



Heritage Impact Statement for Ballarat Avenue of Honour

Section from Western Highway to Weatherboard Road

December 2024

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Limitations

This Heritage Impact Statement has been prepared by Officer of the City of Ballarat for the City of Ballarat with the express purpose of providing information on the proposal of the removal and replanting of two Avenue trees in response to federally funded blackspot works being undertaken at the intersection of Avenue Road and Henderson Road Burrumbeet.

This advice relies on information gathered by the City of Ballarat and is supported by guidance and policy set out the 2014 Conservation Management Plan as well as site visits undertaken in 2023 and 2024.

The information provided to the officer from the City of Ballarat compiling this report to inform this proposal is set out below:

- Arboricultural Report prepared by City of Ballarat Arborist Tony Marshall AQF Level 5 Arborist
- Plans" Avenue Road/Hendersons Road Blackspot intersection treatment".
- Blackspot submission (To DoT) for "Avenue Road/Hendersons Road Traffic Management" compiled by Driscoll's Engineering on behalf of the City of Ballarat
- Recommendation from the Avenue of Honor Committee
- Consultation with local farm owners and residents

1.0 Project Details

Heritage Impact Statement For: Avenue of Honour and Arch of Victory (portion)

Victorian Heritage Register Number: H2089

Address and location description: Intersection of Hendersons Road and Avenue Road Burrumbeet



Figure 1 Area of proposed works shown at intersection of Remembrance Drive and Weighbridge and Madden Roads (Red Circle)

Prepared by: Karen Matthews

Co-Ordinator Design and Survey

City of Ballarat

Prepared for: City of Ballarat Infrastructure Department

Date: 24th January 2025

Pre-Application Meeting No.

Advice supplied Via phone/email

Feedback from Heritage Victoria, dated 29th 11 2024, 5th 12 2024, 12th 12 2024, 6th 1 2025

Advice was provided on discussions regarding the proposal / application :

- Further information request
- Advice on requirements for Heritage Impact Statement
- Advice on extension of time
- Extension of time given

2.0 The cultural heritage significance of the place

The Ballarat Avenue of Honour (H2089) is included on the Victorian Heritage Register as a place of cultural heritage significance to the State of Victoria. The extent of H2089 includes all of the trees planted in the avenue from the intersection of Sturt Street and Learmonth Road, Ballarat to the intersection of Weatherboard Road and Avenue Road, Weatherboard. It also includes all name plates associated with the trees, the Arch of Victory, a number of memorial structures and all of the land included in the Road Reserve.

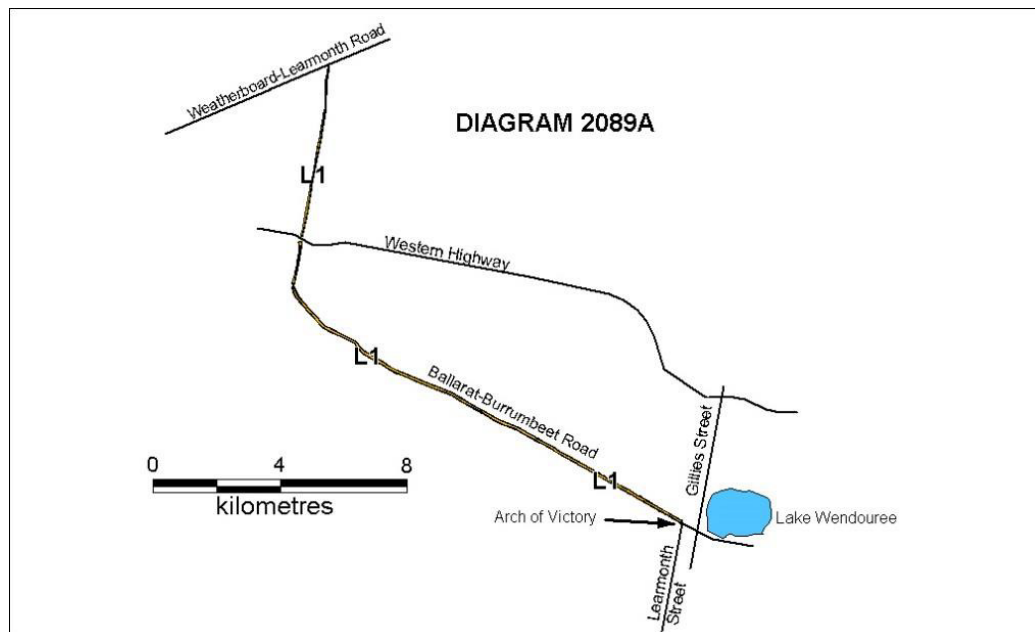


Figure 2 Extent of Registered Land H2089 (2015). Source: Heritage Victoria HERMES record No.4220

2.1. Statement of Significance - Victorian Heritage Register

The Statement of Significance for the Ballarat Avenue of Honour H2089 was created at the inclusion of the place on the Victorian Heritage Register. It is recorded in the HERMES database and publicly available through the Victorian Heritage Database. The Statement of Significance is not set out in the manner, which is now considered standard, under the headings of 'What is Significant' etc. It is however clear that the place is identified as having historical, aesthetic and architectural and social values, as summarised below.

Historical significance (Criterion A):

- Being one of the earliest known and longest examples of a memorial planting.
- As a representative example of the memorials established across Australia which commemorated those who enlisted for service rather than just those who died.
- The collection of memorial types and structures representing various forms of memorialist in Victoria over the twentieth century.

Aesthetic and architectural significance (Criterion E)

- For the Arch of Victory, which is an outstanding landscape monument, which is the only memorial arch in Victoria constructed at such a grand scale.
- For the positioning and association of the Arch of Victory within the Avenue of Honour, which is unique within Victoria.
- As an outstanding designed landscape and living memorial within Victoria.

Social Significance (Criterion G)

- As a well-recognised symbol of community and endeavor in war time.
- As Victoria's best known war memorial with the exception of the Shrine of Remembrance.
- For its importance to the people of Ballarat, particularly descendants of those memorialised in the Avenue, and to the RSL. This is reflected in the continuing and ongoing use of the area for memorialisation and commemoration.

2.2 Statement of Significance – Conservation Management Plan

The Statement of Significance set out in the Conservation Management Plan (2014) places a strong emphasis on the social significance of the place, and the importance of the understanding the layering of its values. It identifies the values of the place as being of historical, aesthetic and architectural, social and associative significance. The additional threshold indicators of rarity and representativeness are also identified.

Historical significance (Criterion A):

- As an example of the Victorian tradition of planting commemorative avenues to commemorate men and women who served and died in the Great war.
- As one of the earliest known and longest examples of a memorial planting in Victoria.
- As a memorial which acted as the catalyst for the development of many other commemorative avenues around Victoria, particularly in rural areas.
- For its ongoing importance as a place of commemoration and remembrance for the local community.
- As a place which exemplifies the efforts made by the local population to commemorate those who had enlisted for service.

Rarity (Criterion B)

- As the longest avenue planted in Australia and as the longest remaining commemorative Great War avenue in the World.

For the unusual approach whereby a variety of species and genera of exotic tree [species] were used to establish the Avenue of Honour.

- As the largest memorial arch constructed in Victoria and possibly Australia.
- As the only example in Australia of an Avenue of Honour with grand memorial arch as a key architectural element.

Potential to yield information that will contribute to an understanding (Criterion C)

- Provides an opportunity for people to become more aware to the impact of war
- Encourages research activities related to the service and sacrifice of specific individuals.
- Helps to tell the stories of the men and women who served, but also the units to which they belonged, and the battles or actions in which these units were involved during the war.
- Ability to reveal information about the evolving management of war memorials in public spaces and how the Ballarat community has made continuing use of this site for commemorations, both private and public up to the present.

Demonstrating the principal characteristics of a class of place (Criterion D)

- As a commemorative memorial, which became popular in Australia during the Great War.
- For the collection of elements associated with memorialisation including the Arch of Victory, the Avenue planting and plaques, arrangement and layout of the Avenue and the numerous memorial structures located within the place.
- As an example of the Avenues of Honour planted throughout Ballarat during the Great War to acknowledge the importance of war service.

Aesthetic and architectural significance (Criterion E)

- For its length, of 22 kilometres.
- For its visual dominance, particularly evident in non-urban environments.
- Contributes to the aesthetic appeal of Ballarat through the provision of a continuous avenue of trees in harmony with other avenues and trees within Ballarat.
- The sense of procession associated with passing under the Arch of Victory which denotes the entry point to the Avenue.

- As a major manmade landscape which is largely intact
- As an impressive gateway to the City of Ballarat from the western approach
-
- The Arch of Victory is an outstanding example of a large victory arch which dominates the western approach to Ballarat.

Social Significance (Criterion G)

- As a symbolic link to the past for the people of Ballarat.
- As a cultural landmark, strongly identified with service and sacrifice of men and women during the Great War.
- For its importance to the people of Ballarat, particularly descendants of those memorialised in the Avenue, and to the RSL.

Associative Significance (Criterion H)

- Associations with the Lucas & Co. clothing and textiles factory workers (the Lucas Girls)

3.0 Existing conditions

3.1 Avenue of Honour and Arch of Victory H2089

Section from Arch Victory Western Highway

The Avenue of Honour and Arch of Victory is a combined heritage place which includes the c.1920 Arch of Victory and a 22-kilometre avenue planting of over 3700 exotic trees memorialising those men and women from Ballarat who served in World War One. The Avenue was originally planted between 1917 and 1919.

The Arch of Victory is located at the intersection of Sturt Street (where it becomes Remembrance Drive) and Learmonth Street in Ballarat. The Avenue of Honour extends from the Arch through to the intersection of Weatherboard and Avenue Roads, Weatherboard.

Trees in the Avenue of Honour are planted at regular (approximately 10-12m) intervals on both sides of the road for the full length of the Avenue, with minor breaks at intersections and the junction of Avenue Road and the Western Highway overpass. The Dyson Drive intersection is also an exception, where a major intersection has resulted in the loss of a number of trees and realignment of the road layout to widen it.

The tree species varies, with an estimated [up to] 40 different species of exotic trees along the route, including different species of Oak, Poplar, Ash and Elm. The Avenue was originally planted with 23 different species of exotic tree, but many species were not suited to the soil and climatic conditions and failed to thrive. Over time, these trees were replaced with species of Elm and Poplar which are now the dominant genera of trees in the Avenue.

The original trees were planted in blocks of 25 (or more) pairs of the same species. While in some areas this consistency of planting has remained (mainly where the original plantings have survived), most areas have experienced at least some change in either species or alignment of new trees.

The original plantings were set between 4.5 and 6.0m from the roadway. Over time, due to roadworks and widening and shoulder sealing, most of the original plantings are now located approximately 4.0m from the roadway (Wadsley, 2014:115). The alignment has further been disrupted over time as the roadway was modified, particularly with widened junctions, new accesses to property and new development adjacent to the Avenue (Ibid.).

Further incremental change to the original alignment of the Avenue has been experienced post 1997, when a report prepared by Mark McWha recommended that plantings should be set a further 1m back from the roadway to provide better road safety and allow the trees a larger root growing zone while still allowing for an overarching canopy effect. This has subsequently been referred to as 'the ultimate alignment' and creates for a maximum of 17 metres between the two tree rows.

Road works between 1960-1980, particularly to Remembrance Drive and its intersections with other roads are believed to have resulted in some sections of the avenue being removed and replanted out of alignment with the original avenue rhythm or the 'ultimate alignment'. This is particularly the case where there are splayed intersections, additional turning lanes, roundabouts and overpasses introduced. At most of the intersection of secondary roads with the Avenue, splaying has occurred, and the subsequent realignment of trees has been undertaken with new specimens.

A strong commitment to replacing 'lost' trees and replacing senescent or incomplete blocks of planting was undertaken between 2000 – 2015, and since further replanting works have taken place in the last five years, particularly in the lead up to the 100-year anniversary of the end of World War One in 2018. The Avenue is now largely complete, although trees continue to be replaced.

Each of the trees is numbered and allocated to an individual, arranged to be as close as possible to their order of enlistment, beginning at the Ballarat (Arch) end of the Avenue. The original timber tree guards and attached timber plaques were replaced with bronze plaques in 1934. Although many of the bronze plaques have been replaced with new copies, there are still an estimated 80% of trees within the Avenue which have an associated plaque (Wadsley, 2014).

The whole of the Avenue of Honour is believed to be in fair condition, with a variety of trees ages and species, and the majority of the c1934 bronze plaques (and later replacements) remaining in fair to good condition. The Arch of Victory is in very good condition.

Avenue of Honour and Arch of Victory H2089

Section at intersection of Avenue Road and Hendersons Road

This intersection is part of the original block of 100 trees planted with two species of trees planted in an alternate pattern. It started at Tree number 3283 and finished at Tree number 3382. The two species of trees were White Poplar (*Populus alba*) and Mountain Ash (*Sorbus aucuparia*).

The tree species and block plantings were reviewed approximately 10 years ago and a spreadsheet formulated by the Avenue of Honour committee that shows any replacement tree species should now be taking into account climate change issues and in keeping with the original block planting structure and the extent of species diversity used originally. That spreadsheet indicates the White Poplar are to be retained in this section but the Mountain Ash are to be replaced with Cimmarron Ash trees (*Fraxinus pennsylvanica* 'Cimmzam'). Quite a few replacement Avenue trees have already been planted in this section over the last 10 years following this strategy.

3.2 Current use

The Avenue of Honour was laid out and planted between June 1917 and August 1919 with some 3,771 trees planted over a distance of some 22 kilometres. The Avenue of Honour and Arch of Victory remains as a continuing living memorial for the Ballarat community.

3.2.1 Location of works within Avenue of Honour

The proposed works are limited to the area immediately around the intersection of Hendersons Road and Avenue Road. This represents a small portion (approximately 40m in total) of the whole 22km Avenue of Honour.

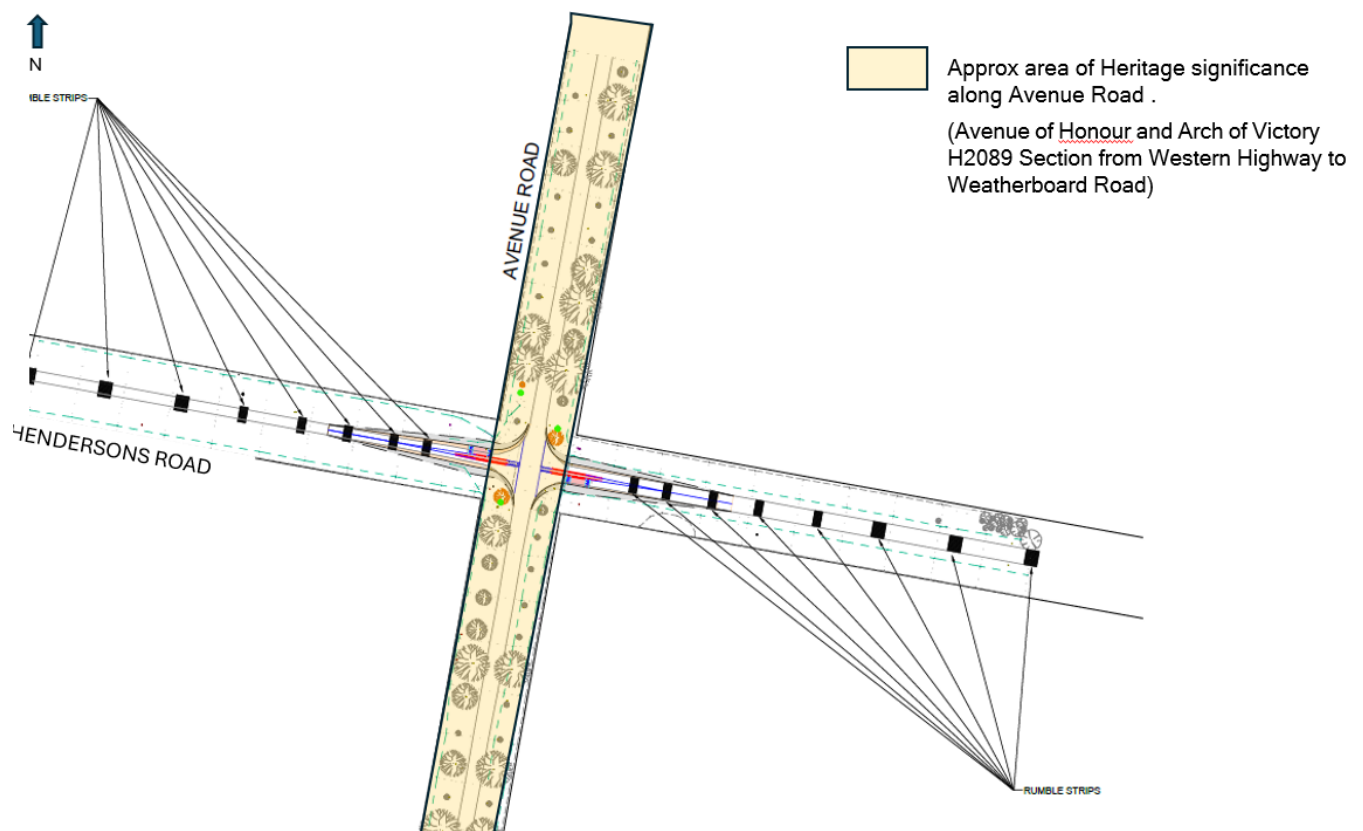


Figure 3 Location of proposed works.

The road pavement within the area of proposed works is in good condition.

The surrounding area is rural farming, the intersection of Avenue Road and Hendersons Road is sealed with crushed rock edges.

The road reserve has grass/small shrubs along with Avenue trees (see figure 4 on next page)

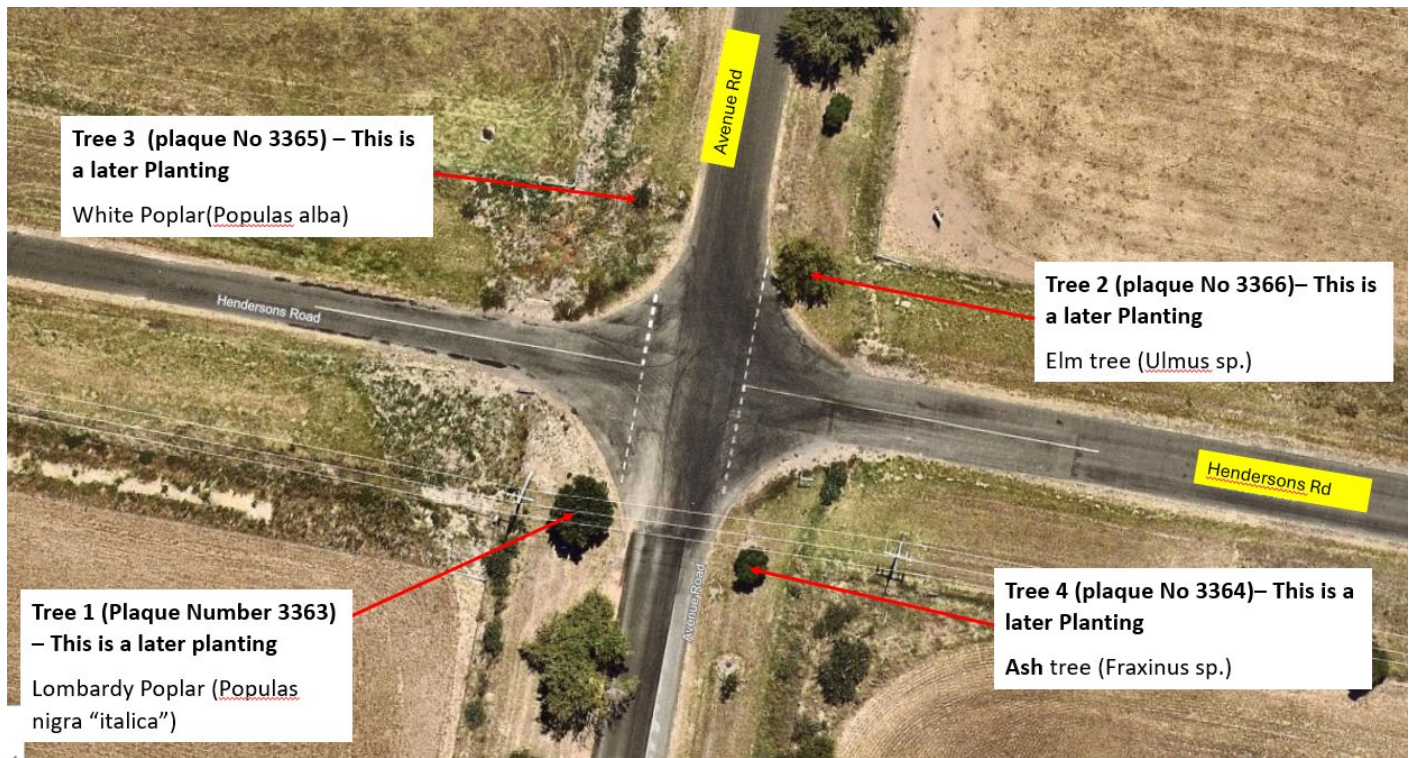


Figure 4 Area of proposed works showing existing trees, their species and plaques numbers. Note alignment of tree 1 and 2 compared to tree 3 and 4.

Tree 1 on Southwest corner is a mature *Populus nigra* "italica" (Lombardy Poplar) plaque number 3363,.

Tree 2 located on the northeast of the intersection is a mature *Ulmus* sp (Elm tree) plaque number 3366.

Tree 3 on the northwest corner is a young *Populus alba* (white Poplar) plaque 3365, and the tree 4 on the south east corner is a young *Fraxinus* sp (Ash Tree) plaque number 3364.

Plaque No 3363 WE Gilbert is an original plaque as is 3365 RS Featherstone and 3364 CA Carvosso, 3366 AA Neal is a replacement plaque.



Figure 5 Existing conditions showing current Avenue trees



Figure 6 plaques on affected trees.



Figure 7 Proposed area of works, looking south at intersection of Avenue Road and Hendersons Road

The area is a rural area of farming, the intersection and existing roads of Hendersons Road and Avenue Road are currently sealed with crushed rock edges and no kerb and channel. There is existing linemarking and signage at the intersection.

The roads are used by approximately 110 farming vehicles a day, this count did not include visitors to the area or personal vehicles of the farmers.

The intersection has proved to be a blind spot coming from Hendersons Road due to the Avenue trees in Avenue Road.

5.0 Constraints and opportunities resulting from the significance of the place

5.1 Statutory Controls

The Avenue of Honour and Arch of Victory as a heritage place is included on both the Victorian Heritage Register and the local Heritage Overlay of the Ballarat Planning Scheme.

A number of management documents have been prepared to guide the future development of the heritage place. Of particular relevance is the Conservation Management Plan (CMP), prepared by John Wadsley for the City of Ballarat in 2014.

5.2 Constraints

In terms of constraints, proposed works will need to comply with the policies and management requirements set out in the 2014 Conservation Management Plan. There are no specific policies relating to the management of the road pavement, or the experience of traveling the Avenue which are alluded to throughout the document.

Rather Chapter 11 of the CMP 'Issues , Challenges and Opportunities' sets out broad overarching management guidance which is considered appropriate to guide development.

These include (with regard to the proposed works):

1. Preserve the integrity of the avenue through:
 - a. conserving the experience of the 'journey' along the avenue.
 - b. by not increasing the number and scale of physical interruptions/intrusions, visual breaks, traffic or directional signs and infrastructure.
2. The application of what is referred to as 'the ultimate alignment' for the tree planting of the avenue is to be applied (ensuring 15-17m between trees across the road pavement, with a spacing of 12m).
3. Avoid the practice of splaying the planting at intersections.
4. Road widths should not be increased to accommodate turning lanes; line marking, and associated infrastructure is discouraged.

5.3 Opportunities

Any works within the Avenue of Honour present an opportunity to re-establish plantings in a version of 'the ultimate alignment', and to consider how the recommendations of the CMP might be implemented alongside the proposed works.

At the intersection in this proposal, there is an opportunity to replace two existing trees on the correct alignment and spacing (tree 1 and 2 in figure 4).

Perhaps most importantly, the proposal presents an opportunity to prevent further road fatalities and near fatalities through the installation of traffic management islands.

6.0 The Proposal

6.1 Current proposal

The city of Ballarat on behalf of the Department of Transport Blackspot program proposes to undertake traffic management at the intersection of Avenue Road and Hendersons Road. The traffic Management would involve the installation of islands in Hendersons Road, the islands are low profile (semi mountable by vehicles), with half the island being very low profile from the intersection back into Hendersons Road (50mm in height).

In place of the kerb and channel around the edges of the corners the proposal is for “edge strips” beside the seal on the road (shoulders) of standard crushed rock, this is to alleviate the visual impact. *A large section of the islands are outside of the Area of Heritage significance.*

There will be rumble strips placed in Hendersons Road, to alert vehicles to the oncoming stop sign. These are strips placed on the asphalt to create a noise when cars go over them to alert drivers of the oncoming intersection. *This section of the works are outside of the Area of Heritage significance.*

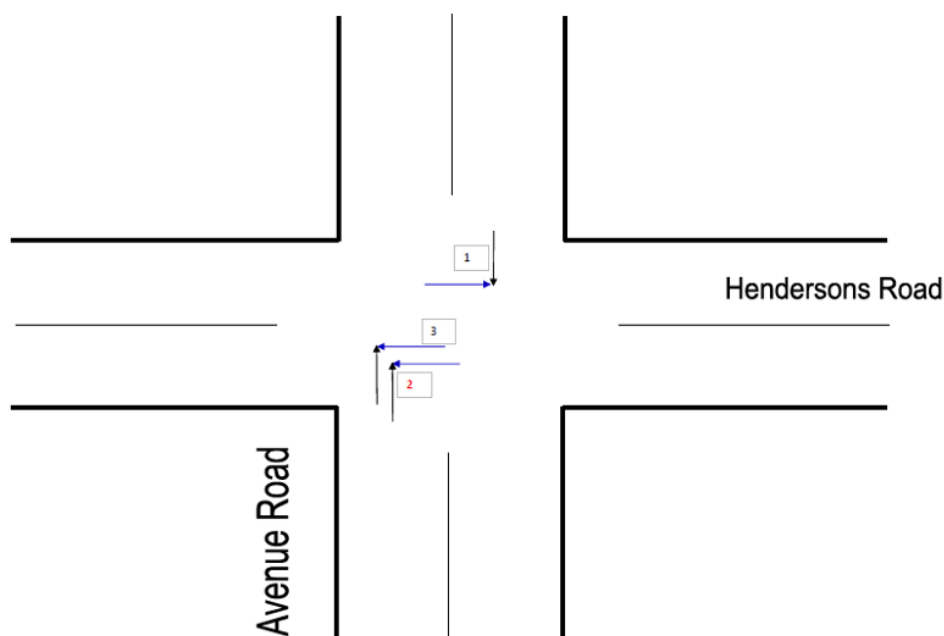
The existing “giveaway” will be replaced with a “stop sign.

Avenue Road and Hendersons Road will be changed from a 100km zone to a 80km zone in this area.

As part of the works there is a proposal to remove two existing Avenue trees in Avenue Road and relocate them to their correct placement/alignment which will also help alleviate “blind spots” for oncoming traffic from Hendersons Road.

This option was undertaken with the significance of the Avenue Road trees in mind as a Heritage site, and deemed the least impact treatment that was available.

The treatment is in response to a number of accidents and 1 fatality in the vicinity of the intersection in the past. **See figure 8**







	 Unit 1  Unit 2	Wet or Dark/Dusk Fatal Accident Serious Injury Accident Other Injury accident	COLLISION DIAGRAM Date Range 01/07/2017 to 31/1/2021 Location Avenue Road and Hendersons Road Intersection Map Ref 58 C9 Council Ballarat City Council	Weather & Light Filter All Crashes	

Figure 8 Crash statistics as provided by Police reports.

The traffic management works will be largely located outside the extent of registered land See (figure 9), although the removal and replacement of tree 1 and 2 (see figure 10) is within the registered area.

Plaques associated with the proposed tree removal are:

Tree No 1 plaque No 3363 W E Gilbert is an original plaque,
Tree No 2 plaque No 3366 A A Neal is a replacement plaque.

The plaques will be removed and inspected for any repairs that may be needed and then stored safely at Council Offices until reinstallation can be undertaken.

The installation will be to Councils Standard drawing for installation of Avenue Plaques: See Attachment 1

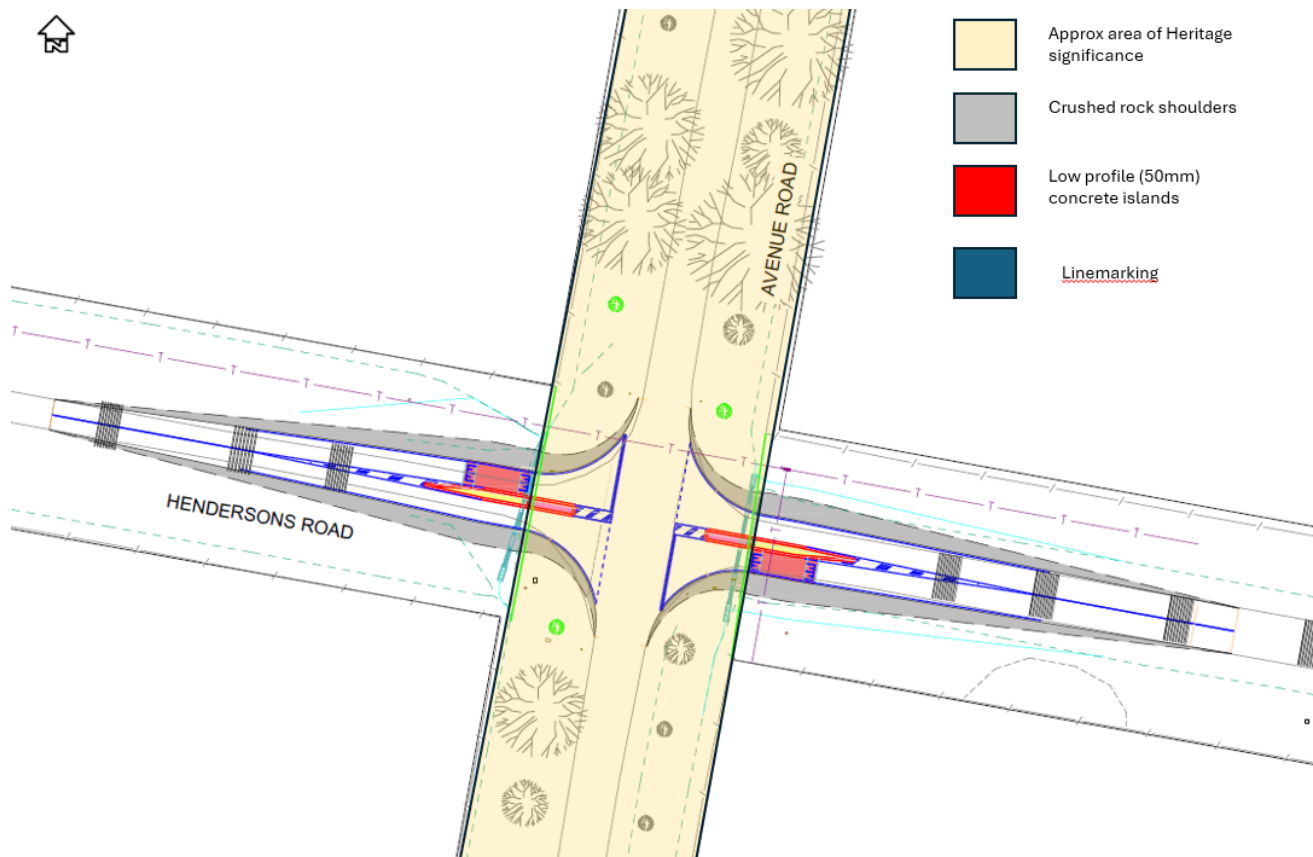


Figure 9 Proposed plan of works showing approx. extent registered land.

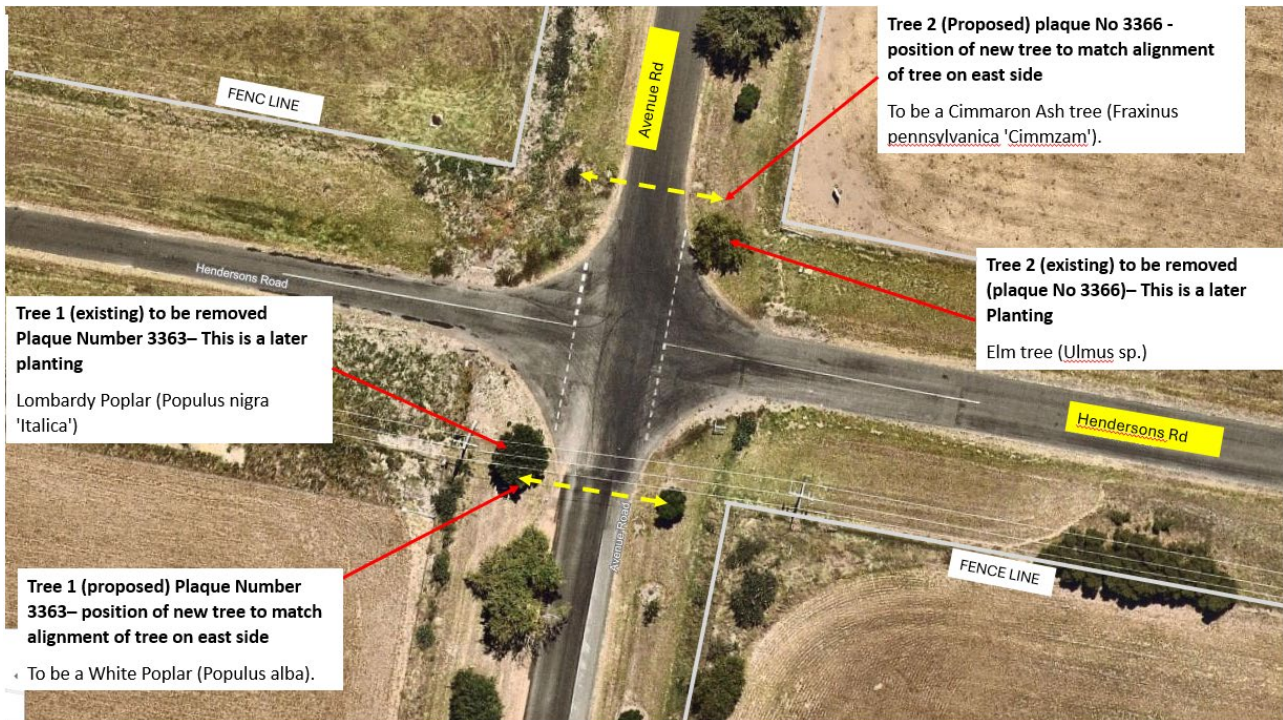


Figure 10 Proposed tree removal and replacement.

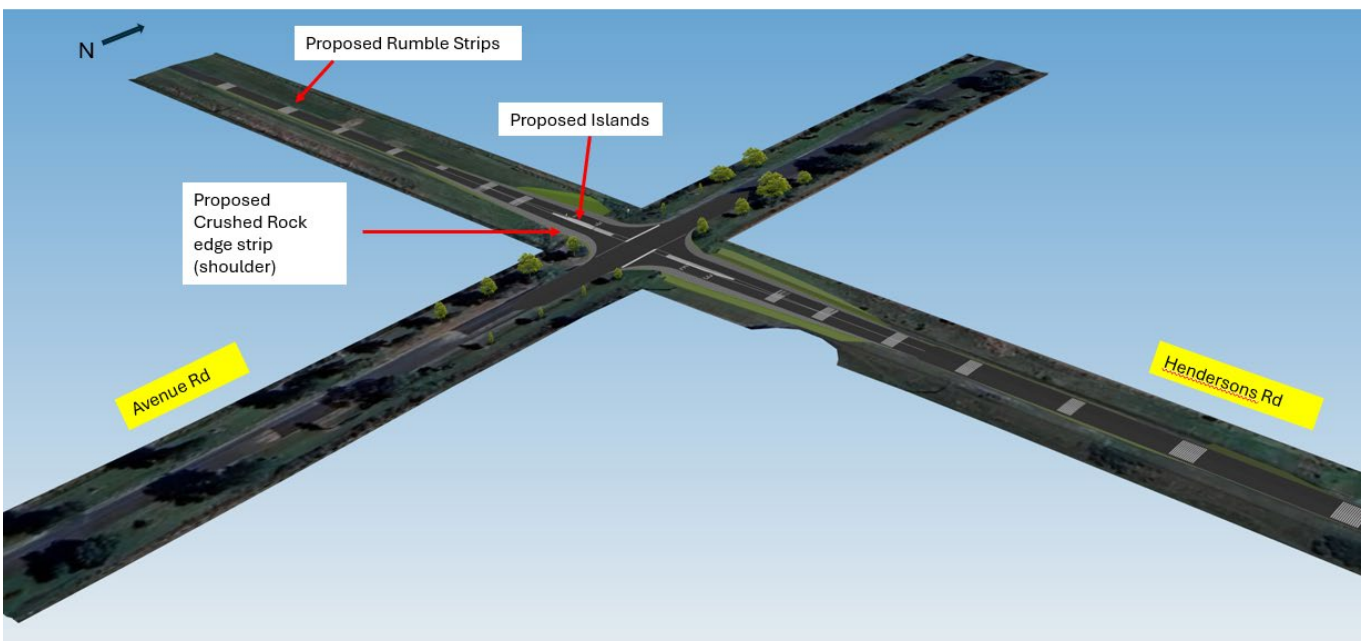


Figure 11 Overview rendering of proposal

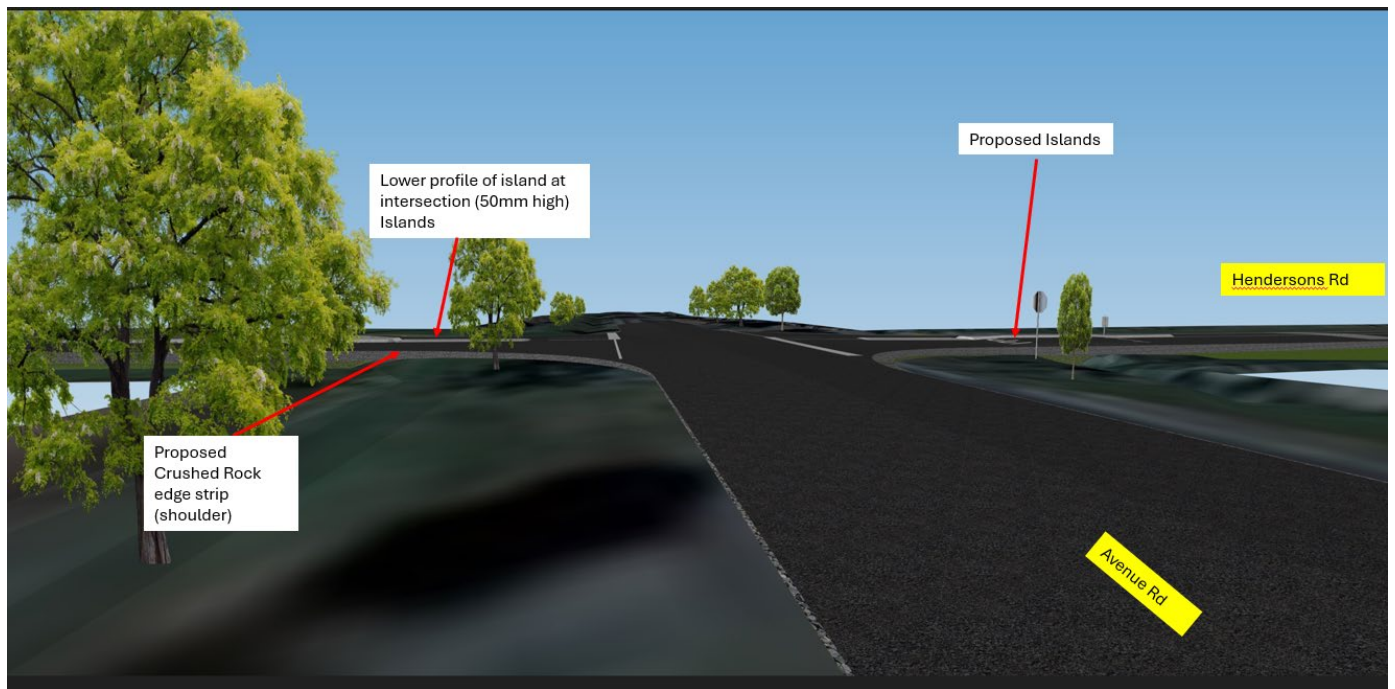


Figure 12 Rendering of proposal looking North along Avenue Road (please note trees are symbol only and not correct tree species)

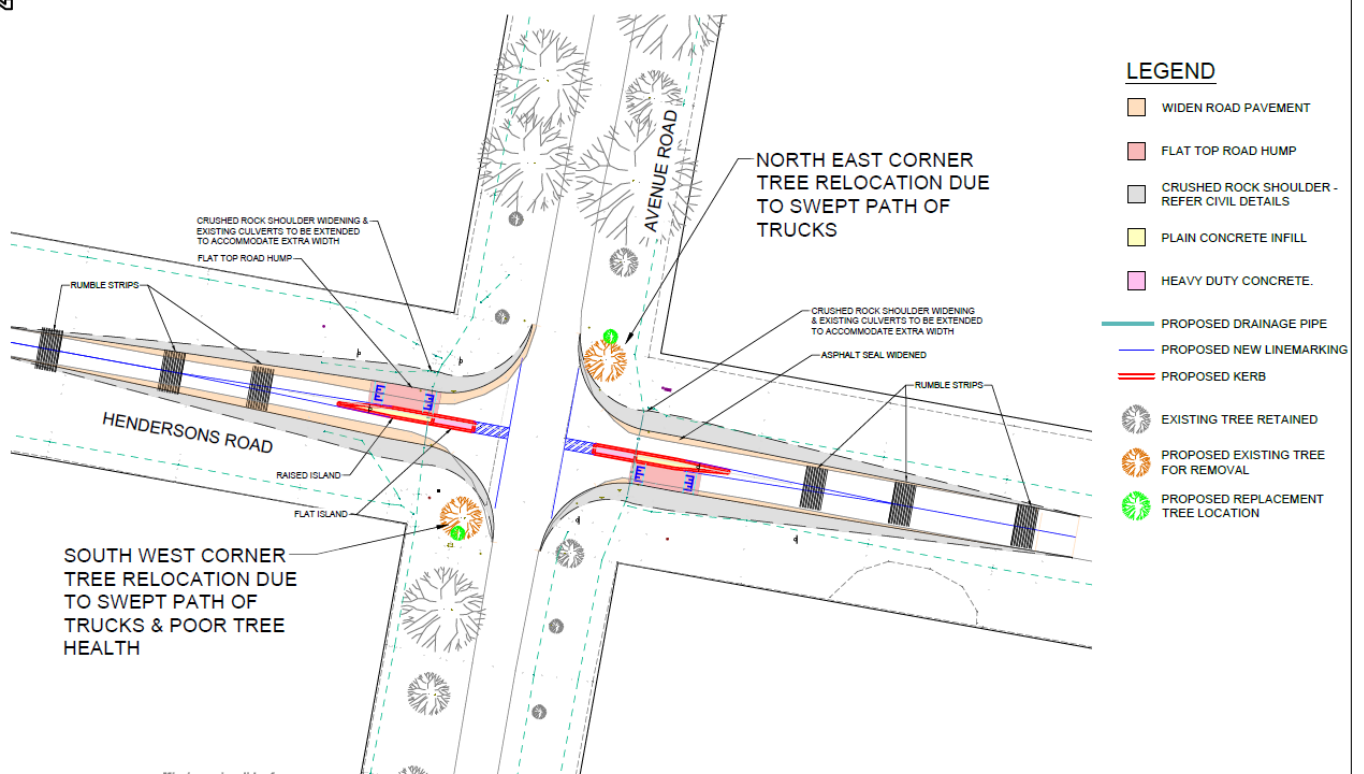


Figure 13 Plan of proposed works

6.1.1 Splitter islands

The traffic islands will be situated in the centre of Hendersons Road on both the east and west sides along with the rumble strips, the front section of the islands will potentially fall within the area of Heritage significance along Avenue Road due to their position having to be near the intersection. **See figure 9**

These sections will be low profile (50mm) to minimize visual impact driving along Avenue Road. See figure 14

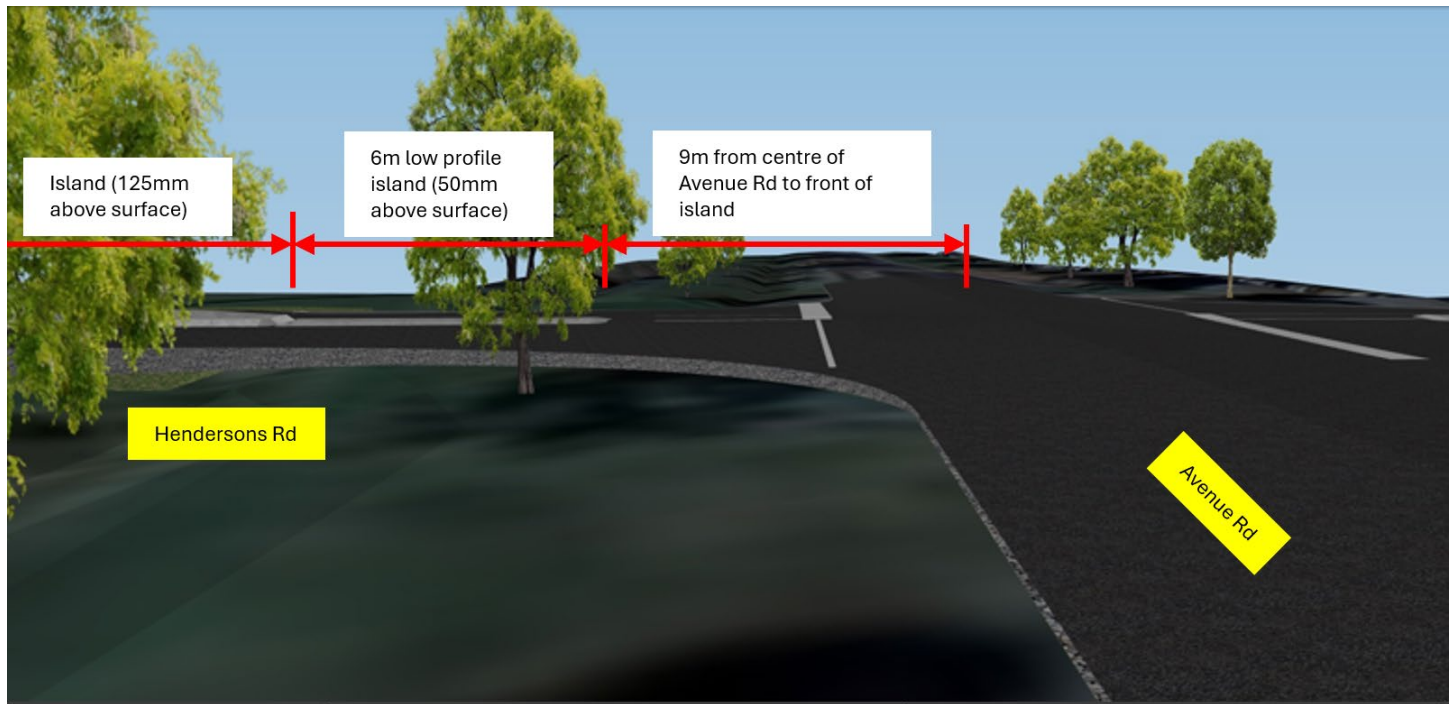


Figure 14 Cross section of island showing minimal height above road pavement

6.1.2 Edge treatments and rumble strips.

In place of the kerb and channel around the edges of the corners the proposal is for “edge strips” beside the seal on the road (shoulders) of standard crushed rock, this is to alleviate the visual impact.

There will be rumble strips placed in Hendersons Road, to alert vehicles to the oncoming stop sign. These are strips placed on the asphalt to create a noise when cars go over them to alert drivers of the oncoming intersection. *This section of the works are outside of the Area of Heritage significance as they will be in Hendersons Road and will have no visual impact on the Avenue.*

6.2 Alternatives solutions

6.2.1 Roundabout

Due to the limitation of the size of this intersection and the locality of the Avenue trees a roundabout was not feasible.

6.2.2 Traffic lights

Due to the locality of the Avenue trees, the availability of the required power and the large farm machinery that frequent this intersection traffic light were not feasible.

6.2.3 Do Nothing

The approach where no action is taken will potentially have dire consequences relating to the loss of human life. The high likelihood of collisions at the intersection may have adverse impacts on the surrounding trees, which could experience death or damage as a consequence.

6.2.4 Summary of proposal

Given the rural context of the subject site, it was decided to approach the intersection with a less engineered design response, which still responds to safety concerns, with emphasis on less visual impact as possible.

Although the removal of two Avenue trees is required, the opportunity now arises to relocate them on their correct alignment and plant the correct species in line with the City of Ballarat's Conservation plan.

Consultation was undertaken with the Avenue of Honor Committee as well as the City of Ballarat section Arborist Department that maintain the Avenue.

Full support has been given for the proposal and the tree replacement. **See figure 15**

c/- City of Ballarat
PO Box 655
Ballarat Vic 3353
AUSTRALIA

Telephone: 03 5320 5500
0487 313 137



November 7th

2024

Dear Karen,

Re: Proposed alterations to the Hendersons Rd/Avenue Rd intersection on the Ballarat Avenue of Honour

Firstly, thank you for the on-site meeting and the opportunity to provide comment on the proposed works at this intersection.

Our Arch of Victory/Avenue of Honour Committee, Executive Committee and our arboricultural expert, David Grant, have reviewed the plans provided and we are in full support of the proposed works as shown on your Plans referenced as HENDERSONS ROAD AVENUE ROAD "Issue 1, CONCEPT PLANS, dated 10/24".

We believe the road safety at this intersection will be greatly improved and the integrity and function of the Avenue will also be improved by implementing this plan. The design will enable the two trees and name plaques to be removed (trees planted to commemorate the service of W E Gilbert (Tree No 3363) and A A Neal (Tree No 3366) to be replaced in a more uniform layout than the current situation, and allow the visitors to these soldier's trees to pay their respects in a safer location.

The proposed works comply with the City of Ballarat, Conservation Management Plan – Ballarat Avenue of Honour and Arch of Victory. In particular, the visual and functional experience along the Avenue of Honour will not be affected, with the safety improvements and works primarily being focussed along Hendersons Road.

Yours sincerely,

Garry Snowden
President
Arch of Victory/Avenue of Honour Committee Inc.

Figure 15 Letter of support from Avenue of Honor Committee

7.0 Assessment Against the Heritage Act 2017

The proposed works to construct islands and remove/relocate two Avenue trees at the intersection of Avenue Road and Henderson Road Burrumbeet will have low impact on the Avenue of Honour and Arch of Victory (H2089) as a heritage place. The impacts will be associated with minor visual intrusion at a low scale with the low profile concrete islands as you approach the intersection along Avenue Road. The proposal to remove two Avenue trees will have an initial impact but this will be mitigated once the new plantings have been undertaken and established.

7.1 Methodology

In making this assessment, I have had regard to the Statement of Significance prepared for the Registered Place H2089 and stored in the HERMES Database, as well as the Statement of Significance prepared in the 2014 CMP by John Wadsley to understand the significant values and fabric of the heritage place. This has been enhanced by undertaking extensive site visits along the length of the Avenue Road and its approaches towards Henderson Road. Furthermore, the experience of travelling along the avenue as a linear experience was able to be understood, as was the proportion of change to the whole of Avenue Road by this proposal.

In developing the potential treatments for this intersection I have carefully considered issues and impacts of the proposal, I have sought to understand the carefully evaluate the impact this proposal may have and the Heritage significance of this site. I have undertaken to seek professional advice where required from the City of Ballarat Arboricultural Officer, the Avenue of Honor Committee, City of Ballarat Heritage Officers, City of Ballarat Traffic Department. I have also ensured I have communicated with affected residents.

7.2 Extent to which the cultural heritage significance of the place is affected by the proposal

7.2.1 Identified values of the place

The identified values of the place are at the State Level. These are historical, aesthetic and architectural, social and associative (Criteria A, E, G & H). The threshold indicators of representativeness and rareness are also identified as being significant at the State Level (Criteria B & D).

These are further expanded at Section 2 of this report.

Potential impacts on the values of the place

The social and associative significance of the place is both tangible and intangible and embodied in the connection of individual trees to individual people from the local area, expressed physically in the form of a bronze plaque, and through memorialisation and interpretation. As a well-recognised symbol of community and endeavor in war time, as a symbolic link to the past and for its connection to the people of Ballarat and its use as a memorial place there will be no real impact. The place will still be clearly understood as a united memorial with individual and collection associations and social value.

The **Rarity** value of the place is attached to its great length, usually broad range of exotic tree species and as an Avenue which is combined with a grand memorial arch. There will be no change or impact on the tree species, the length of the Avenue nor the connection between Avenue and Arch.

The values which may be impacted are that of historical, aesthetic and representativeness.

Historical significance of the Avenue of Honour and Arch of Victory is embodied in the physical fabric of the place, being the plantings, the route of the Avenue and the memorials, plaques and structures within it. The historical significance of the place is largely associated with the place as a living memorial to those who served and those who died from the local area. The association of these memorial values will not be impacted by this proposal, which does not seek to remove any of the trees or plaques or alter the route of the Avenue.

Aesthetic of the place is expressed through the great length of the Avenue and the sense of progression through a designed memorial landscape which strongly emphasises the extent of individual lives affected by the Great War in the Ballarat region.

Of further aesthetic importance is the visual dominance of the Avenue within the surrounding landscape, particularly in non-urban environments where it is largely surrounded by flat rural land. The visual connection with other locally significant Avenues, such as that in Sturt Street is also of aesthetic importance as a continuity of the Avenue planting within Ballarat.

The intactness of the fabric, layout and form of the Avenue also contributes to its aesthetic significance.

The Arch of Victory is of **architectural** significance, and considered to be an outstanding landscape monument, which is unique within Victoria which dominates the Western approach to Ballarat and the eastern approach to the Avenue itself.

The proposed works will impact on the aesthetic values of the place but not the architectural values, as the works are situated well away from the Arch. The impacts will be limited to the intersection itself which are minor, the two trees to be removed will have an initial impact but this will be mitigated once the new plantings have been undertaken and established.

7.2.2 Special values set out in the CMP

Section 11.1.1 of the Conservation Management Plan states that:

The matter of integrity is a critical aspect to preserving the heritage significance of the Avenue and maintaining its connection and relevance to the local community.

Amongst other things, the CMP identifies the integrity of the Avenue as reliant on the

- *The experience of the 'journey' along the Avenue.*
- *The number and scale of physical interruptions/intrusions and visual breaks along the Avenue.*

This proposal **does not** seek to create breaks in, or intrude on the linear nature of the Avenue through interruptions in the form of new intersections.

7.3 Management and mitigation works

This section sets out mitigation measures and management options proposed to prevent, control, abate or mitigate identified heritage impacts associated with the proposal.

7.3.1 Plaques

The plaques associated with all trees are to be recorded and photographed, with annotations made to ensure that each plaque remains associated with its correct tree.

The plaques will also be protected during construction as they will be located within the Tree Protection Zone fencing established around the trees recommended by the Arborist's report.

7.3.2 Trees

The As part of these works existing trees in the vicinity of the works in Avenue Road will be protected using AS 4970-2009.

A tree protection zone (TPZ) shall be setup according to AS 4970-2009 and it is at the prescribed distance where protective fencing shall be erected.

The City of Ballarat Arborist and Contract Supervisor will inspect for compliance to the AS 4970-2009.

The erection of such fencing will not only protect the above and below components of trees but eliminate a range of activities from occurring within the TPZ such as:

- Machine excavation including trenching
- Storage
- Preparation of chemicals, including cement products
- Parking of vehicles and plant
- Refueling
- Dumping of waste
- Wash down and cleaning of equipment
- Placement of fill
- Physical damage to the tree

A worksite plan must be provided with the winning tender to the City of Ballarat to demonstrate that it is not within the vicinity of the Avenue trees.

Once erected the protective fencing may not be altered or removed without the approval of the City of Ballarat Arborist

8.0 Summary of Impacts and Conclusion

The Avenue of Honour and Arch of Victory is an extensive 22-kilometre linear heritage place, its commencement announced by the grand processional Arch of Victory located at the intersection of Sturt Street/Remembrance Drive and Learmonth Street, and concluded by its intersection with Weatherboard Road, and a memorial.

The Conservation Management Plan for the place identifies it as having historical, aesthetic,

architectural, social and associative values at the local, state and national level as well satisfying the criteria of rarity and representativeness. The Statement of Significance for the registered land identifies the place as meeting the threshold for State Significance for the criteria associated with historical, aesthetic, architectural and social values.

The significance of the place is considered to both tangible and intangible. The fabric of the place particularly the Avenue planting of trees and associated plaques on either side of the road pavement, the road alignment and width, the Arch of Victory and the various monuments and memorials throughout the registered land are considered to embody the cultural heritage values of the place. The linear nature of the roadway defined by continual avenue plantings is considered to be of significance also.

An arborist's report outlining fabric of the trees within the Avenue at this intersection (and the plaques) are to be managed has been obtained, and will be adhered to.

This includes the erection of Tree Protection Zone fencing, mulching and irrigation throughout the growing season.

Given the rural context of the subject site, the approach to the intersection with a less engineered design response, which still responds to safety concerns, with emphasis on less visual impact as possible is desirable.

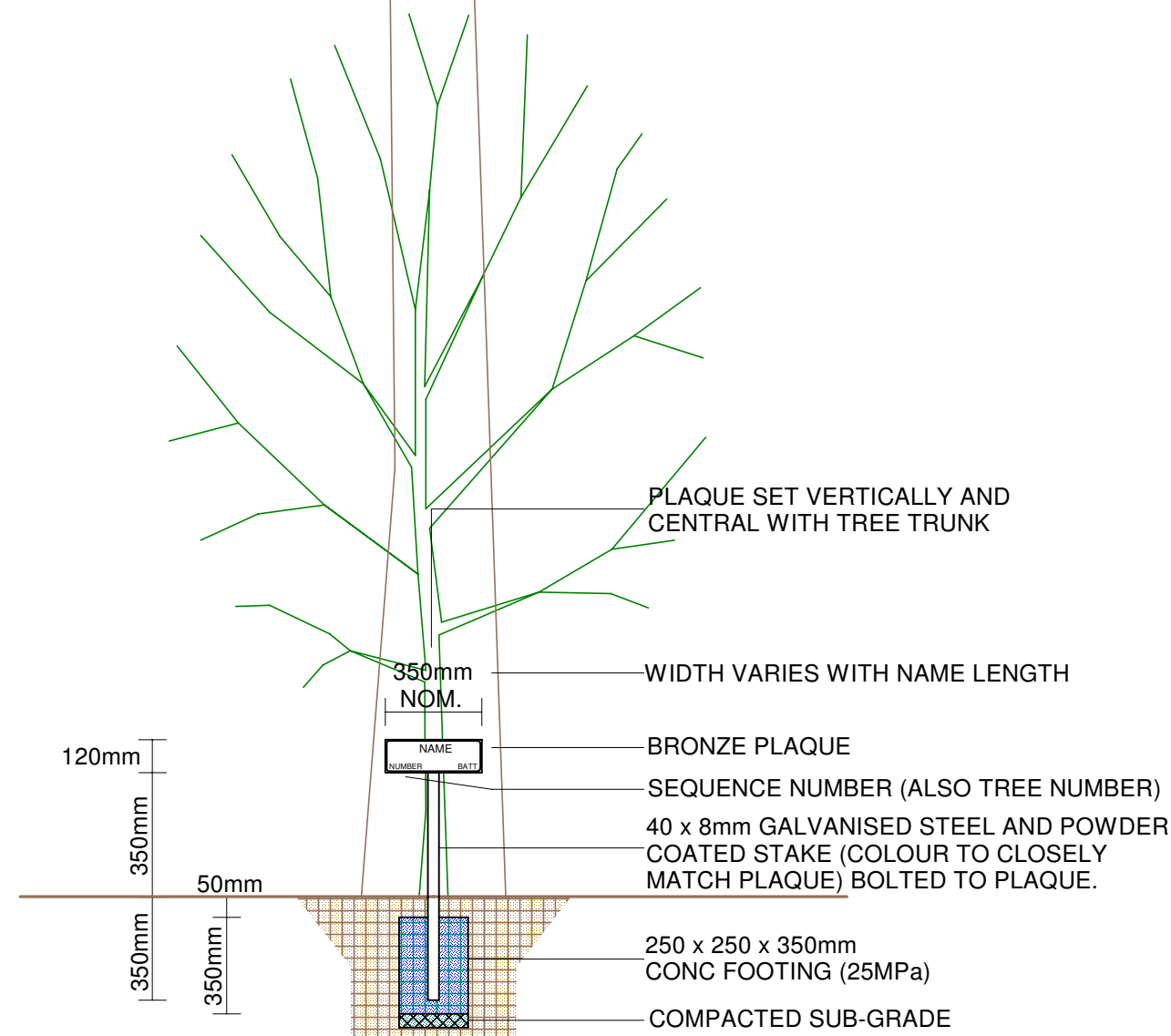
Although the removal of two Avenue trees is required, the opportunity now arises to relocate them on their correct alignment and plant the correct species in line with the City of Ballarat's Conservation plan.

The assessed heritage values of the whole place are unlikely to be greatly affected by the proposed works.

ATTACHMENTS

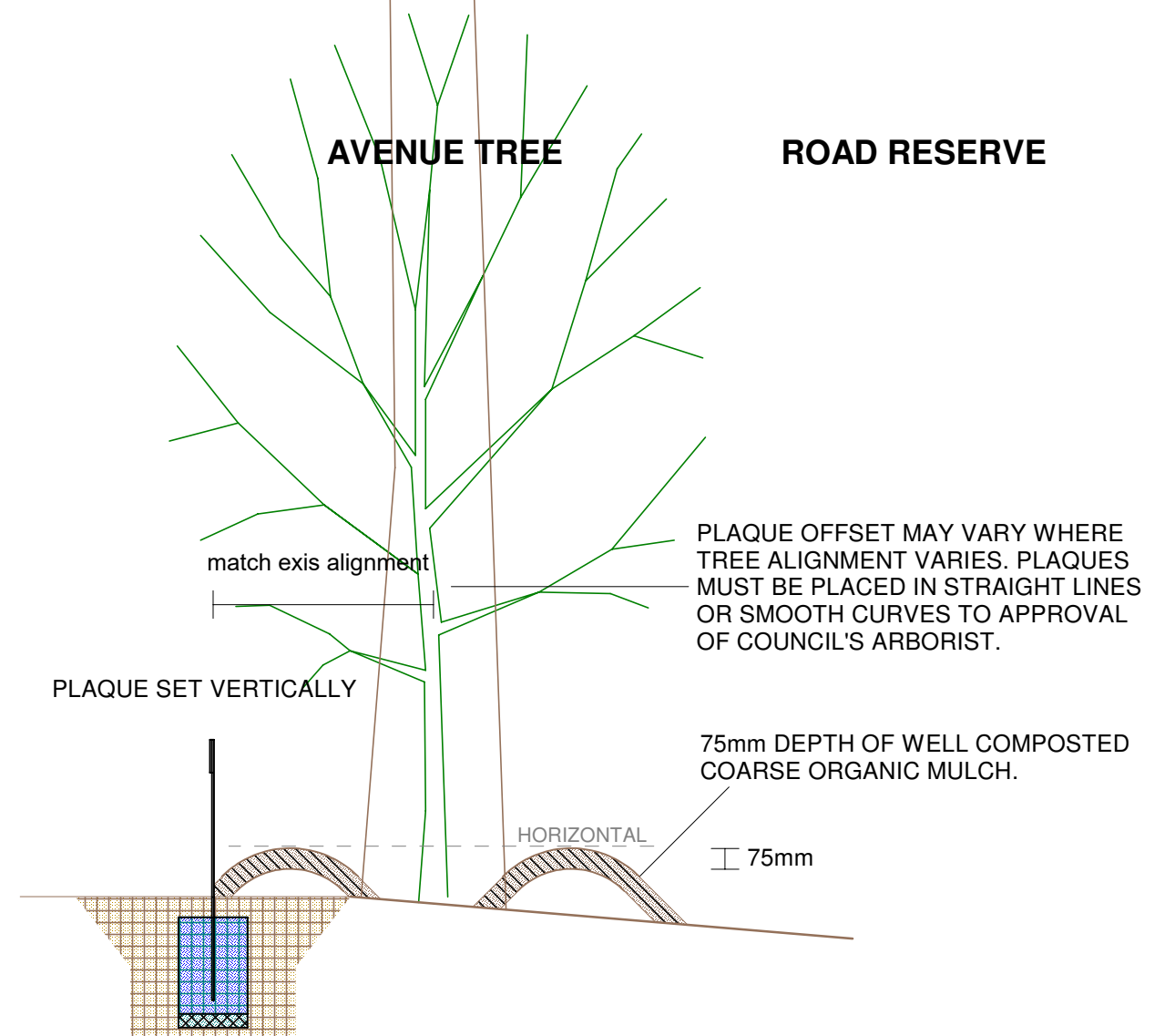
Attachment 1 – Installation of Avenue of Honor Plaques

Attachment 2 – Arborist Report



NOTE: ANY PLAQUE RE-INSTALLED IN FRONT OF EXISTING, MATURE AVENUE TREES MUST BE INSTALLED WITH CONSIDERATION OF THE TREE'S ROOT SYSTEM TO THE APPROVAL OF COUNCIL'S ARBORIST.

FRONT ELEVATION



SIDE ELEVATION

ISSUE	AMENDMENT	DATE	<h1>PLAQUE INSTALLATION DETAIL</h1>	SCALES DO NOT SCALE THIS DRAWING <small>WARNING: THE LOCATION OF U/G SERVICES SHOWN IS BASED ON INFORMATION SUPPLIED BY OTHER AUTHORITIES AND SHOULD BE PROVEN ON SITE. ALL WORKS NEAR SERVICES SHALL COMPLY WITH REQUIREMENTS OF THE RELEVANT AUTHORITY</small>	CITY OF BALLARAT Avenue Road Plaque installation			CITY OF BALLARAT	DRAWING No. 2024-1
					SURVEY:	DATE:			
					DRAWN:	DATE:			
					DESIGN:	DATE:			
EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION SHOWN ON THE DRAWING IS ACCURATE HOWEVER SOME VARIATIONS FROM RECORDS MAY EXIST, AND COMPLETE ACCURACY CANNOT BE GUARANTEED.					FILES:		TEAM LEADER DESIGN	MANAGER INFRASTRUCTURE	

This report is intended to provide information regarding the current condition of trees located at the intersection of Hendersons Road and Avenue Road, WINDERMERE VIC considering the proposal to do BLACKSOPT SAFETY WORKS.

Tony Marshall – Arboricultural Officer
AQF Level 5 Arborist
City of Ballarat

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Introduction

This Arboricultural Report is to assess the viability of four (4) trees located at the intersection of Hendersons Road and Avenue Road WINDERMERE VIC 3352.

All trees assessed are part of the Ballarat Avenue of Honour.

The report is intended to provide information regarding the subject trees structural condition and advice around their ongoing maintenance requirements and/or removal considering the BLACKSPOT SAFETY WORKS proposed to be undertaken by the City of Ballarat.

This assessment was commissioned by Karen Mathews – Coordinator Survey & Design at the City of Ballarat considering the proposal to do blackspot safety construction works at the intersection.

Observations and recommendations provided within this report are based on visual tree inspections undertaken by Tony Marshall – Arboricultural Officer City of Ballarat.

Scope

Undertake a visual examination of the four (4) subject trees located within the road reserve at the intersection of Hendersons Road and Avenue Road, WINDERMERE VIC 3352.

Provide an objective appraisal of the trees in relation to age, species, health, structural condition, useful life expectancy (ULE) and viability within the landscape considering the proposed road upgrade works.

Based on the findings of the visual tree inspection, this report is intended to provide information regarding the trees current condition and ongoing viability requirements to make an informed decision around tree retention prospects considering the proposed construction.

Methodology

Observations in this report are based on visual tree inspections undertaken by Tony Marshall AQF Level 5 Arborist – Arboricultural Officer, City of Ballarat, on 3rd October 2024.

All tree data and photographs have been captured in the City of Ballarat Information Asset Management System [ConfirmConnect](#).

Recommendations will be provided based on the findings of the inspection.

One limited visual inspection was undertaken on 3rd October 2024.

Site plan (Figure 1) was attained from aerial imagery IntraMaps City of Ballarat.

Location

The subject trees located at the intersection of Hendersons Road and Avenue Road, WINDERMERE.

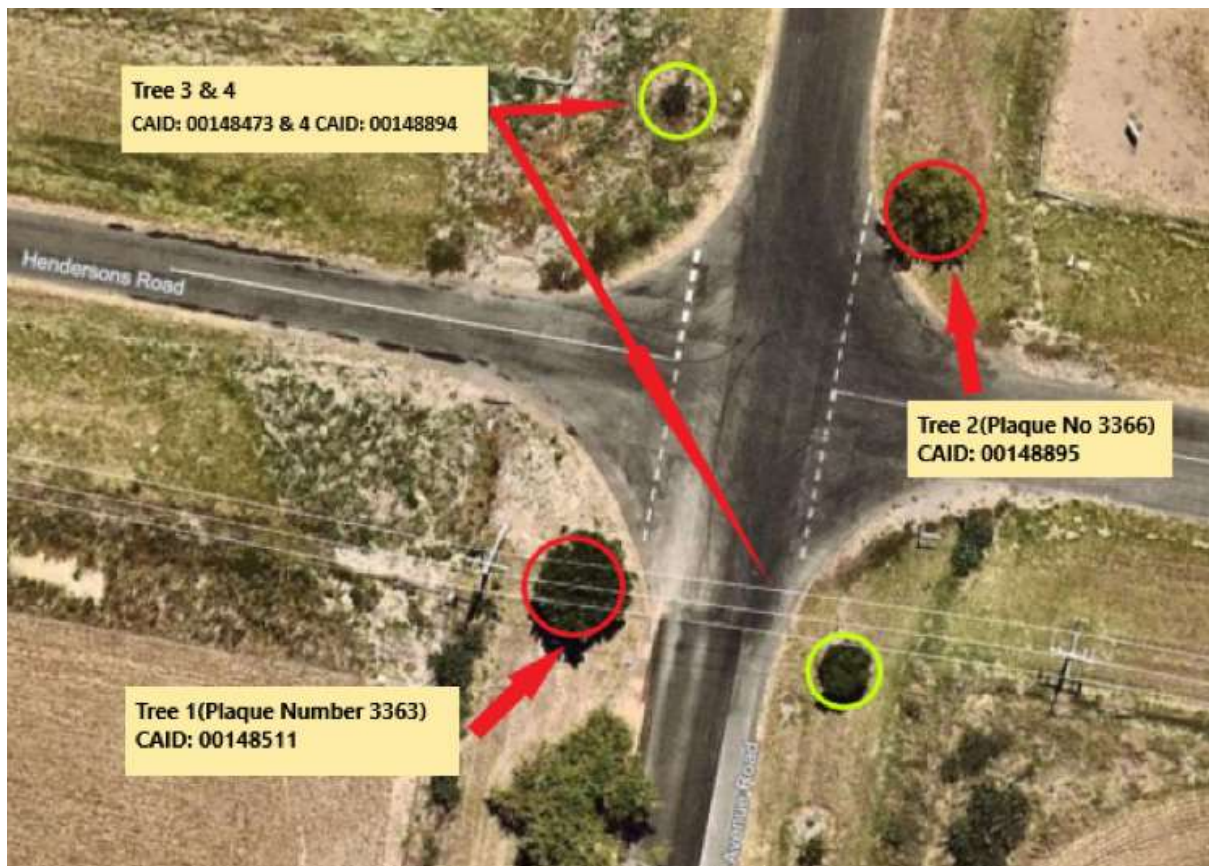


Figure 1: Hendersons Road and Avenue Road WINDERMERE VIC 3352. (Intra Maps 2024)

Observations and Recommendations

Tree 1 (Plaque Number 3363) CAID: 00148511

Observations: Mature *Populus nigra* 'Italica' (Lombardy Poplar) located on the southwest corner.

- Located on the southwest corner.
- Growing directly beneath High Voltage Powerlines some 12m from the intersection
- Tree has a number of exposed cavities containing decay.
- Exposed root system has been scalped by mowers exposing decay.
- Extensive suckering on lower trunk potentially causing sight distance issues at intersection.
- Tree has been heavily reduced (lopped) numerous times due to proximity to the overhead power infrastructure.
- The original tree planted at this location was a *Sorbus aucuparia* (Mountain Ash).

Recommendations:

Remove and replace with new tree in a more suitable position away from intersection and consistent with the tree spacing for the Avenue. Replace with a *Populus alba* (White Poplar).

Tree 2 (Plaque No 3366) CAID: 00148895

Observations – Mature *Ulmus* sp (Elm tree) located on the northeast corner.

- Suppressed crown with limited extension growth.
- Tree alignment is inconsistent with remainder of trees in the avenue.
- The original tree planted at this location was a *Populus alba* (White Poplar)

Recommendations:

- Remove and replace with new tree in correct alignment away from intersection and consistent with the tree spacing for the Avenue. Replace with *Fraxinus pennsylvanica* 'Cimmzam' (Cimmzam Ash)

Tree 3 CAID: 00148473 & 4 CAID: 00148894 - Protect the remaining two (2) trees according to the advice contained in the Australian Standard 4970-2009 Protection of trees on development sites.

Discussion

This Arboricultural assessment was undertaken due to the Blackspot Safety works proposed for the intersection of Hendersons Road and Avenue Road, WINDERMERE VIC 3352.

Four (4) trees were assessed.

All assessed trees form part of the Ballarat Avenue of Honour.

Two (2) trees were identified for removal and replacement and a further two (2) trees were to be retained and provided protections in accordance with the Australian Standard 4970-2009 Protection of trees on development sites.

Consultation regarding the proposal has been undertaken with the Avenue of Honour Committee and the below is a statement from David Grant - Arch of Victory/Avenue of Honour Committee:

*“This intersection is part of the original block of 100 trees planted with two species of trees planted in an alternate pattern. It started at Tree number 3283 and finished at Tree number 3382. The two species of trees were White Poplar (*Populus alba*) and Mountain Ash (*Sorbus aucuparia*).*

We reviewed all the tree species and block plantings about 10 years ago and formulated a spreadsheet that shows what any replacement tree species should now be taking into account climate change issues and in keeping with the original block planting structure and the extent of species diversity used originally. That spreadsheet indicates the White Poplar are to be retained in this section but the Mountain Ash are to be replaced with Cimmamon Ash

trees (Fraxinus pennsylvanica 'Cimmzam). Quite a few replacement Avenue trees have already been planted in this section over the last 10 years following this strategy."

Tree Plaque Information

Original Plaques:

- Plaque No 3363 W E Gilbert
- Plaque No 3365 R S Featherstone
- Plaque No 3364 C A Carvosso

Replacement Plaques:

- Plaque 3367 R S Featherstone,
- Plaque 3368 R E Neal and
- Plaque 3366 A A Neal

Note: the two R S Featherstone are brothers as are A A & R E Neal.

References

- Costermans, LF, *Trees of Victoria and Adjoining Areas* (Costermans Publishing2018)
- Dunster, Julian A et al, *Tree Risk Assessment Manual* (International Society of Arboriculture2017)
- Mattheck, C, *Stupsi Explains the Tree: a Hedgehog Teaches the Body Language of Trees, 3rd Enlarged Ed* (Forschungszentrum Karlsruhe2002)
- *Protection of Trees on Development Sites* (Standards Australia2009)
- *Pruning of amenity trees* (Standards Australia2007)

Descriptors

While accurate tree identification is attempted, some inaccuracies in tree identification may be present.

Diameter at Breast Height (DBH) is the trunk diameter measured at 1.4m from the base of the tree.

Height and width of canopy of the tree is estimated in meters.

The Useful Life Expectancy (ULE) is an estimation of the longevity of the tree.

Age of trees is determined by the following:

- Juvenile: Tree is actively growing and is still in its establishment phase. Tree currently makes little contribution to the amenity of the landscape. Trees of this age are possible candidates for relocation during development.
- Semi mature: Tree is still actively growing but has reached an age and size where it is starting to make a contribution to the landscape. The size of the tree would still be expected to increase considerably given no significant changes to the current site
- Mature: Tree growth has slowed, and the size of the tree would not be expected to increase considerably without significant changes to the current situation (e.g. vegetation removal or site improvements) Tree is not exhibiting any major signs of health or structural weakness as a result of age.
- Over mature: Tree is no longer actively putting out extension growth and is starting to show decline in health or structural stability as a result of age.
- Senescent: Tree is senescing. Trees in this category may not be especially large or old, but are reaching the end of their expected life, often indicated by extreme poor health

Tree health is rated as Good, Fair and Poor. Ratings generally meet the following descriptions:

- Good: Tree is generally showing no obvious signs of poor health or stress with a dense canopy that is free of dieback. Rot or pathogens are not obvious or are not considered to be a threat to the tree.
- Fair: tree is showing signs of reduced health or stress. This is apparent through moderate foliage density, minor dieback, moderate stress growth, minor to moderate rot, moderate pathogen infestation, stunted growth or a combination of all of the above symptoms.
- Poor: tree is showing signs of poor health and/or severe stress. This is apparent through either low foliage density, moderate to large-scale dieback, severer stress response growth, severe rot, severe pathogen infestation, failure of wounds to conceal, overall tree decline or a combination of all of the above symptoms.

Tree structure is rated as Good, Fair, and Poor:

- Good: tree has no obvious structural defects and is therefore not considered likely to fail.

- Fair: tree has at least one obvious structural defect, but this is considered to be manageable and of only moderate risk or the piece likely to fail may be small. Structural defects that may contribute to a fair rating are as follows:
 - Poor Branch attachment (including deadwood and large epicormics);
 - Bifurcated, but with a union that is considered to be solid;
 - Moderate trunk lean but without other defects;
 - Minor damage to the trunk base;
 - Rot or any other damage starting to compromise the structure;
 - Limb failure history.
- Poor: tree has at least one structural defect that is severe and considered to have a relatively high risk of failure. If targets are present then defect(s) require treatment, or alternatively the tree should be removed. In some cases, removal may be the only option for these trees. Structural defects that may contribute to a poor rating are as follows:
 - Poor branch attachment (including deadwood and large epicormics);
 - Bifurcated with swelling and/or included bark;
 - Severe trunk lean associated with other defects such as injury to root plate;
 - Major damage to the trunk base or root system;
 - Rot or other damage severely compromising the structure;
 - History of shedding of large branches.

Retention value (RV) is rated as very low, low, medium and high:

- Very low: Tree makes little or no contribution to the amenity value of the site or surrounding area.
- Low: Tree makes some contribution to the amenity value of the site but makes no contribution to the amenity value of the surrounding area.
- Medium: Tree makes moderate contribution to the amenity of the site and/or may contribute to the amenity of the surrounding area.
- High: The tree makes a significant contribution to the amenity value of the site, or tree makes a moderate contribution to the amenity value of the larger landscape.

Note: The amenity value rating considers the impact the tree has on any neighbouring sites as being of equal importance to that supplied to the subject site. However, trees that contribute to the amenity of the general area (e.g. streetscape) are given greater weight.

Habitat value is assessed as:

- High: The tree is a local indigenous species representing the original vegetation of the area. The tree contains a number of hollows and provides habitat for native wildlife.
- Medium: The tree is a non-local native tree. The tree has the potential to provide habitat for native wildlife.
- Low: The tree is very common in cultivation and has little or no value to native wildlife.

Disclaimer

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