



Avenues of Honour - Tree Management Study

Moyne Shire Council

MICHAEL SMITH & ASSOCIATES
LANDSCAPE ARCHITECTURE AND URBAN DESIGN



FINAL REPORT

MARCH 2017

Report prepared by:

Michael Smith and Associates
Landscape Architecture and Urban Design

Office: 1st Floor, 407 Whitehorse Road, Balwyn, 3103
Postal: 5 Jervis Street, Camberwell, 3124
Tel: (03) 9830 0414
Mobile: 0418 172 863
Fax: (03) 9830 2555
Email: mike@msalandurb.com.au
Consultants: Michael Smith and Lena Wang

With:

Stem Arboriculture Pty Ltd
Arboricultural Consulting
25 Hillcrest Road, Eltham North, 3095
Mobile: 0400 260 484
Email: atreeguy@bigpond.net.au
Consultant: Graeme Lewis

Acknowledgements

The consultant team acknowledge the support and input of the Council's Project Steering Group, Officers and staff of Moyne Shire Council.

We would like to acknowledge that we are situated on the traditional land of the three indigenous groups in the area and offer our respects to their elders past and present. We recognise and respect the cultural heritage of this land.

Contents

1	Executive Summary
2	Introduction
3	Aims and Objectives
4	Process
5	Context
6	Arboricultural Assessment
7	Summary of Assessment
8	Management Prescriptions
9	Tree Replacement
10	Recommended Actions
11	Summary of Costs and Priorities
12	Species Selection
A	Appendices

Issue:

Preliminary Report	02/04/2014
Draft Report	24/04/2014
Final Report	24/10/2014
Final Report	14/11/2014
Final Report	21/11/2014
Final Report	24/11/2014
Final Report	13/04/2015
Final Report	19/06/2015
Final Report	15/03/2017
Final Report	24/03/2017

Michael Smith and Associates

MICHAEL SMITH & ASSOCIATES
LANDSCAPE ARCHITECTURE AND URBAN DESIGN



Stem Arboriculture Pty Ltd



Moyne Shire Council



1

Moyne Shire Council has initiated the Avenues of Honour Tree Management Study to seek community support and provide strategies to maintain and retain each Avenue of Honour, of which there are nine towns, townships or hamlets that have an Avenue of Honour on the Victorian Heritage Register.

The project involved consultation with community groups prior to undertaking the individual tree assessment analysis. A total of 441 trees were assessed for health and condition. This report provides recommendations based on the significance of each avenue within the local and regional context, the species of tree present their overall health and condition and their longevity. A key component in establishing removal and replacement of complete or partial rows of trees, is the cost of maintaining existing trees over an extended time and cost of planting replacement trees.

A key component in establishing removal and replacements is the cost of maintaining existing trees over an extended time and cost of planting replacement trees. Cost plans based upon current removal and replacement trees for removal, replacement and maintenance were prepared.

From the analysis and recommendation process, it was determined that Mortlake's Avenue of Honour be given priority due to the number of Monterey Cypress trees present and their declining condition. In May 2015, Moyne Shire Council was advised that the Mortlake Avenue of Honour is now officially on the Victorian Heritage Register (H2342).

Mortlake residents highly value the Avenue of Honour on the Hamilton Highway as it is the most significant feature of the Town and this also contributed to Mortlake receiving the highest priority.

The next recommendations for action were the replacement of the Lone Pine at The Sisters, the replacement of all trees at Hexham, Caramut and Orford in that order. The Ellerslie community valued their existing Monterey Cypress trees and these are to remain with five trees being replaced and two vacant sites being planted with Monterey Cypress trees. The trees at Grassmere, Koroit and Naringal, require only minor replacement within the next 10 years. The Norfolk Island Pine trees at Port Fairy do not require replacements as their needs are related to improvement of ground conditions to reduce compaction around specific trees.

Replacement tree species are listed for each Avenue of Honour and their selection is based upon species that are long lived, pest and disease resistant and are suitable for the local climatic conditions. Replacement trees need to be of a stately character and a species that is consistent in form to provide legible definition as a strong avenue.

Over the past ten years, a fungal disease known as Cypress Canker has devastated Monterey Cypress trees throughout the southern half of Victoria, causing rapid death of trees of all ages. There is no known cure or treatment available. Consequently any new plantings of Monterey Cypress would be extremely prone to infection and death, with very little chance of growing beyond a few years in age. Therefore it is respectfully put forward that the alternative species recommended in the Avenues of Honour Master Plan be utilised to replace the Monterey Cypress Avenues of Honour trees where required.

It is unfortunate that *Seiridium cardinale* (Cypress Canker) is so prevalent in the Mortlake district, otherwise the decision to replace and replicate the Monterey Cypress windrows on a like for like basis would be a foregone conclusion to maintain the tradition.

A one to twelve year program which incorporates planned removal and immediate replacement planting in bulk blocks has been adopted for all the towns except Mortlake.

Following feedback received from the draft version of this study, Council has committed to undertake a phased replacement of the entire row of Monterey Cypress trees at Mortlake over a 21 year period. A trial will be undertaken commencing in 2017 with 21 replacement trees and evaluation after 4 years to determine the affects of Cypress Canker on the new plantings. Should the trial be unsuccessful, there are several replacement species nominated under the recommendations for Mortlake within this report.

2

The drive to the south-west region of rural Victoria is through landscapes of endless flat to undulating grassed terrain and upon entering a town, township or hamlet, the sight of an unusual straight row of trees stands in contrast to the surrounding pastoral landscape. Some of these rows of trees form impressive boulevards that continue far into the horizon, others are more humble in single rows or even single trees. To the unsuspecting visitor, these trees could appear to be just like any other street tree, however for the local resident there is a deeper heart-felt sentiment to which the tree represents, which this study seeks to understand and preserve. This study provides a well researched analysis and functional document as the basis for future management of the succession of the trees.

The Avenues of Honour are more than merely trees, they are important sites to those who fought in WWI and WWII, symbolising honour and sacrifice. The Avenues of Honour trees and associated signage and in several cases, memorial statues, are strong reminders of the effects of the war upon individuals, families, communities and the entire nation. Interestingly, there is an increasing interest of young people and the younger generation in the role of military forces in World War I and II history and the services and sacrifices Australia and New Zealand servicemen made.

In Victoria there was once more than 325 Avenues of Honour, now there is believed to be less than 50 that are actively remembered and cared for by local communities. There are at least 570 Avenues of Honour across Australia, most on the eastern seaboard, including some around Adelaide and some in south-west Western Australia. The earliest recorded Avenues of Honour were

created in response to Australia's participation in the Boer War of 1899-1902. The majority of avenues were established after World War I and to a lesser extent, World War II.

The earliest Avenue of Honour in Victoria is believed to have been planted at Eurack (near Colac) in May 1916. The idea quickly spread to other parts of western Victoria. Modest avenues were planted in virtually all the townships and hamlets in Moyne Shire, including Ellerslie, Hexham, Koroit, Orford, Caramut, Grassmere, Naringal and Port Fairy. With a total of nearly 200 mature Cypresses, Mortlake has the largest and most significant avenue in the Shire. There are other avenues and trees within the municipality that may have links to the military services, but are not formally listed by Heritage Victoria and as a result are not considered in this project.

In many small towns, where a relatively large number of departed young men failed to return home, these avenues became sites of both public and private grief and loss. In addition to the avenues of honour, several Lone Pines, reputedly sourced from the original Lone Pine at Gallipoli, were planted in several locations in south-west Victoria in the 1930's, including Mortlake, Woolsthorpe, The Sisters and at Warrnambool Botanic Gardens. In the aftermath of the war, memorials were also commissioned by local committees and erected in a prominent place, such as a public park or garden, or at a major road intersection. These often took the form of a simple obelisk, such as the memorials at Ellerslie, Hexham and Koroit, or of a soldier, for example at Port Fairy and Mortlake, and the names were inscribed of those who served. Additional names were added after World War II, and subsequent battles. Some towns also

dedicated public halls or mechanics institutes to the memory of fallen soldiers, or erected a purpose built soldiers' memorial hall where the local honour board took pride of place.

Other war memorials were more utilitarian, such as the Soldiers' and Sailors' Memorial Grandstand, which was erected at the Gardens Oval in Port Fairy in the early 1920's. Amiens Avenue in Winslow was dedicated as a war memorial, as was a 'soldiers' park' at Garvoc.

Following World War II, Koroit dedicated both its new hospital and new picture theatre as war memorials. The Woorndoo community erected memorial gates at the local recreation ground. Remembering and memorialising those who had fought and died for their country continues to be important in south-west Victoria because of both the large enlistment numbers and, later, the socio-demographic impact of soldier settlement, especially after World War II.

Before this study's Tree Management Study assessment, the Mortlake RSL Club, the Mortlake and District Historical Society and Mortlake College took responsibility in 2010 to specifically research and document the Mortlake Avenue of Honour, by accurately documenting the service history of each soldier, airman and nurse during World War I.

Each tree represents a fallen or returned soldier, airman or nurse. The study of the Mortlake Avenue of Honour by the Groups resulted in the design and fabrication of the interpretive information at the Memorial Triangle, plus provision of new plaques to each tree.

The Shire has undertaken steps to check and engage authorities and arborists in the review of the decline of Cypress trees of the region.

The Mortlake Avenue of Honour is a National Trust listed site of Australian and historical importance and reinforces the local identity. In May 2015, the Mortlake Avenue of Honour was officially placed on the Victorian Heritage Register (H2342). In the local Mortlake area, 240 men and women volunteered. As John Ralph described in the introduction to “For King and Country”:

“Personnel records held by the Australian War Memorial allow us to discover something of the war services of the Mortlake volunteers; it is in letters sent home that we hear of the bond and friendship between the men who formed “the decent lot from little Mortlake”. Local men sought each other out while on furlough or in the zone of battle, and letters about their encounters and experiences were regularly published in the Mortlake Dispatch, allowing the surrounding community to learn of their welfare and deeds. Through these writings we gain a sense of the adventure and hardship that these men lived through; occasionally, they provide a brief window into the loss and futility of a war being conducted on an extraordinary scale.”

- John Thomas Ralph, November 2011

As the 100th anniversary of World War I approaches to 2015, thoughts have been given to identifying and documenting all existing and lost Avenues of Honour. With support from the National Trust, TREENET based in Adelaide has initiated research and documenting of all existing and lost Avenues of Honour and the people and events they commemorate.

TREENET’s aim is to ensure every Australian who has fallen in war is commemorated with a tree in an Avenue of Honour.

An important factor in the Avenue of Honour philosophy and appreciation of values of commemorative avenues is the surrounding townships in the district, such as Lismore and Darlington, have Avenues of Honour. The Avenues of Honour may also be promoted from a tourism perspective and to increase awareness of their significance. They could be promoted as gateways on a journey through to Moyne Shire Council’s Avenues of Honour, for people interested in researching the history of the Avenues of Honour or learning more about the significance of the avenues and the commemorative value either collectively or individually.

Several townships and rural settlements while listed, did not have remaining Avenues of Honour. In preparation of the study, investigation was undertaken through consultation with the general community and in certain instances, each local community to determine why the avenues no longer exist and where the avenues were once located. No information could be found on why Woolsthorpe, Ballangeich, Winslow and The Sisters did not have remaining Avenues of Honour.

Avenues of Honour within Moyne Shire that are listed on the Victorian Heritage Register have been included in this Tree Management Study. The list of towns, townships and settlements species is as follows:

Township:	Road:	Species:
Mortlake	Shaw St/ Hamilton Hwy	Cypress
Hexham	Hamilton Hwy	Cypress/Peppercorn
Hexham	Faire St	Cypress
Caramut	Brown St/ Hamilton Hwy	Cypress
Ellerslie	Hopkins Hwy	Cypress
Orford	Hamilton-Port Fairy Rd	Cypress
Grassmere	Grassmere Rd	Oak
Koroit	Anzac Ave	Plane Tree
Port Fairy	Bourne Ave	Norfolk Pine
Naringal	Cobden-Warrnambool Rd	Eucalypt

In addition to these Avenues of Honour, there are two trees of similar significance requiring individual assessment:

Township:	Road:	Species:
Mortlake	Cnr Shaw & Dunlop Sts	Norfolk Pine (Peace Tree)
The Sisters	Framlingham-Mortlake Rd	Calabrian Pine (Lone Pine)

3

Moyne Shire Council set the following Aims and Objectives for the preparation of the Avenue of Honour Tree Management Study.

- Prepare practical and realistic strategies and actions to manage, conserve and enhance the existing Avenue of Honour Trees.
- Assess the Avenue of Honour in each of the nominated towns, townships, hamlets and rural settlements in context of their cultural and social values to the municipality and each town, township, hamlet, or rural settlement.
- Enhance the character and identity of each Avenue of Honour through implementation of an appropriate management regime and supporting infrastructure.
- Identify sites where the avenues should be expanded, and/ or replaced where necessary.
- Provide a succession plan in terms of time frame, species and phasing out or one-time replacement.
- Provide a framework for Council to manage, promote and maintain existing and future services and infrastructure at the Avenues of Honour.



Memorial plaque at The Sisters



Name plaque associated with an avenue tree at Mortlake



Corymbia ficifolia on the left and plaque on the right, at Naringal



The Peace Tree on the left and the memorial statue on the right, at Mortlake

4

The following process was undertaken by the consultants:

- An overview of the context of each Avenue of Honour was prepared, based upon a site visit to each Avenue of Honour as nominated by the Shire Council.
- A meeting was conducted in late January 2014 with community members and Council Officers, prior to the detailed arboricultural assessment.
- Assessment of the health and condition of each individual tree within the nominated Avenues of Honour, undertaken in late February 2014.
- From tabulated GPS location and each tree's recorded date i.e., species, age, health condition, useful life expectancy tree protection zone, name plaque details, create a one-page data sheet specific to each tree within each avenue.
- Recommendations for the future management of each individual tree within each Avenue of Honour.
- Provision of recommendations for the future management of each Avenue of Honour. Identify and review strategies of management to address potential damage to trees, public safety, proximity to overhead and underground services, replacement and infill of missing tree(s) and longer term succession planting.
- Provision of a statement in the contribution of each Avenue of Honour to each town/ township's sense of place and streetscape character.
- Preparation of costs to replace and maintain trees within each avenue.
- Establish priorities for replacement on the basis of the significance of each Avenue of Honour from a regional and local perspective, the existing species and their general health and condition.
- Provide display plans and report for Council's website and the hard copies for the Mortlake Office for the six-week community review. Port Fairy and Macarthur offices had hard copies on display.
- Inclusion of comments on the Draft Report, made by stakeholder and community groups.
- Presentation of the Draft Report to the community workshop meeting.
- Inclusion of recommendations from Council following internal review of the Draft Report in early 2017.

5

This study covers the Avenues of Honour located with the Shire of Moyne, located in the south-west of Victoria, the Shire covers an area of 5,478 square kilometres. The region consists mostly of rural farmland and the industry base for the area includes dairy, beef cattle, sheep, vegetable production, manufacturing (quarrying, food products, pharmaceuticals, seafood) and tourism.

The landscape character is rural and the terrain varies from being relatively flat to strongly undulating, mostly of pastoral grass and farmland.

The Avenues of Honour are generally located on the main street of each Town, Township or Hamlet, however in some cases they are situated away from the main activity area, such is the case of Port Fairy, where they are located closer to the Botanical Gardens, at Koroit they are located within the Church Precinct and at Mortlake they are located in a long row along the Hamilton Highway en route towards the main activity area of the Town.



Location of Moyne Shire in Victoria
Image source: Wikipedia



The Avenues of Honour within the 13 towns, townships and settlements under study are highlighted with green boxes

There are 192 *Cupressus macrocarpa* (Monterey Cypress) along the side of the Hamilton Highway east of Mortlake's core retail area. They extend in an east-west direction from the town centre and are spaced at approximately 16-metre intervals. There are seven vacant sites.

At Market Square, corner of Shaw and Officer Streets, there is the Peace Tree, an *Araucaria heterophylla* (Norfolk Island Pine) in Celebration of Peace. The tree is in only fair condition, there is scar damage to the base of the trunk against the kerbline (car damage as right on the kerbline).

The mixed planting between the Avenue of Honour and Market Square of some 200-300 metres in length is predominantly *Schinus molle* (Peppercorn) and two species of Figs-- being *Ficus macrophylla* (Moreton Bay Fig) and *F. rubiginosa* (Port Jackson Fig). These extend from Boundary Road to Market Square.

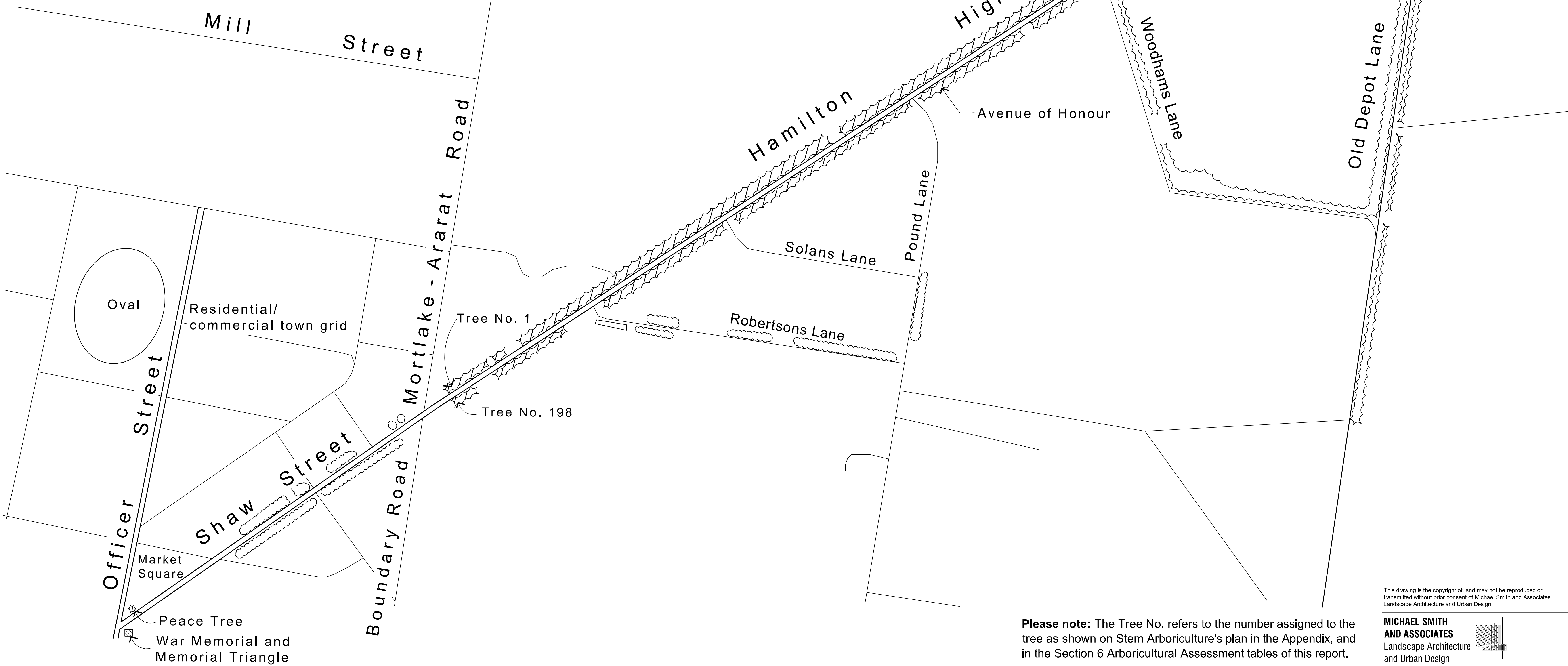
Market Square and Dunlop Street provide a good setting for the war memorial plaques and flagpole.

Interpretive information boards summarise the war campaigns and the relevance of those who served and returned and those who paid the ultimate sacrifice.

The Avenue of Honour is prominent in terms of the town's character, by virtue of the strong form of the Cypress trees in contrast to the adjacent mixed plantings between Boundary Road west to Market Square.

New plaques were unveiled in 2011, as was the interpretive information within the Memorial Triangle.

Of the 134 men from Mortlake and surrounding area who left home to serve in the First World War (1914-18), a total of 42 men failed to return. To remember those who lost their lives, an impressive memorial to commemorate their sacrifice was erected and an Avenue of Honour planted on Darlington Road (Hamilton Highway).



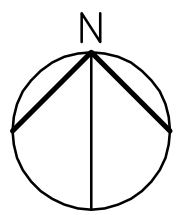
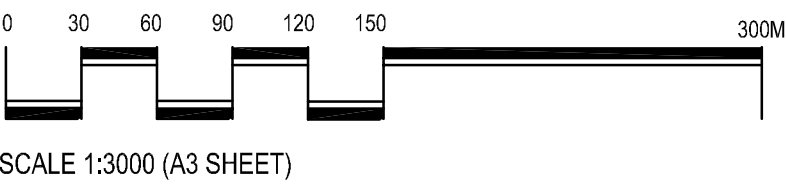
Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

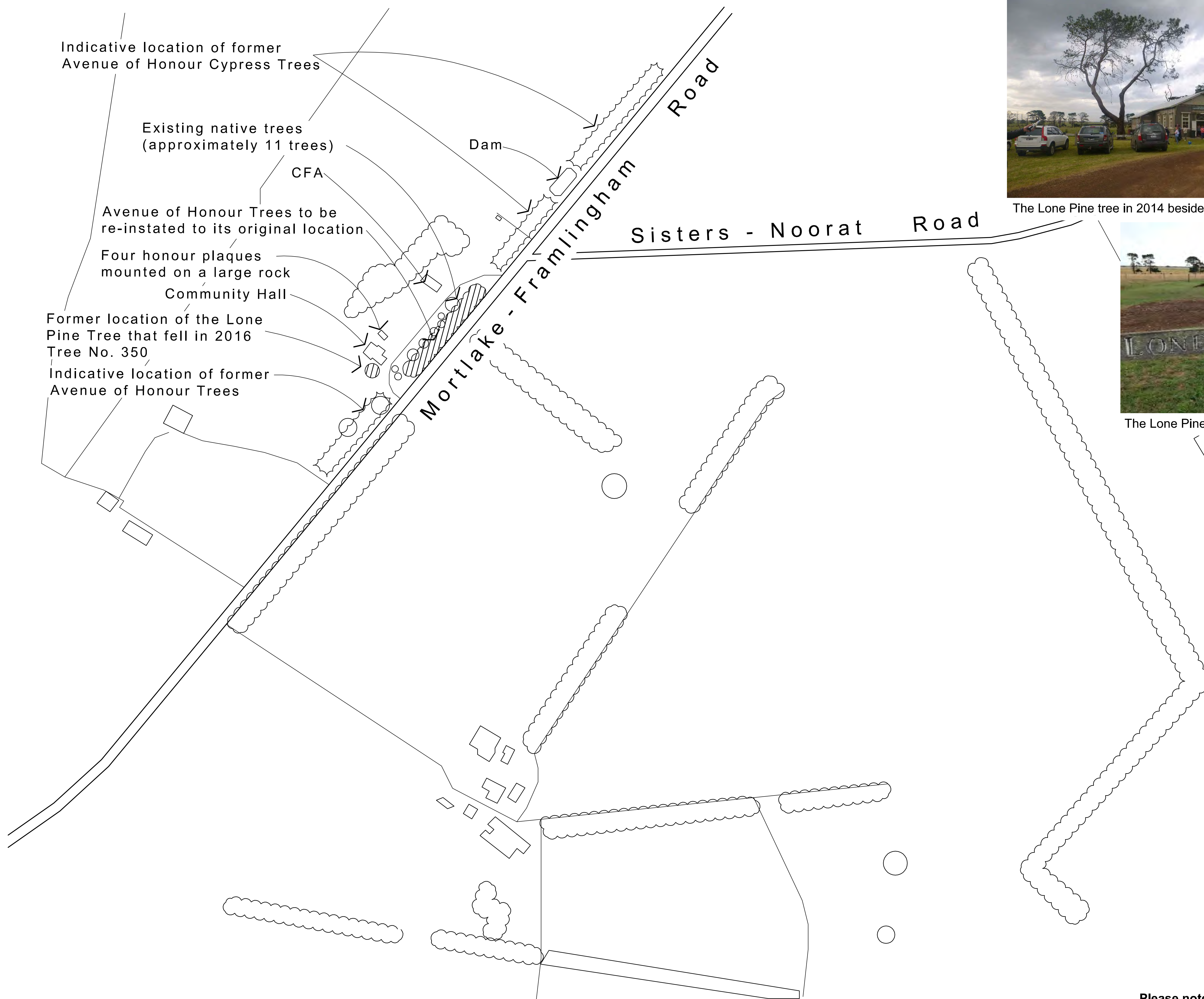
MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS/GL
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1



CONTEXT PLAN - MORTLAKE AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL



The Lone Pine tree in 2014 beside the community hall



The Lone Pine after it fell in 2016 and some objects it was made into - a rustic frame and seat



The Sisters is a rural settlement of surrounding farming properties that share a connection to the Mortlake-Framlingham Road and the Sisters-Noorat Road. There is an existing community hall and four commemorative plaques are mounted on a large rock just east of the community hall.

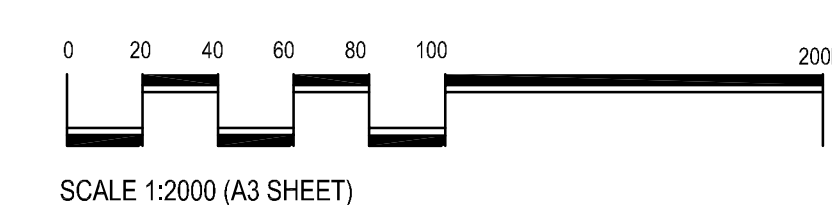
A key feature within the community hall's precinct was the Lone Pine (*Pinus brutia*), which was reputedly sourced from the original Lone Pine at Gallipoli. The Lone Pine fell on the 12th of July 2016 due to a windstorm. The tree was cut into long lengths (as long as possible that could be still be transported). The smaller branches were removed and taken away. The pine cones were collected for their seeds, and they could also be made into mementos. The wood from the tree has since been made into a seat, furniture and a rustic frame. The stump has been removed and is placed on a concrete pad next to the hall.

The original Avenue of Honour of Cypress trees was located along the west side of Mortlake-Framlingham Road, from just past the intersection of Sisters-Noorat Road to the north, and extending down south towards Occupation Lane (as shown indicatively on the plan). The reasons for the decline of the Cypress trees was due to old age, dropping limbs and it was not well-maintained. After the removal of the Cypress trees, some mixed native trees were planted in their place on the road reserve, between the service road near the Community Hall and Mortlake-Framlingham Road.

Provision of a single advisory sign would assist in the interpretation of the site.

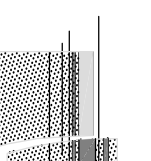
Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

CONTEXT PLAN - THE SISTERS AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL



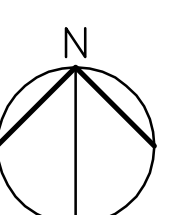
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

**MICHAEL SMITH
AND ASSOCIATES**
Landscape Architecture
and Urban Design



Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No.: Sheet 1 of 1





Caramut is a rural township with a general store, a community hall and several residences. The surrounding landscape, particularly to the east is undulating and farmland. The Avenue of Honour consists of nine *Cupressus macrocarpa*, which are located on the high elevated end of the northern section of the Warrnambool to Caramut Road. There is one missing tree and a tree trunk that is now a wood carved sculpture at the southern end near Gibson Street.

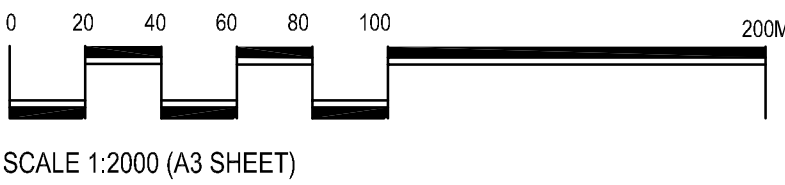
The trees comprising the Avenue of Honour in Brown Street (Hamilton Highway), Caramut, in the vicinity of the local RSL Hall, were probably planted in the 1920s as part of a planned memorial planting program, possibly assisted by the local Shire Council (Mortlake) or the local returned servicemen's association. There are further Monterey Cypress trees on Gibson Street.

Provision of a single advisory sign would assist in the interpretation of the site.

CONTEXT PLAN - CARAMUT AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL

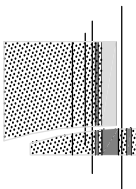


Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.



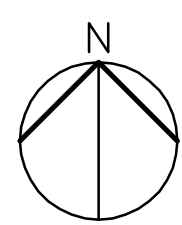
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

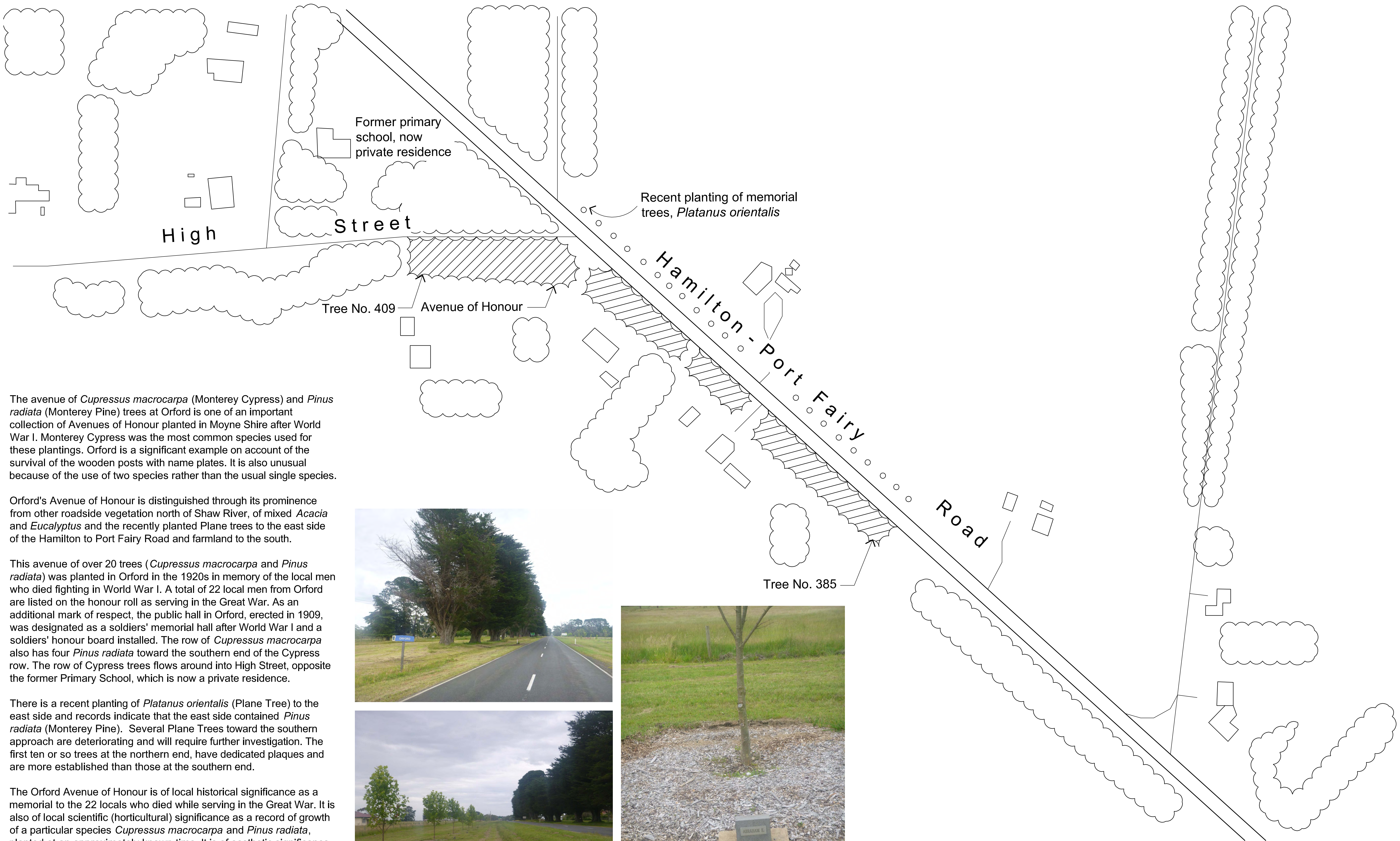
**MICHAEL SMITH
AND ASSOCIATES**
Landscape Architecture
and Urban Design



Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1





The avenue of *Cupressus macrocarpa* (Monterey Cypress) and *Pinus radiata* (Monterey Pine) trees at Orford is one of an important collection of Avenues of Honour planted in Moyne Shire after World War I. Monterey Cypress was the most common species used for these plantings. Orford is a significant example on account of the survival of the wooden posts with name plates. It is also unusual because of the use of two species rather than the usual single species.

Orford's Avenue of Honour is distinguished through its prominence from other roadside vegetation north of Shaw River, of mixed *Acacia* and *Eucalyptus* and the recently planted Plane trees to the east side of the Hamilton to Port Fairy Road and farmland to the south.

This avenue of over 20 trees (*Cupressus macrocarpa* and *Pinus radiata*) was planted in Orford in the 1920s in memory of the local men who died fighting in World War I. A total of 22 local men from Orford are listed on the honour roll as serving in the Great War. As an additional mark of respect, the public hall in Orford, erected in 1909, was designated as a soldiers' memorial hall after World War I and a soldiers' honour board installed. The row of *Cupressus macrocarpa* also has four *Pinus radiata* toward the southern end of the Cypress row. The row of Cypress trees flows around into High Street, opposite the former Primary School, which is now a private residence.

There is a recent planting of *Platanus orientalis* (Plane Tree) to the east side and records indicate that the east side contained *Pinus radiata* (Monterey Pine). Several Plane Trees toward the southern approach are deteriorating and will require further investigation. The first ten or so trees at the northern end, have dedicated plaques and are more established than those at the southern end.

The Orford Avenue of Honour is of local historical significance as a memorial to the 22 locals who died while serving in the Great War. It is also of local scientific (horticultural) significance as a record of growth of a particular species *Cupressus macrocarpa* and *Pinus radiata*, planted at an approximately known time. It is of aesthetic significance for providing an attractive entry to the town and for its contribution to the cultural landscape.

Provision of a single advisory sign would assist in the interpretation of the site.



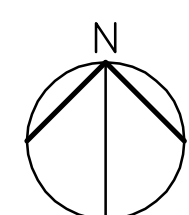
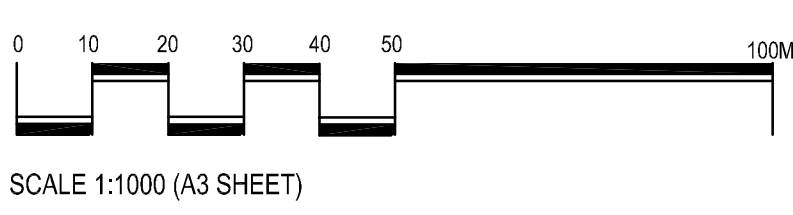
Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS/GL
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1



CONTEXT PLAN - ORFORD

AVENUES OF HONOUR TREE MANAGEMENT STUDY

MOYNE SHIRE COUNCIL

Hexham presents as a hamlet immediately west of the Hopkins River, the surrounding landscape is of a strong undulating and rural character. There is a strong rural community feel within the settlement. Faire Street terminates at a tee intersection of the Hamilton Highway and the Woolshed Inn, a two-storey, bluestone former Inn or Hotel punctuates the corner.

The curvilinear layout and gentle rise from Faire Street west of the Hamilton Highway emphasises the journey through the Avenue of Honour consisting of *Cupressus macrocarpa* (Monterey Cypress) and several *Schinus molle* (Peppercorn). Only a couple of plaques lying on the ground at the foot of the trees were observed.

The original planting of trees in Webster Street (Hamilton Highway) to honour local soldiers was of alternating *Schinus molle* (Peppercorn) and *Acacia baileyana* (Cootamundra Wattle) trees. Webster Street was selected for the avenue because it was an important road through the township. In 1921, the first tree was planted ceremoniously on the south side of the road in honour of Donald McKenzie who was killed in action. Only two of the original Peppercorn trees remain. The avenue has been replanted with *Cupressus macrocarpa* (Monterey Cypress), a traditional species of avenues of honour throughout the municipality.

An avenue of *Cupressus macrocarpa* (Monterey Cypress) was planted in Faire Street, Hexham by Mortlake Shire in 1946-47 in memory of the local men who died fighting in World War II. Approximately one hundred metres west of Faire Street is a War Memorial located on the north side of the road.

Provision of a single advisory sign would assist in the interpretation of the site.



Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

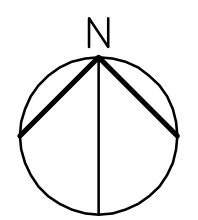
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS
Date : 15.03.2017
Project No. : 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1

0 30 60 90 120 150 300M
SCALE 1:3000 (A3 SHEET)



CONTEXT PLAN - HEXHAM

AVENUES OF HONOUR TREE MANAGEMENT STUDY

MOYNE SHIRE COUNCIL



Ellerslie is a rural settlement with a very notable timber trestle bridge which is of state wide significance and is placed on the State Heritage Register.

The single row of Avenue of Honour *Cupressus macrocapa* (Monterey Cypress) trees is located on the southern side of the Hopkins Highway with one other Monterey Cypress tree located on the north side of the Hopkins Highway at the western end of the trees. There is a simple board (black lettering on a 700 x 600 white metal sign) at either end signifying the Avenue of Honour.

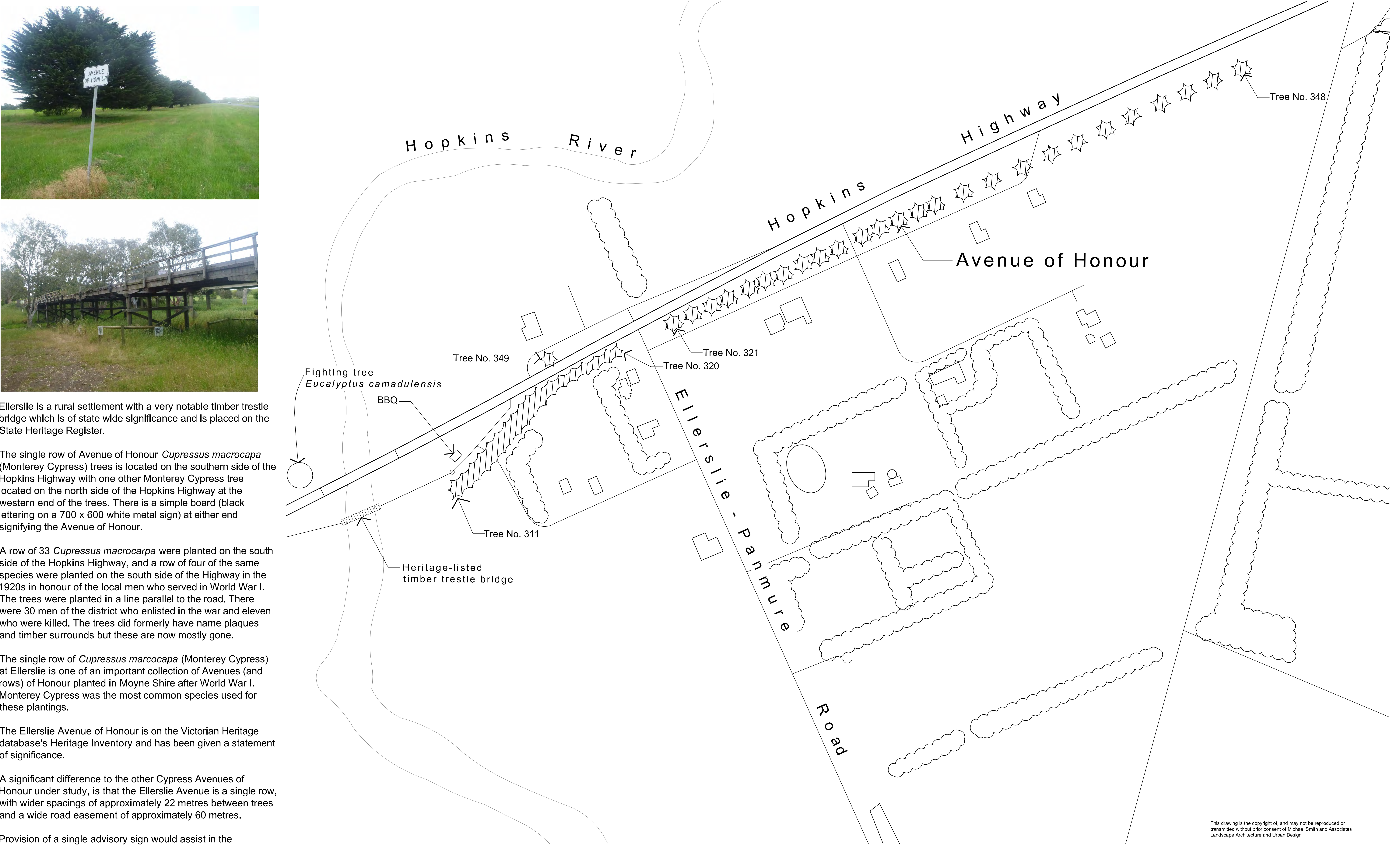
A row of 33 *Cupressus macrocarpa* were planted on the south side of the Hopkins Highway, and a row of four of the same species were planted on the south side of the Highway in the 1920s in honour of the local men who served in World War I. The trees were planted in a line parallel to the road. There were 30 men of the district who enlisted in the war and eleven who were killed. The trees did formerly have name plaques and timber surrounds but these are now mostly gone.

The single row of *Cupressus marcocapa* (Monterey Cypress) at Ellerslie is one of an important collection of Avenues (and rows) of Honour planted in Moyne Shire after World War I. Monterey Cypress was the most common species used for these plantings.

The Ellerslie Avenue of Honour is on the Victorian Heritage database's Heritage Inventory and has been given a statement of significance.

A significant difference to the other Cypress Avenues of Honour under study, is that the Ellerslie Avenue is a single row, with wider spacings of approximately 22 metres between trees and a wide road easement of approximately 60 metres.

Provision of a single advisory sign would assist in the interpretation of the site.

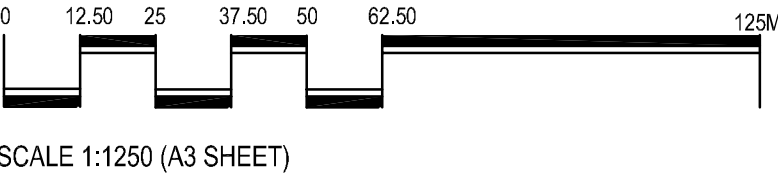


Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

CONTEXT PLAN - ELLERSLIE

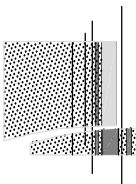
AVENUES OF HONOUR TREE MANAGEMENT STUDY

MOYNE SHIRE COUNCIL



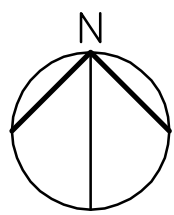
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design



Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS/GL
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1



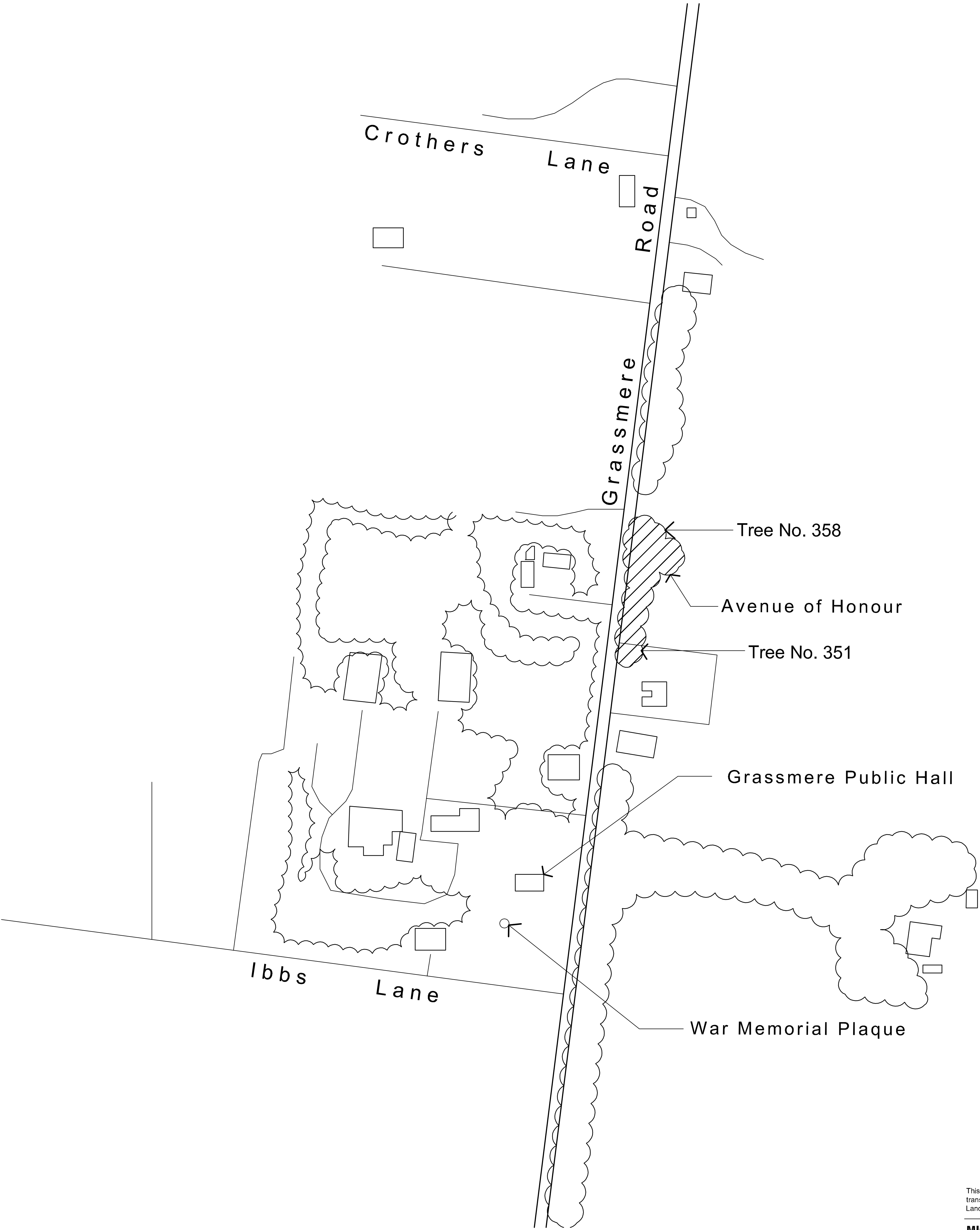


The seven Turkey Oak trees (*Quercus cerris*) were planted in the 1920s in memory of the local men who died fighting in World War I. According to the memorial plaque in the grounds of the Grassmere Public Hall, there were eight local men who lost their lives in the Great War. Currently there is a row of 7 Oak trees, so it is likely that one tree has been removed. The seven trees appear to stand as a memorial to the eight names of those who lost their lives in the First World War. The names are given on a plaque outside the Grassmere Public Hall.

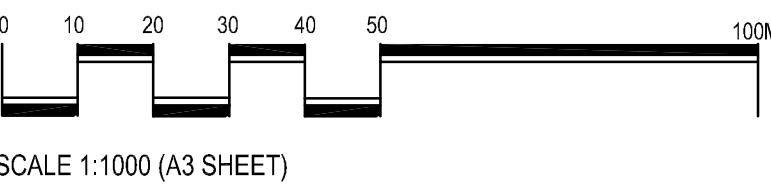
The choice of Oaks for the Grassmere Avenue of Honour may have been in recognition of the 'English' associations of the Vale of Grassmere (William Wordsworth's home in the Lakes District). Oaks were part of the original planting palette of the Ballarat Avenue of Honour, and are associated with the qualities of virtue and majesty.

The Grassmere Avenue of Honour is unusual in Moyne Shire for its choice of Oak trees, rather than the more typical Monterey Cypress. Comprising of only seven trees, it was planted as a single row rather than a proper avenue, which makes it similar to Ellerslie and Naringal.

Provision of a single advisory sign would assist in the interpretation of the site.

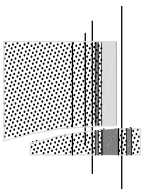


Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.



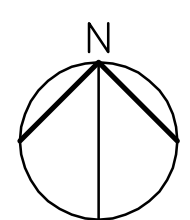
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

**MICHAEL SMITH
AND ASSOCIATES**
Landscape Architecture
and Urban Design



Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS/GL
Date : 15.03.2017
Project No. : 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1



CONTEXT PLAN - GRASSMERE AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL



Koroit is the home town of Henry Handel Richardson. She lived in the Koroit Post Office as a child from 1878. The town is recognised for its heritage value, with eight sites listed in the Register of the National Estate.

The Avenue of Honour of 22 *Platanus orientalis* (Plane Tree) is located on Anzac Avenue, which lies directly south of Victoria Park Gardens (Botanic Gardens) and Recreation Reserve. There is a direct visual link between the Avenue of Honour and the Botanic Gardens. The Gardens were designed by William Guilfoyle who had a hand in the layout of many of the Regional Botanic Gardens in Victoria, including the Royal Botanic Gardens in Melbourne. The Avenue is on part of the Town's Heritage Trail. The Plane trees are in good condition. There is no advisory signage of their significance nor any name plaques.

While the Avenue of Honour is somewhat physically and visually removed from the core town area, it is located within the Koroit Church Precinct, with a strong civic and community services presence of St. Patrick's Roman Catholic Church. To the immediate west side of the row of *Platanus orientalis* is Patrick's Luxury Bed and Breakfast, which are boutique apartments in the former convent. To the east side of the avenue is St Patrick's Primary School and Scot's Presbyterian Church and to the south-east side, St. Patrick's Church.

Provision of a single advisory signs would be helpful in the interpretation of the avenue, particularly as it is associated with the Botanic Gardens, the Church Precinct and the Heritage Trail.

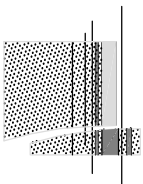


Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

CONTEXT PLAN - KOROIT AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL

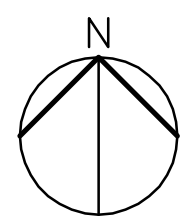
This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

**MICHAEL SMITH
AND ASSOCIATES**
Landscape Architecture
and Urban Design



Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1



Naringal is located approximately eight kilometres east of Allansford and is a rural settlement with a CFA building and the Naringal Community Hall.

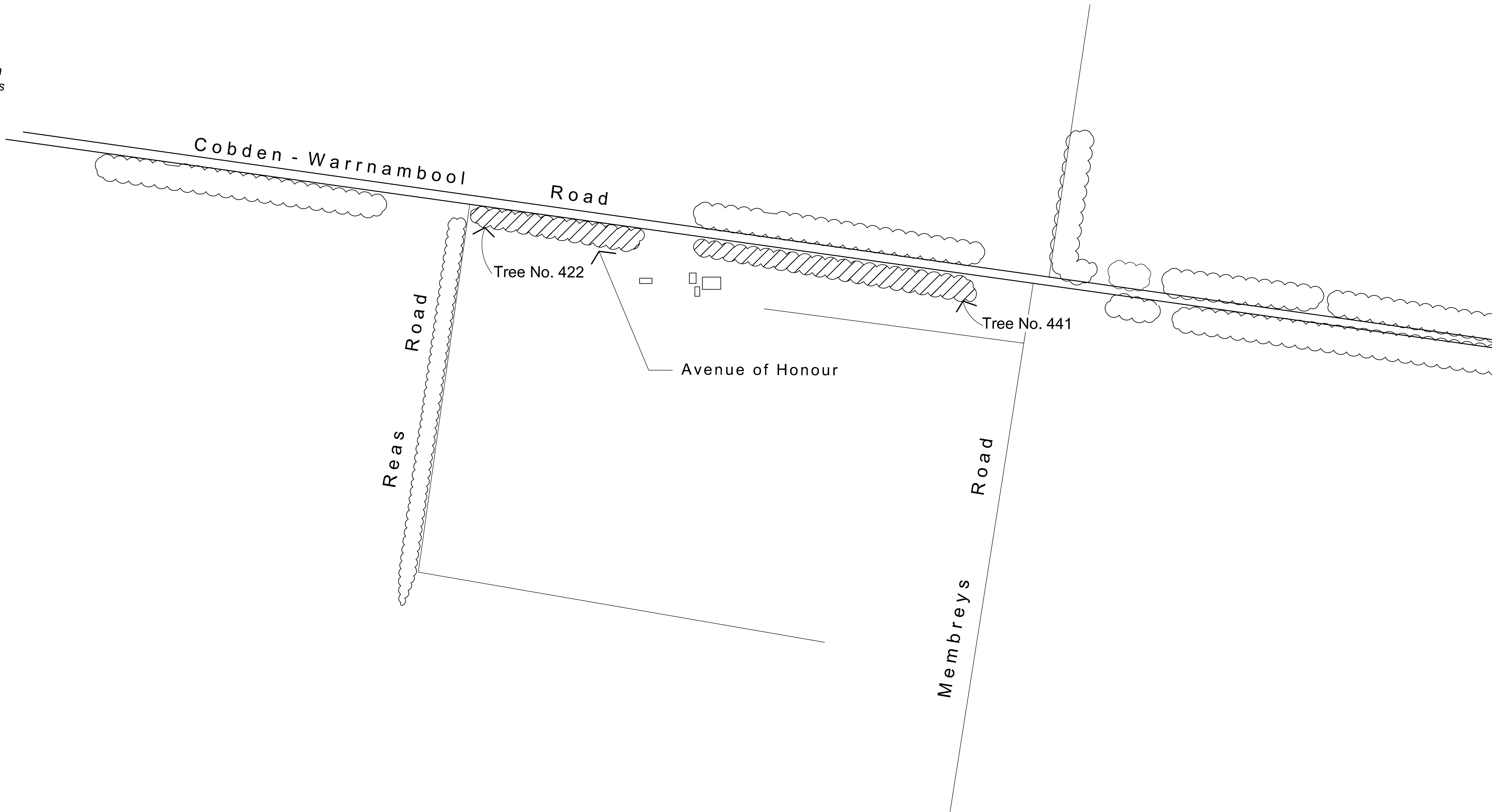
The Avenue of Honour consists of *Corymbia ficifolia* (Red Flowering Gum). Mixed *Acacia* and *Eucalyptus* exist either end of the Avenue and in parts in amongst the Avenue at the eastern end, therefore diminishing the integrity of the Avenue of Honour. There is recognition of the commemorative heritage with a stone gateway memorial, flagpole and name plaques directly in front of the community hall.

There are 34 *Corymbia ficifolia* recorded, and approximately 10 trees are visually well defined, as the roadside verge near the CFA and community hall is slashed/ mown grass. However the balance of possibly 24 trees or so, is lost in the thickets of bracken, *Phalaris sp.* grass, and mixed natives.

Memorial gates were a popular utilitarian memorial erected in many small towns in Victoria. Entrance gates, like avenues of trees, provided a symbolic form of a threshold or 'passage through', which suited the purpose of remembering those who had died in war. The memorial gates and monument are of enhanced significance when considered in the context of the Naringal Avenue of Honour. They were installed after World War I as a memorial to those who served and fought in the Great War.

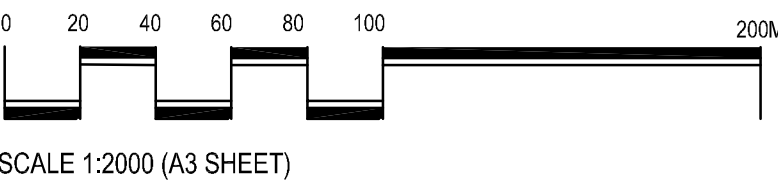
The memorial planting of Red Flowering Gums (*Corymbia ficifolia*) was undertaken as a memorial to those who served in World War II. The original planting included a white painted wooden fence and the name of a soldier set on a piece of wood on the fence (pers. comm, Bart Gane).

Provision of a single advisory sign would assist in the interpretation of the site.



Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

CONTEXT PLAN - NARINGAL AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL

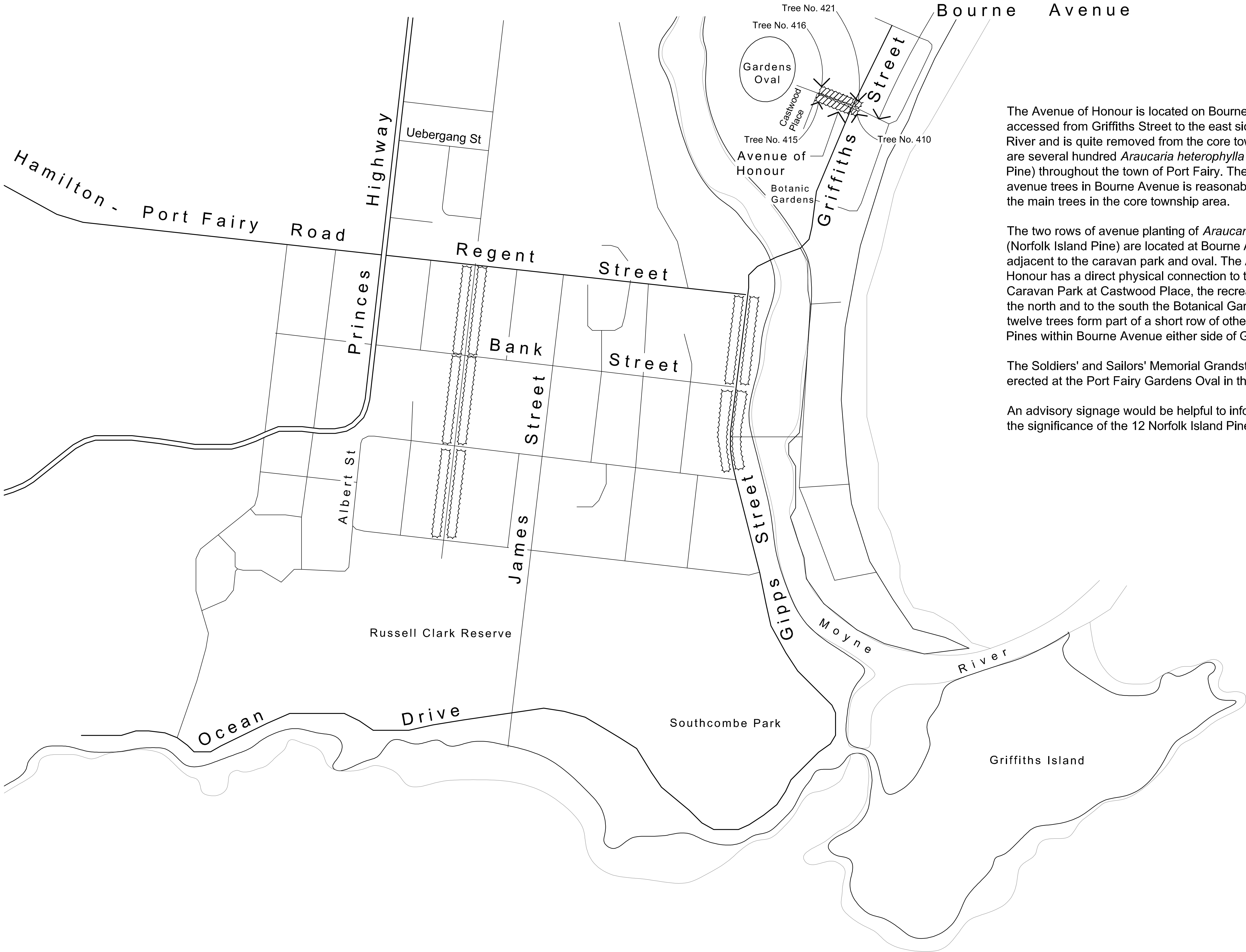


This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

**MICHAEL SMITH
AND ASSOCIATES**
Landscape Architecture
and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS	
Date: 15.03.2017	
Project No.: 14-011	
Cad File: ContextPlan.dwg	
Drawing No. : Sheet 1 of 1	



The Avenue of Honour is located on Bourne Avenue accessed from Griffiths Street to the east side of Moyne River and is quite removed from the core town area. There are several hundred *Araucaria heterophylla* (Norfolk Island Pine) throughout the town of Port Fairy. The short length of avenue trees in Bourne Avenue is reasonably isolated from the main trees in the core township area.

The two rows of avenue planting of *Araucaria heterophylla* (Norfolk Island Pine) are located at Bourne Avenue adjacent to the caravan park and oval. The Avenue of Honour has a direct physical connection to the Gardens Caravan Park at Castwood Place, the recreation oval to the north and to the south the Botanical Gardens. The twelve trees form part of a short row of other Norfolk Island Pines within Bourne Avenue either side of Griffiths Street.

The Soldiers' and Sailors' Memorial Grandstand was erected at the Port Fairy Gardens Oval in the early 1920's.

An advisory signage would be helpful to inform people of the significance of the 12 Norfolk Island Pines.



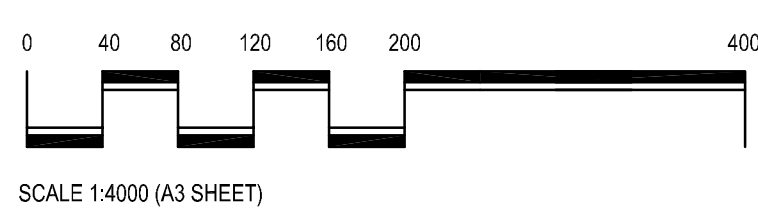
Within the core township zone, Norfolk Island Pines are a dominant feature.

CONTEXT PLAN - PORT FAIRY

AVENUES OF HONOUR TREE MANAGEMENT STUDY

MOYNE SHIRE COUNCIL

Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.



This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: AO/CS/GL
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No. : Sheet 1 of 1

6

Introduction

The assessment of each tree within each Avenue of Honour, was made in late February 2014 by Stem Arboriculture, over the duration of a week. The assessment included the following information:

Tree ID

The trees are numbered from 1 to 444, including vacant sites.

Plaque No.

Trees with existing plaques are recorded, noting their plaque number. Trees without existing plaques are noted as "None".

Botanic name and common name

Trees were identified botanically, the predominant species is *Cupressus macrocarpa* (Monterey Cypress). Other species were *Quercus cerris* (Turkey Oak), *Corymbia ficifolia* (Red Flowering Gum), *Platanus x acerifolia* (London Plane), *Pinus radiata* (Monterey Pine) and *Schinus aerira* (Peppercorn). There were two isolated trees to be assessed, one was *Pinus brutia* (Calabrian Pine) at The Sisters known as the Lone Pine and the other was the *Araucaria heterophylla* (Norfolk Island Pine) at Mortlake, known as the Peace Tree.

Height and width of tree canopy

Each tree's canopy measurements were taken in metres.

Trunk DBH

Each tree's trunk diameter was taken at breast height (1.4 metres) above ground level. Measurements were taken in centimetres.

Health

Category	Description
Good	Good growth indicators, e.g. extension growth. Crown full, with good density, foliage entire with good colour. No or minimal canopy dieback. Minimal or no pathogen damage. Good wound wood development.
Fair	Typical growth indicators, e.g. extension growth, leaf size, canopy density for species in location. Tree may have <30% dead wood, or can have minor canopy dieback. Foliage generally a good colour, some discolouration may be present. Minor pathogen damage may be present.
Poor	Poor growth indicators. Tree may have >30% dead wood. Canopy dieback present. Discoloured or distorted leaves, and/ or excessive epicormic growth. Pathogen is present and/ or stress symptoms that could lead or are leading to decline of tree.

Structure

Category	Description
Good	Good branch attachment and/ or no or minor structural defects. Trunk and scaffold branches sound or minor damage. Good trunk and scaffold branch taper. No branch over extension. No damage to structural roots and/ or good buttressing present. No obvious root pests or diseases.
Fair	Typical structure for species. Some minor structural defects and/ or minor damage to trunk. Bark missing. Cavities could be present. Minimal or no damage to structural roots.
Poor	Major structural defects and/ or trunk damaged and/ or missing bark, large cavities, and/ or girdling or damaged roots that are problematic.
Hazardous	Tree poses immediate hazard potential that should be rectified as soon as possible.

Form

Category	Description
Good	Canopy full and symmetrical.
Fair	Minor asymmetry or suppression. Considered typical for species in the situation.
Poor	Canopy suppressed, major asymmetry. Stump re-growth.

Useful Life Expectancy (ULE)

The useful life expectancy is a guide to the possible life of the tree. In the case of a tree in poor condition and in decline, the life expectancy was noted as <10 years. Other specimens were given a range of years, such as 10 - 15 years or 20 - 30 years.

Observations

The following categories contributed to the analysis of each tree's overall health and conditions:

- Cypress canker
- Dieback
- In decline
- Good specimen
- Poor location
- Vacant site
- Storm damage
- Structural failure
- Uprooted
- Root death
- Decaying Structure
- Fungal brackets present
- Cable installed
- Trunk cavity
- Bifurcated with included bark
- Adjacent powerlines

GPS - locations

For each of the 441 trees and vacant sites, a GPS location was recorded and including the following information:

- Easting
- Northing

Recommended actions

The following categories contributed to the recommended actions for the ongoing management and maintenance of each tree:

- Remove
- Retain
- Install cable
- Prune reduce weight
- Prune deadwood
- Canopy lift
- Prune of power lines
- Install limb support

During the preparation of the Study Report and communication with Moyne Shire Council's Project Manager, it became evident that a simplified approach was required in terms of short-term (1 - 5 years) to medium term (6 - 20 years) and long term (20 - 50 years) management prescriptions and recommended actions. The recommendations and final strategies and actions need to be realistic and achievable given the significant number of trees (mainly Monterey Cypress) that were in a state of decline. To this end, several Avenues of Honour - Mortlake, Hexham, Caramut and Orford in that order, have priority in terms of removal and replanting of appropriate tree species.

The Avenue of Honour at Ellerslie is in relatively good condition largely due to its wide spacings of trees. The Ellerslie community advised the existing Monterey Cypress trees should be retained and managed. Five replacement trees should be planted and two vacant sites planted as the first stage of overall works.

The other Avenues of Honour at Koroit, Grassmere and Naringal, only require minor replacement and at Port Fairy, infrastructure improvements need to be made.

MORTLAKE

KEY FOR USEFUL LIFE EXPECTANCY (ULE)

Vacant site

ULE < 5 Years (hazardous trees)

ULE 5 - 20 Years

ULE 20 - 50 Years

ULE > 50 Years

KEY FOR RECOMMENDED ACTIONS

Recommended action for removal and replacement of 21 trees with Cypress as a trial in 2017

Recommended action of removal and replacement of a block of 19 trees in 2022

Recommended action of removal and replacement of a block of 20 trees in 2024

Recommended action of removal and replacement of a block of 20 trees in 2026

Recommended action of removal and replacement of a block of 20 trees in 2028

Recommended action of removal and replacement of a block of 20 trees in 2030

Recommended action of removal and replacement of a block of 20 trees in 2032

Recommended action of removal and replacement of a block of 20 trees in 2034

Recommended action of removal and replacement of a block of 20 trees in 2036

Recommended action of removal and replacement of a block of 20 trees in 2038

Recommended action of regular maintenance for the Norfolk Island Pine Peace Tree

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
1	SN432	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	226	Good	Fair	Good	15 - 20 Yrs	Cable Installed	Retain. Prune broken branches	24/02/2014	659169.8296	5784052.063
2	SN869	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	205	Good	Fair	Good	15 - 20 Yrs	Adjacent powerlines	Retain	24/02/2014	659187.4668	5784062.484
3	SN1387	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	224	Good	Poor	Fair	5 - 10 Yrs	Stem failure. Longitudinal split over road, adjacent powerlines	Remove	24/02/2014	659203.9837	5784072.589
4	SN629	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	210	Good	Poor	Poor	10 - 15 Yrs	Longitudinal split to east, adjacent powerlines	Prune/reduce weight. Remove splitting limb	24/02/2014	659221.3151	5784083.5
5	SN6003	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	219	Good	Fair	Fair	10 - 15 Yrs	Resin exudation, structural failure, adjacent power lines	Retain, prune/reduce weight	24/02/2014	659238.1815	5784093.385
6	SN3240	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	217	Good	Hazardous	Good	15 - 20 Yrs	Cracking limb over road. Sectional dieback, adjacent powerlines	Retain, prune/reduce weight. Remove cracked limb	24/02/2014	659255.126	5784104.773
7	SN3122	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	19	162	Fair	Fair	Poor	5 - 10 Yrs	Structural failure, adjacent powerlines	Remove	24/02/2014	659289.5676	5784125.211
8	SN1624	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	182	Fair	Fair	Fair	15 - 20 Yrs	Cable installed, adjacent powerlines	Retain, prune/reduce weight	24/02/2014	659272.3642	5784114.78
9	AAMC Doctor	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	195	Fair	Poor	Fair	5 - 10 Yrs	Possible Cypress canker, structural failure, adjacent powerlines. Resin exudation	Remove	24/02/2014	659305.9821	5784136.145
10	SN4666	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	198	Fair	Fair	Fair	15 - 20 Yrs	Sectional dieback, structural failure, adjacent powerlines	Retain, prune/reduce weight	24/02/2014	659323.4806	5784146.028
11	SN2218	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	184	Fair	Fair	Good	15 - 20 Yrs	Adjacent powerlines	Retain	24/02/2014	659339.8804	5784157.114
12	SN951	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	219	Fair	Fair	Fair	10 - 15 Yrs	Sectional dieback of foliage to north, adjacent powerlines	Retain, prune/reduce weight	24/02/2014	659357.0599	5784167.91
13	SN3607	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	210	Poor	Poor	Fair	< 5 Yrs	Possible Cypress canker, in decline	Remove	24/02/2014	659409.7962	5784201.376
14	SN14	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	212	Poor	Fair	Fair	5 - 10 Yrs	Extensive cable system. Cracked limb to north. Cypress canker.	Remove	24/02/2014	659426.4919	5784209.852
15	SN1733	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	215	Fair	Fair	Good	5 - 10 Yrs	Cabled and braced. Resin exudation. Cyprees canker, dieback, adjacent powerlines	Remove	24/02/2014	659442.098	5784220.664
16	SN308	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	20	206	Good	Fair	Good	15 - 20 Yrs	Resin exudation. Minimal canopy decline	Retain, prune/reduce weight	24/02/2014	659458.9848	5784231.667
17	SNDepot	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	226	Fair	Poor	Poor	< 5 Yrs	Poor specimen. Major assymetry, Storm damage, structural failure	Remove	24/02/2014	659475.9337	5784241.885
18	SNDepot	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	218	Good	Fair	Good	15 - 20 Yrs	Cracked limb to south-west	Retain, prune/reduce weight	24/02/2014	659492.7223	5784252.917
19	SN61360	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	201	Good	Fair	Good	15 - 20 Yrs		Retain	24/02/2014	659520.2333	5784271.104
20	SN321	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	187	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659538.2643	5784280.115
21	SN3248	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	222	Good	Fair	Good	15 - 20 Yrs	Major assymetry. Exposed to wind, strom damage, structural failure	Remove	24/02/2014	659556.4834	5784290.639
22	SN3808	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	192	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659574.8153	5784304.001
23	SN918	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	200	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659593.794	5784316.636
24	SN1736	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	175	Good	Poor	Poor	< 5 Yrs	Poor specimen, storm damage, structural failure	Remove	24/02/2014	659612.8722	5784326.535

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
25	SN51505	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	20	173	Good	Poor	Good	5 - 10 Yrs	Cracked limb over roadside	Remove	24/02/2014	659639.6876	5784347.3
26	SN250	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	196	Good	Hazardous	Good	< 5 Yrs	Splitting apart at base, bifurcated with included bark	Could be cabled and braced. Candidate for removal	24/02/2014	659661.3869	5784358.608
27	SN5291	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	195	Good	Fair	Fair	10 - 15 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	659680.9439	5784366.029
28	SN3466	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	173	Fair	Poor	Poor	5 - 10 Yrs	Cable installed, structural failure. Cracking in location of eye bolt, needs weight reduction	Remove	24/02/2014	659693.6236	5784377.05
29	SN51	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	173	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	24/02/2014	659715.0891	5784392.292
30	SN1536	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	170	Good	Fair	Good	10 - 15 Yrs	Some sectional dieback to north	Retain, prune/ reduce weight	24/02/2014	659730.6973	5784400.016
31	SN31	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	172	Fair	Fair	Good	10 - 15 Yrs	Old cracked pruned limbs. Recent failure over road	Retain, prune/reduce weight	24/02/2014	659747.3905	5784411.873
32	SN5368	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	179	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659767.3049	5784423.138
33	SN2652	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	196	Fair	Fair	Good	10 - 15 Yrs	Structural failure	Retain, prune/reduce weight	24/02/2014	659781.0031	5784433.028
34	SN6272	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	21	190	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659801.2291	5784445.682
35	SN1337/29	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	187	Fair	Fair	Good	5 - 10 Yrs	Some sectional dieback	Remove	24/02/2014	659815.5682	5784456.541
36	SN200	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	172	Fair	Poor	Poor	5 - 10 Yrs	Storm damage, structural failure	Remove	24/02/2014	659833.7262	5784464.312
37	SN57072	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	192	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight, prune canopy lift	24/02/2014	659850.9601	5784476.042
38	SN1678	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	163	Good	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight	24/02/2014	659866.5086	5784484.668
39	SN2526	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	180	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/reduce weight, prune canopy lift	24/02/2014	659886.893	5784499.147
40	SN69011	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	148	Fair	Fair	Good	15 - 20 Yrs	Cracked limb over road, structural failure	Retain, prune/reduce weight. Remove cracked limb	24/02/2014	659902.9465	5784509.702
41	SN1165	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	21	136	Fair	Poor	Poor	5 - 10 Yrs	Major assymetry, storm damage, structural failure	Could be retained. Consider removal	24/02/2014	659918.3896	5784518.996
42	SN3907	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	168	Fair	Fair	Fair	10 - 15 Yrs	Broken branches in upper canopy	Retain, prune/reduce weight. Remedial prune	24/02/2014	659934.417	5784529.447
43	SN Unknown	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	147	Fair	Fair	Fair	10 - 15 Yrs		Retain, prune/reduce weight	24/02/2014	659951.1721	5784539.237
44	SN2348	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	17	142	Fair	Fair	Good	15 - 20 Yrs	Structural failure	Retain, prune/reduce weight	24/02/2014	659968.3532	5784550.875
45	SN Unknown	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	150	Fair	Fair	Poor	5 - 10 Yrs	Shallow soil. On cutting. Storm damage, structural failure	Remove	24/02/2014	659985.0405	5784560.479
46	SN214	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	18	142	Fair	Fair	Good	15 - 20 Yrs	Growing adjacent cutting	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660001.3604	5784571.795
47	SN214	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	17	123	Fair	Fair	Good	15 - 20 Yrs	Adjacent cutting, stuctural failure	Retain, prune/ reduce weight	24/02/2014	660018.2053	5784581.626
48	SN21635	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	17	119	Fair	Fair	Good	10 - 15 Yrs	Sectional dieback to north	Retain, prune/ reduce weight	24/02/2014	660036.173	5784591.89
49	SN461	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	15	128	Fair	Fair	Fair	5 - 10 Yrs	Adjacent cutting. Broken limbs. Sectional dieback	Remove	24/02/2014	660053.689	5784603.763
50	SN1631	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	18	115	Poor	Fair	Fair	< 5 Yrs	In decline	Remove	24/02/2014	660067.0353	5784613.775
51	SN Unknown	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	19	113	Fair	Fair	Fair	5 - 10 Yrs	Resin exudation on trunk, dieback	Consider removal	24/02/2014	660084.5768	5784626.075
52	SN1615	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	186	Fair	Fair	Fair	15 - 20 Yrs	Pruned off roadway	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660101.5367	5784633.67

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
53	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	172	Fair	Poor	Poor	5 - 10 Yrs	Dieback, structural failure	Remove	24/02/2014	660116.6885	5784642.052
54	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	196	Poor	Poor	Fair	< 5 Yrs	Breaking apart, in decline	Remove	24/02/2014	660157.0148	5784668.506
55	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	158	Poor	Poor	Poor	< 5 Yrs	Breaking up, in decline. Storm damage	Remove	24/02/2014	660172.4839	5784680.23
56	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	19	151	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	24/02/2014	660186.2262	5784689.395
57	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	162	Fair	Poor	Poor	< 5 Yrs	Breaking up, cable installed	Remove	24/02/2014	660204.5714	5784699.264
58	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	209	Good	Poor	Good	5 - 10 Yrs	Basal decay. Potential for catastrophic failure	Consider removal or install cable and brace system	24/02/2014	660219.9981	5784709.379
59	SN6569	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	19	218	Fair	Poor	Good	5 - 10 Yrs	Basal decay. Signs of subsidence, Bifurcated with included bark	Remove	24/02/2014	660239.2213	5784722.034
60	SN2800	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	194	Fair	Poor	Fair	10 - 15 Yrs	Trunk cavity	Retain, prune/ reduce weight	24/02/2014	660258.7783	5784735.484
61	SN324	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	164	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	24/02/2014	660272.9468	5784743.19
62	SN4629	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	17	199	Fair	Fair	Fair	10 - 15 Yrs	Bees nest in trunk cavity. Reaction wood. Cracked limbs. Structural failure	Retain, prune/ reduce weight	24/02/2014	660290.6507	5784753.768
63	SN2064	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	18	172	Fair	Poor	Good	10 - 15 Yrs	Branch cavity	Retain, prune/ reduce weight	24/02/2014	660306.6989	5784763.043
64	SN447	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	19	162	Fair	Fair	Good	15 - 20 Yrs		Retain	24/02/2014	660319.8937	5784771.559
65	SN2738	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	177	Good	Fair	Good	15 - 20 Yrs	Structural failure	Retain, prune/ reduce weight	24/02/2014	660339.2682	5784784.781
66	SN7006	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	134	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	24/02/2014	660357.5885	5784795.651
67	SN7665	<i>Cupressus macrocarpa</i>	Monterey Cypress	10	16	134	Good	Poor	Poor	5 - 10 Yrs	Structural failure	Remove	24/02/2014	660374.6372	5784807.54
68	SN Unknown	<i>Cupressus macrocarpa</i>	Monterey Cypress	10	15	130	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660390.9145	5784818.658
69	SN unknown	<i>Cupressus macrocarpa</i>	Monterey Cypress	10	14	135	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660407.2927	5784828.653
70	SN Depot	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	13	132	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660424.6828	5784839.303
71	SN508	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	13	143	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660442.0687	5784850.394
72	SN4335	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	16	142	Fair	Fair	Good	10 - 15 Yrs	Dieback to north	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660458.247	5784860.842
73	SN 23/1876	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	15	134	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660475.4678	5784871.386
74	SN173	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	13	140	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660492.8796	5784881.258
75	SN543	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	14	137	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660509.0778	5784893.921
76	SN2849	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	15	132	Fair	Fair	Good	20 - 30 Yrs	Minor dieback	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660526.3165	5784903.463
77	SN7479	<i>Cupressus macrocarpa</i>	Monterey Cypress	10	14	135	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660543.3558	5784914.337
78	SN28321	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	15	151	Good	Fair	Good	20 - 30 Yrs	Minor failures	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660559.7286	5784924.669
79	SN10409	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	16	153	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660577.1888	5784935.786
80	SN6908	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	15	114	Fair	Fair	Good	20 - 30 Yrs	Minor dieback to north	Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660593.785	5784946.763

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
81	SN55228	Cupressus macrocarpa	Monterey Cypress	10	16	117	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660610.7278	5784957.656
82	SN6925	Cupressus macrocarpa	Monterey Cypress	12	16	130	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660626.9445	5784968.144
83	SN3722	Cupressus macrocarpa	Monterey Cypress	11	14	132	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	24/02/2014	660645.4763	5784977.706
84	None	Cupressus macrocarpa	Monterey Cypress	10	14	112	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660662.792	5784987.759
85	None	Cupressus macrocarpa	Monterey Cypress	11	15	10	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660679.5018	5784997.49
86	None	Cupressus macrocarpa	Monterey Cypress	11	14	117	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660696.8777	5785006.799
87	None	Cupressus macrocarpa	Monterey Cypress	11	15	119	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660713.8843	5785018.149
88	None	Cupressus macrocarpa	Monterey Cypress	11	15	128	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660730.3345	5785029.566
89	None	Cupressus macrocarpa	Monterey Cypress	11	15	119	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660747.7028	5785039.617
90	None	Cupressus macrocarpa	Monterey Cypress	11	15	125	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660764.4359	5785049.484
91	None	Cupressus macrocarpa	Monterey Cypress	11	15	118	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660781.2536	5785059.656
92	None	Cupressus macrocarpa	Monterey Cypress	11	15	122	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660798.3436	5785070.315
93	None	Cupressus macrocarpa	Monterey Cypress	12	15	113	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660814.2034	5785080.423
94	None	Cupressus macrocarpa	Monterey Cypress	12	15	126	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660830.0736	5785090.561
95	None	Cupressus macrocarpa	Monterey Cypress	12	15	136	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660848.5809	5785100.287
96	None	Cupressus macrocarpa	Monterey Cypress	12	15	118	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660862.8748	5785110.505
97	None	Cupressus macrocarpa	Monterey Cypress	12	15	118	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660877.5769	5785118.843
98	None	Cupressus macrocarpa	Monterey Cypress	12	15	121	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660892.1425	5785127.366
99	None	Cupressus macrocarpa	Monterey Cypress	12	15	106	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660905.2311	5785135.79
100	None	Cupressus macrocarpa	Monterey Cypress	12	15	130	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660920.7776	5785144.976
101	None	Cupressus macrocarpa	Monterey Cypress	12	15	117	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660934.6184	5785120.219
102	None	Cupressus macrocarpa	Monterey Cypress	13	15	109	Good	Fair	Good	20 - 30 Yrs	Cracked limb to south	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660916.4043	5785110.916
103	None	Cupressus macrocarpa	Monterey Cypress	13	15	121	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660899.6307	5785098.989
104	None	Cupressus macrocarpa	Monterey Cypress	13	15	130	Good	Fair	Good	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660883.1061	5785088.771
105	None	Cupressus macrocarpa	Monterey Cypress	13	15	119	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660865.6849	5785078.388
106	None	Cupressus macrocarpa	Monterey Cypress	14	15	121	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660848.9796	5785067.654
107	None	Cupressus macrocarpa	Monterey Cypress	13	15	130	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660831.6854	5785057.232
108	None	Cupressus macrocarpa	Monterey Cypress	13	14	123	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660815.0023	5785046.285

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
109	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	16	126	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660797.9468	5785035.655
110	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	119	Fair	Fair	Fair	15 - 20 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660782.0806	5785025.307
111	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	15	123	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660766.6302	5785015.065
112	SN4325	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	123	Fair	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660748.5617	5785004.367
113	SN4326	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	127	Fair	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660730.5153	5784994.325
114	SN4330	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	140	Good	Poor	Good	20 - 30 Yrs	Bifurcated with included bark	Retain, install cable, prune/reduce weight, prune canopy lift	25/02/2014	660712.9783	5784983.087
115	SN22972	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	112	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660696.635	5784973.309
116	SN2050	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	128	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660679.4635	5784962.632
117	SN914	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	133	Good	Fair	Fair	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660662.0464	5784951.355
118	SN981	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	124	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660645.4944	5784941.235
119	SN1171	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	148	Good	Fair	Good	20 - 30 Yrs	Bifurcated with included bark	Retain, install cable, prune/ reduce weight, prune canopy lift	25/02/2014	660627.8646	5784930.378
120	SN975	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	14	123	Good	Poor	Poor	10 - 15 Yrs	Structural failure, bifurcated with included bark	Retain, prune/reduce weight, prune canopy lift. Remedial prune stumps.	25/02/2014	660611.5773	5784920.565
121	SN3633	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	139	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660595.4094	5784910.061
122	SN503	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	136	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660577.5704	5784899.22
123	SN3798	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	128	Good	Fair	Good	20 - 30 Yrs	Some minor dieback. Split fork to north-west	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660560.1007	5784888.049
124	SN4288	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	139	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660542.9974	5784877.63
125	SN35	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	145	Good	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660525.9824	5784866.739
126	SN665	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	128	Good	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660509.1085	5784856.32
127	SN55229	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	137	Good	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660491.2081	5784846.665
128	SN5004	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	135	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660474.0601	5784835.539
129	SN4645	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	129	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660457.3386	5784824.896
130	SN5401	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	132	Good	Fair	Good	20 - 30 Yrs	Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660440.4985	5784813.995
131	SN2654	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	15	122	Good	Poor	Poor	5 - 10 Yrs	Major assymetry, structural failure	Remove	25/02/2014	660423.5422	5784803.916
132	SN295	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	137	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660406.4081	5784792.9
133	Sister	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	132	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660389.6008	5784783.164
134	Sister	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	142	Good	Fair	Good	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift. Remedial prune stumps	25/02/2014	660372.818	5784772.274
135	SN5207	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	165	Good	Fair	Good	10 - 15 Yrs	Structural failure, decaying structure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660355.6861	5784761.495
136	SN1583	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	20	183	Good	Poor	Good	15 - 20 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660333.5775	5784747.031

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
137	SN	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	163	Good	Fair	Good	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660310.7035	5784735.263
138	SN3976A	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	19	193	Good	Fair	Good	15 - 20 Yrs	Codominant stem	Retain, install cable, prune/reduce weight	25/02/2014	660291.4731	5784722.922
139	SN1724	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	17	186	Good	Poor	Poor	5 - 10 Yrs	Storm damage, structural failure	Remove	25/02/2014	660270.0513	5784710.027
140	SN1121	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	194	Good	Poor	Good	10 - 15 Yrs	Cracked limbs. Necrotic tensin wood, structural failure	Retain, prune/ reduce weight, prune canopy lift. Remedial prune lower dead	25/02/2014	660253.5659	5784698.853
141	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	191	Good	Poor	Fair	10 - 15 Yrs	Cracked lower limb, structural failure	Retain, prune/ reduce weight, prune canopy lift. Remedial prune stumps	25/02/2014	660236.3303	5784689.374
142	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	168	Good	Fair	Good	15 - 20 Yrs	Remedial prune. Broken limbs	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660219.8471	5784677.278
143				0	0	0					Vacant site		25/02/2014	660201.5493	5784665.859
144	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	21	127	Good	Fair	Fair	10 - 15 Yrs	Not pruned by circular saw, structural failure	Retain, prune/ reduce weight, prune deadwood, prune canopy lift	25/02/2014	660187.4477	5784653.264
145	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	190	Good	Fair	Poor	5 - 10 Yrs	Structural failure	Remove	25/02/2014	660170.5014	5784644.457
146				0	0	0					Vacant site		25/02/2014	660146.4341	5784629.646
147	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	194	Good	Fair	Fair	15 - 20 Yrs	Soil built up over root plate. Cable installed	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660123.2846	5784616.097
148	SN51599	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	161	Good	Poor	Fair	< 5 Yrs	Storm damage, structural failure	Remove	25/02/2014	660099.9032	5784603.42
149	SN48	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	171	Good	Poor	Poor	5 - 10 Yrs	Adjacent cutting. Storm Damage, structural failure	Remove	25/02/2014	660083.0313	5784590.828
150	SN1423	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	192	Good	Fair	Fair	15 - 20 Yrs	Adjacent cutting. Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660066.0897	5784580.365
151	SN1706	<i>Cupressus macrocarpa</i>	Monterey Cypress	10	16	97	Poor	Fair	Fair	< 5 Yrs	Adjacent cutting. In decline	Remove	25/02/2014	660049.6249	5784570.188
152	SN1145	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	14	111	Good	Fair	Fair	15 - 20 Yrs	Adjacent cutting	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660032.8421	5784558.711
153	SN31416	<i>Cupressus macrocarpa</i>	Monterey Cypress	11	15	138	Good	Fair	Good	15 - 20 Yrs	Adjacent cutting	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	660017.0432	5784547.74
154	SN2029	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	15	166	Good	Fair	Fair	15 - 20 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659998.6472	5784537.864
155	SN5192	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	178	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659987.2217	5784528.385
156	SN1568	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	156	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659967.0038	5784513.943
157	SN2563	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	150	Fair	Fair	Good	15 - 20 Yrs	Adjacent cutting. Some minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659948.7701	5784502.529
158	SN248	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	163	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659931.9895	5784495.224
159	SN4598	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	16	165	Fair	Fair	Good	15 - 20 Yrs	Adjacent cutting. Minor dieback	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659915.0348	5784484.466
160	SN651	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	15	152	Fair	Fair	Good	15 - 20 Yrs	Adjacent cutting	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659898.1231	5784473.766
161	SN11873=0o	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	16	173	Fair	Fair	Good	15 - 20 Yrs	Adjacent cutting	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659880.9092	5784463.182
162	SN227	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	16	174	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659863.4138	5784452.726
163	SN2643	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	180	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	25/02/2014	659848.023	5784441.526
164	SNVX18026	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	177	Fair	Fair	Good	15 - 20 Yrs	Structural failure, cable installed	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659830.1734	5784430.436

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
165	SN613	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	16	186	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659813.4853	5784421.512
166	SN72	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	16	195	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659795.6033	5784411.034
167	SN7991	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	19	179	Fair	Poor	Good	15 - 20 Yrs	Structural failure. Active cracking stem and limb to sth. Urgent attention required.	Retain, install cable, prune/ reduce weight, prune canopy lift	25/02/2014	659780.5765	5784400.794
168	Sister	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	18	190	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659761.5297	5784388.845
169	SN2139	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	171	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659744.6925	5784378.372
170	SN916	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	15	169	Fair	Poor	Poor	< 5 Yrs	Storm damage, structural failure	Remove	25/02/2014	659726.4768	5784367.261
171	SN9645	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	168	Fair	Poor	Poor	< 5 Yrs	Storm damage, structural failure	Remove	25/02/2014	659710.8639	5784358.43
172	SN2791	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	191	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659693.3534	5784346.777
173	SN653	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	210	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659672.679	5784333.872
174	SN57456	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	19	191	Fair	Poor	Fair	5 - 10 Yrs	Recent limb failures have opened canopy to wind. Split fork in upper canopy. Adjacent	Retain, prune/ reduce weight, prune canopy lift. Consider removal	25/02/2014	659645.1603	5784317.678
175	SN665	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	19	196	Fair	Poor	Fair	10 - 15 Yrs	Large crack in limb to s/e. Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659626.1439	5784303.019
176	SN599	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	19	216	Fair	Hazardous	Fair	5 - 10 Yrs	Crack in large limb to s/e threatens powerlines. Tree next to 80kmh sign	Retain, install cable, prune/reduce weight. Consider removal	25/02/2014	659603.1927	5784290.94
177	SN453	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	177	Fair	Fair	Good	10 - 15 Yrs	Sparse canopy, some minor dieback. Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659587.1915	5784279.09
178	SN6899	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	223	Fair	Poor	Fair	5 - 10 Yrs	Termites in centre. Structural failure, decaying.	Remove	25/02/2014	659569.6777	5784269.165
179	SN2639/3910	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	228	Fair	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659549.3006	5784256.589
180	SN4539	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	206	Fair	Poor	Fair	5 - 10 Yrs	Splitting limb to sth. Canopy open to wind. Structural failure	Retain, prune/ reduce weight, prune canopy lift. Consider removal	25/02/2014	659530.7782	5784245.076
181	SN2259	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	226	Fair	Fair	Good	15 - 20 Yrs	Bifurcated with included bark, adjacent powerlines	Retain, install cable, prune/ reduce weight, prune canopy lift	25/02/2014	659511.8832	5784233.308
182	SN3112/225	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	232	Fair	Fair	Fair	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659489.5507	5784219.241
183	SN2381	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	226	Fair	Poor	Fair	5 - 10 Yrs	Structural failure. Canopy open to sth wind. Further stem failure probable. Adjacent	Retain, install cable, prune/ reduce weight. Consider removal	25/02/2014	659473.0099	5784208.679
184	SN2125	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	18	192	Fair	Fair	Good	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659456.0377	5784198.024
185	SN1206	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	240	Fair	Poor	Poor	5 - 10 Yrs	Structural failure. Heavily pruned off powerlines. Canopy open to wind	Remove	25/02/2014	659428.3491	5784180.57
186	SNNZ	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	18	190	Fair	Fair	Fair	15 - 20 Yrs	Structural failure	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659354.3218	5784133.597
187				0	0	0					Vacant site		25/02/2014	659372.6029	5784145.165
188				0	0	0					Vacant site		25/02/2014	659388.2452	5784155.513
189				0	0	0					Vacant site		25/02/2014	659406.8066	5784166.811
190	SN7044	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	187	Fair	Poor	Poor	< 5 Yrs	Storm damage, structural failure, adjacent powerlines	Remove	25/02/2014	659337.681	5784123.165
191	SN6584	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	18	216	Fair	Hazardous	Poor	< 5 Yrs	Structural failure, cracking apart. Dieback. Sparse canopy	Remove	25/02/2014	659321.1634	5784112.499
192	SN6415	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	15	Fair	Fair	Fair	5 - 10 Yrs	Split fork threatens failure of stem onto road. Other weak internal unions.	Retain, install cable, prune/ reduce weight. Consider removal	25/02/2014	659303.5478	5784102.093

MORTLAKE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
193	SN541	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	19	183	Fair	Fair	Good	10 - 15 Yrs		Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659287.2195	5784091.09
194	SN427	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	215	Fair	Poor	Poor	< 5 Yrs	storm damage, structural failure, adjacent powerlines	Remove	25/02/2014	659269.8048	5784080.906
195	SN1403	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	19	186	Fair	Fair	Fair	10 - 15 Yrs	Poorly pruned back from HV powerlines	Retain, prune/ reduce weight, prune canopy lift. Remedial prune stumps	25/02/2014	659254.2881	5784070.347
196				0	0	0					Vacant site		25/02/2014	659225.2166	5784052.694
197	SN1643	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	20	216	Fair	Fair	Fair	10 - 15 Yrs	Structural failure, adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	25/02/2014	659203.3719	5784039.85
198		<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	200	Fair	Poor	Poor	5 - 10 Yrs	Storm damage, structural failure, adjacent powerlines	Remove	25/02/2014	659184.8605	5784028.338
199	Peace Tree	<i>Araucaria heterophylla</i>	Norfolk Island Pine	15	11	70	Fair	Good	Fair	> 50 Yrs	Mechanical wound at base. Poor location. Possible root loss with installaton of	Retain. Remove grass and apply mulch	26/02/2014	658589.6244	5783652.486
442	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	0	0	0					Vacant site		24/02/2014	660137.3554	5784654.581

THE SISTERS

KEY
ULE 10 - 20 Years - Recommended action of immediate propogation and removal thereafter

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
350	None	<i>Pinus brutia</i>	Calabrian Pine	11	14	85	Poor	Fair	Poor	< 5 Yrs	In decline, trunk cavity	Retain, prune deadwood. Remove grass and apply mulch within 12m radius. Irrigate over Summer/Autumn	27/02/2014	655820.8691	5771370.389

CARAMUT

KEY

Vacant site

ULE 5 - 20 Years - Recommended action of regular maintenance and commence removal and replacement of all of the trees , over a 10 year period between 2017 - 2027

ULE 20 - 50 Years - Recommended action of regular maintenance and commence removal and replacement of all of the trees , over a 10 year period between 2017 - 2027

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
295				0	0	0					Vacant site		26/02/2014	633471.2597	5797962.003
296	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	26	210	Good	Fair	Fair	15 - 20 Yrs	Storm damage. Pruned over road	Retain, prune/ reduce weight. Remedial prune	26/02/2014	633475.4394	5797981.925
297	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	23	265	Good	Poor	Fair	15 - 20 Yrs	Splitting apart at base. Bifurcated with included bark	Retain, install cable, prune /reduce weight. Consider removal	26/02/2014	633477.7392	5798000.878
298	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	23	263	Good	Hazardous	Fair	15 - 20 Yrs	Splitting apart at base. Bifurcated with included bark	Retain, install cable, prune/ reduce weight. Consider removal	26/02/2014	633481.7596	5798020.601
299	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	24	263	Good	Poor	Fair	10 - 15 Yrs	Cracking apart at base. Old failure	Retain, install cable, prune/ reduce weight. Consider removal	26/02/2014	633485.049	5798039.642
300	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	18	19	226	Good	Poor	Fair	5 - 10 Yrs	Splitting apart at base. Structural failure. Adjacent powerlines	Remove	26/02/2014	633515.451	5798033.612
301	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	184	Fair	Fair	Fair	20 - 30 Yrs		Retain, prune/ reduce weight. Remedial prune	26/02/2014	633510.8637	5798012.705
302	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	171	Good	Poor	Fair	5 - 10 Yrs	Structural failure, trunk cavity	Remove	26/02/2014	633508.7525	5797992.628
303	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	21	167	Good	Poor	Fair	5 - 10 Yrs	Cracking apart. Bifurcated with included bark	Remove. Could be retained with extensive cable and brace system	26/02/2014	633504.8806	5797974.297
304	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	18	21	182	Good	Poor	Fair	5 - 10 Yrs	Small crack in main fork. Trunk cavity. Bifurcated with included bark. Form does	Remove	26/02/2014	633499.426	5797953.723
305	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	156	Fair	Fair	Fair	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	633632.1401	5797888.353
306	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	162	Good	Fair	Fair	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	633650.9753	5797886.133
307	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	23	157	Good	Fair	Poor	10 - 15 Yrs	Structural failure, bifurcated with included bark. Adjacent powerlines	Retain, install cable, prune/ reduce weight	26/02/2014	633671.9718	5797882.37
308	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	172	Good	Fair	Fair	15 - 20 Yrs	Structural failure, adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	633691.3235	5797879.543
309	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	22	144	Good	Fair	Fair	15 - 20 Yrs	Structural failure, bifurcated with included bark. Adjacent powerlines	Retain, install cable, prune/ reduce weight	26/02/2014	633712.1818	5797876.62
310	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	185	Good	Poor	Poor	5 - 10 Yrs	Burnt trunk. Structural failure. Decaying. Adjacent powerlines.	Remove	26/02/2014	633731.4244	5797873.602

ORFORD

KEY

ULE < 5 Years - Recommended action for removal and replacement between 2015 - 2017

ULE 5 - 20 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	ULE	Observations	Recommended Actions	Inspect Date	Easting	Northing
385	None	Cupressus macrocarpa	Monterey Cypress	16	18	190	Poor	Poor	Fair	< 5 Yrs	In decline, adjacent powerlines	Remove	28/02/2014	596831.9025	5770797.326
386	None	Cupressus macrocarpa	Monterey Cypress	16	18	199	Fair	Fair	Fair	5 - 10 Yrs	Pruned off powerlines and road. Bifurcated with included bark, adjacent	Retain	28/02/2014	596820.334	5770808.297
387	None	Cupressus macrocarpa	Monterey Cypress	16	20	264	Fair	Fair	Fair	10 - 15 Yrs	Pruned off powerlines and road	Retain	28/02/2014	596806.4174	5770820.859
388	None	Cupressus macrocarpa	Monterey Cypress	10	9	112	Poor	Fair	Fair	5 - 10 Yrs	Pruned off powerlines and road. Dieback	Remove	28/02/2014	596792.9439	5770834.504
389	None	Pinus radiata	Monterey Pine	16	18	152	Fair	Fair	Fair	10 - 15 Yrs	Pruned off powerlines and road	Retain	28/02/2014	596781.3395	5770845.635
390	None	Pinus radiata	Monterey Pine	15	14	103	Fair	Fair	Fair	10 - 15 Yrs	Pruned off powerlines and road.	Retain	28/02/2014	596772.6487	5770854.332
391	None	Pinus radiata	Monterey Pine	18	17	155	Fair	Fair	Fair	10 - 15 Yrs	Pruned off powerlines and road. Bifurcated with included bark, adjacent	Retain	28/02/2014	596765.1179	5770861.721
392	None	Pinus radiata	Monterey Pine	18	17	142	Good	Poor	Fair	5 - 10 Yrs	Signs of cracking in fork. Root death. Pruned off powerlines and road	Retain, install cable. Consider Removal	28/02/2014	596753.0273	5770873.615
393	None	Cupressus macrocarpa	Monterey Cypress	15	19	220	Fair	Fair	Fair	< 5 Yrs	Pruned off powerlines and road. Major root death to north	Remove	28/02/2014	596735.9166	5770889.808
394	None	Cupressus macrocarpa	Monterey Cypress	15	19	216	Good	Fair	Fair	15 - 20 Yrs	Pruned off powerlines and road	Retain	28/02/2014	596724.028	5770901.953
395	None	Cupressus macrocarpa	Monterey Cypress	15	20	190	Good	Fair	Fair	10 - 15 Yrs	Pruned off powerlines and road. Bifurcated with included bark, adjacent	Retain, prune/ reduce weight	28/02/2014	596710.3039	5770914.7
396	None	Cupressus macrocarpa	Monterey Cypress	16	20	205	Good	Fair	Fair	15 - 20 Yrs	Pruned off road. Structural failure	Retain, prune/ reduce weight. Remedial prune	28/02/2014	596690.5327	5770932.211
397	None	Cupressus macrocarpa	Monterey Cypress	16	17	168	Good	Fair	Fair	15 - 20 Yrs	Pruned off road	Retain, prune/ reduce weight	28/02/2014	596681.4773	5770941.78
398	None	Cupressus macrocarpa	Monterey Cypress	16	20	207	Good	Fair	Fair	10 - 15 Yrs	Pruned off road	Retain, prune/ reduce weight	28/02/2014	596670.0074	5770953.299
399	None	Cupressus macrocarpa	Monterey Cypress	15	20	160	Fair	Fair	Poor	10 - 15 Yrs	Dieback, structural failure	Retain. Consider deadwood removal	28/02/2014	596658.505	5770963.948
400	None	Cupressus macrocarpa	Monterey Cypress	14	22	209	Fair	Poor	Poor	5 - 10 Yrs	Major structural failure. Open to wind damage	Remove	28/02/2014	596645.5711	5770974.407
401	None	Cupressus macrocarpa	Monterey Cypress	9	12	206	Poor	Poor	Poor	< 5 Yrs	Dieback, in decline	Remove	28/02/2014	596636.3351	5770985.749
402	None	Cupressus macrocarpa	Monterey Cypress	15	22	210	Poor	Fair	Fair	5 - 10 Yrs	Dieback	Remove	28/02/2014	596626.1782	5770995.522
403	None	Cupressus macrocarpa	Monterey Cypress	15	23	202	Good	Fair	Fair	15 - 20 Yrs		Retain, prune/ reduce weight	28/02/2014	596609.5814	5771001.915
404	None	Cupressus macrocarpa	Monterey Cypress	16	25	232	Good	Fair	Good	15 - 20 Yrs		Retain, prune/ reduce weight	28/02/2014	596596.0438	5771000.541
405	None	Cupressus macrocarpa	Monterey Cypress	11	5	55	Fair	Fair	Poor	5 - 10 Yrs	Suppressed form	Retain, prune deadwood. Remove dead low branches. Consider removal	28/02/2014	596582.9551	5770999.968
406	None	Cupressus macrocarpa	Monterey Cypress	16	24	228	Fair	Fair	Fair	15 - 20 Yrs	Heavy laterals. Dieback	Retain, prune/ reduce weight	28/02/2014	596567.3833	5770999.919
407	None	Cupressus macrocarpa	Monterey Cypress	16	22	233	Poor	Poor	Poor	< 5 Yrs	In decline, structural failure	Remove	28/02/2014	596555.1974	5771000.06
408	None	Cupressus macrocarpa	Monterey Cypress	15	20	257	Fair	Fair	Poor	5 - 10 Yrs	Minor dieback. Will be exposed by removal tree 23	Retain. Consider removal	28/02/2014	596543.308	5770998.781
409	None	Cupressus macrocarpa	Monterey Cypress	15	24	212	Fair	Fair	Fair	10 - 15 Yrs	Old crack in limb over road. Reaction wood forming. Heavy laterals. Structural	Retain, prune/ reduce weight. Consider removal	28/02/2014	596527.5639	5770997.931

HEXHAM

KEY

Vacant site

ULE < 5 Years - Recommended action for removal and replacement between 2015 - 2017

ULE 5 - 20 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027

ULE 20 - 50 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027

ULE > 50 Years - Recommended action of regular maintenance and possible removal and replacement after 2027

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	ULE	Observations	Recommended Actions	Inspect Date	Easting	Northing
200	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	16	99	Fair	Fair	Poor	15 - 20 Yrs	Adjacent tree removal has opened canopy to wind	Retain, prune/ reduce weight	26/02/2014	648244.5875	5793349.376
201				0	0	0					Vacant site		26/02/2014	648258.2602	5793349.452
202	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	152	Fair	Fair	Poor	15 - 20 Yrs	Lopped at 6m. Acute forks	Retain, prune/ reduce weight	26/02/2014	648233.5339	5793348.877
203	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	17	82	Good	Fair	Poor	15 - 20 Yrs	Crowded planting. Steel band at base restricting sap flow	Retain, prune/ reduce weight	26/02/2014	648223.7819	5793348.706
204	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	163	Fair	Fair	Fair	15 - 20 Yrs	Crowded planting. Recent adjacent tree removal	Retain, install cable, prune/ reduce weight	26/02/2014	648213.3234	5793348.237
205				0	0	0					Large stump. Vacant Site		26/02/2014	648203.4253	5793348.002
206	None	<i>Schinus areira</i>	Peppercorn	5	6	52	Fair	Good	Poor	> 50 Yrs	Suppressed form	Retain, prune deadwood, prune canopy lift	26/02/2014	648210.4059	5793378.395
207	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	142	Fair	Fair	Fair	15 - 20 Yrs	Crowded planting. Adjacent Powerlines	Retain, prune/ reduce weight	26/02/2014	648200.7552	5793376.722
208	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	118	Good	Fair	Fair	15 - 20 Yrs	Crowded planting	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648190.7995	5793376.06
209	F.Geddes	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	137	Good	Fair	Fair	20 - 30 Yrs	Crowded planting. Adjacent Powerlines	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648180.8565	5793373.921
210	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	145	Good	Fair	Poor	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648170.9143	5793372.685
211	J.Pennycuick	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	14	90	Good	Fair	Fair	15 - 20 Yrs	Compaction. Adjacent side road / powerlines	Retain, prune/ reduce weight	26/02/2014	648123.8292	5793321.218
212	None	<i>Schinus areira</i>	Peppercorn	8	10	82	Good	Good	Good	> 50 Yrs	Compaction. Adjacent side road / powerlines	Retain, prune deadwood	26/02/2014	648116.3276	5793318.166
213	C.Vernon	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	13	87	Fair	Fair	Fair	10 - 15 Yrs	Compaction. Adjacent side road. Dieback	Retain, prune deadwood	26/02/2014	648108.9815	5793310.864
214	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	15	97	Fair	Good	Fair	20 - 30 Yrs	Compaction. Adjacent side road	Retain, prune/ reduce weight	26/02/2014	648101.4529	5793305.77
215	F. Vern??	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	17	136	Good	Fair	Fair	15 - 20 Yrs	Compaction. Adjacent side road	Retain, prune/ reduce weight	26/02/2014	648094.445	5793300.111
216	K.McDonald	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	18	138	Good	Fair	Fair	15 - 20 Yrs	Compaction. Adjacent side road / powerlines	Retain, prune/ reduce weight	26/02/2014	648134.198	5793325.058
217	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	139	Good	Fair	Fair	15 - 20 Yrs		Retain, prune/ reduce weight	26/02/2014	648132.1179	5793365.426
218	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	17	100	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	648124.1148	5793359.972
219	S.Reynolds	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	98	Poor	Fair	Fair	5 - 10 Yrs	Dieback	Remove	26/02/2014	648117.0922	5793352.937
220	G.Powell	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	102	Fair	Fair	Fair	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648108.3827	5793347.986
221	W.Evans	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	116	Good	Fair	Fair	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648101.1668	5793340.867
222	H.Guerdon	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	17	98	Fair	Fair	Poor	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648093.0965	5793333.928
223	J.Hindhaugh	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	13	114	Fair	Fair	Poor	15 - 20 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648085.4447	5793327.642

HEXHAM

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	Ule	Observations	Recommended Actions	Inspect Date	Easting	Northing
224	A.Swadling	Cupressus macrocarpa	Monterey Cypress	15	13	100	Fair	Poor	Fair	15 - 20 Yrs	Bifurcated with included bark, adjacent powerlines	Retain, install cable, prune/ reduce weight	26/02/2014	648077.3263	5793321.378
225	None	Cupressus macrocarpa	Monterey Cypress	14	13	98	Fair	Fair	Poor	15 - 20 Yrs	Adjacent powerlines. Dead low limb	Retain, prune/ reduce weight. Remove dead limb	26/02/2014	648069.8135	5793315.122
226	None	Cupressus macrocarpa	Monterey Cypress	15	15	116	Good	Fair	Poor	15 - 20 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648061.9696	5793309.241
227	None	Cupressus macrocarpa	Monterey Cypress	15	15	89	Good	Fair	Fair	30 - 40 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648054.3844	5793302.655
228	None	Cupressus macrocarpa	Monterey Cypress	15	15	100	Good	Fair	Poor	20 - 30 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648046.4729	5793296.647
229	None	Cupressus macrocarpa	Monterey Cypress	15	15	101	Good	Fair	Poor	20 - 30 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648038.6496	5793291.219
230	None	Cupressus macrocarpa	Monterey Cypress	15	13	124	Good	Fair	Poor	20 - 30 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	26/02/2014	648005.8106	5793263.419
231	None	Cupressus macrocarpa	Monterey Cypress	12	19	138	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648028.4797	5793282.124
232	None	Cupressus macrocarpa	Monterey Cypress	13	19	147	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647981.2007	5793245.014
233	None	Cupressus macrocarpa	Monterey Cypress	13	20	132	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647956.253	5793227.238
234	None	Cupressus macrocarpa	Monterey Cypress	13	19	139	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647934.9171	5793206.178
235	None	Cupressus macrocarpa	Monterey Cypress	12	16	127	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	647912.0865	5793188.45
236	None	Cupressus macrocarpa	Monterey Cypress	12	17	130	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647888.5295	5793167.929
237	None	Cupressus macrocarpa	Monterey Cypress	13	17	131	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	647866.5739	5793148.863
238	None	Cupressus macrocarpa	Monterey Cypress	13	18	133	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647842.9161	5793130.147
239	None	Cupressus macrocarpa	Monterey Cypress	13	16	137	Good	Fair	Fair	30 - 40 Yrs	Structural failure	Retain, prune/ reduce weight	26/02/2014	647820.0365	5793110.601
240	None	Cupressus macrocarpa	Monterey Cypress	13	16	132	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647796.4538	5793091.544
241	None	Cupressus macrocarpa	Monterey Cypress	13	18	144	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647772.8295	5793072.548
242	None	Cupressus macrocarpa	Monterey Cypress	13	17	156	Good	Fair	Good	30 - 40 Yrs	Fasciation (witches broom) over road	Retain, prune/ reduce weight. Remove dead witches broom	26/02/2014	647749.9113	5793053.352
243	None	Cupressus macrocarpa	Monterey Cypress	13	18	157	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647726.2265	5793034.338
244	None	Cupressus macrocarpa	Monterey Cypress	13	19	131	Good	Fair	Good	30 - 40 Yrs	Branch failure over road. Structural failure	Retain, prune/ reduce weight	26/02/2014	647703.163	5793014.28
245	None	Cupressus macrocarpa	Monterey Cypress	13	19	132	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647680.6061	5792995.104
246				0	0	0					Vacant site		26/02/2014	647657.2783	5792976.388
247				0	0	0					Vacant site		26/02/2014	647628.5251	5792960.471
248				0	0	0					Vacant site		26/02/2014	647599.6399	5792946.344
249	None	Cupressus macrocarpa	Monterey Cypress	12	18	152	Fair	Fair	Fair	5 - 10 Yrs	Possible cypress canker in lower canopy	Test for Cypress Canker. Remove if infected.	26/02/2014	647552.16	5792933.176
250	None	Cupressus macrocarpa	Monterey Cypress	14	16	134	Fair	Fair	Fair	10 - 15 Yrs	Possible cypress canker on lower limbs. Test for infection	Test for Cypress Canker. Remove if infected.	26/02/2014	647523.0158	5792936.575
251	None	Cupressus macrocarpa	Monterey Cypress	14	20	139	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	647491.4526	5792935.512

HEXHAM

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	Ule	Observations	Recommended Actions	Inspect Date	Easting	Northing
252	None	Cupressus macrocarpa	Monterey Cypress	13	20	143	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647462.0216	5792936.141
253	None	Cupressus macrocarpa	Monterey Cypress	14	18	137	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647431.5579	5792938.275
254	None	Cupressus macrocarpa	Monterey Cypress	15	20	154	Good	Fair	Good	30 - 40 Yrs	Broken limbs. Structural failure. Bifurcated with included bark	Install cable. Bifurcation is on east side of canopy	26/02/2014	647400.5886	5792937.811
255	None	Cupressus macrocarpa	Monterey Cypress	15	22	146	Good	Fair	Good	30 - 40 Yrs	Recent limb failure	Retain, prune/ reduce weight. Remedial prune	26/02/2014	647370.8829	5792938.381
256	None	Cupressus macrocarpa	Monterey Cypress	14	22	161	Good	Fair	Good	30 - 40 Yrs	Recent broken limbs	Retain, prune/ reduce weight. Remedial prune. Remove lower broken limb	26/02/2014	647341.1223	5792939.231
257	None	Cupressus macrocarpa	Monterey Cypress	14	33	144	Good	Poor	Poor	< 5 Yrs	Crown failure. Splitting in half at bifurcation	Remove	26/02/2014	647312.5991	5792937.521
258	None	Cupressus macrocarpa	Monterey Cypress	13	18	159	Good	Poor	Good	< 5 Yrs	Splitting in half at bifurcation. Included bark present.	Remove	26/02/2014	647280.1573	5792940.981
259	None	Cupressus macrocarpa	Monterey Cypress	13	21	133	Good	Fair	Good	30 - 40 Yrs	Broken limb	Retain, prune/ reduce weight, prune canopy lift. Remedial prune	26/02/2014	647251.054	5792940.557
260	None	Cupressus macrocarpa	Monterey Cypress	14	20	158	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight, prune canopy lift	26/02/2014	647220.5471	5792941.074
261	None	Cupressus macrocarpa	Monterey Cypress	18	26	166	Fair	Fair	Fair	15 - 20 Yrs	Heavy laterals. Recent limb failures	Retain, prune/ reduce weight	26/02/2014	648297.8815	5793434.42
262	None	Cupressus macrocarpa	Monterey Cypress	10	14	206	Poor	Poor	Poor	< 5 Yrs	Splitting in half	Remove	26/02/2014	648303.1252	5793456.611
263	None	Cupressus macrocarpa	Monterey Cypress	15	22	158	Good	Fair	Good	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight	26/02/2014	648306.8432	5793492.331
264	None	Cupressus macrocarpa	Monterey Cypress	15	19	153	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648311.141	5793520.261
265	None	Cupressus macrocarpa	Monterey Cypress	15	18	142	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648317.5748	5793550.641
266	None	Cupressus macrocarpa	Monterey Cypress	15	19	142	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648318.8771	5793578.974
267	None	Cupressus macrocarpa	Monterey Cypress	15	20	138	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648326.6459	5793609.08
268	None	Cupressus macrocarpa	Monterey Cypress	15	23	133	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648328.2121	5793638.572
269	None	Cupressus macrocarpa	Monterey Cypress	15	22	135	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648335.3718	5793669.977
270	None	Cupressus macrocarpa	Monterey Cypress	15	20	139	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648339.6648	5793698.822
271	None	Cupressus macrocarpa	Monterey Cypress	12	15	118	Fair	Fair	Fair	15 - 20 Yrs	Resin exudation on trunk. Pruned off service wire	Retain, prune/ reduce weight	26/02/2014	648343.2311	5793729.905
272	None	Cupressus macrocarpa	Monterey Cypress	13	16	120	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648349.193	5793758.493
273	None	Cupressus macrocarpa	Monterey Cypress	14	20	123	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648352.682	5793787.167
274	None	Cupressus macrocarpa	Monterey Cypress	14	18	123	Good	Fair	Good	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight. Remedial prune	26/02/2014	648355.1681	5793816.808
275	None	Cupressus macrocarpa	Monterey Cypress	14	15	114	Good	Fair	Poor	20 - 30 Yrs	Pruned off service wire	Retain, prune/ reduce weight	26/02/2014	648355.6598	5793838.803
276	None	Cupressus macrocarpa	Monterey Cypress	15	24	126	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648343.1987	5793867.794
277	None	Cupressus macrocarpa	Monterey Cypress	13	26	124	Good	Fair	Fair	15 - 20 Yrs	Heavy laterals. Structural failure	Retain, prune/ reduce weight	26/02/2014	648333.9435	5793896.14
278	None	Cupressus macrocarpa	Monterey Cypress	14	16	126	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648359.5521	5793905.589
279	None	Cupressus macrocarpa	Monterey Cypress	14	19	131	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648372.7405	5793878.774

HEXHAM

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
280	None	<i>Pinus brutia</i>	Calabrian Pine	14	18	112	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648383.9007	5793850.842
281	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	108	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648381.3703	5793812.433
282	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	16	100	Good	Fair	Good	30 - 40 Yrs		Retain, prune/ reduce weight	26/02/2014	648378.8759	5793784.087
283	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	22	118	Fair	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648374.3311	5793753.339
284	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	18	125	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648372.5478	5793724.745
285	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	14	20	133	Good	Poor	Good	5 - 10 Yrs	Active crack. Structural failure. Several poor attachments	Retain, install cable, prune/ reduce weight. Weight reduce split limb.	26/02/2014	648367.9281	5793694.944
286	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	20	0	Good	Fair	Fair	20 - 30 Yrs	Split fork. Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648358.3654	5793664.849
287	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	15	19	135	Good	Fair	Good	20 - 30 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648358.3196	5793635.748
288	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	21	143	Good	Fair	Good	20 - 30 Yrs	Heavy laterals	Retain, prune/ reduce weight	26/02/2014	648353.5993	5793605.331
289	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	21	144	Good	Fair	Good	20 - 30 Yrs		Retain, prune/ reduce weight	26/02/2014	648347.7357	5793575.917
290	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	142	Good	Fair	Good	20 - 30 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648343.7491	5793546.389
291	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	143	Good	Fair	Good	20 - 30 Yrs	Bifurcated lower limbs with included bark. Heavy laterals. Adjacent	Retain, prune/ reduce weight. Remove dead hanger	26/02/2014	648339.387	5793516.958
292	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	16	22	166	Good	Poor	Fair	20 - 30 Yrs	Structural failure, bifurcated with included bark	Retain, install cable, prune/ reduce weight	26/02/2014	648333.0619	5793494.545
293	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	17	25	163	Good	Poor	Good	15 - 20 Yrs	Bifurcated with included bark	Retain, install cable, prune/ reduce weight	26/02/2014	648330.2231	5793455.951
294	None	<i>Cupressus macrocarpa</i>	Monterey Cypress	17	25	164	Fair	Fair	Good	15 - 20 Yrs	Structural failure, adjacent powerlines	Retain, prune/ reduce weight	26/02/2014	648325.8407	5793435.563

ELLERSLIE

KEY

Vacant site

ULE < 5 Years - Recommended action for removal andr eplacement between 2015 - 2017

ULE 5 - 20 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027

ULE 20 - 50 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027

ULE > 50 Years - Recommended action of regular maintenance and possible removal and replacement after 2027

*Note: The single tree Tree No. 349 could be removed earlier over a 10 year period between 2017 - 2027, to provide a more uniform growth.

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	ULE	Observations	Recommended Actions	Inspect Date	Easting	Northing
311	None	Cupressus macrocarpa	Monterey Cypress	18	22	194	Good	Fair	Fair	15 - 20 Yrs	Road over west of root plate, Structural failure, bifurcated with included bark	Retain, install cable, prune/ reduce weight. Cable eastern stem	27/02/2014	647498.1068	5776126.511
312	None	Cupressus macrocarpa	Monterey Cypress	18	22	181	Good	Fair	Fair	20 - 30 Yrs	Exposed roots. Structural failure, bifurcated with included bark	Retain, install cable, prune/ reduce weight	27/02/2014	647524.4072	5776150.73
313	None	Cupressus macrocarpa	Monterey Cypress	16	24	206	Good	Fair	Good	20 - 30 Yrs	Stem separation/subsidence. Bifurcated with included bark	Retain, install cable, prune/ reduce weight	27/02/2014	647540.2103	5776169.272
314	None	Cupressus macrocarpa	Monterey Cypress	16	20	221	Good	Fair	Fair	15 - 20 Yrs	Possible split between main stems, requires aerial inspection. Storm damage, structural failure	Retain, prune/ reduce weight. Aerial inspection required	27/02/2014	647563.2624	5776197.485
315	None	Cupressus macrocarpa	Monterey Cypress	16	24	212	Good	Fair	Fair	20 - 30 Yrs	Signs of termites in heartwood. Multiple limb failures. Structural failure	Retain, prune/ reduce weight	27/02/2014	647562.9994	5776204.704
316	None	Cupressus macrocarpa	Monterey Cypress	16	22	256	Good	Fair	Good	20 - 30 Yrs	Broken limb. Structural failure	Retain, prune/ reduce weight	27/02/2014	647591.1393	5776223.91
317	None	Cupressus macrocarpa	Monterey Cypress	14	17	156	Good	Fair	Good	20 - 30 Yrs	Bifurcated with included bark	Retain, install cable, prune/ reduce weight	27/02/2014	647608.3341	5776228.376
318	None	Cupressus macrocarpa	Monterey Cypress	14	15	163	Good	Fair	Good	30 - 40 Yrs	Some acute unions	Retain, prune/ reduce weight	27/02/2014	647626.2167	5776239.574
319	None	Cupressus macrocarpa	Monterey Cypress	14	17	146	Good		Good	30 - 40 Yrs	Adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	27/02/2014	647643.6011	5776248.707
320	None	Cupressus macrocarpa	Monterey Cypress	14	16	134	Good	Fair	Good	30 - 40 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	27/02/2014	647662.5521	5776256.765
321	None	Cupressus macrocarpa	Monterey Cypress	14	17	196	Good	Fair	Good	30 - 40 Yrs	Adjacent powerlines	Retain, prune/ reduce weight	27/02/2014	647715.7221	5776276.757
322	None	Cupressus macrocarpa	Monterey Cypress	15	18	213	Good	Fair	Fair	20 - 30 Yrs	Has been crown reduced. Poor pruning. Adjacent powerlines	Retain. Remedial prune	27/02/2014	647731.2715	5776285.703
323	None	Cupressus macrocarpa	Monterey Cypress	15	18	183	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced. Poor pruning	Retain. Remedial prune	27/02/2014	647743.6032	5776290.58
324	None	Cupressus macrocarpa	Monterey Cypress	14	18	167	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Poor pruning. Adjacent powerlines	Retain. Remedial prune	27/02/2014	647766.5627	5776302.805
325	None	Cupressus macrocarpa	Monterey Cypress	14	18	209	Good	Fair	Good	20 - 30 Yrs	Structural failure, adjacent powerlines	Retain, prune/ reduce weight	27/02/2014	647780.3137	5776308.347
326	None	Cupressus macrocarpa	Monterey Cypress	15	17	192	Good	Fair	Fair	15 - 20 Yrs	Splitting limb. Structural failure, adjacent powerlines	Retain, prune/ reduce weight, prune canopy lift	27/02/2014	647803.8729	5776319.413
327	None	Cupressus macrocarpa	Monterey Cypress	15	15	154	Good	Fair	Fair	15 - 20 Yrs	Has been crown reduced. Trunk cavity, adjacent powerlines	Retain, prune canopy lift	27/02/2014	647818.3102	5776324.405
328	None	Cupressus macrocarpa	Monterey Cypress	15	17	193	Good	Fair	Fair	15 - 20 Yrs	Has been crown reduced. Poor pruning. Structural failure, adjacent powerlines	Retain. Remedial prune	27/02/2014	647842.809	5776337.008
329	None	Cupressus macrocarpa	Monterey Cypress	14	17	189	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced. Poor pruning. Adjacent powerlines	Retain. Remedial prune	27/02/2014	647861.3392	5776343.015
330	None	Cupressus macrocarpa	Monterey Cypress	15	18	194	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced. Poor pruning.Structural failure, adjacent powerlines	Retain, prune canopy lift. Remedial prune	27/02/2014	647875.0619	5776349.508
331	None	Cupressus macrocarpa	Monterey Cypress	15	16	179	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Poor pruning. Adjacent powerlines	Retain, prune canopy lift. Remedial prune	27/02/2014	647902.8009	5776358.662
332	None	Cupressus macrocarpa	Monterey Cypress	15	17	182	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Poor pruning. Structural failure. Adjacent powerlines	Retain, prune canopy lift. Remedial prune	27/02/2014	647922.4509	5776367.767
333	None	Cupressus macrocarpa	Monterey Cypress	15	18	169	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced. Poor pruning. Adjacent powerlines	Retain. Remedial prune	27/02/2014	647941.8304	5776376.718

ELLERSLIE

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
334	None	Cupressus macrocarpa	Monterey Cypress	13	16	184	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced. Poor pruning. Structural failure, adjacent powerlines	Retain, prune canopy lift. Remedial prune	27/02/2014	647958.5484	5776384.65
335	None	Cupressus macrocarpa	Monterey Cypress	14	13	224	Good	Poor	Poor	< 5 Yrs	Root death to east. Major structural failure.Cracking apart	Remove and replace with a Monterey Cypress tree	27/02/2014	647974.8715	5776390.885
336				0	0	0					Vacant site	Plant a Monterey Cypress tree	27/02/2014	647994.5334	5776400.941
337	None	Cupressus macrocarpa	Monterey Cypress	16	16	171	Good	Hazardous	Fair	< 5 Yrs	Splitting apart. Structural failure, decaying structure, trunk cavity, adjacent powerlines	Remove and replace with a Monterey Cypress tree	27/02/2014	648013.66	5776407.381
338				0	0	0					Vacant site	Plant a Monterey Cypress tree	27/02/2014	648031.6974	5776415.358
339	None	Cupressus macrocarpa	Monterey Cypress	15	16	159	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced	Retain	27/02/2014	648049.1675	5776422.958
340		Cupressus macrocarpa	Monterey Cypress	16	17	173	Good	Fair	Good	20 - 30 Yrs	Has been crown reduced	Retain	27/02/2014	648067.9827	5776431.575
341	None	Cupressus macrocarpa	Monterey Cypress	15	18	225	Good	Hazardous	Good	5 - 10 Yrs	Splitting apart, trunk cavity, unable to remediate. Adjacent s/w powerline	Remove and replace with a Monterey Cypress tree	27/02/2014	648086.9298	5776440.256
342	None	Cupressus macrocarpa	Monterey Cypress	15	17	194	Good	Fair	Good	15 - 20 Yrs	Has been crown reduced	Retain, prune/ reduce weight	27/02/2014	648105.2692	5776447.861
343	None	Cupressus macrocarpa	Monterey Cypress	15	19	180	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced	Retain, prune/ reduce weight, prune canopy lift	27/02/2014	648144.8462	5776468.683
344	None	Cupressus macrocarpa	Monterey Cypress	15	20	152	Fair	Fair	Good	30 - 40 Yrs	Minor dieback. Has been crown reduced. Good pruning	Retain, prune/ reduce weight, prune canopy lift	27/02/2014	648175.0763	5776480.232
345	None	Cupressus macrocarpa	Monterey Cypress	15	20	181	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Good pruning	Retain, prune/ reduce weight	27/02/2014	648201.1132	5776489.814
346	None	Cupressus macrocarpa	Monterey Cypress	15	19	166	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Good pruning	Retain, prune/ reduce weight	27/02/2014	648229.4173	5776502.52
347	None	Cupressus macrocarpa	Monterey Cypress	12	14	115	Good	Fair	Good	30 - 40 Yrs	Bifurcated with included bark	Retain	27/02/2014	648258.8279	5776514.029
348	None	Cupressus macrocarpa	Monterey Cypress	15	19	182	Good	Fair	Good	30 - 40 Yrs	Has been crown reduced. Good pruning	Retain, prune/ reduce weight, prune canopy lift	27/02/2014	648282.1256	5776526.211
349	None	Cupressus macrocarpa	Monterey Cypress	14	16	150	Good	Fair	Good	> 50 Yrs	Has been crown reduced. Good pruning. Bifurcated with included bark	Retain, prune/ reduce weight	27/02/2014	647598.0392	5776253.048

GRASSMERE

KEY

ULE > 50 Years - Recommended action of regular maintenance and possible removal and replacement after 2027

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
351	None	<i>Quercus cerris</i>	Turkey Oak	10	16	90	Good	Good	Good	50 - 100 Yrs	Road fill built up over root plate. Good specimen	Retain, prune deadwood. Remedial prune	27/02/2014	633407.2999	5761579.642
352	None	<i>Quercus cerris</i>	Turkey Oak	11	16	100	Good	Good	Good	50 - 100 Yrs	Has been crown reduced. Poor pruning. Road fill built up over root plate	Retain, prune deadwood. Remedial prune	27/02/2014	633410.447	5761594.31
353				0	0	0					Vacant site		27/02/2014	633413.7038	5761620.53
354	None	<i>Quercus cerris</i>	Turkey Oak	12	16	90	Good	Good	Good	50 - 100 Yrs	Road fill built up over root plate. Good specimen	Retain, prune deadwood. Remedial prune	27/02/2014	633414.8388	5761636.163
355	None	<i>Quercus cerris</i>	Turkey Oak	12	19	110	Fair	Good	Good	50 - 100 Yrs	Road fill built up over root plate	Retain, prune deadwood. Remedial prune	27/02/2014	633419.6334	5761654.514
356	None	<i>Quercus cerris</i>	Turkey Oak	10	14	87	Good	Good	Fair	> 100 Yrs	Road fill built up over root plate	Retain, prune deadwood. Remedial prune	27/02/2014	633422.8764	5761672.436
357	None	<i>Quercus cerris</i>	Turkey Oak	11	17	104	Good	Good	Good	50 - 100 Yrs	Road fill built up over root plate	Retain, prune deadwood. Remedial prune	27/02/2014	633424.3586	5761687.113
358	None	<i>Quercus cerris</i>	Turkey Oak	11	17	92	Good	Good	Good	50 - 100 Yrs	Road fill built up over root plate	Retain, prune deadwood. Remedial prune	27/02/2014	633425.9024	5761704.302

KOROIT

KEY

ULE > 50 Years - Recommended action of regular maintenance and possible removal and replacement after 2027

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	ULE	Observations	Recommended Actions	Inspect Date	Easting	Northing
359	None	Platanus x acerifolia	London Plane	9	15	44	Good	Good	Poor	> 100 Yrs	Pruned under powerlines	Retain, prune canopy lift	28/02/2014	619645.7708	5759931.337
360	None	Platanus x acerifolia	London Plane	11	15	47	Good	Good	Fair	> 100 Yrs	Canopy encroaching on road	Retain, prune canopy lift. Prune off road	28/02/2014	619630.2763	5759947
361	None	Platanus x acerifolia	London Plane	12	16	66	Good	Good	Fair	> 50 Yrs	Previously lopped at 3m. Trunk cavity	Retain, prune deadwood. Thin out leaders over time.	28/02/2014	619642.6376	5760017.665
362	None	Platanus x acerifolia	London Plane	13	16	63	Good	Good	Fair	> 50 Yrs	Previously lopped. Canopy encroaching on road	Retain, prune canopy lift	28/02/2014	619644.2333	5760030.936
363	None	Platanus x acerifolia	London Plane	14	16	73	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619646.3342	5760041.698
364	None	Platanus x acerifolia	London Plane	14	16	76	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Lopped at 3m	Retain, prune canopy lift	28/02/2014	619648.305	5760056.655
365	None	Platanus x acerifolia	London Plane	14	16	77	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619650.489	5760067.972
366	None	Platanus x acerifolia	London Plane	14	16	79	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Lopped at 3m	Retain, prune deadwood, prune canopy lift. Thin out leaders over time	28/02/2014	619651.4872	5760081.17
367	None	Platanus x acerifolia	London Plane	7	6	20	Good	Good	Fair	> 100 Yrs	Young tree	Retain, prune canopy lift	28/02/2014	619653.148	5760094.958
368	None	Platanus x acerifolia	London Plane	14	16	70	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619654.9439	5760107.882
369	None	Platanus x acerifolia	London Plane	14	16	76	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619657.184	5760119.123
370	None	Platanus x acerifolia	London Plane	14	16	64	Good	Good	Good	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619658.9834	5760134.3
371				0	0	0					Vacant site		28/02/2014	619661.0125	5760151.689
372				0	0	0					Vacant site		28/02/2014	619666.2734	5760188.011
373	None	Platanus x acerifolia	London Plane	8	7	26	Good	Good	Fair	> 50 Yrs	Previously lopped at 3m	Retain. Thin out leaders over time	28/02/2014	619685.2514	5760185.669
374	None	Platanus x acerifolia	London Plane	10	13	49	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619683.6766	5760173.894
375				0	0	0					Vacant site		28/02/2014	619682.5919	5760161.917
376				0	0	0					Vacant site		28/02/2014	619680.2666	5760152.069
377	None	Platanus x acerifolia	London Plane	11	16	67	Good	Good	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619679.8433	5760142.59
378	None	Platanus x acerifolia	London Plane	10	15	44	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 2m. Adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619676.2741	5760124.675
379	None	Platanus x acerifolia	London Plane	11	15	54	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Trunk cavity, adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619673.7259	5760106.458
380	None	Platanus x acerifolia	London Plane	9	15	52	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Adjacent powerlines	Retain, prune canopy lift	28/02/2014	619671.3709	5760092.941
381	None	Platanus x acerifolia	London Plane	13	16	53	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Trunk cavity, adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619669.6234	5760080.099
382	None	Platanus x acerifolia	London Plane	12	15	50	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619664.3382	5760066.892
383	None	Platanus x acerifolia	London Plane	12	14	45	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619662.2483	5760034.186
384	None	Platanus x acerifolia	London Plane	7	9	31	Good	Fair	Poor	> 50 Yrs	Canopy encroaching on road. Previously lopped at 3m. Adjacent powerlines	Retain, prune canopy lift. Thin out leaders over time	28/02/2014	619659.1634	5760011.994
443				0	0	0					Vacant site		28/02/2014	619662.8678	5760164.536
444				0	0	0					Vacant site		28/02/2014	619664.8633	5760175.054

NARINGAL

KEY

Vacant site

ULE 10 - 20 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027 for bulk removal

ULE 20 - 50 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027 for bulk removal

ULE > 50 Years - Recommended action of regular maintenance and commence removal and replacement over a 10 year period between 2017 - 2027 for bulk removal

Tree ID	Plaque No.	Botanic Name	Common Name	Height	Width	DBH	Health	Structure	Form	ULE	Observations	Recommended Actions	Inspect Date	Easting	Northing
422	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	6	8	76	Fair	Fair	Poor	> 50 Yrs		Retain, prune deadwood	28/02/2014	647656.9002	5748880.755
423	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	4	4	34	Fair	Good	Poor	> 50 Yrs		Retain, prune deadwood	28/02/2014	647676.0146	5748878.126
424	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	5	6	64	Fair	Fair	Fair	> 50 Yrs		Retain, prune deadwood. Remove weeds	28/02/2014	647697.4919	5748875.383
425	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	5	5	42	Fair	Fair	Poor	> 50 Yrs		Retain, prune deadwood	28/02/2014	647718.1639	5748871.895
426	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	5	6	43	Fair	Poor	Poor	> 50 Yrs	Bifurcated with included bark	Retain, prune deadwood. Remove poorly attached southern stem	28/02/2014	647738.9468	5748868.796
427				0	0	0					Vacant site		28/02/2014	647757.2922	5748865.776
428	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	7	6	54	Fair	Fair	Fair	> 50 Yrs		Retain, prune deadwood	28/02/2014	647776.4248	5748862.505
429	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	6	9	79	Good	Poor	Good	20 - 30 Yrs	Trunk cavity, bifurcated with included bark	Retain, install cable, Install brace, prune deadwood	28/02/2014	647813.8309	5748857.832
430				0	0	0					Vacant site		28/02/2014	647836.3121	5748854.218
431				0	0	0					Vacant site		28/02/2014	647854.7911	5748851.769
432				0	0	0					Vacant site		28/02/2014	647873.5998	5748848.43
433	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	4	6	34	Fair	Poor	Poor	15 - 20 Yrs	Stump regrowth. Bifurcated with included bark	Retain. Remove multiple stems	28/02/2014	647933.9086	5748838.778
434	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	6	7	68	Good	Good	Good	> 50 Yrs	Good specimen	Retain, prune deadwood	28/02/2014	647955.223	5748835.627
435	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	6	6	44	Good	Fair	Good	> 50 Yrs	Good specimen	Retain, prune deadwood	28/02/2014	647972.6274	5748832.819
436	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	7	8	60	Good	Fair	Good	> 50 Yrs	Bifurcated with included bark	Retain, prune/ reduce weight. Reduce low limb to north	28/02/2014	647987.9967	5748830.584
437	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	7	11	73	Good	Fair	Fair	20 - 30 Yrs	Structural failure	Retain, prune/ reduce weight, prune deadwood. Remedial prune	28/02/2014	648010.5953	5748827.632
438	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	5	6	27	Good	Poor	Poor	30 - 40 Yrs	Stump regrowth	Retain. Remove competing inferior stems. Remedial prune	28/02/2014	648031.4418	5748823.676
439	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	6	9	54	Good	Poor	Good	> 50 Yrs	Bifurcated with included bark	Retain, install cable, prune/ reduce weight, install limb support	28/02/2014	648044.3445	5748821.136
440	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	7	10	44	Good	Fair	Good	> 50 Yrs		Retain, prune/ reduce weight, prune deadwood	28/02/2014	648070.9273	5748817.893
441	None	<i>Corymbia ficifolia</i>	Red Flowering Gum	7	6	56	Fair	Fair	Poor	30 - 40 Yrs		Retain, prune/ reduce weight, prune deadwood. Remove and poison competing adjacent Eucalypt stump regrowth	28/02/2014	648090.9116	5748814.84

PORT FAIRY

KEY

ULE > 50 Years - Recommended action of regular maintenance and possible removal and replacement after 2027

TREE ID	PLAQUE NO.	BOTANIC NAME	COMMON NAME	HEIGHT	WIDTH	DBH	HEALTH	STRUCTURE	FORM	ULE	OBSERVATIONS	RECOMMENDED ACTIONS	INSPECT DATE	EASTING	NORTHING
410	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	110	Good	Good	Good	> 50 Yrs	Poor location. Compaction from road and parking bays. Limited root volume	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608556.9561	5751588.371
411	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	106	Good	Good	Good	> 50 Yrs	Poor location. Compaction from road and parking bays. Limited root volume	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608545.5772	5751593.584
412	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	86	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking bays. Limited root volume	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608533.7593	5751597.098
413	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	20	14	90	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking bays. Limited root volume	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608522.5041	5751601.786
414	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	96	Good	Fair	Good	> 50 Yrs	Poor location. Soil compaction. Parking bays. Limited root volume	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608512.0683	5751607.423
415	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	31	14	97	Good	Good	Good	> 50 Yrs	Minor Corella damage. Poor location. Soil compaction. Parking bays Street crossover over both sides of root plate. Limited root volume	Retain. Remove part of asphalt crossover. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608500.8859	5751610.836
416	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	19	12	77	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608507.4798	5751626.437
417	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	89	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608518.7016	5751622.412
418	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	94	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608530.2555	5751618.456
419	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	107	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608540.6943	5751612.861
420	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	109	Good	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608552.4814	5751609.918
421	None	<i>Araucaria heterophylla</i>	Norfolk Island Pine	21	14	96	Fair	Good	Good	> 50 Yrs	Poor location. Soil compaction. Parking on grass. Limited root volume. Corella damage. Adjacent powerlines.	Retain. Restrict parking over root plate. Remove grass and apply mulch	28/02/2014	608563.7984	5751604.103

7

Introduction

The following chapter and diagrams, document the Summary of the Arboricultural assessment.

Mortlake

Species - *Cupressus macrocarpa* (Monterey Cypress) & *Araucaria heterophylla* (Norfolk Island Pine) as a singular specimen, known as The Peace Tree.

There is a total of 200 trees, including 192 Monterey Cypress, the single Norfolk Island Pine Peace Tree and seven vacant sites.

The Mortlake Avenue of Monterey Cypress consists of two age groups, World War I and World War II.

The majority of World War I plantings are in poor condition and rapidly approaching senescence. These are the trees that are located closer towards the town centre. Many are falling apart or in such poor health that they are beyond remedial measures. Certainly many are detracting from the overall aesthetics of the row.

The majority of World War II plantings are in much better condition with an average useful life expectancy of 20 - 30 years.

Existing within these two age groups are individual trees that need urgent attention. Routine bulk pruning has maintained the intact form of some trees and reduced the incidence of structural failure. These routine works are seen as critical to maintaining those trees that are in reasonable condition.

The replacement of the Monterey Cypress in Mortlake's Avenue of Honour, is a priority due to the significant number of trees making up the avenue, the decline of trees and the fact that the residents highly value the Avenue of Honour, as it is the town's main feature. Future replanting may consider extending the avenue into the town centre.

Heritage Victoria and Mortlake RSL's preference is to replace the Monterey Cypress with young Monterey Cypress trees, despite the presence of Cypress Canker in the immediate Mortlake district. After considering feedback on the Draft Report, Council's decision was to conduct a four year trial commencing in 2017 to remove Monterey Cypress trees as a block of 21 trees with a large number of low Useful Life Expectancy of <5 years. Removal will be in block groupings. The health and condition of each of the 21 replacement Monterey Cypress trees will be monitored and recorded on an annual basis. The success or otherwise of the trial will be reported to determine the likelihood of replacing all the trees within the Avenue with this Monterey Cypress trees over a 21 year period.

Following the monitoring of the 4 year trial period, if the Monterey Cypress is determined to be successful then the 21 trees will remain. However, if the condition is determined to be poor, then they will be removed and replaced with a different tree species. The ongoing removal and replacement with an alternative species would be in the same regime as set out below. Suggested replacement tree species are the Moreton Bay Fig tree, which has been successfully grown in other parts of Mortlake, Turkey Oak, English Oak or London Plane tree.

The remainder of existing Monterey Cypress trees are to be removed and replaced in blocks of approximately 20 trees every two years over a 21 year period, with the following tree numbers, as labelled on Stem Aboriculture's 'Moyne Shire Masterplan' maps attached in the Appendix:

2017 - Tree numbers 48-57 and 142-151 as a trial.

Then assuming there is 95% success rate of the 2017 plantings:

2022 - Tree numbers 13-18 and 189-198.

2024 - Tree numbers 1-12 and 178-185.

2026 - Tree numbers 158-177.

2028 - Tree numbers 19-38.

2030 - Tree numbers 39-47, 137-141 and 152-157.

2032 - Tree numbers 58-77.

2034 - Tree numbers 117-136.

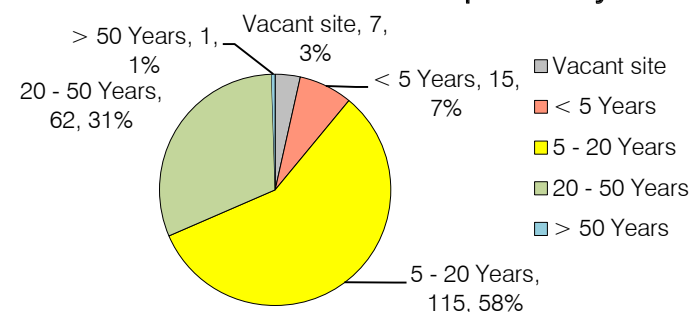
2036 - Tree numbers 78-97.

2038 - Tree numbers 98-116.

Where routine powerline clearance works are conflicting with the Avenues' health and amenity, consider placing those wires below ground or use of aerial bundled cable to minimise the pruning requirement.

Recommended individual tree works, including 'The Peace Tree' are also provided in the accompanying tree data.

Mortlake - Useful Life Expectancy



The Sisters

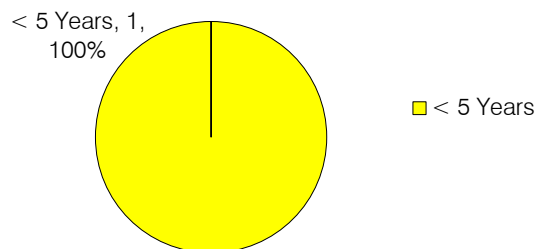
Species - *Pinus Brutia* (Calabrian Pine)
Total number of trees and vacant sites - 1

The Lone Pine fell on the 12th of July 2016 due to a windstorm. The seeds from the cones were salvaged to maintain the genetic integrity of the particular Lone Pine tree.

It would be desirable to propagate seedlings from this tree to replace the Lone Pine tree. A few seedlings could be planted to increase the chances of growing a healthy and thriving tree.

There are mixed *Corymbia* and *Eucalyptus* within the road reserve. There has been reference made during the study process that there was an Avenue of Honour located to the north-east of the Community Hall on Mortlake-Framlingham Road. In 2017, this location was confirmed by locals and the recommendation is for the establishment of two rows trees, with a total of 31 *Quercus palustris* (Pin Oak) trees to represent the 31 soldiers.

The Sisters - Useful Life Expectancy



Caramut

Species - *Cupressus macrocarpa* (Monterey Cypress)
Total number of trees and vacant sites - 16

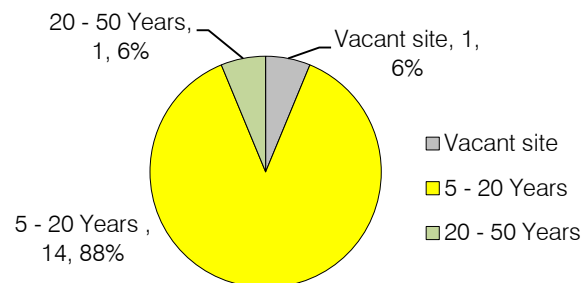
The Caramut Avenue consist of two almost separate groups, one in Glenthompson-Caramut Road, the other in Gibson Street.

Many individual trees are in very poor structural condition and are held together by extensive cable systems.

Based on their relatively limited useful life expectancy, a removal and replacement program is recommended, with all trees being removed within the next 10 years.

Recommended individual tree works are also provided in the accompanying tree data.

Caramut - Useful Life Expectancy



Orford

Species - *Cupressus macrocarpa* (Monterey Cypress) & *Pinus radiata* (Monterey Pine)
Total number of trees and vacant sites - 25

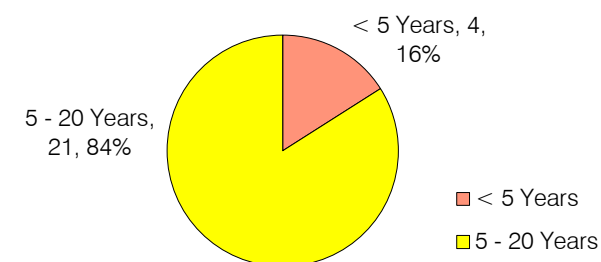
The avenue consists of a single row of mature trees on the west side of the Hamilton - Port Fairy Road and new plantings of London Plane trees to the east of that road.

The mature trees are mostly in poor condition with a useful life expectancy of less than 20 years. Approximately 70% of the trees will need replacing within the next 12 years.

It is recommended that the entire western row be removed and replaced over the next 10 years.

Recommended individual tree works are also provided in the accompanying tree data.

Orford - Useful Life Expectancy



Hexham

Species - *Cupressus macrocarpa* (Monterey Cypress)
Total number of trees and vacant sites - 95

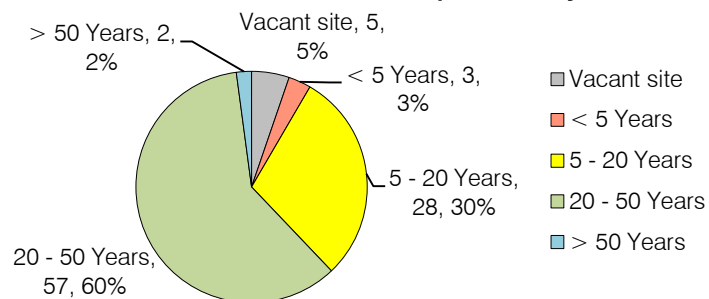
The avenue at Hexham is in reasonable condition with over half the row expected to have a useful life expectancy beyond the next 20 years.

The poorer trees appear to be closer to the township centre.

Hexham's Avenue of Honour is a significant landscape feature and due to the number of trees comprising the avenue, it has been given a medium to high priority for complete replacement and removal in the one process. In the interim, over the next 5 - 12 years, implement a routine pruning program.

Recommended individual tree works are also provided in the accompanying tree data.

Hexham - Useful Life Expectancy



Ellerslie

Species - *Cupressus macrocarpa* (Monterey Cypress)
Total number of trees and vacant sites - 39

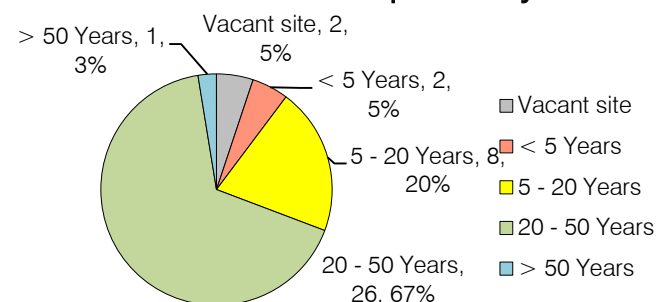
Overall the condition of the avenue is reasonably good, with only a few individuals displaying a useful life expectancy of less than 5 years.

Routine pruning of this row has played an important role in maintaining their structural integrity. Selective removal and replacement works should be undertaken to sustain the row's amenity value over a long period of time. Removal and replacement of the Monterey Cypress trees should be undertaken as a complete grouping or row of trees between 5 - 12 years.

Reduction of the service road should be considered to reduce compaction and increase the available root foraging area.

Recommended individual tree works are also provided in the accompanying tree data.

Ellerslie - Useful Life Expectancy



Grassmere

Species - *Quercus cerris* (Turkey Oak)
Total number of trees and vacant sites - 7

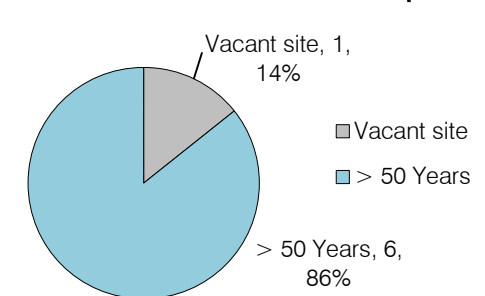
The Grassmere Avenue consists of a single row of *Quercus cerris* (Turkey Oak) in a north-south alignment.

Overall the avenue is in good condition, despite the road being built up around their trunks. A lesser tree would have been ringbarked by soil borne organisms years ago.

Given their long useful life expectancy, no specific removal program is required, however removal of the fill built up around the trunks should be undertaken.

Recommended individual tree works are also provided in the accompanying tree data.

Grassmere - Useful Life Expectancy



Koroit

Species - *Platanus x acerifolia* (London Plane)
Total number of trees and vacant sites - 28

A relatively young avenue and in good condition, although the eastern side of the avenue is being adversely affected by powerline clearance pruning.

Consider diverting, placing underground or aerial bundling the power lines.

Due to the relatively young age of the avenue, programmed removals are not required at this stage.

Recommended individual tree works are also provided in the accompanying tree data.

Naringal

Species - *Corymbia ficifolia* (Red Flowering Gum)
Total number of trees and vacant sites - 20

This avenue is relatively young and of a modest size, consequently it lacks landscape presence. In some areas it is 'lost' in seedling regrowth.

Due to the relatively young age of the avenue, programmed removals are not required at this stage.

Recommended individual tree works are also provided in the accompanying tree data.

Port Fairy

Species - *Araucaria heterophylla* (Norfolk Island Pine)
Total number of trees and vacant sites - 12

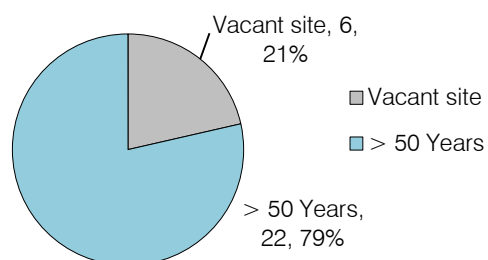
In reasonable condition, although more can be done to improve their health.

Isolating the trees' root mass from car parking will help reduce soil compaction. Therefore some form of barrier or fencing is needed.

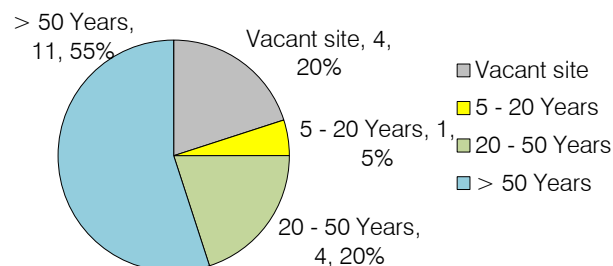
Corellas are causing some minor damage, this should be monitored for any increased grazing activity resulting in further damage of trees.

Recommended individual tree works are also provided in the accompanying tree data.

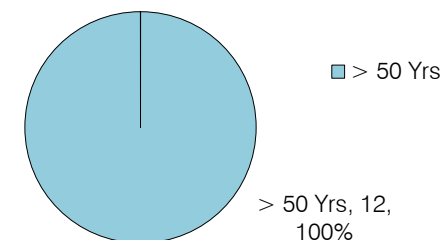
Koroit - Useful Life Expectancy



Naringal - Useful Life Expectancy



Port Fairy - Useful Life Expectancy



Pruning of Monterey Cypress

As *Cupressus macrocarpa* (Monterey Cypress) tend to hold their foliage at the extremities of the limb, the weight of the foliage (which is sometimes wet) combined with cone production, places enormous leverage along the length of the limb. This combination often results in structural failure, particularly in mature specimens.

When branch failures open the canopy to the forces of the wind, previously protected branches can also begin to fail, causing an exponential collapse of the canopy.

Whilst some tree species benefit from internal pruning of deadwood and redundant branches, Cypress perform better when deadwood is left intact and canopies remain entire. As Monterey Cypress do not regenerate from old wood, there is a limit to how much foliage can be removed before the limb can no longer grow new foliage.

Pruning of Monterey Cypress should be limited to tip reduction and some selective foliage thinning of overly heavy lateral limbs. This style of pruning maintains the foliage at the extremities, but significantly reduces the weight and leverage placed on the pruned limb, thereby reducing the incidence of limb failure.

For the above reasons, the current practise of tip pruning some of the Cypress rows should be maintained and extended to all Monterey Cypress Avenue of Honour trees.

All pruning must only be undertaken by suitably qualified and experienced arborist whose work conforms to AS4373 2007 Pruning of Amenity Trees.

Cypress Canker

Over the past ten years, the decline of Cypress trees has become prevalent throughout rural southern Victoria. Agriculture Victoria have found trees affected by various fungal pathogens, particularly cypress canker (*Seiridium* species), as well as *Botryosphaeria*, *Phomopsis* and *Pestalotiopsis* species.

These fungi can all cause dieback symptoms, especially when the trees are placed under environmental stress. They are a mixture of primary pathogens (which can attack intact plants) and secondary pathogens (which usually attack plants at sites where another infection already exists).

Cypress canker is currently the most significant pathogen affecting exotic conifers in Victoria and unfortunately there is no proven cure for the disease. Cypress canker attacks more than 25 conifer species of the *Cupressaceae* family in many parts of the world, including Australia, the United States and Europe.

Cypress canker infects plants through spores (*conidia*), which are spread by being carried in the wind, in water droplets or by insects. Spores that land on healthy foliage can germinate under warm, moist conditions and infection occurs through natural fissures in the bark or through scars caused by mechanical damage (e.g. pruning, animals or falling branches). The pathogen then girdles twigs, branches and the main trunk, interfering with the sap-conducting system and causing the foliage to die. Death may occur progressively from branch to branch. New local infections can also develop when spores are washed down the tree or splashed from tree to tree by rain or overhead irrigation. They can also be transferred from plant to plant on pruning tools, or through the transport of infected cuttings or plants.

Sectional dieback was observed in some Avenue of Honour trees, however other symptoms of Cypress Canker, such as resin exudation and cankering bark were not observed.

In the absence of further laboratory testing it would be prudent to maintain good hygiene when Cypress pruning is undertaken. Therefore all pruning tools must be sterilised in between pruning of individual trees and certainly directly after removing dead or dying branches that may be infected.

As reduced tree health is thought to lower a plants resistance to disease, cultural practices that improve tree health need to be considered.

Extreme weather such as drought or waterlogged soils are thought to increase tree susceptibility to Cypress Canker. Unfortunately the assessment of the avenues cannot foresee future environmental conditions and how this would affect the impact of the disease upon those Cypress rows.

Mulching

It is recommended that coarse mulch is to be applied as a 75mm layer to aid soil moisture retention and cooling of the root mass of trees that are planted from 2015 onwards as replacement trees.

Ideally the coarse mulch should be applied as a 75mm layer to the entire canopy drip line of all trees to be retained. The mulch must be appropriately composted and free of weed seed or disease. Because of the threat of Cypress Canker, mulch from Cypress removals or pruning should not be used.

The use of mulch beneath the trees will stop further mechanical damage caused to existing surface roots by lawn mowers.

Tree Replacement

The issue of tree removal and replacement is often difficult due to the emotional attachment and sense of ownership a community feels towards its significant trees, particularly with Avenue of Honour specimens.

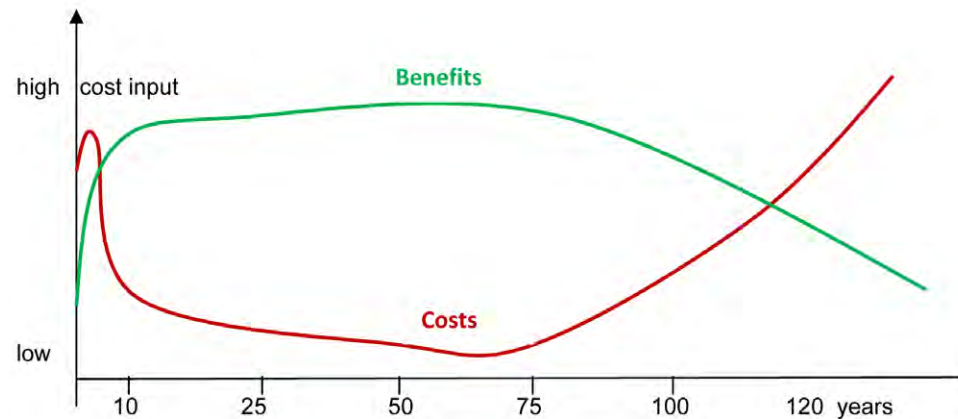
Council must consider the cost of removal and replacement programs and budgeting is critical due to the large costs associated with these works.

Unfortunately difficult decisions to remove and replace trees are often postponed until the trees reach such an advanced state of decline there can be no other alternative but to remove the trees within a short time frame. This has dramatic consequences for the landscape and the local community, as large prominent specimens are rapidly replaced by much smaller trees. In this way the amenity value of the row is much depleted for at least 10 - 15 years until the trees gain sufficient size as to make some sort of landscape impact.

In an ideal world, a semi-mature avenue would undergo a routine tree removal program that initiated the removal and replacement of every second or third tree. This thinning of the population would require the loss of some good trees, however their replacement would ensure a vigorous and relatively young population. In this way the average age of the avenue is controlled and amenity value sustained, without requiring wholesale tree removal and an ensuing loss of amenity.

With input from Moyne Shire Council, a realistic and achievable replacement program was adopted. This is documented in the following tables in chapter 10.

The diagram below illustrates the relationship between the time since planting and the aesthetic returns and management cost generated by a hypothetical tree. This diagram shows that aesthetic benefits increase as a tree ages, until a plateau is reached. Amenity value then falls away as the tree ages and declines.



(Reproduced from Hitchmough, J.D. 1994 *Urban Landscape Management*.)

The cost line shows that there is an initial high cost associated with planting and establishment and then costs reduce until a constant level is reached. These costs begin to increase as the tree reaches over-maturity and a higher level of maintenance is required to keep the tree in a safe and healthy condition.





When dealing with avenue plantings, a holistic approach to tree management is required. Whereas removal of individual trees may create a sporadic avenue, a holistic approach will provide a more uniform and consistent avenue.

When dealing with mature populations it is often a case that reactive works must occur, rather than having a choice with a younger avenue of when and how tree work should occur.

Recommended Actions

This chapter is based on the field results of the arboricultural assessment of each individual tree within each Avenue of Honour nominated by Moyne Shire Council for review. The arboricultural assessment was undertaken in February 2014. Each existing tree and vacant site in each town, township, settlement or hamlet was recorded and inserted as the tabulated information in Chapter 6. The arboricultural assessment provides the Useful Life Expectancy (ULE) of each tree, which takes into account its health, structure, form and other observable factors, to give an indication of its reasonable remaining life span.

As an easy reference to removal and replacement regimes, the tabulated chart prepared from the arboricultural assessment has been colour coded.

-  High priority replacement trees - ULE < 5 years are coded in red.
-  Medium priority replacement trees - ULE 5 – 20 years are coded in yellow.
-  Low priority replacement trees - ULE 20 – 50 years are coded in green.
-  The trees with a ULE > 50 years are coded in blue.

In the analysis of the tabulated data, the percentage of the trees' ULE within a particular Avenue of Honour is presented in the form of pie charts and recommendations are made in chapter 7. The estimated cost of removal, replacement planting and maintenance are provided in the Overview and Recommended Actions Table in chapter 10 and the numbers of trees that form the basis of the costs are taken from the colour coded table in chapter 6.











Bulk tree removal methodology

Two regimes of tree replacement were adopted for this study. Mortlake's Avenue of Honour of 192 existing Cypress trees forms a strong corridor and character. The decision has been made to phase out blocks of trees following a four year trial period, rather than bulk removal of trees, which is applicable to the other shorter length avenues of trees. On this basis, Mortlake's recommended actions are separate to all other towns and townships' recommended actions.

Bulk tree removal methodology for Mortlake

For Mortlake's Avenue of Honour, which is on the Victorian Heritage Register, Council will follow Heritage Victoria's recommendation to perform a staged removal and replacement process, trialling initially with Cypress trees over approximately 21 years. The decision was to conduct a four year trial commencing in 2017 to remove Monterey Cypress trees as a block of 21 trees with a large number of low Useful Life Expectancy of <5 years. Removal will be in block groupings. The health and condition of each of the 21 replacement Monterey Cypress trees will be monitored and recorded on an annual basis. The success or otherwise of the trial will be reported to determine the likelihood of replacing all the trees within the Avenue with this Monterey Cypress trees over a 21 year period.

The remainder of existing Monterey Cypress trees are to be removed and replaced in blocks of approximately 20 trees every two years over a 21 year period. The following colour codes have been used to denote the blocks of trees and the year in which they should be removed.

-  Recommended action for removal and replacement of 21 trees with a large number of trees with ULE < 5 years as a trial in 2017 are coded in red.
-  Recommended action of removal and replacement of a block of 19 trees in 2022 coded in orange.
-  Recommended action of removal and replacement of a block of 20 trees in 2024 coded in pink.
-  Recommended action of removal and replacement of a block of 20 trees in 2026 coded in brown.
-  Recommended action of removal and replacement of a block of 20 trees in 2028 coded in light purple.
-  Recommended action of removal and replacement of a block of 20 trees in 2030 coded in dark purple.
-  Recommended action of removal and replacement of a block of 20 trees in 2032 coded in light blue.
-  Recommended action of removal and replacement of a block of 20 trees in 2034 coded in dark blue.
-  Recommended action of removal and replacement of a block of 20 trees in 2036 coded in light green.
-  Recommended action of removal and replacement of a block of 19 trees in 2038 coded in dark green.

The Norfolk Island Pine Peace Tree has a ULE of > 50 Years and is to be retained and maintained.

21 trees to be removed and replaced with Cypress as a trial in 2017

LEGEND FOR THE MORTLAKE AVENUE OF HONOUR STAGED TREE REPLACEMENT:

-  Vacant tree site
-  Trees with a ULE < 5 Years (hazardous trees)
-  21 trees to be removed and replaced with Cypress as a trial in 2017
-  19 trees to be removed and replaced in 2022
-  20 trees to be removed and replaced in 2024
-  20 trees to be removed and replaced in 2026
-  20 trees to be removed and replaced in 2028
-  20 trees to be removed and replaced in 2030
-  20 trees to be removed and replaced in 2032
-  20 trees to be removed and replaced in 2034
-  20 trees to be removed and replaced in 2036
-  19 trees to be removed and replaced in 2038

Please note: The Tree No. refers to the number assigned to the tree as shown on Stem Arboriculture's plan in the Appendix, and in the Section 6 Arboricultural Assessment tables of this report.

This drawing is the copyright of, and may not be reproduced or transmitted without prior consent of Michael Smith and Associates Landscape Architecture and Urban Design

MICHAEL SMITH AND ASSOCIATES
Landscape Architecture and Urban Design

Office: 1st floor/ 407 Whitehorse Road, Balwyn 3103
Postal: 5 Jervis Street, Camberwell 3124
Tel: 9830 0414 Fax: 9830 2555
Mobile: 0418 172 863
Email: mike@msalandurb.com.au

Drawn: LW
Date: 15.03.2017
Project No.: 14-011
Cad File: ContextPlan.dwg
Drawing No.: Sheet 1 of 1





MORTLAKE TREE REMOVAL AND REPLACEMENT STRATEGY AVENUES OF HONOUR TREE MANAGEMENT STUDY MOYNE SHIRE COUNCIL


Bulk tree removal methodology for all towns other than Mortlake

The methodology or process set out below to replace trees applies to all towns except for Mortlake.

The coloured coded system used in Chapter 6, Arboricultural Assessment (pages 10 - 11), has been simplified to achieve a realistic approach in tree management, including the cost of replacement and replanting. The trees of < 5 year ULE (red colour coded) indicating trees requiring immediate attention, has been retained as per the Chapter 6 information, while the trees of ULE 5 - 20 years (yellow colour coded), has been combined with the trees of ULE 20 - 50 years (green colour coded) to enable bulk removal and replacement of trees, rather than incrementally removing and replacing individual or alternating trees. This strategy achieves complete new avenues over a relatively short time frame.

 High priority replacement trees - ULE < 5 years are coded in red.

 Medium-Low priority replacement trees combined - ULE 5 - 50 years are coded in purple.

 The trees with a ULE > 50 years are coded in blue.

This strategy involving block or bulk removal, particularly of the Monterey Cypress trees, necessitates Moyne Shire Council and key stakeholders and groups in taking a proactive role in the management of the process. The immediate removal and replacement actions over a relatively short time frame will reduce the significant cost to Council and funding partners of maintaining trees that would be in an increasing state of decline for potentially many years.

The bulk removal of trees within a consolidated time frame commencing in 2017 and completion in 2027 is seen as being more achievable and workable from a Council resource perspective. The consolidated time frame enables applications for immediate and short-term funding programs to be more achievable.

The opinion of probable costs for the removal, replacement and maintenance of trees is based on 2014 costs.

The consolidation of the yellow and green coloured categories of removing trees in the 5 – 50 year category (purple colour coded), has implications of reducing the on-going maintenance commitment to Council and key stakeholders, but does place significant emphasis and commitment by Moyne Shire Council and key stakeholders in facilitating the removal of bulk blocks of Monterey Cypress trees in five towns, townships and hamlets.

Exceptions

The Avenues of Honour at Ellerslie and Hexham were rated in the arboricultural assessment with one or two trees of >50 year ULE (blue colour coded), these several trees have been joined with the majority of the other trees within the hamlet with the 10-50 year ULE (yellow and green colour coded). This strategy assists in establishing a co-ordinated, effective and efficient labour task in removal and replacement and to provide a more consistent tree growth across large blocks of tree groups.

In Naringal, although there are 11 trees of ULE of >50 years (blue colour coded), there are only 20 trees in total and to be replaced in bulk at the same time, this can be left towards the end of the removal and replacement program.

Maintenance

Maintenance works include regular work on all remaining trees until they are removed. For some avenues such as Naringal, Koroit, Grassmere and Port Fairy, this may be 2035 and well beyond.

Maintenance for the larger and older existing trees can range from general pruning, weight reduction, canopy lifting and in some instances, cable bracing.

Maintenance for newly planted replacement trees has been considered in the opinion of probable costs and includes the watering of trees during the spring to autumn period and where necessary, formative pruning of trees for a period of at least three years after planting. Irrigation requirements will depend on prevailing seasonal conditions. It is expected that in the first year, trees would require up to ten separate waterings every two to three weeks over a 6-month spring to autumn period. In the second year, watering would be reduced by 50% to five waterings and a further reduction in the third year to two waterings. Again, this would be seasonally dependent.

The opinion of probable costs for maintenance of remaining Cypress trees with a ULE of between 5 – 50 years is based on 2014 cost rates. The maintenance of the trees would be undertaken once every four years and the cost is broken down into quarters for the cost per annum.

Plaques and Signs

There are some plaques remaining in the Avenue of Honour at Mortlake and Hexham. For the remaining Avenues there are no memorial plaques. Following the release of the Draft Report, Council determined that the most cost effective means of displaying names would be to erect a single sign at each Avenue of Honour, except at Mortlake, where plaques would continue to be used due to this Avenue's heritage-listed status.

For Mortlake, plaques will be provided at trees where currently the plaques are missing. It is assumed the plaques for the trees would be in the same material and proportion/scale as those already at Mortlake. This is a stone plaque. The plaques need to depict the name and serial number clearly. The signs need to be in the order of 550 to 600mm in length and 100 to 110mm in width.

For the Lone Pine at The Sisters an information board or sign would be appropriate giving interpretive information on the significance of the Lone Pine as an iconic tree associated with the World War 1 battlefields in Turkey. In the Opinion of Cost, research into the significance, artwork and fabrication has been considered.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – UPDATED MARCH 2017

Michael Smith and Associates
and Stem Arboriculture

The following two pages is a summary of recommended actions for tree management at the Mortlake Avenue of Honour, including Opinion of Probable Costs (OPC) based on 2014 costs and rates. The initial Avenue of Honour Report was prepared in November 2014. The table below was prepared in March 2017 to reflect the new tree removal and replacement methodology. The advice from Council was to retain the 2014 tree removal, planting and maintenance rates.

The following two pages refer to the tree removal and replacement regime specifically for Mortlake's Avenue of Honour.

KEY












	Recommended action for removal and replacement of 21 trees with Cypress as a trial in 2017		Recommended action of removal and replacement of a block of 20 trees in 2032
	Recommended action of removal and replacement of a block of 19 trees in 2022		Recommended action of removal and replacement of a block of 20 trees in 2034
	Recommended action of removal and replacement of a block of 20 trees in 2024		Recommended action of removal and replacement of a block of 20 trees in 2036
	Recommended action of removal and replacement of a block of 20 trees in 2026		Recommended action of removal and replacement of a block of 19 trees in 2038
	Recommended action of removal and replacement of a block of 20 trees in 2028		Recommended action of regular maintenance for the Norfolk Island Pine Peace Tree
	Recommended action of removal and replacement of a block of 20 trees in 2030		

TABLE A: MORTLAKE TREE REPLACEMENTS

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACEMENT SPECIES
Mortlake	<i>Cupressus macrocarpa</i> (Monterey Cypress)	WW1 plantings mostly in poor condition. WW2 average life expectancy 20-30 years.	192 <i>Cupressus</i> 7 vacant sites	2017 19 trees @ \$1,800 = \$34,200	2017 21 trees @ \$200 = \$4,200	2017 21 trees @ \$150 = \$3,150	2017 21 trees @ \$50 = \$1,050	2017-2022 174 trees @ \$300 = \$52,200	Replace 21 trees with Cypress as a trial in 2017.	<i>Quercus robur</i> or <i>Quercus cerris</i> or <i>Platanus x acerifolia</i>
				2022 15 trees @ \$1,800 = \$27,000	2022 19 trees @ \$200 = \$3,800	2022 19 trees @ \$150 = \$2,850	2022 19 trees @ \$50 = \$950	2022-2026 159 trees @ \$300 = \$47,700	Remove and replace the remaining trees as blocks of approximately 20 trees every 2 years after the trial, commencing in 2022.	
				2024 20 trees @ \$1,800 = \$36,000	2024 20 trees @ \$200 = \$4,000	2024 20 trees @ \$150 = \$3,000	2024 20 trees @ \$50 = \$1,000			
				2026 20 trees @ \$1,800 = \$36,000	2026 20 trees @ \$200 = \$4,000	2026 20 trees @ \$150 = \$3,000	2026 20 trees @ \$50 = \$1,000	2026-2030 119 trees @ \$300 = \$35,700	For the remaining Cypress, implement a programmed pruning cycle every 4 years until 2027. Remove grass and mulch root zone.	
				2028 20 trees @ \$1,800 = \$36,000	2028 20 trees @ \$200 = \$4,000	2028 20 trees @ \$150 = \$3,000	2028 20 trees @ \$50 = \$1,000			
				2030 20 trees @ \$1,800 = \$36,000	2030 20 trees @ \$200 = \$4,000	2030 20 trees @ \$150 = \$3,000	2030 20 trees @ \$50 = \$1,000	2030-2034 79 trees @ \$300 = \$23,700		
				2032 20 trees @ \$1,800 = \$36,000	2032 20 trees @ \$200 = \$4,000	2032 20 trees @ \$150 = \$3,000	2032 20 trees @ \$50 = \$1,000		Future replanting could extend west into the town centre.	

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – UPDATED MARCH 2017

Michael Smith and Associates
and Stem Arboriculture

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACE-MENT SPECIES
				2034 20 trees @ \$1,800 = \$36,000	2034 20 trees @ \$200 = \$4,000	2034 20 trees @ \$150 = \$3,000	2034 20 trees @ \$50 = \$1,000	2034-2038 39 trees @ \$300 = \$11,700	Replace missing plaques. 47 plaques @ \$300 each = \$14,100	
				2036 20 trees @ \$1,800 = \$36,000	2036 20 trees @ \$200 = \$4,000	2036 20 trees @ \$150 = \$3,000	2036 20 trees @ \$50 = \$1,000			
				2038 19 trees @ \$1,800 = \$34,200	2038 19 trees @ \$200 = \$3,800	2038 19 trees @ \$150 = \$2,850	2038 19 trees @ \$50 = \$950	2038 All Cypress have been replaced by 2038.		
Mortlake	<i>Araucaria heterophylla</i> (Norfolk Island Pine) – The Peace Tree	Fair condition, growing in problematic site	1 <i>Araucaria</i>	N/A	N/A	N/A		\$100/annum	Consider new planting to eventually replace this tree within the next 20-30 years.	<i>Araucaria heterophylla</i>

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – FEBRUARY 2017

Michael Smith and Associates
and Stem Arboriculture

The following four pages is a summary of recommended actions for tree management at each Avenue of Honour except Mortlake, including Opinion of Probable Costs (OPC) based on 2014 costs and rates. The initial Avenue of Honour Report was prepared in November 2014. The table below was prepared in March 2017 to reflect the new tree removal and replacement methodology. The advice from Council was to retain the 2014 tree removal, planting and maintenance rates.

The following four pages refer to the tree removal and replacement regime of all the Avenues of Honour except Mortlake.

KEY




	Recommended action for removal and replacement of trees ULE < 5 Years (hazardous trees) and planting of trees in vacant sites in 2017
	Recommended action of removal and replacement of trees ULE 5 - 50 Years over a 10 year period between 2017 – 2027
	Recommended action of regular maintenance for trees ULE > 50 Years and possible removal after 2027.

TABLE B: ALL AVENUES OF HONOUR EXCEPT MORTLAKE

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACEMENT SPECIES
The Sisters	<i>Pinus brutia</i> (Calabrian Pine)	A single specimen west of the Community Hall. It fell on the 12 th of July 2016 due to a windstorm.	1 <i>Pinus brutia</i>	Already completed	2017 - 2027 \$500 planting per tree	2017 - 2027 \$250 per tree	N/A	N/A	The Lone Pine fell on the 12th of July 2016 due to a windstorm. The seeds from the cones were salvaged. Propagate the seedlings from this tree and plant the tree when it is 2-3 years old. Information sign on the significance of the Lone Pine Tree = \$4,000	<i>Pinus brutia</i> \$1,000 nursery growing for the Lone Pine
	<i>Cupressus macrocarpa</i> (Monterey Cypress)	The original Avenue of Honour along Mortlake-Framlingham Road was removed.	0 <i>Cupressus macrocarpa</i> They have all since been removed		2017 - 2027 31 trees @ \$200 = \$6,200	2017 - 2027 31 trees @ \$150 = \$4,650	N/A	N/A	Replant 31 trees (1 for each of the 31 soldiers) to re-instate the original Avenue of Honour between the service road and Mortlake-Framlingham Road.	<i>Quercus palustris</i>

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – FEBRUARY 2017

Michael Smith and Associates
and Stem Arboriculture

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACE-MENT SPECIES
Caramut	<i>Cupressus macrocarpa</i> (Monterey Cypress) Glen Thompson – Caramut Road.	Poor structural condition. Limited life expectancy.	15 <i>Cupressus</i> 1 vacant site	No tree removal required. All trees have a ULE greater than 5 years.				2017 15 trees @ \$300 = \$4,500	Every tree removed and replaced by 2027. Single sign = \$4000	<i>Brachychiton populneus</i>
	<i>Cupressus macrocarpa</i> (Monterey Cypress) Gibson Street	Poor structural condition. Limited life expectancy.		2017 - 2027 15 trees @ \$1,800 = \$27,000	2017 - 2027 15 trees @ \$200 = \$3,000	2017 - 2027 15 trees @ \$150 = \$2,250		2017 - 2027 All Cypress have been replaced by 2027.		
Orford	<i>Cupressus macrocarpa</i> (Monterey Cypress)	Most Cypress are in poor condition. 70% need replacing by 2030.	21 <i>Cupressus macrocarpa</i> 4 <i>Pinus radiata</i>	2017 4 trees @ \$1,800 = \$7,200	2017 4 trees @ \$200 = \$800	2017 4 trees @ \$150 = \$600		2017 21 trees @ \$200 = \$4,200	Recommend that 4 trees are immediately removed and the remainder by 2027.	<i>Platanus x acerifolia</i>
	And <i>Pinus radiata</i> Monterey Pine			2017 - 2027 21 trees @ \$1,800 = \$37,800	2017 - 2027 21 trees @ \$200 = \$4,200	2017 - 2027 21 trees @ \$150 = \$3,150	2017 - 2027 4 trees @ \$50 = \$200	2017 - 2027 All trees have been replaced by 2027.	Plaques exist in new plantings to the east of the carriageway. Single sign = \$4000	This matches the recent Avenue planting to the east side of the road.
Hexham	<i>Cupressus macrocarpa</i> (Monterey Cypress)	Generally poorer condition trees are close to town.	87 <i>Cupressus</i> 2 <i>Schinus</i> 1 <i>Pinus brutia</i> 5 vacant sites	2017 3 trees @ \$1,800 = \$5,400	2017 8 trees @ \$200 = \$1,600	2017 8 trees @ \$150 = \$1,200		2017 87 trees @ \$300 = \$26,100	Implement routine pruning and programmed removal and replacement of every tree.	<i>Brachychiton populneus</i>
				2017 - 2027 87 trees @ \$1,800 = \$156,600	2017 - 2027 87 trees @ \$200 = \$17,400	2017 - 2027 87 trees @ \$150 = \$13,050	2017 - 2027 8 trees @ \$50 = \$400	2017 - 2027 All Cypress have been replaced by 2027.	11 trees have plaques. 84 trees/ vacant sites without a plaque. Single sign = \$4000	

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – FEBRUARY 2017

Michael Smith and Associates
and Stem Arboriculture

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACE-MENT SPECIES
Ellerslie	<i>Cupressus macrocarpa</i> (Monterey Cypress)	Reasonably good condition. 3 trees of ULE of less than 5 years. The Ellerslie community advised healthy trees are to be retained.	37 <i>Cupressus</i> 2 vacant sites	2017 5 trees @ \$1,800 = \$9,000	2017 5 trees @ \$200 = \$1,000	2017 5 trees @ \$150 = \$750		2017 34 trees @ \$300 = \$10,200	Replace 3 trees identified of low life expectancy are 2 vacant sites to be planted. Single sign = \$4000	<i>Cupressus macrocarpa</i>
Grassmere	<i>Quercus cerris</i> (Turkey Oak)	Good condition	7 <i>Quercus</i> 1 vacant site	No tree removal required. All trees have a ULE greater than 50 years.	2017 1 tree @ \$200 = \$200 (vacant site)	2017 1 tree @ \$150 = \$150		2017 7 trees @ \$200 = \$1,400	Remove roadside fill from root systems of all trees. Allow \$3,000.	<i>Quercus cerris</i>
							2017 - 2027 1 tree @ \$50 = \$50	2017 - 2027 8 trees @ \$200 = \$1,600	Minor remedial pruning every 5 years In fill planting of 1 tree. Single sign = \$4000	
Koroit	<i>Platanus x acerifolia</i> (London Plane)	Young avenue in good condition. Eastern side affected by power line clearance pruning.	22 <i>Platanus</i> 6 vacant sites	No tree removal required. All trees have a ULE greater than 50 years.	2017 6 trees @ \$200 = \$1,200 (vacant sites)	2017 6 trees @ \$150 = \$900		2017 22 trees @ \$200 = \$4,400	Maintenance of minor remedial pruning every 5 years.	<i>Platanus x acerifolia</i>
							2017 - 2027 6 trees @ \$50 = \$300	2017 - 2027 28 trees @ \$200 = \$1,600	Aerial bundling or relocation of power lines to eastern trees. Approximately \$150/Lm @ \$1,500/Lm = \$225,000 Single sign = \$4000	

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

RECOMMENDED ACTIONS AND OPINION OF PROBABLE COSTS (OPC) – FEBRUARY 2017

Michael Smith and Associates
and Stem Arboriculture

PLACE	SPECIES AND COMMON NAME	OVERALL CONDITION	QUANTITY	OPC FOR TREE REMOVAL (Based on 2014 rates)	OPC PLANTING OF ADVANCED REPLACEMENT TREES (Based on 2014 rates)	OPC FOR INITIAL MAINTENANCE OF NEWLY PLANTED TREES (Based on 2014 rates) ¹	OPC FOR ONGOING MAINTENANCE OF TREES REPLACED AFTER 2017 (Based on 2014 rates) ²	OPC FOR ANNUAL RECURRENT MAINTENANCE OF REMAINING MATURE TREES PER ANNUM (Based on 2014 rates) ³	RECOMMENDED ACTIONS AND ADDITIONAL COSTS	REPLACEMENT SPECIES
Naringal	<i>Corymbia ficifolia</i> (Flowering Gum)	The avenue is in danger of becoming confused with other road-side vegetation. Some trees are lost in seedling regrowth and invasion by other native trees and shrubs.	16 <i>Corymbia</i> 4 vacant sites	No tree removal required in the short-term. All trees have a ULE greater than 15 years. 2017 - 2027 1 tree removed @ \$1,800 = \$1,800	2017 - 2027 5No <i>Angophora lanceolata</i> @ \$200 = \$1,000	2017 - 2027 5No <i>Angophora lanceolata</i> @ \$150 = \$750	N/A	2017 16 trees @ \$100 = \$1,600 By 2064 All <i>Corymbia ficifolia</i> will have been replaced.	Remove and poison the fringe and interfering trees and shrubs, i.e. <i>Melaleuca armillaris</i> and <i>Eucalyptus ovata</i> , <i>E. viminalis</i> and <i>Acacia spp</i> to allow full development of the Avenue of Honour. \$8,000 for initial works of removing and disposing of vegetation. Minor pruning and competing vegetation, remove every 2 years. Monitor competing regeneration of other native trees and shrubs. Allow \$500 per 2 years. Single sign = \$4000	<i>Angophora lanceolata</i>
Port Fairy	<i>Araucaria heterophylla</i> (Norfolk Island Pine)	Reasonable condition. Corellas grazing on branches are a problem	11 <i>Araucaria</i>	2017 No trees with ULE < 50 years	N/A	N/A	N/A	2017 12 trees @ \$200 = \$2,400	Remove asphalt car parking areas from the root systems of trees that are affected. Civil works \$7,000. Introduce barrier fencing to define vehicle parking areas. Install bollards \$5,000. Minor remedial pruning (as per the table). Single sign = \$4000	Ultimately <i>Araucaria heterophylla</i> or <i>Corymbia citriodora</i>

¹ The initial maintenance of newly planted trees over a three year establishment period, where the intensity of maintenance is high.

² The maintenance cost of trees after the initial 3 year establishment period, is based on \$50/tree over a ten year period.

³ The price for maintenance per tree per annum of remaining trees, is based on a quarter of the \$1,200 maintenance cost, which includes pruning, watering and mulch replacement and is to be undertaken once every four years.

Summary of Costs and Priorities

It was evident during the inspection and assessment of each Avenue of Honour during late February 2014, that some trees within avenues are in better condition than others.

The general health, condition and presentation balanced with the locality and extent of each avenue, directs works that should be undertaken as a priority. The avenues of Mortlake, Hexham, Caramut and Orford currently with Monterey Cypress and in Orford's case, several Monterey Pines listed above are in order of priority. The above avenues are considered higher priority for replacement than avenues containing longer lived species. During the report preparation period, the *Pinus brutia* at The Sisters was removed and seed was saved from the tree for future succession planting, so as to maintain the genetic gene pool. The avenue of existing Monterey Cypress at Ellerslie is to be retained and maintained with only minor replacements.

There are three townships or hamlets where there are no identifiable Avenues of Honour, being Woolsthorpe, Ballangeich and Winslow. Council has reviewed the three avenues with local communities and it has been determined that no Avenues of Honour exist in these four townships or rural settlements. It is recommended Council inform Heritage Victoria that these townships or rural settlements no longer have an Avenue of Honour and that they be deleted from the Heritage Register.

The provision of plaques has been allowed for. A total of 278 trees that currently do not have plaques and one information sign on the significance of the Lone Pine Tree at The Sisters.

OPC OF TREE REMOVAL, REPLACEMENT AND INITIAL MAINTENANCE OF A 3 YEAR ESTABLISHMENT PERIOD OF NEWLY PLANTED TREES, INCLUDING PLAQUES AND OTHER RECOMMENDED ACTIONS

The following table lists the total sum of the Opinion of Probable Costs for removal, replacement planting and initial maintenance of newly planted trees over a three year period from the time of planting. The provision of plaques at \$300 per plaque and signs at \$4,000 per sign (excl. GST) is included. The order below is based the priority ranking from highest to lowest:

Calculation of total costs for Mortlake only:

Year	Amount
2017	\$42,600
2022	\$34,600
2024	\$44,000
2026	\$44,000
2028	\$44,000
2030	\$44,000
2032	\$44,000
2034	\$44,000
2036	\$44,000
2038	\$41,800
Total	\$427,000

Township	2017	2017 - 2027	2027-2038	Total	Other Actions	Signs and plaques
1. Mortlake	\$42,600	\$122,600	\$261,800	\$427,000		\$14,100
2. The Sisters	-	\$10,850		\$10,850		\$4,000
3. Caramut	-	\$32,250		\$32,250		\$4,000
4. Orford	\$8,600	\$45,150		\$53,750		\$4,000
5. Hexham	\$8,200	\$187,050		\$195,250		\$4,000
6. Ellerslie	\$9,000	\$1,750		\$10,750		\$4,000
7. Grassmere	\$350	-		\$350	\$3,000	\$4,000
8. Koroit	\$2,100	-		\$2,100	\$225,000	\$4,000
9. Naringal	-	\$3,550		\$3,550	\$8,000 + \$500	\$4,000
10. Port Fairy	-	-		-	\$7,000 + \$5,000	\$4,000
Total	\$70,850	\$403,200	\$261,800	\$735,850	\$248,500	\$50,100

Note: The Opinion of Probable Costs (OPC) for both tables is based on current 2014 rates and excludes the GST of 10%.

Summary of Costs and Priorities cont.

OPC OF ANNUAL RECURRENT MAINTENANCE OF REMAINING TREES PER ANNUM

The following table lists the Opinion of Probable Costs for the recurrent annual maintenance cost of remaining trees per annum. Most of the figures pertain to the maintenance cost of remaining mature trees, except for the figures labelled with an asterisk(*), which indicate the cost of maintenance of trees replaced after 2017, after the initial 3 year establishment period. The towns are in order of priority ranking from highest to lowest:

Calculation of total costs for Mortlake only:

Year	Amount
2017-2022	\$52,200
2022-2026	\$47,700
2026-2030	\$35,700
2030-2034	\$23,700
2034-2038	\$11,700
Total	\$171,000

Township	2015 - 2017	2017 - 2027	2027-2038	Total
1. Mortlake	-	\$135,600	\$35,400	\$171,100
2. The Sisters	-	-		-
3. Caramut	\$4,500	-		\$4,500
4. Orford	\$4,200	\$200*		\$4,400
5. Hexham	\$26,100	\$400*		\$26,500
6. Ellerslie	\$10,200			\$10,200
7. Grassmere	\$4,400	\$3,200 + \$50*		\$7,650
8. Koroit	\$4,400	\$3,200 + \$300*		\$7,900
9. Naringal	\$2,000	-		\$2,000
10. Port Fairy	\$2,400	-		\$2,400
Total	\$58,200	\$142,950	\$35,400	\$236,650

Note: The Opinion of Probable Costs (OPC) for both tables is based on current 2014 rates and excludes the GST of 10%.

12

This chapter documents the species selection as replacement species considered to be the most appropriate for creation of stately and long-lived Avenues of Honour. The recommendations do not include *Cyprinus macrocarpa* (Monterey Cypress) or other related Cypress species, due to their vulnerability with infection by Cypress Canker, which is prevalent throughout Victoria. Refer to Chapters 8 and 9.

Difficult decisions need to be made for all avenues with existing mature Cypress trees as to when some or all Cypress trees are replaced. This applies to particularly Mortlake where Council were advised the entire Avenue of Honour row of Cypress trees on Shaw Street and the Hamilton Highway have now been officially placed on the Victorian Heritage Register. Other towns and settlements with Avenues of Honour of Cypress trees are Hexham, Caramut, Ellerslie and Orford.

It would be very unwise to plant replacement Cypress trees to any of the five places listed above for the reason of susceptibility to Cypress Canker, which is a wind-blown fungal disease and has had devastating affects on Monterey Cypress trees throughout southern Victoria over the past decade.

Unless biological or chemical injection control can be developed in the future, any remaining Cypress trees both young and old are vulnerable to the pathogen. For these reasons alternative tree species have been nominated and recommended in this chapter.

The following tree species below were chosen as recommended replacement tree species to the Avenues of Honour, as they are known for being successfully grown throughout Victoria, are of low maintenance, are suitable street tree species, have a long life span and have a stately form and size that is fitting to be planted as an Avenues of Honour tree. The trees nominated cope with the prevalent basalt clay soils of the region, which are moisture laden in winter and dry in summer.

***Brachychiton populneus* – Kurrajong**

A hardy long-lived Australian native evergreen tree. It tolerates dry conditions and is pyramidal in form.

***Ficus macrophylla* – Moreton Bay Fig**

An evergreen tree with a stately rounded canopy and once established is highly tolerant to dry conditions. Due to its aggressive root system it is not suitable where infrastructure and underground services are close by.

***Quercus cerris* – Turkey Oak**

Native to southern Europe and the Middle East and is extremely drought tolerant. It requires well drained soils so selection needs to be mindful of surrounding ground profiles. It is deciduous, losing its foliage in winter.

***Quercus robur* – English Oak**

Native to Europe, Western Asia and Northern Africa, the English Oak is a stately deciduous tree of consistent form as an avenue. It is a long lived tree and has featured in many of Victoria's provincial and rural gardens.

***Corymbia citriodora* – Lemon Scented Gum**

Native to northern New South Wales and southern Queensland. It is an evergreen tree reaching majestic proportions in time. It may struggle in the cold and wet soil conditions experienced in much of Moyne Shire.

***Araucaria heterophylla* – Norfolk Island Pine**

A stately symmetrical evergreen tree of apical dominant or pyramidal form. Whilst from Norfolk Island, it is quite adaptable to cooler conditions and has been widely planted in Victoria and South Australia.

***Eucalyptus sideroxylon* – Ironbark**

A hardy native evergreen tree tolerant of a wide range of soil types.

***Acer saccharum* – Sugar Maple**

A long-lived deciduous tree from eastern North America. It prefers deep soil profiles. It is moderately drought tolerant. It produces strong autumn colour.

***Pinus brutia* – Calabrian Pine**

Native to the eastern Mediterranean region and infact to the Gallipoli coastline, this tree species has a direct connection with World War I. Trees have been planted at various memorial sites in Australia from seeds collected from the Gallipoli region. It is tolerant of shallow soils and dry conditions. It has a variable and open character when mature, making it questionable for a consistent long avenue, however it is a very desirable choice in short avenues, group or specimen planting.

***Corymbia maculata* – Spotted Gum**

An evergreen native to coastal New South Wales, but is adaptable to a wide range of soils and climatic conditions. This species has been widely planted in regional streetscapes since the 1960's due to its consistent form.

***Angophora lanceolata* – Smooth-Barked Apple Myrtle**

An evergreen tree native to coastal New South Wales of an open rounded canopy developing to majestic proportions. This species has been widely planted in municipal parks and gardens over many decades.

***Platanus x acerifolius* – London Plane**

A large rounded canopy deciduous tree widely planted in streets and municipal parks and gardens. It prefers deep soils with reasonable moisture levels. It forms avenues of particularly consistent form.

***Brachychiton populneus* – Kurrajong**

Origin: North eastern Victoria into southern New South Wales

Mature size height x spread: 15-18 metres x 8-10 metres

Shape: Initially pyramidal, but when mature it takes on a more rounded canopy.

Evergreen

Foliage type / density: Variable shaped, dark, green, glossy leaves. Leaves can be poplar-like to partly divided and deeply lobed. Dense coverage to the canopy.

Growth rate: Slow

Consistency of habit and form: Some variability initially.

Tolerances:

Drought: Very high

Waterlogging: Poor

pH: Wide range

Soil: Can grow on lime stone derived soils

Salt: Unknown



Image: Graeme Lewis



Image: www.nationalarboretum.act.gov.au

Positives	Negatives
<ul style="list-style-type: none"> • A very hardy Australian native tree. • Long lived. • Tolerates poor and shallow soils. • Dense canopy of foliage. • Interesting history of use of the fibres from the bark, being used by Aborigines. • Apical dominant until maturity. 	<ul style="list-style-type: none"> • Slow growing.

***Ficus macrophylla* – Moreton Bay Fig**

Origin: Northern New South Wales to northern Queensland.

Mature size height x spread (in Victoria): 15-18 metres x 12-18 metres.

Shape: A rounded tree with significant tree buttressing.

Evergreen

Foliage type / density: Large, thick and glossy leaves.

Growth rate: Slow to moderate.

Consistency of habit and form: Consistent within a group. Refer to Geelong's Princes Highway and some in Raglan Street, Warrnambool.

Tolerances:

Drought: High (once established)

Waterlogging: Good

pH: Reasonable range

Soil: Can grow on quite poor soils, however it can be stunted

Salt: Unknown



Images: Michael Smith, Princes Highway (Raglan Street), Warrnambool.

Positives	Negatives
<ul style="list-style-type: none"> • A stately, robust and well rounded tree. • Long-lived. • Dense canopy of foliage. 	<ul style="list-style-type: none"> • Fruit drop could pose a problem to pedestrian areas • Root system is aggressive, making the tree unsuitable near infrastructure.

***Quercus cerris* – Turkey Oak**

Origin: Southern Europe and the Middle East.

Mature size height x spread: 17 metres x 13 metres.

Shape: Spreading canopy.

Deciduous: Hangs onto its brown leaves into mid winter.

Foliage type / density: Dark green leaves to the upper surface, paler beneath. Dense foliage cover.

Growth rate: Moderate.

Consistency of habit and form: Very consistent.

Tolerances:

Drought: High

Waterlogging: Fair

pH: Complete range

Soil: Withstands a wide range of soil types

Salt: Unknown

Positives	Negatives
<ul style="list-style-type: none">• A broad spreading deciduous tree.• Tolerant to hot and dry conditions.	<ul style="list-style-type: none">• The dead brown leaves hanging on to stems detract somewhat from the tree's appearance in mid-winter.• May not be tolerant to wet conditions for extended periods of time.• Acorns could pose a problem in an urban setting with regard to pedestrian safety.



Image: www.fbbg.org.au

***Quercus robur* – English Oak**

Origin: Europe, Western Asia, Northern Africa

Mature size height x spread: 18 metres x 15 metres.

Shape: Spreading canopy.

Deciduous

Foliage type / density: Leaves broader at outer end, cut to 3-6 pairs of rounded lobes, with 2 small ear-lobes at the short stalk. Acorn cups on long stalks.

Growth rate: Moderate.

Consistency of habit and form: Very consistent.

Tolerances:

Drought: Moderate

Waterlogging: Fair

pH: Prefers slightly acidic soil

Soil: Prefers deep fertile soil

Salt: Moderate tolerance

Positives	Negatives
<ul style="list-style-type: none">• A stately, consistent form and habit• Very long lived	<ul style="list-style-type: none">• Some trees (genetic variations) hold onto dead brown leaves into winter• Acorns could pose a problem in an urban setting with regard to pedestrian safety.



Image: www.leafland.co.nz

***Corymbia citriodora* – Lemon Scented Gum**

Origin: New South Wales and southern Queensland coastline.

Mature size height x spread: 17-25 metres x 10-14 metres.

Shape: Tall with a rounded upper canopy exposing a clean trunk.

Evergreen

Foliage type / density: Thin leaves and an open canopy.

Growth rate: Fast.

Consistency of habit and form: Some variability initially when young trees but ultimately they reach a rounded upper canopy.

Tolerances:

Drought: High (once established)

Waterlogging: Fair

pH: Prefers slightly acidic soils

Soil: Grows well on a range of soil types.

Salt: Unknown



Image: nationalregisterofbigtrees.com.au



Image: www.gardensonline.com.au

Positives	Negatives
<ul style="list-style-type: none"> A long lived Gum of majestic proportions on maturity. Makes a stately avenue tree. 	<ul style="list-style-type: none"> As the tree develops, it sheds branches, hence the ultimate development of a clean trunk and branches. Limb drop is mainly from small limbs. May struggle in the cold damp soils in Moyne Shire.

***Araucaria heterophylla* – Norfolk Island Pine**

Origin: Norfolk Island.

Mature size height x spread: 15-20 metres x 7-10 metres.

Shape: Apical dominant resulting in pyramidal and very symmetrical form.

Evergreen

Foliage type / density: Small prickly leaves borne on long stems that radiates as whorls from branches.

Growth rate: Moderate.

Consistency of habit and form: Very consistent.

Tolerances:

Drought: High

Waterlogging: Fair - poor

pH: Prefers acidic soils

Soil: Prefers coastal sands and silty loams, but tolerates heavy clay soil where it would be of stunted development

Salt: Withstands salt laden winds



Images: Michael Smith, Princes Highway , Port Fairy

Positives	Negatives
<ul style="list-style-type: none">• A very stately symmetrical tree making this species ideal for avenue and row planting.• Long lived.	<ul style="list-style-type: none">• Can suffer from die back when mature.

***Eucalyptus sideroxylon* – Ironbark**

Origin: North central Victoria

Mature size height x spread: 16 metres x 8 metres.

Shape: Upright tree with a reasonably open canopy.

Evergreen

Foliage type / density: Olive green to greyish leaves with a reasonably open canopy.

Growth rate: Moderate.

Consistency of habit and form: Some variability.

Tolerances:

Drought: High

Waterlogging: Good

pH: Wide range

Soil: Grows well on a wide range of soil types and in its natural state grows on poor, shallow, claystone soils

Salt: Unknown

Positives	Negatives
<ul style="list-style-type: none"> • A hardy Australian native tree. • Long lived. • Tolerates poor and shallow soils. • Dark furrowed bark trunk. 	<ul style="list-style-type: none"> • Subject to major limb drop and bifurcation of trunk.



Image: nationalregisterofbigtrees.com.au



Image: metrotrees.com.au

***Acer saccharum* – Sugar Maple**

Origin: Eastern North America.

Mature size height x spread: 15 metres x 9 metres.

Shape: Slightly pyramidal and a rounded canopy outline.

Deciduous

Foliage type / density: Palmate shaped leaf varying in length, forming a dense canopy. Leaves turn rich, autumn colours.

Growth rate: Moderate.

Consistency of habit and form: Consistent.

Tolerances:

Drought: Medium

Waterlogging: Good

pH: Prefers slightly acidic soil

Soil: Prefers deep soil profiles

Salt: Unknown

Positives	Negatives
<ul style="list-style-type: none">• A proven reliable tree that has been used in parks for many decades.• Long lived.• Interesting history of use both in wood-working and the sap is boiled to make maple syrup.	



Image: www.plantplaces.com



Image: www.fossilcreeknursery.com

***Pinus brutia* – Calabrian Pine**

Origin: Eastern Mediterranean region.

Mature size height x spread: 15 metres x 12 metres.

Shape: Tall with an open crown

Evergreen

Foliage type / density: Long, thin pine needles in pairs forming upright stalks. Open canopy.

Growth rate: Slow.

Consistency of habit and form: Some variability but generally an open-crowned tree with an irregular branching habit.

Tolerances:

Drought: Very high

Waterlogging: Fair – poor

pH: Wide range

Soil: Can grow on extremely rocky and stony ground

Salt: Likely to be tolerant of saline conditions

Positives	Negatives
<ul style="list-style-type: none"> This species is on the Gallipoli coastline so there is a direct connection to the First World War and seeds saved from Gallipoli have been planted at various memorial sites in Australia. Tolerant to extremely shallow soils and dry conditions. Tolerant to coastal exposure. 	<ul style="list-style-type: none"> An open crown and canopy. Variability in branch habit makes this species perhaps not ideal for a consistent and long avenue. It is still very relevant to planting as a single specimen tree or cluster grouping.



Image: Michael Smith, Kerang.

***Corymbia maculata* - Spotted Gum**

Origin: Coastal New South Wales.

Mature size height x spread: 15-20 metres x 7-12 metres.

Shape: Tall with an open upper canopy

Evergreen

Foliage type / density: Olive green leaves forming a rather open crowned canopy.

Growth rate: Fast.

Consistency of habit and form: Consistent.

Tolerances:

Drought: Medium

Waterlogging: Good

pH: Wide range, preferring slightly acidic soil

Soil: Grows well on a wide range of soils

Salt: Tolerates coastal conditions

Positives	Negatives
<ul style="list-style-type: none">A proven tree species of consistent habit and widely planted in nature strips and avenues.	



Image: nationalregisterofbigtrees.com.au



Image: metrotrees.com.au

***Angophora lanceolata* – Smooth-Barked Apple Myrtle**

Origin: Coastal New South Wales.

Mature size height x spread: 15-20 metres x 10-18 metres.

Shape: Generally rounded with an open canopy

Evergreen

Foliage type / density: Long gum-like leaves in a drooping habit.
Open crown and canopy.

Growth rate: Moderate.

Consistency of habit and form: The open canopy and branch structure is variable particularly at maturity.

Tolerances:

Drought: Medium - high

Waterlogging: Good

pH: Wide range

Soil: Prefers coast sands and silty clay

Salt: Reasonably tolerant



Image: www.onlineplants.com.au



Image: www.treelogic.com.au

Positives	Negatives
<ul style="list-style-type: none">• A majestic Australian native tree.• Long lived.• Large spreading canopy becomes orange coloured in summer.	

Appendix

Stem Arboriculture
Moyne Shire Avenues of Honour
Tree Survey Masterplans





MICHAEL SMITH & ASSOCIATES

LANDSCAPE ARCHITECTS AND PLANNERS



LEGEND

● Tree

Drawn
H.G.

Checked
RMS

Approved
RMS

Date
08/04/2014

Survey Date

-
Original
A4

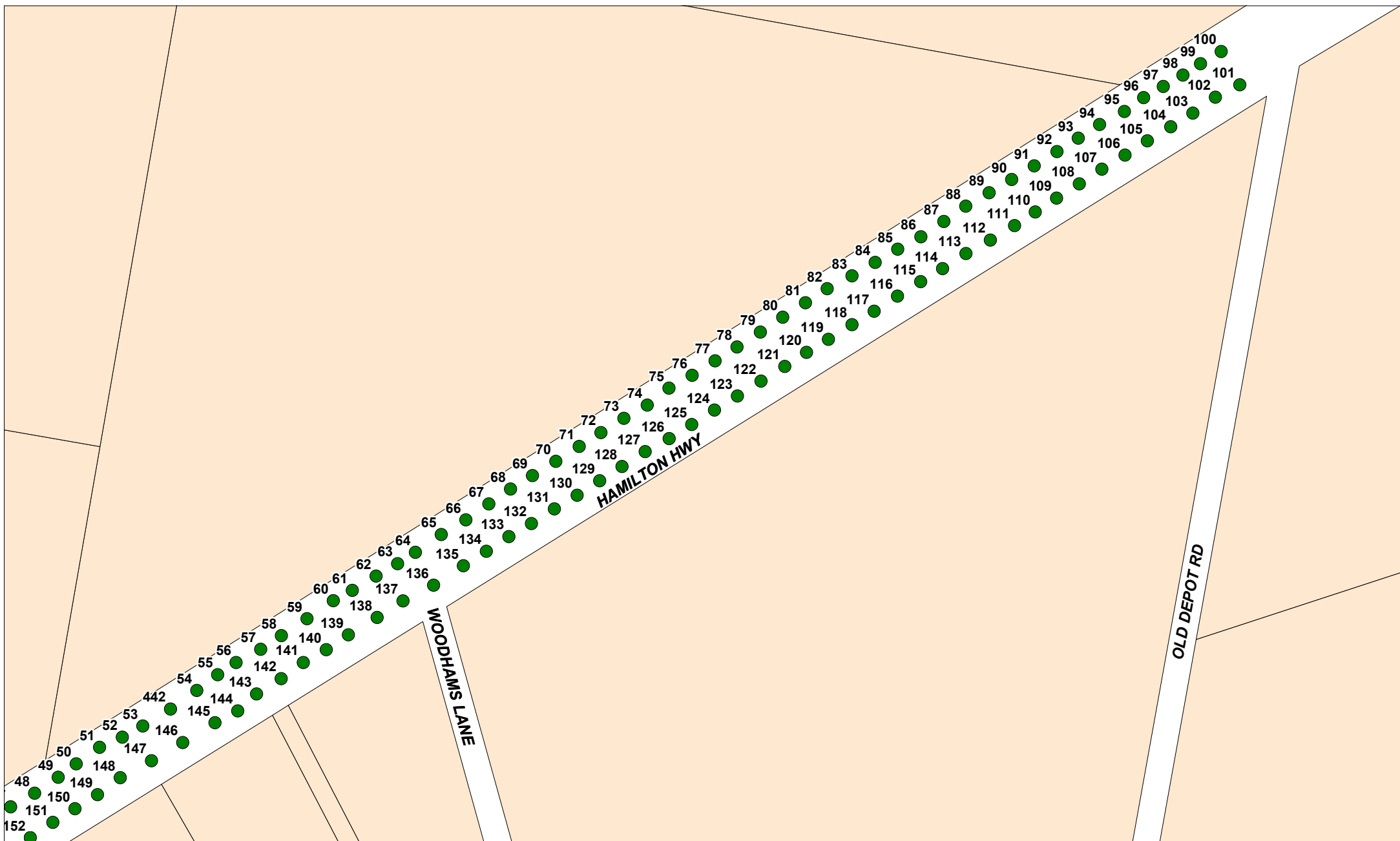
Scale
NO SCALE

SHEET 08B

MOYNE SHIRE MASTERPLAN

AVENUE OF HONOUR

MORTLAKE



MICHAEL SMITH & ASSOCIATES



LEGEND

● Tree

Drawn
H.G.

Checked
RMS

Approved
RMS

Date
08/04/2014

Survey Date

-
Original
A4

Scale
NO SCALE

SHEET 08C

MOYNE SHIRE MASTERPLAN

AVENUE OF HONOUR

MORTLAKE





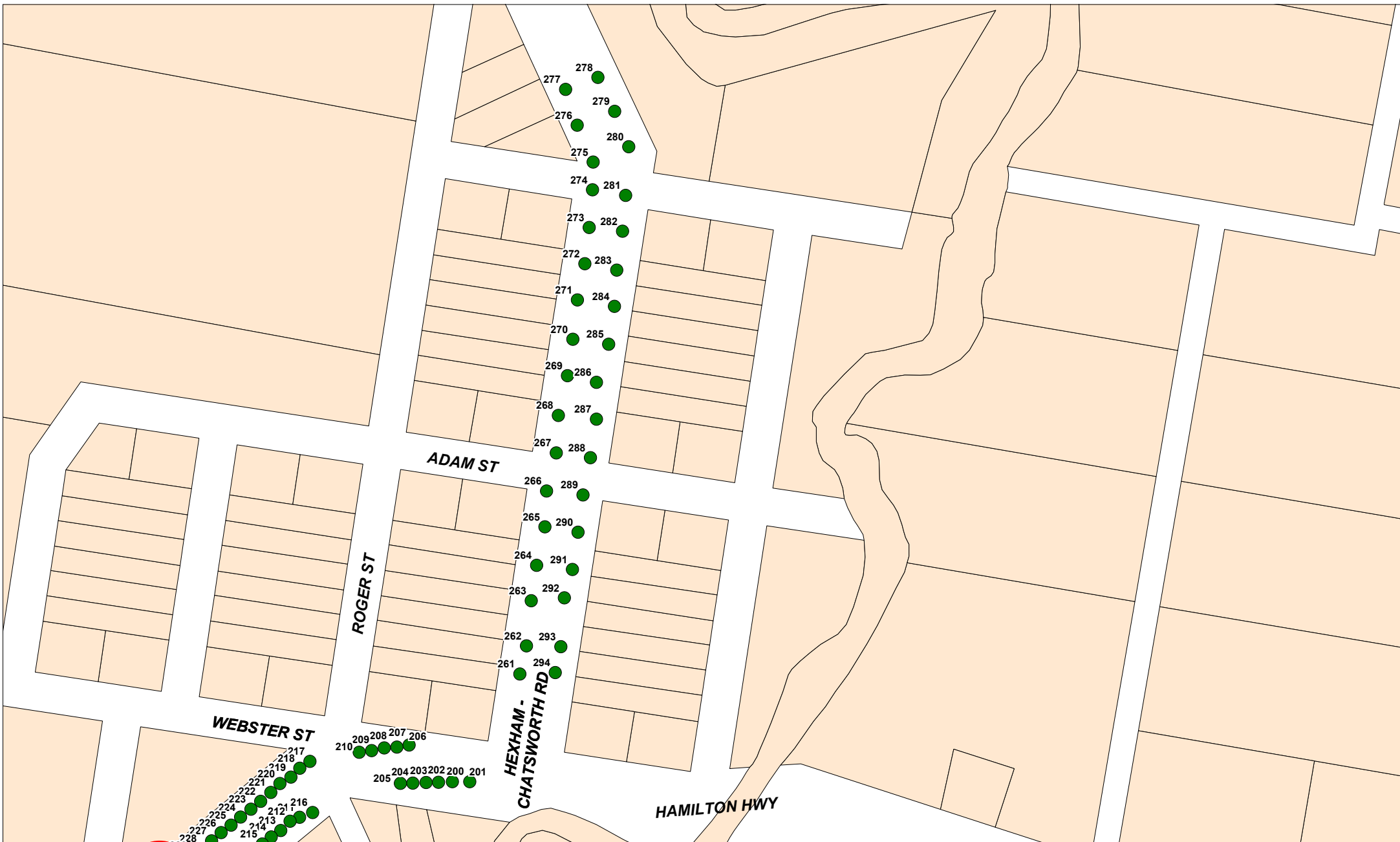
LEGEND
● Tree


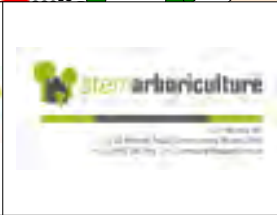

Drawn H.G.	Survey Date -
Checked RMS	Original A4
Approved RMS	Scale NO SCALE
Date 08/04/2014	SHEET 10

MOYNE SHIRE MASTERPLAN
AVENUE OF HONOUR
CARAMUT

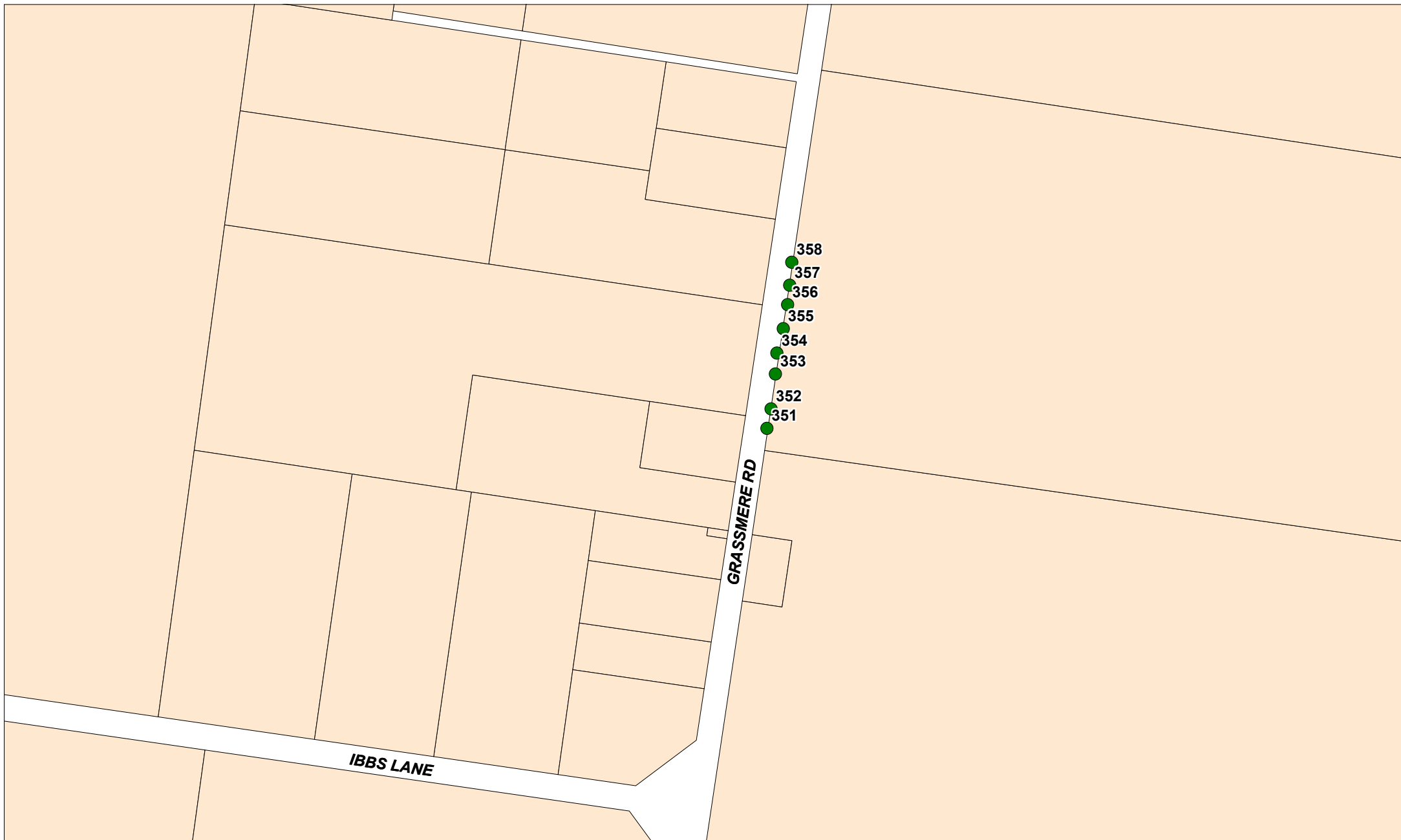









	 	<p>LEGEND</p> <p>● Tree</p>	<p>Drawn H.G.</p> <p>Checked RMS</p> <p>Approved RMS</p> <p>Date 08/04/2014</p>	<p>Survey Date -</p> <p>Original A4</p> <p>Scale NO SCALE</p> <p>SHEET 09B</p>	<p>MOYNE SHIRE MASTERPLAN</p> <p>AVENUE OF HONOUR</p> <p>HEXHAM</p>
--	---	-----------------------------	---	--	--





  	LEGEND		Drawn H.G.	Survey Date -	MOYNE SHIRE MASTERPLAN AVENUE OF HONOUR GRASSMERE
	● Tree		Checked RMS	Original A4	
			Approved RMS	Scale NO SCALE	
			Date 08/04/2014	SHEET 04	



