# ARBORICULTURAL & IMPACT ASSESSMENT REPORT

# 300 – 308 MAROONDAH HIGHWAY, HEALESVILLE

REPORT PREPARED FOR: JAEGER GROUP



REPORT PREPARED BY: **DAMIEN BURGESS**PROJECT ARBORIST - DB HORTICULTURE PTY LTD.

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#### 1. Brief

The client, Jaeger Group, has requested an Arboricultural & Impact Assessment Report Plan for trees within and adjacent to the property at 300-308 Maroondah Highway, Healesville.

## 2. Background

The property contains a group of shops and a rear carpark. It is located in the Yarra Ranges Council area, Planning Scheme Zone C1Z. The following Planning Scheme Overlays apply: HO428, BMO1 and DDO12. A commercial and residential development is proposed.

# 3. Methodology

A visual site inspection of the trees took place on May 25<sup>th</sup> and December 18th, 2023. The trees were not climbed nor was any soil excavation or diagnosis of the internal or below ground components of the trees undertaken.

The trees were photographed on site using an iphone 11. Height and Spread of trees was recorded via visual estimation. Diameter at Breast Height (DBH) was taken at 1.4 metres above ground level using a diameter tape.

A Retention Value for each tree has been determined using tree condition factors and values as listed on Page 14 of this report.

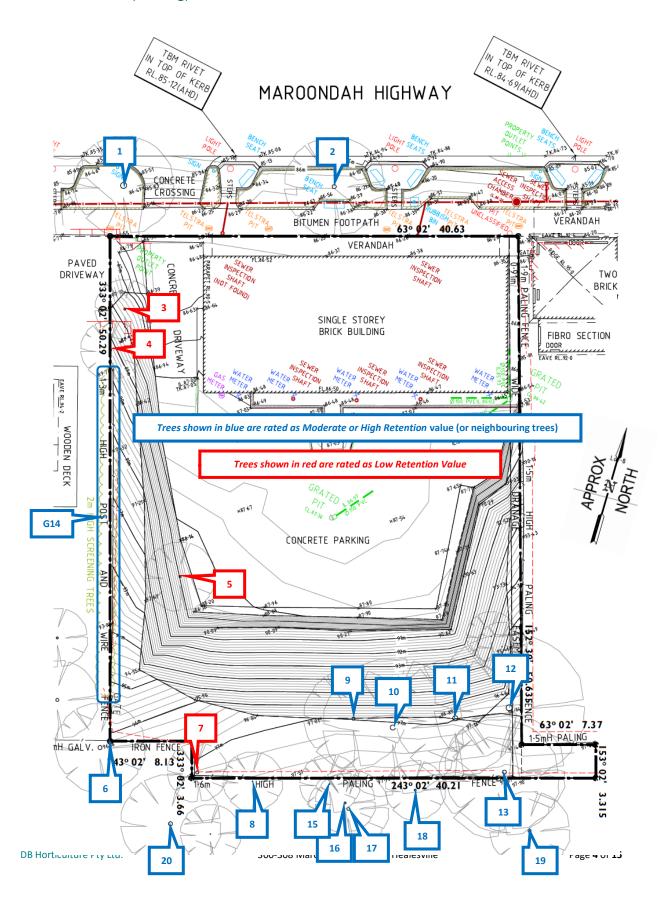
# 4. Tree Protection Zones (TPZ's)

Where appropriate, Tree Protection Zones and Structural Root Zones have been applied as per AS4970-2009, 'Protection of Trees on Development Sites'.

Tree Protection Zones are determined by multiplying the Trunk Diameter @ Breast Height (DBH) x 12. TPZ's are measured from the centre of the trunk.

Structural Root Zones are the area required for tree stability and are only necessary where major encroachment into the TPZ is to occur. The SRZ radius = (Diameter x 50)  $^{0.42}$  x 0.64.

# 5. Site Plan (existing)



# 6. Tree Summary Table

| #           | Species                       | Common name    | Native/ Exotic | Height (m) | Spread (m) |          | DRH (cm) | TD7 (m) | SRZ (m) | SULE | Age | Condition | Structure | Form | Amenity value | Retention value |                                    | Comments |
|-------------|-------------------------------|----------------|----------------|------------|------------|----------|----------|---------|---------|------|-----|-----------|-----------|------|---------------|-----------------|------------------------------------|----------|
| STREET      | TREES                         |                | •              |            |            |          |          |         |         |      |     | •         |           | •    |               |                 |                                    |          |
| 1           | Ulmus glabra                  | Wych Elm       | Ε              | 6          | 7          | 75       | 9.0      | 3.3     | 1       | М    | М   | F         | F         | F    | F             | М               |                                    |          |
| 2           | Quercus palustris             | Pin Oak        | Е              | 14         | 10         | 52       | 6.2      | 2.      | 7       | Г    | М   | G         | G         | G    | G             | Н               |                                    |          |
| TREES IN    | N NEIGHBOURING PROPER         | TIES           |                |            |            |          |          |         |         |      |     |           |           |      |               |                 |                                    |          |
| 6           | Liquidambar styraciflua       | Sweet Gum      | E              | 10         | 6          | 30       | 3.6      | 2.3     | 3       | L    | М   | G         | G         | F    | F             | М               |                                    |          |
| 8           | Prunus sp.                    | Cherry Plum    | Ε              | 5          | 4          | 12/12/12 | 2.5      | 2.2     | 2       | R    | M   | F         | Р         | F    | Р             | L               |                                    |          |
| Group<br>14 | Banksia integrifolia          | Coast Banksia  | N              | 4          | 1          | 5/5      | 2.0      | 1.5     | 5       | ٦    | SM  | F         | F         | G    | Р             | L               | Banksia hedge, surveyed as a group |          |
| 20          | Acer negundo                  | Box Elder      | Е              | 14         | 8          | 40       | 4.8      | 2.5     | 5       | L    | М   | F         | F         | F    | Р             | L               |                                    |          |
| 15          | Quercus robur                 | English Oak    | Е              | 4          | 3          | 12       | 2.0      | 1.5     | 5       | L    | SM  | F         | F         | Р    | Р             | L               |                                    |          |
| 16          | Quercus robur                 | English Oak    | Е              | 8          | 3          | 15       | 2.0      | 1.7     | 7       | L    | SM  | F         | F         | F    | Р             | L               |                                    |          |
| 17          | Populus simonii               | Chinese Poplar | Е              | 13         | 8          | 25/25    | 4.2      | 2.5     | 5       | L    | М   | F         | Р         | F    | Р             | L               |                                    |          |
| 18          | Populus simonii               | Chinese Poplar | Е              | 9          | 4          | 15       | 2.0      | 1.7     | 7       | L    | SM  | F         | F         | F    | Р             | L               |                                    | -        |
| 19          | Fraxinus excelsior<br>'Aurea' | Golden Ash     | E              | 8          | 8          | 35       | 4.2      | 2.5     | 5       | L    | М   | F         | Р         | Р    | Р             | L               |                                    |          |
| TREES IN    | N SUBJECT PROPERTY            |                |                |            |            | •        |          |         |         |      |     |           |           |      |               |                 |                                    |          |
| 3           | Eucalyptus sp.                | Eucalypt       | N              | 6          | 3          | 15       | 2.0      | 1.7     | 7       | L    | SM  | G         | G         | G    | F             | L               |                                    |          |
| 4           | Corymbia maculata             | Spotted Gum    | N              | 6          | 4          | 17       | 2.0      | 1.8     | 8       | L    | SM  | G         | G         | G    | F             | L               |                                    |          |
| 5           | Fraxinus angustifolia         | Desert Ash     | Е              |            |            |          |          |         |         | R    |     |           |           |      |               | L               | Permit exempt weed species         |          |
| 7           | Prunus sp.                    | Cherry Plum    | Е              |            |            |          |          |         |         | R    |     |           |           |      |               | L               | Permit exempt weed species         |          |
| 9           | Quercus robur                 | English Oak    | Е              | 14         | 8          | 38       | 4.6      | 2.4     | 4       | L    | М   | G         | F         | F    | F             | М               |                                    |          |
| 10          | Quercus robur                 | English Oak    | Е              | 14         | 12         | 50/47    | 8.2      | 3.0     | 0       | L    | М   | G         | F         | G    | G             | М               |                                    |          |
| 11          | Quercus robur                 | English Oak    | Е              | 14         | 8          | 38/56    | 8.1      | 3.4     | 4       | L    | М   | G         | F         | G    | G             | М               |                                    |          |
| 12          | Quercus robur                 | English Oak    | Е              | 13         | 11         | 57       | 6.8      | 2.9     |         | L    | М   | G         | G         | G    | G             | М               |                                    |          |
| 13          | Quercus robur                 | English Oak    | Ε              | 13         | 10         | 42/59    | 8.7      | 2.9     | 9       | L    | М   | G         | Р         | G    | G             | М               |                                    |          |

<sup>\*</sup>Trees shown in red are considered appropriate for removal if required \*Dimensions listed for neighbouring trees are estimates

# 7. Photos



Tree 1



Trees 3 & 4



Tree 2



Tree 5





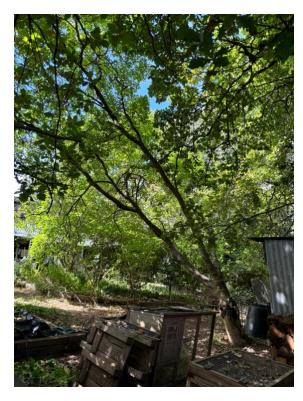
Tree 6 Trees 7 & 8



Group 14



Trees 9 - 13



Tree 19

# 8. Preliminary Comments

#### **Street Trees**

Tree 1 is a Wych Elm on Maroondah Highway, west of the existing driveway crossing. Tree 2 is a Pin Oak, located centrally in front of the site.

### **Trees within Neighbouring Properties**

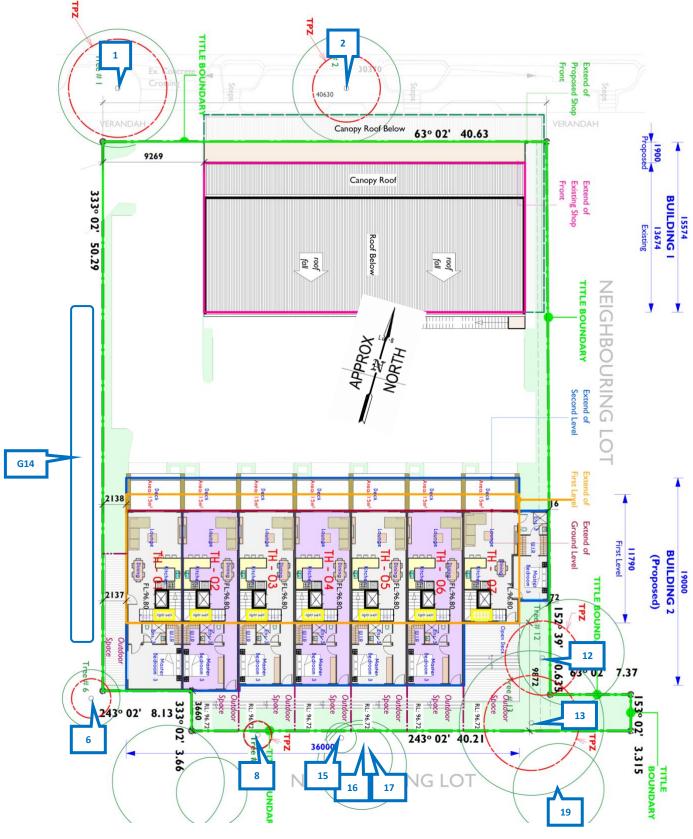
Trees 6, 8, 15, 16, 17, 18, 19 and 20 are located within the neighbouring property to the rear. Group 14 is a row of small Banksias forming a hedge along the boundary line within the neighbouring property to the west.

# **Trees within Subject Property**

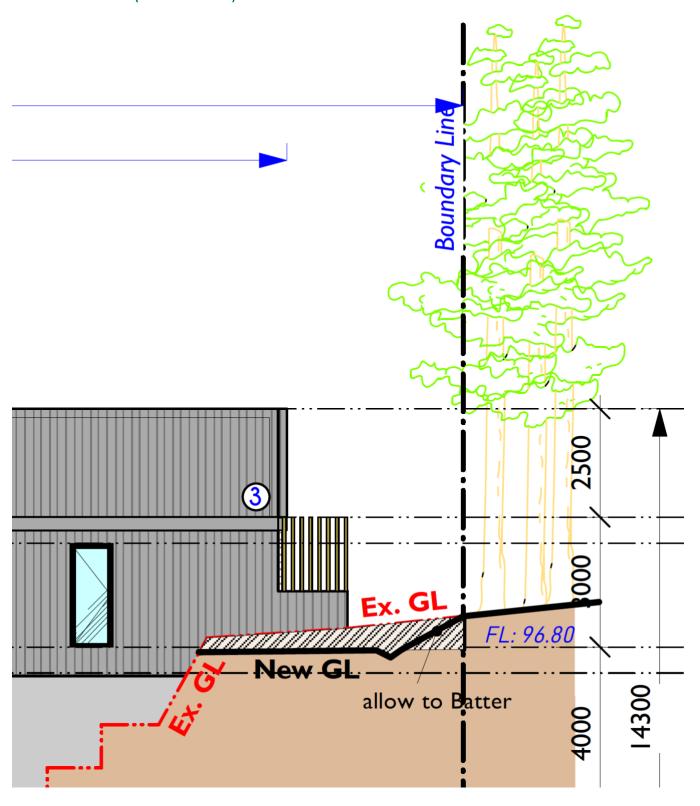
Tree 3, a semi-mature Eucalypt and Tree 4, a semi-mature Spotted Gum; are located on the embankment on the western side adjacent to the driveway. They are good specimens but are small and are considered to be of Low Retention Value. Tree 5 is a small Desert Ash sucker within the parking area and Tree 7 is a small Cherry Plum in the rear south-west corner. Both are of Low Retention Value. Both are weed species and do not require a removal permit. Trees 9 to 13 are mature English Oaks located at the top of the high embankment to the rear of the site. All are rated as Moderate Retention Value.

# 9. Site Plan (proposed)

# MAROONDAH HIGHWAY



# 10. Site Plan (elevation view)





#### 11. Construction Impact Assessment

- **Tree 1:** Tree within road reserve with a TPZ of 9.0m. The existing driveway crossing is to remain in-situ. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.
- **Tree 2:** Tree within road reserve with a TPZ of 6.2m. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.
- **Tree 3:** Tree within subject property with a TPZ of 2.0m. A site cut is proposed in the western embankment to accommodate new visitor parking spaces. Due to proposed encroachment into the TPZ of this tree **it cannot be viably retained and should be removed.**
- **Tree 4:** Tree within subject property with a TPZ of 2.0m. A site cut is proposed in the western embankment to accommodate new visitor parking spaces. Due to proposed encroachment into the TPZ of this tree **it cannot be viably retained and should be removed.**
- **Tree 5:** Tree within subject property. **Weed species to be removed** to accommodate proposed central access road.
- **Tree 6:** Tree within neighbouring property with a TPZ of 3.6m. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.
- **Tree 7:** Tree within subject property. This is a weed species of Low Retention Value. Although it could be retained, **removal is recommended.**
- **Tree 8:** Tree within rear neighbouring property with a TPZ of 2.5m. There will be encroachment of 25% into the TPZ of this tree. This is a low retention value weed species and **should be removed** in consultation with the neighbouring property owner. A removal permit is not required.
- **Tree 9:** Tree within subject property with a TPZ of 4.6m. The tree is within the footprint of the proposed development; therefore, **removal of this tree is required.**
- **Tree 10:** Tree within subject property with a TPZ of 8.2m. The tree is within the footprint of the proposed development; therefore, **removal of this tree is required.**
- **Tree 11:** Tree within subject property with a TPZ of 8.1m. The tree is within the footprint of the proposed development; therefore, **removal of this tree is required.**
- Tree 12: Tree within subject property, close to the eastern boundary with a TPZ of 6.8m. The design plans have been altered so that there is no major construction within the TPZ of this tree. The only excavation will be from some post holes to support the deck. These must be hand excavated in the top 400mm of soil and located to avoid contact with any woody tree roots which may be present. There is a large limb on the western side of this tree whichg requires removal to accommodate the design. This can be removed without impacting the health, structure or amenity of this tree. This tree will not be adversely affected and can be viably retained.
- **Tree 13:** Tree within subject property with a TPZ of 8.7m. The design plans have been altered so that there is no major construction within the TPZ of this tree. The only excavation will be from some post holes to support the deck. These must be hand excavated in the top 400mm of soil and located to avoid contact with any woody tree roots which may be present. **This tree will not be adversely affected and can be viably retained**.
- **Group 14:** Hedge of trees within neighbouring property with TPZ's of 2.0m. There will be **no encroachment** into the TPZ's of these trees and therefore **they will not be affected**.

- **Tree 15:** Tree within neighbouring property with a TPZ of 2.0m. Proposed **encroachment** into the TPZ of this tree is approximately 9%. This is minor encroachment and therefore **this tree can be viably retained**.
- **Tree 16:** Tree within neighbouring property with a TPZ of 2.0m. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.
- **Tree 17:** Tree within neighbouring property with a TPZ of 4.2m. Proposed **encroachment** into the TPZ of this tree is approximately 3%. This is minor encroachment and therefore **this tree can be viably retained**.
- **Tree 18:** Tree within neighbouring property with a TPZ of 2.0m. Proposed **encroachment** into the TPZ of this tree is approximately 5%. This is minor encroachment and therefore **this tree can be viably retained**.
- **Tree 19:** Tree within neighbouring property with a TPZ of 4.2m. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.
- **Tree 20:** Tree within neighbouring property with a TPZ of 4.8m. There will be **no encroachment** into the TPZ of this tree and therefore **this tree will not be affected**.

Rather than a site cut, a batter will be made sloping down from the rear boundary to the townhouses to minimise impact on neighbouring trees, particularly Trees 8, 15 and 18, which are close to the boundary.

# 12. Tree Descriptors

# Age

| Υ  | Young       | Tree is juvenile or recently planted     |
|----|-------------|--|
| SM | Semi-mature | Tree is established and actively growing |
| М  | Mature      | Tree has reached expected maximum size   |
| OM | Over Mature | Tree is over mature and in decline       |

#### Condition

| G | Good | Full crown, free of disease, good colour, good extension growth of twigs, no dieback                |
|---|------|---|
| F | Fair | Tree shows one or more of the following: <25% deadwood, dieback, unbalanced canopy, minor pathogens |
| Р | Poor | Tree shows one or more of the following: >25% deadwood, major pathogen presence, structural faults  |
| D | Dead | Tree is dead  |

# Structure

| G | Good      | Good branch attachments and no structural defects present, no co-<br>dominant stems, good branch and trunk taper, good buttressing at<br>base of trunk |
|---|-----------|--|
| F | Fair      | Some minor structural defects or cavities may be present   |
| Р | Poor      | Major defects to trunk, branches or roots, poor attachment points, missing bark, likely points of failure  |
| Н | Hazardous | Tree poses immediate danger and should be removed  |

#### Form

| G | Good | Full and balanced canopy               |
|---|------|--|
| F | Fair | Minor asymmetry in canopy shape        |
| Р | Poor | Major asymmetry, unbalanced appearance |

# **Amenity Value**

| G | Good | Attractive tree which contributes significantly to the surrounding landscape and public realm, may provide good screening and shade qualities |
|---|------|---|
| F | Fair | Tree contributes to its immediate surroundings, may be one of a group of trees and/or provide moderate screening and shading qualities        |
| Р | Poor | Tree does not make a positive contribution to the landscape and could be considered for removal   |

# Safe Useful Life Expectancy (SULE)

| L  | Long             | Tree appears retainable for 40+ years        |
|----|------------------|--|
| M  | Medium           | Tree appears retainable for 15 – 40 years    |
| S  | Short            | Tree appears retainable for 5 – 15 years     |
| R  | Removal          | Tree should be removed                       |
| МО | Move or Replaced | Trees which can be readily moved or replaced |

# **Retention Value**

| L | Low      | An assessment rating which incorporates all the above criteria |
|---|----------|--|
| М | Moderate |  |
| Н | High     |  |

# 13. References

- Clark, J.R. & Matheny N.P. (1998), Trees and Development: A Technical guide to preservation of trees during land development, ISA Publishing
- Standards Australia (2007) AS43737-2007 Pruning of Amenity Trees, Standards Australia
- Standards Australia (2009), AS4970-2009 Protection of Trees on Development Sites, Standards Australia
- https://planning-schemes.app.planning.vic.gov.au/YARRA%20RANGES/ordinance/

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March 27th, 2024.

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Unless expressed otherwise; the information contained in this report covers only those items that were covered in the project brief or that were examined during the assessment and reflect the condition of those items at the time of inspection; and the inspection undertaken as part of the preparation of this report was limited to visual examination of accessible components of any tree without climbing the tree or removal of any part of the tree or any dissection, excavation or probing unless otherwise stipulated.

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