
TO:	Madeline Seeley, Planner
FROM:	Luke McKinlay, Landscape Architect
DATE:	30-Septmeber-2019
SUBJECT	Land Use Consent – Scheduled Tree LUC-2019-380 – 5 Ferntree Drive

Hi Maddy,

This memorandum is in response to your request for comment on the application to remove a protected tree - a European Silver Fir (*Abies alba*) from 5 Ferntree Drive, Wakari. As you note, the Fir tree is listed in the Operative District Plan (ODP) as T444 and as T444 in the Schedule of Trees in Appendix A1.3 of the Proposed District Plan (2GP). The tree is approximately 35m high and has a spread of approximately 8m. The trunk of the tree is approximately 1.3m diameter at breast height. Part of the canopy overhangs 3 Ferntree Drive and the western side of the Ferntree Drive carriageway and footpath.

The original STEM assessment, which was made in 2001, resulted in a score of 174, which is well above the required 147 “pass” total. The amenity evaluation section and the condition evaluation section received the same subtotal of 87 points. The highest score was attributed to its solitary nature in the ‘proximity’ category (27 points), while occurrence, form and stature characteristics all received 21 points each.

Under the Operative District Plan (ODP), the proposal is a restricted discretionary activity pursuant to Rule 15.5.1(i). As such, council are to have regard to the health and quality of the tree, the reason for the proposed work, any alternatives to its removal and the impact of the removal upon the amenity of the locality and values of the trees.

Under the Proposed District Plan (2GP), the proposal is a non-complying activity pursuant of Rule 7.3.2(3), which seeks to avoid the removal of scheduled trees unless:

- I. There is a significant risk to personal/public safety or a risk to personal safety that is required to be managed under health and safety legislation
- II. The tree poses a substantial risk to a scheduled heritage building or structure
- III. There is moderate to significant risk to buildings
- IV. The removal of the tree is necessary to avoid significant adverse effects on existing infrastructure and network utilities, or
- V. The removal of the tree will result in significant positive effects in respect of the efficient use of land (Policy 7.2.1.2)

Background

I am aware of the history of the tree/site, including the consent granted to undertake works within the root protection zone (LUC 2019-61), consent for pruning (LUC 2018-86) and matters concerning the tree in the subdivision consent for 3 Ferntree Drive (SUB-2016-103 and LUC-2016), which included the following condition:

Prior to s224(c), the following condition of consent was imposed (condition 3(e) of SUB-2016-103):

- e) *A Tree Protection Zone (TPZ) in the form of a physical barrier must be established prior to any works being carried out for the formation of the access and/or servicing of the new lots, to prevent construction and compaction damage to the tree. The extent of the TPZ must be established by Council's arborist. The TPZ must exclude all vehicles, plant, machinery, construction materials, fuels, liquids, etc. from entering the zone. This must remain in place until all works have been completed on site*

The Proposal

An arborist's assessment has been provided in support of the application, undertaken by Peter Waymouth – Arborist (GreenTrees Ltd). The report concludes that two options are available to remedy potential health and safety/risk to property issues associated with T444. These options are summarised as follows:

- 1) To prune the Fir tree using reductions cuts and install steel cabling and bracing systems; or
- 2) To remove the tree.

The reasons provided in the application for the tree's removal are:

- Danger to traffic, pedestrians on the footpath under the tree, and to the subdivided property at 3 Ferntree Drive (presumably from falling branches);
- The needles make the footpath slippery;
- The tree root growth makes the footpath uneven and hazardous;
- A 100mm water main within close-proximity to the tree and "other services have been installed extensively around the base of the tree";
- The cutting of roots over successive years of ground work has compromised the stability of the tree.

Council Arborist Report

Council's consultant arborist, Mark Roberts, has reviewed the proposal and associated report, prepared by GreenTrees Ltd. He reaches the following conclusions/recommendations:

- That there are inconsistencies with the applicant's risk assessment. He believes that T444 can be retained and managed, so it continues to pose a low risk to people and property.
- He agrees with Mr Waymouth, that some minor end-weight/reduction pruning on the three limbs identified and the installation of a cable bracing system could maintain the risk associated by those limbs to low levels.
- He considers that the proposed mitigation in response to the proposed removal of T444 is inadequate.
- He recommends that the application to remove T444 is declined.

Amenity Effects

These comments are restricted to considering broader amenity values associated with T444. It is acknowledged that the planner must weigh up the amenity values of this tree and any potential adverse effects of tree removal alongside issues of health and safety and effects on property.

I undertook a site visit to the area surrounding the subject tree on 7 August 2019 to determine the likely effect of the proposed removal of T444 on existing visual and landscape amenity values. Photographs taken at this time are appended to this report as Attachment 1.

Site Context

Ferntree Drive is located in a residential Wakari. It connects with Dean and Wairoa Streets at its southern end and terminates in a cul-de sac at its Northern end. Most dwellings are located on the western side of the street. Ferntree Reserve and the grounds of Ferntree Lodge occupy large areas to the east. The street is moderately steep for most of its length. There is a flatter portion in the vicinity of the turning area in front of Ferntree Lodge¹.

The subject tree is located near the southern end of Ferntree Drive, adjacent to number 3, on the western side of the street. Directly opposite the tree, is a band of road reserve planting, to the west of 14 Dean Street.

T444 forms a prominent feature from both the southern and northern approaches on Ferntree Drive (refer figures 1 & 2). Due to its stature and close-proximity to the street, T444 is a primary focal feature of the streetscape. A relatively uncommon species in Dunedin, T444 is visually distinct from the nearby trees within Ferntree Reserve. Not only is it separated from these trees by the street itself, its height and relatively narrow, evenly foliated canopy set it apart from the reserve trees. From locations to the west, such as the walkway to Hood Street, the height of T444, above that of neighbouring vegetation is most apparent (refer figure 3).

As noted in the GreenTrees report, pruning of the lower limbs to raise the canopy of T444 was undertaken last year (LUC-2018-86). Mr Waymouth makes the following comments on the appearance of the tree following this work - "its original aesthetic charm has been entirely lost by the raising of its canopy". I consider that the effects of the pruning are somewhat overstated by this statement. Prior to pruning, the lower branches almost extended to the ground (as shown in the photo attached to the 2001 STEM assessment). This is relatively uncommon for street trees of this size, where they are located adjacent to footpaths and a clear pathway for pedestrians is required. As such, while the change in the appearance of the tree is highly noticeable, I consider that the effects of the crown lifting on the appearance of T444 are not as high as suggested by Mr Waymouth, particularly in this suburban context. Crown lifting is not uncommon in suburban/urban environments and the upper two thirds of the tree remain well foliated. It is my assessment that the tree retains considerable aesthetic value and this is reflected in the updated STEM assessment, outlined below.

One of the recommendations of the GreenTrees report is that T444 is pruned using reduction cuts on the tree 'shaded sail areas' in order to lessen end-weight. It is my assessment that if this pruning involves approximately a 10-15% reduction in the length of the branches, effects on the amenity of the tree are likely to be low. Given the size of this tree, that extent of pruning, is unlikely to be highly noticeable to the general public or result in the tree appearing significantly unbalanced. Despite the presence of second and third leaders, which would be subject to the pruning, the tree retains a generally balanced, conical form, which a 10-15% end reduction would not compromise to a significant degree.

¹ Ferntree Drive originally formed the entrance to the historic Ferntree Lodge. The Lodge dates from 1849 (Dunedin's oldest surviving residence) but was subject to a substantial and 'grand' addition in 1902, undertaken by Alexander Thompson. According to Heritage New Zealand records, the lodge remained in the Thompson family for 60 years and it was during this time that many of the existing trees were planted (<https://www.heritage.org.nz/the-list/details/368>).

As noted by Mr Waymouth, "from the position of this Silver Fir in relation to the historic Ferntree Lodge, it is conceivable that the tree was planted near the original driveway". Having examined some historical aerial photographs (refer figure 4), it appears that T444 is likely to have been one of the avenue trees that led to the lodge, however, it is considered that the aerial photography can't be relied upon to confirm this. As such, I have not added any additional points to the notable evaluation component of the STEM assessment.

If, rather than reduction pruning, the entire tree is removed, effects on streetscape amenity would be considerable. Due to the height and considerable age of this tree, it is likely that T444 has become a well-established and highly prominent landmark within this neighbourhood. *Abies alba* is a relatively rare species in Dunedin and makes a considerable contribution to the diversity of exotic tree specimens in the city.

STEM Assessment

There are two broad assessment categories to a STEM report – condition (health) and amenity (community benefit). My role in the assessment of applications to remove a scheduled tree, is to comment on the amenity related matters.

The 2001 council STEM assessment of T444, resulted in a total amenity ‘score’ of 87. The largest component of this score was for the proximity component, where the tree scored 27 as a ‘solitary’ tree. Mr Waymouth reassessed the tree and reduced the proximity score from solitary to ‘parkland’ (9 points).

The proximity criterion of STEM identifies the potential significance of a lone tree in an urban situation. The rationale for this is that one tree in a street or in a bare field draws attention to itself, meaning the fewer the trees the more they are valued. On the other hand, The STEM manual identifies that a tree could potential be ‘lost’ in a block or group of trees, without dramatically changing the overall impact in the composition of a vista. Importantly, the manual identifies the following – “should a situation arise where a single tree dominates its many smaller neighbours, this tree would lose merit points in this section but would gain high points in e.g. stature, visibility, role in setting and climatic influence”. In my assessment, this last point is relevant to the subject tree. While separate from the Ferntree Reserve trees by the Ferntree Drive carriageway, T444 is in relatively close-proximity to these trees and those within the council reserve. As such, it is agreed that T444 should not be assessed as a solitary tree. Rather, it is my assessment that it forms part of a group of 10+ trees (15 points). I do not agree that it forms part of a parkland setting as suggested by Mr Waymouth. In my opinion, a parkland assessment would more accurately describe the setting of the Silver Fir in Chingford Park, which Mr Waymouth refers to (an image of which is shown on page four of his assessment).

As described above, in this situation, where a single tree dominates its smaller neighbours, it is anticipated that higher points are attributed to factors such as stature, visibility, role in setting and climatic influence. I consider that the role of this tree is significant (21 points) in the streetscape of Ferndrive Drive given its visual prominence from both northern and southern approaches and its likely historic association with Ferntree Lodge.

It is agreed that the stature of the tree has increased since the 2001 assessment and is now in the 27m+ category.

My re-evaluation of the 2001 STEM, results in a total of 87 points for the amenity section:

- Stature: 27+ (27 points)
- Visibility: 1km (9 points)
- Proximity: Group 10+ (15 points)
- Role: Significant (21 points)
- Climate: Important (15 points)

This is consistent with the total points attributed to T444 in the 2001 assessment (87 points).

Proposed Mitigation

It is considered that the proposed replacement planting of rhododendrons, camellias, azaleas and viburnums to complement the existing planting near the frontage of 3 Ferntree Drive, would be insufficient to maintain amenity values provided by T444. It is acknowledged that it is very difficult to mitigate for the loss of such a large, prominent tree, however, its replacement with a selection of flowering shrubs/small trees appears of insufficient scale to compensate for the loss of this tree.

Concluding Comments

Overall, it is my opinion that the proposed removal of the T444 will have adverse effects on the broader amenity values of the Ferntree Drive streetscape and surrounding area. It is considered that T444 retains the amenity values that resulted in its inclusion on the scheduled tree register and it should have on-going protection.

If it is determined that some pruning is required to address potential safety issues, it is considered that reduction cuts are unlikely to result in unacceptable adverse effects on existing amenity values of the tree or cause the amenity component of the STEM assessment to be notably affected.

Regards,

Luke McKinlay

CITY PLANNING

Attachment 1. Site Photographs



Figure 1. View towards T444 from above the subject site on Ferntree Drive



Figure 2. View towards T444 from below the subject site on Ferntree Drive



Figure 3. View towards T444 from walkway connection to Hood Street above 3 Ferntree Drive



Figure 4: 1942 Aerial photograph of Ferntree Drive (sourced from <http://retrolens.nz> and licenced by LINZ CC-BY3.0)