DEVELOPMENT IMPACT ASSESSMENT

31 Nubeena Crescent, Taroona

01/07/2020

For: Tasmanian Lobster Hatchery Pty Ltd
ATTENTION: Scott Parkinson
PO Box 40
Rosny Park TAS 7018

Alister Hodgman
Diploma (Hort/Arb)
Tree Risk-Benefit Validator
QTRA Registered Advanced User: 3743

Element Tree Services
23 King Street
Bellerive
TAS 7018

alister@elementtree.com.au
1. Terms of Reference

This report was requested by Poppy Sharkie, Student Planner at Ireneinc Planning and Urban Design, to assess the impacts of development on the high conservation value trees at 31 Nubeena Crescent, Taroona. An assessment of the site was undertaken on the 1st of July 2020. This report will discuss those findings and present data on potential zones which could be avoided if the trees were to be retained.

To ensure consistency with the documentation already completed by Ecotas Environmental Consulting Options, I refer to the site plan indicating those trees subject to the proposed research facility.

![Site Plan](image)

**Fig. 1** - the site plan indicating the trees which are subject to this report, courtesy of Ecotas and Preston Lane.

2. Site Findings

The proposed development will be located in a partially cleared zone, but this does include seven trees that are to be considered of high conservation value.

The majority of the trees are of fair to good health, but of concern is their structural condition. Some years ago, many of the larger trees have been lopped which has resulted in significant wounds and the development of epicormic regrowth. This treatment is outside the scope of the Australian Standard 4374-2007 *Pruning of amenity trees*, as the poorly attached regrowth presents an elevated probability of failure.
As site usage is currently minimal, their level of risk is considered to be tolerable; however, in a developed situation with increased target potential, I expect some individuals will present an unacceptable level of risk. Without knowing the final site use, it is not possible to quantify the future level of risk.

Additional to the trees surveyed, council have asked to identify native trees greater than 25cm diameter at 1.5m subject to the works. As the services connection is yet to be finalised, I have included a copse of trees on the south-eastern corner of the site which may be subject to trenching. Many of these trees are either dying or have been compromised through previous lopping.

![Map with trees marked]

**Fig. 2** – the trees additional to the original Ecotas assessment (fig. 1). ID’s overlaid on the PDA site plan.

### 3. Development Impacts

The current proposal physically sits over the footprint or structural root zone of each tree. If the trees were to be retained, the following tree protection zones (TPZ) and structural root zones (SRZ) would need to be considered.

<table>
<thead>
<tr>
<th>Tree</th>
<th>SRZ</th>
<th>TPZ</th>
<th>TPZ Area</th>
<th>Current proposal impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.51m</td>
<td>12.12mm</td>
<td>461.5m²</td>
<td>Within carpark</td>
</tr>
<tr>
<td>2</td>
<td>3.08m</td>
<td>7.56m</td>
<td>179.6m²</td>
<td>Within carpark and building</td>
</tr>
<tr>
<td>3</td>
<td>3.82m</td>
<td>15.0m</td>
<td>706.9m²</td>
<td>Within building</td>
</tr>
<tr>
<td>4</td>
<td>3.5m</td>
<td>10.8m</td>
<td>366.4m²</td>
<td>Within building</td>
</tr>
<tr>
<td>5</td>
<td>3.83m</td>
<td>11.04m</td>
<td>382.9m²</td>
<td>Within building</td>
</tr>
<tr>
<td>6</td>
<td>4.07m</td>
<td>15.0m</td>
<td>706.9m²</td>
<td>Major SRZ severance</td>
</tr>
<tr>
<td>7</td>
<td>3.81m</td>
<td>11.16m</td>
<td>391.3 m²</td>
<td>Within building</td>
</tr>
</tbody>
</table>
The following table will provide data on the additional trees collected as part of this report (see fig 2).

<table>
<thead>
<tr>
<th>Tree</th>
<th>Species</th>
<th>SRZ</th>
<th>TPZ</th>
<th>TPZ Area</th>
<th>Current proposal impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><em>E. ovata</em></td>
<td>3.77m</td>
<td>10.68mm</td>
<td>358.3m²</td>
<td>No incursion into TPZ</td>
</tr>
<tr>
<td>B</td>
<td><em>E. viminalis</em></td>
<td>2.25m</td>
<td>3.96mm</td>
<td>49.3m²</td>
<td>*Potentially within car park¹</td>
</tr>
<tr>
<td>C</td>
<td><em>E. viminalis</em></td>
<td>2.34m</td>
<td>3.48mm</td>
<td>38.1m²</td>
<td>*Severed by SW connection</td>
</tr>
<tr>
<td>D</td>
<td><em>E. viminalis</em></td>
<td>2.41m</td>
<td>4.32m</td>
<td>58.6m²</td>
<td>Potentially subject to SW – health declining</td>
</tr>
<tr>
<td>E</td>
<td><em>E. viminalis</em></td>
<td>2.51m</td>
<td>3.7m</td>
<td>43m²</td>
<td>Subject to SW - works to avoid SRZ (tree declining)</td>
</tr>
<tr>
<td>F</td>
<td><em>E. globulus</em></td>
<td>2.67m</td>
<td>5.64m</td>
<td>99.9 m²</td>
<td>Subject to SW – trench no closer than 3.9m from centre of trunk (healthy tree)</td>
</tr>
<tr>
<td>G</td>
<td><em>E. viminalis</em></td>
<td>4.43m</td>
<td>15m</td>
<td>706.9 m²</td>
<td>Subject to SW – works to avoid SRZ (tree declining)</td>
</tr>
</tbody>
</table>

I expect that tree B and C will be damaged as a result of the current proposal and would most likely require removal if a redesign is not possible.

It has been indicated that services could be connected between tree E and F. I feel there is enough space to complete this without critically damaging either tree. It is possible that this may pass by tree D, but as it is in poor condition and is unlikely to reach maturity where it will develop hollows, removal may be appropriate.

4. Tree protection

During development of this site, it is important that the tree protection zones are fenced off and signs installed to delineate the area. Where the tree is situated on the edge of the works, fencing should be installed along this alignment. Activities to avoid in this area include:

- Machine excavation including trenching;
- Excavation for silt fencing;
- Cultivation;
- Storage;
- Preparation of chemicals, including preparation of cement products;
- Parking of vehicles and plant;
- Refuelling;
- Dumping of waste;
- Wash down and cleaning of equipment;
- Placement of fill;
- Lighting of fires;
- Soil level changes;
- Temporary or permanent installation of utilities and signs, and
- Physical damage to the tree(s).

¹ * Not identified in initial survey so exact location not clear.
5. Conclusion

- As identified in the Preston Lane plans, all seven high conservation value trees will be impacted by the works. If a major redesign was initiated, there may be scope to retain some of these trees. It should be noted that many are unsuitable for retention in an increased target situation.

- Additional trees that may be impacted include B and C.

- I believe there is adequate scope to install the services past tree E and F, but this alignment may damage D. The offset distances required for these individuals are contained in this report.

Yours sincerely

Alister Hodgman
Tree 6 – another lopped tree with a questionable form. Note the crown decline.

The potential services easement past F and E

Tree 7 – I am unsure of ecological impact, but from a practical perspective, this stump could be dug out and relocated to preserve the hollow.

The site looking to the south-east.