

Sydney Environmental

Group

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Stage 1 - Preliminary Site Investigation

43, 45, and 49 Warriewood Road, Warriewood NSW

Warriewood Developers (c/- Macpherson Kelley)

Report No: 2148-PSI-01-060723.v1f

Report Date: 7 July 2023





DOCUMENT RECORD

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EXECUTIVE SUMMARY

Sydney Environmental Group Pty Ltd (SE) was engaged by Warriewood Developers Pty Ltd (c/- Macpherson Kelley Pty Ltd) (hereafter referred to as 'the client'), to undertake a Stage 1 Preliminary Site Investigation of the property located at 43, 45, and 49 Warriewood Road, Warriewood NSW (hereafter referred to as 'the site') (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

SE has the following project appreciation:

- The site covers an area of approximately 2.21 ha;
- The site is proposed for construction of two residential flat buildings and the associated residential subdivision of land;
- A Preliminary Site Investigation was undertaken for the site by NG Child & Associates in November 2021 (NG 2021); and
- An updated Preliminary Site Investigation is required to identify any significant changes in the site
 condition, assess any potential contamination that may be present and provide advice on the suitability
 of the site for any proposed future land-use.

The objectives of this project were to:

- Assess the potential for contamination to be present on the site as a result of past and current land use activities;
- Provide advice on whether the site would be suitable (in the context of land contamination) for the continued residential land use setting; and
- Provide recommendations for further investigation, management and/or remediation (if warranted).

SE undertook the following activities to address the project objectives:

- A desktop review of relevant information pertaining to the site;
- A site walkover to understand current site conditions; and
- Data assessment and reporting.

Based on SE's assessment of the desktop review information, fieldwork data and laboratory analytical data, in the context of the proposed redevelopment scenario, SE makes the following conclusions:

- Six (6) areas of potential environmental concern (PAECs) have been identified for the site; and
- Based on the assessments undertaken as part of this investigation, SE have concluded that the site can
 be made suitable for the proposed land use setting, subject to a targeted detailed site investigation
 (DSI) consisting of intrusive sampling.

Based on the conclusions stated above and the background data gathered during the course of this investigation, SE recommend the following:

- A targeted DSI across the identified PAECs comprising an intrusive soil assessment is warranted to characterise potential contamination that may be present at the site;
- Undertake a hazardous building materials survey of the structures present on-site prior to demolition (if required);
- Following removal of hazardous building materials (if identified) and subsequent demolition (if required) of the building materials, a clearance inspection should be carried out by an appropriately qualified occupational hygienist / NSW LAA; and
- A supplementary contamination assessment of the building footprints should be carried out prior to any proposed demolition works.

This report, including its conclusions and recommendations, must be read in conjunction with the limitations presented in **Section 10**.





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A Groundwater Search

B Historical Aerial Imagery

C NSW EPA Search

D Land Titles



ABBREVIATIONS

AHD	Australian Height Datum
AEC	Area of Environmental Concern
ANZECC	Australian and New Zealand Environment and Conservation Council
AST	Aboveground storage tank
Bgs	Below ground surface
ВТЕХ	Benzene, Toluene, Ethylbenzene, Xylene
Btoc	Below top of casing
СоС	Chain of Custody
CSM	Conceptual Site Model
DSI	Detailed Site Investigation
EC	Electrical conductivity
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
GS	Geological Survey of NSW
HIL	Health Investigation Levels
HSL	Health Screening Levels
IL	Investigation Levels
LOR	[Laboratory] Limit of reporting
NATA	National Association of Testing Laboratories
N/A	Not applicable
ND	Not detected
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NSW EPA	NSW Environment Protection Authority
ОСР	Organochlorine Pesticide
ОРР	Organophosphorus Pesticide
PAEC	Potential Area of Environmental Concern
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PID	Photo-ionisation detector
PSH	Phase separated hydrocarbon
PSI	Preliminary Site Investigation
QA/QC	Quality assurance/Quality control
RPD	Relative percentage difference
SAQP	Sampling Analysis and Quality Plan
SE	Sydney Environmental Group Pty Ltd
SVOC	Semi-volatile organic compound
ТРН	Total petroleum hydrocarbon
USCS	Unified Soil Classification System
UST	Underground storage tank
VOC	Volatile organic compound





1. INTRODUCTION

1.1. Background

Sydney Environmental Group Pty Ltd (SE) was engaged by Warriewood Developers Pty Ltd (c/- Macpherson Kelley Pty Ltd) (hereafter referred to as 'the client'), to undertake a Stage 1 Preliminary Site Investigation of the property located at 43, 45, and 49 Warriewood Road, Warriewood NSW (hereafter referred to as 'the site') (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

SE has the following project appreciation:

- The site covers an area of approximately 2.21 ha;
- The site is proposed for the construction of two residential flat buildings and the associated residential subdivision of land;
- A Preliminary Site Investigation was undertaken for the site by NG Child & Associates in November 2021 (NG 2021); and
- An updated Preliminary Site Investigation is required to identify any significant changes in the site
 condition, assess any potential contamination that may be present and provide advice on the suitability
 of the site for any proposed future land-use.

1.2. Proposed Development

The site is proposed for redevelopment comprising demolition of existing structures and construction of two residential flat buildings containing 34 apartments with basement parking and associated services, and the associated residential subdivision of land.

1.3. Objectives

The objectives of this project were to:

- Assess the potential for contamination to be present on the site as a result of past and current land use activities;
- Provide advice on whether the site would be suitable (in the context of land contamination) for the continued residential land use setting; and
- Provide recommendations for further investigation, management and/or remediation (if warranted).

1.4. Scope of Work

SE undertook the following activities to address the project objectives:

- A desktop review of relevant information pertaining to the site;
- A site walkover to understand current site conditions; and
- Data assessment and reporting.



2. SITE IDENTIFICATION

The site identification details and associated information are presented in **Table 2.1.**

Table 2.1. Site Identification Information

Attribute	Description
Street Address	43, 45, and 49 Warriewood Road, Warriewood NSW
Lot and Deposited Plan (DP)	Lots 1 & 2 DP349085 and Lot 2 DP972209
Geographical Coordinates	33°41'13.36"S 151°17'52.71"E (Centre of site)
Site Area	≈ 2.21 ha
Local Government Area (LGA)	Northern Beaches Council
Parish	Narrabeen
County	Cumberland
Zoning	R3 – Medium Density Residential (Pittwater Local Environmental Plan 2014)

The locality of the site is set out in **Figure 1**.

The general layout and boundary of the site is set out in Figure 2.



3. GEOLOGY, ACID SULPHATE SOILS, TOPOGRAPHY AND HYDROGEOLOGY

Regional geology, topography, soil landscape and hydrogeological information are presented in Table 3.1.

Table 3.1. Regional Setting Information

Attribute	Description
Climate	A review of the closest weather station to the site (Norah Head AWS, Station Number: 061366) indicated that the climate is relatively mild with average maximum temperatures ranging from 17.5 – 26.3 °C and minimum temperatures ranging from 9.9 – 20.0 °C. Rainfall is relatively varied across the year, ranging from 5.9 days of rain per month in August, to 10.0 average days of rainfall per month in March. Average monthly rainfall varied from 63.4 mm in September up to 145.7 mm in June.
Geology	A review of the Environment NSW 'eSpade V2.2' web application (environment.nsw.gov.au/eSpade2WebApp, accessed 4 July 2023), indicated that the western portion of the site is likely to be underlain by Terrigal Formation of the Narrabeen Group, comprising lithic and quartz sandstone and siltstone, minor sedimentary breccia, claystone and conglomerate. The eastern portion of the site is likely to be underlain by Narrabeen Group sediments, comprising interbedded laminate and shale with quartz to lithic quartz sandstone.
Acid Sulfate Soils	A review of the Environment NSW 'eSpade V2.2' web application (environment.nsw.gov.au/eSpade2WebApp, accessed 4 July 2023), indicates that the site lies in an area mapped as 'No Known Occurrence' with respect to acid sulfate soils. This infers that land management activities are not likely to be affected by acid sulfate soil materials.
	Further assessment of acid sulfate soils in the context of this investigation is considered by SE as not warranted.
	Generally, the local landscape consists of rolling to steep hills on fine-grained Narrabeen Group sediments, with local relief 60 – 120 m and slopes >25%.
Topography	The site topography slopes downward towards the south-west of site. SE understands that the site is located at an elevation approximately 6 m to 17 m Australian Height Datum (AHD).
	Surface water courses proximal to the site include Narrabeen Creek, located immediately south-west of the site, Fern Creek, located 455 m west of the site and the South Pacific Ocean, located approximately 950 m east of the site.
	Based on distances to the nearest surface water course and the site topography, groundwater flow in the vicinity of the site is considered likely to be towards the west toward Narrabeen Creek.
Hydrology and Hydrogeology	A review of the NSW Office of Water groundwater database undertaken on 4 July 2023 indicated there were four (4) registered groundwater features located within a 500m radius of the site:
	GW106698 – monitoring bore, Standing Water Level (SWL) not specified, located approximately 110 m north-west of the site;
	 GW106697 – monitoring bore, SWL not specified, located approximately 75 m south-west of the site;
	 GW106699 – monitoring bore, SWL not specified, located approximately 200 m south-west of the site; and
	GW108034 – test bore, SWL not specified, located approximately 250 m north-west of the site.



Attribute	Description
Adjacent Sensitive Receptors	A review of the Bureau of Meteorology Groundwater Dependent Ecosystem Map was undertaken to determine the closest sensitive ecological receptors. The closest ecological receptor is the South Pacific Ocean, located approximately 950 m east of the site identified to contain a low dependent ecosystem. South Creek, located approximately 1.65 km south of the site identified to contain a highly dependent ecosystem.
	The closest sensitive human receptors are the residential properties surrounding the site's boundary and any future onsite construction workers/ builders.

A copy of the NSW Office of Water search record is presented in **Appendix A**.



4. SITE HISTORY AND LAND USE

4.1. Land Titles

A search of historical land title ownership was undertaken by NG (2021) and the results are summarised below in **Table 4.1.1** to **Table 4.1.4**.

Table 4.1.1 Land Titles Records Summary for entire site

Date of Acquisition (Term Held)	Registered Proprietor/s and Occupations
1912 to 1919	George Henry Gardiner (Greengrocer)
1919 to 1921	Alex John Gardiner (freeholder)
1921 to 1923	Annie Elizabeth Gardiner (market gardener) and George Henry Gardiner (market gardener)
1923 to 1943	Alec John Gardiner (freeholder)
1943 to 1944	Albert Farley (market gardener)

Table 4.1.2 Land Titles Records Summary for Lot 2 DP349085

Date of Acquisition (Term Held)	Registered Proprietor/s and Occupations
1944 to 1946	Albert Farley (market gardener)
1947 to 1949	Hannah Casey (married woman)
1949 to 1953	Elsie Lorraine Nilan (married woman)
1953 to 1959	Foska Pikulich (married woman) and Nevenko Pikulich (market gardener)
1959 to 1959	Nevenko Pikulich (market gardener)
1959 to 1979	Ronald Erskine Pearce (clerk) and Vera Florence Jean Pearce (married woman)
1979 to 2005	Nevenko Pikulich (market gardener) and Zlatka Pikulich (married woman)

Table 4.1.3 Land Titles Records Summary for Lot 2 DP349085 A & B

Date of Acquisition (Term Held)	Registered Proprietor/s and Occupations
2005 to 2016	Zlatka Pikulich (married woman) and Nevenko Pikulich (market gardener)
2016 to 2017	Zlatka Pikulich (widow)
2017 to 2018	Golden Arrow International Pty Ltd
2018 to date	Warriewood Developers Pty Ltd

Table 4.1.4 Land Titles Records Summary for Lot 1 DP349085

Date of Acquisition (Term Held)	Registered Proprietor/s and Occupations	
1959 to 2016	Zlatka Pikulich (married woman) and Nevenko Pikulich (market gardener)	
2016 to 2017	Zlatka Pikulich (widow)	
2017 to 2018	Golden Arrow International Pty Ltd	
2018 to date	Warriewood Developers Pty Ltd	



No easements or leases were reported.

Based on the land title ownership search, SE conclude that there is a moderate potential for land contaminating activities to have been undertaken on the site related to horticultural market gardening activities. Further assessment of these potential land contaminating activities, in the context of other historical information identified during this investigation and site walkover observations, is considered warranted.

4.2. Aerial Imagery

A review of selected historical aerial imagery of the site was undertaken. Observations made of the imagery considered relevant to this investigation, are presented in **Table 4.2.1** below.

A copy of the historical aerials is presented in **Appendix B**.

Table 4.2.1 Aerial Imagery Observations

Image Date	Site Features	Surrounding Land Use Settings
1955	The site is observed to have one (1) dwelling within the northern portion of 45 Warriewood Road and a shed immediately east of the dwelling. A small structure is present further south of the main dwelling and four (4) presumed greenhouses are present south of the smaller structure. The central portion of the site appears to be utilised as a market garden. One (1) dwelling is present within the northern portion of 49 Warriewood Road and two (2) sheds appear to be present south of it. Five (5) presumed greenhouses are present south of the sheds and the central portion of the site appears to be utilised as a market garden. The southern portion of the site appears to be dense bushland and shrubbery.	Surrounding land observed to be rural residential with market garden activities in all directions.
1965	The dwelling and shed within the northern portion of 45 Warriewood Road appears to be extended to the south. An additional structure has appeared to the south-west of the dwelling. An additional four (4) presumed greenhouses have appeared to the south of the original. Market garden activities are not evident within the central portion of 45 Warriewood Road. The presumed greenhouses within 49 Warriewood Road appear to have been demolished.	No significant change to surrounding land use.
1975	An additional six (6) presumed greenhouses are present south of the existing units at 45 Warriewood Road. The remainder of the site is unchanged.	Low-Density Residential land use to the north.
1986	The shed east of the main dwelling at 45 Warriewood Road appears to have been demolished. Nine (9) presumed greenhouses are present within the central portion of 49 Warriewood Road and it appears that land has been prepared for an additional four (4) greenhouses. Soil materials within the southern portion of the site appears to have been disturbed, presumed to be part of greenhouse construction activities.	No significant changes to surrounding land use.
1998	Soils south of the greenhouses on all lots appears to be disturbed. Potential filling activities may have occurred and a dirt driveway is present between 45 and 49 Warriewood Road.	No significant changes to surrounding land use.
2009	No significant changes observed across the site.	Development of low-density residential starting to the east.
2023	All greenhouses within the site appear to have been demolished.	Increase in low-density residential to the east, west and south of the site.

The aerial imagery review indicated a moderate potential for land contaminating activities to have occurred on the site including uncontrolled demolition and filling across the site as well as market garden activities. Further consideration of this value is deemed warranted.

4.3. Anecdotal Information

There was no anecdotal information provided to SE during the site investigation.





4.4. Incident Reports / Complaints History

There was no incident reports or complaints history information provided to SE as part of this project.

4.5. Previous Contamination Assessments

SE were provided with a previous contamination assessment that was undertaken for the site.

 NG Child & Associates (2021), 'Preliminary (Stage 1) Site Investigation, Proposed Residential Sub-Division, 45/49 Warriewood Road, Warriewood NSW', dated 16 November, report ref: CA/20/126-2701.

A summary of the previous contamination assessment is presented in **Section** Error! Reference source not found. below.

4.5.1. NG (2021)

Creative Planning Solutions, on behalf of its client Mikara Developments Pty Ltd, was coordinating the planning and prospective delivery of a residential sub-division at 45/49 Warriewood Road, Warriewood NSW. The proposed development is subject to the regulatory control of the Northern Beaches Council, and relevant NSW Government departments and agencies. Northern Beaches Council were the consent authority for the proposed development. NG Child & Associates has undertaken a Stage 1 or Preliminary Site Investigation in relation to the proposed development. The findings are summarised below.

Preliminary Site Investigation

The site investigation and assessment were completed in accordance with all relevant guidelines and protocols, including those provided by in the NSW EPA document Guidelines for Consultants Reporting on Contaminated Sites (1997, reprinted 2000 & 2011), and included in particular:

- A detailed review and consideration of the history and past uses of the site, based on a search of available title and ownership records;
- A thorough physical inspection of the site and surrounding properties; and
- Sampling, physical examination and laboratory analysis of soil samples at varying depths from five soil bores drilled by mechanized hand augur at representative locations throughout the site area.

Site History

The site had in the past been used for market gardening, and a preliminary review of the physical appearance of representative soil samples from the site, together with appropriate supporting laboratory analysis, had been undertaken to ensure that chemical contamination form this past use of the land has not affected soil quality at the site, when assessed against the residential soil quality criteria relevant to the proposed development.

Site Inspection

Based on the site inspections undertaken the general environmental condition of the 45/49 Warriewood Road Warriewood site was considered to be sound, and a detailed physical inspection of the site had not indicated any significant environmental or contamination issues prejudicial to the residential land use proposed for the site. However, it is noted that materials containing asbestos are likely to be present within the existing buildings and structures at the site; and that it is possible that minor quantities of other potentially hazardous or dangerous materials may be identified during any future demolition or construction works at the site.

Soil Sampling & Analysis

Twenty-three (23) soil samples were collected from various depths at five soil bores installed by mechanized hand augur at representative locations throughout the site. These samples were carefully examined on-site for any indications of contamination. Fifteen of these samples, including one duplicate sample and three asbestos





analysis samples, were forwarded to a NATA registered laboratory (Envirolab Services Pty Ltd) for detailed chemical analysis targeting a wide range of potential contaminants potentially relevant to land subject to prior market gardening use. The key findings of this assessment of soil quality are as follows.

- None of the 23 soil samples collected from and examined at the site provided any physical indication during the drilling and sampling process of contamination, either by discoloration, staining, odour or hydrocarbon residue response to examination by a photo-ionisation detector;
- No indication of any significant presence of contaminated fill was noted at the site;
- None of the 15 representative soil samples from the site sent to the NATA accredited laboratory of Envirolab Services for analysis indicated the presence of heavy metals, petroleum hydrocarbons, phenolic compounds and polyaromatic hydrocarbon species at levels of potential concern, or at levels in excess of relevant residential land use guidelines;
- Asbestos was not detected in any of the representative surface and near surface soil samples from the site;
- On this basis, the soils at the site are assessed as being free of contamination, and soil quality at the site is considered appropriate for the residential land use proposed; and
- The absence of volatile contaminants in the sub surface at the site indicates that vapour intrusion from sub surface soil strata through and into any future slab floor or basement areas that might be considered at the site will not present an environmental, indoor air quality or other contamination problem.

Overall Findings & Recommendations

The overall findings of this Preliminary or Stage 1 Site Investigation had established that the underlying soils at the site were free of contamination; that the site was suitable in general environmental and soil quality terms for the residential use proposed; and that no further or more detailed assessment was considered necessary to establish this finding. These findings are made subject to the following recommendations:

- That appropriate handling and disposal practices, in accordance with relevant hazardous material
 handling and disposal guidelines, are observed in relation to any asbestos based materials encountered
 during future demolition and clearance works undertaken at the site;
- That a Destructive Hazardous Material Survey per Australian Standard AS2601:2001 The Demolition of Structures and a supporting Demolition Management Plan should be prepared and implemented prior to the commencement of demolition and/or site clearance works;
- That appropriate care is taken in respect of any other potentially hazardous or dangerous materials unexpectedly identified during any future demolition or clearance works involving the three existing dwellings at the site; and
- 4. That an appropriate "Unexpected Finds Protocol" is established and implemented during future site preparation and development works.

The original version of this report was completed in February 2020. The updated version included the final plans and drawings for the proposed development. The overall findings and recommendations of the February 2020 report have been reviewed and remain valid and applicable at the date of this revised report.



5. REGULATORY RECORDS

5.1. NSW EPA CLM Act Record of Notices

A search of the publicly available online NSW EPA CLM Act Record of Notices was completed on 6 July 2023. The results indicated that the site was not the subject of any notifications under Section 58 of the *Contaminated Land Management Act 1997*.

A copy of the CLM Act Record of Notices search record is presented in **Appendix C**.

5.2. NSW EPA POEO Act Register of Licences, Applications and Notices

A search of the publicly available online NSW EPA Record of Notices was completed on 6 July 2023. The results indicated that the site was not the subject of any licences, applications, notices, audits or pollution studies or reduction programs under Section 308 of the *Protection of the Environment Operations Act 1997*.

The Warriewood Sewage Treatment Plan (located on the corner of Macpherson Street and Boondah Road) currently operates under an Environment Protection Licence (Licence No. 1784). As the treatment works are located 390 m south of the site and are monitored, SE do not consider further investigation as warranted.

A copy of the POEO Act Register of Licences, Applications and Notices search record is presented in Appendix C.

5.3. NSW EPA CLM Act Register of Notified Sites

A search of the publicly available online register of sites notified to the NSW EPA under Section 60 of the *Contaminated Land Management Act 1997*, was undertaken on 6 July 2023. The results did not indicate any sites requiring regulation under Section 60 of the *Contaminated Land Management Act 1997*.

A copy of the NSW EPA CLM ACT Register of Notified Sites is presented in Appendix C.



6. SITE WALKOVER

A site walkover was undertaken on the 21 June 2023 by a suitably experienced environmental consultant. The purpose of the site walkover was to make observations of land use activities on the site, and on properties immediately adjacent to the site.

6.1. Current Land Use Activity

The land use setting on the site appeared to be residential and commercial with residences present in the northern portion of the lots and the remainder of the site utilised for market garden activities.

Adjacent land use is observed to be predominantly residential.

6.2. Buildings and General Infrastructure

The following buildings and infrastructure were observed within the investigation areas:

- One (1) fibre cement residential dwelling in the north-western portion of 45 Warriewood Road;
- One (1) metal and timber shed within the north-western portion of 45 Warriewood Road;
- One (1) fibre cement dwelling within the northern portion of 49 Warriewood Road;
- One (1) metal shed within the north-western portion of 49 Warriewood Road; and
- One (1) fibre cement structure within the north-western portion of 45 Warriewood Road.

The remainder of the site consisted of a dirt driveway and vacant land. No structures were present within 43 Warriewood Road.



Site Photograph 6.2.1 Fibre cement residential dwelling within the northern portion of 45 Warriewood Road, as observed on 21 June 2023.



Site Photograph 6.2.2 Shed located within the north-western portion of 45 Warriewood Road, as observed on 21 June 2023.



Site Photograph 6.2.3 Main fibre cement dwelling located within the northern portion of 49 Warriewood Road, as observed on 21 June 2023.



Site Photograph 6.2.4 Metal shed located within the north-western portion of 49 Warriewood Road, as observed on 21 June 2023.



Site Photograph 6.2.5 Fibre cement structure located within the north-western portion of 45 Warriewood Road, as observed on 21 June 2023.



6.3. Boundary Fencing

The site was observed to be fenced along the north, east and western boundaries. Dense vegetation and shrubbery were observed along the southern boundary of the site alongside Narrabeen Creek.

6.4. Adjacent Land Use Activities

Observations made during the site walkover indicated the following land use activities adjacent to the site:

- North Low-Density Residential;
- East Low-Density Residential subdivision works;
- West Low to Medium-Density Residential; and
- South Narrabeen Creek followed by Low-Density Residential.

6.5. Odours and Staining

There was no olfactory or visual evidence of contamination observed on the site, during the site walkover.

6.6. Chemical Storage

There was no visual evidence of chemical storage on site, during the site walkover.

SE notes that due to former use of the site for market gardening activities, pesticide storage was potentially stored onsite within the existing sheds.

6.7. Underground and Aboveground Storage Tanks

Underground and aboveground storage tanks were not observed during the site walkover however, it is presumed that below ground septic systems are likely to be located in close proximity to the residences. Based on the presence of overgrown grass across the site, the septic tanks could not be located.

6.8. Fill Material

Widespread fill material was not observed across site during the site walkover. Two (2) long stockpiles, approximately 80 m³ each, were observed along the western and eastern boundaries of the site. SE presume that market garden activities and the tilling of land in preparation has contributed to the generation of the stockpiles.



Site Photograph 6.8.1 Fill materials located along the western boundary of the site, as observed on 21 June 2023.

6.9. Wastes

Widespread storage of waste was not observed across site. Localised piles of building materials were identified within vicinity of the structures in the northern portion of the site. Piles were observed to contain fibre cement sheeting and scrap metal. One (1) pile of scrap metal was observed within the northern portion of 45 Warriewood Road.



Photograph 6.9.1 Pile of scrap metal and fibre cement sheeting located in the northern portion of the site, as observed on 21 June 2023.



Site Photograph 6.9.2 Pile of scrap metal observed adjacent to the structures at 45 Warriewood Road, as observed on 21 June 2023.

6.10. Asbestos Containing Materials

Potential asbestos containing materials (PACM) were observed within localised locations across the soil surface within the site. Evidence of building materials were observed within close proximity to the structures within the





site. As the structures were observed to be in poor condition, SE presume the fibre cement fragments to be a result of weathered building materials.

PACM was also observed within the pile of scrap metal and suspected asbestos fibre cement. Scattered suspected asbestos fibre cement fragments were observed within the southern portion of the site across the soil surface.

Based on the presumed age of the residence, ACM is likely to be present within the building materials. A predemolition hazardous building materials survey was not within the scope of this site investigation, but is recommended prior to any demolition activities occurring on the site.



Photograph 6.10.1 Localised suspected asbestos fibre cement surficial impacts within the southern portion of the site, as observed on 21 June 2023.

6.11. Phytotoxicity

There was no visual evidence observed to suggest significant or widespread phytotoxic impact (in the form of dieback or plant stress) in the vegetation at the site. Similar observations were made of visible vegetation on land adjacent to the site.

6.12. Surface Water and Site Drainage

Visual observations made in the context of site drainage during the walkover, indicated that drainage mechanisms on the site are likely to include:

- Infiltration into underlying soils, where soil permeability permits; and
- Stormwater systems from the use of downpipes on structures.

6.13. Adjacent Receptors

Adjacent ecological receptors included Narrabeen Creek, located immediately south-west of the site, Fern Creek, located 455 m west of the site and the South Pacific Ocean, located approximately 950 m east of the site.

The closest sensitive human receptors are current and future onsite residential land users, and those on neighbouring sites.



7. DATA INTEGRITY ASSESSMENT

SE has relied on the following sources of data while undertaking this investigation:

- SE field observations during the site walkover;
- Australian Soil Resource Information System;
- Department of Land and Water Conservation;
- Department of Minerals and Energy;
- Department of Primary Industries Water;
- Northern Beaches Council;
- Google Earth;
- Infotrack Pty Ltd;
- National Environment Protection Council;
- Nearmap Pty Ltd;
- NSW Environment Protection Authority;
- NSW Land and Property Information; and
- Water NSW.

Based on SE's experience and professional judgement, the data obtained from the sources relied upon, is considered to be adequately precise, accurate, representative, complete and comparable within the objectives of this investigation and for the purpose of drawing conclusions regarding land contamination risks at the site.



8. CONCEPTUAL SITE MODEL

8.1. Potential Areas of Environmental Concern

The site history data collected and site walkover observations made were assessed within the objectives of this investigation and in the context of the proposed development works. That assessment identified areas of environmental concern (AEC) and contaminants of potential concern (COPC) which have the potential to be present on site. The AEC and associated COPC identified are presented in **Table 8.1.1** below.

Table 8.1.1 PAEC and COPC

ID	Potential Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
PAEC01	Fill Materials Across Former Market Gardens	Uncontrolled Filling, Pesticide Usage	Heavy metals, TRH, BTEX, PAH, OCP, OPP, PCB & Asbestos
PAEC02	On-site Structures	Hazardous Building Materials	Asbestos, Lead, SMF & PCB
PAEC03	Localised suspected ACM Impacts	Weathered Building Materials	Aesthetics & Asbestos
PAEC04	Fill material stockpiles along eastern and western boundaries of site	Uncontrolled Filling, Pesticide Usage	Heavy metals, TRH, BTEX, PAH, OCP, OPP, PCB & Asbestos
PAEC05	Former Chemical/Pesticide Storage within Sheds	Chemical/Pesticide Storage	Heavy metals, TRH, BTEX, PAH, OCP, OPP, PCB
PAEC06	Former Structure within 45 Warriewood Road	Uncontrolled Demolition	Heavy metals, TRH, BTEX, PAH, PCB & Asbestos

The potential contamination pathways are considered to be as follows:

- Inhalation/ingestion of contaminants released in dust during redevelopment by site workers; and
- Direct contact, ingestion or inhalation of soil by future site inhabitants.

Relevant potential receptors are considered to include:

- Onsite construction and maintenance workers;
- Third parties during construction (adjacent site users and adjacent residents);
- Onsite flora and fauna;
- Future residents/end users; and
- Neighbouring residential land users.

8.2. Land Use Setting

SE understands that the site is proposed for redevelopment comprising demolition of the existing structures and construction of the proposed two residential flat buildings and the associated residential subdivision of land.

As the proposed future site use is proposed include lots with accessible soils, SE considers it reasonable to adopt the 'HIL A' per guidance provided in Section 2.2 of Schedule B (1) of the National Environment Protection Measure (Assessment of Site Contamination) 2013 (NEPM ASC 2013), in order to conservatively assess the site for any future proposed land use as well as the current land use.

8.3. Drinking Water Use

There are no groundwater bores onsite or down-gradient of the site, registered for drinking water use. It is noted that a reticulated mains potable water supply is available in the area. Therefore, further assessment of this groundwater drinking water value is considered not warranted.





8.4. Recreational Water Use

Surface water courses proximal to the site included Narrabeen Creek, located immediately south-west of the site, Fern Creek, located 455 m west of the site and the South Pacific Ocean, located approximately 950 m east of the site.

There is a potential, albeit low, that the usage of these surface water courses within proximity to the site would include swimming, fishing for consumption and / or water sports, and as such consideration of this pathway is considered warranted.

8.5. Aquatic Ecosystems

Surface water courses proximal to the site included Narrabeen Creek, located immediately south-west of the site, Fern Creek, located 455 m west of the site and the South Pacific Ocean, located approximately 950 m east of the site.

Based on historical and ongoing land-use there is a potential, for surface / groundwater contamination. As a conservative measure, consideration of this value is deemed warranted.

8.6. Direct Contact - Human Health

SE understands that a future proposed development will mostly consist of residential structures across the current site, which would act as a direct contact barrier between potential land contamination and onsite receptors during operation of the site. The rest of the site would generally consist of open space landscaped areas. In these areas, it is considered that a direct contact exposure pathway may be present between potential contamination and onsite receptors.

Based on the potential for uncontrolled filling and remnant pesticides to be present within the market garden portion of the site, SE consider further investigation as warranted.

8.7. Inhalation / Vapour Intrusion - Human Health

In order for a potentially unacceptable inhalation / vapour intrusion human health exposure risk to exist, a primary vapour source (e.g. underground storage tank) or secondary vapour source (e.g. significantly contaminated soil or groundwater) must exist.

The historical evidence reviewed indicated a low likelihood for a potential primary source to be present on the site.

Potential sources of groundwater contamination in the immediate vicinity of the site was not observed. A groundwater source of vapours was therefore considered unlikely at the site.

Based on the site walkover and the potential for asbestos containing materials (ACM) to be present within the site footprint, SE consider the need for further inhalation human health risk assessment to be warranted.

8.8. Aesthetics

Section 3.7 of Schedule B1 NEPM ASC advises that there are no specific numerical aesthetic guidelines, however site assessment requires a balanced consideration of the quantity, type and distribution of foreign material or odours in relation to the specific land use and its sensitivity.

Based on the site walkover and the potential for asbestos containing materials (ACM) to be present within the site footprint, SE consider the need for further aesthetics assessment and management to be warranted.

8.9. Ecological Health - Terrestrial Ecosystems

Section 3.4.2 of Schedule B (1) NEPM ASC 2013 suggests that a pragmatic risk-based approach be taken in applying ecological investigation levels and ecological screening levels in residential and commercial/industrial land use settings.





SE understand that the proposed development includes the construction of a road within the south-west of site, which would act as a direct contact barrier between potential land contamination and onsite receptors during operation of the site. The rest of the site would generally consist of open space and landscaped areas. In these areas, it is considered that a direct contact exposure pathway may be present between potential contamination and onsite receptors.

Due to the presence of these open space areas further ecological assessment is considered warranted.

8.10. Management Limits for Petroleum Hydrocarbon Compounds

NEPM ASC 2013 notes that there are a number of policy considerations which reflect the nature and properties of petroleum hydrocarbons:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosive hazards; and
- Effects on buried infrastructure (e.g. penetration of or damage to, in-ground services by hydrocarbons).

Section 2.9 of Schedule B (1) NEPM ASC 2013 includes 'management limits' to avoid or minimise these potential effects. Application of the management limits requires consideration of site-specific factors such as the depth of building basements and services and depth to groundwater, to determine the maximum depth to which the limits should apply. Section 2.9 of Schedule B (1) NEPM ASC 2013 also notes that management limits may have less relevance at operating industrial sites which have no or limited sensitive receptors in the area of potential impact, and when management limits are exceeded, further site-specific assessment and management may enable any identified risk to be addressed.



9. CONCLUSIONS AND RECOMMENDATIONS

Based on SE's assessment of the desktop review information, fieldwork data and laboratory analytical data, in the context of the proposed redevelopment scenario, SE makes the following conclusions:

- Six (6) areas of potential environmental concern (PAECs) have been identified for the site; and
- Based on the assessments undertaken as part of this investigation, SE have concluded that the site can
 be made suitable for the proposed land use setting, subject to a targeted detailed site investigation
 (DSI) consisting of intrusive sampling.

Based on the conclusions stated above and the background data gathered during the course of this investigation, SE recommend the following:

- A targeted DSI across the identified PAECs comprising an intrusive soil assessment is warranted to characterise potential contamination that may be present at the site;
- Undertake a hazardous building materials survey of the structures present on-site prior to demolition (if required);
- Following removal of hazardous building materials (if identified) and subsequent demolition (if required) of the building materials, a clearance inspection should be carried out by an appropriately qualified occupational hygienist / NSW LAA; and
- A supplementary contamination assessment of the building footprints should be carried out prior to any proposed demolition works.

This report, including its conclusions and recommendations, must be read in conjunction with the limitations presented in **Section 10.**



10. STATEMENT OF LIMITATIONS

The findings presented in this report are based on specific searches of relevant, government historical databases and anecdotal information that were made available during the course of this investigation. To the best of our knowledge, these observations represent a reasonable interpretation of the general condition of the site at the time of report completion.

This report has been prepared solely for the use of the client to whom it is addressed and no other party is entitled to rely on its findings.

No warranties are made as to the information provided in this report. All conclusions and recommendations made in this report are of the professional opinions of personnel involved with the project and while normal checking of the accuracy of data has been conducted, any circumstances outside the scope of this report or which are not made known to personnel and which may impact on those opinions is not the responsibility of Sydney Environmental Group Pty Ltd. Should information become available regarding conditions at the site including previously unknown sources of contamination, SE reserves the right to review the report in the context of the additional information.

This report must be reviewed in its entirety and in conjunction with the objectives, scope and terms applicable to SE's engagement. The report must not be used for any purpose other than the purpose specified at the time SE was engaged to prepare the report.

Logs, figures, and drawings are generated for this report based on individual SE consultant interpretations of nominated data, as well as observations made at the time site walkover/s were completed.

Data and/or information presented in this report must not be redrawn for its inclusion in other reports, plans or documents, nor should that data and/or information be separated from this report in any way.

Should additional information that may impact on the findings of this report be encountered or site conditions change, SE reserves the right to review and amend this report.



11. REFERENCES

NG Child & Associates (2021), 'Preliminary (Stage 1) Site Investigation, Proposed Residential Sub-Division, 45/49 Warriewood Road, Warriewood NSW', dated 16 November, report ref: CA/20/126-2701

National Environment Protection Council (NEPC) 2013A, 'Schedule B(1) Guideline on Investigation Levels for Soil and Groundwater, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013'.

National Environment Protection Council (NEPC) 2013B, 'Schedule B(2) Guideline on Site Characterisation, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013'.

NSW EPA 2017, 'Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd edition)'.

NSW EPA 2022, 'Sampling Design Guidelines for Contaminated Sites'.

NSW EPA 2012, 'Guidelines for the Assessment and Management of Sites Impacted by Hazardous Ground Gases'

NSW EPA 2020, 'Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites'.

WA DOH 2009, 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' [Guidelines considered relevant as referenced in NEPM ASC 2013]

WA DOH 2021, 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' [Updated WA DOH guidelines]

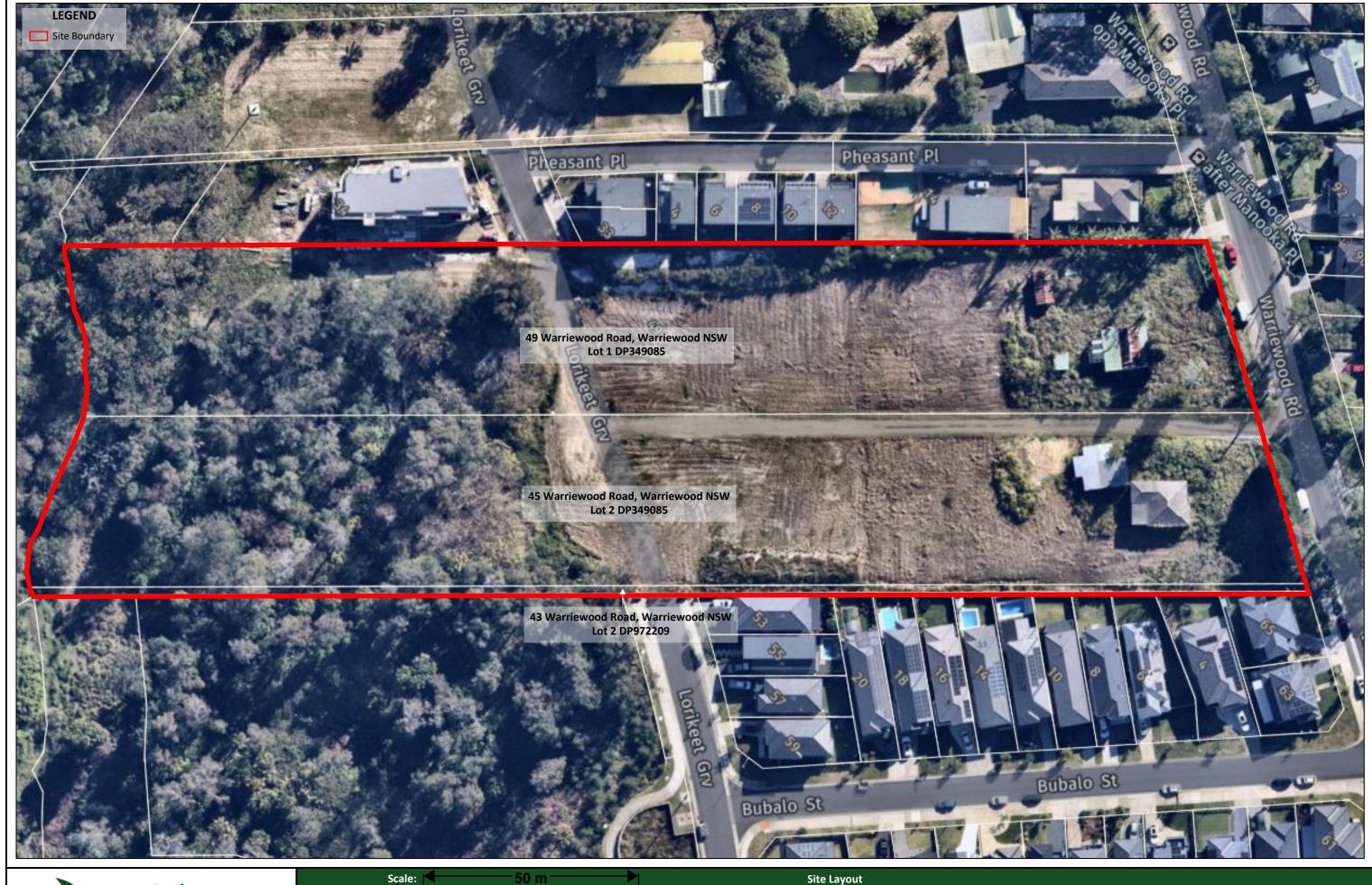


FIGURES





Sydney Environmental Group \bigwedge Figure Date: 6 July 2023 Project Name: Stage 1 Preliminary Site Investigation **Project Location:** 43-49 Warriewood Road, Warriewood NSW Report Number: 2148-PSI-01-060723.v1f





Client Name: Macpherson Kelley

Project Name: Stage 1 Preliminary Site Investigation

Project Location: 43-49 Warriewood Road, Warriewood NSW

Figure Number: 2

Figure Date: 6 July 2023

Report Number: 2148-PSI-01-060723.v1f





Scale: 50 m Potential Areas of Environmental Concern

Client Name: Macpherson Kelley

Project Name: Stage 1 Preliminary Site Investigation

Project Location: 43-49 Warriewood Road, Warriewood NSW

Figure Number: 3

Figure Date: 6 July 2023

Report Number: 2148-PSI-01-060723.v1f



APPENDIX A

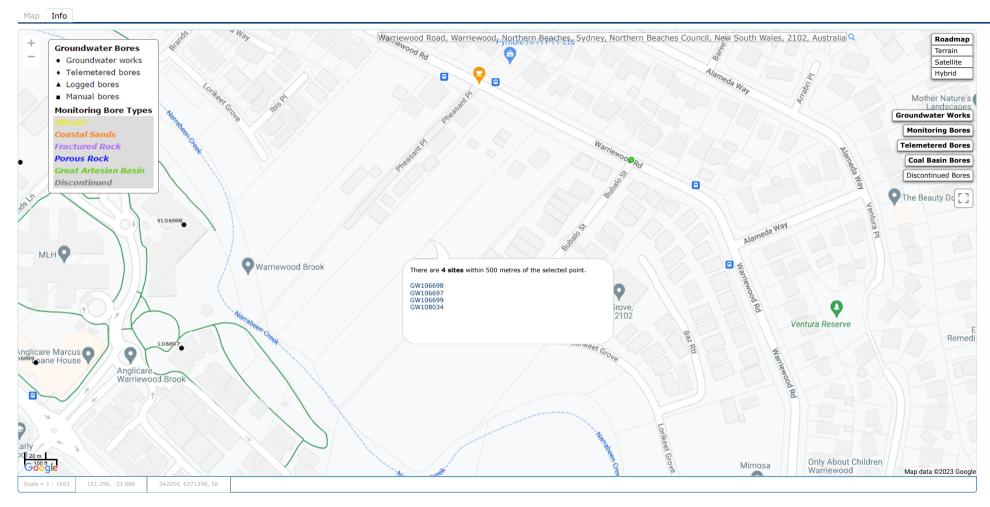
GROUNDWATER SEARCH

All Groundwater Site Details

ALL GROUNDWATER MAP

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All data times are Eastern Standard Time



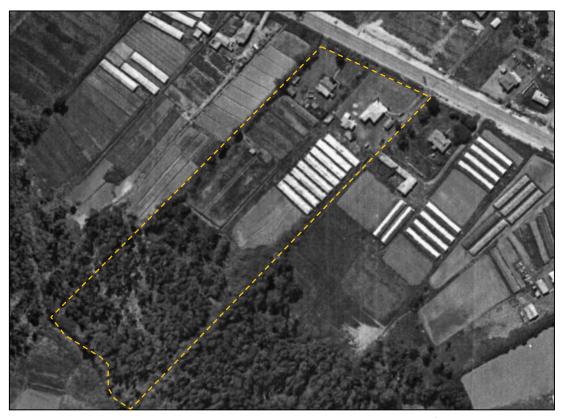


APPENDIX B

HISTORICAL AERIAL IMAGERY



Historical Aerial Photograph 1. 1955 historical aerial image of site.



Historical Aerial Photograph 2. 1965 historical aerial image of site.



Historical Aerial Photograph 3. 1975 historical aerial image of the site.



Historical Aerial Photograph 4. 1986 historical aerial image of the site.



Historical Aerial Photograph 5. 1998 historical aerial image of the site.



Historical Aerial Photograph 6. 2010 historical aerial image of the site.



Historical Aerial Photograph 7. 2023 Historical aerial image of the site.



APPENDIX C

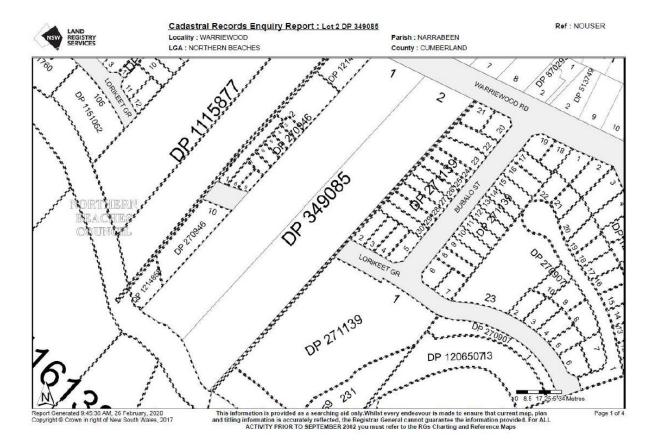
NSW EPA



APPENDIX D

LAND TITLES







NSW REGISTRY	Locality: WARRIEWOOD		Parish: NARRABEEN
SERVICES	LGA: NORTHERN BEACHES		County : CUMBERLAND
	Status	Surv/Comp	Purpose
P5464			
ot(s): 25 Section : C			
P1245613	PRE-EXAM	SURVEY	REDEFINITION
ot(s): 20 Section : C			
☐ DP1168850	PRE-EXAM	SURVEY	CONSOLIDATION
■ DP1248056	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
P270730			
ot(s): 1, 3, 9, 10, 11, 12			
A DF345528	HISTORICAL	SURVEY	UNRESEARCHED
DP1115877	HISTORICAL	SURVEY	SUBDIVISION
DP1151002	HISTORICAL	SURVEY	SUBDIVISION
	HISTORICAL	SURVEY	SUBUNISION
P270907		40.00.04.00.00	
	9, 10, 11, 12, 13, 14, 15, 16, 17, 19		UNRESEARCHED
☐ DP5464	HISTORICAL	SURVEY	
U DP1206607	HISTORICAL	SURVEY	SUBDIVISION
P270946			
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E DP579389	HISTORICAL	COMPILATION	SUBDIVISION
DP1115877	HISTORICAL	SURVEY	SUBDIVISION
E DP1214859	HISTORICAL	SURVEY	SUBDIVISION
P271139			
ot(s): 1, 2, 3, 4, 5, 8, 7, 8,	9, 10, 11, 12, 13, 14, 15, 16, 17, 18	3, 19, 20, 21, 22, 23, 24	. 25, 26, 27, 28, 29, 30
■ DF5404	HISTORICAL	SURVEY	UNRESEARCHED
■ DP1239959	HISTORICAL	SURVEY	SUBDIVISION
PP42319	1.101.01.101.10		124-14-14-14-14
ot(s): 3			
DP271262	PRE-ALLOCATED	UNAVAILABLE	COMMUNITY PLAN
DF1234045	WITHDRAWN	UNAVAILABLE	CONSOLIDATION
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P072200			
ot(s): 2 DP271252	PRE-ALLOCATED	UNAVAILABLE	COMMUNITY PLAN
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P1071760			
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■ DP345528	HISTORICAL	SURVEY	UNRESEARCHEO
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P1234046	WITHDRAWN	UNAVAILABLE	CONSOLIDATION
DF1234191	WITHDRAWN	UNAVAILABLE	SUBDIVISION
ot(s): 3			
■ DP270946	REGISTERED	SURVEY	COMMUNITY PLAN
E DF271252	PRE-ALLOCATED	UNAVAILABLE	COMMUNITY PLAN
☐ DP578309	HISTORICAL	COMPILATION	SUBDIVISION
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ot(s): 2	HISTORICAL	COMPILATION	SUBDIVISION
☐ DP209140	HIS LURICAL	COMPLATION	SUBDIVISION
P1151002			
ot(s): 100	HISTORICAL	SURVEY	UNRESEARCHED
E DP345528	50000 G00000 G0000		
☐ DP1115877	HISTORICAL	SURVEY	SUBDIVISION
P1161389			
ot(s): 4, 5, 8	533222.50		100.000.000.000
■ DP40D488	HISTORICAL	SURVEY	UNRESEARCHED
ot(s): 2, 0			
■ DP358765	HISTORICAL	COMPILATION	UNRESEARCHED
			O 49, 51 TO 55, 57, 58, 85, 88, 70 TO 72, 79 TO

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DP1238959 Lot(s): 231

DP5464

HISTORICAL

Cadastral Records Enquiry Report: Lot 2 DP 349085 Ref: NOUSER LAND REGISTRY SERVICES Locality: WARRIEWOOD LGA: NORTHERN BEACHES County: CUMBERLAND Status Surv/Comp Purpose Lot(s): 6 DP345528 HISTORICAL SURVEY UNRESEARCHED WARRIEWOOD BROCK RETIREMENT VILLAGE UNITS 1 TO 22, 00 TO 09, 72 TO 79 AND CARSPACES 1B TO 42B SHOWN IN PLAN WITH MEMORANDUM AGES 1515 Lot(s): 3, 6 DP5464 HISTORICAL SURVEY UNRESEARCHED DP209140 DP579309 HISTORICAL COMPILATION SUBDIVISION COMPILATION HISTORICAL SUBDIVISION DP1115977 HISTORICAL SURVEY SUBDIVISION Lot(s): 2, 3, 6 WARRIEWOOD BROCK RETIREMENT VILLAGE UNITS 49 TO 51, 55 TO 57, 61 TO 63 AND 85 TO 88 SHOWN IN PLAN WITH MEMORANDUM AG651515 Lot(s): 3, 4, 5 WARRIEWOOD BROOK RETIREMENT VILLAGE MACPHERSON STREET UNITS 90 TO 94, 97 TO 99 AND 134 TO 148 SHOWN IN PLAN WITH MEMORANDUM AK412799 DP1206507 Lot(s): 1, 2, 3, 4, 5, 6, 7, 13 DP5464 HISTORICAL SURVEY UNRESEARCHED DP1214950 Lot(s): 1, 2 DP579309 HISTORICAL COMPILATION SUBDIVISION DP1115877 HISTORICAL SURVEY SUBDIVISION

SURVEY

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Ref: NOUSER





Cadastral Records Enquiry Report : Lot 2 DP 349085

Locality: WARRIEWOOD Parish: NARRABEEN
LGA: NORTHERN BEACHES County: CUMBERLAND

Plan	Surv/Comp	Purpose	
DP5464	SURVEY	UNRESEARCHED	
DP228171	SURVEY	SUBDIVISION	
DP270730	UNRESEARCHED	COMMUNITY PLAN	
DP270730	SURVEY	COMMUNITY PLAN	
DP270730	SURVEY	COMMUNITY PLAN	
DP270907	UNRESEARCHED	COMMUNITY PLAN	
DP270907	SURVEY	COMMUNITY PLAN	
DP270907	SURVEY	COMMUNITY PLAN	
DP270946	SURVEY	COMMUNITY PLAN	
DP270946	UNRESEARCHED	COMMUNITY PLAN	
DP271130	SURVEY	COMMUNITY PLAN	
DP271139	UNRESEARCHED	COMMUNITY PLAN	
DP271139	SURVEY	COMMUNITY PLAN	
DP349085	COMPILATION	UNRESEARCHED	
DP513749	COMPILATION	SUBDIVISION	
DF870293	SURVEY	SUBDIVISION	
DP942319	SURVEY	UNRESEARCHED	
DP072200	COMPILATION	UNRESEARCHED	
DP1071760	SURVEY	SUBDIVISION	
DP1071760	SURVEY	SUBDIVISION	
DP1115877	SURVEY	SUBDIVISION	
DP1151062	UNRESEARCHED	SUBDIVISION	
DP1151062	SURVEY	SUBDIVISION	
DP1151062	SURVEY	SUBDIVISION	
DP1161389	UNRESEARCHED	SUBDIVISION	
DP1161389	SURVEY	SUBDIVISION	
DP1206507	SURVEY	SUBDIVISION	
DP1206507	SURVEY	SUBDIVISION	
DP1206507	UNRESEARCHED	SUBDIVISION	
DP1214859	SURVEY	SUBDIVISION	
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DP1214859	SURVEY	SUBDIVISION	
DP1238959	SURVEY	SUBDIVISION	
DP1238060	SURVEY	SUBDIVISION	
DP1238959	UNRESEARCHED	SUBDIVISION	

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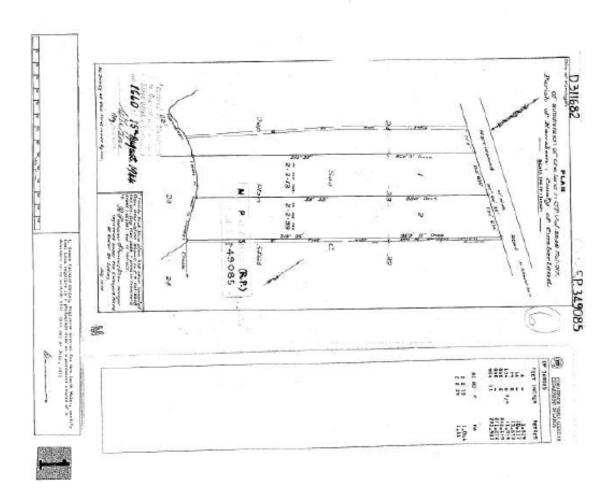


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(G)		Encumbrances (if applicable):	
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FOLIO: 1/349085

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 5451 FOL 37

Recorded 18/12/1988	Number	Type of Instrument TITLE AUTOMATION PROJECT	C.T. Issue LOT RECORDED FOLIO NOT CREATED
13/7/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
30/9/1994		AMENDMENT: LOCAL GOVT AREA	
29/7/2002	8815535	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 1
17/2/2016	AK227392	NOTICE OF DEATH	EDITION 2
23/9/2016	AK775371	CAVEAT	
24/4/2017 24/4/2017	AM320962 AM320963	TRANSPER MORTGAGE	EDITION 3
8/6/2017	AN463947	CAVEAT	
16/6/2017	AN479404	CAVEAT	
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7/8/2017	AM620386	CAVEAT	
30/8/2017	AM688489	CAVEAT	
5/9/2017 5/9/2017	AN701714 AN703059	CAVEAT	
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SEARCH DATE

26/2/2020 10:42AM

FOLIO: 1/3	49085		PAGE 2
Recorded	Number	Type of Instrument	C.T. Issue
13/9/2017	AN715833 AN724280	MORTGAGE CAYEAT	EDITION 5
15/9/2017	AN732540	CAVEAT	
18/9/2017	AN736306	CAVEAT	
21/9/2017 21/9/2017	AN742696 AN746343	CAVEAT	
19/10/2017	AN818627	CAVEAT	
4/12/2017	AM936966	CAVXAT	
13/12/2017	AM966170	CAVEAT	
30/1/2018	AN79212	WITHDRAWAL OF CAVEAT	
9/2/2018	AN105597	PRIORITY NOTICE	
13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018	AN114071 AN114072 AN114073 AN114075 AN114075 AN114077 AN114080 AN114081 AN114082 AN114083 AN114084	WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT DISCHARGE OF MORTGAGE DISCHARGE OF MORTGAGE TRANSFER MORTGAGE	RDITION 6
11/10/2018	AN757832	DEPARTMENTAL DEALING	
27/9/2019	AP563986	CAVEAT	

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*** END OF SEARCE ***

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FOLIO: 2/349085A

Recorded 15/7/2005	Number AB624423	Type of Instrument DEPARTMENTAL DEALING	C.T. ISSUE FOLIO CREATED CT NOT ISSUED
18/7/2005	AB524691	DEPARTMENTAL DEALING	EDITION 1
19/7/2005	AB533296	DEPARTMENTAL DEALING	
23/9/2016	AK775371	CAVRAT	
24/4/2017 24/4/2017 24/4/2017	AM320962 AM320963 AM325492	TRANSFER MORTGAGE DEPARTMENTAL DEALING	EDITION 2
8/6/2017	AM463947	CAVEAT	
16/6/2017	AM479404	CAVEAT	
20/6/2017 20/6/2017 20/6/2017 20/6/2017	AM492846 AM492847 AM492848 AM492849	MITHDRAWAL OF CAYEAT WITHDRAWAL OF CAYEAT DISCHARGE OF MORTGAGE MORTGAGE	EDITION 3
3/7/2017	AM533678	CAVEAT	
7/8/2017	AM620386	CAVEAT	
30/8/2017	AM688489	CAVEAT	
5/9/2017	AM701714 AM703060	CAVEAT	
13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017	AM715826 AM715829 AM715830 AM715831 AM715833 AM724290	WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT MORTCAGE CAVEAT	EDITION 4
15/9/2017	AM732540	CAVEAT	
18/9/2017	AM736306	CAVEAT	
	15/7/2005 18/7/2005 19/7/2005 19/7/2005 23/9/2016 24/4/2017 24/4/2017 24/4/2017 8/6/2017 20/6/2017 20/6/2017 20/6/2017 3/7/2017 7/8/2017 3/8/2017 5/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017	15/7/2005 AB624423 18/7/2005 AB624691 19/7/2005 AB633296 23/9/2016 AK775371 24/4/2017 AM320962 24/4/2017 AM320963 24/4/2017 AM325492 8/6/2017 AM463947 16/6/2017 AM479404 20/6/2017 AM492846 20/6/2017 AM492848 3/7/2017 AM492848 3/7/2017 AM620386 3/8/2017 AM688489 5/9/2017 AM701714 5/9/2017 AM701714 5/9/2017 AM701714 5/9/2017 AM701714 5/9/2017 AM715826 13/9/2017 AM715820 13/9/2017 AM715830 13/9/2017 AM715831 13/9/2017 AM715831	15/7/2005 AB624423 DEPARTMENTAL DEALING 18/7/2005 AB633296 DEPARTMENTAL DEALING 19/7/2005 AB633296 DEPARTMENTAL DEALING 23/9/2016 AK775371 CAVEAT 24/4/2017 AM320962 TRANSFER AM472017 AM320963 MORTGAGE 24/4/2017 AM325492 DEPARTMENTAL DEALING 8/6/2017 AM463947 CAVEAT 16/6/2017 AM463947 CAVEAT 20/6/2017 AM492846 MITHDRAWAL OF CAVEAT 20/6/2017 AM492848 DISCEARGE OF MORTGAGE 3/7/2017 AM492848 NORTGAGE 3/7/2017 AM492849 NORTGAGE 3/7/2017 AM620386 CAVEAT 1/8/2017 AM620386 CAVEAT 5/9/2017 AM703080 CAVEAT 13/9/2017 AM715826 WITHDRAWAL OF CAVEAT 13/9/2017 AM715829 WITHDRAWAL OF CAVEAT 13/9/2017 AM715839 MORTGAGE 13/9/2017 AM724200 CAVEAT 13/9/2017 AM724200 CAVEAT

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SEARCH DATE 25/2/2020 10:16AM

FOLIO: 2/3	49085A		PAGE 2
Recorded 21/9/2017 21/9/2017	Number AM742696 AM746345	Type of Instrument CAVEAT CAVEAT	C.T. Issue
19/10/2017	AM818627	CAVEAT	
4/12/2017	AM936966	CAVEAT	
13/12/2017	AM966170	CAVEAT	
30/1/2018	AN79212	WITHDRAWAL OF CAVEAT	
8/2/2018	AN105597	PRIORITY NOTICE	
13/2/2018 13/2/2018 13/2/2018	AN114071 AN114072 AN114073 AN114074 AN114076 AN114077 AN114077 AN114081 AN114082 AN114083 AN114084	WITHDRAWAL OF CAVEAT DISCHARGE OF MORTGAGE DISCHARGE OF MORTGAGE TRANSFER MORTGAGE	EDITION 5 CORD ISSUED
11/10/2018	AN757832	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

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3EARCH DATE 26/2/2020 5:12PM

FOLIO: 2/349085B

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Redorded 15/7/2005	Number AB624423	Type of Instrument DEPARTMENTAL DEALING	C.T. Issue FOLIO CREATED CT NOT ISSUED
18/7/2005	AB624691	DEPARTMENTAL DEALING	EDITION 1
19/7/2005	AB633296	DEPARTMENTAL DEALING	
21/7/2016	AK612449	TRANSMISSION APPLICATION (DEVISEE, BENEFICIARY, NEXT OF	
21/7/2016	AK613284	KIN) DEPARTMENTAL DEALING	EDITION 2
23/9/2016	AK775371	CAVEAT	
24/4/2017 24/4/2017	AM320962 AM320963	TRANSFER MORTGAGE	EDITION 3
8/6/2017	ли463947	CAVEAT	
16/6/2017	AM479404	CAVEAT	
20/6/2017 20/6/2017 20/6/2017 20/6/2017	AM492846 AM492847 AM492848 AM492849	MITHERANAL OF CAVEAT MITHERANAL OF CAVEAT DISCHARGE OF MORTGAGE NORTGAGE	EDITION 4
3/7/2017	AM533678	CAVEAT	
7/8/2017	AM620386	CAVEAT	
30/8/2017	AM688489	CAVEAT	
5/9/2017 5/9/2017	АМ701714 АМ703061	CAVEAT	
13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017 13/9/2017	AM715826 AM715828 AM715830 AM715831 AM715833 AM724280	WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT WORTGAGE CAVEAT	EDITION 5

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SEARCH DATE 26/2/2020 5:12PM

FOLIO: 2/3	49085B		PAGE	*
Recorded 15/9/2017	Number AM732540	Type of Instrument CAVEAT	C.T. Issue	
18/9/2017	AM736306	CAVEAT		
21/9/2017 21/9/2017	AM742696 AM746344	CAVEAT		
19/10/2017	AM818627	CAVEAT		
4/12/2017	AM936966	CAVEAT		
13/12/2017	AM966170	CAVEAT		
30/1/2018	AN79212	WITHDRAWAL OF CAVEAT		
8/2/2018	AN105597	PRIORITY NOTICE		
13/2/2018 13/2/2019 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018 13/2/2018	ANII 4071 ANII 4072 ANII 4073 ANII 4074 ANII 4075 ANII 4076 ANII 4077 ANII 4078 ANII 4081 ANII 4082 ANII 4083 ANII 4084	WITHDRAWAL OF CAVEAT WITHDRAWAL OF CAVEAT DISCHARGE OF MORTGAGE DISCHARGE OF MORTGAGE TRANSFER MORTGAGE	EDITION 6	
11/10/2018	AN757832	DEPARTMENTAL DEALING		

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FOLIO: 1/349085

SEARCH DATE EDITION NO 26/2/2020 10:13 AM 6 13/2/2018

NO CERTIFICATE OF TITLE HAS ISSUED FOR THE CURRENT EDITION OF THIS FOLIO. CONTROL OF THE RIGHT TO DEAL IS HELD BY NATIONAL AUSTRALIA EANK LIMITED.

LOT 1 IN DEPOSITED PLAN 349085
LOCAL GOVERNMENT AREA NORTHERN BEACHES
PARISH OF NARRABEEN COUNTY OF CUMBERLAND
TITLE DIAGRAM DP349085

FIRST SCHEDULE

WARRIEWOOD DEVELOPERS PTY LTD

(T ANI14083)

SECOND SCHEDULE (3 NOTIFICATIONS)

RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
AN114084 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED
AP563986 CAVEAT BY CHIEF COMMISSIONER OF STATE REVENUE

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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FOLIO: 2/349085A

SEARCH DATE TIME EDITION NO DATE 5 26/2/2020 10:12 AM 13/2/2018

NO CERTIFICATE OF TITLE HAS ISSUED FOR THE CURRENT EDITION OF THIS FOLIO, CONTROL OF THE RIGHT TO DEAL IS HELD BY NATIONAL AUSTRALIA BANK LIMITED.

SUB FOLIO

1/2 SHARE IN LOT 2 IN DEPOSITED PLAN 349085 AT WARRIEWOOD LOCAL GOVERNMENT AREA NORTHERN BEACHES

PARISH OF NARRABERN COUNTY OF CUMBERLAND TITLE DIAGRAM DP349085

FIRST SCHEDULE

WARRIEWOOD DEVELOPERS PTY LTD

(T AN114083)

SECOND SCHEDULE (2 NOTIFICATIONS)

RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(5) AN114084 MORIGAGE TO NATIONAL AUSTRALIA BANK LIMITED

NOTATIONS

NOTE: DP581495 EASEMENT FOR SEWERAGE PURPOSES 5 METRES WIDE AFFECTING THE PART SHOWN AS " PROPOSED EASEMENT FOR SEWER 5 WIDE " IN DP581495

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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FOLIO: 2/3490858

SEARCH DATE

TIME 10:13 AM EDITION NO

DATE 13/2/2018

NO CERTIFICATE OF TITLE HAS ISSUED FOR THE CURRENT EDITION OF THIS FOLIO. CONTROL OF THE RIGHT TO DEAL IS HELD BY NATIONAL AUSTRALIA BANK LIMITED.

SUB FOLIO

LAND

1/2 SHARE IN LOT 2 IN DEPOSITED PLAN 349085 AT MARKIEWOOD LOCAL GOVERNMENT AREA NORTHERN BEACHES PARISH OF NARRABERN COUNTY OF CUMBERLAND TITLE DIAGRAM DP349085

FIRST SCHEDULE

MARRIEWOOD DEVELOPERS PTY LTD

(7 AN114083)

SECOND SCHEDULE (2 NOTIFICATIONS)

RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) AN114084 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED

NOTE: DF581495 EASEMENT FOR SEWERAGE PURPOSES 5 METRES NIDE AFFECTING THE PART SHOWN AS " PROPOSED EASEMENT FOR SEMER 5 WIDE " IN DF581495

UNREGISTERED DEALINGS: NIL

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