

3/12/2024

Ref: 18412-ER-1-1

Pittwater RSL Club Ltd
82 Mona Vale Rd
Mona Vale NSW 2103

Attention: Jarrod Simpson (jarrod.simpson@linkedpm.com.au)

Project: Acid Sulfate Soils Assessment at Pittwater RSL Club, 82 Mona Vale Rd, Mona Vale NSW 2103

1 Introduction

Alliance Geotechnical Pty Ltd (Alliance) was engaged by Pittwater RSL Club Ltd (the client) c/o Linked Project Management to provide environmental consulting services (the Services) for Pittwater RSL Club, 82 Mona Vale Rd, Mona Vale NSW 2103 (the site). The site boundaries and existing site layout are provided within **Figure 1**.

Alliance understands that:

- The site is comprised of Lot 52 in DP1237461;
- The site covers an area of approximately 15,500m²;
- The site is owned by the client;
- The site is an existing RSL club, which is proposed for redevelopment, including construction of a new lift and lift access corridor below the existing ground slab level, and new carpark pavement in the western portion of the site. A copy of the redevelopment plans are attached to this letter; and
- The client requires an acid sulfate soils (ASS) assessment to assist the client address development consent decision making processes relevant to Clause 7.1 of the Pittwater Local Environmental Plan 2014; and
- The maximum depth of soil disturbance associated with the redevelopment will be greater than 3m below ground level (bgl), however rock is anticipated from approximately 2.5m bgl.

2 Objectives

Alliance understands the objectives of this project were:

- Assess the potential for ASS to be present at the site, that may be disturbed by the proposed redevelopment works;
- Assess whether the proposed redevelopment works will be carried out on land that is within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum (AHD) and by which the watertable is likely to be lowered below 1 metre AHD on adjacent Class 1, 2, 3 or 4 land; and
- Provide recommendations for further ASS assessment and/or management (if warranted).

3 Scope of Work

Alliance undertook the following scope of work to address the project objective:

- a desktop review; and

- data assessment and reporting.

4 Desktop Review

4.1 Geology

The Department of Mineral Resources Geological Survey of NSW Sydney 1:100,000 Geological Series Sheet 9130 (Edition 1) 1983, indicated that the site is likely to be underlain by the Newport Formation comprising Interbedded laminite, shale and sandstone; white quartz to quartz-lithic, very fine- to medium-grained sandstone; minor shale breccia and pebble polymictic conglomerate (at base of sandstone units); minor red clays.

4.2 Site Topography and Elevation

A review of 10m topographic contours accessed via <https://minview.geoscience.nsw.gov.au/> indicated that:

- The elevation of the west of the site is approximately 30m AHD, with the site sloping upwards towards the east;
- The elevation of the east of the site is approximately 40m AHD;
- The lowest elevation in a 500m radius to the site is approximately 12m AHD; and
- The highest elevation in a 500m radius to the site is approximately 60m AHD.

4.3 Acid Sulfate Soils Mapping

A review of <https://www.environment.nsw.gov.au/eSpade2Webapp> indicated that the site is located in an area mapped as:

- N: no known occurrence.

This mapping dataset is shown on **Figure 2** with a 500m radius added around the site. The dataset indicates there are no areas of mapped acid sulfate soils within 500m of the site.

4.4 Local Environmental Plan Mapping

A review of the Pittwater Local Environmental Plan 2014 Acid Sulfate Soils Map – Sheet ASS_012 indicates that:

- the site is located on Class 5 land; and
- land located within a 500m radius of the site is located on Class 5 land, and not Class 1, 2, 3 or 4 land:

An extract of this map sheet is provided within **Figure 3**, along with a 500m radius mark up around the site.

4.5 Proposed Development

The proposed development works will include:

- excavations for the lift pit and lift foundations; and
- excavations for the carpark pavement works.

Based on Alliance's experience in similar site settings and on comparable projects, Alliance considers the potential for the proposed development works to result in lowering of the groundwater table, to be negligible.

5 Conclusions

Based on the findings of Alliance's desktop review, Alliance makes the following conclusions:

- The potential for ASS to be present at the site, that may be disturbed by the proposed redevelopment works, is negligible;
- The proposed development works, in the context of Clause 7.1 of the Pittwater Local Environmental Plan 2014:
 - will not be carried out on land that is within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum (AHD); and
 - will not result in the water table being lowered below 1 metre AHD on adjacent Class 1, 2, 3 or 4 land.

6 Closing

We trust this advice meets with your current needs. Should you require clarification on its content, please contact the undersigned.

The advice in this letter must be read in conjunction with the attached 'Important Information About This Report'.

For and on behalf of Alliance Geotechnical Pty Ltd

Sam Willis
Senior Project Scientist



Attachments

Important Information About This Report
Figures
Proposed Development Plans

Important Information About This Report

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

The findings presented in this report are based on specific data and information made available during the course of this project. To the best of Alliance's knowledge, these findings represent a reasonable interpretation of the general condition of the site at the time of report completion.

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.

Logs, figures, and drawings are generated for this report based on individual Alliance consultant interpretations of nominated data, as well as observations made at the time fieldwork was undertaken.

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, Alliance reserves the right to review and amend this report.



Legend

Site Boundary

0 25 m 50 m

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2018

alliance

Produced by **Datanest.earth**

Title: Site Location and Layout Plan

Client: Pittwater RSL Club Ltd

Size: A3

Project:
Pittwater RSL
Club

Drawn: SW

Figure No.: 1

Date: 29-11-2024

Checked:
CC

Proj No: 18412

Scale: 1:1340

Version:
ER-1-1



Legend

- Site Boundary
- 500m Radius

0 250 m 500 m
© Nearmap, NSW Department of Planning and Environment

alliance

Produced by **Datanest.earth**

Title: Acid Sulfate Probability

Client: Pittwater RSL Club Ltd

Size: A3

Project:
Pittwater RSL
Club

Drawn: SW

Figure No.: 2

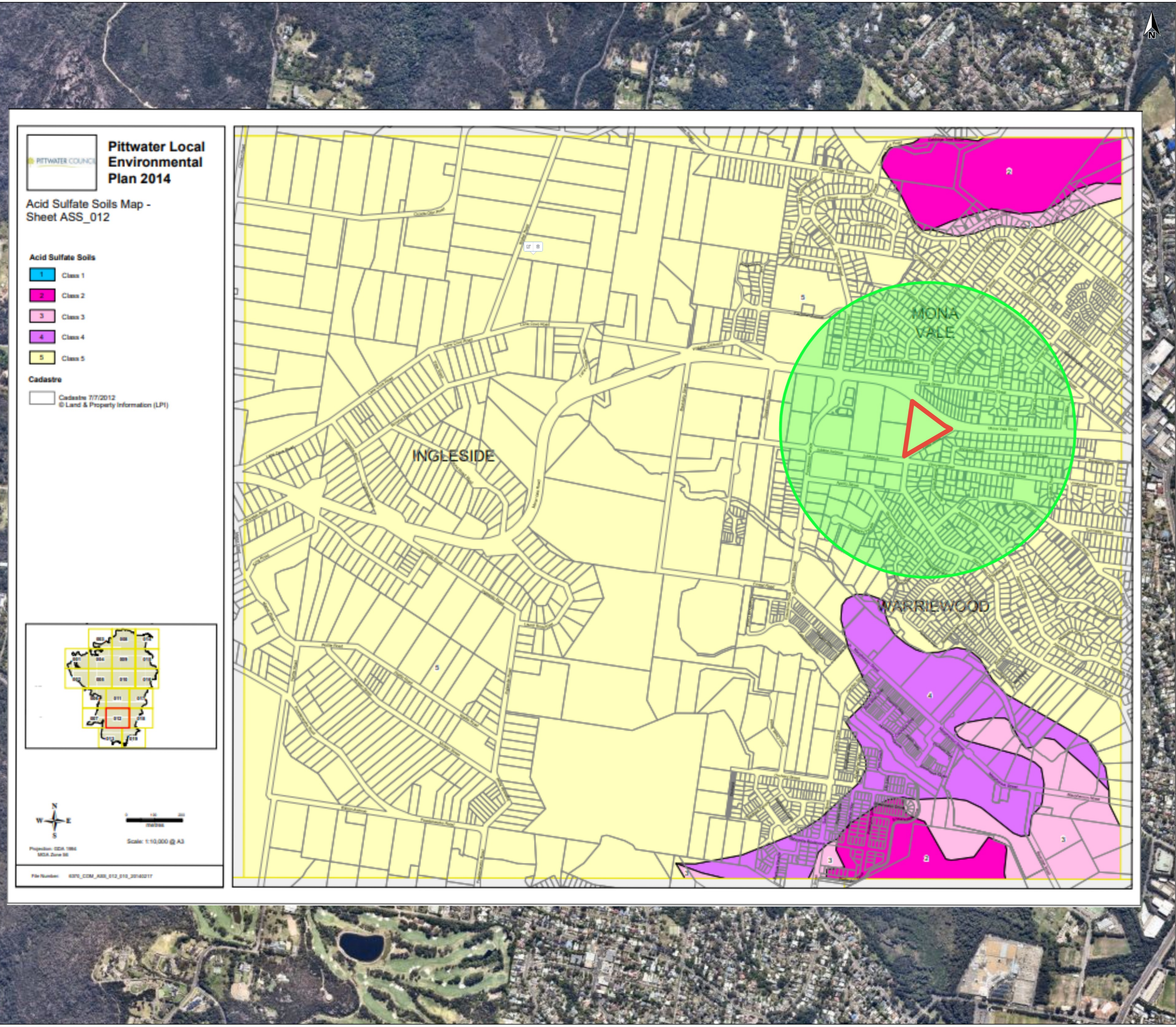
Date: 29-11-2024

Checked:
CC

Proj No: 18412

Scale: 1:11239

Version:
ER-1-1



**Pittwater Local
Environmental
Plan 2014**

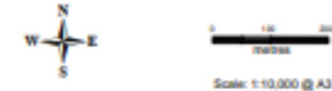
Acid Sulfate Soils Map -
Sheet ASS_012

Acid Sulfate Soils

- 1** Class 1
- 2** Class 2
- 3** Class 3
- 4** Class 4
- 5** Class 5

Cadastral

Cadastral 7/7/2012
© Land & Property Information (LPI)



File Number: 6270_C001_ASS_012_010_20140217

Legend

- Site Boundary
- 500m Radius

0 250 m 500 m
© Nearmap

alliance

Produced by **Datanest.earth**

Title: Pittwater LEP Acid Sulfate Map Extract

Client: Pittwater RSL Club Ltd

Size: A3

Project:
Pittwater RSL
Club

Drawn: SW

Figure No.: 3

Date: 29-11-2024

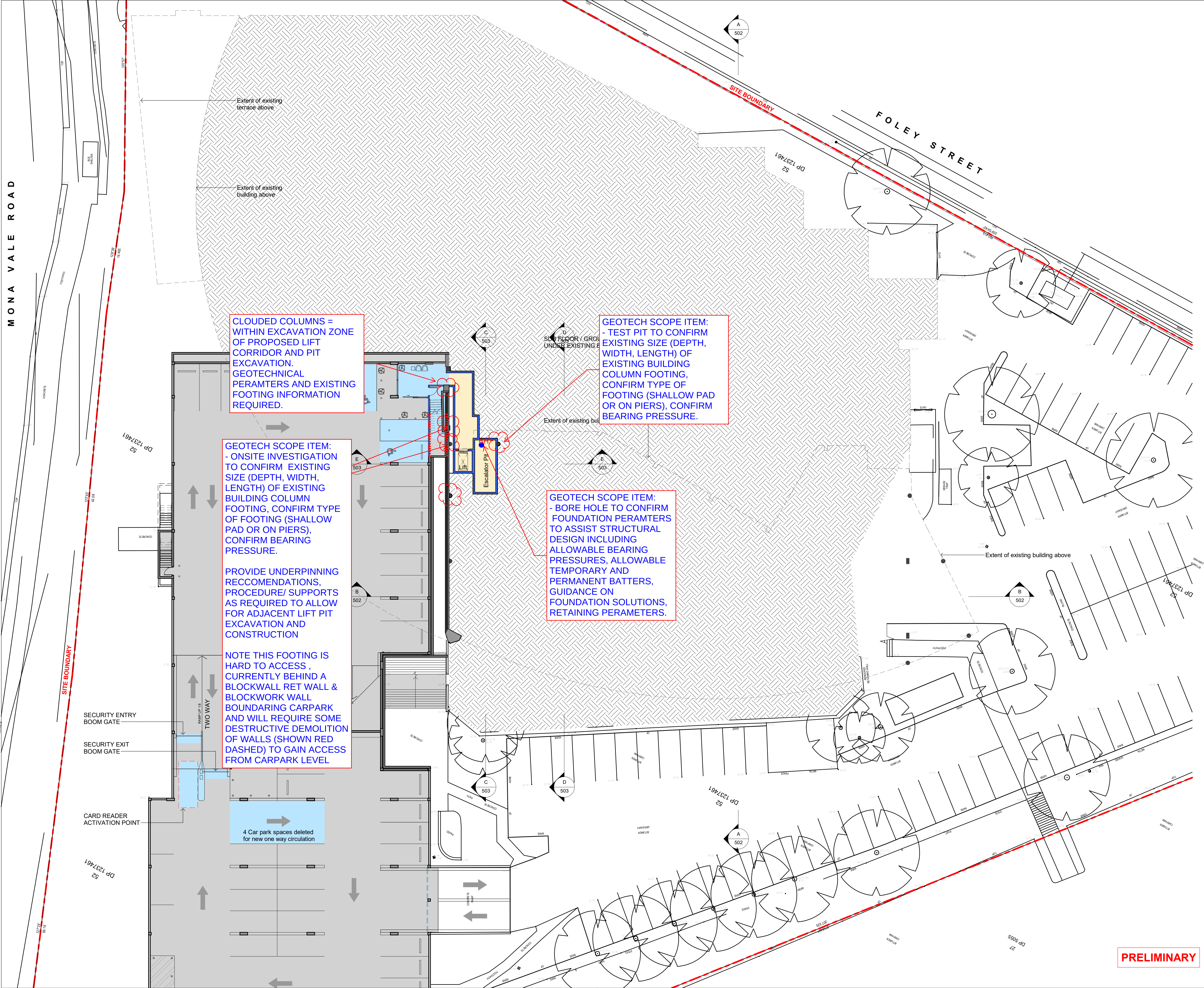
Checked:
CC

Proj No: 18412

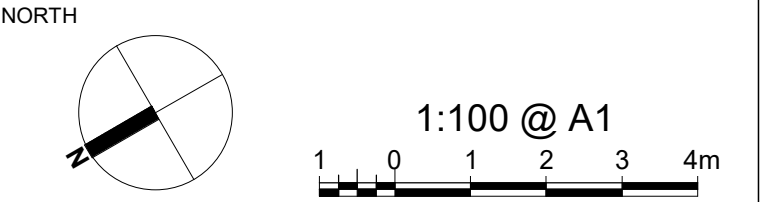
Scale:
1:13426

Version:
ER-1-1

MONA VALE ROAD



PROJECT ADDRESS
82 MONA VALE ROAD
MONA VALE, N.S.W., 2103



- GENERAL NOTES:**
- DO NOT SCALE OFF DRAWINGS. USE ONLY FIGURED DIMENSIONS.
 - ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY WORK.
 - ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF BERGSTROM ARCHITECTS PTY LTD BEFORE COMMENCEMENT OF ANY WORK.
 - ALL DIMENSIONS ARE GIVEN IN MILLIMETRES EXCEPT LEVELS & DRAWINGS TO SCALE 1:500 AND SMALLER WHICH ARE IN METRES.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT CONSULTANTS DOCUMENTATION.
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- DA NOTES:**
- DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE DEVELOPMENT APPLICATION FORM AND STATEMENT OF ENVIRONMENTAL EFFECTS.
 - THE NEW BUILDING WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROVISIONS OF THE BCA.
 - ALL NEW BUILDING WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE NOTICE OF DETERMINATION FOR THIS DEVELOPMENT APPLICATION.
 - DISABILITY ACCESS AND FACILITIES TO BE IN ACCORDANCE WITH AS 1428.1 AND AS 1428.4
 - THE PROPOSED WORKS WILL ADDRESS FIRE SAFETY MEASURES TO COMPLY WITH THE PERFORMANCE REQUIREMENTS OF THE BCA (EITHER DEEMED TO SATISFY OR ALTERNATIVE SOLUTIONS TO BE PREPARED BY A QUALIFIED FIRE ENGINEER).
 - ALL MEANS OF EGRESS, EMERGENCY LIGHTING, EXIT SIGNS, FIRE DOORS, FIRE HYDRANT SYSTEMS, FIRE HOSE REEL SYSTEMS, PORTABLE FIRE EXTINGUISHERS, SMOKE AND HEAT VENTS, SMOKE DETECTION, ALARM AND EXHAUST SYSTEM TO BE IN ACCORDANCE WITH THE BCA AND OTHER RELEVANT AUSTRALIAN STANDARDS.

- LEGEND:**
- EXTENT OF NEW WORKS
 - EXTENT OF ALTERATIONS
 - EXISTING BUILDING REMAIN SAME
 - NEW WALLS & STRUCTURE
 - EXISTING WALLS & STRUCTURE TO REMAIN

P1 21.08.24 PRELIMINARY

REVISION DESCRIPTION

PROJECT MANAGER
[LINKED](#)

ARCHITECT
Bergstrom ARCHITECTS
BERGSTROM ARCHITECTS PTY. LTD. (ABN 75 095 092 989)
SUITE 103/3 EDEN STREET,
NORTH SYDNEY NSW 2060
Ph. 02.8920.1499 Fax. 02.8920.1599

PROJECT
**ALTERNATIONS & ADDITIONS
TO PITTWATER RSL CLUB**

DRAWING
**PROPOSED CARPARK
BASEMENT B1 FLOOR PLAN**

SCALE 1:100 @ A1 DRAWING NO. DA- 110 REVISION P1
JOB NUMBER 23-003 DRAWN BY RL DATE July 2024

PRELIMINARY

NORTH



GENERAL NOTES:

1. DO NOT SCALE OFF DRAWINGS. USE ONLY FIGURED DIMENSIONS.
2. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY WORK.
3. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF BERGSTROM ARCHITECTS PTY LTD BEFORE COMMENCEMENT OF ANY WORK.
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5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT CONSULTANTS DOCUMENTATION.
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DA NOTES:

1. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE DEVELOPMENT APPLICATION FORM AND STATEMENT OF ENVIRONMENTAL EFFECTS.
2. THE NEW BUILDING WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROVISIONS OF THE BCA.
3. ALL NEW BUILDING WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE NOTICE OF DETERMINATION FOR THIS DEVELOPMENT APPLICATION.
4. DISABILITY ACCESS AND FACILITIES TO BE IN ACCORDANCE WITH AS 1428.1 AND AS 1428.4
5. THE PROPOSED WORKS WILL ADDRESS FIRE SAFETY MEASURES TO COMPLY WITH THE PERFORMANCE REQUIREMENTS OF THE BCA. THE PROPOSED WORKS TO SATISFY OR ALTERNATIVE SOLUTIONS TO BE PREPARED BY A QUALIFIED FIRE ENGINEER).
6. ALL MEANS OF EGRESS, EMERGENCY LIGHTING, EXIT SIGNS, FIRE DOORS, FIRE HYDRANT SYSTEMS, FIRE HOSE REEL SYSTEMS, PORTABLE FIRE EXTINGUISHERS, SMOKE HEAT VENT SYSTEMS, SMOKE DETECTORS, ALARM, AND EXHAUST SYSTEM TO BE IN ACCORDANCE WITH THE BCA AND OTHER RELEVANT AUSTRALIAN STANDARDS.

LEGEND:

-
- | Category | Extent |
|-------------------------------|--------|
| EXTENT OF NEW WORKS | 10% |
| EXTENT OF ALTERATIONS | 15% |
| EXISTING BUILDING REMAIN SAME | 75% |
-
- | Category | Extent |
|--------------------------------------|--------|
| NEW WALLS & STRUCTURE | 20% |
| EXISTING WALLS & STRUCTURE TO REMAIN | 80% |

P1	21.08.24	PRELIMINARY
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REV	DATE	DESCRIPTION
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PROJECT MANAGER



ARCHITECT

Bergstrom ARCHITECTS

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PROJECT	
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ALTERNATIONS & ADDITIONS TO PITTWATER RSL CLUB

DRAWING

PROPOSED LOWER GROUND FLOOR PLAN

SCALE

DRAWING NO.

REVISION

1:200 @ A1 ☐

DA- 120

P1 |

JOB NUMBER

DRAWN BY

DATE

23-003

July 2024

08/2024 13:01:52

MONA VALE ROAD

CLOUDED COLUMNS =
 WITHIN EXCAVATION ZONE
 OF PROPOSED LIFT
 CORRIDOR AND PIT
 EXCAVATION.
 GEOTECHNICAL
 PERAMTERS AND EXISTING
 FOOTING INFORMATION
 REQUIRED.

APPROX
OUTLINE OF
PROPOSED
LIFT PIT /
CORRIDOR
BELOW SHOWN
DASHED

GEOTECH SCOPE ITEM:
- TEST PIT TO CONFIRM
EXISTING SIZE (DEPTH,
WIDTH, LENGTH) OF
EXISTING BUILDING
COLUMN FOOTING,
CONFIRM TYPE OF
FOOTING (SHALLOW PAD
OR ON PIERS), CONFIRM
BEARING PRESSURE AT
BASE OF FOOTING.

GEOTECH SCOPE ITEM:
- BORE HOLE TO CONFIRM
FOUNDATION PARAMETERS
TO ASSIST STRUCTURAL
DESIGN INCLUDING
ALLOWABLE BEARING
PRESSURES, ALLOWABLE
TEMPORARY AND
PERMANENT BATTERS,
GUIDANCE ON
FOUNDATION SOLUTIONS,
RETAINING PARAMETERS.

GEOTECH SCOPE ITEM:
- ONSITE INVESTIGATION
TO CONFIRM EXISTING
SIZE (DEPTH, WIDTH,
LENGTH) OF EXISTING
BUILDING COLUMN
FOOTING, CONFIRM TYPE
OF FOOTING (SHALLOW
PAD OR ON PIERS),
CONFIRM BEARING
PRESSURE.

PROVIDE UNDERPINNING
RECOMMENDATIONS,
PROCEDURE/ SUPPORTS
AS REQUIRED TO ALLOW
FOR ADJACENT LIFT PIT
EXCAVATION AND
CONSTRUCTION

NOTE THIS FOOTING IS
HARD TO ACCESS
CURRENTLY BEHIND A
BLOCK WALL AND WILL
REQUIRE SOME
DESTRUCTIVE DEMOLITION
OF WALL TO ACCESS
FROM CARPARK LEVEL

EXISTING
PICKLEBALL COURTS

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