

TREEMAP

ARBORICULTURE



Arboricultural Assessment & Report 488 Murray Road, Preston

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April 2024

Prepared for:
Planning & Design Pty Ltd

Darebin City Council Received 28-06-2024



1 Name and address of consultant

Dean Simonsen (AQF Level 7)
Treemap Arboriculture
PO Box 465, Heidelberg, Victoria 3084

2 Instructions

- 2.1 The instructions provided to Treemap Arboriculture on 22/03/24 by Planning & Design Pty Ltd were to provide an Arboricultural assessment and report for 1 specific tree located adjacent to the subject site, the subject site being 488 Murray Road, Preston.

3 Introduction

- 3.1 The owners of the subject site are undertaking investigations to develop the property. This report examines the arboricultural matters associated with 1 specific tree located adjacent to the subject site.
- 3.2 Under the guidelines of AS4970-2009 (Australian Standard – Protection of trees on development sites), the following report would be defined as an 'Arboricultural impact assessment'. The standard indicates that *"The report will identify possible impacts on trees to be retained. The report will explain design and construction methods proposed to minimize impacts on retained trees where there is encroachment into the calculated TPZ."*

4 Key Objectives

- 4.1 To undertake a general assessment of 1 tree located adjacent to the subject site.
- 4.2 To provide an assessment of the subject tree with respect to its overall condition, structure, safety and suitability for protection.
- 4.3 To provide recommendations on the suitability of the tree for protection and provide approved methods of tree protection if retention is desirable.

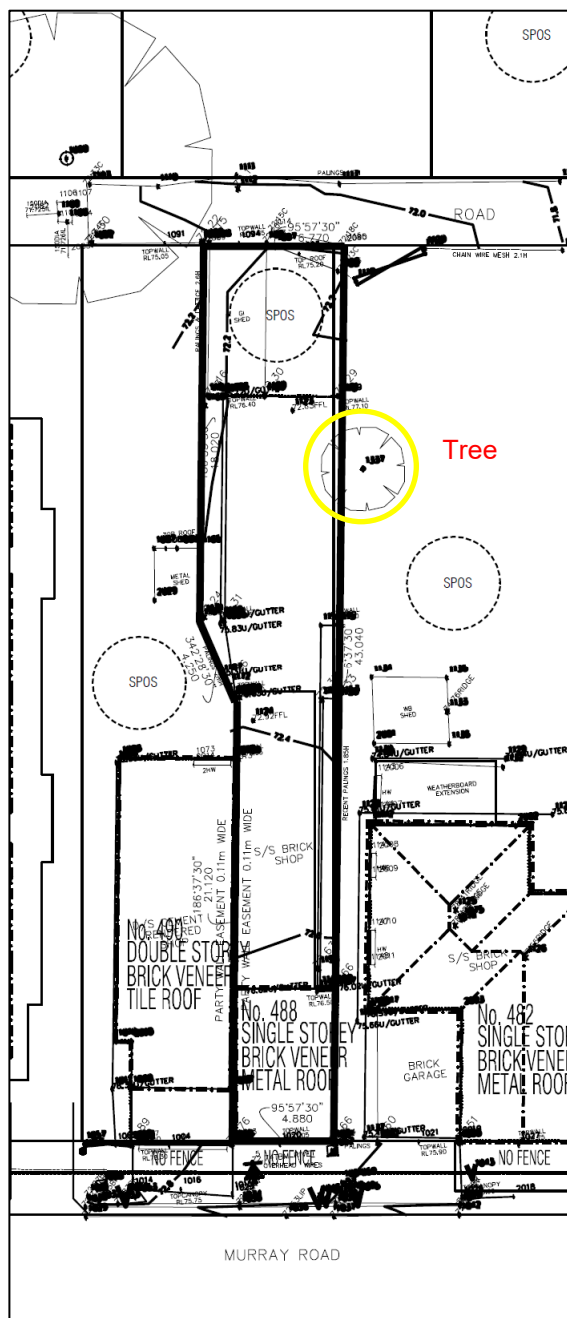
5 Method

- 5.1 A site and tree inspection were conducted on Tuesday 26th March, 2024.
- 5.2 The tree assessment consisted of a visual inspection, which was undertaken with regard to modern arboricultural principles and practices. The assessment did not involve a detailed examination of below ground or internal tree parts. The assessment was undertaken from the ground of the subject site to determine tree condition and species type. Measurements were taken to establish trunk and crown dimensions. No tree samples or site soil samples were taken unless specified. Trunk diameters for trees on adjoining properties may be estimated due to site access restrictions.
- 5.3 The tree has been allocated a retention value rating which combines tree condition factors with functional and aesthetic characteristics in the context of an urban landscape. The retention or preservation of trees may not depend solely on arboricultural considerations;

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therefore, the ratings may act as a guide to assist in decisions relating to tree management and retention.

- 5.4 A feature survey plan was provided by the client (Neighbourhood and Site Description Plan prepared by Planning & Design P/L, Ref 7661, Revision dated February 2024). The assessed tree has been indicated on a section of this plan (below).
- 5.5 A proposed ground floor plan was provided by the client for analysis (Ground Floor Plan, prepared by Planning & Design P/L, Ref 7661, Revision dated 12/02/24). The assessed tree has been indicated on a section of this plan (Section 6.7) and Tree Protection Zones are provided.
- 5.6 The location of the assessed tree is indicated below on the section of Neighbourhood and Site Description Plan.



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6 Observations

- 6.1 The site under review presented as a single allotment with an existing shopfront and detached structures, which cover almost 100% of the property. The site adjoins similar properties to the east and west. Murray Street frontage is located to the south and a laneway adjoins the northern boundary.
- 6.2 One (1) tree was assessed in detail as part of the site review. The detail of the tree assessment is provided below in table format.

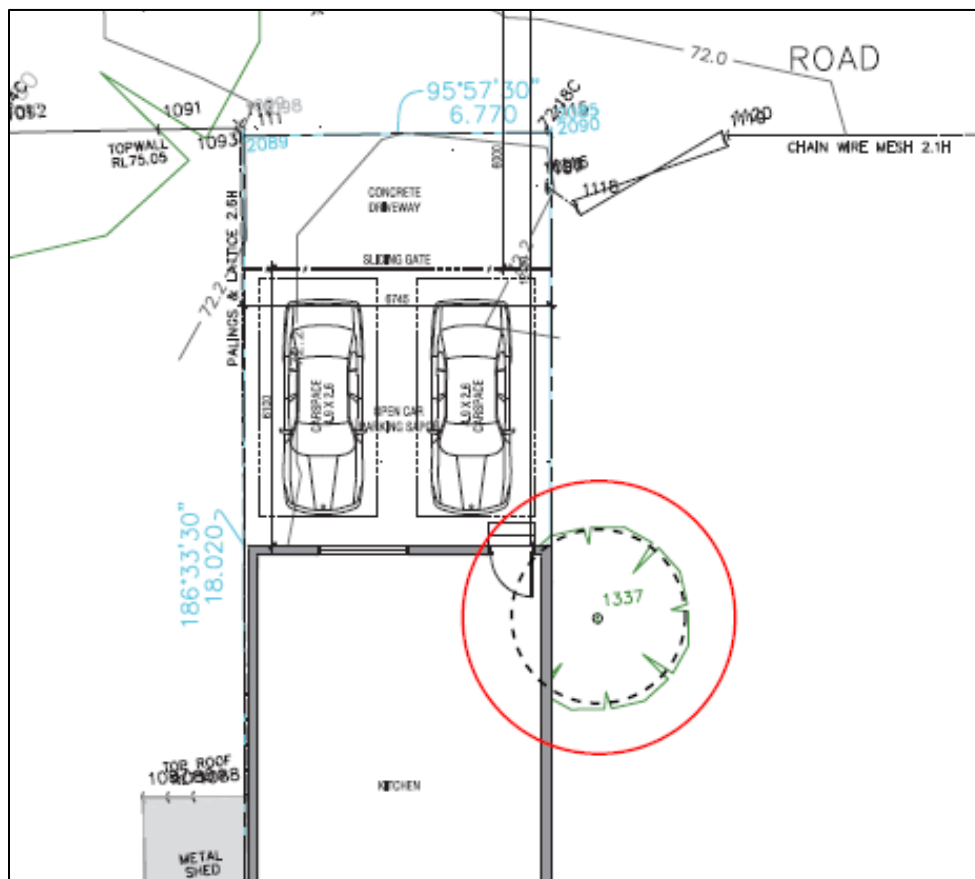
Species	<i>Ficus carica</i>
Common Name	Common Fig
DBH (cm)	25
Tree Protection Zone (m) AS4970	3.00
Structural Root Zone (m) AS4970	1.92
Height x Width (m)	4x7
Age	Semi-mature
Health	Fair
Structure	Poor
Form	Asymmetric
Comment	Woody weed
Tree type	Exotic deciduous
Retention value	None

*Descriptors at Appendix 1

- 6.3 The following photograph indicates the site context of the tree.



- 6.4 The property is not influenced by any specific local vegetation controls under the City of Darebin Planning Scheme. This is based on a planning property report for the site being obtained from www.planning.vic.gov.au/ on 26/03/24.
- 6.5 Trees that are taller than 8m and have a trunk circumference of more than 100cm (31.84cm diameter) are protected under Darebin City Council Tree Protection on Private Property Local Law NO. 01 of 2019. The tree protection law is essentially a blanket control that requires an application to prune, remove or carry out works near every private tree that measures greater than 31.84cm diameter (measured at 1.5m above ground) and is taller than 8m. The criteria provided for determining a tree that can be considered for removal under the local law is as follows;
- written evidence of the owner's consent if the applicant is not the owner of the private land;*
 - whether the tree is a protected tree;*
 - the Council's current Management of Tree Protection on Private Property Policy 2019;*
 - information submitted by the applicant as to the condition and health of tree;*
 - information submitted by the applicant of damage or likely damage to property or infrastructure;*
 - the visual impact that the removal of the tree will have on the neighbourhood; and*
 - any other matter relevant to the circumstances of the application.*
- 6.6 The neighbouring tree does not meet the size criteria of the Darebin City Council Tree Protection on Private Property Local Law.
- 6.7 Section of Ground Floor Plan



7 Discussion

One neighbouring tree was examined adjacent to the subject site. The tree is currently located adjacent to a masonry structure, which would have a substantial supporting footing.

There is virtually no prospect of any tree roots from the neighbouring tree extending into the site because they are obstructed by the presence of the footing for the existing structure.

The species of the neighbouring tree is considered to be an environmental weed. The species is practically indestructible, and highly tolerant of site disturbance. The species is often grown for its fruit and it is common for these plants to be severely lopped as part of their typical management regime. The tolerance of the species to harsh crown lopping is similar or the same as their tolerance to severe root severance.

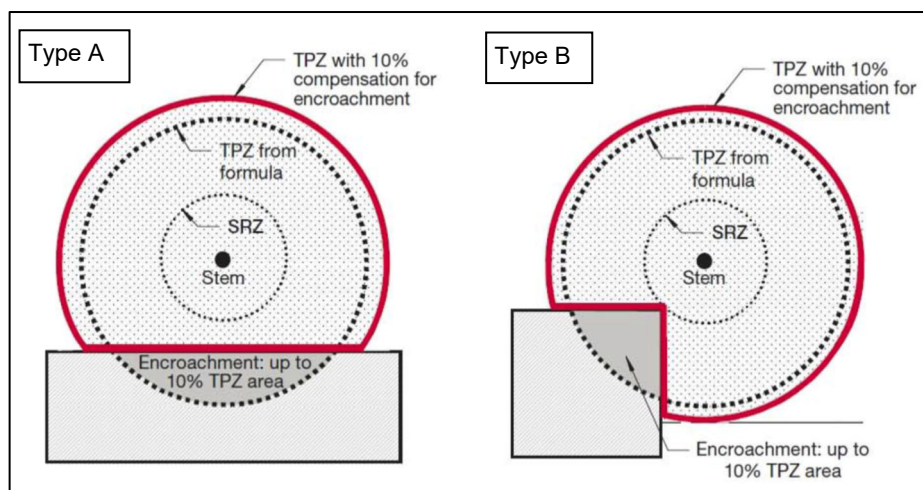
The proposed design indicates a similar footing and structure adjacent to the tree as what currently exists.

7.1 Tree protection zones on development sites

The level of encroachment and the impact to specific trees can be estimated by comparing standard or modified tree protection clearances with those clearances provided to trees in the development design. The overall impact towards a specific tree will be based on the severity of encroachment into the respective tree protection zones. The degree of root activity in the tree protection zone can vary significantly, which can result in more or less severe impacts to trees. The alternative to undertaking root investigations is to assign appropriate tree protection zones with consideration to existing obstructions to root growth.

This report adopts AS4970-2009, Australian Standard – Protection of trees on development sites as the preferred tree protection method. The method provides a tree protection zone and a tree protection fencing distance (radial measurement from trunk centre) by using the width of the trunk at 1.4m above ground multiplied by 12. The prescribed TPZ distances are provided for each tree at Appendix 1 and illustrated for the neighbouring tree at Section 6.7 and Appendix 2.

There is scope to reduce the tree protection zone by an area of 10% without further investigations. The rationale for any reduced tree protection distance is detailed in AS4970-2009 (*Australian Standard – Protection of trees on development sites*). Under encroachment Type A, it is acceptable to reduce the Tree Protection Zone (TPZ) area by 10%. This translates to a reduction in radial clearance distance of approximately 33% on one side of the tree only. This can be applied if there is contiguous space around the tree for root development to occur. The following diagram, from AS4970-2009, is provided to illustrate the approach.



8 Recommendations

- 8.1 The neighbouring tree will not be harmed by the proposed design. The proposed design indicates a similar structure and footing to what currently exists on the site.



Dean Simonsen (BAppSc Melb.)
Consultant Arborist

9 References

Australian Standard AS 4970, 2009. *Protection of trees on development sites*. Standards Australia

10 Definitions

The TPZ and SRZ are defined in AS4970-2009, Australian Standard – Protection of trees on development sites as:

Tree protection zone (TPZ)

A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development.

Structural root zone (SRZ)

The area around the base of a tree required for the tree's stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is nominally circular with the trunk at its centre and is expressed by its radius in metres. This zone considers a tree's structural stability only, not the root zone required for a tree's vigour and long-term viability, which will usually be a much larger area.

11 Expertise of Arborist to prepare report

Qualifications and expertise of consultant

- Bachelor of Applied Science, Horticulture (Plant Production) – University of Melbourne, Burnley College.
- Diploma of Applied Science, Horticulture (Arboriculture) – University of Melbourne, Burnley College. Dux of Arboriculture.
- More than 25 years of experience in the arboriculture/horticulture industry (private and local government experience).
- Consultant Arborist and Director at Tree Logic Pty Ltd from June 1999 to September 2011.
- Manager of Arboriculture – Royal Botanic Gardens, Melbourne (27 Months 1997-1999).
- Secretary for the Victorian Tree Industry Organisation (VTIO) 2007-2012.
- Financial member of the International Society of Arboriculture (ISA).
- Presented paper at the International Society of Arboriculture Conference, 2011 at Parramatta, NSW.

Expertise to prepare report

- My qualifications and experience have primarily involved the management of tree issues in the urban landscape. Specifically, this has involved hazard, general or detailed assessment of tree condition on private and public land with recommendations made on preservation strategies or remedial works.
- Tree assessments to establish tree health, tree structure and arboricultural values are core components of Treemap Arboriculture's business activities.
- Prepared in excess of 4000 development reports.
- I have experience at Victorian Civil Administrative Tribunal and the magistrate's court as an expert witness on arboricultural matters.
- I have inspected and assessed well over one hundred thousand trees and managed assessment programs for at least ten times as many.

Appendix 1

Descriptors

Field name	Description
No.	Tree identification number. Unique numbers are assigned to each assessed individual tree or tree group.
Species	Identifies the tree using the international taxonomic classification system of binomial (or trinomial) nomenclature (genus, species, variety and cultivar).
Common Name	Provides the common name as occurs in current Australian horticultural literature. More than one common name can exist for a single tree species, or several species can share the same common name.
DBH (Diameter at breast height)	Indicates the trunk diameter (expressed in centimetres) of an individual tree usually measured at 1.4m above the existing ground level. Multiple stemmed trees are calculated using a formula to combine the stems into a single stem for tree protection zone calculations.
TPZ (Tree protection zone)	Tree protection zone expressed as a radial distance in metres, measured from trunk centre. Based on AS 4970
SRZ (Structural Root Zone)	Radial distance in metres measured from trunk centre to maintain tree stability - AS4970
HxW (Height x Width)	Indicates height and width of single tree and measurement generally expressed in whole metres

Age	Description
<i>Young</i>	Sapling tree and/or recently planted
<i>Semi-mature</i>	Tree rapidly increasing in size and yet to achieve expected size in situation
<i>Maturing</i>	Specimen approaching expected size in situation, with reduced incremental growth
<i>Over-mature</i>	Tree is senescent and in decline

Health	Term assigned that provides a broad description of the health and vigour of the tree.					
Ratings	<i>Good</i>	<i>Fair</i>	<i>Fair to Poor</i>	<i>Poor</i>	<i>Very poor</i>	<i>Dead</i>

Structure	Term assigned that provides a broad description of the structure and stability of the tree.					
Ratings	<i>Good</i>	<i>Fair</i>	<i>Fair to Poor</i>	<i>Poor</i>	<i>Very poor</i>	<i>Failed</i>

Form	Description
<i>Symmetric</i>	Evenly balanced crown
<i>Asymmetric</i>	Crown biased in one direction; can be minor or major
<i>Stump re-sprout</i>	Adventitious shoots originating from stump or trunk
<i>Manipulated</i>	Hedge, pollard, topiary, windrow; managed for specific landscape use or aesthetic outcome

Comment	Additional comments that provide specific detail on the condition of the tree or management requirements
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Tree type	Description
<i>Indigenous</i>	Occurs naturally in the area or region of the subject site
<i>Victorian native</i>	Occurs naturally within some part of Victoria (not exclusively) but is not indigenous
<i>Australian native</i>	Occurs naturally within Australia but is not a Victorian native or indigenous
<i>Exotic deciduous</i>	Occurs outside of Australia and typically sheds its leaves during winter
<i>Exotic evergreen</i>	Occurs outside of Australia and typically holds its leaves all year round
<i>Exotic conifer</i>	Occurs outside of Australia and is classified as a gymnosperm
<i>Native conifer</i>	Occurs naturally within Australia and is classified as a gymnosperm
<i>Palm</i>	Woody monocotyledon
<i>Other</i>	Other descriptions as indicated


Retention value	Qualitative rating provided on tree based on assessment factors. Provided as a guide for management decisions.			
Ratings	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>None</i>

Recommend	Recommended action based on condition of the tree with reference to proposed site changes							
Responses	<i>Retain</i>	<i>Could be retained</i>	<i>Consider removal</i>	<i>Remove</i>	<i>Street tree</i>	<i>Neighbour's Tree</i>	<i>Already removed</i>	<i>Transplant</i>

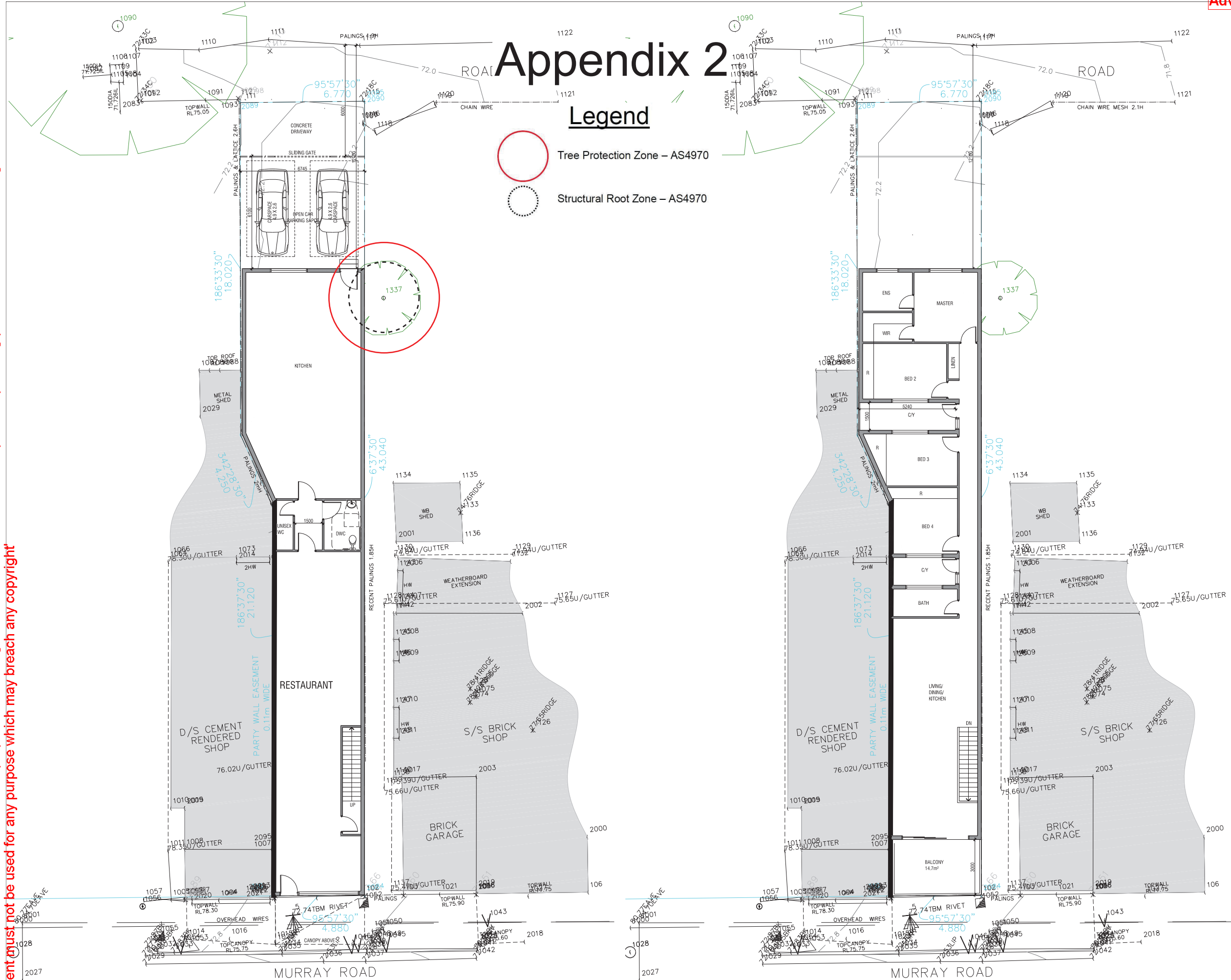
Descriptors reviewed annually and subject to change

Appendix 2

Legend

-  Tree Protection Zone – AS4970
-  Structural Root Zone – AS4970

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Revisions	
Rev#	12.02.2024 TOWN PLANNING SUBMISSION
1	
2	
3	
4	
5	

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PLANNING & DESIGN

DATE	SCALE	DRAWN BY	CHECKED BY	PROJECT NO.
JULY 2023	1:1000 (A4)	WM	C.M.	7661
GROUND & FIRST FLOOR PLAN				
MIXED USED DEVELOPMENT				
488 MURRAY ROAD, PRESTON				
TP01				
REV-				

Assumptions and limiting conditions of arboricultural consultancy report

1. Any legal description provided to Treemap Arboriculture is assumed to be correct. Any titles and ownerships to any property are assumed to be correct. No responsibility is assumed for matters outside the consultant's control.
2. Treemap Arboriculture assumes that any property or project is not in violation of any applicable codes, ordinances, statutes or other local, state or federal government regulations.
3. Treemap Arboriculture has taken care to obtain all information from reliable sources. All data has been verified insofar as possible; however Treemap Arboriculture can neither guarantee nor be responsible for the accuracy of the information provided by others not directly under Treemap Arboriculture control.
4. No Treemap Arboriculture employee shall be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.
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10. There is no warranty or guarantee, expressed or implied by Treemap Arboriculture, that the problems or deficiencies of the plants or site in question may not arise in the future.
11. All instructions (verbal or written) that define the scope of the report have been included in the report and all documents and other materials that the Treemap Arboriculture consultant has been instructed to consider or to take into account in preparing this report have been included or listed within the report.
12. To the writer's knowledge all facts, matter and all assumptions upon which the report proceeds have been stated within the body of the report and all opinion contained within the report have been fully researched and referenced and any such opinion not duly researched is based upon the writers experience and observations.