

PEERS BROWN MILLER LTD

Arboricultural & Environmental Consultants

ARBORICULTURAL MEMO – WORKS WITHIN ROOT ZONE OF TREES IN YATES RESERVE, MANGERE

Prepared for: Resource Consent Planner – Auckland Council
Cc: Wang & Zhong Family Investments
By: Simon Webb
Date: 19th June, 2017

1.0 Background

An application for consent to redevelop the property at 77 Yates Rd, has been lodged with Auckland Council. The Council have subsequently sought information on the aspects of the proposal involving arboricultural matters. The activities requiring such consideration are proposed works within the root zone of one protected tree that stands within Yates Reserve, Mangere.

Peers Brown Miller Ltd. has been engaged by the Applicants to undertake an assessment of environmental effects of the proposed works on that protected vegetation. This report serves to provide that assessment and support the application for Asset Owner's Approval for works within the root zone of the protected tree within Yates Reserve.

2.0 The Proposal

The applicants propose to redevelop the property whereby the existing dwelling would be demolished or removed and a new motel would be constructed in its place. The vehicle crossing would be removed and reinstated to footpath and grass berm. The existing vegetation within the property is non-protected. With respect to the protected trees the proposed activities would include:

- construction of a car park at the rear of the building.

*Note: No drainage plans have been supplied, so this aspect of the proposal has not been assessed.

3.0 Plan References

The following plan, prepared by Square Tomato Architects was supplied for the purposes of this assessment:

- New Motel
77 Yates Rd, Mangere
For Wang & Zhong Family Investments
Job No 16038
Drawing No T101

4.0 Relevant Statutory Framework – Auckland Unitary Plan (OP)

The protected trees affected by this proposal are located within a Reserve; therefore, activities affecting the tree are addressed in the ‘Trees in Open Space Zones’ section of the Auckland Unitary Plan. The relevant ‘Activity’ expected to be applicable to the assessment of this proposal is tabulated below:

Table E16.4.1 Activity Table

Activity		Activity Status
(A7)	Works within the protected root zone (that meet Standards E17.6.3)	P

5.0 Description of Affected Vegetation

A total of two trees, tabulated below, are captured in the assessment of the proposed activities. The table describes the tree by species, dimension, age, and condition, with a brief comment.

Tree No.	Species	Dimensions (canopy = radius)	Protected	Comments
1	Silver Birch <i>Betula pendula</i>	Height: 8.5m Girth: 980mm Canopy: 5.0m	Yes	Mature. Good condition, form and structure.

6.0 Assessment of Works in Dripline of Street Tree

The proposal includes works on the periphery of Tree 1. Providing that the Standards in Section E16.6.2 of the Unitary Plan can be met, these works would be a 'Permitted Activity'. It is intended to abide by the standards defined in Section E16.6.2 of the Unitary Plan.

It has been assumed that the excavation for the car parking area would occur right up to the boundary. The Silver Birch tree is 3.0m distance from that boundary, with approximately 2.0m encroachment of the root zone area into the private property. At a distance of 3.0m, it is expected that only small tree roots would be encountered. The total root zone area of the tree affected by the excavation is less than 20%, therefore the activity would be permitted if it was undertaken with the supervision of an arborist.

6.1 General Methodology for Excavation and Construction of New Carpark Area

1. The Council Manager for Parks, Sport and Recreation would be notified prior to commencing work.
2. All initial excavation within the root zone of the protected tree would be undertaken with hand tools, to a depth of at least 300mm.
3. This activity would be supervised and monitored by an appropriately qualified site arborist.
4. Any roots encountered would be severed cleanly to the excavated face.
5. Thereafter, an excavator may be utilised, using a non-tined bucket (straight blade).
6. The excavator would operate from outside the root zone area.
7. Immediately after excavation of a section, geotextile cloth would be pegged to the excavated face and root zone area as a permanent fixture. This would cover severed root ends to protect them from desiccation and contamination by concrete.

6.2 Calculation of Root Zone Affected

Works within Root Zone	Tree 1
Tree Canopy Radius	5.0m
Total Root Zone Area	79m ²
Area of Works within Root Zone	12m ²
Portion of Root Zone Area Affected	15%

6.3 Unitary Plan Standards

E16.6.2. Works within the protected root zone

Standard	Complies	Will Comply
(2) For roots greater than 60mm but less than 80mm in diameter:		
(a) excavation undertaken by hand digging, or air spade, or hydro vac or machine excavator within the protected root zone with direction and/or supervision of a qualified arborist:	–	Yes
(i) works must not disturb more than 20 per cent of the protected root zone;	Yes	
(ii) works involving root pruning must not be on roots greater than 80mm in diameter at severance;	–	Yes
(iii) any machine excavator must operate on top of paved surfaces and/or ground protection measures;	–	Yes
(iv) any machine excavator must be fitted with a straight blade bucket;		Yes
(v) the Council Manager for Parks, Sport and Recreation must be notified prior to commencing work.	Yes	–

7.0 Conclusion

This report has been prepared to assess proposed activities within the root zone of one protected tree that stands within Yates Reserve. The proposed activities have been assessed against:

- Activity Table E16.4.1 and Standards E16.6.2 (2) of the Auckland Unitary Plan

The protective measures outlined in Sections 6.3 can be achieved with appropriate commitment to their implementation. If the works are carried out in accordance with those measures, it has been assessed that the proposed works would qualify as a **Permitted Activity**.

Please contact Peers Brown Miller Ltd if any further arboricultural input is required.



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Tree 1 – Silver Birch