Alliance Geotechnical

Engineering | Environmental | Testing

Stage 1 Preliminary Site Investigation
Lot 33 & 34 in DP3285, Lot B in DP403780 and Lot 3 in DP26343

47 Warrane Road, Roseville Chase

Prepared for: Ku-ring-gai Council

Report Number: 6838-ER-1-1
Report Date: 21 March 2018

We give you the right information to make the right decisions

Alliance Geotechnical Pty Ltd
10 Welder Road, Seven Hills, NSW
Phone: 1800 288 188 – Email: enviro@allgeo.com.au - Web: www.allgeo.com.au

NOTICE: The information in this report is privileged and confidential, intended only for the use of the person nominated. This publication may not, therefore, be lent, copied, photocopied, reproduced, translated or reduced to any electronic medium or machine readable form without the express written permission of the publisher.

TABLE OF CONTENTS

EXECUTIVE SUMMARY 5
1. INTRODUCTION 7
1.1. Background 7
1.2. Objectives 7
1.3. Scope of Work 7
2. SITE IDENTIFICATION 8
3. SITE HISTORY AND LAND USE 9
3.1. Land Titles 9
3.2. Aerial Imagery 9
3.3. Anecdotal Information 10
3.4. Incident Reports 10
3.5. Complaints History 10
3.6. Previous Contamination Assessments 10
4. REGULATORY RECORDS 11
4.1. NSW EPA CLM Act Record of Notices 11
4.2. NSW EPA POEO Act Register of Licences, Applications and Notices 11
4.3. NSW EPA CLM Act Register of Notified Sites 11
4.4. Section 149 Planning Certificate 11
4.5. SafeWork NSW Stored Chemical Information Database (SCID) 11
5. GEOLOGY, ACID SULFATE SOILS, TOPOGRAPHY AND HYDROGEOLOGY 12
5.1. Geology 12
5.2. Acid Sulfate Soils 12
5.3. Topography 12
5.4. Hydrogeology 12
6. SITE WALKOVER 13
6.1. Current Land Use Activity 13
6.2. Buildings and General Infrastructure 13
6.3. Boundary Fencing 19
6.4. Adjacent Land Use Activities 19
6.5. Odours and Staining 19
6.6. Chemical Storage 19
6.7. Underground and Aboveground Chemical Storage Tanks 20
6.8. Filling Material 20
6.9. Wastes 23
6.10. Asbestos Containing Materials 24
6.11. Phytotoxicity 25
6.12. Site Drainage 26
7. DATA INTEGRITY ASSESSMENT 27
8. AREAS OF ENVIRONMENTAL CONCERN AND CONTAMINANTS OF POTENTIAL CONCERN 28
9. CONCLUSIONS AND RECOMMENDATIONS 29
10. STATEMENT OF LIMITATIONS 30

11. REFERENCES..... 31

FIGURES

Figure 1 Site Location
Figure 2 Site Layout
Figure 3 Areas of Environmental Concern

APPENDICES

A Titles
B NSW EPA
C Planning Certificate
D Groundwater

DOCUMENT CONTROL

Revision	Date	Author	Checked
Draft 1	20 March 2018	Jake Walker / Craig Cowper	
Rev 0	21 March 2018	Jake Walker / Craig Cowper	Craig Cowper

This report remains the property of Alliance Geotechnical subject to payment of all fees due for the assessment. The report shall not be reproduced except in full and with prior written permission by Alliance Geotechnical Pty Ltd.

EXECUTIVE SUMMARY

Alliance Geotechnical Pty Ltd (AG) was engaged by Ku-ring-gai Council, to undertake a stage 1 preliminary site investigation (PSI) for 47 Warrane Road, Roseville Chase (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

AG has the following project appreciation:

- A preliminary site investigation is required to inform future land use planning decisions and development works.

The objectives of this investigation 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 site suitability (in the context of land contamination) for future land use scenarios;
- provide recommendations for further investigation, management and/or remediation (if warranted).

The scope of works undertaken to address the investigation objectives, included:

- a desktop review;
- a site walkover; and
- data assessment and reporting.

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 identified are presented in attached **Figure 3** and associated COPC are presented in the table below.

ID	Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
AEC01	Western bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC02	Central bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC03	Eastern bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC04	Grassed open space area, north eastern corner	Uncontrolled filling	Hydrocarbons, pesticides, polychlorinated biphenyl, metals and asbestos

ID	Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
AEC05	Greenkeepers shed / storage area	Historical chemical / fuel storage	Hydrocarbons, pesticides and metals
AEC06	Former residential dwelling	Uncontrolled demolition	Metals and asbestos
AEC07	Former shed	Uncontrolled demolition	Metals and asbestos
AEC08	Former market gardens	Application of pesticides	Pesticides
AEC09	Former market gardens	Application of pesticides	Pesticides

Based on AG's assessment of the desktop review information and fieldwork data, in the context of informing future land use planning decisions, AG makes the following conclusions:

- A number of areas of environmental concern (AEC) have been identified for the site;
- These AEC may present an unacceptable exposure risk (in the context of land contamination) for future land use settings; and
- The site could be made suitable (from a land contamination perspective) for future land use settings, subject to further assessment of the identified AEC, and management / remediation of potentially unacceptable contamination risks (if warranted).

Based on these conclusions, AG makes the following recommendations:

- A stage 2 detailed site investigation (DSI) should be undertaken for the site, addressing the identified AEC; and
- The stage 2 DSI should be undertaken by a suitably experienced environmental consultant.

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

1. INTRODUCTION

1.1. Background

Alliance Geotechnical Pty Ltd (AG) was engaged by Ku-ring-gai Council, to undertake a stage 1 preliminary site investigation (PSI) for 47 Warrane Road, Roseville Chase (refer **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

AG has the following project appreciation:

- A preliminary site investigation is required to inform future land use planning decisions and development works.

1.2. Objectives

The objectives of this investigation 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 site suitability (in the context of land contamination) for future land use scenarios;
- provide recommendations for further investigation, management and/or remediation (if warranted).

1.3. Scope of Work

The scope of works undertaken to address the investigation objectives, included:

- a desktop review;
- a site walkover; and
- data assessment and reporting.

2. SITE IDENTIFICATION

The site is identified as a portion of Lot 33 & 34 in DP3285, Lot B in DP403780 and Lot 3 in DP26343.

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**.

The site covers an area of approximately 1.0 hectare.

A copy of a detail and level survey for the site was not available.

3. SITE HISTORY AND LAND USE

3.1. Land Titles

A search of historical land title ownership was undertaken. The search results indicate that registered proprietors of the site since 1910, have been generally private individuals (including farmers) and Council.

There was one lease reported for the site in 2004 to East Roseville Bowling Club Limited, expiring in 2008 with two 5-year options.

There were three easements reported for the site for drainage, along the northern boundary of Lot 34 and the eastern boundaries of Lot 33 and Lot 34.

The results of the land title ownership search indicate a potential for land contaminating activities to have occurred on the site, specifically operation of a lawn bowls facility and associated land use activities. Further assessment of the lawn bowls uses of the land, in the context of other historical information identified during this investigation and site walkover observations, is considered warranted.

A copy of the land title search record is presented in **Appendix A**.

3.2. 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 3.2**.

Table 3.2: Aerial Imagery Observations

Image Date	Site Features	Surrounding Land Use Settings
1930	Residential dwelling in central western portion of site, shed in central eastern portion of site, and possible market garden plots in western and central portions of site.	Generally undeveloped, scattered rural residential properties.
1943	Only one market garden plot visible now, east of the residential dwelling.	Some low density residential development.
1955	Residential dwelling, shed and market garden plots no longer visible. Building in central northern portion present (similar to current clubhouse). Residential dwelling present towards south western corner (similar to current). Shed structure towards central southern boundary is present (similar to current). Bowling greens (western and central) are visible (similar to current). Eastern portion of site remains undeveloped (future bowling green),	Further low density residential development.
1965	Eastern bowling green is visible (similar to current).	Further low density residential development.

Image Date	Site Features	Surrounding Land Use Settings
1975	No significant change from previous image.	No significant change from previous image.
1986	The driveway and car parking areas in the northern portion of the site appear to be asphalt paved.	No significant change from previous image.
1994	No significant change from previous image.	No significant change from previous image.
2007	No significant change from previous image.	No significant change from previous image.
2018 (Nearmap)	No significant change from previous image.	No significant change from previous image.

The aerial imagery review indicated a potential for land contaminating activities to have been undertaken, specifically market garden activities between 1930 and 1955, localised uncontrolled demolition (between 1943 and 1955), uncontrolled filling for bowling green construction and levelling (between 1955 and 1965), and application of pesticides to bowling greens between 1955 and current. 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.

3.3. Anecdotal Information

There was no anecdotal information provided to AG as part of this project.

3.4. Incident Reports

There were no incident reports relevant to the site provided to AG during the investigation.

3.5. Complaints History

There was no complaints history provided to AG during the investigation.

3.6. Previous Contamination Assessments

There were no previous contamination assessment reports made available to AG during this investigation.

4. REGULATORY RECORDS

4.1. NSW EPA CLM Act Record of Notices

A search of the publicly available online NSW EPA CLM Act Record of Notices was completed on 5 March 2018. 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 B**.

4.2. 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 5 March 2018. 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*.

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

4.3. 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 5 March 2018. The results indicated that the site was not listed on the register, nor were any properties located on adjacent land.

4.4. Section 149 Planning Certificate

A copy of the planning certificate issued for the site under Section 149 of the Environmental Planning and Assessment Act was reviewed. The certificate indicated that, within the meaning of the Contaminated Land Management Act, the site was not:

- Significantly contaminated land;
- Subject to a management order;
- The subject of an approved voluntary management proposal;
- Subject to an ongoing maintenance order; or
- The subject of a site audit statement.

A copy of the planning certificate is presented in **Appendix C**.

4.5. SafeWork NSW Stored Chemical Information Database (SCID)

A search of Safe Work NSW stored chemical information database (SCID) was not undertaken for the site. A review of historical aerial imagery and historical land title ownership records for the site did not indicate a potential for licensable quantities of dangerous goods to have been historically stored on the site. AG considers that further assessment of storage of licensable quantities of dangerous goods on the site is not warranted.

5. GEOLOGY, ACID SULFATE SOILS, TOPOGRAPHY AND HYDROGEOLOGY

5.1. Geology

A review of the Sydney 1:100,000 Geological Series Sheet 9130 (Edition 1) 1983 indicated that the site is likely to be underlain by Middle Triassic, Wianamatta Group, Hawkesbury Sandstone, comprised of shale and laminite. The site is also in close proximity to a geological boundary to the immediate south, likely to be underlain with Middle Triassic, Wianamatta Group, Ashfield Shale, comprised of dark-grey to black claystone-siltstone and fine sandstone-siltstone laminite

5.2. Acid Sulfate Soils

A review of the New South Wales Department of Land and Water Conservation (NSW DLWC 1997, 2nd Ed) Acid Sulfate Risk Map series for Prospect – Parramatta River indicates that the site lies in an area mapped as 'No Known Occurrence' with respect to acid sulfate soils.

Further assessment of acid sulfate soils in the context of this investigation is considered by AG as not warranted.

5.3. Topography

The site topography was generally flat, with some north-eastern facing slopes.

A detail and level survey indicated that the site surface was located at an elevation of approximately 75m to 84m Australian Height Datum (AHD).

5.4. Hydrogeology

Surface water courses proximal to the site included Middle Harbour, approximately 570m to the east, and Moores Creek approximately 580m to the north-west.

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 east or north-east.

A review of the NSW Office of Water groundwater database (www.http://allwaterdata.water.nsw.gov.au/water) implemented on 5 March 2018 indicated there were four (4) registered groundwater features located within a 500m radius of the site:

- GW111008, authorised as 'Monitoring Bore', approximately 320m to the south-west;
- GW111007, authorised as 'Monitoring Bore', approximately 325m to the south-west;
- GW111006, authorised as 'Monitoring Bore', approximately 375m to the south-west; and
- GW065075, authorised as 'Recreation (Groundwater), Irrigation', approximately 500m to the west.

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

6. SITE WALKOVER

A site walkover was undertaken on 12 March 2018 by a suitably experienced AG environmental consultant (Mr Craig Cowper). 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 comprised of predominantly an unused lawn bowls facility, and a low density residential dwelling in the south western corner of the site.

6.2. Buildings and General Infrastructure

The following buildings and infrastructure was observed on the site:

- a two storey brick and tile clubhouse building in the central northern portion of the site;
- an asphalt driveway entering the north western corner of the site, towards an asphalt paved carparking area around the northern and eastern sides of the clubhouse building;
- three lawn bowls greens;
- a greenkeepers shed and storage area adjacent to the southern boundary of the site;
- a toilet block adjacent to the southern boundary of the site; and
- a single storey residential dwelling in the south western corner of the site.

Image 6.2.1 View of northern side of clubhouse building

Image 6.2.2 View of asphalt driveway facing east

Image 6.2.3 View of portion of car parking area, facing east

Image 6.2.4 View of western bowling green facing south east

Image 6.2.5 View of central bowling green facing north west

Image 6.2.6 View eastern bowling green facing east

Image 6.2.7 View of greenkeeper's shed, facing west

Image 6.2.8 View inside greenkeepers shed

Image 6.2.9 View of greenkeeper's storage area

Image 6.2.10 View of toilet block

Image 6.2.11 View of residential dwelling in south western corner of site, facing east

Image 6.2.12 Rear yard area of residential dwelling in south western portion of site, facing south west

6.3. Boundary Fencing

The site boundary was fenced.

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;
- West - low density residential; and
- South - low density residential.

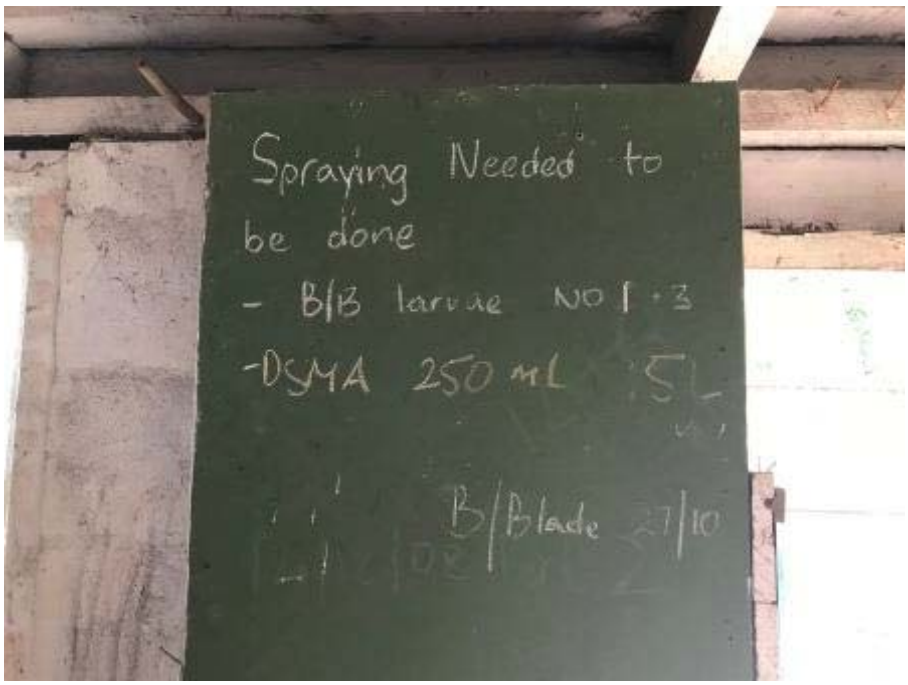
6.5. Odours and Staining

There was no olfactory evidence of odours or visual evidence of staining observed on the surface of the site, including inside the greenkeepers shed, during the site walkover.

6.6. Chemical Storage

There was no visual evidence observed of significant or widespread chemical storage on the site. There was evidence observed to suggest the application of chemical sprays to the bowling greens, including both herbicides and pesticides.

Image 6.6.1 View of sign inside greenkeepers shed



6.7. Underground and Aboveground Chemical Storage Tanks

There was no visual evidence observed of underground or aboveground storage tanks on the site. There was visual evidence of a rainwater tank observed adjacent to the eastern side of the clubhouse building.

6.8. Filling Material

There was visual evidence to suggest the presence of filling on the site, specifically in the following areas:

- The western bowling green, particularly the north eastern portion, nominally 2.5m deep;
- The central bowling green, particularly the northern portion, nominally 2m deep;
- The eastern bowling green, particularly the northern portion, nominally 4m deep and shallower along the eastern side; and
- The grassed area in the north eastern portion of the site.

There was visual evidence to suggest earthworks cutting of the site along the western side of the western bowling green, and the front yard area of the residential dwelling in the south western corner of the site. The extent of cutting on the site did not appear to be commensurate with the level of filling which appears to have been undertaken on the site, indicating that fill may have been imported to the site to achieve current levels.

Image 6.8.1 View of potential fill embankment along northern side of western bowling green

Image 6.8.2 View of potential fill embankment along northern side of central bowling green

Image 6.8.3 View of potential fill embankment along eastern side of central bowling green

Image 6.8.4 View of potential fill embankment on northern side of eastern bowling green

Image 6.8.5 View of potential fill area in north eastern corner of the site

Image 6.8.6 View of potential fill embankment along north eastern boundary of grassed area in north eastern corner of the site

6.9. Wastes

There was no visual evidence observed of wastes being stored inappropriately on the site.

6.10. Asbestos Containing Materials

There was visual evidence observed of potential asbestos containing materials on the surface of the site, specifically, fragments of fibrous cement sheeting on the surface adjacent to the eastern end of the northern boundary, and sheets of fibrous cement sheeting along a number of edges of the bowling greens.

Image 6.10.1 View of example of potential asbestos containing materials on surface of site adjacent to eastern end of northern site boundary

Image 6.10.2 View of example of potential asbestos containing materials on surface of site adjacent to eastern end of northern site boundary

Image 6.10.4 View of fibrous cement sheeting along edge of bowling green

A hazardous materials building survey was not within the scope of this project.

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 vegetation at the site. Similar observations were made of visible vegetation on land adjacent to the site.

6.12. 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:

- downpipes from roofs and gutters into subsurface drainage infrastructure;
- overland flow across hardstand paved areas; and
- infiltration into underlying soils, where soil permeability permits.

7. DATA INTEGRITY ASSESSMENT

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

- AG field observations during the site walkover
- Local Council
- Department of Land and Water Conservations
- Department of Minerals and Energy
- Australian Soil Resource Information System
- Google Earth
- National Environment Protection Council
- Nearmap
- NSW Environment Protection Authority
- NSW Land and Property Information
- NSW Office of Water

Based on AG'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. AREAS OF ENVIRONMENTAL CONCERN AND CONTAMINANTS OF POTENTIAL 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 identified are presented in attached **Figure 3** and associated COPC are presented in **Table 8.1**.

Table 8.1: AEC and COPC

ID	Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern
AEC01	Western bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC02	Central bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC03	Eastern bowling green	Uncontrolled filling, application of herbicides / pesticides, use of fibrous cement bowling green borders	Hydrocarbons, herbicides, pesticides, polychlorinated biphenyl, metals and asbestos
AEC04	Grassed open space area, north eastern corner	Uncontrolled filling	Hydrocarbons, pesticides, polychlorinated biphenyl, metals and asbestos
AEC05	Greenkeepers shed / storage area	Historical chemical / fuel storage	Hydrocarbons, pesticides and metals
AEC06	Former residential dwelling	Uncontrolled demolition	Metals and asbestos
AEC07	Former shed	Uncontrolled demolition	Metals and asbestos
AEC08	Former market gardens	Application of pesticides	Pesticides
AEC09	Former market gardens	Application of pesticides	Pesticides

9. CONCLUSIONS AND RECOMMENDATIONS

Based on AG's assessment of the desktop review information and fieldwork data, in the context of informing future land use planning decisions, AG makes the following conclusions:

- A number of areas of environmental concern (AEC) have been identified for the site;
- These AEC may present an unacceptable exposure risk (in the context of land contamination) for future land use settings; and
- The site could be made suitable (from a land contamination perspective) for future land use settings, subject to further assessment of the identified AEC, and management / remediation of potentially unacceptable contamination risks (if warranted).

Based on these conclusions, AG makes the following recommendations:

- A stage 2 detailed site investigation (DSI) should be undertaken for the site, addressing the identified AEC; and
- The stage 2 DSI should be undertaken by a suitably experienced environmental consultant.

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 Alliance Geotechnical Pty Ltd. Should information become available regarding conditions at the site including previously unknown sources of contamination, AG 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 AG's engagement. The report must not be used for any purpose other than the purpose specified at the time AG was engaged to prepare the report.

Logs, figures, and drawings are generated for this report based on individual AG 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, AG reserves the right to review and amend this report.

11. REFERENCES

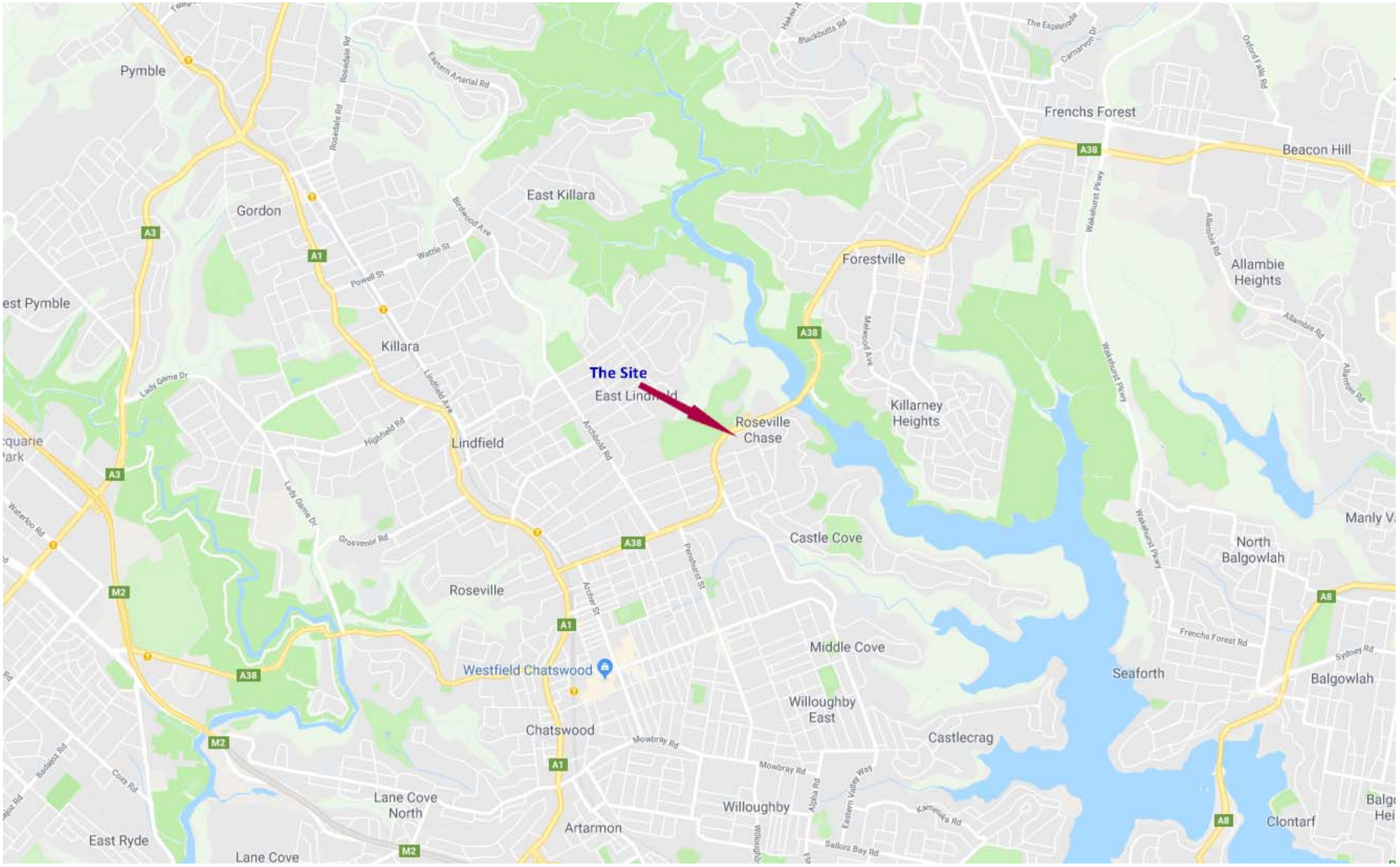
National Environment Protection Council (NEPC) 1999b, 'Schedule B(2) Guideline on Site Characterisation, National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as amended in May 2013'.

NSW DEC 2006, 'Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (2nd edition)'.

NSW OEH 2011, 'Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites'.

NSW Office of Water Groundwater Database (www. http://allwaterdata.water.nsw.gov.au/water)

FIGURES



Alliance Geotechnical Pty Ltd ENGINEERING | ENVIRONMENTAL | TESTING 10 Welder Road, Seven Hills, NSW T: 1800 288 188 E: enviro@allgeo.com.au	Project Address: Lot 33 & 34 in DP3285, Lot B in DP403780 and Lot 3 in DP26343 47 Warrane Road, Roseville Chase, NSW	Client: Ku-ring-gai Council	Project Name: Stage 1 Preliminary Site Investigation	Report No: 6838-ER-1-1 Figure Date: 5 March 2018	N	Figure No: 1	Figure Title: Site Locality Plan

Alliance Geotechnical Pty Ltd ENGINEERING | ENVIRONMENTAL | TESTING 10 Welder Road, Seven Hills, NSW T: 1800 288 188 E: enviro@allgeo.com.au	Project Address: Lot 33 & 34 in DP3285, Lot B in DP403780 and Lot 3 in DP26343 47 Warrane Road, Roseville Chase, NSW	Client: Ku-ring-gai Council	Project Name: Stage 1 Preliminary Site Investigation	Report No: 6838-ER-1-1 Figure Date: 05/03/2018	N	Figure No: 2	Figure Title: Site Layout Plan

Alliance Geotechnical Pty Ltd ENGINEERING | ENVIRONMENTAL | TESTING 10 Welder Road, Seven Hills, NSW T: 1800 288 188 E: enviro@allgeo.com.au	Project Address: Lot 33 & 34 in DP3285, Lot B in DP403780 and Lot 3 in DP26343 47 Warrane Road, Roseville Chase, NSW	Client: Ku-ring-gai Council	Project Name: Stage 1 Preliminary Site Investigation	Report No: 6838-ER-1-1 Figure Date: 05/03/2018	N	Figure No: 3	Figure Title: Areas of Environmental Concern

APPENDIX A

TITLES

ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

LRS NSW (Formerly LPI) **Sydney**

Address: - 47 Warrane Road, Roseville Chase

Description: - Lot B D.P. 403780, Lots 33 & 34 D.P. 3285 and Lot 3 D.P. 26343

As regards Lot B D.P. 403780

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
11.07.1910 (1910 to 1951)	Frederick Riles (Butcher) (or Frederick Samuel Riles)	Vol 2069 Fol 121
06.12.1951 (1951 to 1955)	Victor Harold Aubrey Lawson (Painter)	Vol 2069 Fol 121
08.09.1955 (1955 to 1956)	Nina Kathleen Lawson (Widow) (Transmission Application not investigated)	Vol 2069 Fol 121
01.05.1956 (1956 to 1956)	New Constructions Pty Limited	Vol 2069 Fol 121 Now Vol 7236 Fol 3
30.09.1956 (1956 to date)	# Council of the Municipality of Ku-Ring-Gai	Vol 7236 Fol 3 Now Auto Consol 7701-115

# Denotes Current Registered Proprietor

As regards Lots 33 and 34 D.P. 3285

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
12.05.1923 (1923 to 1932)	Arthur Victor Carden (Nurseryman)	Vol 3476 Fol 216
17.05.1932 (1932 to 1934)	Alfred Ernest Chapman (Civil Servant)	Vol 3476 Fol 216
16.07.1934 (1934 to 19350	Lily Forest Chapman (Widow) George Arthur Chapman (Retired) (Transmission Application not investigated)	Vol 3476 Fol 216
25.03.1935 (1935 to 1950)	Lily Forest Chapman (Widow) Now Lily Forest Arnott (Married Woman)	Vol 3476 Fol 216
06.09.1950 (1950 to date)	# Council of the Municipality of Ku-Ring-Gai	Vol 3476 Fol 216 Now Auto Consol 7701-115

ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As regards Lot 3 D.P. 26343

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
11.07.1910 (1910 to 1951)	Frederick Riles (Butcher) (or Frederick Samuel Riles)	Vol 2069 Fol 121
06.12.1951 (1951 to 1955)	Victor Harold Aubrey Lawson (Painter)	Vol 2069 Fol 121
08.09.1955 (1955 to 1955)	Nina Kathleen Lawson (Widow) (Transmission Application not investigated)	Vol 2069 Fol 121
02.11.1955 (1955 to date)	# Council of the Municipality of Ku-Ring-Gai	Vol 2069 Fol 121 Now Auto Consol 7701-115

# Denotes Current Registered Proprietor

Leases: -

- 03.05.2004 (AA 523820) to East Roseville Bowling Club Limited – expires 30.09.2008, also 2 x 5 year options

Easements: -

- 17.09.1931 (C 91537) Easements for Drainage (5 feet wide along the northern boundary of Lot 34 and the eastern boundaries of Lots 33 and 34) – released prior to 05.09.1956

Note: -

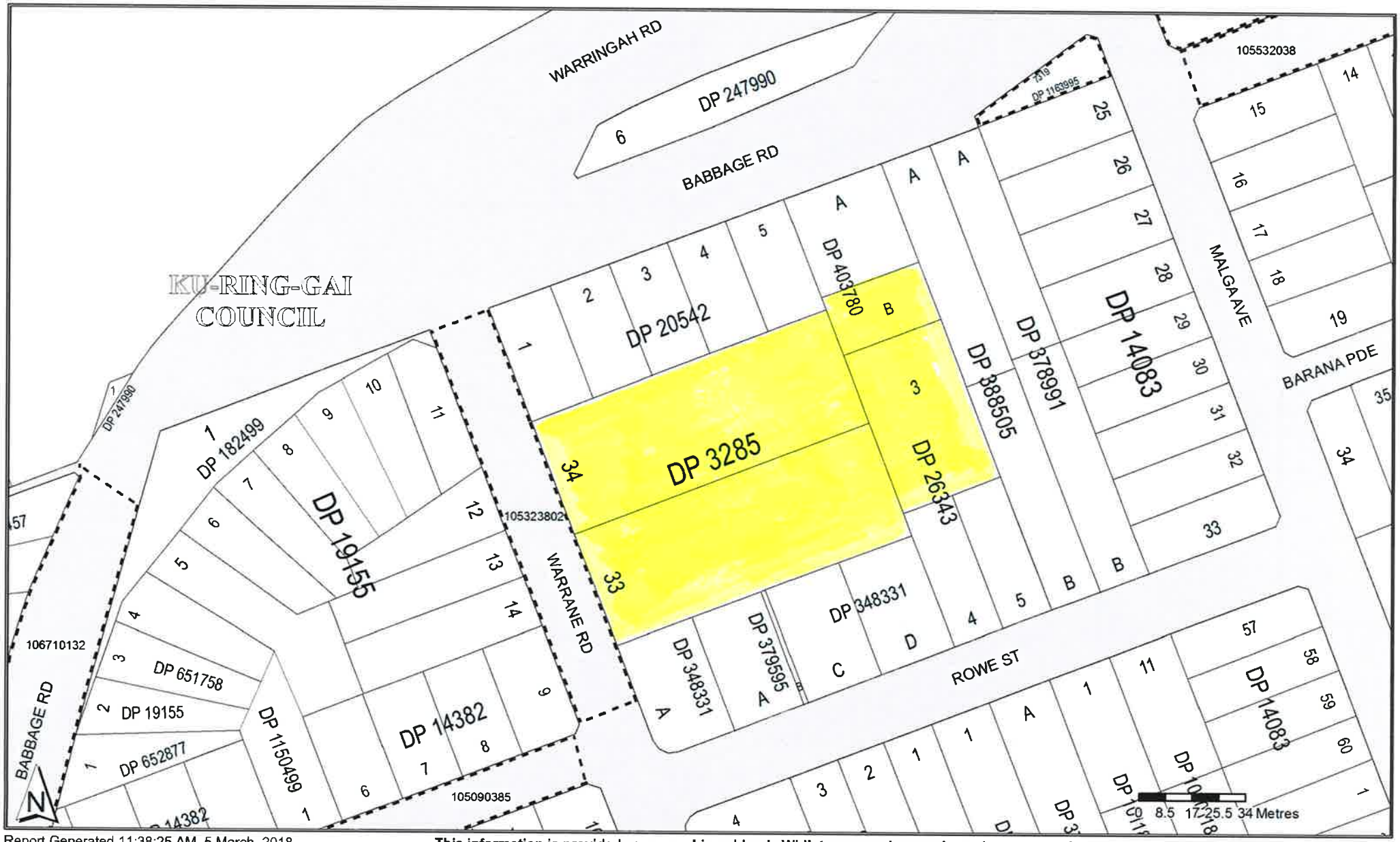
In pursuance of Trust Deeds dated 24th June 1953, 1st June 1955, 12th March 1956 and 18th February 1959 these lands are held by Council as Public Reserve

Yours Sincerely
Mark Groll
8 March 2018

LAND REGISTRY SERVICES

Cadastral Records Enquiry Report : Lot 34 DP 3285

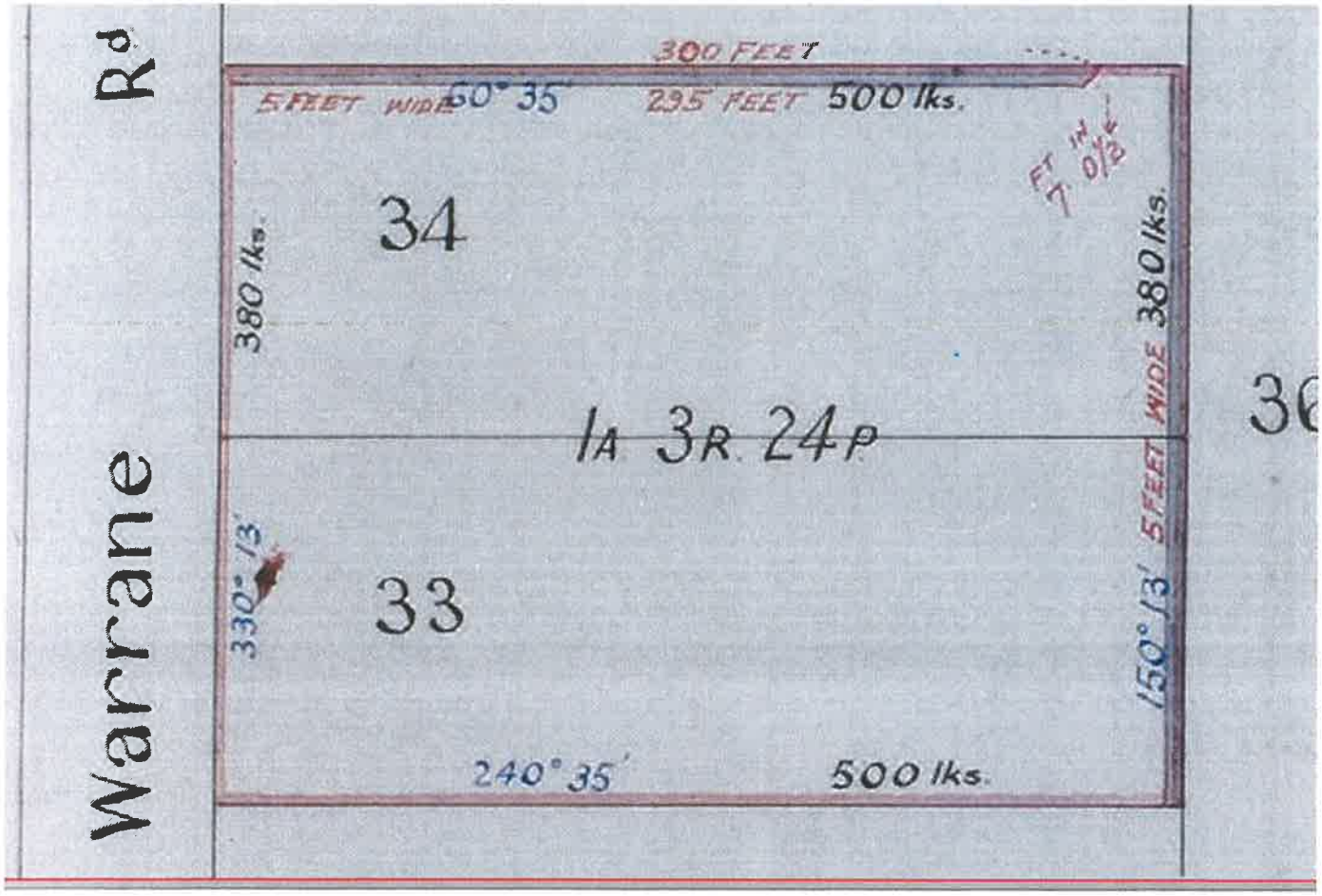
Locality : ROSEVILLE CHASE
LGA : KU-RING-GAI
Parish : GORDON
County : CUMBERLAND



Report Generated 11:38:25 AM, 5 March, 2018

Copyright © Crown in right of New South Wales, 2017

This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps


Rd
Warrane
300 FEET
5 FEET WIDE
60° 35'
295 FEET
500 lks.
34
380 lks.
1A 3R 24P
33
330° 13'
150° 13'
5 FEET WIDE
380 lks.
240° 35'
500 lks.

LAND REGISTRY SERVICES — Historical Title

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
5/3/2018 3:30PM

FOLIO: AUTO CONSOL 7701-115

Recorded	Number	Type of Instrument	C.T. Issue
19/10/1992		CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 7701-115	
		PARCELS IN CONSOL ARE: 33-34/3285, 3/26343, B/403780.	
3/5/2004	AA523820	LEASE	EDITION 1

*** END OF SEARCH ***

roseville PRINTED ON 5/3/2018

InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Copyright © Office of the Registrar-General 2018

Received: 05/03/2018 15:30:50

LAND REGISTRY SERVICES Title Search

InfoTrack

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: AUTO CONSOL 7701-115

SEARCH DATE	TIME	EDITION NO	DATE
5/3/2018	11:37 AM	1	3/5/2004

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
LOCAL GOVERNMENT AREA KU-RING-GAI
PARISH OF GORDON COUNTY OF CUMBERLAND
TITLE DIAGRAM SEE SCHEDULE OF PARCELS

FIRST SCHEDULE

THE COUNCIL OF THE MUNICIPALITY OF KU-RING-GAI

SECOND SCHEDULE (7 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 F899496 CAVEAT BY THE REGISTRAR GENERAL AS REGARDS LOTS 33 AND 34 IN DP3285
3 G399347 COVENANT AFFECTING LOT 3 IN DP26343
4 G414904 CAVEAT BY THE REGISTRAR GENERAL AS REGARDS PART OF THE LAND WITHIN DESCRIBED
5 G473547 CAVEAT BY THE REGISTRAR GENERAL AS REGARDS LOT 3 IN DP26343
6 H296316 CAVEAT BY THE REGISTRAR GENERAL AS REGARDS PART
7 AA523820 LEASE TO EAST ROSEVILLE BOWLING CLUB LIMITED EXPIRES: 30/9/2008. OPTION OF RENEWAL: 5 YEARS WITH A FURTHER PERIOD OF 5 YEARS.

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS	TITLE DIAGRAM
LOTS 33-34 IN DP3285	DP3285
LOT 3 IN DP26343	DP26343
LOT B IN DP403780	DP403780.

*** END OF SEARCH ***

roseville PRINTED ON 5/3/2018

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Copyright © Office of the Registrar-General 2018

Received: 05/03/2018 11:37:04

Req:R242934 /Doc:DL F899496 /Rev:19-Mar-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:1 of 2
Ref:roseville /Src:M

22.

F 899496

Fees—
Registration : :
Endorsements : :
£1 : :
24/7/53

New South Wales.

REGISTRAR GENERAL · NEW SOUTH WALES

CAVEAT BY THE REGISTRAR GENERAL FORBIDDING REGISTRATION OF DEALING WITH ESTATE OR INTEREST.

(REAL PROPERTY ACT, 1900.)

I, THE REGISTRAR GENERAL OF NEW SOUTH WALES, forbid the registration of any dealing affecting the land comprised in Certificate of Title dated 12th July 1923, Vol. 3476 Folio 216 in favour of The Council of the Municipality of Kurrung-gai not in accordance with the terms of a certain declaration of Trust dated 24th June 1953 19 , and filed in the Land Titles Office, Sydney, No. ~~F~~ 17984

DATED this 24th day of July 19 53

J. Wells
~~Deputy~~ Registrar General.

Signed in my presence this.....
day of.....19

30879 3.50 ALFRED HENRY PETTIFER, GOVERNMENT PRINTER.

Req:R242934 /Doc:DL F899496 /Rev:19-Mar-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:2 of 2
Ref:roseville /Src:M

F 899496

No: Caveat against

THE REGISTRAR GENERAL,

Caveator,

Caveatee.

Particulars entered in Register Book, Vol. 3476,

Folio 216,

the 7th day of August, 1953,

at 12 o'clock ~~in the~~ noon.

Deputy Registrar General.

Req:R242935 /Doc:DL G414904 /Rev:19-Mar-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:1 of 2
Ref:roseville /Src:M

22.

V G 414904

(3)

Fees—
Registration : :
Endorsements : :

£1 10
5/12/55

New South Wales.

REGISTRAR·GENERAL·NEW·SOUTH·WALES·

CAVEAT BY THE REGISTRAR GENERAL FORBIDDING REGISTRATION OF DEALING WITH ESTATE OR INTEREST.

(Real Property Act, 1900.)

I, The Registrar General of New South Wales, forbid the registration of any dealing affecting part of the land comprised in Certificate of Title dated 12th July 1923, Vol. 3476 Folio 216 in favour of The Council of the Municipality of Ku-ring-gai not in accordance with the terms of a certain declaration of Trust dated 1st June 1955, and filed in the Land Titles Office, Sydney, No. 18218

DATED this Fifth day of December 1955.

J. W. Reid

Deputy Registrar General.

Signed in my presence this.....
day of.....19

30870 3,50 Alfred Henry Pettifer, Government Printer.

Req:R242935 /Doc:DL G414904 /Rev:19-Mar-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:2 of 2
Ref:roseville /Src:M

G 414904

No. Caveat against

THE REGISTRAR GENERAL,

Caveator,

Caveatee.

Particulars entered in Register Book, Vol. 3476

Folio 216.

the 16th day of April 1956

at 12 o'clock ~~in the~~ noon.

Deputy Registrar General.

Req:R242936 /Doc:DL G473547 /Rev:03-Apr-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:1 of 2
Ref:roseville /Src:M

22

D

G 473547

Fees—
Registration
Endorsements

£1.10.-
22/3/56

New South Wales.

REGISTRAR GENERAL · NEW SOUTH WALES

CAVEAT BY THE REGISTRAR GENERAL FORBIDDING REGISTRATION OF DEALING WITH ESTATE OR INTEREST.

(Real Property Act, 1900.)

I, The Registrar General of New South Wales, forbid the registration of any dealing affecting lot 3 DP 263183 of the land comprised in Certificate of Title dated .....19 , Vol. 7174 Folio 110. in favour of the Council of the Municipality of Willoughby not in accordance with the terms of a certain declaration of Trust dated 14th March 1956 19 , and filed in the Land Titles Office, Sydney, No. 18215

DATED this 22nd 29th day of March 1956

J. Wells.

Deputy Registrar

REGISTRAR GENERAL · SOUTH WALES

Signed in my presence this 12th day of September 1956

B. Allison.

30879 3.50 Alfred Henry Pettifer, Government Printer.

Req:R242936 /Doc:DL G473547 /Rev:03-Apr-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:2 of 2
Ref:roseville /Src:M

G 473547

No. Caveat against

THE REGISTRAR GENERAL,

Caveator,

M.F.D.

Caveatee.

Particulars entered in Register Book, Vol. 7174

Folio 1101

the 12th day of September 1956

at 12 o'clock in the noon.

J. Pells

Deputy Registrar General.

Req:R242937 /Doc:DL H296316 /Rev:03-Apr-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:1 of 2
Ref:roseville /Src:M

H 296316

22.

Fees—
Registration :
Endorsements :
£ 1-10-0

New South Wales

REGISTRAR-GENERAL · NEW SOUTH WALES

CAVEAT BY THE REGISTRAR GENERAL FORBIDDING REGISTRATION OF DEALING WITH ESTATE OR INTEREST

(Real Property Act, 1900.)

I, The Registrar General of New South Wales, forbid the registration of any dealing affecting the land comprised in Certificate of Title dated 23 January 1957, Vol. 7236 Folio 38

in favour of The Council of the Municipality of Fu-ring-gai

not in accordance with the terms of a certain declaration of Trust dated 18th February 1959, and filed in the Land Titles Office, Sydney, No. 18717

DATED this 2nd day of September 1959.

Deputy Registrar General.

Signed in my presence this 24th day of September 1959.

Leo Zande

97563 12.51 A. H. PETTIFER, GOVERNMENT PRINTER.

as now being part of Vol. 7701 Fol. 115

Req:R242937 /Doc:DL H296316 /Rev:03-Apr-1997 /Sts:OK.OK /Pgs:ALL /Prt:07-Mar-2018 23:52 /Seq:2 of 2
Ref:roseville /Src:M

Dowling Taylor

H-296316

No. Caveat against

THE REGISTRAR GENERAL,

Caveator,

Caveatee.

M.P.D.

Particulars entered in Register Book, Vol. 7701

Folio 115

the 24th. day of September 1959

at 35 mts pt. 11 o'clock in the fore noon.

Deputy Registrar General.

6105 - RP1E

APPENDIX B

NSW EPA

Search results

Your search for:Suburb: ROSEVILLE CHASE

Search Again
Refine Search

did not find any records in our database.

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the planning process.

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... more search tips

More information about particular sites may be available from:

- The POEO public register
- The appropriate planning authority: for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act.

See What's in the record and What's not in the record.

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.
This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating contamination at the site through a licence under the Protection of the Environment Operations Act 1997. You may wish to search the POEO public register.POEO public register

5 March 2018

For

business and industry () ^

For local government () ^

Contact us

131 555 (tel:131555)

Online (http://www.epa.nsw.gov.au/about-us/contact-us/feedback/feedback-form)

info@epa.nsw.gov.au (mailto:info@epa.nsw.gov.au)

EPA Office Locations (http://www.epa.nsw.gov.au/about-us/contact-us/locations)

Accessibility (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index)
Disclaimer (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer)
Privacy (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy)
Copyright (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright)

Find us on (https://www.facebook.com/NSWEPA) (https://www.youtube.com/user/NSWEPA)

Search results

Your search for: **General Search** with the following criteria

Suburb - ROSEVILLE CHASE

returned 0 result

Search Again

For business and industry ()

For local government ()

Contact us

131 555 (tel:131555)

Online (http://www.epa.nsw.gov.au/about-us/contact-us/feedback/feedback-form)

info@epa.nsw.gov.au (mailto:info@epa.nsw.gov.au)

EPA Office Locations (http://www.epa.nsw.gov.au/about-us/contact-us/locations)

Accessibility (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index)
Disclaimer (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer)
Privacy (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy)
Copyright (http://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright)

Find us on (https://twitter.com/NSWEPA) (https://www.linkedin.com/company/nsw-epa) (https://www.youtube.com/user/NSWEPA)

APPENDIX C

PLANNING CERTIFICATE

PLANNING

CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

818 Pacific Highway, Gordon NSW 2072
Locked Bag 1006, Gordon NSW 2072
T 02 9424 0000 F 02 9424 0001
DX 8703 Gordon TTY 02 9424 0875
E kmc@kmc.nsw.gov.au
W www.kmc.nsw.gov.au
ABN 86 408 856 411

Ku·ring·gai Council

PROPERTY DETAILS

Address: **47 Warrane Road ROSEVILLE CHASE NSW 2069**

Lot Description: **Lot 33 DP 3285, Lot 34 DP 3285, Lot 3 DP 26343, Lot B DP 403780**

CERTIFICATE DETAILS

Certificate No: **ePC0708/18** **Certificate Date:** **05/03/2018**

Certificate Type: **Section 149(2)**

APPLICANT'S DETAILS

REF: 6838

Mr C Cowper
C/ Alliance Geotechnical, 10 Welder Road
SEVEN HILLS NSW 2147

BACKGROUND INFORMATION

This certificate provides information on how a property (such as land, a house, a commercial building, etc.) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans with data supplied by the State Government. The details contained in this certificate are limited to that required by Section 149 of the Environmental Planning and Assessment Act.

1. WHICH ENVIRONMENTAL PLAN RESTRICTS THE USE OF THIS PROPERTY?

(Including planning proposals and draft local environmental plans exhibited prior to 1 July 2009 pursuant to section 66(1) b of the E. P. & A. Act).

Ku-ring-gai Local Environmental Plan 2015 as published on the NSW Legislation Website on 5 March 2015.

---

2. WHAT IS THE ZONING OF THIS PROPERTY and the relevant environmental plan?

(Zoning is a way of classifying land and limits the range of uses or activities that may be permitted on that land or property).

RE1 Public Recreation

under the provisions of Ku-ring-gai Local Environmental Plan 2015 as published on the NSW Legislation Website on 5 March 2015.

---

3. WHAT DOES NOT REQUIRE DEVELOPMENT CONSENT under the above environmental plan(s)?

Environmental facilities; Environmental protection works; Roads.

Note: Please refer to the provisions for Exempt and Complying Development as described in Part 3 of Ku-ring-gai Local Environmental Plan 2015.

---

4. WHAT DOES REQUIRE DEVELOPMENT CONSENT under the above environmental plan(s)?

Animal boarding or training establishments; Bee keeping; Camping grounds; Car parks; Caravan parks; Centre-based child care facilities; Community facilities; Emergency services facilities; Flood mitigation works; Food and drink premises; Forestry; Information and education facilities; Kiosks; Markets; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Respite day care centres; Roadside stalls; Signage; Water recycling facilities; Water supply systems.

---

5. WHAT IS PROHIBITED under the above environmental plan(s)?

Any other development not specified in item 3 or 4.

---

6. DO THE DIMENSIONS OF THE LAND PERMIT THE ERECTION OF A DWELLING HOUSE ON THIS PROPERTY under the above environmental plan(s)?

Not applicable. Dwelling houses are not permitted within this zone.

7. WHAT IS THE PROPOSED ZONING OF THIS PROPERTY and the relevant proposed environmental plan?

(Zoning is a way of classifying land and limits the range of uses or activities that may be permitted on that land or property).

There are no zoning changes under any proposed environmental plans applying to this land.

8. WHAT DOES NOT REQUIRE DEVELOPMENT CONSENT under the above proposed environmental plan(s)?

Not applicable.

9. WHAT DOES REQUIRE DEVELOPMENT CONSENT under the above proposed environmental plan(s)?

Not applicable.

10. WHAT IS PROHIBITED by the above proposed environmental plan(s)?

Not applicable.

11. DO THE DIMENSIONS OF THE LAND PERMIT THE ERECTION OF A DWELLING HOUSE ON THIS PROPERTY by the above proposed environmental plan(s)?

Not applicable.

12. WHAT OTHER PLANNING INSTRUMENTS AFFECT THIS PROPERTY?

(State and deemed state environmental plans are prepared by the State Government and cover issues as varied as rivers, residential development, employment, etc. If you have any further enquiries please contact the Department of Planning, Tel: 02 9228 6333 or email information@planning.nsw.gov.au..

Draft State Environmental Planning Policy (Competition)

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
State Environmental Planning Policy No.19 - Bushland in Urban Areas.
State Environmental Planning Policy No.21 - Caravan Parks
State Environmental Planning Policy No.33 - Hazardous & Offensive Development.
State Environmental Planning Policy No.44 - Koala Habitat Protection.
State Environmental Planning Policy No.55 - Remediation of Land.
State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.
State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.
State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).
State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
State Environmental Planning Policy (State Significant Precincts) 2005.
State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.
State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.
State Environmental Planning Policy (Infrastructure) 2007.
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
State Environmental Planning Policy (Affordable Rental Housing) 2009.
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

---

13. WHICH DEVELOPMENT CONTROL PLANS APPLY TO THE PROPERTY?

(A development control plan adds further detail to local environmental plans and may address issues such as building height, car parking etc. Copies of the Plans are available from Council).

Ku-ring-gai Development Control Plan

---

14. WHICH DEVELOPMENT CONTRIBUTION PLANS APPLY IF THIS PROPERTY IS DEVELOPED?

(A Development Contribution Plan – commonly known as a Section 94 Plan outlines the financial costs Council charges if a property is developed and Council believes the development will require additional services or facilities such as parks, roads etc. Copies of the Plans are available from Council).

Ku-ring-gai Contributions Plan 2010.
Ku-ring-gai s94A Contributions Plan 2015.

---

15. IS THE PROPERTY IDENTIFIED AS A HERITAGE ITEM by Council or State Government? (and if so, what is the status, e.g. local environmental plan, Heritage Act etc.)

No.

***SPECIAL NOTE**: Your attention is drawn to Clause 5.10(5) of the Ku-ring-gai Local Environmental Plan 2015 which states that the consent authority may, before granting consent to any development: (a) on land on which a heritage item is located, or (b) on land that is within a heritage conservation area, or (c) on land that is within the vicinity of land referred to in paragraph (a) or (b), require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.*

---

16. IS THE PROPERTY IN A CONSERVATION AREA?

No.

SPECIAL NOTE*: A conservation area is a place of historic and aesthetic value to the community. It contains a number of elements of significance, such as a historic subdivision layout, a pattern of building "footprints" within each street block, buildings of historic and architectural importance, road alignments, trees, gutters and kerb edges which all combine to create a sense of place that is worth keeping. Council's Heritage Conservation Planner can provide you with more information on this matter.*

---

17. DOES THE PROPERTY INCLUDE OR COMPRISE CRITICAL HABITAT?

No.

---

18. IS THE PROPERTY AFFECTED BY A ROAD WIDENING OR ROAD REALIGNMENT under the Roads Act, any environmental planning instrument or any Council resolution?

No.

---

19. IS THE PROPERTY RESERVED FOR ACQUISITION BY A PUBLIC AUTHORITY UNDER ANY ENVIRONMENTAL PLAN OR PROPOSED ENVIRONMENTAL PLAN?

No.

---

20. IS THE PROPERTY PART OF ANY APPLICATION DECLARED TO BE "STATE SIGNIFICANT DEVELOPMENT"?

(Development is judged to be "State significant" if the Minister for Planning declares it to be so based on substantial cost of development, significant numbers of employees or other criteria. If you have any further enquiries please contact the Department of Planning, Tel: 02 9228 6333 or email information@planning.nsw.gov.au..

No.

---

21. IS THE PROPERTY AFFECTED BY SECTION 38 OR 39 OF THE *COASTAL PROTECTION ACT*?

No.

---

22. IS THE PROPERTY WITHIN A "PROCLAIMED MINE SUBSIDENCE DISTRICT"?

No.

---

23. IS THE PROPERTY AFFECTED BY ONE OF THE MATTERS PRESCRIBED BY SECTION 59(2) OF THE *CONTAMINATED LAND MANAGEMENT ACT 1997*?

No.

***SPECIAL NOTE**: If you have any concerns about land contamination beyond the information described in this certificate, you should contact the NSW Environmental Protection Authority. Tel:131 555 or email info@environment.nsw.gov.au.*

---

24. IS THE PROPERTY BUSH FIRE PRONE LAND?

No.

---

25. IS THE PROPERTY, LAND TO WHICH A PROPERTY VEGETATION PLAN UNDER PART 4 OF THE *NATIVE VEGETATION ACT 2003* APPLIES?

No.

---

26. IS THE PROPERTY, LAND SUBJECT TO AN ORDER UNDER THE *TREE (DISPUTES BETWEEN NEIGHBOURS) ACT 2006*?

The land is not known to be subject to such an order.

---

27. IS THE PROPERTY SUBJECT TO DIRECTIONS UNDER PART 3A MAJOR INFRASTRUCTURE AND OTHER PROJECTS of the *Environmental Planning & Assessment Act 1979* No.203?

No.

---

28. IS THE PROPERTY SUBJECT TO A CURRENT SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR SENIORS HOUSING under the provisions of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004?

No.

---

29. IS THE PROPERTY SUBJECT TO A VALID SITE COMPATIBILITY CERTIFICATE FOR INFRASTRUCTURE issued under clause 19 of State Environmental Planning Policy (Infrastructure) 2007?

No.

---

30. IS THE PROPERTY SUBJECT TO A VALID SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING issued under clause 37 of State Environmental Planning Policy (Affordable Rental Housing) 2009?

No.

---

31. IS THE PROPERTY SUBJECT TO AN EXEMPTION UNDER SECTION 23 OR AUTHORISATION UNDER SECTION 24 OF THE NATION BUILDING AND JOBS PLAN (*STATE INFRASTRUCTURE DELIVERY) ACT 2009*?

No.

---

32. IS THE PROPERTY, LAND THAT IS BIODIVERSITY CERTIFIED LAND UNDER PART 8 OF THE *BIODIVERSITY CONSERVATION ACT 2016*? (Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*).

No.

Special Note: For further information about the Biodiversity Certified Land contact the NSW Office of Environment & Heritage. Tel:131 555 or email info@environment.nsw.gov.au.

---

33. IS THE PROPERTY, LAND THAT IS A BIODIVERSITY STEWARDSHIP SITE UNDER A BIODIVERSITY STEWARDSHIP AGREEMENT UNDER PART 5 OF THE *BIODIVERSITY CONSERVATION ACT 2016*? (Biodiversity stewardship agreements include biobanking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardship agreements under Part 5 of the *Biodiversity Conservation Act 2016*).

No.

Special Note: For further information about the Biodiversity Stewardship Agreement contact the NSW Office of Environment & Heritage. Tel:131 555 or email info@environment.nsw.gov.au.

---

34. IS THE PROPERTY, LAND THAT CONTAINS A SET ASIDE AREA UNDER SECTION 60ZC OF THE *LOCAL LAND SERVICES ACT 2013*?

No.

---

35. DOES THE PROPERTY INCLUDE ANY RESIDENTIAL PREMISES (WITHIN THE MEANING OF DIVISION 1A OF PART 8 OF THE *HOME BUILDING ACT 1989*) THAT ARE LISTED ON THE REGISTER THAT IS REQUIRED TO BE MAINTAINED UNDER THAT DIVISION?

NSW Fair Trading has not provided Council with written confirmation that this property is listed on the Loose-Fill Asbestos Insulation Register.

Special Note: For further information about the Loos-fill asbestos Public Register contact NSW Fair Trading. Tel:13 32 20 or www.loosefillasbestos.nsw.gov.au.

---

36. MAY COMPLYING DEVELOPMENT BE CARRIED OUT UNDER EACH OF THE CODES FOR COMPLYING DEVELOPMENT IN *STATE ENVIRONMENTAL PLANNING POLICY (EXEMPT AND COMPLYING DEVELOPMENT CODES) 2008* ON THE LAND AND IF COMPLYING DEVELOPMENT MAY NOT BE CARRIED OUT ON THAT LAND, BECAUSE OF ONE OR MORE OF THE REQUIREMENTS UNDER CLAUSES 1.17A(1)(c) TO (e), (2), (3) AND (4), 1.18(1)(c3) AND 1.19 OF THAT POLICY, WHY IT MAY NOT BE CARRIED OUT ON THAT LAND?

Housing Code

Complying development under the Housing Code **may** be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code **may** be carried out on the land.

General Development Code

Complying development under the General Development Code **may** be carried out on the land.

Commercial and Industrial Alterations Code

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code **may** be carried out on the land.

Subdivision Code

Complying development under the Subdivision Code **may** be carried out on the land.

Demolition Code

Complying development under the Demolition Code **may** be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code **may** be carried out on the land.

Container Recycling Facilities Code

Complying development under the Container Recycling Facilities Code **may** be carried out on the land.

SPECIAL NOTE: *The above question relates to whether or not the land falls within an exclusion area under Clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. It is your responsibility to ensure that you comply with any other general requirements of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Failure to comply with these provisions may mean that a Complying Development Certificate issued under the provisions of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 is invalid.*

---

37. DO ANY ADOPTED COUNCIL POLICIES OR RESOLUTIONS OR ANY POLICIES ADOPTED BY A PUBLIC AUTHORITY AND NOTIFIED TO THE COUNCIL FOR THE EXPRESS PURPOSE OF ITS ADOPTION BY THAT AUTHORITY BEING REFERRED TO IN PLANNING CERTIFICATES ISSUED BY THE COUNCIL RESTRICT THE DEVELOPMENT OF THE PROPERTY DUE TO THE LIKELIHOOD OF LANDSLIP, BUSHFIRE, TIDAL INUNDATION, SUBSIDENCE, CONTAMINATION, ACID SULPHATE SOILS OR ANY OTHER RISK (OTHER THAN FLOODING)?

No.

Note: A review of Council's readily available records has been conducted to identify previous land uses that may have caused land contamination. This review did not reveal any reason for contamination of this property. However, prior to urban settlement, sizeable areas of Ku-ring-gai were covered by agricultural and horticultural activities. These uses are listed in the Managing Land Contamination Planning Guidelines as activities that may cause contamination. If you are concerned about possible contamination of the site you should make your own investigations regarding the condition of this property.

---

38. DO ANY ADOPTED COUNCIL POLICIES OR RESOLUTIONS OR ANY POLICIES ADOPTED BY A PUBLIC AUTHORITY REQUIRED TO BE REFERRED TO IN A PLANNING CERTIFICATE EFFECT THE DEVELOPMENT OF THE PROPERTY DUE TO FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION?

No.

---

39. OTHER INFORMATION RELATING TO DEVELOPMENT OF THE SITE.

This land may contain threatened species, populations and ecological communities listed under the *Biodiversity Conservation Act 2016 (NSW)* and or the *Environment Protection Biodiversity Conservation Act 1999* (Commonwealth). For more information contact NSW Office of Environment and Heritage Tel: 131 555 or the Australian Government Department of Environment and Energy Tel: 1800 803 772.

---

40. DO YOU NEED TO REFER TO ANY OTHER DOCUMENTS?

Yes. The Environmental Planning and Assessment Amendment Act 1997 No.152 commenced operation on 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998. Your solicitor will have a copy of this legislation or it may be obtained from the Government Information Office.

John McKee
General Manager

APPENDIX D

GROUNDWATER

Department of Primary Industries
Office of Water

All Groundwater
find a site
- All Groundwater Map
  - North Coast Region
  - Hunter Region
  - Greater Sydney Region
    - Hawkesbury River ...
    - **Georges River B...**
    - Wollongong Basin
  - South Coast Region
  - Northwest Region
  - Central West Region
  - Southwest Region
  - Far West Region
  - Great Artesian Basin
  - Coal Basins

bandwidth (•) high ( ) low

glossary and metadata

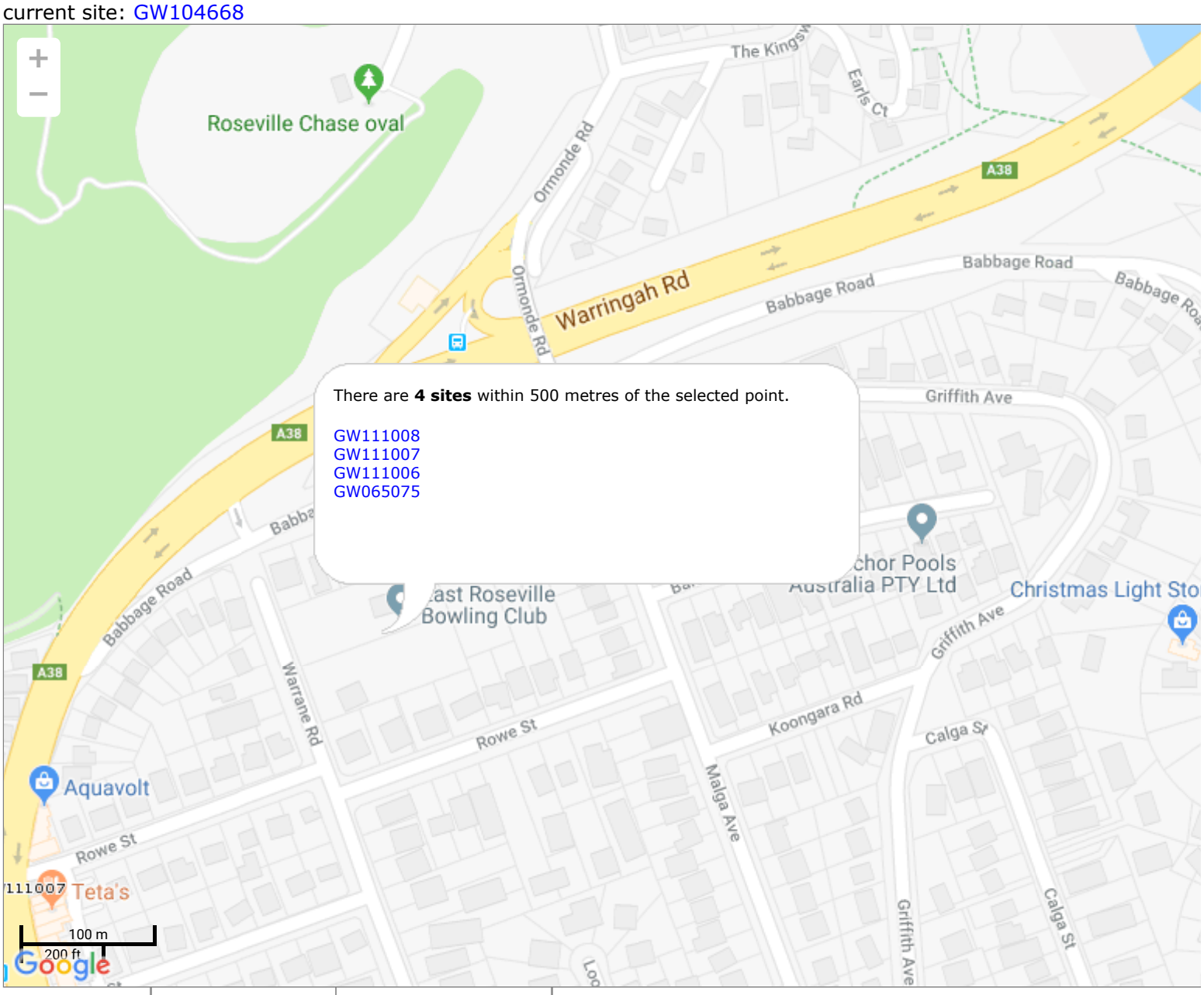
Georges River Basin

bookmark this page

All data times are Eastern Standard Time

Map

current site: GW104668



Scale = 1 : 3385

NSW Office of Water
Work Summary

GW111008

Licence: 10BL603947 **Licence Status:** ACTIVE

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger
Owner Type: Private

Commenced Date: **Final Depth:** 7.50 m
Completion Date: 19/04/2010 **Drilled Depth:** 7.50 m

Contractor Name:
Driller: Yoon Fook Chin
Assistant Driller:

Property: ANTELLA 20 - 22 BABBAGE ROAD ROSEVILLE 2069 NSW **Standing Water Level:** 3.800
GWMA: **Salinity:**
GW Zone: **Yield:**

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBE	CUMBE.21	1//1028524
Licensed:			

Region: 10 - Sydney South Coast **CMA Map:**
River Basin: - Unknown **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6260996.0 **Latitude:** 33°46'40.7"S
Elevation Source: Unknown **Easting:** 332847.0 **Longitude:** 151°11'41.1"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	7.50	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	4.50	50			Seated, Screwed
1	1	Opening	Slots - Horizontal	4.50	7.50	55		1	Slotted In Hole, PVC Class 18, SL: 3.0mm, A: 1.50mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
3.80	7.50	3.70	Unknown	3.80					

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	CONCRETE SLAB:0.15m	Fill	
0.20	1.80	1.60	FILL,AS ABOVE,TRACE OF IRONSTONE AND IGNEOUS GRAVEL	Fill	
1.80	4.20	2.40	SANDSTONE FINE TO MEDIUM GRAINED,RED WITH GREY CLAY BANDS.	Sandstone	
4.20	6.40	2.20	SANDSTONE,FINE TO MEDIUM GRAINED,LIGHT YELLOW	Sandstone	
6.40	7.50	1.10	SANDSTONE FINE TO MEDIUM GRAINED,DARK BROWN WITH CLAY BANDS.	Sandstone	

Remarks

***** End of GW111008 *****

Warning To Clients: This raw data has been supplied to the NSW Office of Water by drillers, licensees and other sources. The NOW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

NSW Office of Water
Work Summary

GW111007

Licence: 10BL603947 **Licence Status:** ACTIVE

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger
Owner Type: Private

Commenced Date: **Final Depth:** 7.50 m
Completion Date: 19/04/2010 **Drilled Depth:** 7.50 m

Contractor Name:
Driller: Yoon Fook Chin
Assistant Driller:

Property: ANTELLA 20 - 22 BABBAGE ROAD ROSEVILLE 2069 NSW **Standing Water Level:** 3.800
GWMA: **Salinity:**
GW Zone: **Yield:**

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBE	CUMBE.21	1//1028524
Licensed:			

Region: 10 - Sydney South Coast **CMA Map:**
River Basin: - Unknown **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6260984.0 **Latitude:** 33°46'41.1"S
Elevation Source: Unknown **Easting:** 332849.0 **Longitude:** 151°11'41.2"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	7.50	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	4.50	50			Screwed
1	1	Opening	Slots - Horizontal	4.50	7.50	55		1	Slotted In Hole, PVC Class 18, SL: 3.0mm, A: 1.50mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
3.80	7.50	3.70	Unknown	3.80					

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	CONCRETE SLAB:0.2m	Fill	
0.20	0.60	0.40	FILL,SILTY SAND,FINE TO MED.GRAINED,YELLOW	Fill	
0.60	0.70	0.10	CONCRETE SLAB:0.1m	Fill	
0.70	1.60	0.90	FILL,SILTY SAND,CLAY,IRONSTONE,GRAVEL	Fill	
1.60	3.00	1.40	SHALE,GREY WITH CLAY BANDS,GREY AND ORANGE	Shale	
3.00	4.40	1.40	SANDSTONE FINE TO MED. GRAINED,GREY AND ORANGE	Sandstone	
4.40	5.40	1.00	SANDSTONE WITH SHALE BANDS	Sandstone	
5.40	7.50	2.10	SANDSTONE FINE TO MEDIUM GRAINED.ORANGE WITH CLAY BANDS	Sandstone	

Remarks

***** End of GW111007 *****

Warning To Clients: This raw data has been supplied to the NSW Office of Water by drillers, licensees and other sources. The NOW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

NSW Office of Water
Work Summary

GW111006

Licence: 10BL603947 **Licence Status:** ACTIVE

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger
Owner Type: Private

Commenced Date: **Final Depth:** 7.50 m
Completion Date: 19/04/2010 **Drilled Depth:** 7.50 m

Contractor Name:
Driller: Yoon Fook Chin
Assistant Driller:

Property: ANTELLA 20 - 22 BABBAGE ROAD ROSEVILLE 2069 NSW **Standing Water Level:** 3.800
GWMA: **Salinity:**
GW Zone: **Yield:**

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBE	CUMBE.21	1//1028524
Licensed:			

Region: 10 - Sydney South Coast **CMA Map:**
River Basin: - Unknown **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6260991.0 **Latitude:** 33°46'40.9"S
Elevation Source: Unknown **Easting:** 332810.0 **Longitude:** 151°11'39.7"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	7.50	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	4.50	50			Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	4.50	7.50	55		1	Slotted In Hole, PVC Class 18, SL: 3.0mm, A: 1.50mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
3.80	7.50	3.70	Unknown	3.80					

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	CONCRETE	Fill	
0.20	0.40	0.20	FILL,SILTY SANDY CLAY,TRACE OF IRONSTONE	Fill	
0.40	0.80	0.40	SILTY CLAY	Silty Clay	
0.80	1.80	1.00	SHALE,/ QUARTZ	Shale	
1.80	3.50	1.70	SANDSTONE,FINE TO MEDIUM GRAINED RED.	Sandstone	
3.50	6.20	2.70	SANDSTONE YELLOW	Sandstone	
6.20	7.50	1.30	SANDSTONE,FINE TO MED.GRAINED,GREY	Sandstone	

Remarks

***** End of GW111006 *****

Warning To Clients: This raw data has been supplied to the NSW Office of Water by drillers, licensees and other sources. The NOW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

NSW Office of Water
Work Summary

GW065075

Licence: 10BL154122 **Licence Status:** CONVERTED

Authorised Purpose(s): RECREATION (GROUNDWATER),IRRIGATION
Intended Purpose(s): RECREATION (GROUNDWATER), IRRIGATION

Work Type: Bore
Work Status: Supply Obtained
Construct.Method: Cable Tool
Owner Type: Private

Commenced Date: **Final Depth:** 150.00 m
Completion Date: 15/02/1994 **Drilled Depth:** 150.00 m

Contractor Name:
Driller: John Hans Iselt
Assistant Driller:

Property: ROSEVILLE GOLF COURSE LINKS AVE ROSEVILLE CHASE 2069 NSW **Standing Water Level (m):** 44.000
GWMA: - **Salinity Description:** Fresh
GW Zone: - **Yield (L/s):** 6.000

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBE	CUMBE.21	20//232774
Licensed:	CUMBERLAND	GORDON	Whole Lot 20//232774

Region: 10 - Sydney South Coast **CMA Map:** 9130-3N
River Basin: 213 - SYDNEY COAST - GEORGES RIVER **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6261356.0 **Latitude:** 33°46'29.0"S
Elevation Source: Unknown **Easting:** 332677.0 **Longitude:** 151°11'34.8"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.20	300			Rotary Air
1		Hole	Hole	4.20	150.00	200			Rotary Air
1	1	Casing	Pvc Class 9	-0.50	150.00	200			Seated on Bottom, Glued
1	1	Casing	P.V.C.	-0.50	4.20	250	138		Seated on Bottom, Glued

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
32.40	32.50	0.10	Consolidated	11.00	35.00	0.40	35.00		
122.90	125.60	2.70	Consolidated	44.00	144.00	6.00	150.00	03:00:00	

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	137.00	137.00		(Unknown)	
137.00	147.00	10.00	SHALE DARK GREY	Shale	
147.00	150.00	3.00	SANDSTONE GREY DARK	Sandstone	

Remarks

10/11/1999: PREVIOUS LIC. No:10BL 141258.
22/11/2012: Nat Carling, 22-Nov-2012; Added status (based on licence) & added rock type codes in driller's log.

***** End of GW065075 *****

Warning To Clients: This raw data has been supplied to the NSW Office of Water by drillers, licensees and other sources. The NOW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.