MACKILLOP FAMILY SERVICES

ARBORICULTURAL IMPACT ASSESSMENT

PREPARED BY: [redacted] (DIPLOMA OF ARBORICULTURE)

OCTOBER 7, 2025

1 TERMS & LIMITATIONS

Report Integrity:

- This report is a complete and final document prepared by ATC Land Management and must not be altered in any way. Any unauthorized modifications will render the report invalid.

Disclaimer of Liability:

- Trees are living organisms subject to natural processes, environmental changes, and extreme weather events. Our inspection, conducted by qualified personnel, relies on visual assessment of tree health and structure from the ground. While thorough, this method may not detect hidden defects. We cannot guarantee the absolute condition or safety of the trees beyond what's reasonably assessed during the inspection. Regular inspections are recommended, and our staff can advise on the appropriate frequency.

Report Objectivity and Accuracy:

- This report is free from bias and reflects the honest professional opinion of the consulting Arborist, based on the client's provided information and relevant research. All details, information, and recommendations are based on research and referenced where applicable. Without references, determinations are made using the experience and observations of the Certified Arborist who prepared the report.

Limitations of Representation:

- Pictures, diagrams, graphs, and other reference materials within this report are not guaranteed to be perfectly scaled. Measurements and values are made to the best of the Arborist's ability at the time of inspection and report creation.

Interpretation and Discussion:

- Discussions regarding specific points within this report are discouraged as they may be taken out of context. Discussions should focus on the entire report. Similarly, discussions concerning the actions of third parties regarding the trees are not included within the scope of this report.

Governing Law and Dispute Resolution:

- This agreement and the report shall be governed by and construed in accordance with the laws of Victoria, Australia. In the event of a dispute arising from this report, the parties agree to attempt to resolve the dispute amicably through mediation.

Entire Agreement:

- These terms and conditions, together with the Arborist Report, constitute the entire agreement between the parties and supersede all prior or contemporaneous communications, representations, or agreements, whether oral or written.

By accepting this report, the client acknowledges that they have read, understood, and agree to be bound by these terms and conditions.

2 EXECUTIVE SUMMARY

This report provides an assessment of the vegetation controls applicable to the planned expansion of MacKillop Specialist School across the 25 Oxford Street and 34 Truscott Street sites in Whittington.

2.1 Key planning findings

Due to the size of the combined site, it is subject to the provisions of Clause 52.37 (Canopy Trees). Crucially, an assessment confirmed that the vegetation is planted and in a formal landscape arrangement, which exempts the site from Clause 52.17 (Native Vegetation) permit requirements (as detailed in **Appendix D**). Therefore, this proposal only addresses the requirements of the Canopy Tree control.

2.1.1 Arboricultural justification for tree removal:

The assessment confirms that the removal of three Boundary Canopy Trees protected under Clause 52.37 (Tree 2: Ornamental Citrus, Tree 3: Lillypilly, and Tree 6: Tuart) is arboriculturally justified.

These specimens exhibit severe structural defects (including significant dieback, included bark at basal unions, and suppressed growth), which results in a low Useful Life Expectancy (ULE) and an unacceptable risk of failure. Their compromised condition renders them unsuitable for retention, particularly within a high-use children's playground environment.

The existing Pittosporum undulatum trees located along the rear fence line of 34 Truscott Street, Whittington, are included in the removal proposal. These trees are classified as an environmental weed species and are therefore exempt from requiring a tree removal permit. Importantly, there are no proposals to remove any other existing trees within the larger site boundaries of 25 Oxford Street, Whittington.

2.1.2 Tree retention and compliance:

All remaining trees designated for retention—including the Council-owned *Callistemon citrinus*—will sustain only minor or negligible encroachments into their Tree Protection Zones (TPZs). This ensures the proposal can achieve full compliance with the planning overlays.

2.1.3 Mitigation and next steps

To mitigate all potential construction impacts and secure the long-term health of the retained trees, a robust Tree Protection Specification (TPS), strictly adhering to Australian Standard 4970-2025, is mandatory. Key mitigation strategies include:

- Installing compliant TPZ fencing.
- Scheduling dedicated Arborist Supervision for all critical works.

To ensure strict contractor adherence, it is strongly recommended that a detailed, site-specific Tree Protection Specification be produced by a qualified arborist immediately after the planning permit is issued. This specification will translate the strategies in this report into clear, actionable site instructions, ensuring the compliant and sensitive integration of the new school facilities within the existing landscape.

TABLE OF CONTENTS

3 CONTACT DETAILS

3.1 Client details

Client company	[redacted]
Client name	PMDL Architects
E-mail	[redacted]

3.2 Assessing arborist

The assessment was conducted by an arborist demonstrating competence in accordance with Australian Standard 4970-2025 (Protection of trees on development sites) and AS4373-2007 (Pruning of amenity trees). This competence is evidenced by the arborist's 29 years of industry experience and attainment of a minimum Australian Qualification Framework (AQF) Level 5 Diploma of Arboriculture. This combination of extensive practical experience and formal qualifications ensures the arborist possesses the requisite knowledge and skills to accurately perform the assessments and adhere to the standards outlined within AS4970-2025 and AS4373-2007.

Assessing company	ATC Land Management
Assessing Arborist	[redacted]
Phone	[redacted]
E-mail	[redacted]
Qualifications	Diploma of Horticulture (Arboriculture)

4 INTRODUCTION

4.1 Brief

Prepared by: ATC Land Management

This report details the findings of an Arboricultural Impact Assessment (AIA) commissioned by PMDL Architects. The assessment focuses on the trees located at 34 Truscott Street, Whittington, following the property's acquisition by MacKillop Family Services, which operates from the adjacent 25 Oxford Street site.

This AIA is a vital component of the development application package, designed to evaluate the consequences of the proposed works on the existing tree assets and to establish necessary tree protection and management protocols for the combined site.

4.2 Scope

The primary objectives of this Arboricultural Impact Assessment are to:

- **Tree inventory and condition analysis:** Conduct a detailed site inspection to identify all relevant trees on the property and in the immediate vicinity. For each tree, the report will provide a thorough analysis of its species, age, health, structural condition, and overall viability.
- **Tree Protection Zone determination:** Calculate the Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) for all trees to be retained, in accordance with the Australian Standard AS 4970-2025. These zones define the minimum area around a tree that must be protected from development-related impacts.
- **Impact assessment:** Evaluate the potential for direct and indirect impacts from the proposed development, including excavation, soil compaction, changes to site levels, and service installations, on the health and stability of the retained trees.
- **Mitigation strategies:** Formulate and recommend best-practice tree protection management strategies to minimize any identified conflicts between the development and the trees.
- **Planning compliance:** The report will be prepared to meet the requirements of Clause 52.37 (Canopy Trees) and will inform the planning permit application process.

The purpose of this document is to ensure a balanced approach that facilitates the proposed development while protecting valuable tree assets and contributing to the long-term ecological and amenity values of the site and its surrounding landscape.

4.3 Methodology

Site assessed: October 7, 2025

Assessed by: [redacted] for ATC Land Management

4.3.1 Assessment methods:

- **Visual Tree Assessment (VTA):** The trees were assessed from the ground using industry accepted VTA methods, focusing on observable signs of health, structure, and stability.
- **Diameter measurements: Stem** diameters were measured at breast height (DBH), at stem base (DAB), and at other required stem heights using a DBH tape.
- **Limitations:** No aerial assessments (rope and harness, drone) or below-ground investigations (non-destructive root assessment) were conducted.

4.3.2 Tree evaluation:

- **Health and condition:** Tree health, structure, and condition were evaluated using standardized descriptors (refer to **Appendix A** for details).

4.3.3 Industry Standards:

- **AS 4373-2007:** This Australian Standard provided guidance for recommendations regarding acceptable pruning practices for amenity trees.
- **AS 4970-2025:** This standard informs recommendations related to tree protection on development sites.

4.3.4 Site history:

- Information on historical site conditions was gathered from online resources such as Street View (Google Maps) and Nearmap to supplement the on-site assessment.

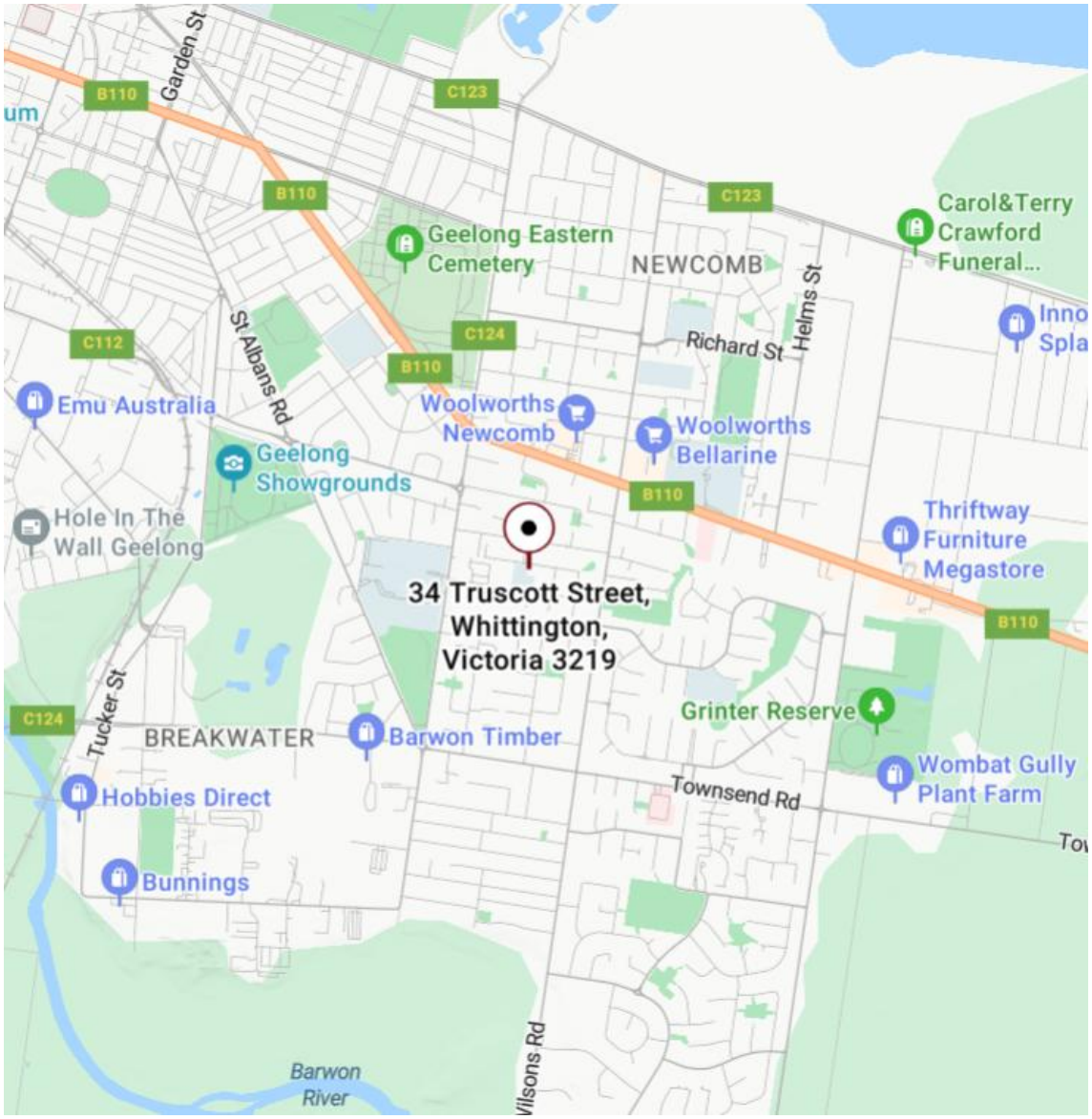
4.3.5 Additional documents:

Architectural plans for the proposed development, prepared by PMDL Architects and dated October 17, 2025, have been provided for review. These plans are included in **Appendix B** of this document for reference.

5 SITE DETAILS

5.1 Site address

The subject site for removal of trees is 34 Truscott street, Whittington. This allotment is contained within the Mackillop Family Services Education Campus at 25-33 Oxford Street, Whittington, VIC, 3219.



6 TREE DETAILS

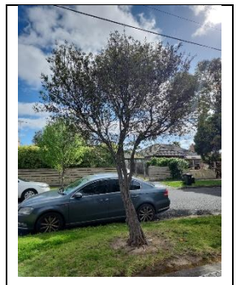
6.1 Indicative tree locations

Tree removal Boundary Canopy Tree
Tree removal Exempt
Retained Tree

6.2 Table of data

6.2.1 Trees within Council owned nature strip:

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
1	Callistemon citrinus	Council tree	NA	4 m	3 m	17 cm	53 cm	28 cm	1.9 m	2.0 m	Poorly attached stem union, 3.1m from boundary	Good	Poor	Mature	Medium



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6.2.2 Trees within 34 Truscott Street, Whittington (subject property):

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
2	Citrus sp.	Clause 52.37	Boundary Canopy Tree	5 m	4 m	20 cm	63 cm	23 cm	1.8 m	2.4 m	Dieback of bark on stems, history of lopping	Fair	Fair	Mature	Short
3	Syzygium smithii	Clause 52.37	Boundary Canopy Tree	7 m	5 m	31 cm	97 cm	45 cm	2.4 m	3.7 m	Poorly attached stem unions	Good	Poor	Mature	Short
4	Liquidambar styraciflua	Nil	Canopy Tree	9 m	8 m	34 cm	107 cm	42 cm	2.3 m	4.1 m		Good	Fair	Mature	Medium
5	Pyrus communis	Nil	Nil	4 m	3 m	32 cm	101 cm	34 cm	2.1 m	3.8 m	Poorly attached stem union	Fair	Poor	Over Mature	Short
6	Eucalyptus gomphocephala	Clause 52.37	Boundary Canopy Tree	10 m	7 m	72 cm	226 cm	66 cm	2.8 m	8.6 m	Dieback on main stem 1.65m from boundary	Good	Poor	Over Mature	Short
7	Pittosporum undulatum	Nil	Environmental Weed	9 m	7 m	34 cm	107 cm	38 cm	2.2 m	4.1 m	Weed species, 4.7m from boundary	Good	Fair	Mature	Short
8	Pittosporum undulatum	Nil	Environmental Weed	8 m	8 m	30 cm	94 cm	43 cm	2.3 m	3.6 m	Weed species, 8.1m from boundary W	Good	Fair	Mature	Short
9	Pittosporum undulatum	Nil	Environmental Weed	6 m	7 m	42 cm	132 cm	64 cm	2.7 m	5.0 m	Weed species, 5m from boundary W	Good	Fair	Mature	Short


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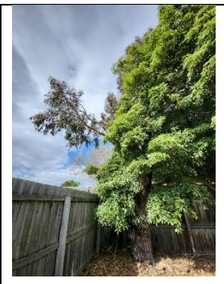
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6.2.3 Trees within 25 Oxford Street, Whittington (MacKillop Family Services):

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
10	Callistemon viminalis	Nil	Nil	4 m	-	9 cm	28 cm	16 cm	1.5 m	2.0 m	Screen planting	Good	Fair	Semi-Mature	Medium
11	Lophostemon confertus	Nil	Canopy Tree	10 m	9 m	40 cm	126 cm	45 cm	2.4 m	4.8 m		Good	Fair	Mature	Medium
12	Prunus cerasifera	Nil	Canopy Tree	5 m	4 m	22 cm	69 cm	37 cm	2.2 m	2.6 m	Poorly attached stem union	Good	Poor	Mature	Short
13	Photinia serratifolia	Clause 52.37	Boundary Canopy Tree	6 m	7 m	33 cm	104 cm	48 cm	2.4 m	4.0 m	Poorly attached stem union	Good	Poor	Mature	Medium
14	Photinia serratifolia	Nil	Canopy Tree	5 m	5 m	20 cm	63 cm	37 cm	2.2 m	2.4 m		Good	Fair	Mature	Medium
15	Prunus x domestica	Nil	Nil	4 m	4 m	15 cm	47 cm	17 cm	1.6 m	2.0 m		Good	Fair	Mature	Medium
16	Pyrus communis	Nil	Nil	5 m	4 m	12 cm	38 cm	16 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
17	Pyrus communis	Nil	Nil	5 m	3 m	14 cm	44 cm	19 cm	1.6 m	2.0 m		Good	Fair	Semi-Mature	Medium
18	Acacia sp.	Nil	Nil	3 m	3 m	8 cm	25 cm	20 cm	1.7 m	2.0 m		Fair	Fair	Semi-Mature	Medium
19	Cotoneaster glaucophyllus	Nil	Environmental Weed	3 m	3 m	8 cm	25 cm	17 cm	1.6 m	2.0 m		Good	Poor	Young	Short

10	11	12	13	14	15	16	17	18	19

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
20	Callistemon viminalis	Clause 52.37	Boundary Canopy Tree	5 m	4 m	25 cm	79 cm	33 cm	2.1 m	3.0 m		Good	Poor	Mature	Medium
21	Callistemon viminalis	Clause 52.37	Boundary Canopy Tree	6 m	5 m	23 cm	72 cm	28 cm	1.9 m	2.8 m	History of stem failure	Fair	Fair	Mature	Short
22	Acacia sp.	Nil	Nil	4 m	4 m	14 cm	44 cm	32 cm	2.1 m	2.0 m		Good	Poor	Mature	Short
23	Prunus x domestica	Nil	Nil	4 m	3 m	11 cm	35 cm	17 cm	1.6 m	2.0 m		Good	Fair	Semi-Mature	Medium
24	Ficus carica	Nil	Nil	4 m	4 m	13 cm	41 cm	15 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
25	Leptospermum laevigatum	Nil	Canopy Tree	7 m	7 m	64 cm	201 cm	69 cm	2.8 m	7.7 m	Tree is actively splitting	Good	Poor	Over Mature	Short
26	Quercus robur	Nil	Canopy Tree	12 m	16 m	74 cm	232 cm	82 cm	3.0 m	8.9 m		Good	Fair	Mature	Long
27	Acacia implexa	Nil	Canopy Tree	7 m	5 m	18 cm	57 cm	25 cm	1.8 m	2.2 m		Good	Fair	Mature	Medium
28	Acacia implexa	Nil	Canopy Tree	7 m	4 m	24 cm	75 cm	28 cm	1.9 m	2.9 m		Good	Fair	Mature	Medium
29	Lophostemon confertus	Nil	Canopy Tree	8 m	4 m	17 cm	53 cm	23 cm	1.8 m	2.0 m		Good	Fair	Semi-Mature	Medium


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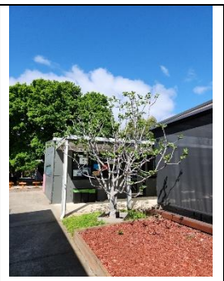
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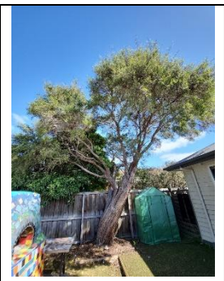
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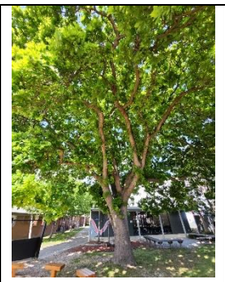
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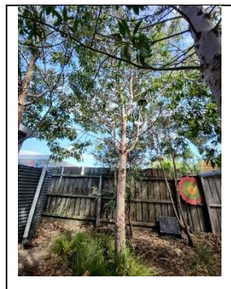
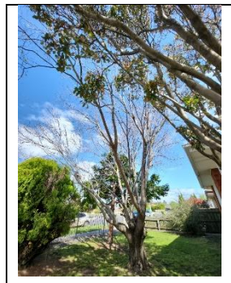
Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
30	Lophostemon confertus	Nil	Nil	7 m	4 m	14 cm	44 cm	19 cm	1.6 m	2.0 m		Good	Fair	Semi-Mature	Medium
31	Lophostemon confertus	Nil	Nil	6 m	3 m	14 cm	44 cm	19 cm	1.6 m	2.0 m		Good	Fair	Semi-Mature	Medium
32	Pyrus calleryana	Nil	Nil	4 m	3 m	9 cm	28 cm	10 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
33	Pyrus calleryana	Nil	Nil	7 m	3 m	14 cm	44 cm	16 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
34	Pyrus calleryana	Nil	Nil	5 m	5 m	14 cm	44 cm	17 cm	1.6 m	2.0 m		Good	Fair	Semi-Mature	Medium
35	Pyrus calleryana	Nil	Canopy Tree	7 m	6 m	19 cm	60 cm	24 cm	1.8 m	2.3 m		Good	Fair	Mature	Medium
36	Pyrus calleryana	Nil	Canopy Tree	7 m	7 m	18 cm	57 cm	24 cm	1.8 m	2.2 m		Good	Fair	Mature	Medium
37	Pyrus calleryana	Nil	Canopy Tree	7 m	7 m	29 cm	91 cm	32 cm	2.1 m	3.5 m	Poorly attached stem union	Good	Poor	Mature	Medium
38	Pyrus calleryana	Nil	Canopy Tree	8 m	8 m	26 cm	82 cm	29 cm	2.0 m	3.1 m		Good	Fair	Mature	Medium
39	Photinia serratifolia	Clause 52.37	Boundary Canopy Tree	7 m	7 m	33 cm	104 cm	36 cm	2.2 m	4.0 m		Good	Fair	Mature	Medium

30	31	32	33	34	35	36	37	38	39
									

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
40	Ulmus glabra 'Lutescens'	Clause 52.37	Boundary Canopy Tree	8 m	7 m	43 cm	135 cm	58 cm	2.6 m	5.2 m		Fair	Fair	Mature	Medium
41	Thuja plicata	Clause 52.37	Boundary Canopy Tree	5 m	5 m	20 cm	63 cm	26 cm	1.9 m	2.4 m		Good	Fair	Semi-Mature	Medium
42	Betula pendula	Nil	Nil	8 m	3 m	16 cm	50 cm	22 cm	1.8 m	2.0 m		Good	Fair	Mature	Short
43	Betula pendula	Clause 52.37	Boundary Canopy Tree	10 m	5 m	19 cm	60 cm	25 cm	1.8 m	2.3 m		Good	Fair	Mature	Short
44	Betula pendula	Nil	Nil	7 m	3 m	10 cm	31 cm	14 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
45	Betula pendula	Nil	Nil	7 m	4 m	11 cm	35 cm	15 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
46	Betula pendula	Nil	Nil	5 m	3 m	9 cm	28 cm	14 cm	1.5 m	2.0 m		Good	Fair	Semi-Mature	Medium
47	Betula pendula	Nil	Nil	7 m	4 m	13 cm	41 cm	20 cm	1.7 m	2.0 m		Good	Fair	Mature	Short
48	Eucalyptus leucoxylon	Nil	Canopy Tree	6 m	5 m	19 cm	60 cm	24 cm	1.8 m	2.3 m		Good	Fair	Mature	Medium
49	Eucalyptus leucoxylon	Nil	Canopy Tree	11 m	7 m	29 cm	91 cm	37 cm	2.2 m	3.5 m		Good	Fair	Mature	Medium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Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
50	Eucalyptus leucoxylon	Nil	Canopy Tree	9 m	8 m	29 cm	91 cm	40 cm	2.3 m	3.5 m		Good	Fair	Mature	Medium
51	Eucalyptus leucoxylon	Nil	Canopy Tree	8 m	5 m	20 cm	63 cm	23 cm	1.8 m	2.4 m		Good	Fair	Mature	Medium
52	Eucalyptus leucoxylon	Nil	Canopy Tree	6 m	5 m	18 cm	57 cm	20 cm	1.7 m	2.2 m		Good	Fair	Mature	Medium
53	Eucalyptus leucoxylon	Nil	Canopy Tree	8 m	8 m	26 cm	82 cm	33 cm	2.1 m	3.1 m		Good	Fair	Mature	Medium
54	Callistemon viminalis	Nil	Canopy Tree	14 m	10 m	48 cm	151 cm	65 cm	2.8 m	5.8 m		Good	Fair	Mature	Medium
55	Eucalyptus leucoxylon	Nil	Canopy Tree	7 m	8 m	29 cm	91 cm	36 cm	2.2 m	3.5 m		Good	Fair	Mature	Medium
56	Eucalyptus leucoxylon	Nil	Canopy Tree	6 m	7 m	28 cm	88 cm	29 cm	2.0 m	3.4 m		Good	Fair	Mature	Medium
57	Eucalyptus leucoxylon	Nil	Canopy Tree	12 m	5 m	24 cm	75 cm	30 cm	2.0 m	2.9 m		Good	Fair	Mature	Medium
58	Eucalyptus leucoxylon	Nil	Canopy Tree	6 m	10 m	22 cm	69 cm	25 cm	1.8 m	2.6 m	History of lopping	Good	Poor	Mature	Medium
59	Eucalyptus leucoxylon	Nil	Canopy Tree	10 m	7 m	26 cm	82 cm	31 cm	2.0 m	3.1 m		Good	Fair	Mature	Medium

									
50	51	52	53	54	55	56	57	58	59

Num	ID	Vegetation controls	Vegetation type	Height	Span	Stem diameter @ 1.4 m	Stem circumference @ 1.4 m	Stem diameter @ base	Structural Root Zone (radius)	Tree Protection Zone (radius)	Observations	Health	Structure	Age	Useful Life Expectancy
60	Eucalyptus nicholii	Nil	Canopy Tree	14 m	16 m	61 cm	192 cm	73 cm	2.9 m	7.3 m		Good	Fair	Mature	Medium
61	Eucalyptus radiata	Nil	Canopy Tree	12 m	8 m	44 cm	138 cm	53 cm	2.5 m	5.3 m		Good	Fair	Mature	Medium
62	Lagerstroemia indica	Nil	Nil	4 m	-	8 cm	25 cm	14 cm	1.5 m	2.0 m	Row of trees	Good	Fair	Semi-Mature	Medium
63	Callistemon viminalis	Nil	Nil	4 m	-	18 cm	57 cm	22 cm	1.8 m	2.2 m	Row of trees	Good	Fair	Mature	Medium
64	Callistemon viminalis	Nil	Nil	4 m	-	19 cm	60 cm	24 cm	1.8 m	2.3 m		Good	Fair	Mature	Medium
65	Platanus x acerifolia	Nil	Canopy Tree	14 m	10 m	68 cm	214 cm	79 cm	3.0 m	8.2 m		Good	Fair	Mature	Medium


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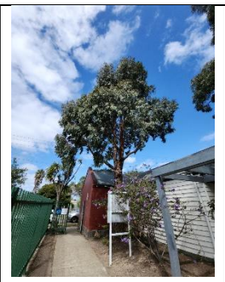
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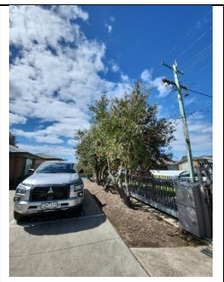
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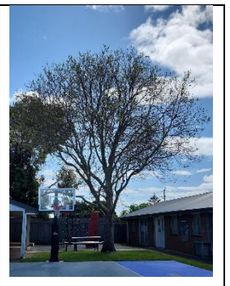
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7 SITE CONTEXT

MacKillop Family Services is a highly regarded, non-profit organisation dedicated to supporting vulnerable children, young people, and their families throughout Australia, continuing the work built on the enduring legacies of the Sisters of Mercy, the Christian Brothers, and the Sisters of St Joseph.

In Whittington, MacKillop's key presence is the MacKillop Specialist School (Geelong Campus) located at 25 Oxford Street. This institution provides trauma-informed, individualized education programs (from Foundation through to the Victorian Pathways Certificate) for students whose complex needs, often stemming from disability, trauma, or social and emotional challenges, cannot be met in mainstream settings.

To expand their critical mission, MacKillop Family Services acquired the adjacent property at 34 Truscott Street. The purpose of the current development application—which this Arboricultural Impact Assessment (AIA) supports—is to facilitate this essential growth. Crucially, the scope of works requires the complete demolition of the existing dwelling and the removal of the established garden at 34 Truscott Street to accommodate the new construction footprint. Specifically, the expansion involves the construction of two new educational buildings (one on the Oxford Street site and one on the newly acquired Truscott Street site) and the creation of a primary playground area. This development ensures the school can continue to expand its capacity to serve the community's most vulnerable students (see **Appendix B** for development plans).

8 VEGETATION CONTROLS

8.1 Trees within Council nature strip

The trees situated within the nature strip at 34 Truscott Street are under the exclusive ownership and management of the City of Greater Geelong Council. Consequently, these trees are to be considered for preservation and protection throughout all phases of the proposed development. Any intervention involving the removal of, or significant impact to, these trees must receive explicit approval from the City of Greater Geelong Council.

8.1.1 List of Council owned trees:

The following trees are located within the Council nature strip:

Num	ID	Vegetation controls	Height	Span	Stem circumference @ 1.4 m
1	Callistemon citrinus	Council tree	4 m	3 m	53 cm

8.2 Subject property

A review of the governing planning scheme and local laws confirms that the combined site is subject to key planning overlays and clauses, which dictate the management of existing vegetation:

- **Clause 52.37 (Canopy Trees):** Both 25 Oxford Street, Whittington and 34 Truscott Street, Whittington fall under the provisions of this clause due to their specific planning zone. This clause mandates controls over the removal, destruction, or lopping of canopy trees across both parcels.
- **Clause 52.17 (Native Vegetation):** The 25 Oxford Street site is additionally subject to this clause, specifically triggered by its land size and location, which imposes requirements for the protection and potential offsetting of native vegetation proposed for removal.

8.3 Clause 52.37 (Canopy Trees)

All proposed tree works on the subject property, including removal and pruning, are governed by particular provisions and potential exemptions as outlined in Clause 52.37 (Canopy Trees) of the relevant planning controls. This section details the criteria that must be met to ensure compliance.

8.3.1 Meaning of terms:

In clause 52.37:

canopy tree means a tree that has:

– a height of more than 5 metres above ground level; and

– a trunk circumference of more than 0.5 metres, measured at 1.4 metres above ground level;

and

– a canopy diameter of at least 4 metres;

boundary canopy tree means a canopy tree if any part of its trunk is within:

– 6 metres of the narrowest street frontage of a lot; or

– 4.5 metres of the rear boundary of a lot;

new canopy tree means a canopy tree proposed to be planted. It must be a species and type that will, at maturity, have:

– an expected height of at least 6 metres above ground level; and

– an expected canopy diameter of at least 4 metres.

8.3.2 Permit requirement:

A permit is required to remove, destroy or lop a canopy tree in the Mixed Use Zone, Township Zone, Residential Growth Zone, General Residential Zone, Neighbourhood Residential Zone, and Housing Choice and Transport Zone.

This does not apply:

If the table of exemptions in clause 52.37-8 specifically states that a permit is not required. To the removal, destruction or lopping of a canopy tree (other than a boundary canopy tree) identified for assessment in an application to which clause 54, 55, 57 or 58 applies and the tree is not removed, destroyed or lopped until the permit is issued.

To the removal, destruction or lopping of a canopy tree (other than a boundary canopy tree) if the site is developed with an existing dwelling.

8.4 List of "Boundary Canopy Trees"

8.4.1 34 Truscott Street, Whittington "Boundary Canopy Trees":

Num	ID	Vegetation controls	Vegetation class	Permit required	Height	Span	Stem circumference @ 1.4 m
2	Citrus sp.	Clause 52.37	Boundary Canopy Tree	Yes	5 m	4 m	63 cm
3	Syzygium smithii	Clause 52.37	Boundary Canopy Tree	Yes	7 m	5 m	97 cm
4	Liquidambar styraciflua	Nil	Canopy Tree	No	9 m	8 m	107 cm
6	Eucalyptus gomphocephala	Clause 52.37	Boundary Canopy Tree	Yes	10 m	7 m	226 cm

8.4.2 25 Oxford Street, Whittington "Boundary Canopy Trees":

Num	ID	Vegetation controls	Vegetation class	Permit required	Height	Span	Stem circumference @ 1.4 m
11	Lophostemon confertus	Nil	Canopy Tree	No	10 m	9 m	126 cm
12	Prunus cerasifera	Nil	Canopy Tree	No	5 m	4 m	69 cm
13	Photinia serratifolia	Clause 52.37	Boundary Canopy Tree	Yes	6 m	7 m	104 cm
14	Photinia serratifolia	Nil	Canopy Tree	No	5 m	5 m	63 cm
20	Callistemon viminalis	Clause 52.37	Boundary Canopy Tree	Yes	5 m	4 m	79 cm
21	Callistemon viminalis	Clause 52.37	Boundary Canopy Tree	Yes	6 m	5 m	72 cm
25	Leptospermum laevigatum	Nil	Canopy Tree	No	7 m	7 m	201 cm
26	Quercus robur	Nil	Canopy Tree	No	12 m	16 m	232 cm
27	Acacia implexa	Nil	Canopy Tree	No	7 m	5 m	57 cm
28	Acacia implexa	Nil	Canopy Tree	No	7 m	4 m	75 cm
29	Lophostemon confertus	Nil	Canopy Tree	No	8 m	4 m	53 cm

Num	ID	Vegetation controls	Vegetation class	Permit required	Height	Span	Stem circumference @ 1.4 m
35	Pyrus calleryana	Nil	Canopy Tree	No	7 m	6 m	60 cm
36	Pyrus calleryana	Nil	Canopy Tree	No	7 m	7 m	57 cm
37	Pyrus calleryana	Nil	Canopy Tree	No	7 m	7 m	91 cm
38	Pyrus calleryana	Nil	Canopy Tree	No	8 m	8 m	82 cm
39	Photinia serratifolia	Clause 52.37	Boundary Canopy Tree	Yes	7 m	7 m	104 cm
40	Ulmus glabra 'Lutescens'	Clause 52.37	Boundary Canopy Tree	Yes	8 m	7 m	135 cm
41	Thuja plicata	Clause 52.37	Boundary Canopy Tree	Yes	5 m	5 m	63 cm
43	Betula pendula	Clause 52.37	Boundary Canopy Tree	Yes	10 m	5 m	60 cm
48	Eucalyptus leucoxylon	Nil	Canopy Tree	No	6 m	5 m	60 cm
49	Eucalyptus leucoxylon	Nil	Canopy Tree	No	11 m	7 m	91 cm
50	Eucalyptus leucoxylon	Nil	Canopy Tree	No	9 m	8 m	91 cm
51	Eucalyptus leucoxylon	Nil	Canopy Tree	No	8 m	5 m	63 cm
52	Eucalyptus leucoxylon	Nil	Canopy Tree	No	6 m	5 m	57 cm
53	Eucalyptus leucoxylon	Nil	Canopy Tree	No	8 m	8 m	82 cm
54	Callistemon viminalis	Nil	Canopy Tree	No	14 m	10 m	151 cm
55	Eucalyptus leucoxylon	Nil	Canopy Tree	No	7 m	8 m	91 cm
56	Eucalyptus leucoxylon	Nil	Canopy Tree	No	6 m	7 m	88 cm
57	Eucalyptus leucoxylon	Nil	Canopy Tree	No	12 m	5 m	75 cm
58	Eucalyptus leucoxylon	Nil	Canopy Tree	No	6 m	10 m	69 cm
59	Eucalyptus leucoxylon	Nil	Canopy Tree	No	10 m	7 m	82 cm
60	Eucalyptus nicholii	Nil	Canopy Tree	No	14 m	16 m	192 cm

Num	ID	Vegetation controls	Vegetation class	Permit required	Height	Span	Stem circumference @ 1.4 m
61	Eucalyptus radiata	Nil	Canopy Tree	No	12 m	8 m	138 cm
65	Platanus x acerifolia	Nil	Canopy Tree	No	14 m	10 m	214 cm

8.5 Canopy tree requirement

The number of canopy trees on the site should meet the minimum canopy tree requirements specified in Table 1.

If the site has an area of more than 1000 square metres and the existing total canopy cover within the site is more than 20 per cent of the site area, the canopy trees on the site should achieve a total canopy cover within the site that is equal to at least 20 per cent of the site area plus 50 per cent of the area of existing canopy cover that exceeds 20 per cent.

Example:

If the site area is 2000 square metres and the existing total canopy cover within the site is 30 per cent of the site area, the required total canopy cover is 25 per cent (20% + [(0.5 x (30%-20%)] = 25%).

The minimum canopy tree requirement may be met with either an existing canopy tree, by planting a new canopy tree, or a combination of both.

A new canopy tree should be planted in:

- a minimum deep soil area of at least 12 square metres with a minimum dimension of at least 2.5 metres; or
- in a planter with a minimum volume of 12 cubic metres with a minimum depth of at least 0.8 metres of planter soil; or
- if the proposed canopy tree has an expected canopy diameter of more than 8 metres at maturity, deep soil area or a planter area that is to the satisfaction of the responsible authority.

Table 1 - Minimum canopy tree requirement

Site area	Canopy tree requirement
100 square metres or less	1 tree
101 sqm to 200 sqm	2 trees
201 sqm to 500 sqm	3 trees
501 sqm to 700 sqm	4 trees
701 sqm to 1000 sqm	6 trees
Above 10001 sqm	A total canopy tree cover within the site that is equal to at least 20 per cent of the area.

8.6 Site canopy coverage

Canopy coverage must be demonstrated within the landscape plans submitted for the site. Replacement trees must be chosen specifically for their long-term potential to establish a full canopy, and their species selection is subject to the Responsible Authority's final approval.

The site currently has a robust canopy coverage of approximately 27.9%. The necessary tree removals for the site development will result in a canopy loss of approximately 2.24%.

To maintain compliance with Clause 52.37, the submitted landscape plans must detail canopy tree plantings capable of replacing 1.12% of the site area. This replacement figure represents half the area of the canopy loss, ensuring the overall site coverage meets the minimum mandated threshold (see **Appendix C** for existing tree canopy).

9 TREE REMOVAL

9.1 Subject property trees

To accommodate the proposed new building footprints and necessary site infrastructure, the development plans explicitly necessitate the removal of the following trees. It is critical to note that all proposed tree removals are strictly confined to 34 Truscott Street, Whittington parcel.

9.1.1 List of tree removals (34 Truscott Street, Whittington):

Num	ID	Vegetation controls	Height	Span	Stem circumference @ 1.4 m
2	Citrus sp.	Clause 52.37	5 m	4 m	63 cm
3	Syzygium smithii	Clause 52.37	7 m	5 m	97 cm
4	Liquidambar styraciflua	Nil	9 m	8 m	107 cm
5	Pyrus communis	Nil	4 m	3 m	101 cm
6	Eucalyptus gomphocephala	Clause 52.37	10 m	7 m	226 cm
7	Pittosporum undulatum	Nil	9 m	7 m	107 cm
8	Pittosporum undulatum	Nil	8 m	8 m	94 cm
9	Pittosporum undulatum	Nil	6 m	7 m	132 cm

9.2 Justification for removal of Clause 52.37 (Canopy Trees)

9.2.1 Tree 2: Ornamental Citrus:

This specimen is an ornamental Citrus exhibiting clear signs of stem dieback, which is a significant indicator of a decline in overall tree health. The observed dieback suggests a structural fault or underlying vascular issue, compromising the tree's integrity and long-term viability. Given this compromised state, the tree has a short Useful Life Expectancy (ULE) within the landscape, particularly in a high amenity setting where structural reliability is paramount. Remedial action is unlikely to restore its full health or structural soundness, suggesting it is a candidate for eventual removal.

Figure 1 - Visible dieback on the stems of Tree 2

9.2.2 Tree 3: Lillypilly (*Syzygium* species):

The Lillypilly displays a growth habit characteristic of coppice regrowth originating from an old, established tree stump or large pruning wound. This form has resulted in a collection of multiple main stems that are poorly attached at the basal junction. Critical to the assessment is the presence of included bark within these tight unions. Included bark prevents the formation of strong woody connections, instead creating a structurally weak point that significantly increases the risk of catastrophic failure and stem shed, especially under wind load. Consequently, the tree's structural defects and high failure potential necessitate a classification of short Useful Life Expectancy (ULE) within the landscape.

Figure 2 - Poorly attached stem unions of Tree 3

9.2.3 Tree 6: Tuart (Eucalyptus gomphocephala):

This Tuart (*Eucalyptus gomphocephala*), located within the backyard, exhibits suppressed growth as a direct result of competition from the adjacent, more dominant *Pittosporum* specimens. Arboricultural assessment revealed notable dieback on the main stem, indicating a clear decline in the tree's physiological health and a compromised structural system. While removal of the competing adjacent trees would alleviate suppression, this action would simultaneously expose the *Eucalyptus* to new environmental stressors, including increased wind exposure. Due to its already compromised structure, poor form, and declining health, retaining this specimen would pose an unacceptable and increased failure risk. Considering the site's proposal for development into a children's playground, the tree's compromised condition renders it unsuitable for retention in a high-use public area.

Figure 3 - Dieback on the stem of Tree 6

10 TREE PROTECTION

10.1 Impact of development on trees

The integration of living trees within development projects requires careful planning and execution due to their intrinsic biological complexity and vulnerability. Trees are intricate organisms that depend on specific environmental conditions for healthy growth and are highly susceptible to stress, damage, and irreversible injury from construction activities. The subterranean root system, often extending far beyond the canopy dripline, is particularly sensitive to disturbance, and damage sustained during development can lead to long-term decline or even tree mortality. Therefore, the implementation of robust preventative measures is paramount for successful tree retention.

Effective tree protection must be considered and applied throughout every stage of the development process, from initial conceptualization to post-construction. Early identification and comprehensive assessment of valuable trees during the preliminary planning phases are crucial. This proactive approach allows for informed decisions regarding tree retention and enables the development design to seamlessly integrate existing vegetation, optimizing site utilization in a tree-sensitive manner. By understanding the extensive nature of tree root systems

and canopy spreads, potential conflicts can be identified and mitigated before they become problematic, ensuring minimal negative impact on trees designated for preservation.

10.2 Structural Root Zone (SRZ)

The Structural Root Zone (SRZ) is a fundamental component of the overall Tree Protection Zone, representing the essential area required for a tree's structural stability and anchorage. It is typically modelled as a hypothetical radius around the base of the tree where the majority of critical structural roots are expected to be found. Any proposed impact or encroachment within the SRZ is considered a major disturbance and necessitates rigorous additional investigation by a qualified arborist, often involving non-destructive excavation techniques. The removal or significant severance of tree roots within the SRZ is rarely permissible due to the direct threat it poses to the tree's stability and long-term survival. It is important to note that environmental factors, such as soil type, topography, and previous site disturbance, can significantly influence the actual establishment and distribution of structural roots. The SRZ radius is also measured from the centre of the tree stem at ground level.

10.3 Notional Root Zone

The Notional Root Zone (NRZ) serves as the initial calculation for establishing a tree's critical Tree Protection Zone (TPZ). It provides a preliminary estimate of the minimum area required to support the tree's root system, based on its trunk size.

The radius of the NRZ is determined using a straightforward calculation:

Radius of the NRZ = Stem Diameter @ 1.4m × 12

Here, the stem diameter is measured at a standard height of 1.4 meters above ground level. This measurement point is commonly used in arboriculture for consistency.

The calculated NRZ radius is measured outwards from the true centre of the tree's stem at ground level.

10.3.1 Important constraints for NRZ calculation:

To ensure realistic and practical protection zones, the calculated NRZ radius is subject to specific minimum and maximum limits:

- The NRZ radius shall not be less than 2 meters. This minimum ensures that even small trees receive a basic level of root protection.

- The NRZ radius shall not be greater than 15 meters. This maximum acknowledges that root systems, while extensive, have practical limits, and an overly large protection zone may not always be warranted or feasible in developed areas.

The NRZ is a foundational element, acting as the starting point for determining the more comprehensive Tree Protection Zone (TPZ), which often requires further refinement based on specific site conditions and proposed impacts.

10.4 Tree Protection Zone

Establishing and maintaining a Tree Protection Zone (TPZ) is the most important part of protecting trees during the onsite stages of work (e.g. site establishment, demolition, construction). The TPZ is the zone determined by the project arborist as set out below.

10.4.1 Determining a Tree Protection Zone:

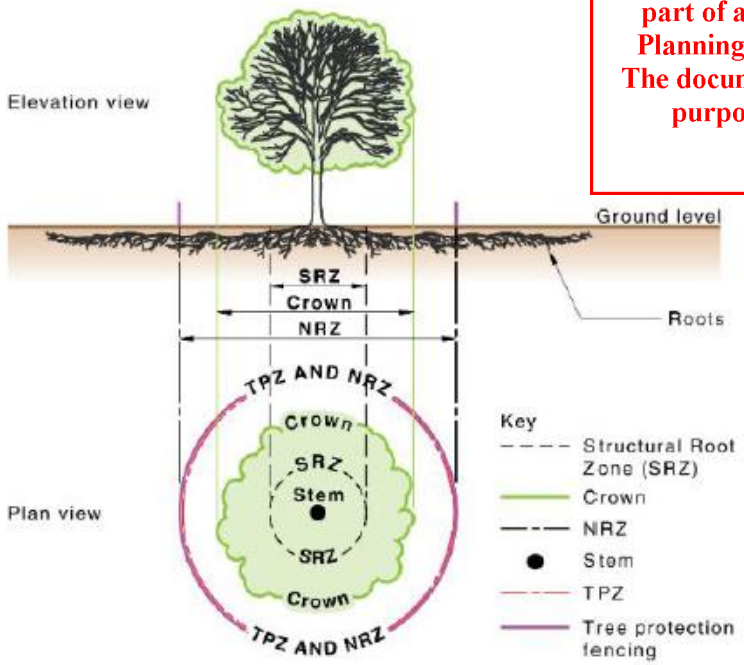
The Notional Root Zone is the starting point for determining the Tree Protection Zone. The TPZ should be determined using the considerations and encroachments as follows:

(a) Location and distribution of the roots.
(b) Potential loss of root mass resulting from encroachment (number of roots and diameter of roots).
(c) Tree species and tolerance to root disturbance.
(d) If the work will result in temporary (e.g. service trench) or permanent (e.g. basement car park loss of available soil volume.
(e) Age, health, current size and projected size of the tree.
(f) Presence of other trees with overlapping NRZ or grafted roots.
(g) Proposed staging and timing of excavation or root cutting.
(h) Proposed maintenance and tree care activities.
(i) Lean and stability of the tree.
(j) Soil characteristics and volume, topography and drainage.
(k) Presence of existing or past structures, obstacles affecting root growth or recent encroachments.
(l) Proposed construction measures that reduce the impact on trees.
(m) Whether a root investigation is required. The location and distribution of the roots should be determined through minimal destructive investigation methods (pneumatic, hydraulic, hand

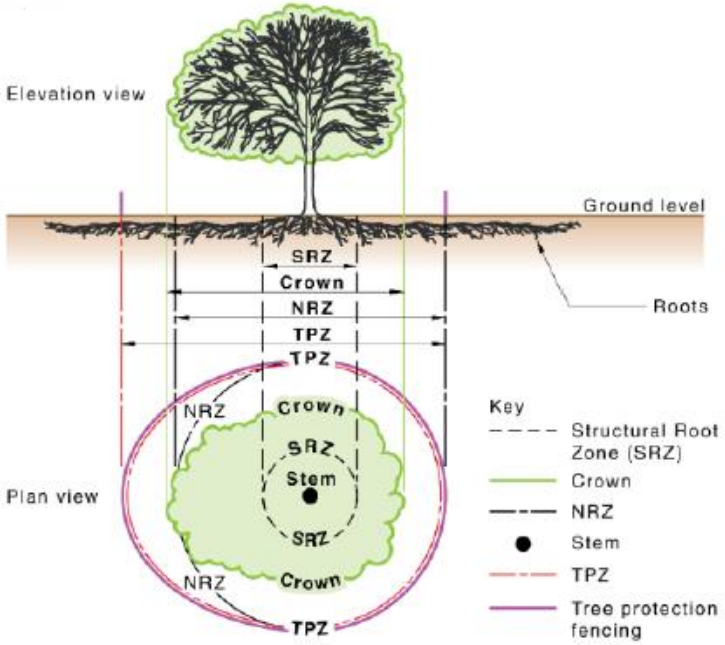
digging or ground penetrating radar). Photographs should be taken and were needed to address geospatial issues; a root map should be prepared.

NOTE 1 Construction measures such as pier and beam, suspended slabs, cantilevered building sections and screw piles can reduce the impact of the encroachment.

NOTE 2 Root damage should be minimised during this process. The roots should only be exposed for as long as required to meet the purposes of the investigation.



(a) No development within NRZ



(b) No development within NRZ but with crown protection required

11 MANAGING PROPOSED ENCROACHMENTS

11.1 Tree Protection Zone encroachments

The management of development within Tree Protection Zones (TPZs) requires a balanced approach that respects both development needs and the imperative of tree preservation. Australian Standard 4970-2025 (Protection of trees on development sites) provides a robust framework for this balance.

11.2 Balancing development needs with tree preservation

Australian Standard 4970-2025 acknowledges that some level of encroachment into a TPZ may be unavoidable in urban development. It generally considers minor encroachments (defined as impacting less than 10% of the total TPZ area and occurring outside the critical Structural Root Zone) as potentially acceptable, provided appropriate mitigation strategies are employed. However, the overarching principle remains to always minimize any direct or indirect impact on trees. The aim is to integrate the built environment with the natural landscape in a way that allows both to thrive.

11.3 Benefits of tree retention

Retaining and protecting trees within development sites offers a multitude of immediate and long-term benefits that significantly enhance the project's value and sustainability:

- **Enhanced aesthetics and amenity:** Trees contribute significantly to the visual appeal of development, softening hardscapes, improving streetscapes, and creating a more pleasant environment for occupants and the broader community.
- **Environmental sustainability:** They provide crucial ecological services such as natural shade (reducing urban heat island effect and energy consumption for cooling), effective stormwater management (reducing runoff and erosion), air quality improvement (filtering pollutants), and carbon sequestration.
- **Increased property value:** Mature trees are consistently linked to higher property values and faster sales.
- **Biodiversity support:** Trees provide vital habitat, food, and shelter for various flora and fauna, contributing to local biodiversity.

- **Long-term value and resilience:** While trees may take decades to reach maturity, their long-term value can be rapidly diminished or lost due to a lack of understanding of their specific needs, particularly concerning the unseen and vulnerable root systems. Proactive, early intervention and consistent protection measures throughout the development lifecycle are therefore absolutely vital for ensuring their successful long-term survival and continued contribution to the site.

11.4 Key points for successful tree protection

Achieving successful tree protection in development hinges on several critical practices:

- **Early identification and planning:** Identifying valuable trees during the initial stages of site assessment and development planning is paramount. This allows project teams to make informed decisions about their retention, potential impacts, and necessary design adjustments, thereby minimizing the likelihood of encountering conflicts with unsuitable trees later in the project lifecycle.
- **Minimal impact design:** The development plan should be meticulously designed to actively minimize any negative impacts on trees designated for preservation. This includes thoughtful consideration of building footprints, underground services, access routes, and construction methodologies to avoid or reduce encroachment into TPZs and SRZs.
- **Consistent monitoring and management:** Effective tree protection requires continuous monitoring by qualified arborists and strict adherence to established tree protection plans throughout all demolition and construction phases.

11.5 Minor encroachments

Encroachments of less than 10% are minor and acceptable in accordance with Australian Standard 4970-2025 (Protection of trees on development sites).

11.5.1 Table of minor encroachments:

The following trees will experience a minor encroachment:

Num	ID	Structural Root Zone (radius)	Tree Protection Zone (radius)	Encroachment into Tree Protection Zone
1	Callistemon citrinus	1.9 m	2.0 m	0%
10	Callistemon viminalis	1.5 m	2.0 m	0%
11	Lophostemon confertus	2.4 m	4.8 m	0%

Num	ID	Structural Root Zone (radius)	Tree Protection Zone (radius)	Encroachment into Tree Protection Zone
12	Prunus cerasifera	2.2 m	2.6 m	0%
13	Photinia serratifolia	2.4 m	4.0 m	0%
14	Photinia serratifolia	2.2 m	2.4 m	0%
15	Prunus x domestica	1.6 m	2.0 m	0%
16	Pyrus communis	1.5 m	2.0 m	0%
17	Pyrus communis	1.6 m	2.0 m	0%
18	Acacia sp.	1.7 m	2.0 m	0%
19	Cotoneaster glaucophyllus	1.6 m	2.0 m	0%
20	Callistemon viminalis	2.1 m	3.0 m	0%
21	Callistemon viminalis	1.9 m	2.8 m	0%
22	Acacia sp.	2.1 m	2.0 m	0%
23	Prunus x domestica	1.6 m	2.0 m	0%
24	Ficus carica	1.5 m	2.0 m	0%
25	Leptospermum laevigatum	2.8 m	7.7 m	0%
26	Quercus robur	3.0 m	8.9 m	0%
27	Acacia implexa	1.8 m	2.2 m	0%
28	Acacia implexa	1.9 m	2.9 m	0%
29	Lophostemon confertus	1.8 m	2.0 m	0%
30	Lophostemon confertus	1.6 m	2.0 m	0%
31	Lophostemon confertus	1.6 m	2.0 m	0%
32	Pyrus calleryana	1.5 m	2.0 m	0%
33	Pyrus calleryana	1.5 m	2.0 m	0%
34	Pyrus calleryana	1.6 m	2.0 m	0%
35	Pyrus calleryana	1.8 m	2.3 m	0%
36	Pyrus calleryana	1.8 m	2.2 m	0%
37	Pyrus calleryana	2.1 m	3.5 m	0%
38	Pyrus calleryana	2.0 m	3.1 m	0%
39	Photinia serratifolia	2.2 m	4.0 m	0%
40	Ulmus glabra 'Lutescens'	2.6 m	5.2 m	0%
41	Thuja plicata	1.9 m	2.4 m	0%
42	Betula pendula	1.8 m	2.0 m	0%
43	Betula pendula	1.8 m	2.3 m	0%
44	Betula pendula	1.5 m	2.0 m	0%
45	Betula pendula	1.5 m	2.0 m	0%
46	Betula pendula	1.5 m	2.0 m	0%
47	Betula pendula	1.7 m	2.0 m	0%
48	Eucalyptus leucoxylon	1.8 m	2.3 m	0%
49	Eucalyptus leucoxylon	2.2 m	3.5 m	0%
50	Eucalyptus leucoxylon	2.3 m	3.5 m	0%
51	Eucalyptus leucoxylon	1.8 m	2.4 m	0%
52	Eucalyptus leucoxylon	1.7 m	2.2 m	0%
53	Eucalyptus leucoxylon	2.1 m	3.1 m	0%
54	Callistemon viminalis	2.8 m	5.8 m	5.5%

Num	ID	Structural Root Zone (radius)	Tree Protection Zone (radius)	Encroachment into Tree Protection Zone
55	Eucalyptus leucoxylon	2.2 m	3.5 m	0%
56	Eucalyptus leucoxylon	2.0 m	3.4 m	0%
57	Eucalyptus leucoxylon	2.0 m	2.9 m	0%
58	Eucalyptus leucoxylon	1.8 m	2.6 m	0%
59	Eucalyptus leucoxylon	2.0 m	3.1 m	0%
60	Eucalyptus nicholii	2.9 m	7.3 m	0%
61	Eucalyptus radiata	2.5 m	5.3 m	0%
62	Lagerstroemia indica	1.5 m	2.0 m	0%
63	Callistemon viminalis	1.8 m	2.2 m	0%
64	Callistemon viminalis	1.8 m	2.3 m	0%

These trees experience encroachments of less than 10% within their Tree Protection Zones, which is considered a minor impact according to Australian Standard 4970-2025 (Protection of trees on development sites). Therefore, further justification is deemed unnecessary.

11.6 Moderate encroachments

When development encroaches on a tree's Tree Protection Zone (TPZ), the severity of that impact is carefully assessed. According to Australian Standard 4970-2025 (Protection of trees on development sites), an encroachment is considered moderate if it falls between 10% and 20% of the TPZ's area and remains outside the Structural Root Zone (SRZ).

While moderate, such an encroachment requires a thorough review to confirm the tree's continued viability. This assessment must consider a range of crucial factors:

- **Root characteristics:** This includes the exact location and distribution of roots, as well as the potential loss of root mass (both in number and diameter) resulting from the proposed works.
- **Tree biology:** Understanding the specific tree species and its known tolerance to root disturbance is essential. The tree's age, current health, size, and projected growth also play a significant role.
- **Site context:** Factors like existing soil characteristics, volume, topography, and drainage, along with the presence of other trees with overlapping root zones, must be evaluated. Any existing structures, obstacles, or recent encroachments that might have already affected root growth are also important considerations.

- **Work methodology & impact:** The proposed staging and timing of any excavation or root cutting are critical. It's important to determine if the works will result in a temporary (e.g., a service trench) or permanent (e.g., a basement carpark) loss of available soil volume.
- **Proposed mitigation:** A review of planned tree maintenance and care activities, as well as specific construction measures designed to reduce impact, is vital. For instance, using tree-sensitive footing technologies like pier and beam, suspended slabs, cantilevered building sections, or screw piles can significantly minimize encroachment impact.

To accurately determine root location and distribution, minimally destructive investigation methods may be required. These can include pneumatic or hydraulic excavation, hand digging, or ground-penetrating radar.

Ultimately, minimizing encroachment can be achieved through implementing suitable design measures and construction controls as part of a comprehensive Tree Protection Management Plan. To prevent a net loss of vital soil area and volume, an equivalent area to the encroachment should generally be incorporated into the Tree Protection Zone elsewhere, unless the project arborist can explicitly demonstrate the tree's viability without such compensation.

11.6.1 Table of moderate encroachments:

Num	ID	Structural Root Zone (radius)	Tree Protection Zone (radius)	Encroachment into Tree Protection Zone
65	Platanus x acerifolia	3.0 m	8.2 m	10.1%

11.7 Strategies for managing encroachments

The proposed development involves an encroachment into the Tree Protection Zone (TPZ) of Tree 65 that registers at a level slightly exceeding the threshold for a minor impact (0.1% greater). As such, this impact is formally classified as moderate according to the criteria set forth in Australian Standard 4970-2025 (Protection of trees on development sites).

This moderate classification does not necessarily necessitate the removal of the tree. Instead, the impact can be successfully downgraded to minor through the rigorous implementation of a comprehensive set of mitigating strategies throughout the planning and construction phases.

11.7.1 Recommended mitigation measures:

To ensure the long-term health, condition, and stability of Tree 65 are preserved, the following measures are to be implemented, strictly adhering to AS 4970-2025 guidelines:

1. **Strict tree protection fencing:** Robust, compliant Tree Protection Zone (TPZ) fencing must be established and maintained *prior* to any site works commencing. This fencing will act as a physical barrier to prevent unauthorized access, vehicle movement, material storage, and machinery impacts within the TPZ.

2. **Strategic root management:** Where root systems are encountered, all excavation within the TPZ must be carried out using non-destructive methods, such as hand-digging or air-spading (Air Knife/Air-Vac). Any roots encountered greater than in diameter should be retained where possible or pruned cleanly by a qualified arborist if unavoidable.

3. **Hydro-management (Pre, during, and post-works):** A dedicated watering regime must be implemented. This includes deep-root zone irrigation of Tree 65 before, continuously during, and for a specified period after the construction works. This is essential for maintaining root function and reducing physiological stress caused by root disturbance.

4. **Increasing the TPZ area (TPZ adjustment):** The mitigation plan includes contiguous increasing of the Tree Protection Zone in areas adjacent to the development footprint. This compensatory measure ensures that the overall volume of protected soil and root area is maintained or enhanced, offsetting the impact of the encroachment.

11.8 Species resilience and justification

The effectiveness of these strategies is significantly bolstered by the inherent hardiness of the *Platanus* species (Plane Tree). Plane Trees are widely known within urban arboriculture for their remarkable tolerance to significant root impacts and disturbed soil environments. This robust nature, coupled with the mandatory implementation of the above, will collectively minimize the impact on the tree's health and stability, ensuring its successful long-term retention within the landscape.

12 FINDINGS

The proposed development, intended to facilitate the crucial expansion of MacKillop Specialist School and its trauma-informed educational programs for vulnerable students, necessitates an arborescent strategy that balances essential construction requirements with mandated vegetation protection controls.

The Arboricultural Impact Assessment (AIA) confirms that the development scope requires the removal of nine trees from the newly acquired 34 Truscott Street, Whittington site to accommodate the new educational buildings and primary playground. Critically, three of these specimens (Trees 2, 3, and 6) are classified as 'Boundary Canopy Trees' under Clause 52.37, but their removal is justified on arboricultural grounds due to clear structural faults, significant dieback, and low Useful Life Expectancy (ULE), rendering them unsuitable for retention in a high-amenity area, particularly a children's playground.

12.1 Key compliance and mitigation

- **Council-owned trees:** The sole Council-owned tree (*Callistemon citrinus*, Tree 1) and all other trees on the 25 Oxford Street parcel designated for retention will experience minor or negligible encroachment into their Tree Protection Zones (TPZs).
- **Planning overlays:** The proposed tree removals are appropriately assessed against Clause 52.37 (Canopy Trees) and the Clause 52.17 (Native Vegetation) exemption for planted vegetation is applicable to the ornamental species on the 25 Oxford Street, Whittington site.
- **Protection strategy:** To ensure the successful long-term retention of all protected trees, a robust Tree Protection Plan is mandatory. This plan must strictly adhere to Australian Standard 4970-2025 and include the installation of compliant TPZ fencing, dedicated supervision, and non-destructive excavation methods for any works near the TPZs of retained trees.

12.2 Final Recommendation

In summary, the removal of the nine specified trees on the 34 Truscott Street, Whittington parcel is arboriculturally justified and essential to facilitate the expansion of MacKillop Family Services' vital educational mission. With the mandatory implementation of the outlined tree protection measures, the development can proceed while successfully preserving the health and structural integrity of all remaining protected trees.

To formalize these protective requirements and ensure all contractors are fully briefed on their obligations, it is strongly recommended that a detailed Tree Protection Specification be produced by a qualified arborist immediately following the issuance of a planning permit for the development. This specification will translate the AIA's mitigation strategies into actionable, site-specific instructions, including monitoring schedules, designated exclusion zones, and procedures for working near retained trees, thereby achieving a compliant and sensitive integration of the new educational facilities within the existing landscape.

13 APPENDICES

13.1 Appendix A – Tree descriptors

AGE	
Young	Juvenile or recently planted approximately 1-7 years.
Semi Mature	Tree actively growing.
Mature Tree	Has reached expected size in situation.
Over Mature	The tree is over mature and has started to decline. (Senescent)

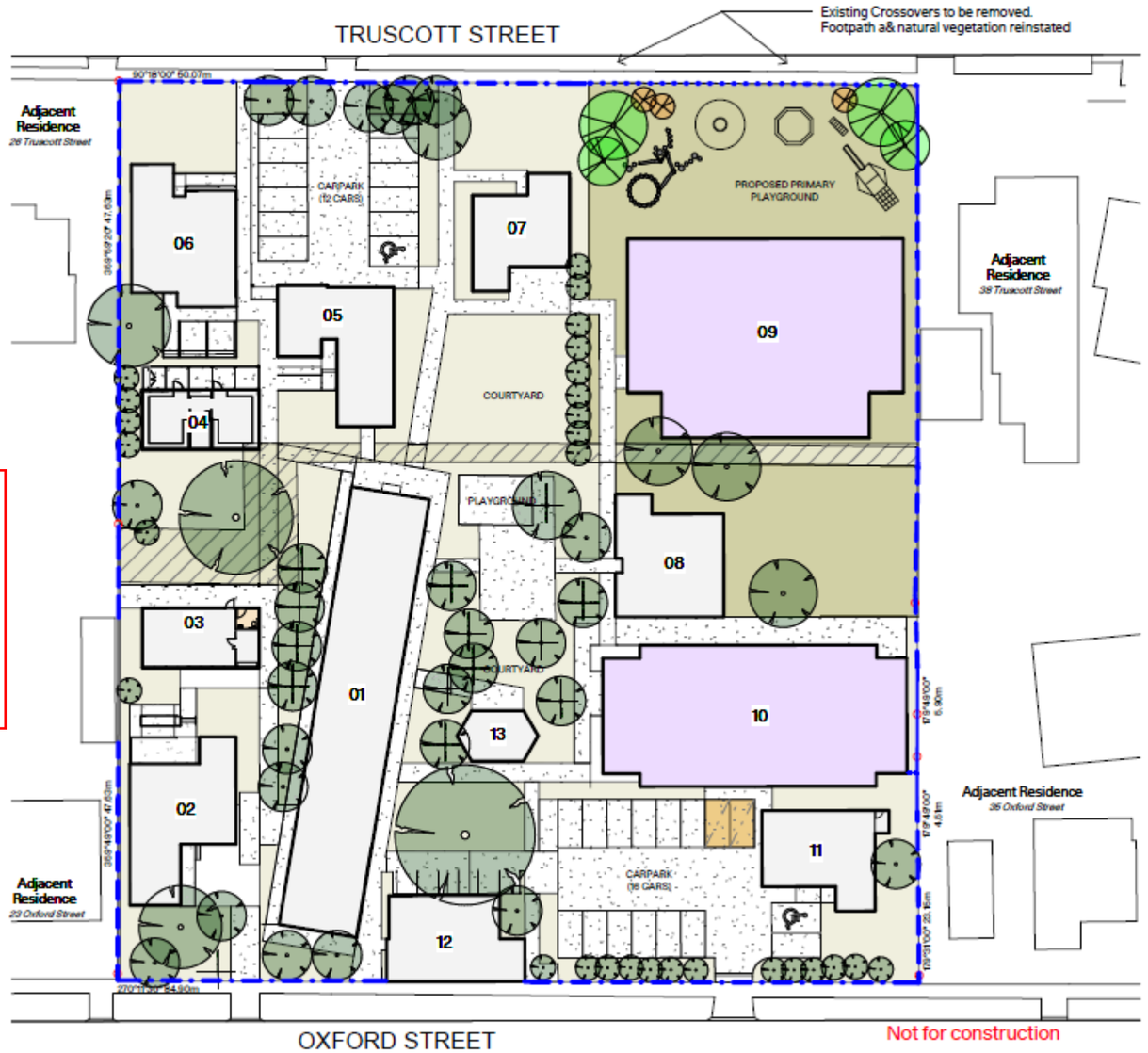
HEALTH	
Good	The foliage of the tree is entire, with good colour, very little sign of pathogens and of good density. Growth indicators are good i.e. Extension growth of twigs and wound wood development. Minimal or no canopy die back (deadwood).
Fair	Tree is showing one or more of the following symptoms; < 25% dead wood, minor canopy die back, foliage generally with good colour though some imperfections may be present. Minor pathogen damage present, with growth indicators such as leaf size, canopy density and twig extension growth typical for the species in this location.
Poor	Tree is showing one or more of the following symptoms of tree decline; > 25% deadwood, canopy die back is observable, discolored or distorted leaves. Pathogens present, stress symptoms are observable as reduced leaf size, extension growth and canopy density.
Dead or dying	Tree is in severe decline; > 55% deadwood, very little foliage, epicormic shoots, minimal extension growth.

STRUCTURE	
Good	Trunk and scaffold branches show good taper and attachment with minor or no structural defects. Tree is a good example of the species with a well-developed form showing no obvious root problems or pests and diseases.
Fair	Tree shows some minor structural defects or minor damage to trunk e.g. bark missing, there could be cavities present. Minimal damage to structural roots. Trees could be seen as typical for this species.
Poor	There are major structural defects, damage to trunk or bark missing. Co-dominant stems could be present or poor structure with likely points of failure. Girdling or damaged roots obvious. Tree is structurally problematic.
Hazardous Tree	Is an immediate hazard with potential to fail; this should be rectified as soon as possible.

CONDITION	
Good	Growth is 75-100% of optimum.
Moderate	Growth is 50-75% of optimum.
Moderate Poor	Growth is 25-50% of optimum.
Poor	(a) No recent increase in canopy; size less than 25% of optimum. (b) New growth, but plant less than 10% of optimum. (c) Growth less than 25% of optimum, new leaves but only slight recent increase in canopy size. (d) Growth less than 25% of optimum, major stem resprouting.
Dead	Plant is dead.

USEFUL LIFE EXPECTANCY	
Short	Tree may be dead or mostly dead. Trees may exhibit major structural faults. Tree may be an imminent failure hazard. Excessive infrastructure damage with high-risk potential cannot be remedied.
	Trees are exhibiting severe chronic decline. Crown is likely to be less than 50% typical density. Crown may be mostly epicormic growth. Dieback of large limbs is common (large deadwood may have been pruned out). Over-mature and senescing. Infrastructure conflicts with heightened risk potential. The tree has outgrown site constraints.
	The trees is exhibiting chronic decline. Crown density will be less than typical and epicormic growth is likely to be present. The crown may still be mostly entire, but some dieback is likely to be evident. Dieback may include large limbs. Over-mature and senescing or early decline symptoms in short-lived species. Early infrastructure conflicts with potential to increase regardless of management.
Medium	Trees do not show symptoms of chronic decline, but growth characteristics are likely to be reduced (bud development, extension growth etc.). The tree may be over-mature and senescing.
	Trees display normal growth characteristics. Trees may be growing in restricted environment (e.g. Streetscapes) or may be in late maturity.
	Semi-mature and mature trees exhibiting normal growth characteristics. Juvenile trees in streetscapes.
Long	Generally juvenile and semi-mature trees exhibit normal growth characteristics in parks or open space. Could also be maturing, long-lived trees. Tree well suited to the site with negligible potential for infrastructure conflicts.

13.2 Appendix B – Development plans



Not for construction

Legend

- Proposed Building
- Internal Refurbishment
- Existing Building to remain
- Drainage Easement
- Pavement
- Landscape to future detail
- Additional Carpark
- Existing Trees
- Proposed Canopy Trees in accordance with Victorian Planning provision 52.37-3 requirements. Tree species to be confirmed
- Proposed shrubs, species to be confirmed
- New palisade fence to match existing
- New timber panel fence to match existing
- Existing timber panel fence to retain
- Existing palisade fence & gates to retain

Legend - Building Names

01	MacKillop House
02	Augustine House
03	Sanctuary Centre (Stage 1c - Internal refurbishment)
04	Technical Centre
05	Arts Centre
06	Hospitality Centre
07	Genevieve House
08	McAuley House Classroom
09	New Learning Building (Stage 1a)
10	New Multi-Purpose Hall (Stage 1b)
11	Edmund House
12	Thomas House
13	Existing Shelter

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MacKillop Family Services - Geelong Campus

Proposed Site Plan

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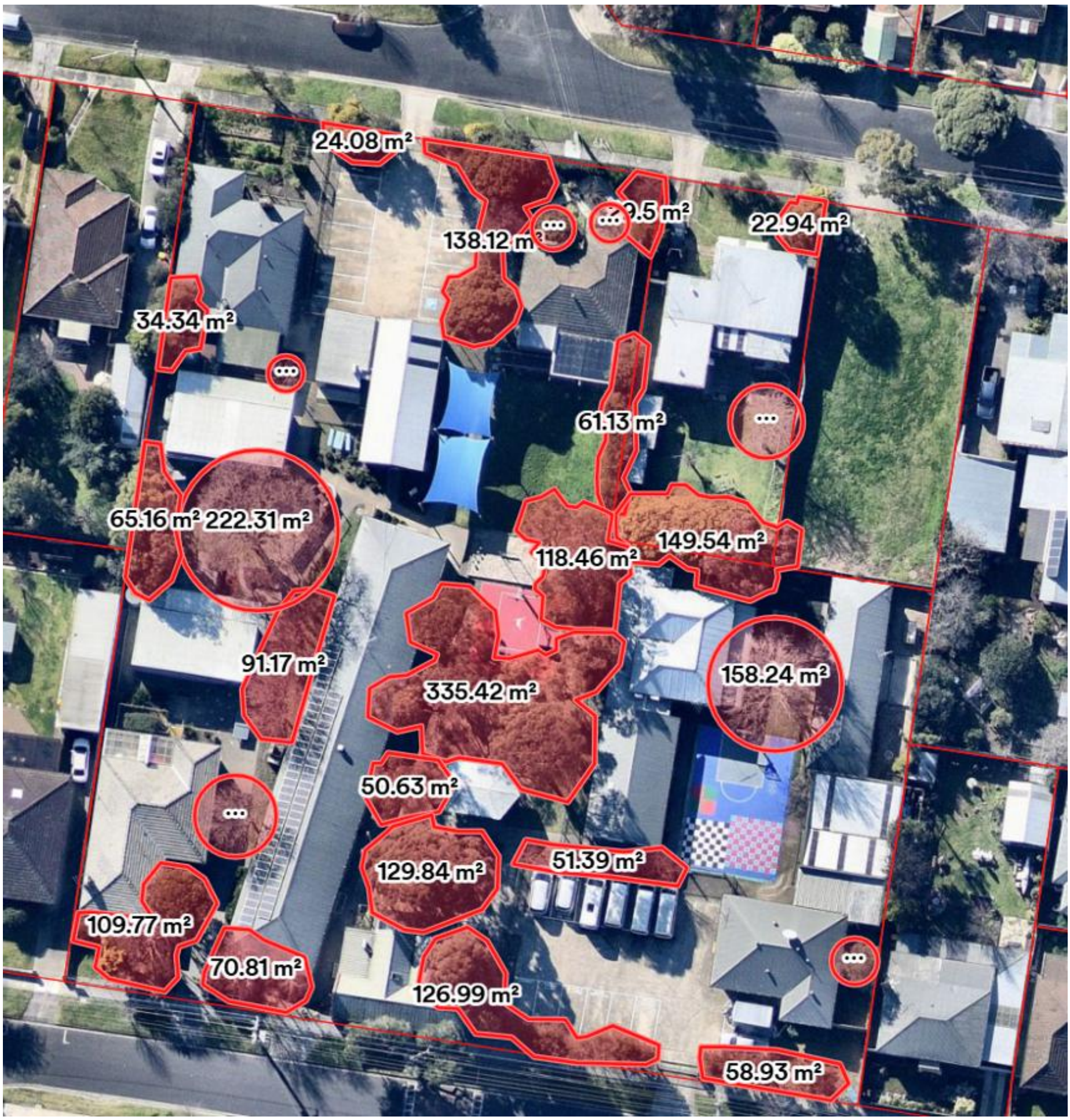
ADVERTISED PLAN

13.3 Appendix C – Existing Canopy Coverage Plan



13.4 Appendix D – Clause 52.17 (Native Vegetation) assessment

13.4.1 Clause 52.17 Native Vegetation (52.17):

A permit is required to remove, destroy, or lop native vegetation, including dead native vegetation.

This does not apply:

- If the table to Clause 52.17-7 specifically states that a permit is not required.
- If a native vegetation precinct plan corresponding to the land is incorporated into this scheme and listed in the schedule to Clause 52.16.
- To the removal, destruction or lopping of native vegetation specified in the schedule to this clause.

13.4.2 Relevant 52.17 Native Vegetation exemptions:

Dead Native Vegetation	Native vegetation that is dead. This exemption does not apply to a standing dead tree with a trunk diameter of 40 centimetres or more at a height of 1.3 metres above ground level.
Emergency Works	Native vegetation that is to be removed, destroyed, or lopped: ▪ in an emergency by, or on behalf of, a public authority or municipal council to create an emergency access associated with emergency works; or ▪ where it presents an immediate risk of personal injury or damage to property. Only that part of the vegetation that presents the immediate risk may be removed, destroyed, or lopped under this exemption.
Existing Building	Native vegetation that is to be removed, destroyed, or lopped to the minimum extent necessary to enable the use or maintenance of a building constructed in accordance with a planning or building permit issued before 15 September 2008. This exemption does not apply to: ▪ the operation or maintenance of a fence; or ▪ native vegetation located more than 10 metres measured from the outermost point of the building.

Fences	Native vegetation that is to be removed, destroyed, or lopped to the minimum extent necessary to enable: ▪ the operation or maintenance of an existing fence; or ▪ the construction of a boundary fence between properties in different ownership. The clearing along both sides of the fence when combined must not exceed 4 metres in width, except where land has already been cleared 4 metres or more along one side of the fence, then up to 1 metre can be cleared along the other side of the fence.
Fire Protections	Native vegetation that is to be removed, destroyed, or lopped to the minimum extent necessary to carry out any of the following fire protection activities: ▪ Fire Fighting; ▪ Planned Burning ▪ making or maintenance of a fuel break or firefighting access track (or any combination thereof) that does not exceed a combined width of 6 metres; ▪ making a strategic fuel break up to 40 metres wide by, or on behalf of, a public authority in accordance with a strategic fuel break plan approved by the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*); ▪ in accordance with a fire prevention notice issued under either: - Section 65 of the *Forests Act 1958*; or - Section 41 of the *Country Fire Authority Act 1958*. ▪ keeping native vegetation clear of, or minimising the risk of bushfire ignition from, an electric line in accordance with a code of practice prepared under Part 8 of the *Electricity Safety Act 1998*; ▪ minimising the risk to life and property from bushfire on a roadside of a public road managed by the relevant responsible road authority, and carried out by or on

	behalf of that authority, in accordance with the written agreement of the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*). In this exemption, roadside, public road and responsible road authority have the same meanings as in section 3 of the *Road Management Act 2004*.
Lopping and Pruning for Maintenance	Lopping or pruning native vegetation, for maintenance only, provided no more than 1/3 of the foliage of each individual plant is lopped or pruned. This exemption does not apply to: ▪ the pruning or lopping of the trunk of a native tree; or ▪ native vegetation on a roadside or railway reservation.
Planted Vegetation	Native vegetation that is to be removed, destroyed, or lopped that was either planted or grown because of direct seeding. This exemption does not apply to native vegetation planted or managed with public funding for the purpose of land protection or enhancing biodiversity unless the removal, destruction or lopping of the native vegetation is in accordance with written permission of the agency (or its successor) that provided the funding.

13.4.3 Clause 52.17 permit status:

The arboricultural assessment confirms that the vegetation within 25 Oxford Street, Whittington consists entirely of ornamental, planted trees. This determination is based on the specific species selection and the deliberate, formal structure of the garden layout.

14 REFERENCES

Australian Standard 4970-2025 (Protection of trees on development sites)

Australian Standard 4373-2007 (Pruning of amenity trees)

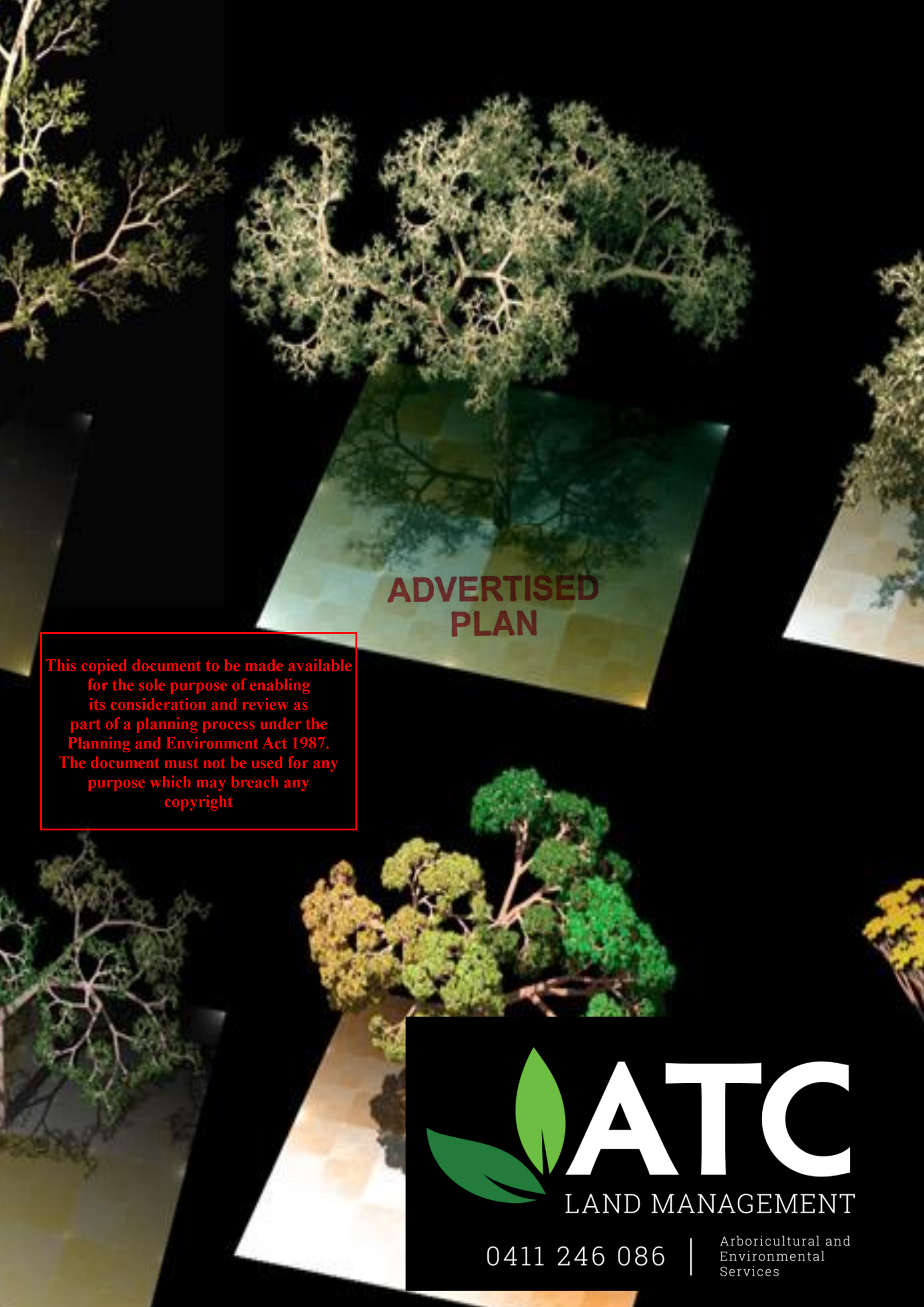
Vicplan (mapshare.vic.gov.au)

Google Maps

MapBrowser | Nearmap

https://www.land.vic.gov.au/

Environmental weeds - City of Greater Geelong



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