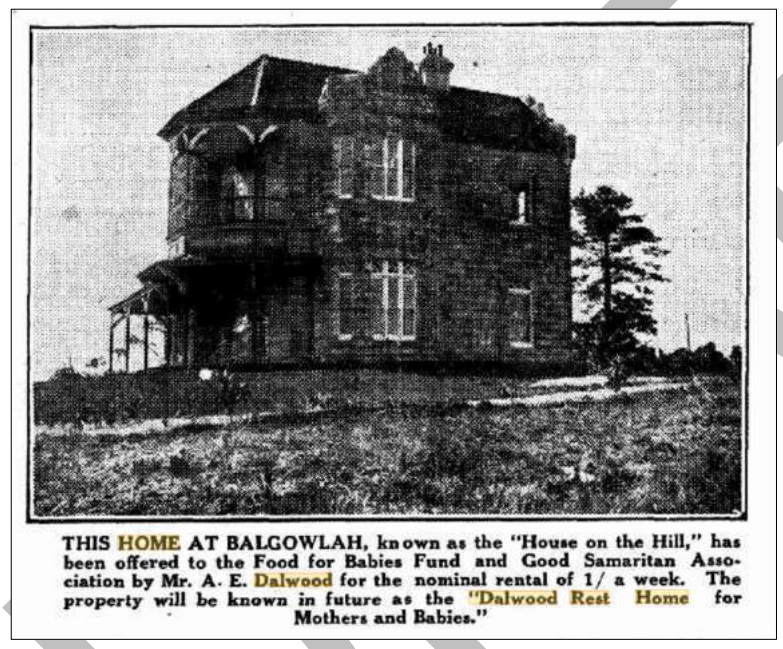
At a meeting of the executive the offer was accepted, and the home will be known as the Dalwood Home for Mothers and Babies.

were members of branches at Glebe, Leichhardt, Marrickville, King's Cross, and North Sydney.

Mr. E. A. Dalwood has given the residence at Balgowlah, built and formerly owned by Professor Guerney, as a rest home for mothers. It has been made available to the Food for Babies Fund and Good Samaritan Association, and will be a permanent memorial to Mr. Dalwood's mother. The home will be used as a holiday house for children, and a rest home for mothers, not necessarily destitute cases. Mrs. David Stewart Dawson has issued invitations to all interested in the home to an inspection this afternoon, when Mr. and Mrs. A. E. Dalwood will be present.

A number of fetes will be held to-day for various charitable causes. Among the most important will be The R.S.P.C.A. fete, at Eynesbury, Edgecliff (the residence of Sir Albert and Lady Gould); and that for the Crown-street Women's Hospital, at The Point (the residence of Mr.

Figure 6: Dalwood's gift.
The Sydney Morning Herald, 5 December, 1927; 10 December, 1927.



THIS HOME AT BALGOWLAH, known as the "House on the Hill," has been offered to the Food for Babies Fund and Good Samaritan Association by Mr. A. E. Dalwood for the nominal rental of 1/ a week. The property will be known in future as the "Dalwood Rest Home for Mothers and Babies."

Figure 7:
The House on the Hill. This is the earliest photograph of the dwelling found to date.
The Sydney Morning Herald, 2 December, 1927.

During the latter part of the nineteenth century, there was increasing concern about the high rate of infant mortality in New South Wales. Of every 1,000 children born during the 1880s, 100 died before their first birthday and 100 more before the age of five.[12] Infant mortality rates were considerably higher in Sydney than in country areas and would remain so until the late 1920s. Dr. Armstrong, Medical Officer for Health in the Sydney Metropolitan Health District in 1860/1870 and later instrumental in the early movement for infant welfare, concluded:

> '…the extraordinarily rapid urbanisation of Sydney which was taking place during those years, the absence of almost any sanitary control, either central or local, bad housing, an inferior milk supply, bad sewerage, innumerable filthy cesspits, inferior drinking water, and an increase in the practice of feeding infants artificially instead of at the human breast.'[13]

[12] Statistics cited in Karen O'Connor (comp.), *Our Babies: The State's best asset*, NSW, Department of Health, undated, p.11.

[13] Cited in Joyce Carr, 'Fifty Years of Service: The Royal Society for the Welfare of Mothers and Their Babies', *The Australian Nurses' Journal*, August 1968, p.176.

Rising concern over infant mortality rates was matched by an equal concern over a decline in the birth rate; babies were important commodities to a nation told to 'populate or perish.' Coupled with these issues was an important ideological shift with regard to welfare and charity. No longer were social ills simply considered to be the result of 'God's will', there was a feeling that some sort of social transformation could be affected through positive human action. As a result, public concern for the welfare of infants developed beyond the care of the deprived or disadvantage child- the traditional focus of concern- towards the causes of infant mortality and the services required to reduce it.[14]

A number of bodies were engaged in the area of infant welfare in the late nineteenth and early twentieth century Sydney. Other examples include the Benevolent Society, who opened the Royal Hospital for Women in Paddington in 1905 and the Alice Rawson School for Mothers (1908), an organisation that sought to educate mothers in the welfare of their children. The work of these often-voluntary organisations was aided by government initiatives, such as the *Public Health Act* (1896) and the individual public health initiatives of local councils.

The movement to coordinate infant welfare services in New South Wales gathered momentum during immediate Post World War I period. The war had stirred the Australian consciousness:

> 'Australia can produce the finest specimens of humanity in the world. That was proved on the battlefields of Europe.'[15]
>
> 'During the war (WWI) we lost 55,000 gallant young men, a cause for national mourning worthy of remembrance for generations to come. During the same period, we lost 47,000 young babies for reasons which were clearly the concern of the Government.'[16]

In the words of the Food for Babies Fund:

> 'The nation marches forward in the footsteps of little children.'[17]

Little information about the Food for Babies Fund has been located. In a booklet on Dalwood, the following information is provided under the heading 'How it Began':

> 'It took for its are the mothers and children of desolate families in the City areas and worked with the object or making them healthier and happier…..
>
> District nurses discovered deserving cases, distributing clothes, food and blankets among them as they were needed. New babies and their mothers were the Fund's especial care.
>
> These needs milk and milk foods as well as warm clothes and correct care. The nurses advised and helped the mothers and arranged for the necessary supply of milk, which was paid for by the Committee personally.
>
> Families were supplied for a month, or two months, and often longer. Skimmed milks in tins is the only kind lots of families in the slums can

[14] Karen O'Connor (comp.), *op cit.*, undated, pp. 10 onwards.
[15] Comment of the president of the Society, Mr. Innes Noads, at the opening of the first *Tresillian* as reported in 'Training School for Infant Welfare: First Under the Karitane Sydney in Australia', *The Australasian Nurses' Journal*, 15 October, 1921, p.349.
[16] Joyce Carr, *op cit.*, August 1968, p.176.
[17] *Dalwood Rest Home: The House on the Hill*, Balgowlah, Dalwood Rest Home, 1929(?), p.3.

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afford…..The milk for the Food for Babies Fund helped many a mother back to health and gave many a new little Australian a fair start in life….

THE FOUR SERVICES:

1. A rest for tired mothers.
2. A chance for mothers with new babies to recuperate.
3. A temporary home for children whose mothers are in hospital.
4. A holiday for needy children who never have any holidays.'[18]

Dalwood House or Dalwood Rest Home was officially opened by the Minister of Health, Dr. Arthur in February 1928. The formal transfer of the title to George Fitzpatrick, director, Albert Edwin Dalwood, gentleman, Lily Eales, widow, and Elsie Myerson (trustees) occurred on 28 March, 1930.[19] The Trustees also acquired additional land fronting Gurney Crescent.[20] The titles were later transferred into the name of the Dalwood Health Home (or the Food for Babies Fund) in January 1947. Refer to Figures 8 and 9.

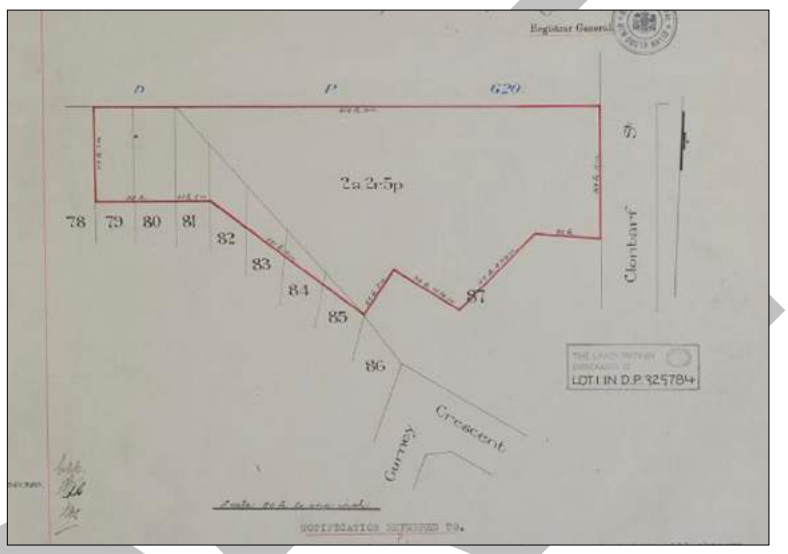

Figure 8:
Land vested in the Trustees and later the Food for Babies Fund.
Certificate of Title Volume 4402 Folio 195. Dated 13 May, 1930.
NSW LPI.

[18] 'The House on the Hill,' separate, small, undated booklet attached to the back of *Dalwood Rest Home: The House on the Hill*, Balgowlah, Dalwood Rest Home, 1929(?).
[19] Transfers attached to Certificate of Title Volume 3266 Folio 162. NSW LPI.
[20] Certificate of Title Volume 4399 Folio 13. NSW LPI.

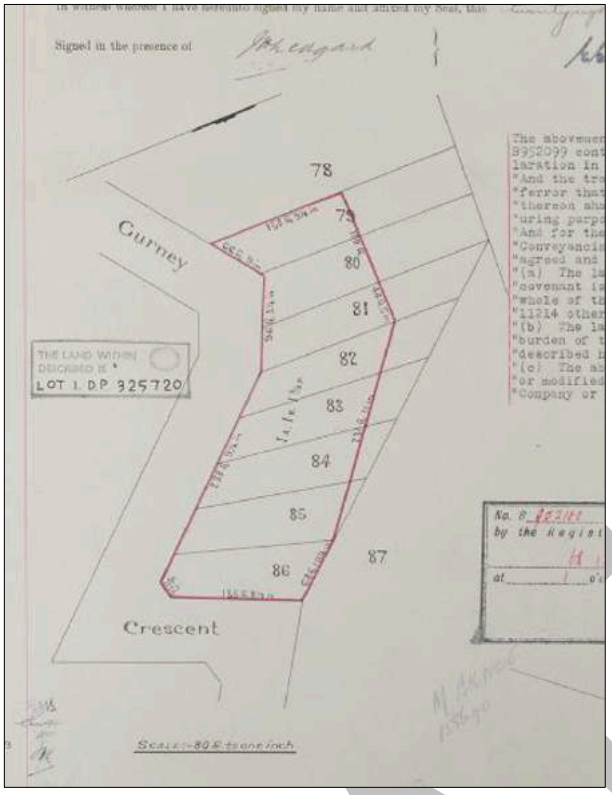

Figure 9:
Land vested in the Trustees and later the Food for Babies Fund.
Certificate of Title Volume 4399 Folio 13.
Dated 28 April, 1930.
NSW LPI.

The opening of Dalwood Rest Home was reported in the major Sydney newspapers, such as *The Sydney Morning Herald*, as well as major regional papers throughout the state, such as the *Barrier Miner* in Broken Hill (Figure 9). In their annual meeting for the year, the Food for Babies Fund reported that 60 mothers and 300 children had enjoyed a holiday at Dalwood Rest Home during the year.

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DALWOOD HOME.

OPENED BY DR. ARTHUR.

A GENEROUS GIFT.

The Minister for Health (Dr. Arthur) on Saturday afternoon opened the Dalwood Rest Home at Balgowlah, which has been made available by Mr. A. E. Dalwood to the Food for Babies Fund. The house stands on an elevated position in French's Forest.

Dr. Arthur said he considered that the work carried on at the Dalwood Rest Home was more important than that done in the hospitals, because the women who rested at the home would not need hospital treatment. He hoped that other Australians would emulate the example of Mr. Dalwood.

The Minister added that it was a calamity that such organisations as the Red Cross Society, which had done valuable service during the war, should be compelled to curtail their activities in some degrees, as far as T.B. patients were concerned, simply because of the want of funds.

Mr. George Fitzpatrick (chairman of the fund), Senator Cox, Mr. J. H. Mostyn (ex-Lord Mayor), and Sir Charles Rosenthal (members of the committee), and Mr. E. L. Sanders, M.L.A., also spoke.

Mr. A. E. Dalwood acknowledged the remarks of the various speakers.

Beds and cots have been presented by the campaign staff of St. Margaret's Hospital, the Misses Saunders, Mesdames M. H. Berry, D. Davis, Stanley Patrick, Emanuel Myerson, and George Fitzpatrick, and Messrs. J. T. Easterbrook, A. E. Dalwood, H. P. Dalwood, Emanuel Myerson.

Phipps.

REST FOR MOTHERS

The Dalwood Rest Home for Mothers at Balgowlah is now open for a holiday home for tired mothers. This home has been given to the Food for Babies Fund by Mr. A. E. Dalwood. Guests are entitled to a fortnight's free hospitality, and full particulars may be obtained from the honorary secretary, (Mrs. Stanley Patrick), Food for Babies' Fund, 21 Macquarie-place, Sydney.

Children will also be taken for a holiday even without their mother. Boys must be under six years of age and girls under 12. No one suffering from an infectious disease will be admitted to the home.

The honorary secretary would also be glad to receive any donation of clean clothes, toys for children, or books, sheets, blankets or anything that is useful in a home.

Figure 9: Opening of Dalwood Home

The Sydney Morning Herald, 20 February, 1928; *The Barrier Miner*, 2 April, 1928.

Figure 10 provides another early photograph of Dalwood Rest Home from the street, prior to the addition of the stone entrance porch that now dominates the north eastern elevation of the building.

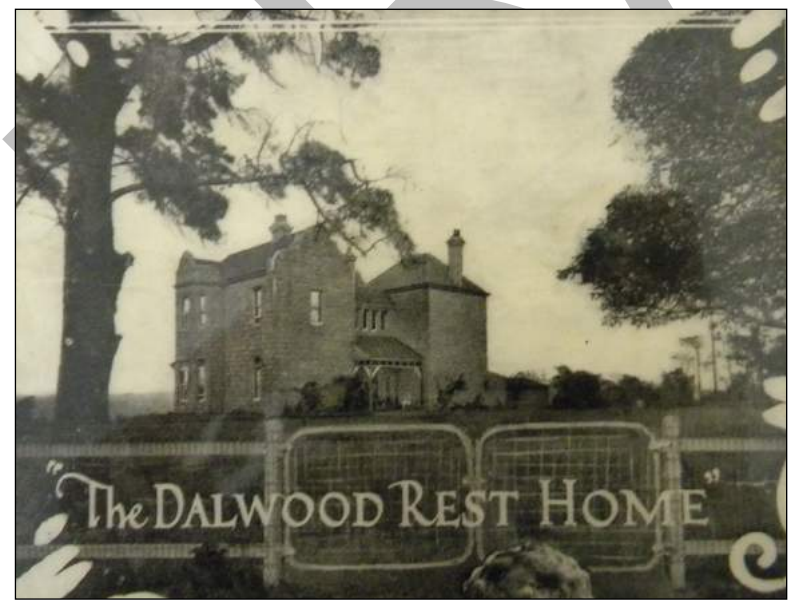
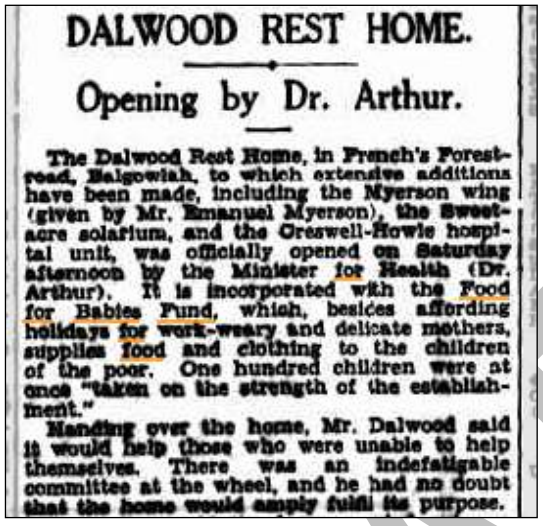


Figure 10:
Dalwood Rest Home.
Framed photograph at Dalwood Homes. Photographed by W.P.Heritage.

By the time that Dalwood Rest Home was opened, Manly was beginning to expand in earnest. The population increased as new subdivisions were opened in Seaforth, Fairlight and Balgowlah. In 1911 the population stood at 10,465 people, who had mainly been confined to the central part of the municipality. By 1921, this had increased to 18,507 people and by

1924, when the first Spit Bridge opened, to 23,160 people. Within Seaforth, there was sufficient development to warrant the establishment of a shopping centre in the early 1920s; business sites were auctioned opposite the public school and along Sydney Road, forming what remains the heart of the Seaforth Shopping Centre.

Dalwood Rest Home underwent refurbishment and addition in 1930, the first of many such works (Figure 10).

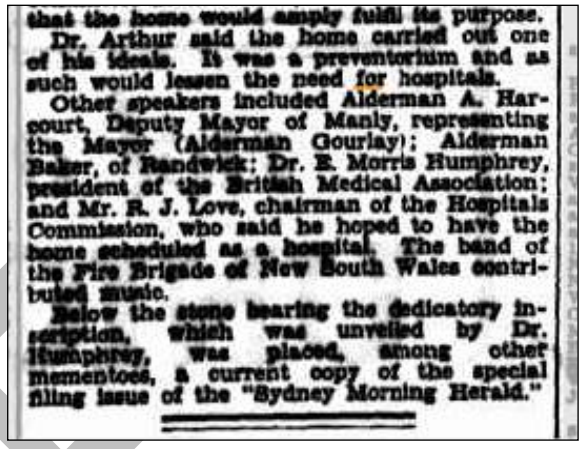


DALWOOD REST HOME.

Opening by Dr. Arthur.

The Dalwood Rest Home, in French's Forest-road, Balgowlah, to which extensive additions have been made, including the Myerson wing (given by Mr. Emanuel Myerson), the Sweetacre solarium, and the Creswell-Howie hospital unit, was officially opened on Saturday afternoon by the Minister for Health (Dr. Arthur). It is incorporated with the Food for Babies Fund, which, besides affording holidays for work-weary and delicate mothers, supplies food and clothing to the children of the poor. One hundred children were at once "taken on the strength of the establishment."

Handing over the home, Mr. Dalwood said it would help those who were unable to help themselves. There was an indefatigable committee at the wheel, and he had no doubt that the home would amply fulfil its purpose.



that the home would amply fulfil its purpose.

Dr. Arthur said the home carried out one of his ideals. It was a preventorium and as such would lessen the need for hospitals.

Other speakers included Alderman A. Harcourt, Deputy Mayor of Manly, representing the Mayor (Alderman Gourlay); Alderman Baker, of Randwick; Dr. E. Morris Humphrey, president of the British Medical Association; and Mr. R. J. Love, chairman of the Hospitals Commission, who said he hoped to have the home scheduled as a hospital. The band of the Fire Brigade of New South Wales contributed music.

Below the stone bearing the dedicatory inscription, which was unveiled by Dr. Humphrey, was placed, among other mementoes, a current copy of the special filing issue of the "Sydney Morning Herald."

Figure 11: Dalwood Rest Home.
The Sydney Morning Herald, 20 October, 1930.

In 1931, Dalwood was registered as a Public Hospital under the Second Schedule of the *Hospitals Act* and was expanded to support families who were unable to meet the needs of children in their own home. The Home was managed by an independent Community Board and was fully funded via charitable support. Prominent life governors include Sir Donald Bradman, Sir Charles Kingsford-Smith and Gladys Moncrief. One of the most popular fund raising activities was the annual Dalwood Dog Show, begun in 1932 and continued to this day.

Several years after he donated his property, Dalwood, although once reputed to be among the wealthiest men in the state, filed for bankruptcy (1932), placing his affairs in the hands of his creditors.

2.7 The Growth of Dalwood Rest Home

The site was expanded in January 1938 when Lots 4A- 7A D.P.17157 fronting Gurney Crescent were purchased by George Fitzpatrick, Dyson Austen and Elise Meyerson.[21] These lots (and others) had originally been purchased from the Loch Lomond subdivision by Minnie Louisa Iredale, wife of Leslie Peel Iredale, a Sydney accountant on 2 September, 1931 and later resumed by the Sydney Supply Company Pty Ltd as mortgagee exercising their power of sale.[22] Refer to Figure 12. The title to this land was transferred to the Dalwood Health Home (The Food for Babies Fund) in 1947.

[21] Transfer attached to Certificate of Title Volume 4516 Folio 174. NSW LPI.
[22] Transfer attached to Certificate of Title Volume 3266 Folio 162. NSW LPI.

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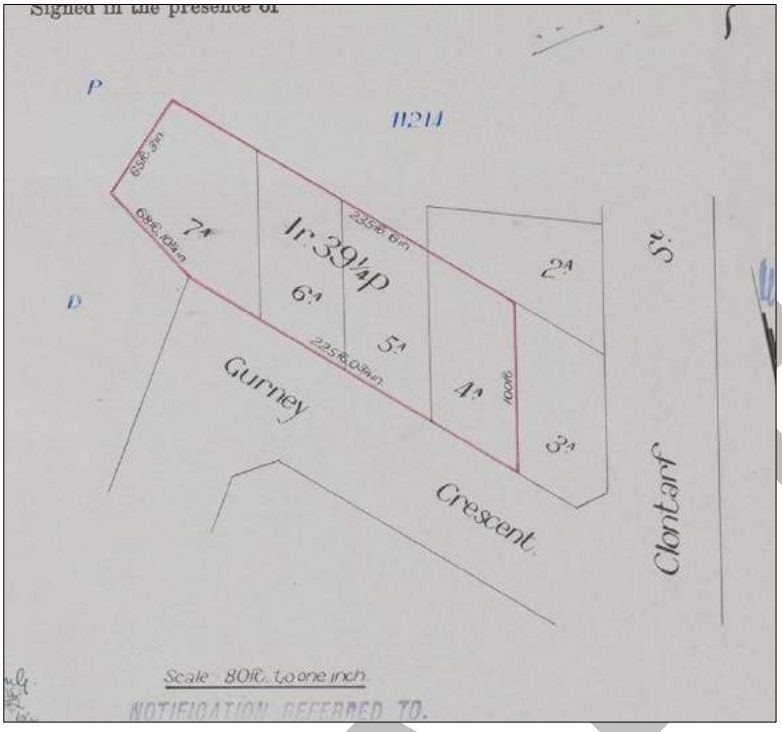

Figure 12:
Land purchased in 1938.
Plan attached to Certificate of Title Volume 4909 Folio 69. Dated 15 February, 1938.

In addition to expanding the boundaries of the site, the original stone buildings were altered and new buildings added. New structures erected on the site after 1930 and prior to World War II include:

- Opening of two new buildings/structures: the Nurses Home (donated by the Myerson family) and the playroom (donated by the Fitzpatrick family).[23] Both since demolished.
- Sandstone entrance gates erected on Dalwood Avenue (1934).

Figures 12 to 19 provide a selection of early photographs of Dalwood before and during World War II.

[23] 'For Women. Dalwood Rest Home. New Quarters Opened,' *The Sydney Morning Herald*, 16 December, 1929, p.4.

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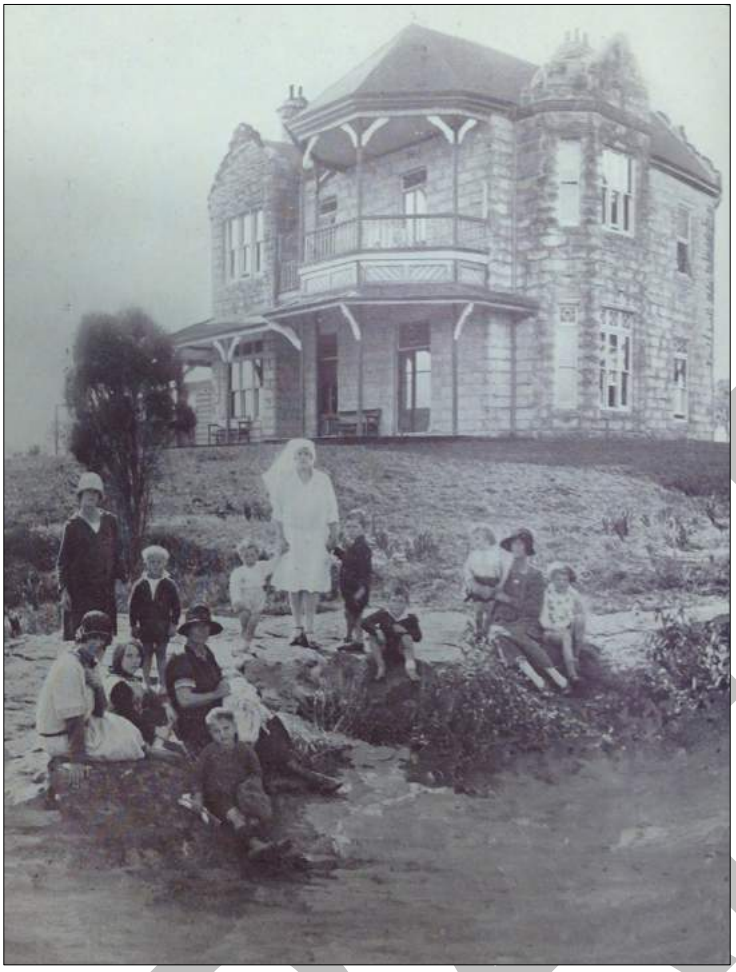

Figure 13:
Dalwood House, c.1929.
***Dalwood Rest Home: The House on the Hill*, 1929(?).**

Figure 14:
Restoration Work at Dalwood, 1928-1931.
Sam Hood, undated. State Library of NSW.

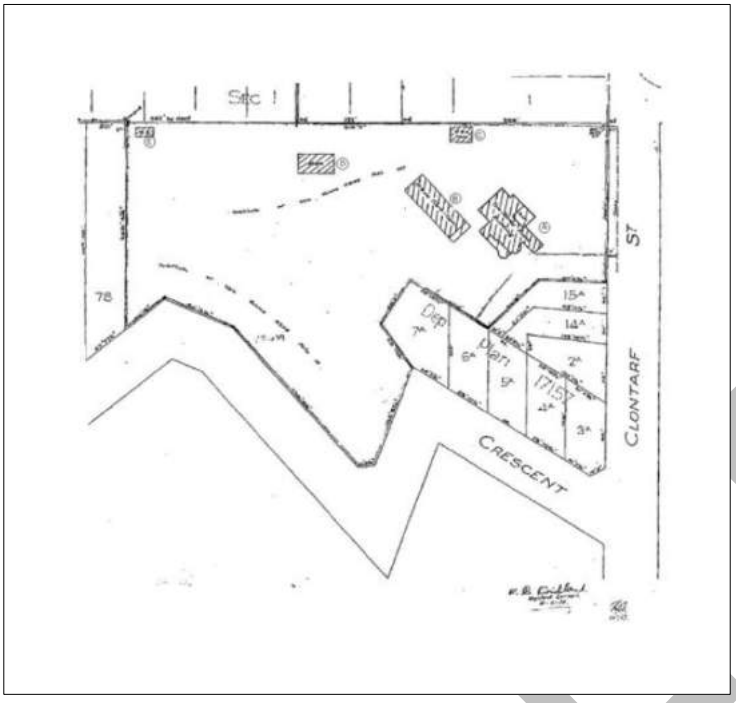

Figure 15:
Site Survey dated 1934. The buildings are not labelled in this survey. The building south west of Dalwood House is the Meyerson Wing (see Figure 17 below). One of the other two buildings is likely to be the playroom (see Figure 18). The other may have been dairy. When and where the dairy were established (and if on this site) is not clear (see Figure 19).
Original source Department of Commerce. Cited in the Judith Kubanyi Heritage Report 2014.

Figure 16:
Sam Hood, *Dalwood Home at Seaforth, 1930s.* Showing the later additions made by the Fund to the original house.
State Library of NSW.

Figure 17:
Sam Hood, *Children at Play at Dalwood Home, 1941.*
State Library of NSW.

This photograph shows the Meyerson Wing to the south west of Dalwood House, later demolished.

Figure 18:
Fitzgerald Playroom, undated. Later demolished.
Manly Library.

Figure 19:
Dalwood Home's Dairy, undated.
Manly Library.
Where the dairy was located is not known.

Figure 20 provides an aerial photograph over the site from 1943 showing Dalwood House, a stone outbuilding (now known as the Loft Building) and the additions identified above.

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Figure 20: Aerial photograph over Dalwood in 1943. The thin yellow lines show the existing lot boundaries; the thick yellow line shows the existing site boundary.
SIX Maps.

2.8 The Site After World War II

Manly continued to grow during the Post World War II period. In 1947, there were 33,775 people within Manly, nearly seven times the number than had been living in the area in 1901. By 1971, this increased to 39,260 people.

At Dalwood, a new 30 bed dormitory was built to house girls (1960) and further alterations were made to the original building, including kitchen facilities. Around this time, the original sheet metal roof on the main house was replaced with tile. By 1966, there were, on average, 56 residents on site. Included among the new works was the addition of the Games Wing to Dalwood House (1966) and a new services block to house children and staff dining rooms, staff amenities, laundry and sewing facilities, workshop and plant rooms (1976).

The types of programmes offered on the site expanded. The Day Care Early Intervention Programme, for example, was added in 1978 to meet the education and developmental needs of children living at home who were under school age; and in 1983, the Byrnes family donated funds for the establishment of a residential cottage for disadvantaged children on the property. Building work continued on site, including the construction of a playing field for organised sports and other activities; a new Day Care Classroom, added to the existing Day Care Centre (1984); a wading pool built close by the Day Care Centre (1985); and the levelling of an area adjoining Gurney Crescent for future development.

The site ceased to offer residential care in 1989. The legacy of the Dalwood Trust was continued by the Dalwood Day Care Early Intervention Programme. The focus was now on caring for vulnerable children and families and providing support for families to care for children in their own homes, together with a renewed emphasis on early learning and development prior to school entry.

In 1991, responsibility for the site passed to the Northern Sydney Health Service following amendments to the *Hospitals Act*. New services were moved to the site, including the Palm Avenue School. The Dalwood Auxiliary funded the construction of a new Family Care Centre

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building in the mid 1990s. The President of the Dalwood Dog Show, Mr. Bill Spilstead, donated funds for the erection of a purpose built day care unit in 1994, which was named the Dalwood Spilstead Centre in this honour.

In 2009 the Byrnes Building was completed. In 2010, the western verandah of the stone building was demolished due to its poor condition. It has since been reconstructed. The tile roof was replaced with new corrugated steel sheeting and the southern external timber stair (c.1980s) was replaced modern steel stair (c.2011).

In 2014-16, the former girls' dormitory (1950s) and later alterations and additions) and the games room (c.1960s) were demolished and replaced with a large new Child and Family Services Building. The staff car park to the north of the family centre was enlarged and landscaping works carried out.

3.0 SITE ASSESSMENT

3.1 The Site

3.1.1 General Description of the Overall Site

For the purposes of the following, refer to Figure 21, an aerial photograph over the Dalwood Home Site.

Figure 21:
Aerial photograph over the Dalwood Home Site. The boundaries are outlined in red. The buildings are numbered. This should be read in conjunction with Figure 3, which shows the site contours. The same building numbers as provided by Figure 3 have been used.
SIX Maps; annotations by WP Heritage.

Building Key:

A. Byrnes Building (c.2009).
B. Spilstead Centre (c.1994).
C. Dalwood House (c.1878).
D. Family Care Centre (c.1995).
E. Services Block (c.1976).
F. The Loft (c.1880s).
G. Child and Family Services Building (c.2014-2016).
H. Shed (c.2009).

It is not the purpose of this HIS to provide a detailed site description of the site as a whole. The following briefly identifies the principal site characteristics.
The site is approximately 37,155.5 square metres (3.72 ha) in size.[24] As demonstrated by Figures 2 and 3 in Section 1.7, the site is irregular in shape with frontages to Dalwood Avenue/Clontaff Street, Callicoma Road and Gurney Crescent. The site is entered and exited from separate driveways opening onto Dalwood Avenue/Clontaff Street. There is a third entrance off Callicoma Road.

Most of the buildings on the site are located on the largest of the lots comprising the site, being Lot 1 D.P. 325784, and on Lots 1-5 D.P. 620, on the corner of Dalwood Avenue/Clontaff Street and Callicoma Road. These lots are level or have a gentle fall.

To the east and north east of Dalwood House (Building C in Figure 20), there is a bitumen surfaced carpark and driveways, with an irregularly shaped grassy island. There are widely spaced, large, mature trees along the eastern boundary, including a large fig tree and a pine tree. The northern most of the entrances along this boundary is marked by a substantial stone pillar/war with memorial clock and the wording 'Dalwood Homes.'

Refer to Figures 22 to 24.

Figure 22:
Entrance into the site from Dalwood Avenue/Clontaff Street. The stonework was erected in 1934.

Figure 23:
Mature trees along the eastern boundary, including a fig tree and a pine tree.

[24] By land title.

Figure 24:
Island in the driveway.

The bitumen driveway continues around the south eastern corner of Dalwood House, where there is a group of mature plantings, including several pine trees. There is lawn and a curving pathway on the north western side of Dalwood House, above a fenced, high, retaining wall. The pathway continues along the front of the services building towards the loft. Refer to Figures 25 and 26.

Figure 25:
Mature trees and other plantings to the south east of Dalwood House.

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Figure 26:
Pathway running along the Service Building, with the Loft and Family Service Centre in the Distance.

The areas immediately around the Loft (being Building B in Figure 20) and the Family Care Centre (Building D in Figure 20) comprise lawn and simple, informal, landscaping.

To the north west of Building G, being the recently constructed Child and Family Services Building, there is a carpark and open areas of lawn. The northern 'fringe' of the lots in this area fall steeply to Callicoma Road. The slope to the road is rocky and well vegetated.

Refer to Figures 27 to 29.

Figure 27:
Carpark to the north west of the new Child and Family Services Building.

Figure 28:
Open lawn fringed with bushland running parallel to Callicoma Road. Looking west from the car park above towards the densely vegetated lots comprising the north western corner of the site.

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Figure 29:
Simple landscaping around the Loft, with the carpark shown in Figure 27 above.

The lots in the north western and south western most corner of the site fall more sharply north west and south west. These lots are rocky and heavily vegetated.

Refer to Figures 30 and 31.

Figure 30:
Looking into the north western corner of the site from Callicoma Road.

Figure 31:
Looking up Gurney Crescent to densely vegetated south western corner of the site.

The proposed re-zoning does not involve these areas of the site.

3.1.2 The Area of Proposed Works

Below Dalwood House, the Services Block and the Loft (see Buildings C, E and F in Figure 20 above), and within the large centre lot (Lot D.P. 325784), there is a high rock face/retaining wall. This rock face/wall decreases in height to the west. The area immediately below the wall and flowing into the lots in the south eastern corner of the site, which it is proposed to rezone for low density residential development (Lots 4A, 5A, 6A and 7A D.P. 17157; part of Lot 1 D.P. 325720 and part of Lot 1 D.P. 325784) has a more gentle fall and is partially cleared. The area below the wall which is it proposed to rezone Environmental Living slopes more steeply and is well vegetated. There are rocky outcrops throughout these lots. With the exception of the retaining wall, there are no structures in this area. Given the nature of the terrain, it is likely that the rock face and level area are the result of human modification. Is this where the rock for the Victorian period buildings on the site was quarried? No historical references have been located to indicate what, if anything, this part of the site has been used for.

Figures 32 to 37 illustrate this area.

Figure 32: The rock face/retaining wall immediately below Dalwood House.

Figure 33: The rock face/retaining wall below the Services Building.

Figure 34: Looking west across the area it is proposed to rezone to the R2 Low Density Residential, with the rockface/retaining wall on the left hand side of the photograph and the Loft in the distance.

Figure 35: Looking east across the area it is proposed to rezone R2 Low Density Residential, with No. 2 Gurney Crescent and No. 17 Dalwood Avenue visible in the distance.

Figure 36: Looking north west into the area from near the corner of Dalwood Avenue and Gurney Crescent.

Figure 37: Further west along Gurney Crescent. Only the very top of the roof of Dalwood House is visible from this point.

3.2 The Buildings

It is not the purpose of this statement provide a detailed description of the buildings, and other improvements, on the site, given that no works are proposed to them.

The table below identifies the buildings on the site. Refer back to Figures 21 for the location of each of the following buildings.

	Building	Constructed	Description
A	Byrnes Building	c.2009	A single storey brick building.
B	Splistead Centre	c.1994	A single storey two tone brick building with tile roof.
C	Dalwood House	c.1878	Two storey sandstone Victorian Gothic style house, with parapeted entrance with Gothic pointed arch. The roof is hipped and gabled and clad in corrugated metal. The

	Building	Constructed	Description
			principal entrance is located within the north western elevation. The building, however, was clearly built to address the views of Middle Harbour to the south west.
D	Family Care Centre	c.1995	A single storey brick building with tile roof.
E	Services Building	c.1976	Two storey brick building with pitched, tiled, roof and aluminium framed doors and windows. The roof extends on the southern side over a concrete verandah.
F	Loft Building	c.1880s	A two storey sandstone building that may have been erected in conjunction with the main house. The roof is pitched, with gable ends, and clad in Colorbond. .
G	Child and Family Services Building	c.2014-2016	Substantial two storey brick building with tiled roof.
H	Shed	c.2009	Metal clad storage shed.

Figures 38 to 48 illustrate each of the above buildings, with a greater focus on Dalwood House and the Loft, being the two most significant buildings on the site. Note: the Byrnes Building was not photographed because the associated playground was in use. It is similar in style to the Family Care Centre.

Figure 38: South western elevation of Dalwood House. The corner verandah was recently reconstructed using physical and documentary evidence.

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Figure 39:
North eastern elevation of Dalwood House. This elevation has been significantly altered, most notably in the 1930s.

Figure 40:
North western elevation of Dalwood House.

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Figure 41:
South eastern elevation of Dalwood House. The stair is a recent addition and replaced an earlier, timber, stair.

Figure 42:
Southern and eastern elevations of the Loft.

Figure 43:
Northern elevation of the Loft.

Figure 44:
Spilstead Centre (southern side). This building is similar in style to the family care centre.

Figure 45:
Family Care Centre.

Figure 46:
South western elevation of the Services Building.

Figure 47:
North eastern elevation of the Services Building, with Dalwood House on the left hand side.

Figure 48:
Looking south west towards the new Child and Family Services Building.

3.3 The Surrounding Area

For the following, refer to the aerial photograph, Figure 49.

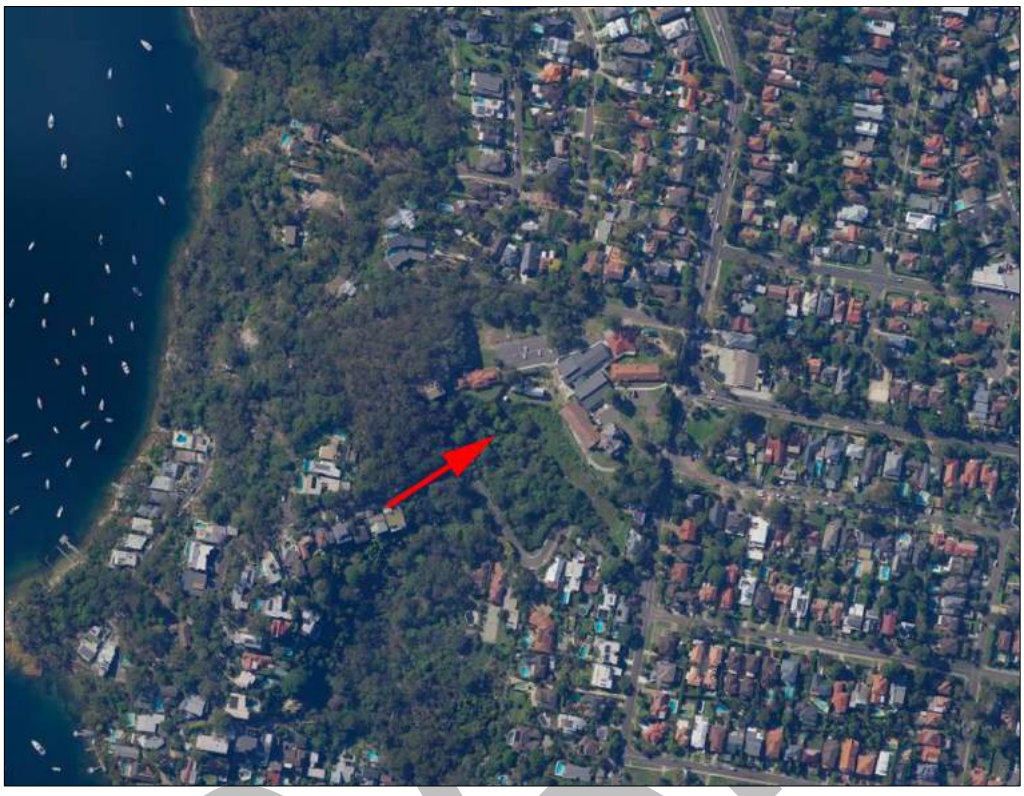

Figure 49: Dalwood's Setting.
SIX Maps; annotation by WP Heritage.

3.3.1 Planning Context

The *Manly LEP 2013* provides for a number of different zonings in the area surrounding the subject site. Refer to Figure 50. There are two zonings across the subject site: special uses (health services facility) and environmental conservation (E2). To the north and east of the site, the majority of the land within the immediate area is zoned for low density use (R2). To the north west, there is a pocket of land zoned environmental management (E3). To the west and south lies areas zoned for low density (R2) and public recreation (RE1). A height limit of 8.5m applies to areas immediately around the site.

The *Manly LEP 2013* Land Use Table outlines the objectives of these zones are as follows:

Low Residential Density (R2):

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

Environmental Management (E2):

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

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Environmental Management (E3):

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To protect tree canopies and provide for low impact residential uses that does not dominate the natural scenic qualities of the foreshore.
- To ensure that development does not negatively impact on nearby foreshores, significant geological features and bushland, including loss of natural vegetation.
- To encourage revegetation and rehabilitation of the immediate foreshore, where appropriate, and minimise the impact of hard surfaces and associated pollutants in stormwater runoff on the ecological characteristics of the locality, including water quality.
- To ensure that the height and bulk of any proposed buildings or structures have regard to existing vegetation, topography and surrounding land uses.

Public Recreation (RE1):

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To protect, manage and restore areas visually exposed to the waters of Middle Harbour, North Harbour, Burnt Bridge Creek and the Pacific Ocean.
- To ensure that the height and bulk of any proposed buildings or structures have regard to existing vegetation, topography and surrounding land uses.

The planning report that accompanies this application should be referred to for further detail.

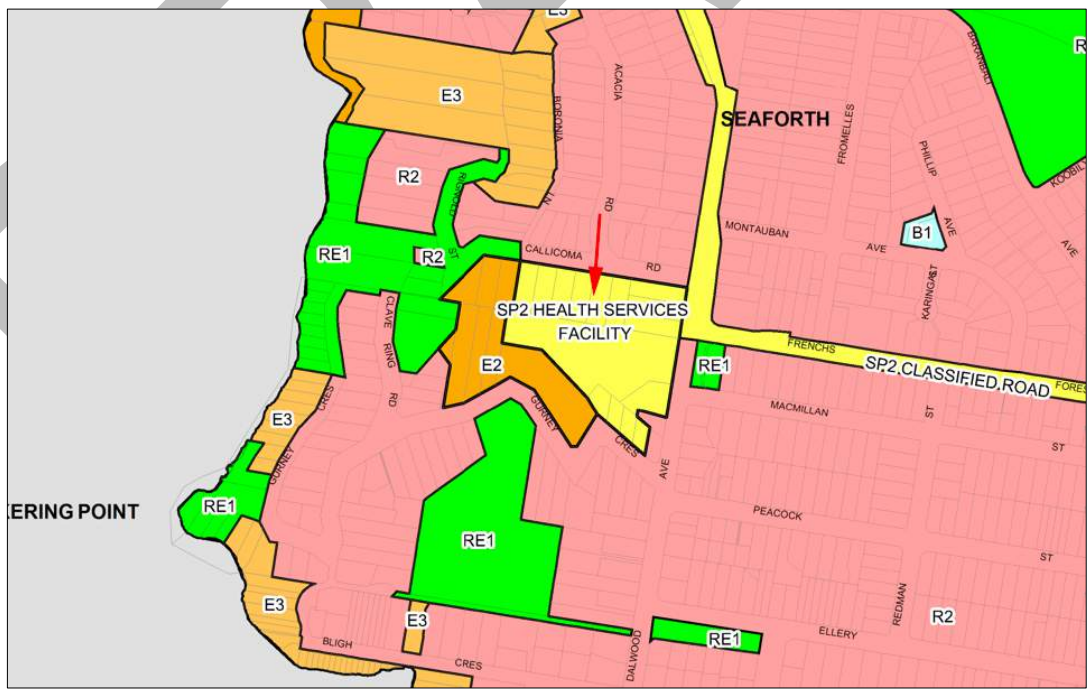

Figure 50: Zoning within Dalwood's Setting.
SIX Maps; annotation by WP Heritage.

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3.3.2 Description

The above zonings result in a setting of low density housing, with pockets of bushland which Council controls protect.

To the east of the site, across Dalwood Avenue, to the north across Callicoma Road and to the south, across Gurney Crescent, the area is characterised by a regular street pattern and regular lot sizes, with allowances for topography. These areas are characterised by one and two storey dwellings set within garden surrounds. Dwellings are predominately brick or rendered brick and tiled roofs. While there are scattered interwar period dwellings, most date from after World War II.

To the west and south west the terrain falls more steeply towards the water. As shown by Figure 49, there are substantial patches of bushland within the areas to the west of the site. Dwellings in these areas have views across Middle Harbour.

Dalwood is located within a residential area. To the east of the site, across Dalwood Avenue, to the north across Callicoma Road and to the south, across Gurney Crescent, the area is characterised by a regular street pattern and regular lot sizes, with allowances for topography. These areas are characterised by one and two storey dwellings set within garden surrounds. There is a childcare centre opposite the main entrance into the site, on the other side of Clontaff Street. Dwellings are predominately brick or rendered brick and tiled roofs. While there are scattered interwar period dwellings, most date from after World War II.

To the west and south west the terrain falls more steeply towards the water. As shown by Figure 49, there are substantial patches of bushland within the areas to the west of the site. Dwellings in these areas have views across Middle Harbour.

Figures 50 to 56 illustrate the general character of the area surrounding the site.

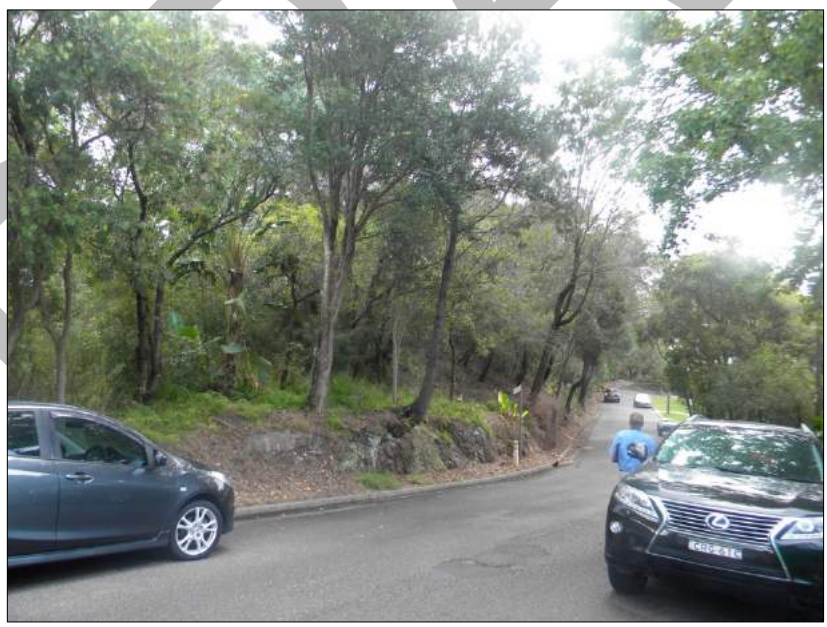

Figure 51: Looking west along Callicoma Road.

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Figure 52:
Typical dwelling on the opposite side of Callicoma Road.

Figure 53:
Showing the character of the general streetscape at the corner of Dalwood Avenue and Gurney Crescent, looking north.

Figure 54:
Typical dwellings opposite the site on Dalwood Avenue.

Figure 55:
The dwellings immediately south of the site, fronting Dalwood Avenue.

Figure 56:
No. Dalwood Avenue, adjoining the south eastern corner of the site.

Figure 57:
Gurney Crescent.

Figure 58: Childcare Centre on Clontaff Street, opposite the main entrance into the site.

4.0 ASSESSMENT OF SIGNIFICANCE

Two types of heritage listings may apply to a site:

- Statutory Listings.
- Non-Statutory Listings.

For the following, refer to the listing sheets in Appendix 1.

4.1 Statutory Listings

4.1.1 Commonwealth

No part of Dalwood Home Site is listed as a heritage item on the National or Commonwealth State Lists under the auspices of the *Environment Protection and Biodiversity Conservation Act 1999* (*EPBC Act*).

4.1.2 State (New South Wales)

No part of Dalwood Home Site is listed as a heritage item on the **State Heritage Register** under the auspices of the *NSW Heritage Act 1977*.

Two buildings on the site are listed as heritage items by the **s170 Register** of NSW Department of Health maintained in accordance with the *NSW Heritage Act 1977*. The listings are for:

- 'Principal Building', Dalwood Avenue, Seaforth.
- 'Stone Out Building', Dalwood Avenue, Seaforth. i.e. the Loft Building.

4.1.3 Local (Manly Council)

The site is listed by Schedule 5 Part 1 of the *Manly LEP 2013* as follow:

- 'Dalwood Home (principal building and stone building to Dalwood Home)', No. 21 Dalwood Avenue, Seaforth. Item No. 270. Local significance.

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The site is not located within a Conservation Area as identified by Schedule 5 Part 2 of the *Manly LEP 2013*.

The site is not identified as an archaeological site by Schedule 5 Part 3 of the *Manly LEP 2013.*

4.2 Non-Statutory Listings

The Dalwood site is listed on the following non-statutory heritage registers:

- National Trust of Australia (NSW). The listing is under the name 'Dalwood's Children's Home, formerly Clavering,' Frenchs Forest Road, Seaforth. Classified.
- The site also lies within the National Trust's Manly Urban Conservation Area Precinct 5 Seaforth.

Note: The site is not listed on the *Register of the National Estate*.

4.3 Identifying View Corridors

For the following, refer to Figure 58, which identifies the significant view corridors into (marked in yellow) and out of (marked in green) of the site.

Figure 59: Identifying significant view corridors to, from and within the site. The solid red arrows identify significant view corridors into the site from the public domain. The dotted red arrow identifies a distant (likely) view corridor. The yellow arrow identifies a minor view corridor into the site. The green arrows identify significant view corridors out of the site.

SIX Maps; annotations by WP Heritage.

4.3.1 View Corridors Towards the Site

The principal view corridors into the site, defined by the red arrows in Figure 58, are obtained from the northern end of Dalwood Avenue directly outside the site. Significant views are principally those involving Dalwood House and/or the Memorial Gates and, with the exception of views from the entrances and along the driveways, are partially screened by trees and buildings. The Loft is not visible from the public domain. Views towards the other buildings on the site from the public domain are not significant. Refer to Figures 59 and 60 below, to the front cover and to Figure 23.

Figure 60: View towards the site from the southern entrance off Dalwood Avenue. Refer to the front cover for a view into the site from directly outside of the northern entrance from Dalwood Avenue (the main entrance). Refer back to Figure 23 for an example of a filtered view into the site from opposite it on Dalwood Avenue.

As approached along Dalwood Avenue from the south, views into the site are screened until directly outside the site by vegetation. Refer to Figure 60. The dense vegetation on the site on approach in this direction provides a marker for it in the street.

Figure 61:View towards the site as approached up Dalwood Avenue from the south.

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As approached along Clontaff Street from the north, the view is primarily of the new buildings in the northern corner of the site, which are fenced. Dalwood House becomes visible as the Memorial Gates are passed. Refer to Figures 61 and 62.

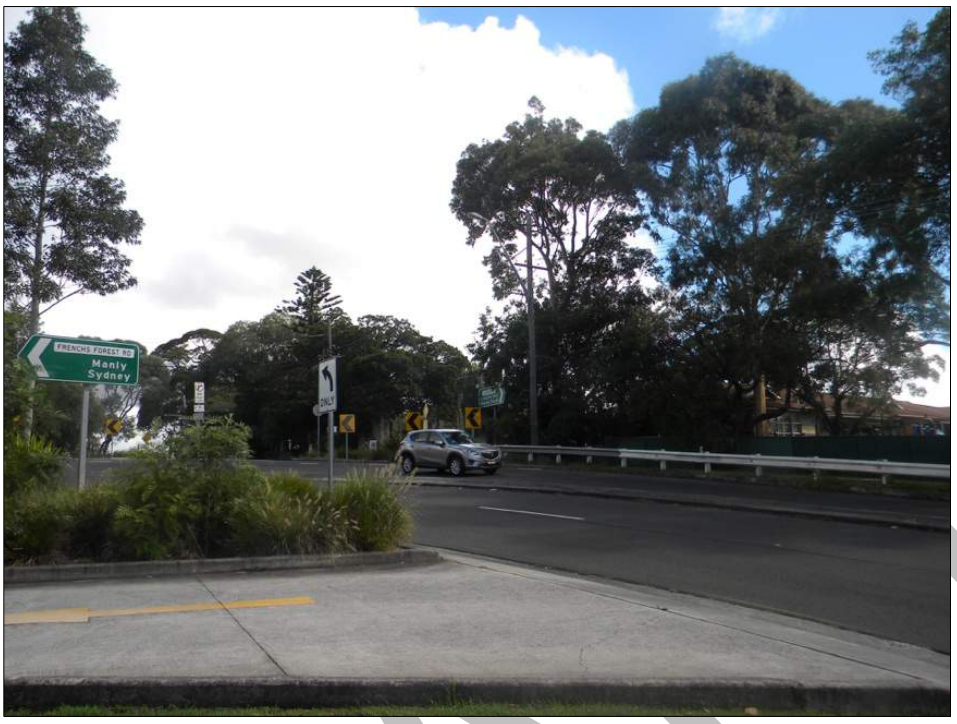

Figure 62:Dalwood House is concealed by later buildings and fencing as approached from the north

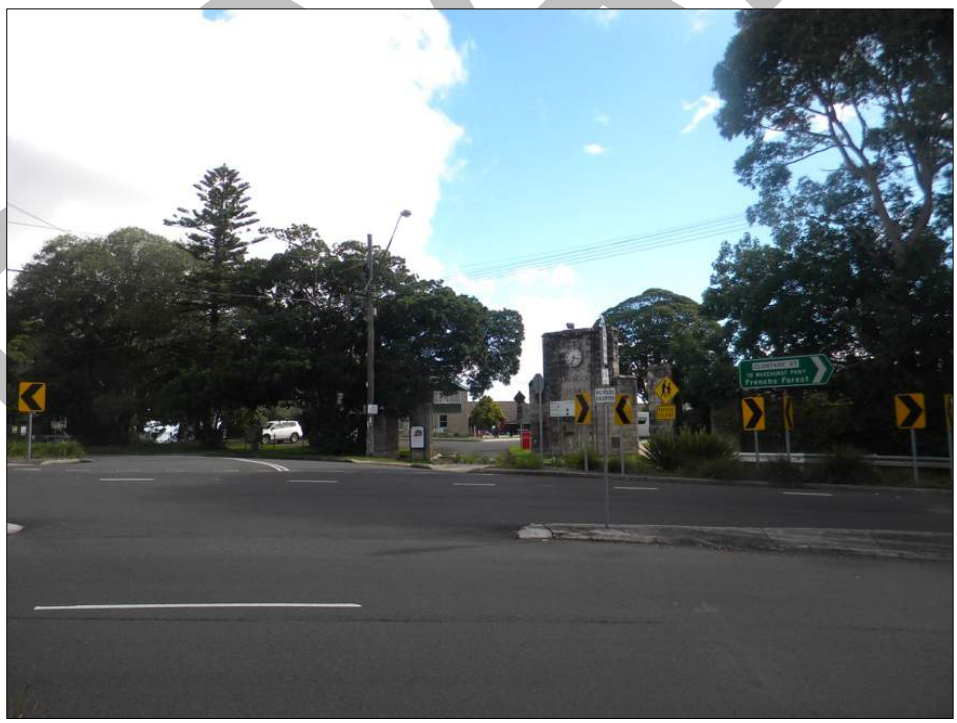

Figure 63: Dalwood House from the opposite side of Clontaff Street, outside of the main gates.

There are views towards the site from MacMillian Street and Frenches Forest Road to the east. The former are of Dalwood House, partially screened by trees. The latter are principally of the Memorial Gates. Refer to Figures 63 and 64.

Figure 64: View toward Dalwood House from MacMillian Street. This photograph was taken by the authors in 2012, prior to the construction of the new Family and Children's' Services Building, which would also be visible in this view corridor.

Figure 65: View towards Dalwood House from Frenches Forest Road.

There are minor glimpses of the upper part of Dalwood House from the eastern most end of Gurney Crescent. Refer back to Figure 37. This is the view corridor identified by the yellow arrow in Figure 58 above.

There are no significant views into the site from Clavering Road or Callicoma Road. The views are of dense vegetation.

There are distant views towards the roof of Dalwood House from Middle Harbour. Refer to Figure 65 below.

Figure 66: View from Peach Tree Bay, near Sugar Loaf Point. The arrow marks Dalwood House.
Google Maps; WP Heritage and Planning.

4.3.2 View Corridors Out of the Site

The most significant view corridors out of the site, in terms of historic view corridors and extant view corridors, are the views towards the water from Dalwood House defined by the green arrows in Figure 58 above. Dalwood House presents its principal elevation to the water; the two storey verandah was positioned to take advantage of these views. The view out towards the water from the other identified heritage building on the site, being the Loft Building, was less critical, as is typical of an auxiliary building.

The way in which the view towards the water is framed has changed over time from one of uninterrupted, dense bushland, to an urbanised view, with remnant bushland. Although altered to some degree, this view is critical to understanding the historic significance of Dalwood House as a Victorian era weekend retreat (Figure 66 and 67). Although the water is not visible when standing further into the site, there is a clear sense from most parts of the site that it stands on elevated land with district views.

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Figure 67:
View to towards the water from directly outside of Dalwood House.

Figure 68:
View to towards the water from directly outside of Dalwood House.

To the south and south east, views out of the site generally, and from Dalwood House and the Loft in particular, are screened by planting within the site or on adjoining properties. From some viewpoints, there are slot views over surrounding housing.

To the north, views out of the site are generally screened by vegetation within the site. From the buildings on the corner with Dalwood Avenue and Callicoma Road, there are views towards surrounding housing. There are no significant views from Dalwood House or the Loft Building to the north.

While views out of the site to the north and south do not specifically contribute to understanding the significance of the property, the fact that vegetation screens the site from suburban development of a different period and type helps manage its significance.

To the east, views out of the site and from Dalwood House are of Dalwood Avenue, Frenchs Forest Road, Clontaff Street and adjoining streets. These views are partially screened by the vegetation that lines the Dalwood Avenue boundary of the site. The views in this direction are vastly altered from their historical context. They do not help explain the significance of the site.

4.3.3 View Corridors Within the Site

For the following, refer to Figure 68, an annotated aerial photograph which illustrates view within the site. The red arrows identify significant view corridors; the yellow arrows identify minor view corridors. Minor view corridors are those that arise out of the layout of the site, but which do not necessarily contribute to the ability to understand its heritage significance. For example, the views identified by the yellow arrows towards the Loft have arisen because of land form and the placement of buildings. The building was not, however, built with regard to these view corridors.

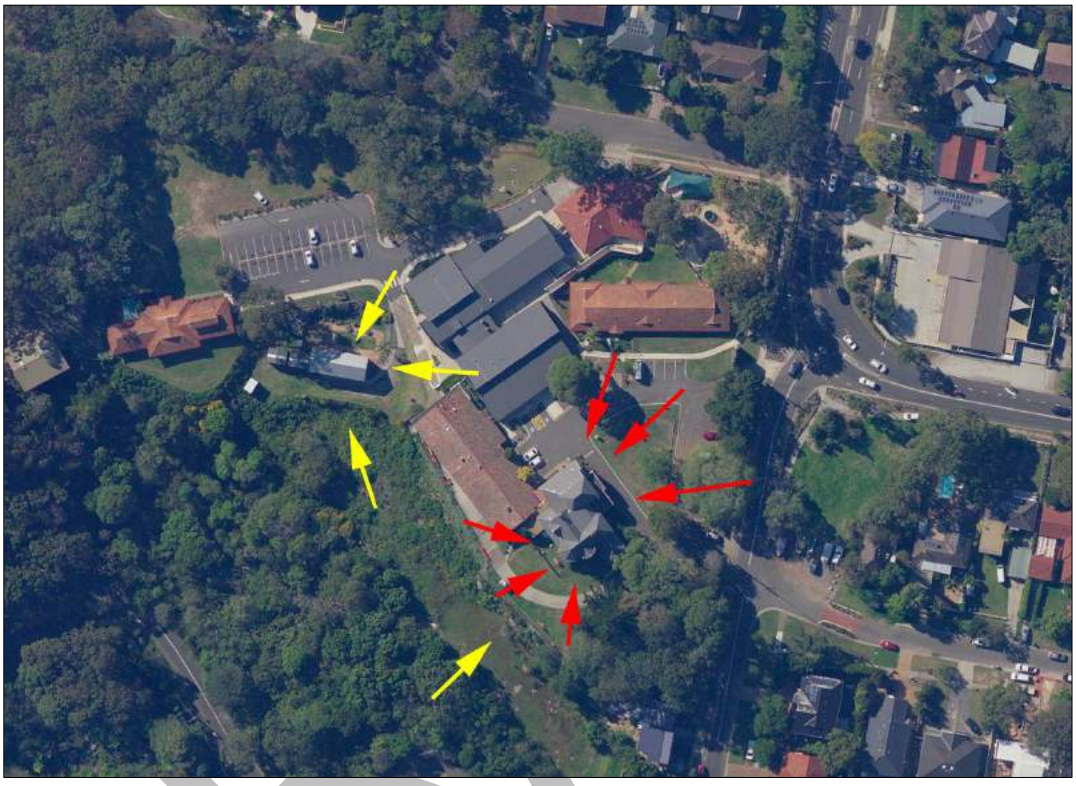

Figure 69: View corridors within the site. Red view corridors are significant. Yellow view corridors are of minor significance.

SIX Maps; WP Heritage.

Significant view corridors within the site are views towards the south western and north eastern elevations of Dalwood House. In recent years, view towards the north western side of Dalwood House from within the site have been impacted upon by the construction of new buildings.

View corridors towards the Loft are of minor significance. This is a utility building that has been altered. It was not designed with regard to view corridors.

There are minor view corridors across the area that it is proposed to rezone towards the Loft (Figure 69) and foreshortened view corridors towards the top of Dalwood House from below the crib wall (Figure 70).

Figure 70:
View to towards the Loft from across the area that it is proposed to rezone.

Figure 71:
View towards Dalwood House from below the crib wall within the area that it is proposed to rezone.

4.4 Integrity

The site demonstrates mixed integrity.

The boundaries have altered over time. When Dalwood House was known as Clavering, it stood on over 34 acres of land. This was reduced to just over 2 acres in the late 1920s, before being slightly increased over the following ten years through the purchase of lots from the Loch Lomond Estate subdivision (which included Clavering) and the neighbouring subdivision of E. Vickery's grant.

There is no original or significant fencing on the site. The only entrance gate of significance is the sandstone entrance gate at the northern end of Dalwood Avenue.

The comparison of historic (1943) and current aerial photographs show that the layout of road/paths and the pattern/density of planting on the site has changed over time.

The pattern of buildings on the site have changed over time. Buildings have been demolished and others constructed, altering the immediate setting of the nineteenth century buildings (Dalwood House and the Loft) and view corridors to and from them. Buildings, including Dalwood House and the Loft, have also been retained and altered. It is not the

purpose of this statement to set out all the alterations and additions made to the buildings on the site. Dalwood House and the Loft, as they exists today have undergone significant alteration and addition since constructed as a gentleman's country retreat.

4.5 Significance

4.5.1 Under NSW Heritage Division Criteria

4.5.1.1 Criterion (a)

An item is important in the course, or pattern, of New South Wales' cultural or natural history (or the cultural of natural history of the local area)

Guidelines for Inclusion	Guidelines for Exclusion
• shows evidence of a significant human activity	• has incidental or unsubstantiated connections with historically important activities or processes
• is associated with a significant activity or historical phase	• provides evidence of activities or processes that are of dubious historical importance
• maintains or shows continuity of a historical process or activity	• has been altered so that is can no longer provide evidence of a particular association

Dalwood Home Site, Seaforth has historic significance as a place that has provided services to children and their families since 1927, first through the Food for Babies Fund and later as a Public Hospital. The Food for Babies Fund was part of wider movement that arose during the late nineteenth and early twentieth centuries that focused on women and children's welfare. The type of services offered on the site has continued to evolve to meet changing social needs.

Dalwood Home Site, Seaforth has historic and aesthetic significance as a rare local example of a Victorian period villa estate. It is noted that its use for this purpose was periodic. It was not Gurney's primary place of residence and Dalwood does not appear to have occupied it. This phase of use is shorter than its ongoing use for children's services. Two buildings survive from this period: Dalwood House (originally Clavering), c.1878, and a stone outbuilding, now known as the Loft, c.1880s. Although the estate on which the two buildings now stands have been substantially reduced, the two early buildings altered and other buildings erected on the site, it is still possible to understand that these buildings were once part of gentleman's estate.

4.5.1.2 Criterion (b)

An item has strong or special association with the life or works of a person, or group of persons, of importance in New South Wales' cultural or natural history (or the cultural or natural history of the local area)

Guidelines for Inclusion	Guidelines for Exclusion
• shows evidence of a significant human occupation	• has incidental or unsubstantiated connections with historically important people or events
• is associated with a significant event, person, or group of persons	• provides evidence of people or events that are of dubious historical importance
• maintains or shows continuity of a historical process or activity	• has been altered so that is can no longer provide evidence of a particular association

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Dalwood Home Site, Seaforth has significance for its association with A.E. Dalwood and his philanthropic activities and the Food for Babies Fund. The works started by the Food for Babies Fund have evolved and are continued by the NSW state government today.

The site also has significance for its association with Theodore Gurney, Professor of Mathematics at Sydney University from 1877 to 1902, who purchased the original Alleyne grant and built the villa, now Dalwood House, and its associated outbuilding. While altered, Dalwood House is still clearly recognisable as Gurney's Clavering.

4.5.1.3 Criterion (c)

An item is important in demonstrating aesthetic characteristics and/or a high degree of technical achievement in New South Wales (or the local area)

Guidelines for Inclusion	Guidelines for Exclusion
• shows or is associated with, creative or technical innovation or achievement	• is not a major work by an important designer or artist
• is the inspiration for creative or technical innovation or achievement	• has lost its design or technical integrity
• is aesthetically distinctive or has landmark qualities	• its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded
• exemplifies a particular taste, style or technology	• has only a loose association with a creative or technical achievement

Dalwood House has significance as a large Victorian period villa with later neo-Gothic Style alterations and additions. It is understood that the interior contains significant fabric, including a substantial cedar staircase and leadlight windows.

The Loft similarly has aesthetic significance, albeit at a lower level to the villa. While altered and added to, it is recognisable as an late nineteenth century outbuilding.

Despite the changes to its curtilage over time and the construction of other buildings on the site, the site retains an ability to understand the aesthetic significance of its original setting, high above Middle Harbour. There are significant trees on the site to the south east and north east of Dalwood House.

4.5.1.4 Criterion (d)

An item has strong or special association with a particular community or cultural group in New South Wales (or the local area) for social, cultural or spiritual reasons

Guidelines for Inclusion	Guidelines for Exclusion
• is important for its association with an identifiable group	• is only important to the community for amenity reasons
• is important to a community's sense of place	• is retained only in preference to a proposed alternative

Dalwood Home Site, Seaforth has significance under this criterion. Throughout its long history of use for the care of children and the families it has been the recipient of assistance from benefactors. It continues to enjoy community support. Whether past recipients of the services of the site retain an attachment to the place has not been investigated.

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4.5.1.5 Criterion (e)

An item has potential to yield information that will contribute to an understanding of New South Wales' cultural or natural history (or the cultural or natural history of the local area)

Guidelines for Inclusion	Guidelines for Exclusion
• has the potential to yield new or further substantial scientific and/or archaeological information	• has little archaeological or research potential
• is an important benchmark or reference site or type	• only contains information that is readily available from other resources of archaeological sites
• provides evidence of past human cultures that is unavailable elsewhere	• the knowledge gained would be irrelevant to research on science, human history of culture

The physical and documentary evidence associated with Dalwood Home Site, Seaforth demonstrates the evolution of children's services first by a private organisation (Babies Food Fund) and later by the NSW government.

The brief for this assessment did not include an archaeological assessment.

4.5.1.6 Criterion (f)

An item possesses uncommon, rare or endangered aspects of New South Wales' cultural or natural history (of the cultural or natural history of the local area)

Guidelines for Inclusion	Guidelines for Exclusion
• provides evidence of a defunct custom, way of life or process	• is not rare
• demonstrate a process, custom or other human activity that is in danger of being lost	• is numerous but under threat
• shown unusually accurate evidence of a significant human activity	
• is the only example of its type	
• demonstrate designs or techniques of exceptional interest	
• shown rare evidence of a significant human activity important to a community	

Dalwood House and outbuilding provide a rare local example of a late nineteenth century gentleman's rural retreat.

4.5.1.7 Criterion (g)

An item is important in demonstrating the principal characteristics of a class of New South Wales (or a class of the local areas):

- **Cultural or natural places; or**
- **Cultural or natural environments**

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Guidelines for Inclusion	Guidelines for Exclusion
• is a fine example of its type	• is a poor example of its type
• has the potential characteristics of an important class or group of items	• does not include or has lost the range of characteristics of a type
• has attributes typical of a particular way of life, philosophy, custom, significant process, design, technique of activity	• does not represent well the characteristics that make up a significant variation of type
• is a significant variation to a class of items	
• is part of a group which collectively illustrates a representative type	
• is outstanding because of its setting, condition or size	
• is outstanding because of its integrity or the esteem in which it is held	

Dalwood Home Site, Seaforth demonstrates the evolution of child welfare first by a private organisation and later by the state from the late 1920s through to the current date. It demonstrates the evolution in societal and government attitudes to the needs and care of children and their families suffering from disadvantage.

Despite the addition of buildings to the site overtime, Dalwood House and its associated outbuilding are a rare example of a late nineteenth century gentleman's retreat. It retains a large parcel of land and its outlook (albeit altered) towards Middle Harbour. The extensive bushland part of the site contributes to the surrounding area and provides some understanding of the original setting and isolation of Dalwood House.

4.5.2 Statements of Significance

4.5.2.1 Existing Statements of Significance

There are a number of existing statements of significance for the site, as follows.

S170 Listing

This listing provides two separate statements of significance for Dalwood House and the Loft.

The statement of significance given by the s170 listing for Dalwood House is as follows:

> 'A rare example of a Victorian sandstone villa in the Manly area. Of historical significance because of its association with philanthropy.'[25]

The statement of significance given by the s170 listing for the Stone Out Building (the Loft) is as follows:

[25] *Principal Building*, Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 3540677.

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> 'Along with the original sandstone villa, this stone out building is of historical significance in the Manly area as a rare example of its type and for its associations with philanthropy.'[26]

Manly LEP 2013

This listing provides two separate statements of significance for Dalwood House and the Loft.

The State Heritage Inventory listing sheet associated with the listing under the *Manly LEP 2013* provides the following statement of significance for Dalwood House:

> 'Regionally significant historically and socially, and aesthetically as the home of Theodore Gurney and Mr. A.E. Dalwood, and as Dalwood Home for disadvantaged children.'[27]

The State Heritage Inventory listing sheet associated with the listing under the *Manly LEP 2013* provides the following statement of significance for the stone outbuilding:

> 'Significant Out Building associated with Dalwood Home. Represents rare surviving gentleman's residence outbuilding.'[28]

National Trust

The National Trust listing card for the site provides the following reasons for listing:

> 'A well-constructed mansion exhibiting a transitional phase of late nineteenth century architectural styles which, in its idyllic setting overlooking Middle Harbour, is still reminiscent of the isolation of this area before the turn of the century. The building also has links with Professor Theodor Thomas Gurney and with the early twentieth century philanthropy of A.E. Dalwood.'[29]

4.5.2.2 Revised Statement for the Purposes of this Report

The primary significance of Dalwood Home Site, Seaforth, lies in its historic and social significance as a place that has provided services to children and their families since 1927, first through the Food for Babies Fund and later as a Public Hospital. The Food for Babies Fund was part of wider movement that arose during the late nineteenth and early twentieth centuries that focused on women and children's welfare. The type of services offered on the site has continued to evolve to meet changing social needs. The site thus demonstrates the evolution in societal and government attitudes to the needs and care of children and their families suffering from disadvantage. The site has social significance arising out of its significant associations with numerous groups and individuals who have been actively involved in its governance, day to day operation and fund raising.

Dalwood Home Site has historic and aesthetic significance as an example of a Victorian period villa estate. Two buildings survive from this period: Dalwood House and a much altered stone outbuilding, now known as the Loft Building. Dalwood House, originally Clavering, was constructed in 1878 as a weekend retreat for the University of Sydney Professor of Mathematics, Thomas Gurney, at a time when Seaforth was isolated and sparsely settled. The site has historic associations with A.E. Dalwood, who originally donated the property to the Food for Babies Fund.

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[26] *Stone Out Building*, Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 3540678.
[27] *Dalwood- Principal Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020383.
[28] *Dalwood- Stone Out Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020384.
[29] *Dalwood's Children Home, formerly Clavering*, Frenches Forest Road, Seaforth. Listing I.D. S7284.

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Dalwood Home Site makes a significant contribution to the public domain through the presence of the Dalwood House, the later main entrance gates and mature exotic planting, particularly along the Dalwood Avenue boundary and in the south eastern corner of the site. The extensive bushland part of the site also contributes to the surrounding area and provides some understanding of the original setting and isolation of Dalwood House.

4.5.3 Items in the Vicinity

This statement also considers the impact of the proposed works on heritage items in the vicinity of the site.

'In the vicinity' has been determined by physical proximity and existing/potential view corridors.

There are no heritage items listed on the State Heritage Register or a s170 Register under the auspices of the *NSW Heritage Act 1977* within the vicinity of the site.

There are two heritage items listed by Schedule 5 Part 1 of the *Manly LEP 2013* within the vicinity of the site. Figure 71 in Section 4.6.2 below shows the location of these items with respect to the site. These items are as follows:

- Stone House, No. 8 Clavering Road, Seaforth (I277)

Note: The SHI listing sheet gives the address of this item as No. 2 Rignold Avenue.

The SHI provides the following description of this item:

> 'Two storey sandstone house with gabled concrete tile roof with high sandstone foundations. Decorative timber bargeboards to gable ends. Timber framed multipaned casement windows. Concrete floor to front verandah with no balustrade.'[30]

The SHI provides the following statement of significance for this item:

> 'A Victorian Gothic style sandstone residence significant as evidence of early waterfront development in Seaforth.'[31]

This item has a lot boundary curtilage.

The principal view corridors towards this item from the public domain are obtained from directly outside of it. The principal view corridors out of the site are towards Middle Harbour.

This item lies to the west of the Dalwood Home Site. It is screened from the buildings at Dalwood by the dense bush that lies in the north western corner of the Dalwood Home Site. this bushland contributes to the setting of No. Clavering Road.

- Dry stone wall, Clavering Road, Seaforth (I269)

There is no heritage listing sheet for this item. It is likely to have aesthetic significance as a substantial dry stone wall visible from the public domain. This item lies to the west of the Dalwood Home site and is separated from it by a number of intervening lots. It is not visible from the Dalwood Home Site and not visible within significant view corridor towards it.

[30] *Stone House*, No. 2 Rignold Avenue, Seaforth. State Heritage Inventory Database No.: 2020381.
[31] *Ibid*.

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4.6 Curtilage

4.6.1 Different Types of Curtilage

When a heritage item or place is being considered for management purposes, a decision must be made about the extent of land around it that could be considered to contain its heritage significance. This boundary is often referred to as the curtilage of a site.

Curtilage is a difficult concept that is subject to many interpretations. Curtilage takes into consideration tangible and intangible historic relationships and aesthetic relationships defined by vistas and visual corridors. In other words, curtilage moderates between a site and its setting. Curtilage may be comprised of more or less than the legal or physical boundary of a site:

> 'At times there is a clear distinction between the place and its setting – only rarely is a culturally significant place self-contained within definite boundaries, without some visible link to the world around it. If the cultural significance of a place relates to its visual attributes – such as form, scale, colour, texture and materials – its setting is of special importance.'[32]

For the purposes of this assessment, the following definition, provided by the NSW Heritage Branch, has been adopted.

Curtilage is:

> '… the area of land (including land covered by water) surrounding an item or area of heritage significance which is essential for retaining and interpreting its heritage significance. This can apply to either:
>
> Land which is integral to the heritage significance of the items or the built heritage; or
>
> A Precinct which includes buildings, works, relics, trees or places and their setting.'[33]

The NSW Heritage Office (now Branch) has identified a number of types of curtilage:

- *Lot boundary curtilage*: the most common type of curtilage, comprising the boundary of the property containing the heritage item.
- *Reduced lot boundary curtilage*: less than the lot boundary of a site.
- *Expanded heritage curtilage*: greater than the lot boundary of a site.[34]

4.6.2 Existing Curtilages

4.6.2.1 s170 Listing

The listing sheet for the site from the NSW Department of Health Heritage and Conservation Register does not define the boundaries of the listing. It may be that only the lot on which the two buildings stand is subject to the heritage listing. Alternatively, and more likely, the listing includes the entire site, as is the case under the *Manly LEP 2013*(see below). No further information has been obtained through enquiries to the Department.

[32] Commentary for Article 8 of the Burra Charter in Marquis-Kyle, Peter and Walker, Meredith, *The Illustrated Burra Charter*, Victoria, Australia ICOMOS Inc., 2004, p.38.

[33] New South Wales Heritage Office and Department of Urban Affairs and Planning, *Heritage Curtilages*, NSW, NSW Heritage Office and Department of Urban Affairs and Planning, 1996, p.3.

[34] *Ibid*, pp.5-7.

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4.6.2.2 *Manly LEP 2013*

Schedule 5 Part 1 of the *Manly LEP 2013* identifies the listing boundaries as follows:

Lots 1–12, DP 620; Lots 4A–7A, DP 17157; Lot 1, DP 325784; Lot 1, DP 325720; Lot 87, DP 666550; Lots 76–77, DP 112214.

This is the entire site area. Refer to Figure 72. The site is coloured brown and numbered 'I270.'

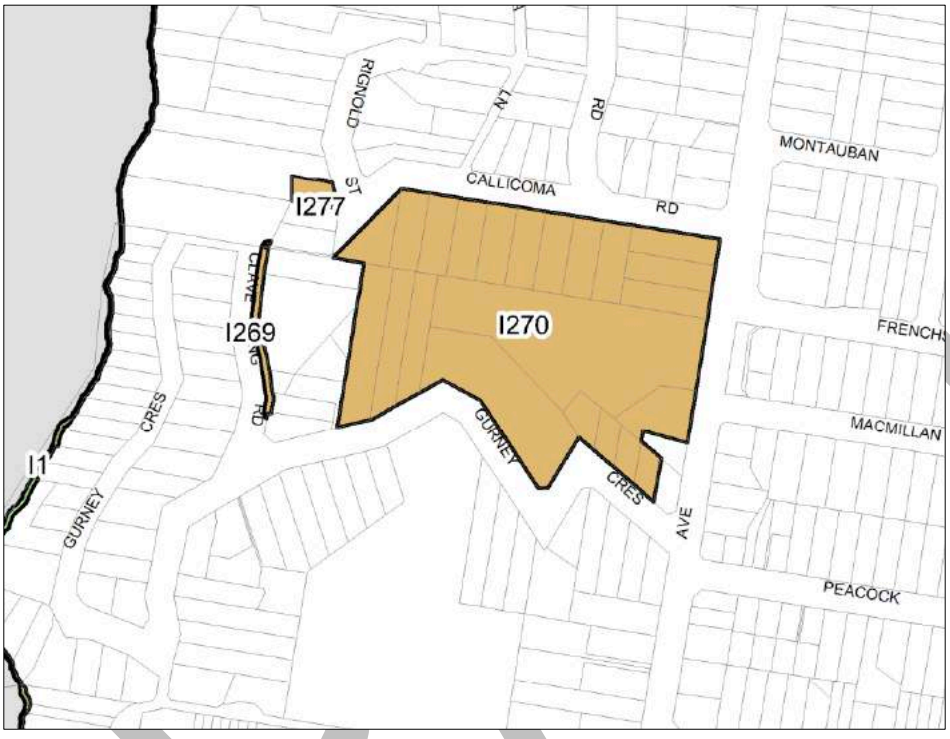


Figure 72: View to towards the Loft from across the area that it is proposed to rezone.
Detail of the Heritage Plan, *Manly LEP 2013*.

4.6.2.3 National Trust of NSW

The National Trust Listing Sheet describes the listing area as: 'the area to the property boundary.'

4.6.3 Recommend Curtilage

The following curtilage recommendation is based on the following:

- Dalwood House, the stone outbuilding (the Loft Building) and the memorial entrance gates are the only built structures that must be retained in order to understand the significance of the site. The other structures on the site have varying levels of historic and social significance but no aesthetic significance. In some instances, their presence has impacted upon the aesthetic significance of Dalwood House.
- There is significant exotic planting on the site, particularly along the Dalwood Avenue frontage and within the south eastern corner of the site.
- Maintaining an understanding of the relationship of Dalwood House to remnant bushland assists in understanding its original setting.
- Maintaining the outlook of Dalwood House to Middle Harbour assists in understanding the original setting of Dalwood House.

DRAFT

In determining curtilage, the following has been taken into consideration:

- The history of the site, including the subdivision pattern and the addition of land over time to the irregularly spaced lot that was first gifted to Dalwood House in the 1930s. The lot boundaries of this lot (Lot 1 D.P. 325784) appear to be arbitrary rather than historically significant and determined by a subdivision (the Loch Lomond Estate) that was only partially realised.
- The relative significance of the different phases of the site's history. The most significant aspect of the site's history is its use for the care of children and their families.
- The topography of the site and the surrounding area. The lower part of the site lies below the significant view lines from Dalwood House.
- View corridors into and out of the site as a whole and to and from individual buildings.
- The orientation of the principal buildings.
- The use and outlook of the buildings: i.e. Dalwood House as the main residence; the stone building as an outbuilding.
- Significant plantings.
- The high level of protection given by Council to the bushland that comprises large areas of the site. This is essentially a general planning, as opposed to, heritage constraint, although it is noted that the bushland setting provides some understanding of the original setting of Dalwood House.
- The character of the area immediately surrounding the site.

Given the above, a reduced lot boundary curtilage is recommended, comprising the following lots: part of Lot 1 D.P. 325784, Lot 87 D.P. 666550 and Lot 1 D.P. 620. Refer to Figure 73.

Figure 73: Recommended Curtilage.
SIX Maps; annotations by WP Heritage.

In defining the above as the curtilage, it is noted that retaining the existing general vegetative cover on the land to the north west, west , south west and south of the site will assist in maintaining an understanding of the original setting of the site. It is further noted that the lots immediately south of Dalwood House, and part of the subject site, lie

beneath the view lines that exist out from the building towards Middle Harbour. Retaining a high level of vegetative cover on these sites is less critical.

5.0 THE PROPOSAL

The planning proposal is for an amendment to *Manly Local Environmental Plan 2013* (*LEP 2013*). on behalf of NSW Ministry of Health. It seeks to rezone Lots 4A, 5A, 6A and 7A in D.P. 17157, part of Lot 1 in D.P. 325720 and part of Lot 1 in D.P. 325784 from part SP2 Infrastructure (Health Services Facilities) and part E2 Environmental Conservation to part R2 Low Density Residential and part E4 Environmental Living. The rezoning will accommodate the future establishment of four dwellings on each of the lots.

Refer to Figure 74 below.

Figure 74: Proposed Expanded Lot 7A.
The Client.

6.0 EFFECT OF WORKS ON THE SITE

6.1 Boundary Adjustment

The proposed realignment of lot boundaries to expand Lot 7A will have no impact on the significance of the site for the following reasons:

- The site as a whole contains numerous lots across several deposited plans. Understanding the boundaries of each of the individual lots within the existing site boundaries lies in historic records only and does not contribute to the ability to understand the significance of the site. The lot boundaries of this lot (Lot 1 D.P. 325784) appear to be arbitrary rather than historically significant and determined by a subdivision (the Loch Lomond Estate) that was only partially realised.
- Changing the lot boundaries will not impact on significant fabric or view corridors.

6.2 Proposed Rezoning

The proposed rezoning of the lots will have an acceptable impact on the significance of the site for the following reasons:

- These lots are located outside of the reduced site curtilage recommended above.
- These lots are located well below the level of Dalwood House, which, even when these lots are built upon, will continue to have unobstructed views to Middle Harbour. Views from Middle Harbour will similarly remain unobstructed. If the roof tops are visible, they will read in conjunction with other roof tops within the tree line below Dalwood House.
- Where the roof tops of new dwellings are visible from within the Dalwood Home Site, they will not impede enjoyment of the views towards Middle Harbour. There are already roof tops within the tree-line within these view corridors.
- Buildings upon these lots of the scale governed by the zoning controls will not block significant view corridors into the site or within the site.
- Development of these lots in line with the proposed R2- Low Density Residential is line with the character of the area immediately surrounding the subject site. Building(s) constructed on these lots in line with the zoning (and other Council controls) will sit comfortably within the established character of the surrounding area.
- The building areas indicated by Figure 74 are largely located within already cleared land. The majority of the new Lot 7A will retain a zoning of Environmental Living and hence the majority of its vegetative cover.

7.0 EFFECT OF WORKS ON HERITAGE ITEMS IN THE VICINITY

The heritage items in the vicinity of the site, identified in Section 4.5.3 above, are sufficiently removed from the area of proposed works for there to be no impact on their setting or view corridors. There will be no impact on the ability to understand their significance.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This HIS has considered the history and significance of Dalwood Home Site, Dalwood Avenue, Seaforth, New South Wales.

Two items on the site are specifically identified as heritage items by statutory registers, being Dalwood House and a stone outbuilding, also known as the Loft Building. While no listing boundary is provided by the s170 Register (NSW Health) listings for either building, the *Manly LEP 2013* identifies the entire site area as a heritage item. There are other individual elements of significance of the site, notably the Memorial Gates on Dalwood Avenue and the mature trees along the Dalwood Avenue boundary and in the south eastern corner of the site. The significant areas of bushland that cover part of the site are subject to planning restrictions, but also contribute to understanding the original setting of Dalwood House.

The primary significance of the site arises out of its association with the provision of services to children and their families since 1927. Dalwood House is also a rare example of a Victorian villa within the immediate area. There is considerable scope for new works where this core significance is supported. Dalwood House also has historic and aesthetic significance as an example of a Victoria period villa. This aspect of significance must also be preserved.

Dalwood currently comprises 22 individual allotments. This report recommends a reduced lot curtilage comprising all or part of the following lots: part of Lot 1 D.P. 325784 and all of Lot 87 D.P. 666550 and Lot 1 D.P. 620. This curtilage takes into consideration the significant elements on the site, their setting and view corridors.

DRAFT

The area of proposed works comprises Lots 4A, 5A, 6A and 7A D.P. 17157; part of Lot 1 D.P. 325720 and part of Lot 1 D.P. 325784. A boundary adjustment is proposed, together with rezoning of all but a small section of land for R2 Low Density Residential. The proposed works will have an acceptable impact because:

- The site boundaries have changed over time. Understanding the individual lot boundaries lies in historic records only. Changing the lot boundaries will have no impact on the significance of the site. The lot boundaries of this lot (Lot 1 D.P. 325784) appear to be arbitrary rather than historically significant and determined by a subdivision (the Loch Lomond Estate) that was only partially realised.
- The effected lots are located well below the level of Dalwood House. Dwellings on these lots will not block view corridors to/from Middle Harbour.
- Dwellings on these lots will not block significant view corridors to/from surrounding streets or from within the site.
- Development of these lots in line with the proposed R2- Low Density Residential is line with the character of the area immediately surrounding the subject site. Building(s) constructed on these lots in line with the zoning (and other Council controls) will sit comfortably within the established character of the surrounding area.

DRAFT

9.0 APPENDIX 1

Heritage Listing Sheets

NSW Health s170

- *Dalwood Children's Home Precinct, Principal Building*, No. 21 Dalwood Avenue, Seaforth. Preliminary Heritage and Conservation Register, Northern Sydney Area Health Service. Heritage Register No. 01/2/6/1000.
- *Dalwood Children's Home Precinct, Stone Cut Building*, No. 21 Dalwood Avenue, Seaforth. Preliminary Heritage and Conservation Register, Northern Sydney Area Health Service. Heritage Register No. 01/2/6/1001.

State Heritage Inventory

- *Dalwood- Principal Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020383. Manly Council listing.
- *Dalwood- Stone Out Building*, No. 21 Dalwood Avenue, Seaforth. State Heritage Inventory Database No.: 2020384. Manly Council listing.

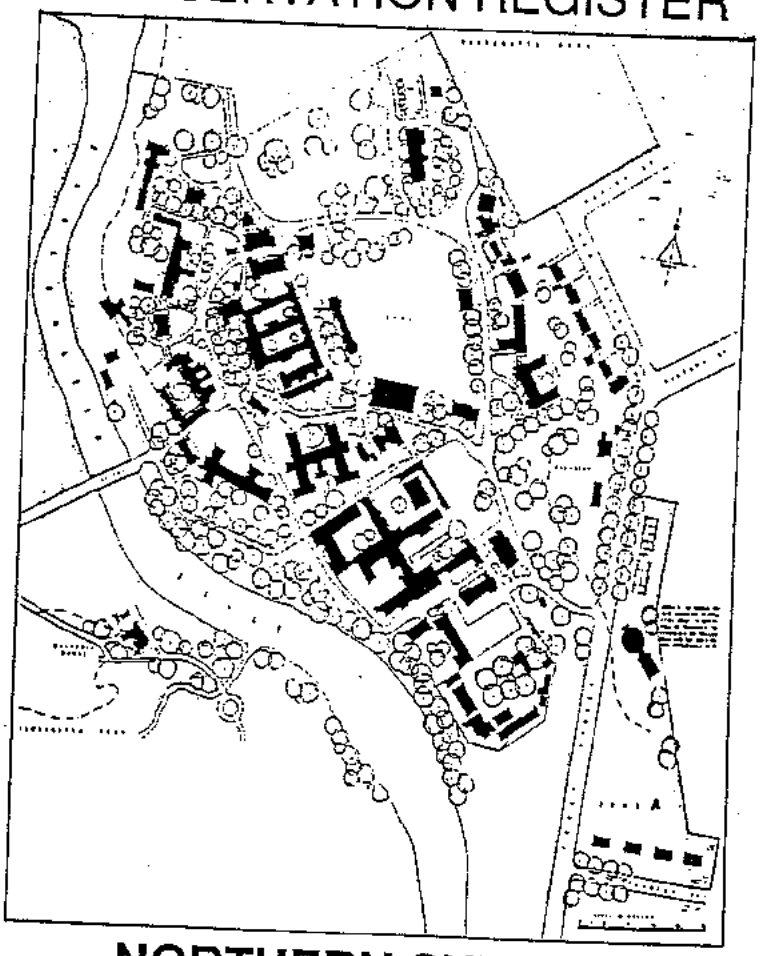
National Trust of Australia (NSW)

- *Dalwood's Children Home, formerly Clavering*, Frenches Forest Road, Seaforth. Listing I.D. S7284.

DRAFT

NSW DEPARTMENT OF HEALTH

PRELIMINARY HERITAGE AND CONSERVATION REGISTER



NORTHERN SYDNEY AREA HEALTH SERVICE

SCHWAGER BROOKS AND PARTNERS
ARCHITECTS AND HERITAGE CONSULTANTS
FEBRUARY 1992

DRAFT

NAME:
Dalwood Childrens' Home Precinct
Principal Building

HERITAGE REGISTER NO:
01/2/6/1000

ADDRESS:
21 Dalwood Avenue
Seaforth NSW 2092

HEALTH DEPT REGION:
Northern Sydney

LOCAL GOVERNMENT AREA:
Manly

S.H.I.P. CATEGORY:
1099

CURRENT USE:
Children's Home

HISTORICAL SUMMARY:
Part of the Alleyne Grant (undated) and Vickery Grant c1859, purchased by Theodore Burney c1877, land subdivided in 1922. Children's home opened in 1929. Originally called 'Clavering'.

FORMER USE:

KEY DATES:
c1878

ARCHITECT / DESIGNER:

DESCRIPTION:
A two storey villa constructed c1878. The building has undergone major alterations and additions which obscure its original appearance. Elements of note include a neo Gothic entrance, casement leadlight windows and internal joinery.

ARCHITECTURAL STYLE:
Victorian Gothic

NO. OF STOREYS:
2

CONDITION:
- [x] GOOD
- [ ] FAIR
- [ ] POOR

CONSTRUCTION:
Sandstone walls.

SIGNIFICANCE:
- [ ] HIGH
- [x] MEDIUM
- [ ] LOW

SIGNIFICANCE:
A rare example of a Victorian sandstone villa in the Manly area. Of historical significance because of its association with philanthropy.

HERITAGE LISTINGS:
- [ ] A.H.C.
- [ ] P.C.O.
- [x] N.T.
- [ ] R.A.I.A.
- [ ] N.P.W.S.
- [ ] P.W.D.
- [x] L.E.P.
- [ ] DR L.E.P.
- [ ] R.E.P.
- [ ]

RECOMMENDED CONSERVATION STRATEGY:

DEMOLITION CONSENT REQUIRED:
- [x] YES
- [ ] NO

STUDY REFERENCES:

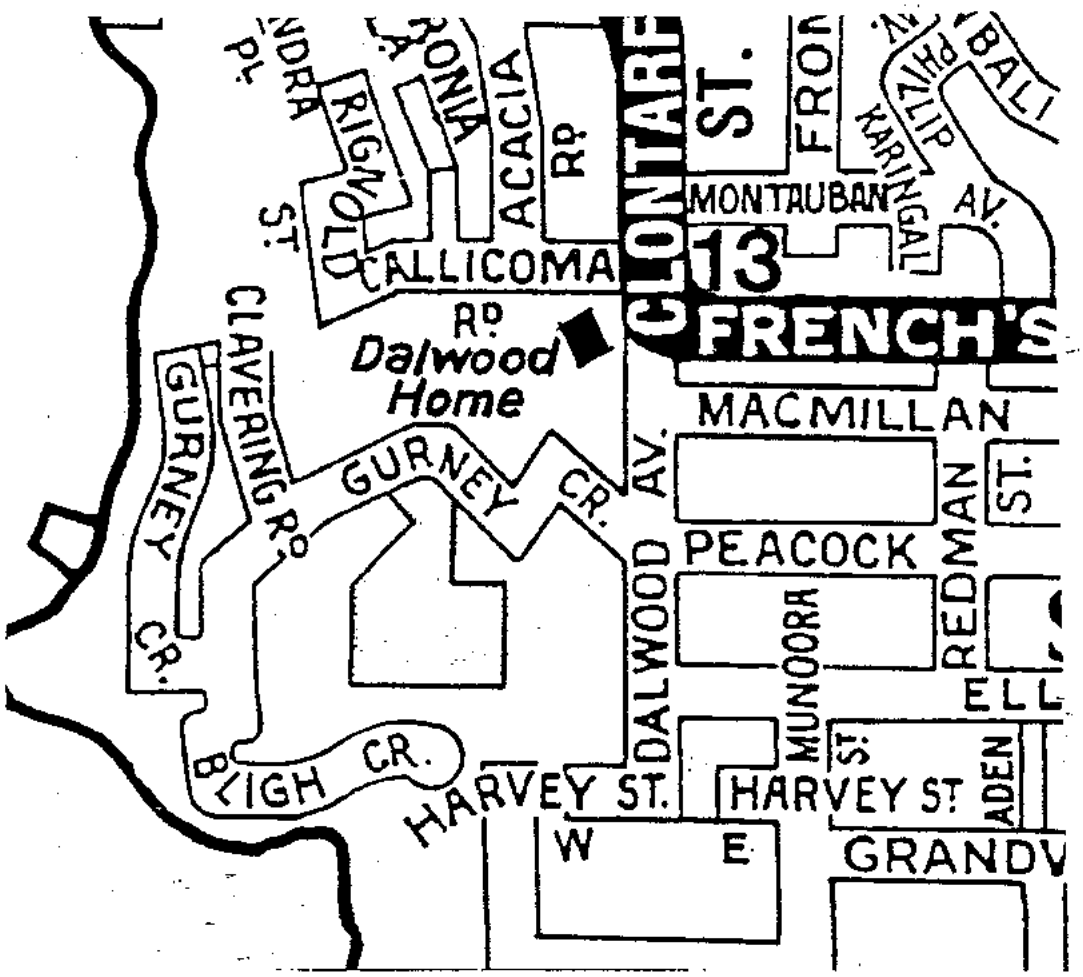
HEALTH ASSET REG. NO.
01-2-01-01

NSW DEPARTMENT OF HEALTH
HERITAGE AND CONSERVATION REGISTER
SCHWAGER BROOKS AND PARTNERS PTY LTD
ARCHITECTS AND HERITAGE CONSULTANTS

DRAFT

NAME: Dalwood Childrens' Home Precinct Principal Building	HERITAGE REGISTER NO: 01/2/6/1000

ADDRESS:
21 Dalwood Avenue
Seaforth NSW



NSW DEPARTMENT OF HEALTH
HERITAGE AND CONSERVATION REGISTER
SCHWAGER BROOKS AND PARTNERS PTY LTD
ARCHITECTS AND HERITAGE CONSULTANTS

DRAFT

NAME:	HERITAGE REGISTER NO:
Dalwood Childrens' Home Precinct **Principal Building**	01/2/6/1000

ADDRESS:

21 Dalwood Avenue
Seaforth NSW

NSW DEPARTMENT OF HEALTH
HERITAGE AND CONSERVATION REGISTER

SCHWAGER BROOKS AND PARTNERS PTY LTD
ARCHITECTS AND HERITAGE CONSULTANTS

DRAFT

NAME:
Dalwood Children's Home Precinct
Stone Cut Building

HERITAGE REGISTER NO:
01/2/6/1001

ADDRESS:
21 Dalwood Avenue
Seaforth NSW 2092

HEALTH DEPT REGION:
Northern Sydney

LOCAL GOVERNMENT AREA:
Manly

S.H.I.P. CATEGORY:
1099

CURRENT USE:
Children's Home

HISTORICAL SUMMARY:
Presumed to be of a similar age to the main building, c1878

FORMER USE:

KEY DATES:
c1878

ARCHITECT / DESIGNER:

DESCRIPTION:
A simple rectangular building of two stories, with a gable roof, used as a store house. Evidence of a former cat head above a first floor window which suggests a loft storeage. Ground floor appears to have been used as a dwelling.

ARCHITECTURAL STYLE:
Victorian Gothic

NO. OF STOREYS:
2

CONDITION:
- ☐ GOOD
- ☐ FAIR
- ☐ POOR

CONSTRUCTION:
Stone walls, gable roof clad in corrugated iron with decorative timber barge boards.

SIGNIFICANCE:
- ☐ HIGH
- ☐ MEDIUM
- ☒ LOW

SIGNIFICANCE:
Along with the original sandstone villa, this stone out building is of historical significance in the Manly area as a rare example of its type and for its associations with philanthropy.

HERITAGE LISTINGS:
- ☐ A.H.C.
- ☐ P.C.O.
- ☐ N.T.
- ☐ R.A.I.A.
- ☐ N.P.W.S.
- ☐ P.W.D.
- ☒ L.E.P.
- ☐ DR L.E.P.
- ☐ R.E.P.
- ☐

RECOMMENDED CONSERVATION STRATEGY:

DEMOLITION CONSENT REQUIRED:
- ☒ YES
- ☐ NO

STUDY REFERENCES:

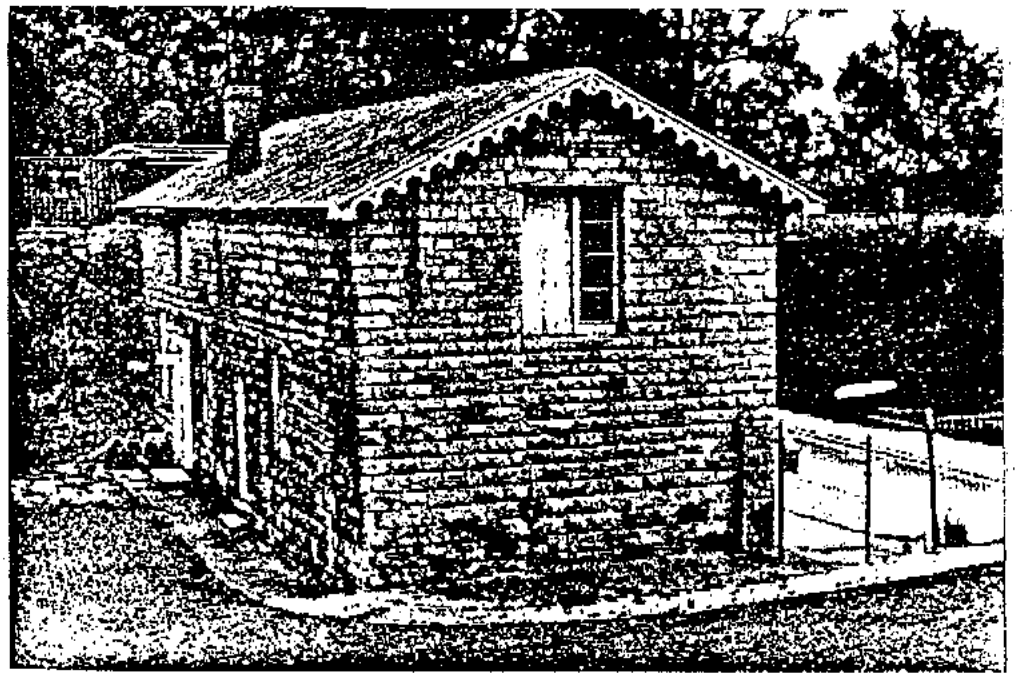
HEALTH ASSET REG. NO.
01-2-01-01

NSW DEPARTMENT OF HEALTH
HERITAGE AND CONSERVATION REGISTER
SCHWAGER BROOKS AND PARTNERS PTY LTD
ARCHITECTS AND HERITAGE CONSULTANTS

DRAFT

NAME: Dalwood Children's Home Precinct Stone Cut Building	HERITAGE REGISTER NO: 01/2/6/1001

ADDRESS:
21 Dalwood Avenue
Seaforth NSW



NSW DEPARTMENT OF HEALTH
HERITAGE AND CONSERVATION REGISTER
SCHWAGER BROOKS AND PARTNERS PTY LTD
ARCHITECTS AND HERITAGE CONSULTANTS

DRAFT

Dalwood - Principal Building

Item details

Name of item: Dalwood - Principal Building
Type of item: Built
Group/Collection: Community Facilities
Category: Other - Community Facilities
Primary address: 21 Dalwood Avenue, Seaforth, NSW 2092
Local govt. area: Manly

All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
21 Dalwood Avenue	Seaforth	Manly			Primary Address

Statement of significance:

Regionally significant historically and socially, and aesthetically as the home of Theodore Gurney and Mr. A.E. Dalwood, and as Dalwood Home for disadvantaged children.
Date significance updated: 27 Apr 00
Note: There are incomplete details for a number of items listed in NSW. The Heritage Branch intends to develop or upgrade statements of significance and other information for these items as resources become available.

Description

Physical description: Two storey sandstone Victorian Gothic style house with parapeted entrance with Gothic pointed arch, timber-framed double hinge windows, hipped unglazed terracotta roof. Return verandah facing water views. On a landmark site.

History

Historical notes: As per 1976 study attached extract. Part of Alleyne Grant (undated) and Vickery Grant (c.1859); purchased by Theordore Burney c.1877; subdivided 1922; Children's Home 1929

Historic themes

Australian theme (abbrev)	New South Wales theme	Local theme
4. Settlement-Building settlements, towns and cities	Accommodation-Activities associated with the provision of accommodation, and particular types of accommodation – does not include architectural styles – use the theme of Creative Endeavour for such activities.	(none)-
7. Governing-Governing	Welfare-Activities and process associated with the provision of social services by the state or philanthropic organisations	(none)-

Recommended management:

Whole site requires Conservation Management Plan

Listings

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Local Environmental Plan					
Heritage study					

Study details

Title	Year	Number	Author	Inspected by	Guidelines used
Manly Heritage Study	1986		Blackmore, Ashton, and Co.		No
Review and Database Listing	1999		C. Kemp/ W. McArthur		Yes
Manly Planning Scheme Review Stage 1	1976		Manly Municipal Council		No

References, internet links & imagess

None

Note: internet links may be to web pages, documents or images.

(Click on thumbnail for full size image and image details)

Data source

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Name: Local Government
Database number: 2020383

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Dalwood - Stone Out Building

Item details

Name of item: Dalwood - Stone Out Building
Type of item: Built
Group/Collection: Farming and Grazing
Category: Stables
Primary address: 21 Dalwood Avenue, Seaforth, NSW 2092
Local govt. area: Manly

All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
21 Dalwood Avenue	Seaforth	Manly			Primary Address

Statement of significance:

Significant outbuilding associated with Dalwood Home. Represents rare surviving gentlemen's residence outbuilding.
Date significance updated: 27 Apr 00
Note: There are incomplete details for a number of items listed in NSW. The Heritage Branch intends to develop or upgrade statements of significance and other information for these items as resources become available.

Description

Physical description: Gabled roofed sandstone outbuilding with loft storage.

History

Historical notes: As per 1976 study sheet.

Historic themes

Australian theme (abbrev)	New South Wales theme	Local theme
3. Economy-Developing local, regional and national economies	Pastoralism-Activities associated with the breeding, raising, processing and distribution of livestock for human use	(none)-
4. Settlement-Building settlements, towns and cities	Accommodation-Activities associated with the provision of accommodation, and particular types of accommodation – does not include architectural styles – use the theme of Creative Endeavour for such activities.	(none)-

Recommended management:

Whole site requires Conservation Management Plan

Listings

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Local Environmental Plan					
Heritage study					

Study details

Title	Year	Number	Author	Inspected by	Guidelines used
Manly Heritage Study	1986		Blackmore, Ashton, and Co.		No
Review and Database Listing	1999		C. Kemp/ W. McArthur		Yes
Manly Planning Scheme Review Stage 1	1976		Manly Municipal Council		No

References, internet links & imagess

None

Note: internet links may be to web pages, documents or images.

(Click on thumbnail for full size image and image details)

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SEAFORTH (Town or District)	DALWOOD CHILDREN'S HOME FORMERLY CLAVERING INCLUDING CARRIAGE HOUSE	Frenchs Forest Rd
Post Code 2092 Mun of Local Govt. Area Manly		
Author of Proposal from site listing by A Braund		
Date of Proposal 1976,1983	(Name or Identification of Listing)	(Address or Location)
Suggested Listing Category CLASSIFIED STILL RECOMMENDED	Bibliography Records of Dalwood House, Manly Daily,8/10/75;Sands Directory 1880-1898; Manly Planning Scheme Review Stage 1	Owner and Address
Committee (Trust Use) SEE OVER HBC		
Council (Trust Use) APPROVED R 22/11/76		

Description — Briefly cover the points on the following check list where they are relevant and within your knowledge.

Style
Construction
Use
Architect/s
Builder/s
Date of Construction
Present Condition
History
Owners
Boundaries of proposed listing

The original sandstone building c1880 was built for Professor Theodore Thomas Gurney Dean of Arts at the University of Sydney, as an idyllic retreat. It was probably one of the earliest grand houses in this area. After Gurney retired and returned to England in 1902, the house was purchased by Mr A E Dalwood, a Real Estate Agent. The estate was subdivided in 1922 and in the mid-1920s Dalwood offered the house to the Food for Babies Fund as a holiday retreat for needy mothers and babies. He subsequently donated the house to the Trustees of the Fund and the Dalwood Children's Health Home was opened on February 18, 1928. It was incorporated as a children's hospital in 1932 and has been administered by the Health Commission since then.

The building is massive in form and construction with the heaviness relieved to some extent by elegant fanlights and verandah posts and balustrade. It features a conglomerate of late nineteenth century styles including picturesque gothic, Italianate and some Federation details. The hipped roofs over the main section and bays were originally of iron but were tiled in 1967. The western facade was apparently the original entrance to the house and has an open view over Middle Harbour. The entrance is now located in the eastern facade.

.../2 (See over)

Reasons for listing

A well-constructed mansion exhibiting a transitional phase of late nineteenth century architectural styles which, in its idyllic setting overlooking Middle Harbour, is still reminiscent of the isolation of this area before the turn of the century. The building also has historical links with Professor Theodor Thomas Gurney and with the early twentieth century philanthropy of A E Dalwood.

Sketch plan and photos
Attach additional photos if any.

DESCRIPTION (CONTINUED)

A carriage house to the north west of the building retains an iron roof and scalloped barge boards. The Girls Wing was added in 1958 and the Games Wing in 1968. Curtilage includes the area to property boundary.

COMMITTEE REFERENCES:

LSC/62:	13/ 9/76:	recommended RECORD
Council:	22/11/76:	Approved "

Loch Lomond Estate, "Gurney's Choice," Balgowlah

Absolute Water Frontages. Fine Panoramic Views.

For Auction Sale on the Ground at 3 p.m., Saturday, 4th February, 1922

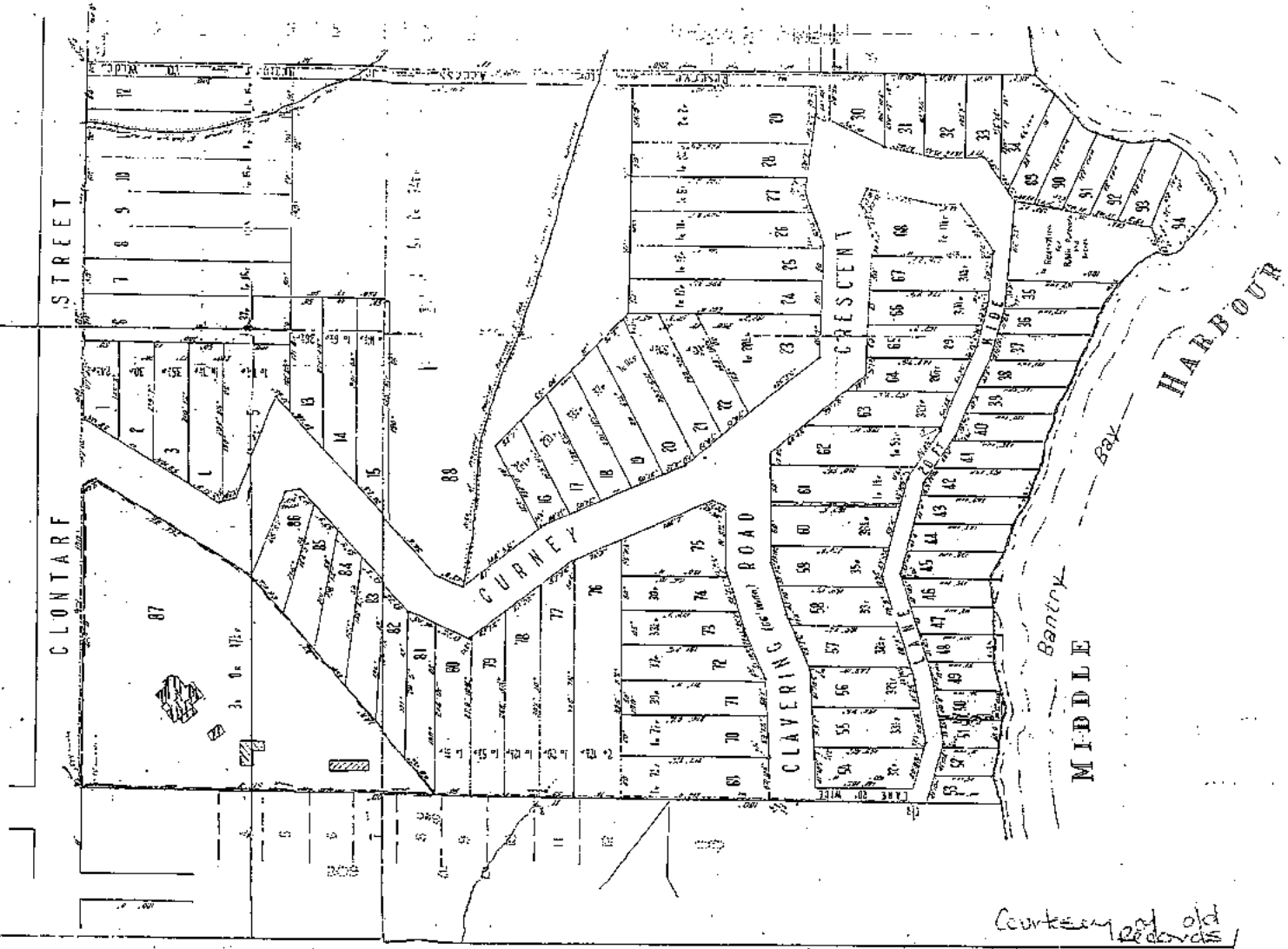
By A. E. Dalwood, Auctioneer, 82 Pitt Street, Sydney.

Easy Terms

10 per cent. deposit, balance in 12 equal ~~monthly~~ QUARTERLY instalments, with interest at 6 per cent.

Title will be Torrens

All measurements subject to deposited plan.



Courtesy of old Records

Produced by E.B.

DALWOOD HOME

New

40

Town, District, Location	Name/ Identification of Classification	Statistical Region
Seaforth	Manly Urban Conservation Area Precinct 5 Seaforth	

Local Government Authority & Postal Address

Manly Municipal Council

Authors of Classification	Date of Proposal	Date of Approval
Scott Robertson	March 1995	24 SEP 1997

Boundary Description

Commencing at the corner of Sydney Road and Frenchs Forest Road proceed east along Ethel Street to Manly Road. Proceed south along Manly Road to the rear boundaries of the properties facing the south side of Ethel then proceed west along those boundaries to the rear boundaries of the properties facing the east side of Sydney Road.. Proceed south along those boundaries to Sydney Road then cross Sydney Road to Old Sydney Road and proceed west along the south boundaries of the first property on the west side of the corner of Old Sydney Road and Sydney Road and then west along the rear boundaries of the properties on the south side of Ponsonby Parade to Panorama Parade then proceed west along Panorama Lane to Palmerston Place. Proceed west along Alan Avenue to the rear boundaries of the properties on the west side of Palmerston Place. Proceed south and west along those rear boundaries to the west boundary of the fifth allotment facing the south side of Alan Avenue. Proceed north-west along that boundary, continue across Alan Avenue and along the west boundary of the second property fronting Alan Avenue. Proceed north-west along that boundary to the rear boundaries of the properties on the west side of Salisbury Square. Proceed north along those boundaries to Ponsonby Parade then proceed east along Ponsonby Parade to Aden Street. Proceed north along Aden Street to the rear boundaries of the properties on the north side of Grandview Grove. Proceed east along those boundaries to the west boundary of the third allotment in Ellery Parade west of the corner of Panorama Parade and Ellery Parade. Proceed north along that boundary, cross Ellery Parade and proceed north along the rear boundaries of the properties facing the east side of Reid Street to the rear boundaries of the properties facing the north side of Ellery Parade. Proceed east along those rear boundaries to the west boundary of the sixth allotment in Peacock Street west of the corner of Reid and Peacock Streets. Proceed north along that boundary to the rear boundaries of the properties facing the north side of Peacock Street then proceed east along those boundaries to the west boundary of the second allotment fronting the south side of Macmillan Street. Proceed north along that boundary, across Macmillan Street to Frenchs Forest Road. Proceed east along Frenchs Forest Road to Brook Road then north along Brook Road to Burnt Bridge Creek. Follow the creek east to the east boundaries of the properties facing the east side of Dudley Street. Proceed south along those rear boundaries to the rear boundaries of the properties facing the north side of Sydney Road. Proceed west along those boundaries to Frenchs Forest Road then proceed south along Frenchs Forest Road to Sydney Road.

History

Recognising its natural advantages and resort and residential potential, Henry Gilbert Smith, moved to Manly in 1827 and, in the 1850s, and built his large house 'Fairlight'. He became known as 'the father of Manly' because of his vision and attempts to develop the area as a seaside resort. Smith built cottages, a hotel, a school, a church, and swimming baths. It is he who is credited with planting the famous Norfolk Island Pine trees along the ocean beach as well as the Moreton Bay figs which grace the Corso in the heart of Manly. The district's early growth was a direct consequence of Smith's ferry service to Circular Quay which began in 1854. The Port

History continued

Jackson and Manly Steamship Companies started their operations in 1876[1]. Trams, and later buses, continued the passenger service to Narrabeen. A small shopping centre evolved around the wharf[2].

The municipality of Manly was incorporated in 1877 with the Cornish designer of the Great Synagogue of Sydney, Newington College and Sydney Hospital, Thomas Rowe (1829-1899) as its first mayor. Gaslights were provided to a limited number of streets in the central settlement by the Manly Gas and Coke Company established in 1883 and the Manly Electric Light Company lit their first lights on 19 October 1906. The council provided its own water supply by constructing Manly Dam. Urban expansion in the Manly district began after World War 1 when there was a boom in the building of flats which continued through the 1920s and 1930s. Those who occupied them were affluent young tenants who commuted by ferry to their Sydney employment[3]. From 1921 to 1933, Manly's population increased by 26 per cent (18,507 to 23,259), and figures for occupied dwellings rose by 66 per cent (3,587 to 5,962). It became more affluent, the average number of people per dwelling being five in 1921, four in 1933, and three by 1947. In 1933 the proportion of brick to timber dwellings was 4 to 1: by 1947 it was about 7.6 to 1 and there was little use of fibro[4].

Description

The Seaforth Precinct contains a mixture of housing types from the 1920s, 1930s and early 1940s but the predominant type are 1930s houses. The houses in Ponsonby Parade and Palmerston Place are large (often two-storey) 1930s and 1940s houses with some significant single storey "waterfall front", white-painted and rendered houses (such as "Leeds", 19 Palmerston Place). Housing to the east of Frenchs Forest Road is predominantly 1920s Californian Bungalows.

There are many mature street trees within the precinct.

Reasons for Classification/Statement of Significance

Manly Urban Conservation Area Precinct 5 (Seaforth) is important because:

1) The area possesses streetscape integrity because it was developed during one period and the excellent state of preservation of the houses and gardens.

2) The area has a uniformity of housing style including colour, form and architectural detail that gives the area an harmonious appearance.

3) The predominance of the Californian Bungalow type in the eastern section illustrates the important influence of American housing ideals and styles on Australia as an important adjunct to the previous English- and Indian-derived bungalows.

4) The large houses are an excellent collection of upper middle class housing of the period.

5) The few excellent examples of Moderne houses are a rare example of that housing type in Sydney.

6) It reflects the availability of finance enabling the middle class to borrow money and finance the purchase of a house and epitomises the great diversion of funds in Australia from private investment in industry and infrastructure to "non-productive" investment in private housing.

7) By virtue of the importance of home ownership in Australia, the area embodies the success in successive Australian governments' political control and subjection of the electorate.

8) The location of residential flat buildings close to tram transport reflects the importance of that building type in providing affordable housing which was accessible by public transport.

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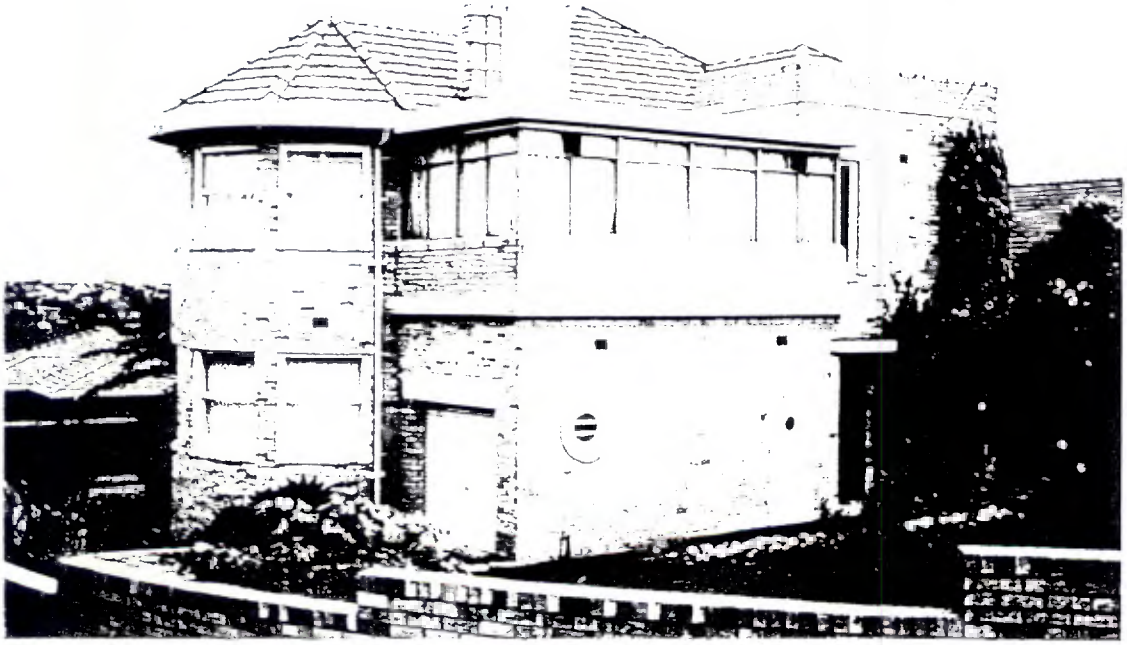
2 Peter Spearritt, *Sydney Since the Twenties*, Hale and Iremonger, Sydney, 1978, pp 43-45

3 Manly Heritage Study, pp 139-143

4 Census 1921, 1933, 1947

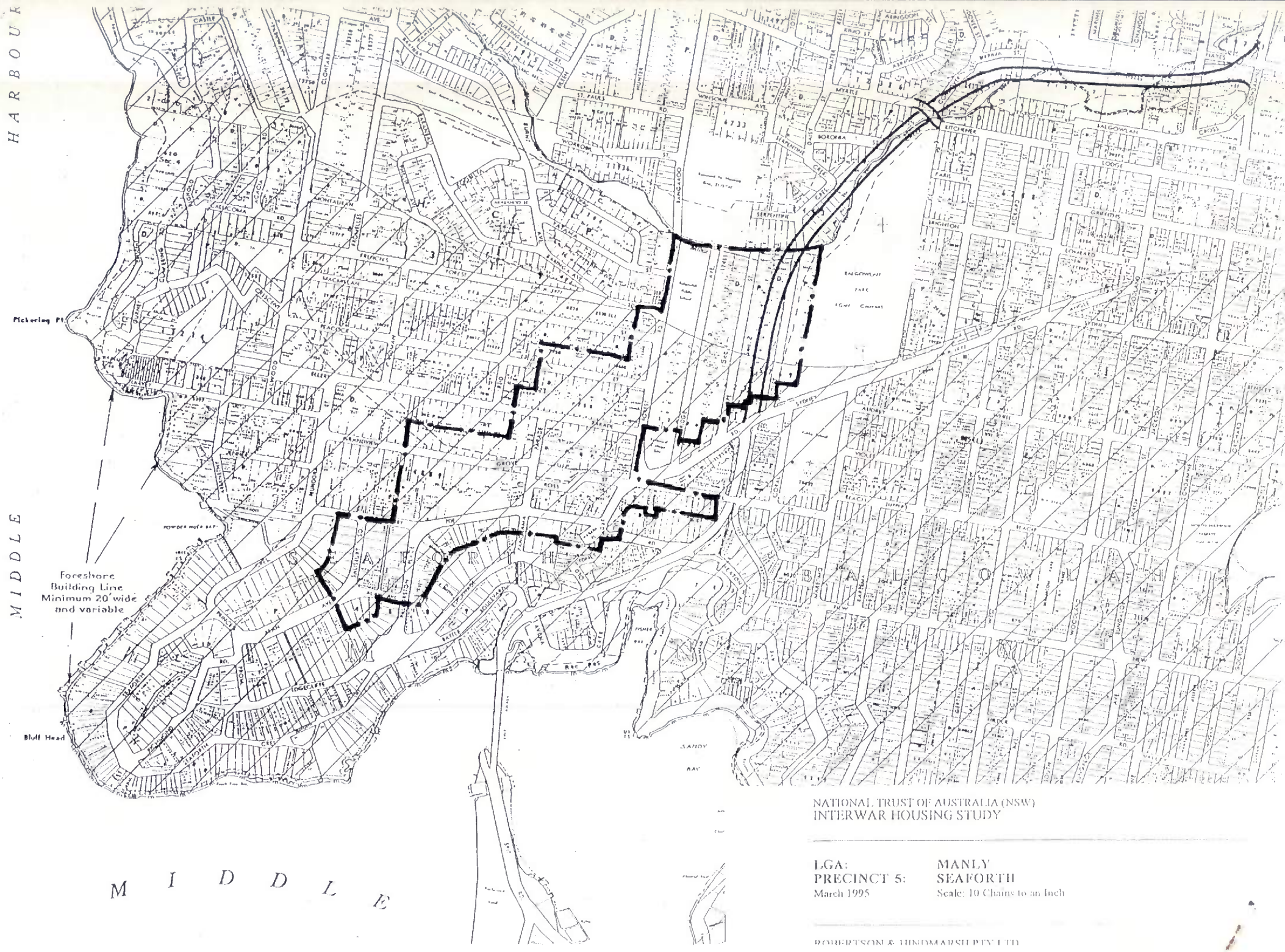
Photographs

Photo: "Leeds", 19 Palmerston Parade, Seaforth
(Robertson & Hindmarsh Pty Ltd photo April 1993)



Upper photo: 14 Palmerston Parade, Seaforth
Lower photo: 19 Ponsonby Parade, Seaforth
(Robertson & Hindmarsh Pty Ltd photos April 1993)

Upper photo: 15 Ponsonby Parade, Seaforth
Lower photo: 24 Ponsonby Parade, Seaforth
(Robertson & Hindmarsh Pty Ltd photos April 1993)



NATIONAL TRUST OF AUSTRALIA (NSW)
INTERWAR HOUSING STUDY

LGA: MANLY
PRECINCT 5: SEAFORTH
March 1995 Scale: 10 Chains to an Inch

ROBERTSON & HINDMARSH PTY LTD

Appendix G. Bushfire Assessment Report

Control Line CONSULTING

PO Box 583
Windsor NSW 2756
P: 02 4577 0125 F: 02 4577 4688
E: craig@controllineconsulting.com.au

ABN 31 613 847 902

Bushfire Hazard Assessment Report

REF No. 19.03.073

Address	Lot 4A, 5A 6A & 7A in DP 17157 Part of Lot 1 in DP 325720; and Part of Lot 1 in DP 325784 Dalwood Avenue, Gurney Crescent and Callicoma Road Seaforth NSW 2092
For	Northern Sydney Local Heath District
The site was inspected on	21st March 2019

Report Preparation

Craig Burley

Grad Dip Design for Bushfire Prone Areas
FPAA Certified BPAD - Level 3 Practitioner

Executive Summary

We have been engaged by APP on behalf of NSW Ministry of Health - Northern Sydney Local Heath District to prepare a Bush Fire Hazard Assessment Report to be a supplement for inclusion in a Planning Proposal (PP) Application to Northern Beaches Council.

The site has been identified as being bushfire prone land and therefore the legislative requirements for any future proposed development would be applicable.

The purpose of this report is to establish if there are any major constraints from a bushfire regulatory perspective for the subdivision of lands (subject to rezoning) and then the construction of residential dwellings upon the created allotments.

This report has found that whilst there would be bushfire related consent conditions applied to the lands at both subdivision and construction phases of development none of these should ultimately be overly restrictive or prohibit development approval by bushfire regulatory provisions.

1.0 Introduction

We have been engaged by APP on behalf of NSW Ministry of Health - Northern Sydney Local Heath District the owners of the subject land to prepare a preliminary bush fire hazard assessment report to be a supplement for inclusion in a Planning Proposal (PP) Application to Northern Beaches Council over the subject land.

The site has been identified as being bushfire prone land and therefore the legislative requirements for the proposed development would be applicable at the time of development application for both subdivision and any future construction of dwellings.

1.1 Purpose of Report

- To determine the vegetation type, the expected fire behaviour and the threat to the subject lands and future dwellings; and
- To assess the proposal with reference to *Planning for Bush Fire Protection* 2006;
- To assess the proposed construction with reference to the Building Code of Australia Volume 2;
- To determine the level of construction with reference to AS 3959-2009 *Construction of buildings in bushfire prone areas;*
- To identify any other such measures as to improve the chances of building survival during a bushfire event; and
- To assist the consent authority Northern Beaches Council in the determination of the PP Application subject to this proposal.

1.2 Scope of Report

The scope of this report is limited to the Bushfire Hazard Assessment for the proposed development site and only contains recommendations for the subject property. Where reference is made to adjacent or adjoining lands, this report does not purport to assess those lands; rather it may discuss bushfire progression on and through those lands with the possible bushfire impact to the subject property and the proposed rezoning.

1.3 Regulatory Controls

The preparation of this report has given consideration to the various legislative and regulatory requirements including the *Rural Fires Act* 1997, *Environmental Planning and Assessment Act 1979*, the Building Code of Australia, *Planning for Bush Fire Protection* 2006 and AS 3959-2009 *Construction of buildings in bushfire prone areas.*

1.4 Methodology

A site inspection for the purpose of assessing bushfire related matters affecting this site was conducted on the 21st March 2019 and a review of the proposed Concept Layout Plan as supplied and prepared by APP has taken place.

An assessment of slope was conducted out to a distance of 100 metres and assessment of vegetation to a distance of 140 metres from the proposed land to be rezoned.

The findings were related and assessed with reference to *Planning for Bush Fire Protection* 2006 Addendum to Appendix 3 and section 2 of AS 3959-2009 *Construction of buildings in bushfire prone areas* for the formulation of the preliminary bushfire hazard assessment.

1.5 The Proposal

The planning proposal is for an amendment to Manly Local Environmental Plan 2013 on behalf of NSW Ministry of Health. It seeks to rezone Lots 4A, 5A, 6A and 7A in DP 17157, Part of Lot 1 in DP 325720 and Part of Lot 1 in DP 325784 from part SP2 Infrastructure (Health Services Facilities) and part E2 Environmental Conservation to part R2 Low Density Residential and part E4 Environmental Living. The rezoning will accommodate the future establishment of four dwellings on each of the lots.

The planning proposal is supported by a Concept Layout Plan (CLP) which demonstrates a boundary adjustment between Lot 7A DP 17157, Lot 1 DP 325720 and Lot 1 DP 325784 to expand Lot 7A. The CLP shows the future indicative locations for each of the four dwellings.

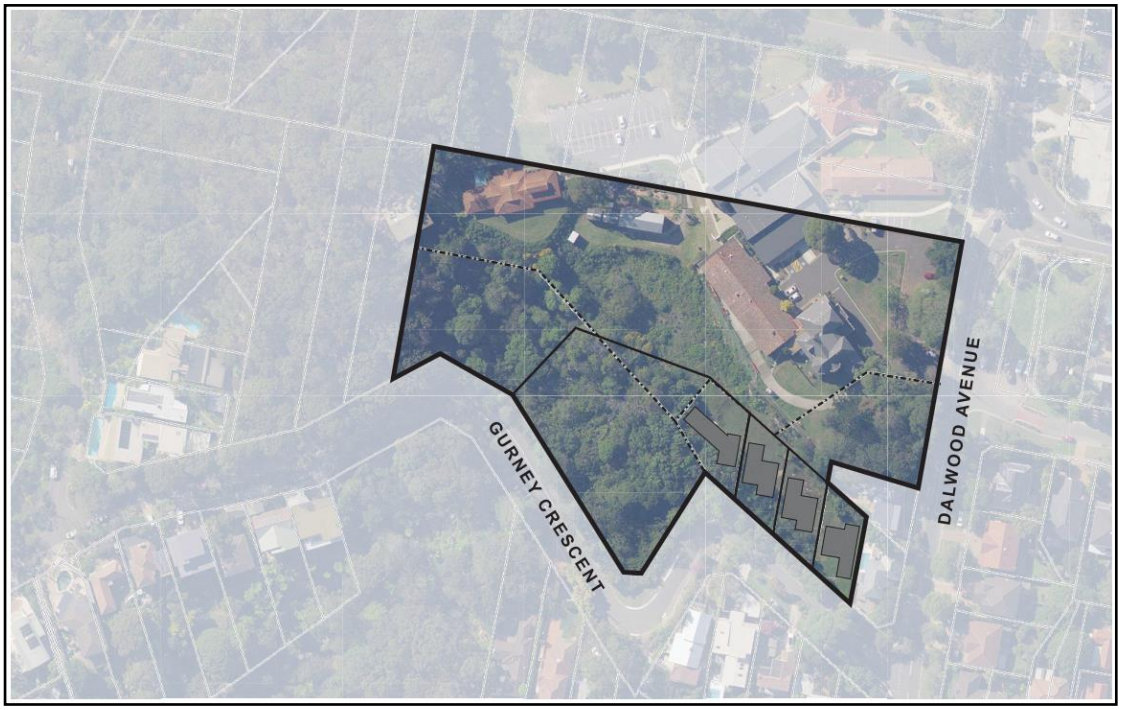


Figure 1; Concept Layout Plan (CLP)

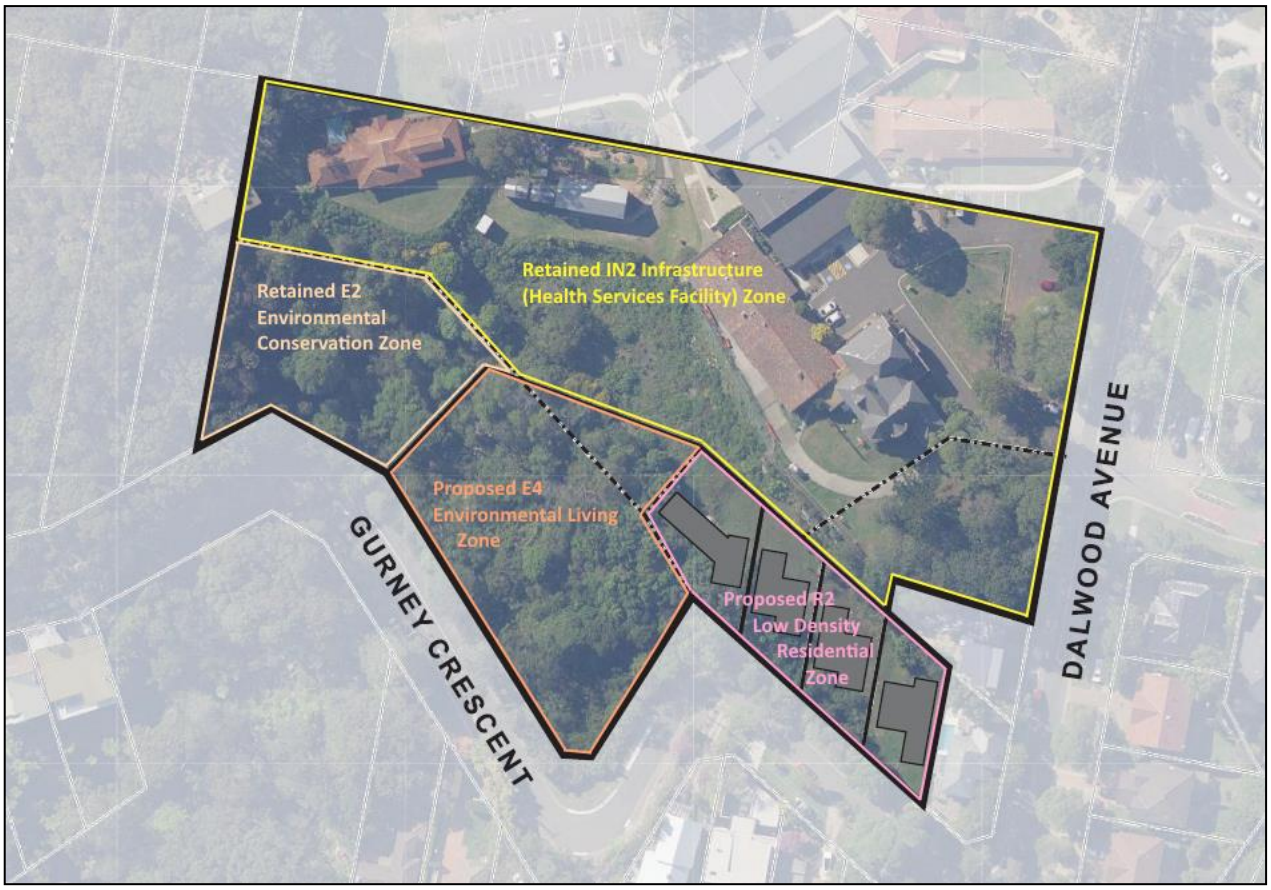


Figure 2; Concept Layout Plan showing Rezoning Detail

2.0 Site and Adjacent Developments

The following seeks to describe the site and the adjoining lands.

2.1 Site Description

The site is identified as; "Dalwood Home"

Dalwood Avenue, Gurney Crescent and Callicoma Road
Seaforth NSW 2092

LGA Northern Beaches Council

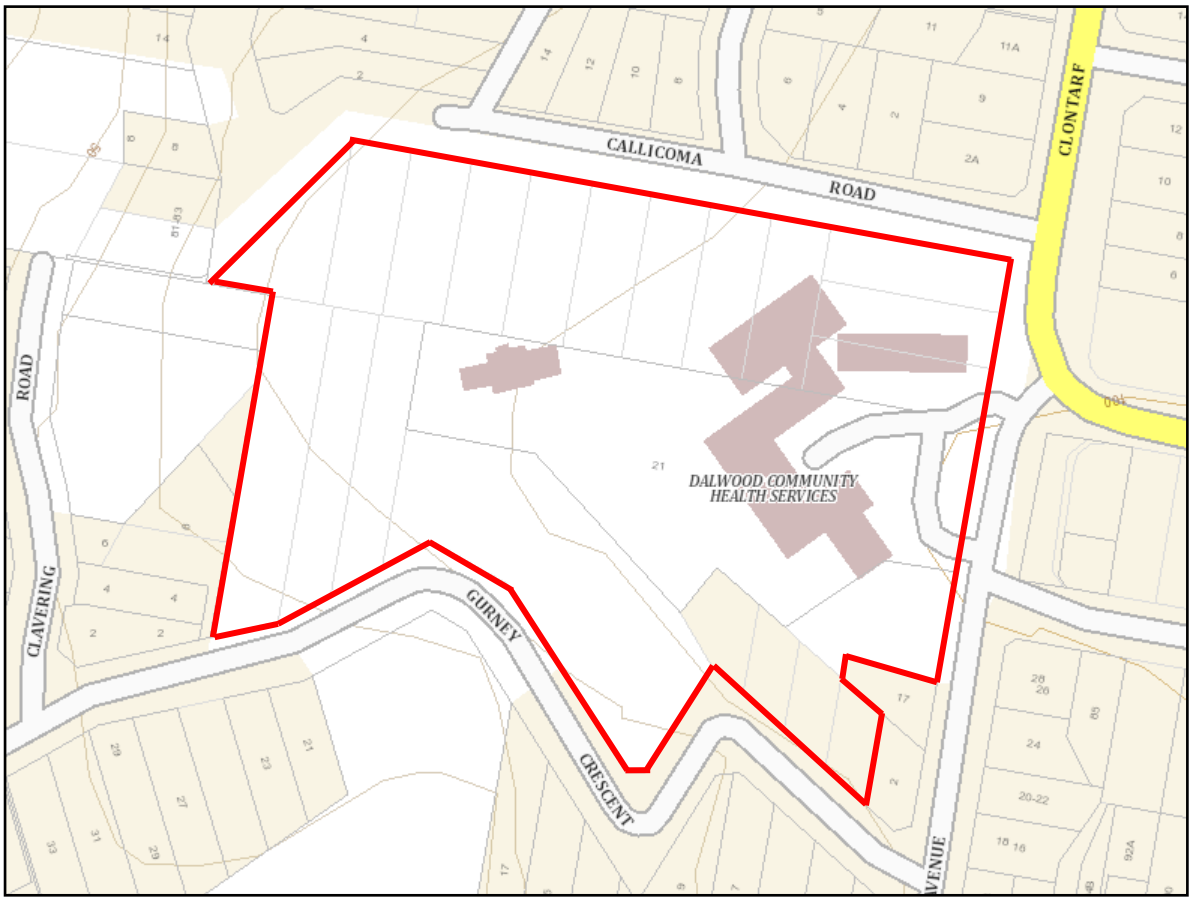


Figure 3; Address validation ex Dept of Lands

The Dalwood Home site is approximately 3.7 hectares bounded by Callicoma Road to the north, Dalwood Avenue to the east, Gurney Crescent to the south and private residential allotments to the west, within the Northern Beaches Council Local Government Area.

The Dalwood site is a combination of well maintained gardens and lawns within the north eastern section of the site that transition into unmanaged forest vegetation upon the steeply descending slopes over the southern and western areas of the site.

The vegetation in the southern areas of the site are dominated by heavy weed infestation with numerous large areas of lantana and other weed species of shrubs and ground layer fuels.

In the western area the vegetation is less influenced by weed infestation although this area is not completely free of invasive plant types.

The terrain of the site in broad terms is described as being reasonably level within the north eastern section of the parcel before rapidly descending with large areas of slope in excess of 20 degrees downslope.

There is a secondary plateau of level ground directly south of the main administration building where by consultation with Dalwood staff confirmed that physical earthworks were undertaken many years ago for a proposed building development that never actually eventuated.

The structural improvements are located on level areas in the north eastern section of the site and these are currently being used for a variety of health and community facilities although it is noted that none of these are residential.

The built area is dominated by a historic large sandstone two storey building identified as “Dalwood Home”. This building is currently used by the Northern Sydney Local Area Heath for administration purposes.

There are also other buildings on the site which are used for storage of welfare goods, a Family Care Centre and a preschool centre together with some sections of buildings that are currently not utilised and are considered vacant.

All buildings in the area are connected to existing mains power and water infrastructure. It is assumed that the buildings are provided with suitable water supplies for structural fire protection purposes in accordance with Building Code of Australia (BCA) requirements although such an assessment.

The site is shown on the Northern Beaches Bushfire Prone Land Map (Figure 3) to be within a combination of Category 1 vegetation (shown red) and Category 1 vegetation buffer zone (shown yellow).

The site inspection and interpretation of aerial photography for the site confirms that whilst this image is reasonably accurate, the Category 1 vegetation does extend across the southern sections of Lots 5A, 6A and 7A.

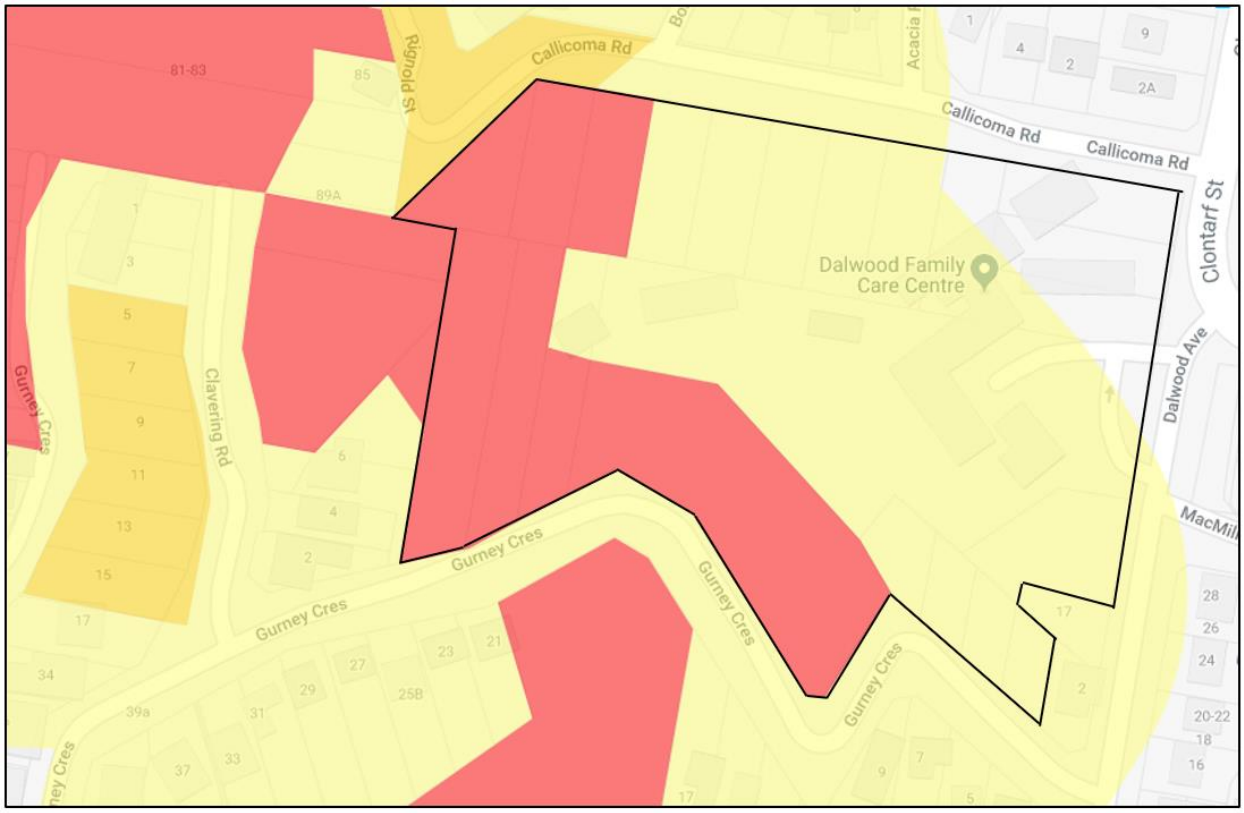


Figure 4; Section Northern Beaches LGA Bushfire Prone Land Map

2.2 Description of Adjoining Lands

To the north and east of the Dalwood Home site is well established residential developments with no significant areas of bushfire hazardous vegetation.

To the south of the site is the carriageway of Gurney Crescent and beyond is established residential dwellings. However, there is also a bushland reserve of approximately two (2) hectares which has the potential to carry a bushfire event into the forest located within the proposed lands to be rezoned.

To the west and northwest of the subject parcel is a combination of residential dwellings and unmanaged forest vegetation on steeply descending slopes above the foreshores of Middle Harbour.

The vegetation on these slopes has direct linkage to the subject parcel and it is envisaged that a bushfire front could easily enter the Dalwood Home site from this direction and aspect.

3.0 Environmental Considerations

The scope of this report has not been to provide an environmental survey.

It is envisaged that some vegetation removal will be required to provide for areas of asset protection zones and that studies will be undertaken by others to assess the effects of the rezoning from a flora and fauna perspective which is beyond the expertise of the author of this report.

4.0 Bushfire Hazard Assessment

The bushfire hazard assessment was conducted for the Proposal, using the procedures as outlined in *Planning for Bush Fire Protection* 2006, Addendum to Appendix 3 and section 2 of AS 3959-2009 *Construction of buildings in bushfire prone areas* procedure to determine the bushfire attack level (BAL) likely for the development.

The assessment was conducted on the assumption of the building footprint being positioned as described in section 1.5 The Proposal and Figure 1 of this report and the site plan.

4.1 Classification of Vegetation, Distance from Proposed Development

The vegetation was assessed for a distance of 140 metres from the proposed development in each of the following directions. To the west and southwest being the general direction adjacent and away from the proposed development site.

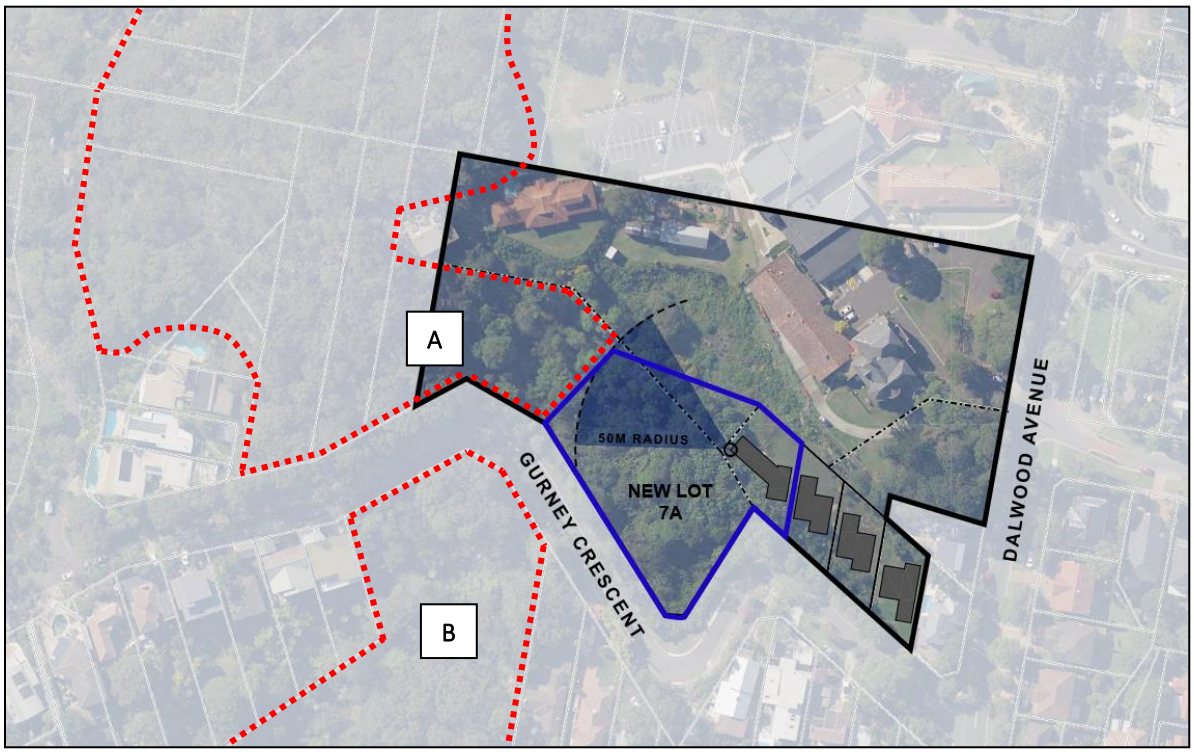


Figure 5; Vegetation study area

The proposed residential development is shown above as the four (4) allotments within the south eastern section of the overall Dalwood site illustrated by the solid red line (———).

It is also proposed to establish an area of asset protection zone illustrated by the green dashed line (·····) as a component of the western most allotment which would then create a benefit to the other three parcels rather than establish an easement for the asset protection zone, over the Dalwood Home site.

As a consequence the areas of vegetation hazard illustrated by the dashed red line (·····) to the west being Area A and to the southwest Area B would have a minimum separation distances to the individual potential dwelling locations as follows;

Allotment	Area A (metres)	Area B (metres)
4A	109	109
5A	89	93
6A	71	81
7A	50	67

4.2 Slope Assessment

The slope was assessed for a distance of 100 meters within the bushfire hazardous vegetation and reference to slope classifications has been undertaken considering the procedure specified within section 2 of AS 3959-2009 *Construction of buildings in bushfire prone areas.*

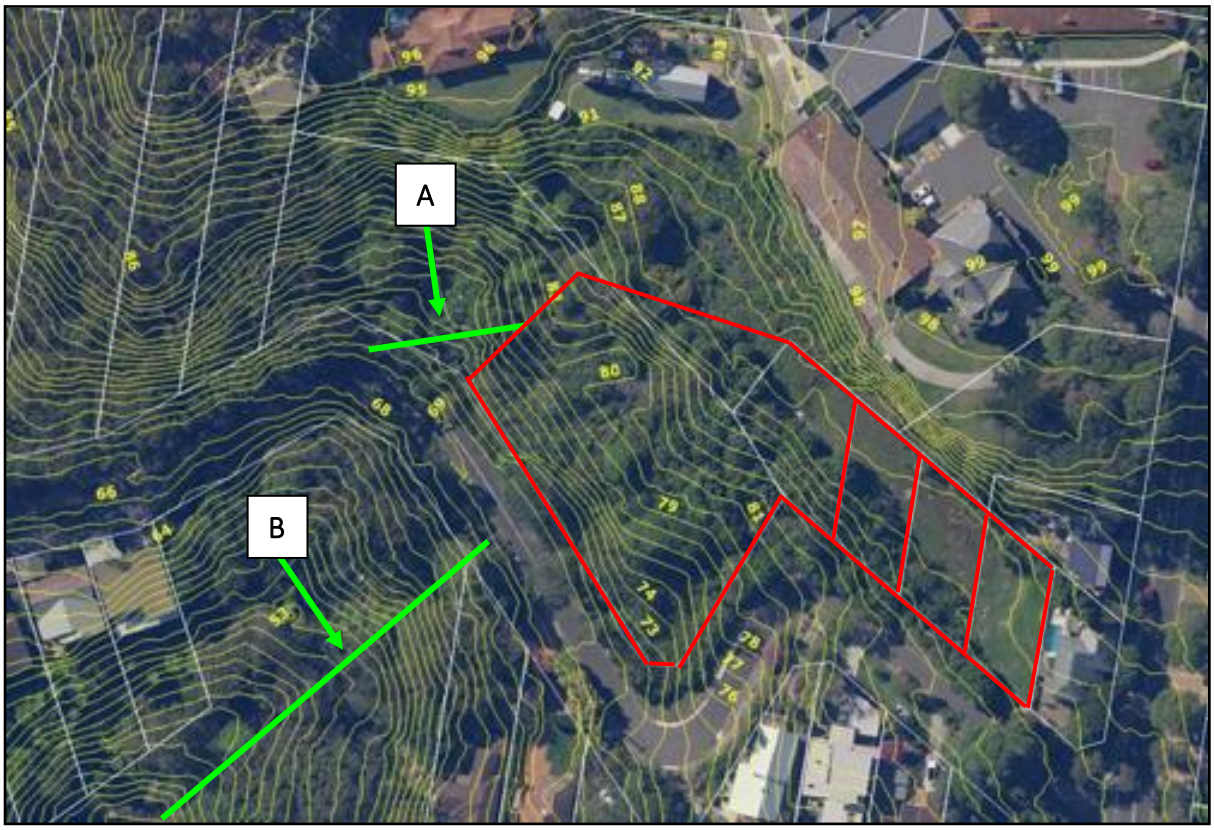


Figure 6; Slope assessment study area Image ex Nearmap

The **effective slope** of the land, out to a distance of 100 metres from the proposed scope of works (that is, the slope of the land most likely to influence bushfire behaviour for the purposes of calculating the Category of Bushfire Attack and Asset Protection Zones), has been assessed (using a clinometer) and desktop analysis as being;

- Area A – Forest - > 10 to 15 degrees downslope (assumed) (elevation 9 met / dist. 41 met = 12.38 degrees)
- Area B – Forest - > 15 to 20 degrees downslope (assumed) (elevation 27 met / dist. 90 met = 16.70 degrees)

4.3 Category of Bushfire Attack

The bushfire attack level (BAL) for the proposed development was determined by using the information gathered with respect to the separation distances, the classification of the vegetation, the effective slope and provision of asset protection zones specified in this report.

The separation distances nominated have determined by reference to Appendix 2 Table A2.4 of *Planning for Bush Fire Protection* 2006 – Minimum Specifications for Asset Protection Zones for Residential and Rural Residential Subdivision Purposes (for Class 1 and 2 buildings) in Fire Danger Index (FDI) 100 Fire Areas to achieve less than 29kW/m² radiant heat exposure on any building element.

This maximum permissible level of radiant heat exposure is a baseline requirement of the NSW Rural Fire Service within the subdivision approval process. It is also referred to within AS 3959-2009 *Construction of buildings in bushfire prone area* as Bushfire Attack Level (BAL) 29.

For allotments effected by the Forest vegetation with consideration of the effective downslope of > 10 to 15 degrees beneath the vegetation hazard a minimum distance of separation of 50 metres is required.

For allotments effected by the Forest vegetation with consideration of the effective downslope of > 15 to 20 degrees beneath the vegetation hazard a minimum distance of separation of 61 metres is required.

Clearly the CLP supplied for perusal within the context of formulating this report, shows that these minimum separation distances are very easily achieved and it is actually envisaged that distances of separation would ultimately be well in excess of the minimum requirements of *Planning for Bush Fire Protection* 2006.

5.0 Assessment of the extent to which the development potentially conforms or deviates from Chapter 4 of *Planning for Bush Fire Protection* 2006

5.1 Asset Protection Zones

The provision of asset protection zones for any future subdivision, subsequent to a rezoning, must be fully provided for onsite to satisfy the requirements of *Planning for Bush Fire Protection* 2006.

The maintenance of the majority of area upon the subject allotment particularly within the existing and proposed Lot 7A currently would not satisfy the requirements of an inner protection area of an asset protection zone as contained in *Planning for Bush Fire Protection* 2006.

The following is a summary of the requirements for an asset protection zone inner protection area as described within the documents *Planning for Bush Fire Protection* 2006 and NSW RFS *Standards for Asset Protection Zones*.

Inner Protection Area

An IPA should provide a tree canopy cover of less than 15% and the tree canopy should be located greater than 2.0 metres from any part of the roof line of a dwelling. Garden beds of flammable shrubs should not be located under trees and should be located not closer than 10 metres from an exposed window or door. Trees should have lower limbs removed up to a height of 2.0 metres above the ground.

Ground fuels such as fallen leaves, twigs (less than 6mm in diameter) and branches should be removed on a regular basis, and grass needs to be kept closely mown and where possible green.

A report formulated for the purposes of subdivision will recommend that the entire site within Lot 4A, 5A, 6A and 7A where not built upon is maintained to the requirements of an inner protection area of an asset protection zone and managed to these provisions for the lifetime of the development.

The site inspection undertaken for the purposes of the rezoning application noted the site is primarily dominated by regrowth vegetation of weed infestation and significant stands of bamboo.

The other native trees were reasonably sparse in spatial arrangement and it would not be likely that a substantial number would need removal to accommodate asset protection zones arising from any future development.

In terms of shrub and ground layer fuels these are easily managed by regular slashing or mowing.

It is my opinion that the provision of adequate and complying areas asset protection zones could be easily achieved over the subject allotment in the context of the CLP supplied for consideration.

5.3 Construction Level

The Building Code of Australia contains both the performance requirements and the 'deemed to satisfy' provisions relating to construction of class 1, 2 & 3 buildings that are proposed for *construction in bushfire prone areas.* To satisfy the performance provision P2.3.4 of the Building Code of Australia Vol. 2, a Class 1a building that is constructed in a designated bushfire prone area must be designed and constructed to reduce the risk of ignition from a bushfire while the fire front passes.

Australian Standard 3959-2009 *Construction of buildings in bushfire prone areas* is referenced by the NCC as the deemed to satisfy construction standard for residential dwellings in designated bushfire prone areas with the exception that the requirements shall be varied to comply with the Addendum to Appendix 3 of *Planning for Bushfire Protection 2*006.

As noted previously any construction of dwellings or proposed buildings footprints must not be exposed to greater than BAL 29 and this can be easily achieved within the context of the CLP supplied.

5.4 Access / Egress

5.4.1 To the Proposed Development

The access to the subject site for the proposed residential allotments is from Gurney Crescent which is a sealed two lane road in a well maintained condition and under most conditions should provide adequate access and egress for both residents and emergency service vehicles.

Gurney Crescent links to other through roads in an easterly direction which would afford the residents the ability to evacuate the area to a location not being directly implicated by the mechanisms of bushfire attack, although under most bushfire or grassfire conditions this would generally not be required.

5.4.2 Within the Site

No construction of access roads is required by the provisions of *Planning for Bush Fire Protection* 2006.

5.5 Utility Supplies

5.5.1 Water

The locality of Seaforth is serviced by a mains reticulated water system and the site inspection noted that this system is within the carriageway of Gurney Crescent.

The provisions of *Planning for Bush Fire Protection* 2006 will require that if the mains water is integrated within any future development it should be undertaken to satisfy AS 2419 – 2005 *Fire hydrant installations.*

5.5.2 Electricity

The preferred methodology for the connection of electricity is by underground cabling as stated within *Planning for Bush Fire Protection* 2006.

5.5.3 Gas

At the time of report preparation it was not known if it is proposed to connect gas supply to the subject allotment. However any future connection to either mains or portable gas supply should be undertaken and maintained to the provisions of AS 1596-2002 *Storage and handling of LP Gas.* All piping associated with the installation must be metal.

5.6 Landscaping

A formal landscaping plan was not supplied for perusal at the time of formulating this report however this must be undertaken to satisfy Appendix 5 of *Planning for Bushfire Protection* 2006.

6.0 Conclusion

After consideration of the aims and objectives of *Planning for Bush Fire Protection* 2006 in the context of the PP and the CLP for future residential development on the site, it is my professional opinion that the provisions of bushfire regulatory requirements could be achieved and that the relevant consent authorities would be likely to approve future dwellings on the 4 lots.

Craig Burley
Grad.Dip. Building in Bushfire Prone Areas (UWS)
FPA Australia Certified BPAD-A Practitioner

Caveat

Quote from *Planning for Bush Fire Protection* 2006, '*not withstanding the precautions adopted, it should always be remembered that bushfire burn under a wide range of conditions and an element of risk, no matter how small always remains.'*
Quote from Standards Australia, '*Although the standard is designed to improve the performance of such buildings, there can be no guarantee, because of the variable nature of bushfires, that any one building will withstand bushfire attack on every occasion.'*

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Property and Infrastructure Specialists

Adelaide

61 8 8409 4280

Level 1
151 South Terrace
Adelaide SA 5000

Brisbane

61 7 3238 0400

Ground Floor
143 Coronation Drive
Milton QLD 4064

Canberra

61 2 9957 6211

Level 9
121 Marcus Clarke Street
Canberra ACT 2600

Melbourne

61 3 8866 0200

Level 7
420 St Kilda Road
Melbourne VIC 3004

Newcastle

61 2 4928 7600

Level 2
426 King Street
Newcastle NSW 2300

Perth

61 8 9224 6300

Level 4
181 Adelaide Terrace
Perth WA 6004

Sydney

61 2 9957 6211

Level 7
116 Miller Street
North Sydney NSW 2060

Tamworth

61 421 959 484

Suite 6
493 Peel Street
Tamworth NSW 2340

Wollongong

61 2 4220 6300

Suite 3, Level 1
6-8 Regent Street
Wollongong NSW 2500

APP Corporation Pty Limited ABN 29 003 764 770