

August 20, 2019

RE: Application to remove scheduled tree T444

Madeline Seeley
City Planning
Dunedin City Council
PO Box 5045
Dunedin 9058

Dear Madeline,

As per your August 2, email request, I have conducted a site visit to number 5 Ferntree Drive, Dunedin to inspect Scheduled tree T444 listed on the Dunedin City Council's operative District Plan as a European silver fir (*Abies alba*). The purpose of the visit was to assess the condition of the tree. You have also asked me to provide comment on the accuracy of the applicant's arborist report.

Summary of finding and my recommendation(s):

- i. There are inconsistencies with the applicant's risk assessment and risk rating
- ii. There are inconsistencies the applicant's Standard Tree Evaluation Method (STEM)
- iii. There is excessive extrapolation used to predict the placement and distribution of roots
- iv. The suggested replanting mitigation could never address the loss or meet the aims of the city
- v. When the same data is correctly applied to the applicant's risk assessment the risk rating for T44 is Low.
- vi. T444 currently poses a Low risk to people and property and a Low-risk rating can be maintained indefinitely if the tree is correctly managed.

My report is as follows.

I have assessed T444 for the Dunedin City Council (DCC) on two previous occasions, and once for a potential purchaser (of one of the Lots) on behalf of the DCC.

In March 2018 I assessed the tree in relation to Planning Application LUC-2018-86 (a maintenance application) and again in February 2019 in relation to Planning Application LUC-2019-61 (an application for works in close proximity). On both occasions the tree looked to be in good health and based on the vigour and vitality of the tree I recommended that the applications were approved. On December 5, 2018, at the DCC's request I conducted a site visit to measure the tree and to give Mr Morris Mitchell arboricultural advice as to what might be acceptable to support a consent application (it was a pre-application meeting). The meeting took place, the tree was measured and I provided Mr Mitchell with some arboricultural considerations and options for construction and development within the dripline of a protected tree.

In relation to your request, I inspected the tree from ground level on the morning of August 7, the weather was clear and calm at the time of the visit.

1 Condition assessment and observations as at August 7, 2019

- 1.1 In general, at the time of the assessment, the tree looked to be in good health and have vitality within the normal range for the species and age.
- 1.2 The canopy of the tree was evenly foliated throughout
- 1.3 Based on the callus growth around previous pruning works the tree has good vigour
- 1.4 T444 has developed a second leader at approximately 14m up the main trunk and a 3rd leader higher up at approximately 22m (Abies are typically considered a single trunk or leader species)
- 1.5 The land under and around T444 to the west had been cleared of building and divided (fenced off) into sections. The sections were vacant lots (empty) at the time of the assessment.
- 1.6 T444 had good trunk taper and appeared to have good root flare
- 1.7 The root flare had encroached over and had lifted a section of footpath directly under the tree on Ferntree Drive
- 1.8 The angle of branch attachment of the two additional leaders (1.4 above) and a lower branch (and described in the applicant's arborist report) indicate the presence of included bark.
 - 1.8.1 Included bark can be an indication of a weakened branch union (a poor structural connection between the branch and trunk). While it is true that some included bark unions have the potential to completely split away from the main trunk, many do not and research into the actual strength loss and the process of 'natural bracing' (where branches from the branch and/or trunk bypass each other) suggest that such unions are not as problematic as they once were considered.
 - 1.8.2 Trees with included bark are very common, for example; there are several smaller trees within the Ferntree Drive 'pocket' reserve that have included branches, and most of the Larch trees on the opposite side of the road also have them, none of these branches has failed
- 1.9 Overall, the tree appeared to be in good condition, and I saw nothing to suggest that whole tree, partial or branch failure was imminent
- 1.10 Based on the collective observations of my three previous visits, the tree is not in decline and I saw nothing to indicate that decline was likely in the near future.

2 Comments in relation to the July 3, 2019, Greentrees Tree Report written by Peter Waymouth. The applicant's arborist report titled: Greentrees Tree Report concerning a scheduled tree and application for removal of European Silver Fir - T444

Summary of concerns:

- 2.1 There are inconsistencies in Mr Waymouth's report regarding his use and application of the tree risk assessment methodology TRAQ
- 2.2 There are inconsistencies in Mr Waymouth's report regarding his use and application of the Standard Tree Evaluation Method (STEM)
- 2.3 There are inconsistencies in this report regarding the location and distribution of roots
- 2.4 The suggested replanting mitigation is inadequate to meet the aims of the city

2.1 Inconsistencies with TRAQ

- 2.1.1 TRAQ is a risk assessment tool designed to determine the amount of risk a tree or tree part poses on a given target over a given time period. The stated aims of TRAQ are; i) to provide a systematic process for assessing risk, ii) to provide confidence in professional and ethical decisions, *and* iii) to provide a standardised process throughout the industry.

Mr Waymouth uses a self-adapted TRAQ risk assessment form, and not the form created and provided by the International Society of Arboriculture (the owners and creators of the methodology).

- 2.1.2 From my understanding of Mr Waymouth's form, he is indicating that there is a High risk that three branches will fall from the tree before July 2020 and two will impact the dwellings and cause significant damage or will cause harm to the people who are living there. He has also indicated that there is a high chance that the same branches will fall onto property and people on the public road before July 2020 causing significant damage or harm.

To achieve a High-risk rating Mr Waymouth has over-stated the occupancy rating and the effective area of the target zone.

- 2.1.3 According to TRAQ; *"the amount of time one or more targets are within the target zone - its occupancy rate - is the primary component of assessing the likelihood of a target being impacted"*. To generate a High-Risk Rating, Mr. Waymouth has stated the targets (the people, dwellings and road users) have a Frequent or Occasional occupancy rate.

- 2.1.4 A 'Frequent' occupancy according to TRAQ *"indicates that the target zone is occupied for a large portion of the day or week"*. At the time of his assessment, there were no houses on the site or people living in those houses. It is not reasonable to expect that occupancy of the targets (the yet to be built houses and/or the people living in those houses) could spend enough time within the target zone to be given a Frequent occupancy classification.

- 2.1.5 Mr Waymouth rates the occupancy of property within the subdivision and public road users as being Occasional. A building is a static object, therefore it has a Constant occupancy (i.e. it can't leave the target zone, so it must be in the zone 24 hours a day, 7 days a week). For property inside the target zone to have an occasional occupancy rate, it must not be there for a large portion of the assessment period – this can only be possible the buildings are built towards the end of the assessment period. People are classed as mobile targets (i.e. they can move into and out of the target zone). If the buildings inside the target zone have an occasional occupancy and people can come and go from those buildings, then by default, people must spend less time in the target zone than the building. According to TRAQ, less than Occasional is Rare. At best, the occupancy rate of people within the target zone could be classed as Occasional but is more likely to be Rare according to TRAQ methodology

- 2.1.6 You cannot generate a High-Risk Rating using TRAQ, when that target has an Occasional occupancy. No matter what the potential consequences maybe, if the target is unlikely to be there when the failure happens, they are unlikely to be impacted.

- 2.1.7 As for public road users on Ferntree Drive, Mr Waymouth has said the road users (including those on the footpath) have an occasional occupancy. Mr Waymouth has also said that the three branches that will fall from the tree before July 2020 are over the subdivided lots. As the public road does not pass through the subdivision, road users including those on the footpath are

unlikely to be impacted by branches that fall into the subdivision. Mr Waymouth is including targets are not in the target zone for the concerns he has listed, this is an incorrect use of the methodology.

- 2.1.7 You cannot generate a High-Risk Rating using TRAQ when target unlikely impacted by the tree or tree part.

2.2 Inconsistencies with STEM

- 2.2.1 Mr Waymouth uses a self-adapted STEM assessment form which introduces words not used or described in the accepted standardised method (STEM is an acronym with the 'S' standing for Standard). Mr Waymouth's version of STEM is not the same as the standardised method used to evaluate the tree by the Council or myself, therefore his evaluation is not directly comparable.
- 2.2.2 In the Mr Waymouth version of the STEM Condition Evaluation, he awarded the tree 69 points. Using the standardised method, I have awarded the tree 87 points (Form: Good 15, Occurrence: Infrequent 15, Vigour & Vitality: Very good 21, Function: Important 15 and Age: 80 yrs + 21).
- 2.2.3 In Mr Waymouth's opinion the tree has a Poor form due to the raising of the canopy; *'its original aesthetic charm has been entirely lost by the raising of its canopy'*. It should be noted that the raising of the canopy was undertaken at the request of the applicant (LUC-2018-86). There is no definition for Poor Form given in the glossary or definition of terms included in the STEM publication. According to STEM; *form requires a comparison of known examples of local trees within the district*. The New Zealand Tree Register (NZTR) holds detailed information on notable trees in New Zealand, there are two Abies listed in Dunedin that are considered 'notable' trees in the context of all of New Zealand. The 'form' of T444 is consistent with if not better than both of those notable examples.
- 2.2.4 The 2001 DCC STEM evaluation records the 'Form' of T444 as 'Very Good', due to pruning works undertaken at the request of the applicant it is possible that the tree has dropped from Very Good to Good or even down to Moderate, but it is unreasonable to consider that the 'Form' of this tree is Poor.
- 2.2.5 Under Vigour and Vitality, Mr Waymouth notes possible future changes due to loss of feeder roots as a result of potential movement of the water table, change in grade and compaction. These potential future changes have not been confirmed, but internet images on Google Street View would indicate that the area in question has actually been used as a driveway and parking area since at least 2009. There is no parking or street access indicated in the proposed changes, therefore it is equally possible that there will be less compaction and an improved growing environment for this tree due to possible future changes.
- 2.2.6 Under proximity, Mr Waymouth has moved the tree from Solitary down to Parkland because it is *'almost part of Ferntree Reserve'*. There is no definition for a Parkland given in the glossary or definition of terms included in the STEM publication. The STEM Form (the score sheet) indicates that a Parkland consists of more than 10+ trees but has less trees than a forest. According to the Oxford Dictionary, a parkland is 'open grassy land with scattered groups of trees' and a forest is 'a large area covered chiefly with trees and undergrowth'.
- 2.2.6.1 Based on Mr Waymouth's use of STEM, almost every tree in the suburban environment could be classed as existing on a Parkland, I do not believe this is the intent or intention of STEM

2.2.6.2 I do not think that T444 can be classed as existing on a Parkland

2.3 Inconsistencies and extrapolation of root distribution

2.3.1 I question the accuracy of Mr Waymouth's root distribution predictions based on his involvement in excavations representing less than 1.5% tree protection zone (TPZ).

Planning Application LUC-2019-61 was an application for works in close proximity to the tree. In that application, the applicant requested to dig a hole 10m² in size. A hole of 10m² represents less than 1.5% of the TPZ for T444 and it would appear that Mr Waymouth is predicting root distribution based that.

2.3.2 There are inconsistencies between Mr Waymouth's point 22 and point 23.

In point 22 of his conclusion, Mr Waymouth lists one of his, main concerns as, '*feeding root loss*' within the TPZ. In point 23 Mr Waymouth says, "... *it can be fairly safely assumed that the effect of this specific activity* [construction activity within the TPZ] *will have no longterm impact on tree health.*"

These two points seem to contradict each other.

2.4 Inadequate mitigation

2.4.1 The suggested replanting offer in Mr Waymouth's report is completely disproportionate to the loss of T444 and it is inconsistent with intent of the DCC to become a net zero carbon city.

2.4.2 The current volume of T444 is approximately 2,300m³. The volume of the suggested replacements (rhododendrons and/or camellias) will eventually grow to become approximately 8.5m³ each (once established to a height of 2m.) The collective mitigation on offer might reach 100m³ of once established compared to the current carbon sequestration potential of 2,300m³ that the applicant is asking to remove.

The number of plants and/or suggested plant species on offer will represent a substantial net carbon loss to the city. If the DCC has any hope of becoming a net zero carbon city then the mitigation on offer needs to at least be eventually capable of replacing that what it has agreed to remove – the number of plants and/or suggested plant species on offer in this report cannot achieve this.

3 Arboricultural comment in regard to the application to remove the T444.

The application is to remove a Dunedin City Council tree due to the potential of it having a high risk of shedding a large limb or leader during storms onto houses that have consent to be built in the future, and the consequences of limb failure may cause harm to people and property.

3.1 There are inconsistencies with the applicant's risk assessment. To achieve a High-risk rating Mr Waymouth has over-stated the occupancy rating and included targets that are not in the target zone. When the same data is correctly applied to the TRAQ methodology the risk rating for T44 is Low.

3.1.1 'Low' is the lowest risk rating that can be generated using TRAQ where the tree retained (if the tree is removed, there is no risk posed by the tree, because the tree is no longer there). A tree can be retained indefinitely at a Low risk if

it is managed correctly. Mr Waymouth has provided a mitigation/management option for retaining the tree and maintaining the risk at Low [Point 24, option 1; Prune and install a cable bracing system]

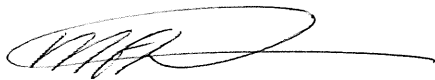
- 3.1.2 T444 currently poses a Low risk to people and property and a Low risk rating can be maintained indefinitely if the tree is managed. I am in agreement with Mr Waymouth, that some minor end-weight/reduction pruning on the three limbs identified and the installation of a cable bracing system could maintain the risk associated by those limbs at Low.
- 3.2 I am unable to comment on the number, size, shape or position of the houses that have consent to be built in the future.
- 3.3 I am unable to comment position of the house shown in the Paterson Pitts plan (titled: Services and Right of Way of proposed Subdivision of Pt Lot 1 DP 11410) included in Mr Waymouth's report.

4 Recommendations in relation to this application

- 4.1 There are inconsistencies with the applicant's risk assessment. When the same data is correctly applied to the TRAQ methodology the risk rating for T44 is Low. I believe that T444 can be retained and managed, so it continues to pose a Low risk to people and property
- 4.2 I recommend that the application to remove T444 is declined

As per your request, I have provided a relatively concise report. If you require an explanation of any of the recommendations provided, or documentary evidence to support any of the content in this report please do not hesitate to ask.

Yours sincerely



Mark Roberts
Roberts Consulting Ltd

Madeline Seeley

From: mark@robertsconsulting.co.nz
Sent: Monday, 14 October 2019 10:59 a.m.
To: Madeline Seeley
Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Maddy - I trust all is well

In response to your question; What would your advice be?

Because tree is healthy enough to be pruned, there is no reason for me not to support a 'minor works' pruning application - the pruning and installation of cable support(s) recommended by Peter Waymouth would fall within minor works (I believe that the Council has approved cable support systems under minor works applications in the past).

Because all 'proposed work must be carried out by an experienced and qualified arborist in accordance with recognised arboricultural practices and pruning standards (standard clause one), I would not specify which branch, trunk or stem to prune or support and/or what support system to use, therefore I don't think/recommend that you/the Council should make approval to that level. Therefore if an application for maintenance on scheduled tree T444 was made to Council, and I was tasked by the Council to assess the tree and make recommendations, my recommendations would read something like this:

As per the resource consent application XXX, the following pruning recommendations and conditions of consent apply and shall be adhered to:

- Condition 1. All proposed work must be carried out by an experienced and qualified arborist in accordance with recognised arboricultural practices and pruning standards.
- Condition 2. Pruning shall consist of Crown Reduction works only. Collectively all pruning activities shall not remove more than 20% of the live foliage of the tree.
- Condition 3. Crown Cleaning is not required and shall not be undertaken
- Condition 4. Crown Thinning is not required and shall not be undertaken
- Condition 5. Crown Raising is not required and shall not be undertaken
- Condition 6. Crown Reduction may be undertaken if required and shall involve the use of branch-end reduction pruning to reduce the overall length and/or end-weight of selected branches to create the required crown shape. Branches being reduced in length shall be pruned back to live lateral branches (side branches) that are at least one third the diameter of the parent branch. The overall shape and form of the branch must be taken into account during pruning.
- Condition 7. A system of cable-brace supports may be installed to support and restrict excessive movement of selected stems. The cable-brace support system shall be designed and manufactured specifically for tree support and shall be positioned and installed in accordance with the manufacturers instructions

Note, Crown Reduction is the process of reducing selective branches in length, in this instance Peter has identified 3 branches, so I'd approve the works under 'Crown Reduction' simply because that is the best fit using the words and/or terms available on current Council forms.

I hope that this helps - call me if you need to

M

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 14/10/2019, at 09:30, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Hi Mark,

Campbell (senior planner) wanted me to ask what conditions you would apply where the pruning suggested by Peter Waymouth was applied to be undertaken. It is unclear whether this is in the scope of the current application or whether what is proposed would be 'minor works' but where it is recommended pruning works and conditions could be provided. If the application was to:

Prune the Silver Fir (T444) using reduction cuts on the 3 'shaded sail areas' as shown in the tree risk assessment on page 7, in order to lessen end-weight.

Install steel cabling & bracing systems or similar with a working load limit (WLL) of 4 tonnes at the owner's/risk manager's discretion.

What would your advice be?

This would be a discretionary activity under the ODP and a restricted discretionary activity under the 2GP (Rule [7.3.2.2](#)). I don't think it would be 'minor works' but the same conditions (standard form) could probably still be used?

Thanks,
Maddy

[<119101407302600857.png>](#)

Madeline Seeley

From: mark@robertsconsulting.co.nz
Sent: Thursday, 12 September 2019 08:28 a.m.
To: Madeline Seeley
Subject: Re: Request for comments - application to remove scheduled tree T444

Morning Maddy - sorry about the typo/word muddle on point 1). The intent of the point is clear but it is messy, it should read; **1) No, the tree does not pose an immediate risk to life or property**

Regards

M

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 12/09/2019, at 08:14, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Thank you for clarifying those points Mark,

Kind regards,
Maddy.

<119091206141400504.png>

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: mark@robertsconsulting.co.nz [<mailto:mark@robertsconsulting.co.nz>]

Sent: Wednesday, 11 September 2019 1:25 p.m.

To: Madeline Seeley

Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Madeline - I'm happy to help

In response to your questions:

1) No the tree does not tree poses an immediate risk to life or property. For a tree to pose an 'immediate risk' the tree or tree part must be in the process of failing (actively failing is the arboricultural term). I have assessed the tree at number 5 Fertree Drive four times from December 2018 and on each occasion I saw no actively failing branches (tree parts), or anything to indicate or suggest that whole tree failure was about to happen. For an 'immediate risk' to be realised, something must exist to be harmed. At my last visit (August 20, 2019), the land at 5 Fertree Drive has no houses or dwellings on it, therefore there could be no risk to property because there was no property there to be harmed. Risk to people is a bit more complicated, obviously there were no people living at 5 Fertree Drive because there were wasn't any houses or dwellings on it. In relation to people on the footpath or driving past on the street, because I saw no actively failing branches (tree parts), or anything to indicate or suggest that whole tree failure was about to happen these was no immediate risk to people on the footpath or driving past on the street.

2) The arborist's report supporting the application does not state that there is an immediate risk to life or property. The arborist's report supporting the application (the Greentrees Report, 03/07/19 written by Peter Waymouth). States that there is a high risk of branches falling from the tree causing harm to people and property within one year. A one-year time frame does not constitute an immediate risk or an emergency and therefore in my opinion there are not sufficient grounds or the ability to trigger and emergency works under the RMA

3) Emergency works do not need to be undertaken on the tree to eliminate risk of falling branches or the tree failing. Emergency works do not need to be undertaken on the tree to eliminate risk because no immediate risk has been identified (by myself or the applicant's arborist).

In relation to standard Council process when receiving an application to remove a tree under emergency works. When a resource consent application to remove a tree under emergency works is sent to me I go out to assess the tree to determine if the tree poses an imminent risk to life or property. Where a tree poses an imminent risk that requires immediate action I report to the Council, the tree owner and/or parties at risk. These steps were taken, process was followed and no immediate risk requiring emergency works were identified.

Ngā Mihi | Kind Regards

Mark

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 11/09/2019, at 10:43, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Hi Mark,

The applicant has contacted me regarding the emergency status of his application to remove the scheduled tree at 5 Fertree Drive. I understand from your arborist's report (received by Council on 22nd August 2019) on this application that you have assessed the tree as having no immediate risk to life or property and that this includes risk from a falling branch/leader/limb of the tree. The applicant has stated that he applied for an emergency removal of the tree and that he has an arborist's report by Peter Waymouth supporting this position. Could you please advise/clarify whether in your opinion:

1. The tree poses an immediate risk to life or property (including the risk from failing branches);
2. The arborist's report supporting the application to have the tree removed claims there is an immediate risk to life or property – such that the emergency provisions of the RMA are triggered and emergency works should be undertaken on the tree; and
3. Emergency works need to be undertaken on the tree to eliminate risk of falling branches or the tree failing?

I have copied and pasted the emergency provisions of the RMA below for reference (section 330).

Kind regards,

Madeline.

<image001.png>

<119091108432500927.png>

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: mark@robertsconsulting.co.nz [mailto:mark@robertsconsulting.co.nz]

Sent: Thursday, 22 August 2019 5:26 p.m.

To: Madeline Seeley

Cc: 2GP Escalations; Luke McKinlay; Parks, Recreation & Aquatics - Consents

Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Maddy - I am unsure if you are back from leave yet.

Attached is my report on T444 (the silver fir on Fern Tree Drive) - based on previous hearings, I've moved some of my content around to make it easier for some of the Councillors to follow. If you have any questions or would like clarification on any of the content then do not hesitate to ask.

I hope all is well. Kind regards

Mark

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 2/08/2019, at 17:08, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Hello,

Please find a memo attached requesting comments for the application to remove a scheduled Fir tree (T444) at 5 Ferntree Drive, Wakari. I am forwarding the applicant's email containing all documents from the application as the arborist's report was missed off the original application (I am yet to save it into ECM).

Please provide comments as soon as possible.

Mark – please find the arborist's assessment undertaken by Peter Waymouth attached, please peer review this and provide an assessment.

Aidan/PARs – as discussed, this tree is on reserve/PARs land and thus is also subject to Landowner approval– I have pointed this out to the applicant (who owns the adjoining property at 3 Ferntree Drive).

Any questions, please get in touch.

Maddy.

<119080215085700604.png>

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: John Phillips <johnmaxphillips@gmail.com>

Sent: Wednesday, 31 July 2019 11:39 a.m.

To: Madeline Seeley <Madeline.Seeley@dcc.govt.nz>
Subject: Fwd: Emergency removal of scheduled tree

Hi Madeline, this is what I originally sent through.

Cheers.

----- Forwarded message -----

From: John Phillips <johnmaxphillips@gmail.com>
Date: Tue, Jul 23, 2019 at 3:27 PM
Subject: Emergency removal of scheduled tree
To: <dcc@dcc.govt.nz>
Cc: Darlene Williams <darlene.williams25@gmail.com>

Hi, please see attached in regard to emergency removal of scheduled tree.

- Covering letter (additional notes)
- Application
- Subdivision consent plan.
- Arborist report.

Please acknowledge receipt of this email.

Cheers

John Phillips.

<Subdivision Construction Plans.pdf><Arborist report.T444.pdf><3 Ferntree Drive - additional notes.docx><Tree application.pdf><LUC-2019-380 Memorandum template.docx>

Madeline Seeley

From: mark@robertsconsulting.co.nz
Sent: Thursday, 10 October 2019 09:10 a.m.
To: Madeline Seeley
Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Maddy - I'm currently in Oz working which is only problem for time... but I don't think this is an issue:

a) in Peters essay he says there were 'only fine feeder roots and no other roots were seen' during the service trench excavations - therefore he's telling us the tree was not compromised by those actions (i.e. there were no structural roots there to cut to compromise - no adverse effect as a result of those excavations)

b) The Patterson Pitts foulsewer pipe is either already in existence (the old house or as a result of the service trench excavations) and therefore there are no adverse effects on the tree, or it hasn't been installed/approved therefore we can position it so no adverse effects are caused

c) as for the water main... because its there and been there, there are no adverse effects in it being there for the tree. If it is scheduled to be replaced then the replacement process may or may not be an issue depending on how the works are undertaken. I believe that have a 70 or 80 year useful life expectancy... it maybe useful to workout/ask when the pipe is due for replacement. If its not for 10 of more years then it's not an issue as we can always manage how and/or where the pipes goes then - if it's scheduled for replacement in the next few years then we can also manage how and/or where the pipes goes - so its still not a significant problem.

If they are saying that the tree has compromised the existing pipe - then it will be up to them to prove that it has (it would pay to check that it hasn't - and front foot that argument by noting something to the effect that there has been no reported issues with the tree affecting the existing water main).

In short - I don't think the services including the water main can be considered as causing 'significant adverse effects' on the tree or the tree onto the services. Peter said there were no roots in his trench, no effects there - if the pipe or pipes already exist, no effects there - if the pipe or pipes are not currently in the soil, then we can place them so not to cause adverse effects - if there isn't a history of the tree compromising the water main, then there is no effects there and if the water main needs to be replaced then then we can place it so not to cause adverse effects.

if you need more, happy to help, just email me your questions, I'll not get them until about 7PM but I will respond to them at about this time tomorrow morning.

M

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 10/10/2019, at 07:48, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Hi Mark,

Hope you are well.

I have been working on the notified report this week for 5 Ferntree Drive, I have an extension to finish it until Monday. One of my matters of discretion (at least under the 2GP) is infrastructure. The

applicant and Mr Waymouth place some weight on the existing water main running close to the trunk of the tree and the more recent services that have gone in. The Patterson Pitts survey map shows the foulsewer pipe running within the tree protection zone too. The conclusion is that this affects the stability/health of the tree (the applicant states this in the word document attached to the application). I am unsure how long the water mains in Ferntree Drive have been there – but I imagine since the inception of the suburb itself. I am unaware of any adverse effect that the tree has on this infrastructure (there needs to be a 'significant adverse effect' in terms of the 2GP wording). But in terms of the effect of the existing water main and more recent excavations (as shown in the 'photo essay in Mer Waymouth's report) on the tree itself - I don't think you address this point in your comments? Unsure whether it is necessary or not – what do you think? Or have I missed you addressing this point in your evidence?

Kind regards,
Maddy.

[<119101005484000339.png>](#)

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: mark@robertsconsulting.co.nz <mark@robertsconsulting.co.nz>
Sent: Tuesday, 24 September 2019 11:44 a.m.
To: Luke McKinlay <Luke.McKinlay@dcc.govt.nz>
Cc: Madeline Seeley <Madeline.Seeley@dcc.govt.nz>
Subject: Re: Request for comments - application to remove scheduled tree T444

Yep, I agree; its safe to say that a 15% reduction of the three identified branches would be unlikely to effect the amenity value of this tree. If one were to reduce the entire tree by 15% (aprox 6.5m) then that statement would be untrue - and... a crown reduction of that type (the reduction of the entire crown) would require a regular and ongoing maintenance programme to maintain the tree at that size and shape.

M
Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 24/09/2019, at 08:36, Luke McKinlay <Luke.McKinlay@dcc.govt.nz> wrote:

Thanks Mark.

Very helpful. I think I can fairly safely say a 15% reduction is unlikely to have a highly noticeable effect on amenity values of this tree.

Cheers,

Luke

[<119092406360700911.png>](#)

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: mark@robertsconsulting.co.nz <mark@robertsconsulting.co.nz>

Sent: Monday, 23 September 2019 5:34 p.m.

To: Luke McKinlay <Luke.McKinlay@dcc.govt.nz>

Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Luke - this is hard to say as there is no set industry standard in relation to this.

From memory Peter is talking about branch end reduction (as in reducing the length of branches that he has concerns about) but he'll call it something else. The physics behind this would suggest a 10 to 15% reduction in length will increase the overall holding capacity of the branch by about 25 to 30%. The science behind this is not tested, or at least not easily accessible (so don't quote me on the numbers). If Peter is talking about a 15% branch end reduction on a 15m stem - then we are talking about 2 to 2.5m coming off the end. If done well, I doubt anybody would notice a pruning event of that amount on that tree. If he goes old school and is suggesting a branch end reduction [terminal back to a lateral of no less than one third the diameter of the parent stem] then at worst we are talking 4 maybe 5m coming off the end of a 15m stem. An arborist and/or observant other would notice that, but again, I doubt Joe and Joanne Public would see a pruning event on of that size on that tree.

Branch end reduction work to shrink the 'reach' of the sail area is acceptable (i.e. to reduce the 'lever-arm'), but thinning to allow air movement through the 'sail area' is a no go - there is a better than good chance that crown thinning will increase the chances of branch failure (so the removal of the end bits, yes/maybe - removal on the internal bits, no/not at all)

Call me if you need to - I am in town all week

M

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 23/09/2019, at 17:03, Luke McKinlay
<Luke.McKinlay@dcc.govt.nz> wrote:

Hi Mark,

Mr Waymouth offers the option of reduction cuts on the 3 'shaded sail areas' of the Silver Fir (T444). How much is likely to come off with this approach? Just trying to get a sense of effects of this.

Cheers,

Luke

[<119092315035000863.png>](#)

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: mark@robertsconsulting.co.nz <mark@robertsconsulting.co.nz>

Sent: Thursday, 22 August 2019 5:26 p.m.

To: Madeline Seeley <Madeline.Seeley@dcc.govt.nz>

Cc: 2GP Escalations <2gp.escalations@dcc.govt.nz>; Luke McKinlay <Luke.McKinlay@dcc.govt.nz>; Parks, Recreation & Aquatics - Consents <par.consents@dcc.govt.nz>

Subject: Re: Request for comments - application to remove scheduled tree T444

Hi Maddy - I am unsure if you are back from leave yet.

Attached is my report on T444 (the silver fir on Fern Tree Drive) - based on previous hearings, I've moved some of my content around to make it easier for some of the Councillors to follow. If you have any questions or would like clarification on any of the content then do not hesitate to ask.

I hope all is well. Kind regards

Mark

Mark Roberts | +64 21 508 255 | www.robertsconsulting.co.nz

On 2/08/2019, at 17:08, Madeline Seeley <Madeline.Seeley@dcc.govt.nz> wrote:

Hello,

Please find a memo attached requesting comments for the application to **remove a scheduled Fir tree (T444) at 5 Ferntree Drive, Wakari**. I am forwarding the applicant's email containing all documents from the application as the arborist's report was missed off the original application (I am yet to save it into ECM).

Please provide comments as soon as possible.

Mark – please find the arborist's assessment undertaken by Peter Waymouth attached, please peer review this and provide an assessment.
Aidan/PARs – as discussed, this tree is on reserve/PARs land and thus is also subject to Landowner approval– I have pointed this out to the applicant (who owns the adjoining property at 3 Ferntree Drive).

Any questions, please get in touch.

Maddy.

[<119080215085700604.png>](#)

If this message is not intended for you please delete it and notify us immediately; you are warned that any further use, dissemination, distribution or reproduction of this material by you is prohibited..

From: John Phillips <johnmaxphillips@gmail.com>
Sent: Wednesday, 31 July 2019 11:39 a.m.
To: Madeline Seeley
<Madeline.Seeley@dcc.govt.nz>
Subject: Fwd: Emergency removal of scheduled tree

Hi Madeline, this is what I originally sent through.

Cheers.

----- Forwarded message -----

From: John Phillips <johnmaxphillips@gmail.com>
Date: Tue, Jul 23, 2019 at 3:27 PM
Subject: Emergency removal of scheduled tree
To: <dcc@dcc.govt.nz>
Cc: Darlene Williams
<darlene.williams25@gmail.com>

Hi, please see attached in regard to emergency removal of scheduled tree.

1. Covering letter (additional notes)
2. Application
3. Subdivision consent plan.
4. Arborist report.

Please acknowledge receipt of this email.

Cheers

John Phillips.

<Subdivision Construction Plans.pdf><Arborist report.T444.pdf><3 Ferntree Drive - additional notes.docx><Tree application.pdf><LUC-2019-380 Memorandum template.docx>