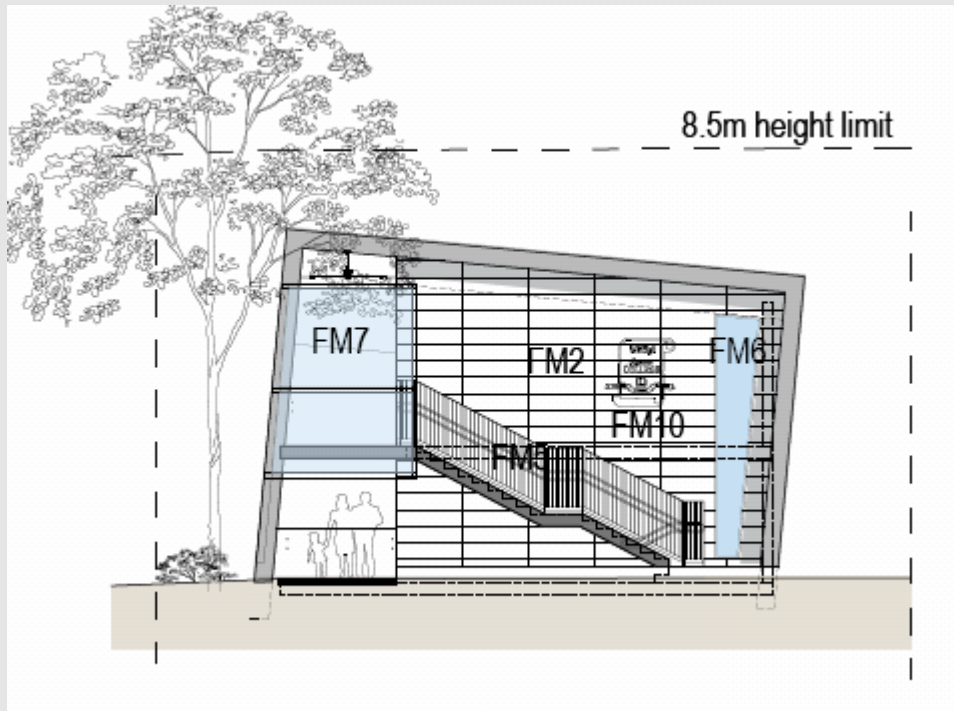
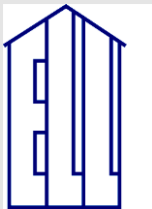


FLOOD REPORT



PROPOSED CLASSROOMS AT 55 MACDONALD STREET, LAKEMBA.



Michael Ell Consulting Engineers Pty Ltd

Office 5, 1 Maxim Street, West Ryde 2114

**FLOOD STUDY AND RISK MANAGEMENT PLAN REPORT
55 MACDONALD STREET, LAKEMBA.**

macdonaldreport01a.doc/de

09 October 2022

1.0 INTRODUCTION

This report has been prepared to support a development application for a school classroom at the above address. The site is within the Canterbury Bankstown Council area. Council has confirmed that this site is subject to flood planning development controls.

2.0 THE PROPOSED DEVELOPMENT

This will consist of a two storey classroom block. The site falls from the street to the rear boundary. The ground floor levels follow the site levels down the block. At the back of the block is the existing school which front onto 54-72 Hampden Road, Lakemba.

A stormwater pipe is shown at the rear of the site on the Stormwater System Report however we could not find any physical sign of this. A surveyor is currently locating and providing levels on this. A copy of Council's plan is attached.

3.0 FLOOD LEVELS

Based on a Stormwater System Report from Canterbury Bankstown Council issued on 5th May 2022 and attached as Appendix A.

- The property is not affected by 100 year ARI flooding. It is within the Cooks River Flood plain area.
- The site generally falls from the street toward the rear. Floor levels for the classrooms are as shown in the table below. Any surcharge from council stormwater system will flow down the street and not throughs the block.

FLOOD STUDY AND RISK MANAGEMENT PLAN REPORT
55 MACDONALD STREET, LAKEMBA.

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Classroom	FFL
GLA 01	24.575
GLA 02	24.575
GLA 03	23.976
GLA 04	23.976

The performance requirements are as shown in the table below.

Table 2.0 – DCP Objectives

Objectives	DCP Requirement	Comments	Satisfy LEP
1a	To minimize the flood risk to life and property associated with the use of land;		Yes
1b	To allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change;		Yes
1c	To avoid significant adverse impacts on flood behaviour and the environment.	The proposed development will generally retained flood storage on site for the 1 in 100 year and PMF storm events.	Yes

Table 3.0 – Flood Risk Management Summary

Item	100 year ARI
Building FFL	<ul style="list-style-type: none"> • The site is not affected by 1 in 100 year flooding. • The floor levels are greater than 500mm above natural ground level.
Structural Adequacy	The flooding does not touch the classroom block so this provision is not applicable.
The development	Any surcharge in council's system will flow down the street

**FLOOD STUDY AND RISK MANAGEMENT PLAN REPORT
55 MACDONALD STREET, LAKEMBA.**

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must not result in increased flooding else where in the catchment	towards the existing open drain.
Vehicular Access	There is no vehicular access to the site or car parking.

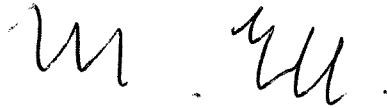
4.0 CONCLUSION

We, Michael Ell Consulting Engineers, being hydraulic and civil engineers within the meaning of the Building Code of Australia, hereby certify that the subject proposed building is not affected by a flood storage area, a floodway area, a flow path area, a high hazard, a high risk area or a flood planning area as defined by Clause 3.5 (Exempt Complying Development Codes 2008) and the NSW Floodplain Development Manual.

Yours faithfully,

MICHAEL ELL CONSULTING ENGINEERS PTY LTD

Per....



Michael Ell B.E.(Civil), M.B.A., M.I.E.(Aust), CPEng.

APPENDIX A



Level 1, 66 - 72 Rickard Road, Bankstown NSW
PO Box 8, Bankstown NSW 1885
Tel: (02) 9707 9010 - Fax: (02) 9707 9408
DX 11220 BANKSTOWN
council@cbc.city.nsw.gov.au

CITY OF CANTERBURY BANKSTOWN

To: Michael Ell
5/1 Maxim St
WEST RYDE NSW 2114

STORMWATER SYSTEM REPORT 55 MacDonald Street, LAKEMBA NSW 2195

Date: 05-May-2022
Ref: WP-SIA-934/2022
Development type: **School**

NO

FLOOD/OVERLAND FLOW STUDY REQUIRED

The site is affected by the following Council stormwater system components:

- 375 mm diameter stormwater pipeline (according to Council records) located along the eastern site boundary within the site.

The site will be subject to stormwater inundation from this overland flowpath during large storm events. Refer to the attached "**PMF Extent Maps from Cooks River Overland Catchment Study**".

The property is not affected by 100 year ARI flooding.

The proposed development including floor levels, shall comply with the development controls specified in Part B, Section B5 of former Canterbury Council's Development Control Plan 2012- Catchments Affected by Stormwater Flooding.

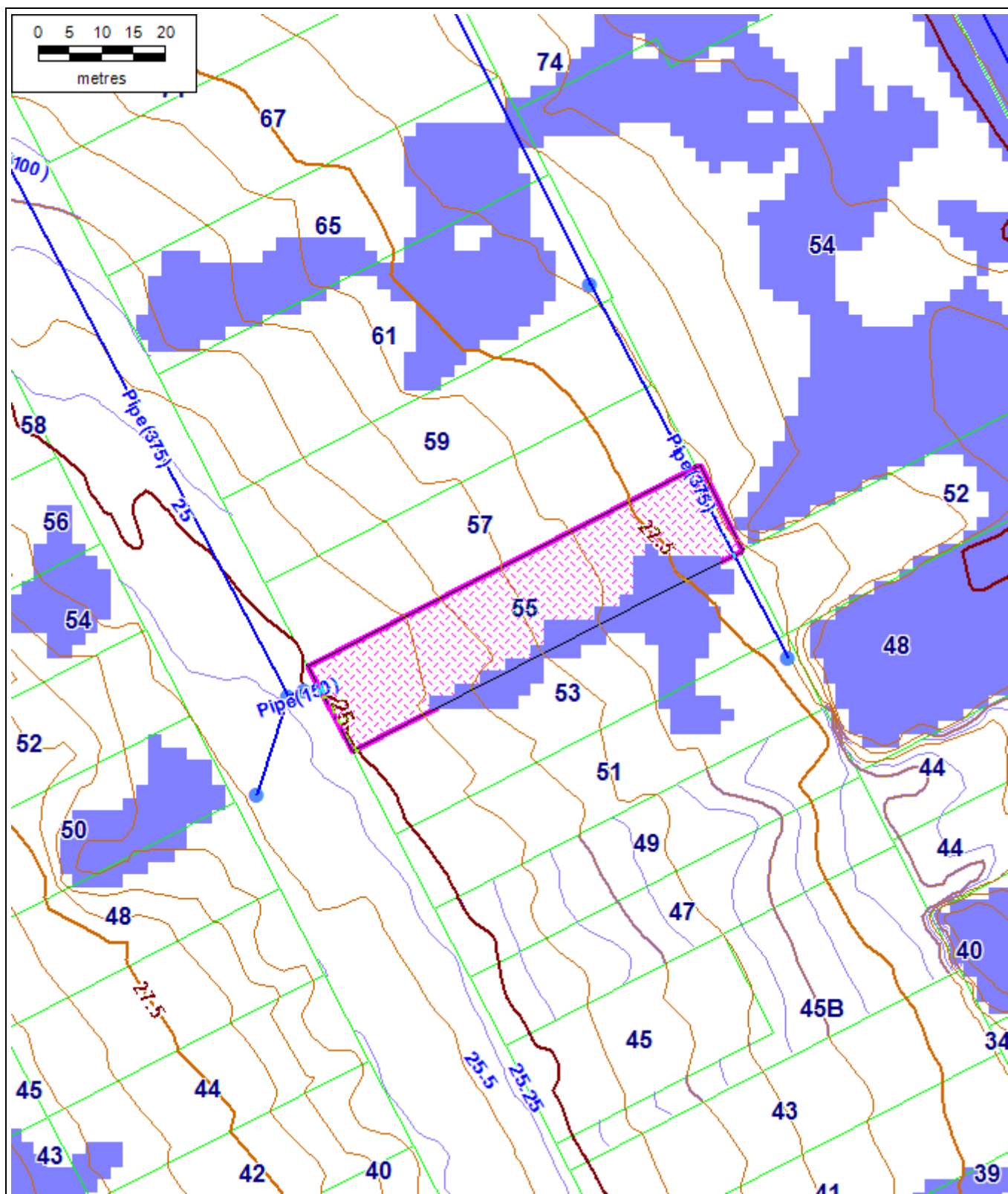
Runoff on the site, and naturally draining to it is to be collected and disposed of to Council's requirements detailed in **Part B, Section B5 of former Canterbury Council's Development Control Plan 2012.**

All structures and buildings must be located clear of pipelines and easements [existing or required by **Part B, Section B5 of former Canterbury Council's Development Control Plan 2012**]. Proposed structures may require special footings due to their proximity to stormwater easements and pipelines. Refer to Bankstown Council's *Development Engineering Standards****.

This report relates to the exposure of the subject site to Council's stormwater system, both underground and overland. It does not assess the suitability or otherwise of this site for the proposed development.

* Average Recurrence Interval
** Australian Height Datum
PMF Probable Maximum Flood

Jeshica Mool
Infrastructure Services Officer



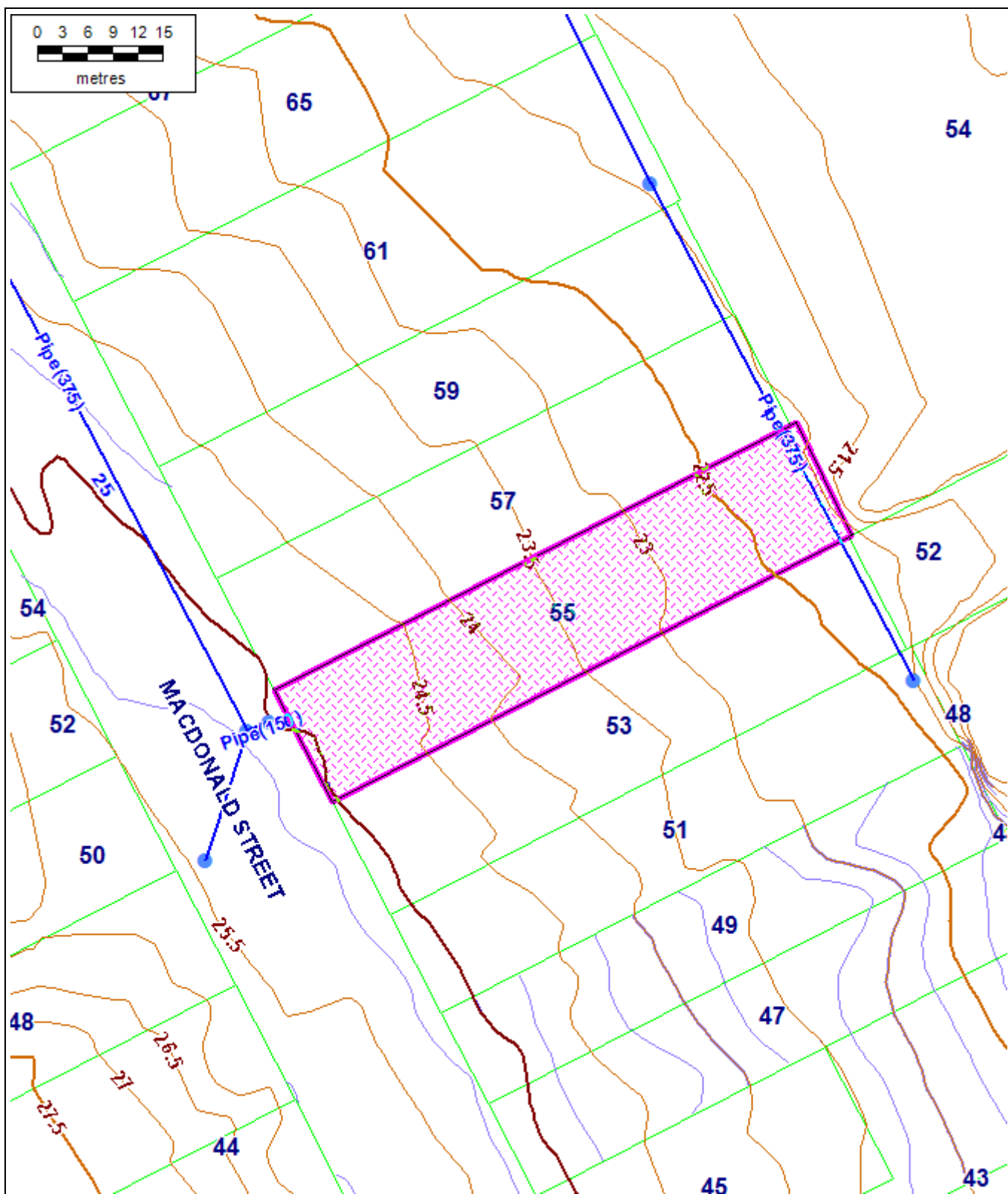
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6 May 2022

55 MacDonald Street, Lakemba

Probable Maximum Flood Extent (PMF) Map

DISCLAIMER: COUNCIL EXPRESSLY DISCLAIMS ALL LIABILITY FOR
ERRORS OR OMISSIONS.
THIS PLAN HAS NO LEGAL STANDING





1:663.8
6 May 2022

55 MacDonal Street, Lakemba

GIS Map

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ERRORS OR OMISSIONS.
THIS PLAN HAS NO LEGAL STANDING





1:663.8
6 May 2022

55 MacDonal Street, Lakemba

Aerial Map

DISCLAIMER: COUNCIL EXPRESSLY DISCLAIMS ALL LIABILITY FOR
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APPENDIX B

SPATIAL LAYERS

- Filter
- Selection
 - Assets
 - Affectations
 - Boundaries
 - Cadastre
 - Contours
 - Contours (All)
 - Contours (Major 10m)
 - Contours (Intermediate 5m)
 - Contours (Minor <5m)
 - Complying Development
 - Disaster Management
 - Drainage
 - Stormwater Drains
 - Drains
 - Drains (Label)
 - Stormwater Pits
 - Pits
 - Pits (Label)
 - Sydney Water Overflow
 - Sydney Water Sewer
 - Sydney Water Stormwater Channels

MAPPING LEGEND

SEARCHING DATA

LAYER FILTERING

REPORTING / PRINTING

QUICK PROPERTY SEARCH

WEB LINKS

COORDINATE DISPLAY

CBCity MAP Google StreetVIEW MetroMAP NearMAP

Print

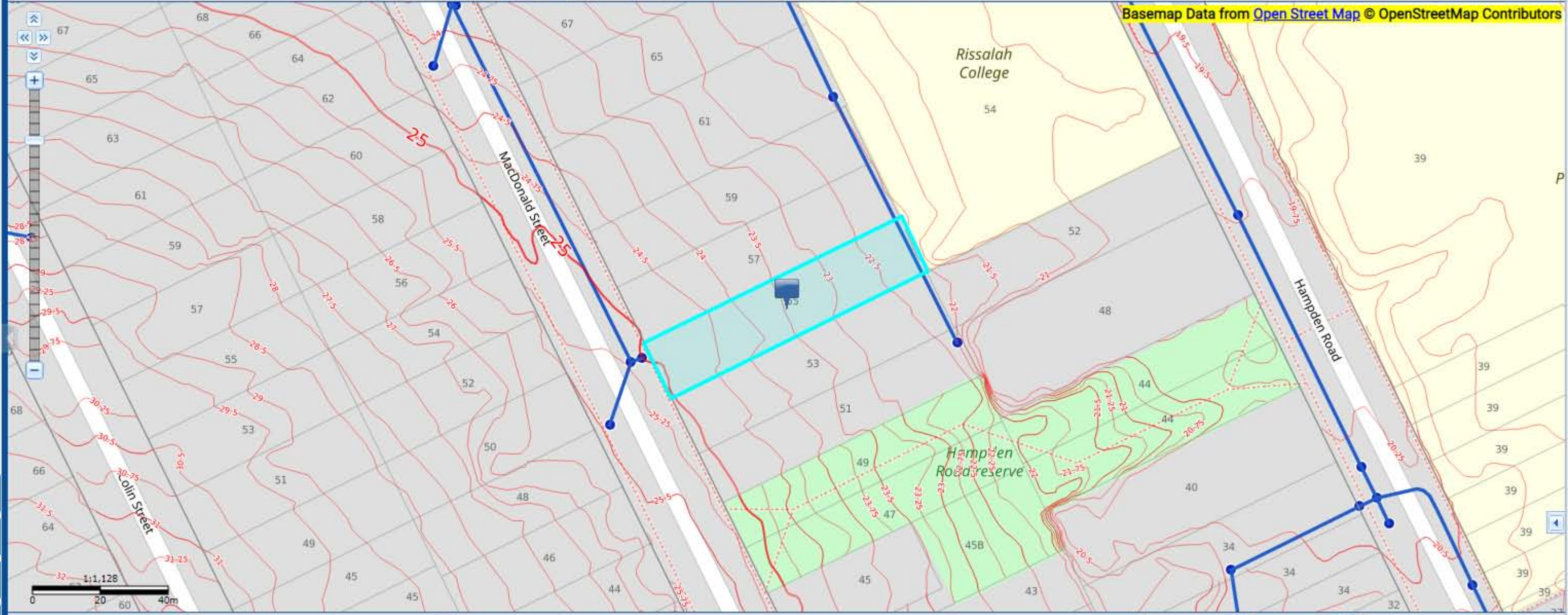
PROPERTY SEARCH: 55 McDonald street

ASSETS SEARCH: Enter Asset ID

Email About Help

SET ACTIVE LAYER: Parcel

CD DA - +



BASEMAP IMAGES (Transparency) OPEN Street MAP SCALE 1: 1,128 SELECTION SIZE: 1 USER = 932085

Part Zoom Remove Refine Export

AGREEMENT Details

TYPE CODE	TYPE DESCRIPTION	LICENCE NUMBER	FORMATTED ADDRESS	LOTS	AREA DESCRIPTION	TENANT	COMMENCEMEN
No data to display							

Pg. 1 10 Items per page Filter