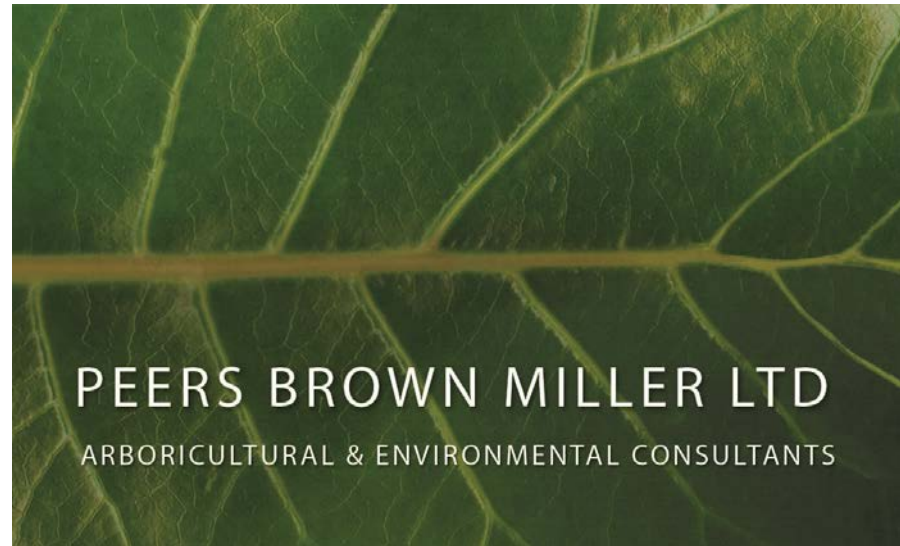


## **Appendix I – Peers Brown Miller: Arboricultural Report – Summary of Findings**



## **ARBORICULTURAL REPORT – Summary of Findings**

Project: Whangarei District Council, PC 129, STEM Assessments

Prepared For: David Badham, Barker & Associates

By: Simon Miller

Date: 05.02.18

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## 1.0 Introduction

The purpose of this report is to document and summarise the various issues, results and recommendations arising from the assessment of a number of scheduled trees on behalf of Whangarei District Council. The assessments were undertaken between 11.12.17 and 14.12.17. More than fifty trees/ tree groups were assessed using the STEM assessment system.

The results of the individual STEM assessment reports are summarised in the following document;

- PC129 Submission Notable Trees- STEM assessment report 07.02.18

## 2.0 Background

Prior to the assessments being undertaken a number of tree owners and/ or submitters within the community had submitted comments to WDC regarding their concerns in relation to the scheduled trees. Comments ranged from a given submitter's opinion that a tree on the Heritage Tree List did not meet the criteria for scheduling, to concerns about the safety of the given tree, to submitters wanting to ensure that a given tree was included on the List.

During the subsequent site visits and assessments many of the submitters and/ or tree owners were met on site and their various issues and concerns were discussed.

## 3.0 Summary of Submitters Concerns

As noted in Section 2 above many submitters considered that a given scheduled tree did not meet the criteria for scheduling. As the accompanying STEM assessment reports demonstrate however, all of the assessed trees clearly met the criteria for scheduling. The other most common concern related to the perceived safety of the trees. During discussions with submitters and/ or tree owners on site this concern typically arose for one or all of the following reasons;

- Proximity of a tree's canopy or scaffold stems/ branches to a dwelling

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- A sense that nothing could be done to alter (prune) the canopy of a scheduled tree without resource consent (difficult) and costs (significant)
- A sense that the size of the tree made it inherently unsafe and inappropriate in an urban context
- Root activity in a driveway or potential for roots to harm underground services

The first two points above generally led to irritation on behalf of the submitter/ tree owner and a notion that nothing could be done without encountering difficulty. Compounding this was the damage (perceived or otherwise) that the tree was doing to a roof of a dwelling or the dwelling itself. Ill will towards the tree, or its scheduled nature, tended to result with the Heritage Tree Rules and/ or the 'Council' in the gun.

Again, based on discussions during site visit, the above irritation or sense that 'nothing can be done' led to the third point i.e. that the size of the tree made it inherently unsafe and inappropriate in an urban context. There is no doubt that a number of the trees are very large and stand in close proximity to existing dwellings or are situated in relatively small urban gardens.

Regarding problematic root activity this was only physically apparent in a couple of instances, otherwise it was not a concern that was backed up with physical evidence (i.e. I was not presented with documented details or pictures of the damage to underground services).

## 4.0 STEM Evaluation System

The STEM evaluation system is composed of three sections – Condition (Health), Amenity (Community Benefit) and Notability (Distinction).

Each of the three sections is further broken into additional categories against which tree trees are assessed and scored. The rationale behind the scoring of each category is explained in the publication titled STEM - A Standard Tree Evaluation Method, by Ron Flook. Those descriptions have been studied by Peers Brown Miller Ltd and, accordingly, our/ my evaluations reflect our understanding of the rationale relating to each of the categories.

### 4.1 Condition (Health) (*ref: pg's 17-21 STEM guidelines*)

The criteria assessed in this section comprise of the following;

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- Form
- Occurrence
- Vigour/ Vitality
- Function (Usefulness) i.e. is the species a source of food for birdlife/ fauna/ invertebrates? Does it provide for roosting or nesting habitat for bird species? Does it perform a useful role in terms of wind modification, shading, screening and pollution/ toxin absorption?
- Age

The assessment of Form, Occurrence, Vigour/ Vitality and Age was found to be, in the main, broadly consistent across the original (1996) STEM assessments and the 2017 STEM assessment.

From an arboricultural perspective these criteria are not typically contentious. While form could be said to be in the eye of the beholder, assessment of this criterion is generally based on the physical and structural integrity of the canopy (i.e. extent of fractures, defects, pruning history etc) rather than whether it's a "nice looking" tree or not.

Occurrence, Vigour and Age are all evidential based assessments.

However, with the assessment of Function this generally scored higher in the 2017 assessment than previously. This is primarily due to an increase in documented evidence with regards to the roles trees play and their contribution to the urban forest. In the main this relates to moderation of adverse climatic effects, amelioration of wind, stormwater and pollutants, maintenance of ecological habitats and pathways and improved community health outcomes

## **4.2 Amenity (Community Benefit) (ref: pg's 23-27 STEM guidelines)**

The criteria assessed in this section comprise of the following;

- Stature
- Visibility
- Proximity (to other trees)
- Role i.e. how a particular scene or place would look without the tree; does it contribute to the setting?; does it lend serenity to an urban or rural space?; does it have an association with tradition?; is it attractive to fauna?
- Climatic Influence

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Stature, Visibility and Proximity again are generally not contentious – all are measurement based. Historically, Role and Climatic Influence may have been scored lower. As with Function in the Condition section an increase in documented evidence with regards to the roles trees play and their contribution to the urban forest. In the main this relates to moderation of adverse climatic effects, amelioration of wind, stormwater and pollutants, maintenance of ecological habitats and pathways and improved community health outcomes saw the trees in the 2017 STEM assessment scoring higher than previously.

## 4.3 Communicating/ Explaining STEM method to Stakeholders

A number of submitters/ tree owners were met on site during the STEM assessment process. As much as was practicable the STEM method was discussed and its vagaries explained. It was generally found that once a specific cause for concern was acknowledged (e.g. a problematic branch; the extent of a canopy overhang over a roof) and a potential solution discussed (generally pruning) the overall benefits of trees (i.e. Function, Role, Climatic Influence) were agreed upon and supported.

From an arboricultural perspective, the general ‘take-away’ from the discussions was that a Heritage Tree rules environment (as per District Plan) that allowed scheduled tree owners a greater degree of latitude in the basic management of their trees without recourse to Resource Consent would engender a more positive response to the presence of a scheduled tree on their properties (Not in all cases obviously. A number of submitters just wanted the tree gone).

## 5.0 Conclusions & Recommendation

In my arboricultural experience, there is often a fear or a concern among those in the statutory arm of urban forest or tree management that too much latitude in pruning rules in particular would see a wholesale desecration of the canopies and stature of scheduled trees. I do not share this opinion. Not out of an unrealistic idea of tree owners’ appreciation of form or aesthetics, simply that large scale pruning is often difficult and costly.

Similarly, it is my arboricultural opinion, that the use of an arborist should not be mandated in the rules – in my experience most people simply do not want to, or are fearful of, getting more than a metre or two above ground with a saw or chainsaw. They would rather employ the services of an arborist. However, in my arboricultural experience and also as a result of talking to submitters during this process, the feeling that ‘they could if they wanted to’ would engender a more positive attitude towards the scheduled trees on their properties.

Once again it is my arboricultural experience that if people feel they have a degree of control over (their) scheduled trees that is not unduly constrained by a District Plan rules process they are less likely to seek the removal of those trees. It is my professional opinion that it is

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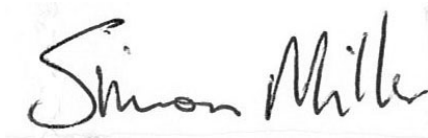
incumbent upon those of us working in the statutory arena not to make people 'hate' or become very irritated or agitated by their protected trees.

It is therefore recommended that the scale of controls relating to scheduled trees would range from loose control – small to mid-level pruning (i.e. Permitted up to 100mm, no arborist required) to very tight control – tree removal; significant alteration of rootzone (Discretionary).

## 5.1 Example of 'Permitted' Scheduled Tree Pruning Rule

### Tree trimming or alteration

- (1) The maximum branch diameter must not exceed 100mm at severance.
- (2) No more than 20 per cent of live growth of the tree may be removed in any one calendar year.
- (3) The works must meet best arboricultural practice (however use of arborist not mandated – i.e. could be undertaken by an owner who has researched arboricultural best practice).
- (4) All trimming or alteration must retain the natural shape, form and branch habit of the tree.



Simon Miller  
Peers Brown Miller Ltd

# Peers Brown Miller Ltd

Arboricultural & Environmental Consultants

Appendix 1 – Auckland Unitary Plan: Operative in Part, Chapter D13 – Notable Trees Overlay