Native vegetation removal report

This report provides information to support an application to remove, destroy or lop native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation*. The report **is not an assessment by DELWP** of the proposed native vegetation removal. Native vegetation information and offset requirements have been determined using spatial data provided by the applicant or their consultant.

Date of issue: **01/10/2020**
Time of issue: **4:55 pm**

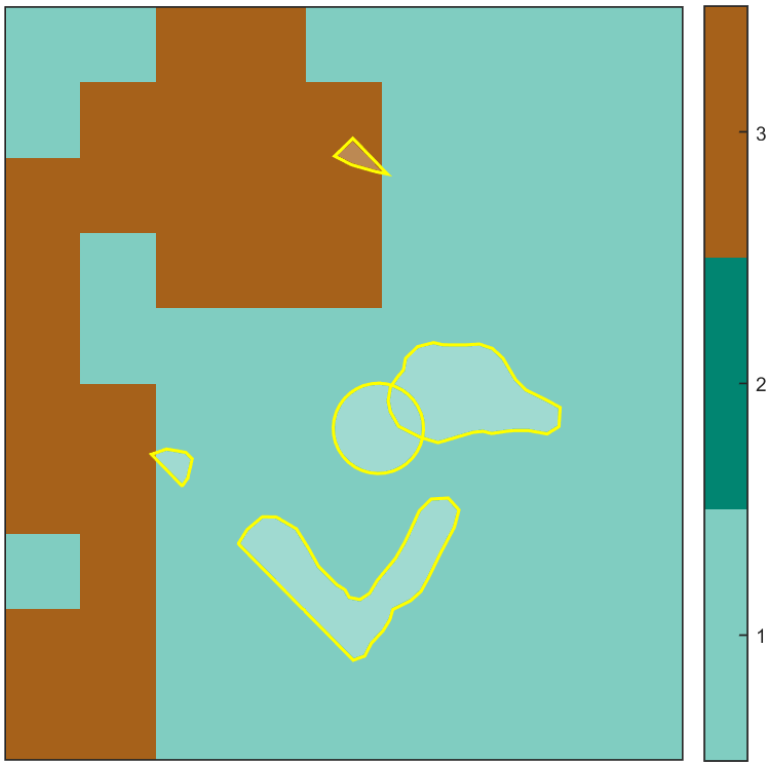
Report ID: ECL_2020_025

Project ID	1905_Marysville_30092020

Assessment pathway

Assessment pathway	**Detailed Assessment Pathway**
Extent including past and proposed	0.343 ha
Extent of past removal	0.000 ha
Extent of proposed removal	0.343 ha
No. Large trees proposed to be removed	6
Location category of proposed removal	Location 3 The native vegetation is in an area where the removal of less than 0.5 hectares could have a significant impact on habitat for one or more rare or threatened species.

1. Location map



Offset requirements if a permit is granted

Any approval granted will include a condition to obtain an offset that meets the following requirements:

General offset amount[1]	0.147 general habitat units
Vicinity	Goulburn Broken Catchment Management Authority (CMA) or Murrindindi Shire Council
Minimum strategic biodiversity value score[2]	0.744
Large trees	6 large trees

NB: values within tables in this document may not add to the totals shown above due to rounding

Appendix 1 includes information about the native vegetation to be removed

Appendix 2 includes information about the rare or threatened species mapped at the site.

Appendix 3 includes maps showing native vegetation to be removed and extracts of relevant species habitat importance maps

1 The general offset amount required is the sum of all general habitat units in Appendix 1.

2 Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

Next steps

Any proposal to remove native vegetation must meet the application requirements of the Detailed Assessment Pathway and it will be assessed under the Detailed Assessment Pathway.

If you wish to remove the mapped native vegetation you are required to apply for a permit from your local council. Council will refer your application to DELWP for assessment, as required. **This report is not a referral assessment by DELWP.**

This *Native vegetation removal report* must be submitted with your application for a permit to remove, destroy or lop native vegetation.

Refer to the *Guidelines for the removal, destruction or lopping of native* vegetation (the Guidelines) for a full list of application requirements This report provides information that meets the following application requirements:

- The assessment pathway and reason for the assessment pathway
- A description of the native vegetation to be removed (partly met)
- Maps showing the native vegetation and property (partly met)
- Information about the impacts on rare or threatened species.
- The offset requirements determined in accordance with section 5 of the Guidelines that apply if approval is granted to remove native vegetation.

Additional application requirements must be met including:

- Topographical and land information
- Recent dated photographs
- Details of past native vegetation removal
- An avoid and minimise statement
- A copy of any Property Vegetation Plan that applies
- A defendable space statement as applicable
- A statement about the Native Vegetation Precinct Plan as applicable
- A site assessment report including a habitat hectare assessment of any patches of native vegetation and details of trees
- An offset statement that explains that an offset has been identified and how it will be secured.

Authorised by the Victorian Government, 8 Nicholson Street, East Melbourne.

For more information contact the DELWP Customer Service Centre 136 186

www.delwp.vic.gov.au

Appendix 1: Description of native vegetation to be removed

The species-general offset test was applied to your proposal. This test determines if the proposed removal of native vegetation has a proportional impact on any rare or threatened species habitats above the species offset threshold. The threshold is set at 0.005 per cent of the mapped habitat value for a species. When the proportional impact is above the species offset threshold a species offset is required. This test is done for all species mapped at the site. Multiple species offsets will be required if the species offset threshold is exceeded for multiple species.

Where a zone requires species offset(s), the species habitat units for each species in that zone is calculated by the following equation in accordance with the Guidelines:

Species habitat units = extent x condition x species landscape factor x 2, where the species landscape factor = 0.5 + (habitat importance score/2)

The species offset amount(s) required is the sum of all species habitat units per zone

Where a zone does not require a species offset, the general habitat units in that zone is calculated by the following equation in accordance with the Guidelines:

General habitat units = extent x condition x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The general offset amount required is the sum of all general habitat units per zone.

Native vegetation to be removed

Information provided by or on behalf of the applicant in a GIS file							Information calculated by EnSym					
Zone	**Type**	**BioEVC**	**BioEVC conservation status**	**Large tree(s)**	**Partial removal**	**Condition score**	**Polygon Extent**	**Extent without overlap**	**SBV score**	**HI score**	**Habitat units**	**Offset type**
0-A	Patch	hnf_0029	Least Concern	0	no	0.350	0.009	0.009	0.930		0.005	General
0-C	Patch	hnf_0029	Least Concern	0	no	0.150	0.138	0.138	0.930		0.030	General
0-B	Patch	hnf_0030	Least Concern	5	no	0.500	0.130	0.130	0.930		0.094	General
0-D	Patch	hnf_0029	Least Concern	0	no	0.150	0.008	0.008	0.930		0.002	General
0-E	Scattered Tree	hnf_0029	Least Concern	1	no	0.200	0.070	0.058	0.930		0.017	General

Appendix 2: Information about impacts to rare or threatened species' habitats on site

This table lists all rare or threatened species' habitats mapped at the site.

Species common name	Species scientific name	Species number	Conservation status	Group	Habitat impacted	% habitat value affected
Barred Galaxias	*Galaxias fuscus*	4695	Critically endangered	Dispersed	Habitat importance map ; special site	0.0000
Forest Sedge	*Carex alsophila*	500622	Rare	Dispersed	Habitat importance map	0.0000
Silky Golden-tip	*Goodia pubescens*	504600	Rare	Dispersed	Habitat importance map	0.0000
Large-leaf Cinnamon-wattle	*Acacia leprosa var. uninervia*	505141	Rare	Dispersed	Habitat importance map	0.0000
Parsley Xanthosia	*Xanthosia leiophylla*	504562	Rare	Dispersed	Habitat importance map	0.0000
Wiry Bossiaea	*Bossiaea cordigera*	500435	Rare	Dispersed	Habitat importance map	0.0000
Forest Phebalium	*Phebalium squamulosum subsp. squamulosum*	504817	Rare	Dispersed	Habitat importance map	0.0000
Greater Glider	*Petauroides volans*	11133	Vulnerable	Dispersed	Habitat importance map	0.0000
Powerful Owl	*Ninox strenua*	10248	Vulnerable	Dispersed	Habitat importance map	0.0000
White-throated Needletail	*Hirundapus caudacutus*	10334	Vulnerable	Dispersed	Habitat importance map	0.0000
Tremont Bundy	*Eucalyptus aff. goniocalyx (Dandenong Ranges)*	507008	Vulnerable	Dispersed	Habitat importance map	0.0000

Habitat group

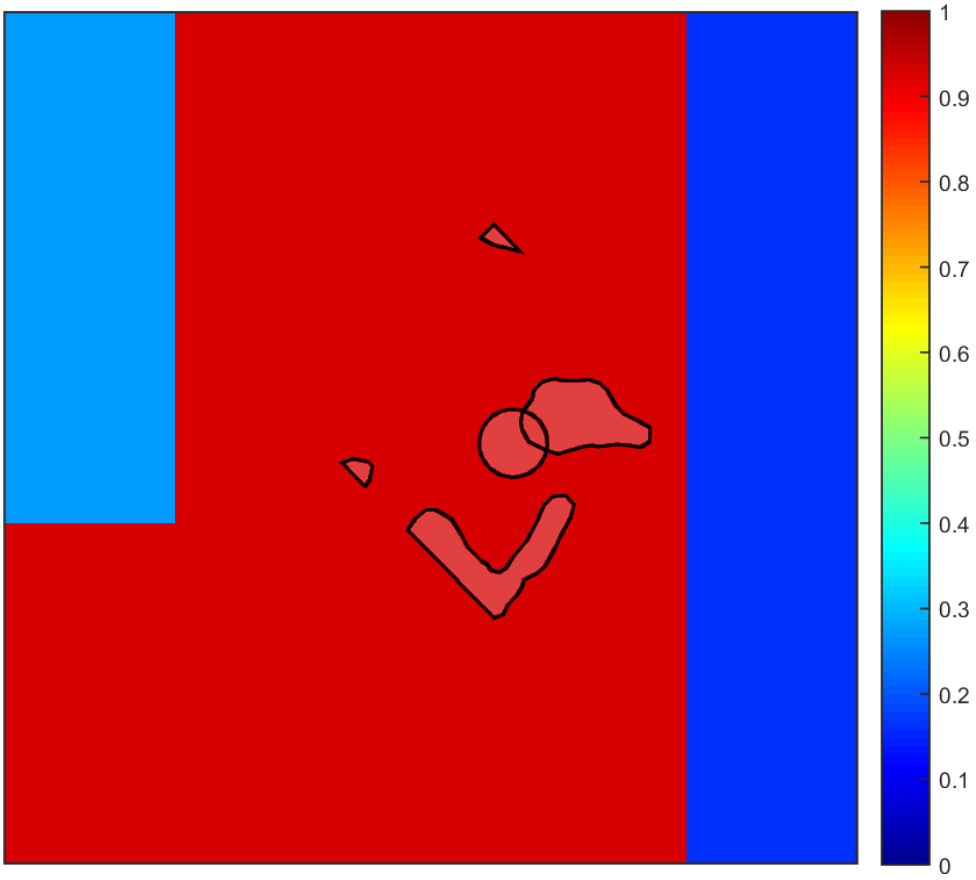
- Highly localised habitat means there is 2000 hectares or less mapped habitat for the species
- Dispersed habitat means there is more than 2000 hectares of mapped habitat for the species

Habitat impacted

- Habitat importance maps are the maps defined in the Guidelines that include all the mapped habitat for a rare or threatened species
- Top ranking maps are the maps defined in the Guidelines that depict the important areas of a dispersed species habitat, developed from the highest habitat importance scores in dispersed species habitat maps and selected VBA records
- Selected VBA record is an area in Victoria that represents a large population, roosting or breeding site etc.

Appendix 3 – Images of mapped native vegetation

2. Strategic biodiversity values map



3. Aerial photograph showing mapped native vegetation

4. Map of the property in context

Yellow boundaries denote areas of proposed native vegetation removal.

TREEMAP
ARBORICULTURE

Arboricultural Assessment & Report
15 Hull Road, Marysville

Treemap Arboriculture
PO Box 465, Heidelberg VIC 3084
ABN 20 325 463 261
www.treemap.com.au

September 2020

Prepared for:
Kanzen Pty Ltd

TREEMAP
ARBORICULTURE

1 Name and address of consultant

Dean Simonsen
Treemap Arboriculture
PO Box 465, Heidelberg, Victoria 3084

2 Instructions

2.1 The instructions provided to Treemap Arboriculture on 11/09/20 by Kanzen Pty Ltd were to provide an Arboricultural assessment and report for 1 tree located on the subject site, the subject site being 15 Hull Road, Marysville.

3 Introduction

3.1 This report examines the arboricultural matters associated with 1 specific tree.

3.2 Under 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 on 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 Friday 18th September, 2020.

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.

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

5.4 A preliminary subdivision plan was provided by the client for analysis (No title or date). The assessed tree has been indicated on this plan and Tree Protection Zones are illustrated (Appendix 2).

6 Observations

6.1 The site under review presented as a large residential allotment with no features apart from vegetation. The site adjoins residential properties to the north west and south east. Kings Road frontage is located to the south west, Falls Road frontage is located to the far north east and Hull Road entrance is to the south east.

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.

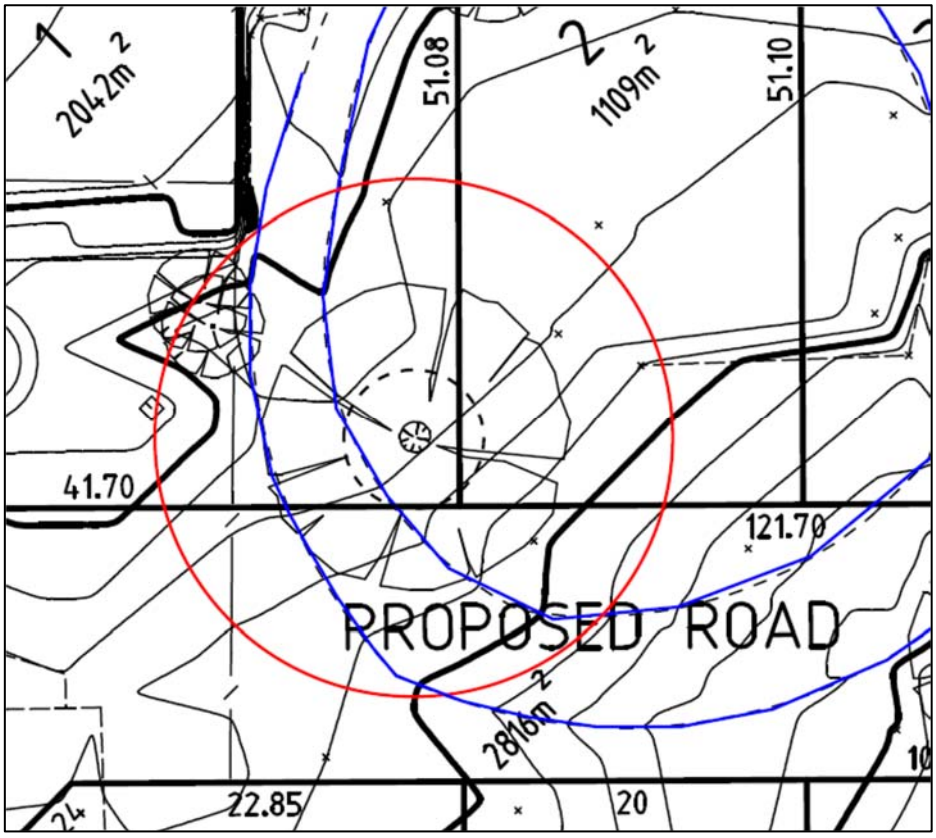
Species	*Quercus canariensis*
Common Name	Algerian Oak
DBH (cm)	157
Tree Protection Zone (m) AS4970	15.00
Structural Root Zone (m) AS4970	4.16
Height x Width (m)	16x15
Age	Maturing
Health	Fair to Poor
Structure	Fair to Poor
Form	Symmetric
Tree type	Exotic deciduous
Retention value	Low

**Descriptors at Appendix 1*

South east elevation

6.3 The subject tree was evidently damaged during the 2009 Black Saturday fires. The extremities of all branches were decayed and new epicormic shoots have developed from the unburnt sections. The structure of the tree was rated fair to poor. The health of the tree was rated fair to poor because there was tip dieback and deadwood throughout the tree. The tree would require considerable restorative pruning work to improve its appearance and longevity.

6.4 The tree is indicated on a previously considered subdivision plan, which also contains features and levels. A section of this plan is provided below to illustrate existing conditions near the tree, which includes a gravel road highlighted blue.



7 Discussion

The subject tree exhibited sub-optimal condition and structure because it was fire damaged in 2009. As a consequence, the tree requires restorative pruning work to improve its appearance and longevity.

The species *Quercus canariensis* (Algerian Oak) can behave as a weed under certain growing conditions, but it is slow to establish and can be easily controlled. There was evidence of seedlings establishing at the dripline edge of the tree under review.

The tree was assigned a 'Low' retention value because of its sub-optimal condition and its woody weed tendencies.

The subject tree is examined against the space requirements for trees under the guidelines of AS4970-2009, Australian Standard – Protection of trees on development sites. The design indicates a 16m wide internal road to the south west of the trunk. The plan does not indicate any nature strip abutting the proposed lots. I can only assume a nature strip of approximately 4m on each side of the road is being considered (illustrated at Appendix 2) so an 8m carriageway is provided.

The level of Tree Protection Zone encroachment from the proposed road would equal approximately 23.9% of the TPZ area, if a 4m wide nature strip was provided.

The simplest solution to constructing the internal road past the tree under the current subdivision plan would be to align the road and nature strip towards the edge of the Tree Protection Zone so that less than 10% of the Tree Protection Zone is encroached. A nature strip width of 7.5m wide past the tree would result in approximately 10% TPZ encroachment. This alignment would result in virtually no nature strip along the north east frontage of Lot 6 & 7.

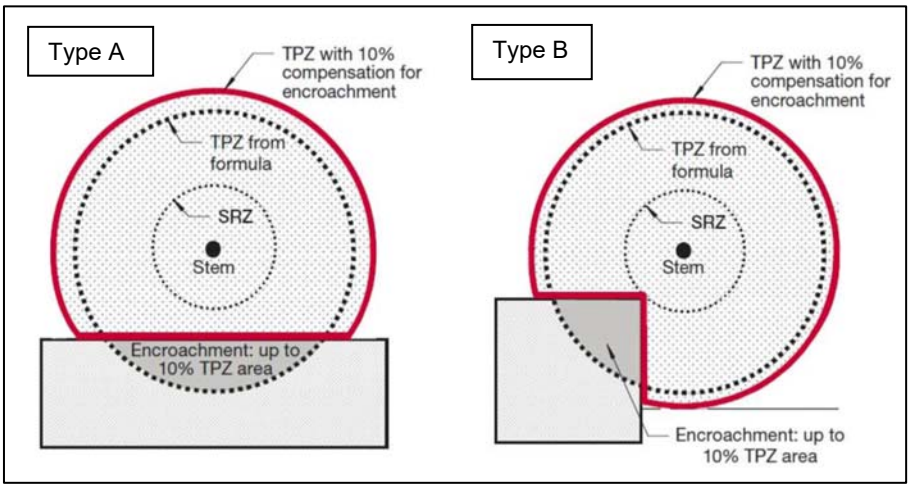
Under the guidelines of AS4970, if more than 10% of the Tree Protection Zone area is proposed to be encroached, it must be demonstrated how the tree might tolerate this level of encroachment. The most common way of determining the likely impact towards trees is to undertake non-destructive root investigations in areas where encroachment is proposed.

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 (as discussed above). 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 most accurate means of determining root activity in these zones is to undertake subsurface root investigations, but these may be impractical. The alternative to undertaking root investigations is to assign appropriate tree protection zones.

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.

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.



Encroachment of less than 10% of the TPZ area is considered minor and acceptable under AS4970, provided that additional space is provided in other directions contiguous with the TPZ. In this instance, there is opportunity for the area of encroached TPZ to be offset in other directions.

8 Recommendations

8.1 The level of interference into the Tree Protection Zone will be significant (23.9% of TPZ area) if a nature strip of approximately 4m is provided on both sides of the road.

8.2 A nature strip width of 7.5m wide past the tree would result in approximately 10% TPZ encroachment (Refer to Appendix 2). This would result in virtually no nature strip being provided along the north east frontage of Lot 6 & 7.

8.3 Under the guidelines of AS4970, if more than 10% of the Tree Protection Zone area is proposed to be encroached, it must be demonstrated how the tree might tolerate this level of encroachment. The most common way of determining the likely impact towards trees is to undertake non-destructive root investigations.

8.4 It is recommended that the subject tree be pruned to improve its structure. The type of pruning required is termed Crown maintenance pruning. Any pruning that is required must be carried out by trained and competent arborist who has a thorough knowledge of tree physiology and pruning methods and carry out pruning to the Australian Standard – AS 4373 – 2007 Pruning of Amenity Trees.

Dean Simonsen (BAppSc *Melb*.)
Consultant Arborist

9 References

Australian Standard AS 4373, 2007. *Pruning of Amenity Trees*. Standards Australia.

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 & Qualifications of Arborist

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.
- Twenty-eight 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).
- Trained and licensed to use Quantified Tree Risk Assessment method (Lic No. 809).
- 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 2000 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 (Version C - 2013)

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
TPZr (Tree protection zone reduced)	Reduced tree protection zone expressed as a radial distance in metres measured from trunk centre and justified according to a standard (Usually AS4970) or other method.
HxW (Height x Width)	Indicates height and width of single tree and measurement generally expressed in whole metres

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

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

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

Form	Description
Symmetric	Evenly balanced crown
Asymmetric	Crown biased in one direction; can be minor or major
Stump re-sprout	Adventitious shoots originating from stump or trunk
Manipulated	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

Tree type	Description
Indigenous	Occurs naturally in the area or region of the subject site
Victorian native	Occurs naturally within some part of Victoria (not exclusively) but is not indigenous
Australian native	Occurs naturally within Australia but is not a Victorian native or indigenous
Exotic deciduous	Occurs outside of Australia and typically sheds its leaves during winter
Exotic evergreen	Occurs outside of Australia and typically holds its leaves all year round
Exotic conifer	Occurs outside of Australia and is classified as a gymnosperm
Native conifer	Occurs naturally within Australia and is classified as a gymnosperm
Palm	Woody monocotyledon
Other	Other descriptions as indicated

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

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

Descriptors reviewed annually and subject to change

Appendix 2

Legend

Tree Protection Zone – AS4970

Structural Root Zone – AS4970

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.

5. Loss of this report or alteration of any part of this report not undertaken by Treemap Arboriculture invalidates the entire report.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by anyone but the client or their directed representatives, without the prior consent of the Treemap Arboriculture.

7. This report and any values expressed herein represent the opinion of the Treemap Arboriculture consultant and the Treemap Arboriculture fee is in no way conditional upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

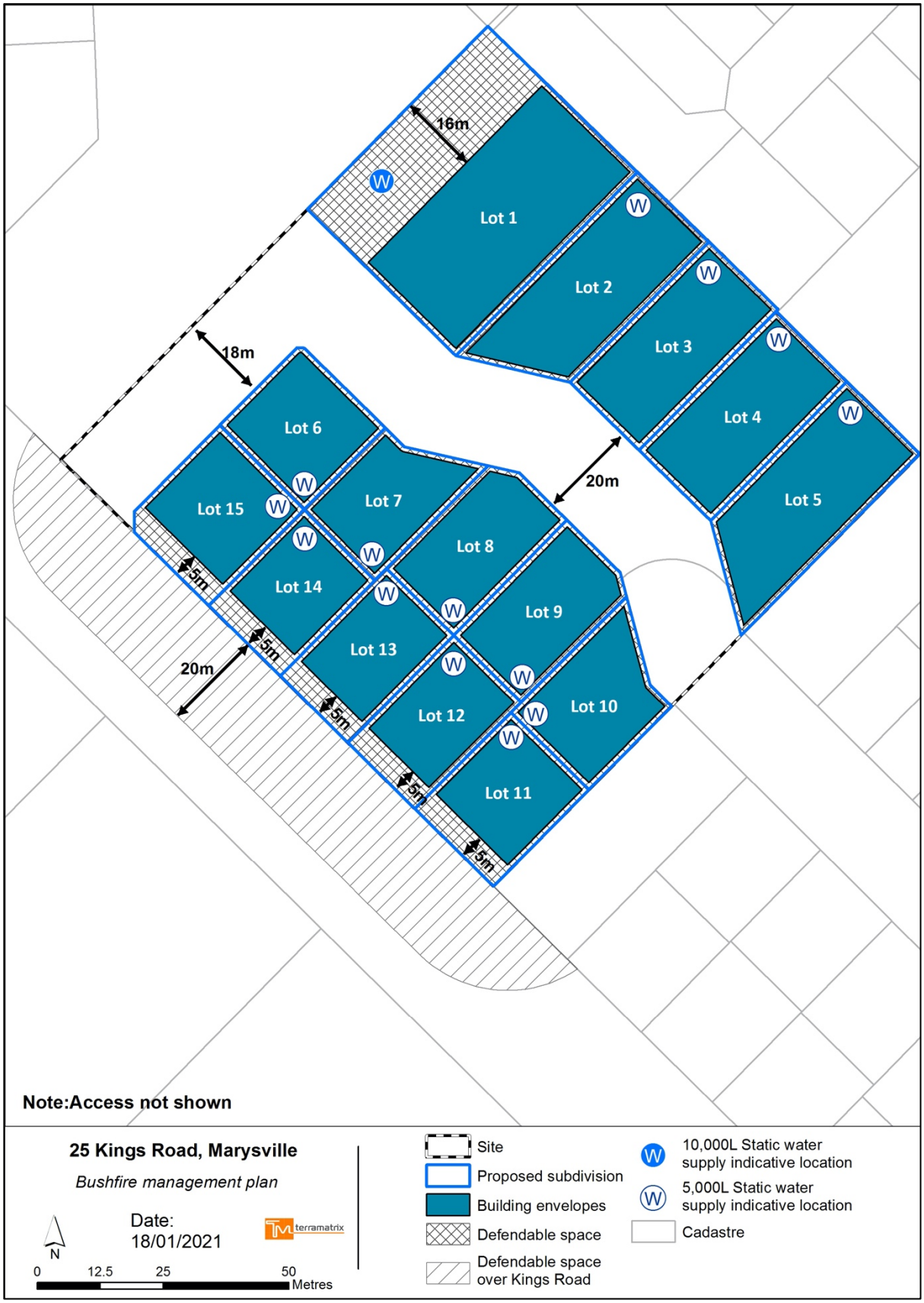
8. Sketches, diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural drawings, reports or surveys.

9. Unless expressed otherwise: 1) Information contained in this report covers only those items that were covered in the project brief or that were examined during the assessment and reflect the condition of those items at the time of inspection; and 2) The inspection is limited to visual examination of accessible components without dissection, excavation or probing unless otherwise stipulated.

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.


16m
18m
20m
20m
5m
5m
5m
5m
Lot 1
Lot 2
Lot 3
Lot 4
Lot 5
Lot 6
Lot 7
Lot 8
Lot 9
Lot 10
Lot 11
Lot 12
Lot 13
Lot 14
Lot 15
W
Note:Access not shown
25 Kings Road, Marysville
Bushfire management plan
Date:
18/01/2021
terramatrix
N
0
12.5
25
50
Metres
Site
Proposed subdivision
Building envelopes
Defendable space
Defendable space over Kings Road
10,000L Static water supply indicative location
5,000L Static water supply indicative location
Cadastre

Construction Standard

The dwellings on all lots must be designed and constructed to a minimum BAL-29 standard.

Water Supply

A minimum 10,000L of effective water supply for fire fighting purposes must be provided on Lot 1 in accordance with the following requirements:

- Be stored in an above ground water tank/s constructed of concrete or metal.
- Have all fixed above-ground water pipes and fittings required for fire fighting purposes made of corrosive resistant metal.
- Include a separate outlet for site occupant use.
- Be readily identifiable from the building or appropriate identification signage to the satisfaction of the CFA.
- Be located within 60 metres of the outer edge of the approved building.
- The outlet/s of the water tank/s must be within 4m of the accessway and unobstructed.
- Incorporate a separate ball or gate valve (British Standard Pipe (BSP) 65mm) and coupling (64 mm CFA 3 thread per inch male fitting).
- Any pipework and fittings must be a minimum of 65 mm (excluding the CFA coupling).

A minimum 5,000L of effective water supply for fire fighting purposes must be provided on Lots 2 –15 in accordance with the following requirements:

- Be stored in an above ground water tank/s constructed of concrete or metal.
- Have all fixed above-ground water pipes and fittings required for fire fighting purposes made of corrosive resistant metal.
- Include a separate outlet for site occupant use.

Vehicle Access

Vehicle access to the water supply outlet on Lot 1 must be provided in accordance with the following requirements:

- All-weather construction.
- A load limit of at least 15 tonnes.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- Curves must have a minimum inner radius of 10 metres.
- The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum grade of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.

Defendable Space Management

Defendable space must be provided to the property boundary and be managed in accordance with the following requirements:

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed $5m^2$ in area and must be separated by at least 5m.
- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5m.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.