Before the Hearings Panel At Porirua City Council

Under Schedule 1 of the Resource Management Act 1991

In the matter of the Proposed Porirua District Plan

Between Various

Submitters

And Porirua City Council

Respondent

Statement of supplementary arboricultural evidence of Leon Saxon on behalf of Porirua City Council

Date: 2 December 2021

INTRODUCTION:

- 1 My full name is Leon Glen Saxon. I am employed as a consultant arborist by Arborlab Consultancy Services Ltd.
- 2 I have read the evidence of Mr Jeremy Partridge.
- I have been instructed by the Hearing Commissioners to undertake Expert Conferencing with Mr Partridge, and together we have prepared a Joint Witness Statement (Appendix A).
- I have prepared this statement of supplementary evidence on behalf of the Porirua City Council (**Council**) in respect of technical related matters arising from the evidence of Mr Partridge and points of clarification regarding my original evidence and issues discussed in the Joint Witness Statement.
- 5 Specifically, this statement of evidence relates to the matters in Chapter TREE Notable Trees.
- 6 In addition, this statement addresses a minor correction to my Statement of Evidence.
- 7 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS, EXPERIENCE AND CODE OF CONDUCT

- 8 My original statement of evidence sets out my qualifications and experience.
- 9 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2014.

SCOPE OF EVIDENCE

- 10 My statement of evidence addresses the following matters:
 - 10.1 Definition of the Root Protection Area
 - 10.2 Permitted Activities in the Root Protection Area (RPA) and Standards TREE-S1 and TREE-S2.
 - 10.3 Error in my original statement of evidence regarding the address for TREE-008.

Definition of Root Protection Area

- 11 Following a review of Mr Partridge's evidence and having participated in expert conferencing together, I have reached the conclusion that the alternative method for defining the RPA (that being 12 X the trunk or stem diameter measured at 1.4m above ground level) is appropriate for inclusion within the PDP.
- While both methods have the potential to provide varying results for root protection areas, there is sufficient evidence to suggest that the 12 X stem diameter method provides a more consistently accurate depiction of a tree's root system. While neither method is entirely accurate in determining the actual location of a tree's roots, I acknowledge that any tree assessed to be worthy of scheduling as notable warrants a high level of protection.
- It is my opinion that the diagrams and wording as proposed in the PDP are still useful for laypersons to refer to as an initial consideration. It is likely that the determination of the RPA will require input from an experienced arborist.

Permitted Activities and Standards TREES-S1 and TREE-S2

During our expert conferencing, Mr Partridge and I discussed various alterations to the wording of Standards TREE-S1 and TREE-S2. These alterations were agreed between both parties as a reasonable compromise to satisfy the relief sought by Mr Partridge. The Joint Witness Statement is provided as Appendix A.

Error Regarding TREE-008

- I have read the Submitter Tabled Letter of Thomas and Claire Clark and acknowledge an error at paragraph 36 of my Statement of Evidence.
- At paragraph 36 of my statement of evidence I referred to TREE-008 as being located at 22 Whanake Street. The address should have read 24 Whanake Street.

Date: 2 December 2021

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Joint Witness Statement Notable Trees

Leon Saxon and Jez Partridge areas of agreement and disagreement between expert witnesses

Root Protection Area (RPA)

Mr Saxon and Mr Partridge discussed the issue of the definition of the RPA. Mr Partridge preferred relief is that the District Plan solely uses the 12 times stem diameter method as supported by the NZ, AUS and UK Arboricultural Associations and recommended by the relevant National Standards of those countries. Mr Partridge believes this is the most appropriate method to use in the District Plan because it is evidence based and represents best arboricultural practice. Mr Saxon believes that the definition currently proposed in the PDP is simpler for laypeople to understand and apply, however acknowledges that trees with a notable status warrant a high level of protection.

Following discussions Mr Saxon and Mr Partridge agreed to compromise on the proposed RPA definition by combining Council's preferred RPA method with the 12 times stem diameter method as shown in the agreed proposed RPA definition below.

Permitted activities within the RPA and Arborist qualifications required to undertake, supervise and report on satisfactory adherence to tree work standards.

Mr Saxon and Mr Partridge discussed the above issues. Following these discussions, recommended changes to Standards Tree S1 and Tree S2 have been agreed to, and are shown in Tables 2 and 3 below.

Table 1: Relief sought and agreement reached

Issue	Jez Partridge relief sought	Compromise agreed between Mr Saxon and Mr Partridge
District Plan Definition of RPA	The RPA shall be calculated in accordance with the requirements of the most current version of Australian Standard 4970 - Protection of Trees on Development Site (12 times stem diameter), and/or the equivalent NZ/AUS Minimum Industry Standard	See agreed RPA definition below
Use of hydrovac within RPA	Hydrovac is not allowed within the RPA of a Notable Tree	See agreed Tree S1 changes below
Hand digging within the RPA	This is not allowed apart from for small exploratory holes using a trowel or small spade undertaken by a L6 qualified arborist	See agreed S1 changes below
Permitted activities within the RPA	All activities within the RPA area a Discretionary activity. Generally a L6 arborist will be required to prepare an Arb Method Statement to cover	See agreed S1 changes below

Minimum Arborist qualifications required to confirm specific tree conditions	proposed works and require adequate mitigation if allowed. All works within the RPA to be supervised or undertaken by a L6 arborist A L4 qualified arborist holding a current tree risk certification such as TRAQ, QTRA, or VALID may make a determinations as to whether a tree or any of its parts are dead or dangerous such that the tree or parts of can be removed as a permitted activity.	See agreed S1and S2 changes below
10% reduction of RPA is considered a minor encroachment.	Discretionary activity: RPA has the potential to be reduced by up to 10% dependent upon the advice and any offset proposed by a L6 qualified arborist.	See agreed S1-2 changes below

Mr Saxon and Mr Partridge agreed changes to District Plan Root Protection Area definition, and Tree S1 and S2 Standards.

Root Protection Area

Means the circular area surrounding a notable tree measured from the base of the trunk to:

- a. the outer most extent of the greatest branch spread/dripline; or
- b. half the height of the tree; or
- c. trunk/stem diameter* multiplied by 12 (measured at 140cm height)

Use whichever is greater of the three above methods. *For multi-stemmed trees the square root of each stem is added and the square root of the total is multiplied by 12. The maximum RPA radius must be no greater than 15m and no less than 2m

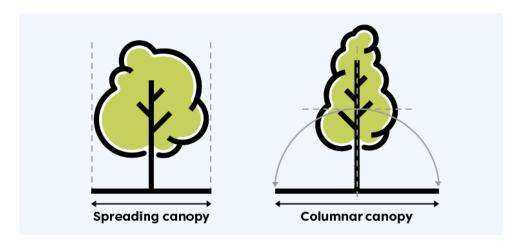


Table 2: TREE-S1 as proposed in PDP and recommended changes

As Proposed in PDP TREE-S1 – Activities in the root protection area of a notable tree.	As recommended following Expert Conferencing TREE-S1 Activities in the root protection area of a notable tree
1. The works are undertaken or supervised by a technician arborist.	1. The works are undertaken or directed by a technician arborist and;
2. Any machinery associated with undertaking the earthworks is only operated on top of paved surfaces and/or ground protection measures.	2. Any machinery associated with undertaking the earthworks is only operated on top of paved surfaces and/or ground protection measures as specified by a technician arborist and;
3. Any excavation must be undertaken by hand-digging, air spade, hydro excavation, or drilling machine where under the protected root zone at a depth of 1m or greater.	3. Any excavations must be undertaken using hand-digging, air excavation or hydro-excavation methods and not exceed an area greater than 1 square metre. Directional drilling shall be undertaken at a depth of 1 metre or greater when within the Root Protection Area of a notable tree
4. Works involving root pruning must not be on roots greater than 35mm in diameter at the point of cut.	and; 4. Works involving root pruning must not be on
5. Works do not create new impermeable surfaces (including sealing, paving, soil compaction), buildings or structures within	roots greater than 35mm in diameter at the point of cut, and must be undertaken by a technician arborist and;
the root protection area. 6. The works shall not affect any more than 10% of the trees protected root zone.	5. Works do not create new impermeable surfaces (including sealing, paving, soil compaction), buildings or structures within the root protection area and;
•	6. Any of the above listed works must not affect any more than 10% of roots within the tree's root protection area.

Table 3: TREE-S2 as proposed in PDP and recommended changes

As Proposed in PDP Tree-S2 - Trimming and pruning of a notable tree	As recommended following Expert Conferencing Tree-S2 - Trimming and pruning of a notable tree
1. The maximum branch diameter must not exceed 50mm at severance unless it is the removal of deadwood.	1. The maximum branch diameter must not exceed 50mm at severance unless it is the removal of deadwood, and;
2. The works are undertaken or supervised by a works arborist.	2. The works are undertaken or supervised by a works arborist and;
3. All trimming or alteration retains the natural shape, form and branch habit of the tree.	3. All trimming or alteration retains the natural shape, form and branch habit of the tree and;4. No more than 10% of live growth of the tree may be removed in any one calendar year.

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Leon Saxon	Jeremy (Jez) Partridge
Date: 01 November 2021	Date: 01 November 2021