

Attachment 3 – Landscape

Memorandum

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Attention: Daniel Shao
Company: Woolworths NZ
Date: 21 February 2024
From: Mark Brown
Message Ref: Proposed Woolworths Development Madras St - CCC S92 Request Landscape Response
Project No: BM240948B Woolworths Madras St

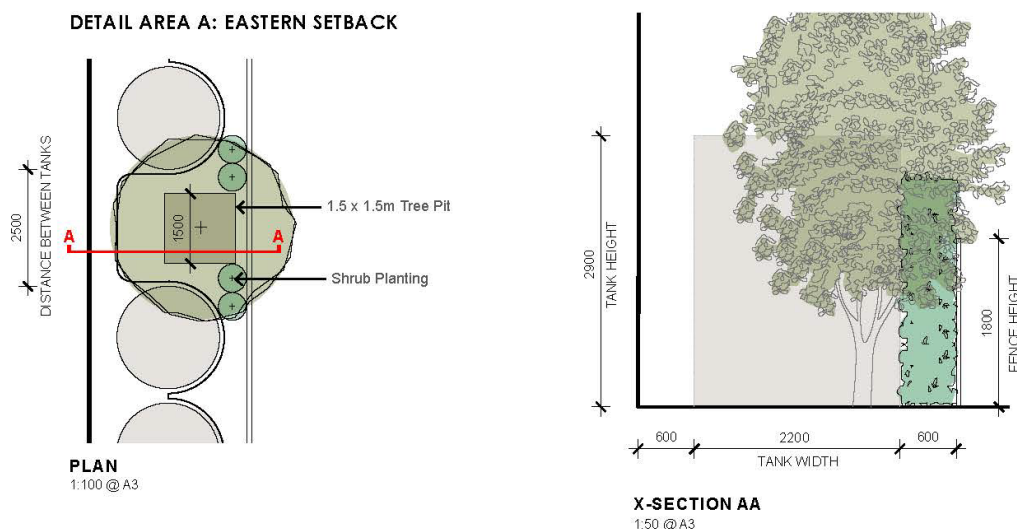
Christchurch City Council has requested further information and provided feedback related to landscape matters in their s92 request. Our responses are detailed in the following memorandum.

Also attached is a revised Landscape Concept Design Report, which includes revisions discussed in the following responses. Revisions are identified with red clouded lines.

S92 / RFI 8. Please provide sketches or cross sections that show how the proposed hedges and tree planting are to be arranged against the east and southern building elevations. No details are provided.

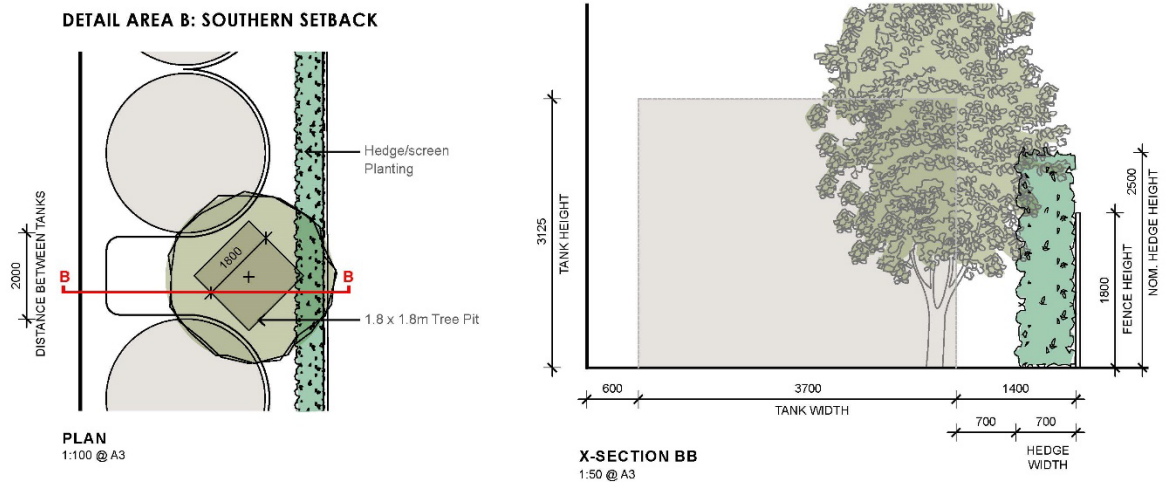
In addition to the rendered image of the southern boundary setback area shown on page 13 of the Landscape Design Report originally submitted with the resource consent application, detail plans and cross sections for the eastern and southern setback are illustrated below and appended to the attached updated Landscape Concept Design Report.

The **eastern boundary setback** incorporates a 2.2m diameter, 2.9m high tank, specimen tree located in a nominal 1.5m x 1.5m wide tree pit within a nominal 3.3m to 3.4m wide setback width. Continuous hedge planting is not proposed adjacent to the proposed detention tanks located in the east boundary setback.



Cross Section: Typical East Boundary Setback Arrangement Cross Section

The **southern boundary setback** incorporates a 3.66m diameter, 3.125m high tank, specimen tree located in a nominal 2m x 2m wide tree pit and 2.5m high hedge within a nominal 5.7m to 5.8m wide setback width.



Cross Section: Typical South Boundary Setback Arrangement Cross Section and Detail Plan

S92 / RFI 9. Please explain how are the trees and the water tanks to be co-located successfully. No details are provided.

Please refer to detail plans included in response to RFI 8 above, and appended to the updated Landscape Concept Design Report. These indicate how trees will be located with sufficient tree pit space between the groups of tanks within the eastern and southern setbacks (1.8m x 1.8m pits on the southern boundary, 1.5m x 1.5m pits on the eastern boundary). Pipe runs between tanks will need to be incorporated within the 'inside' half of the respective setback widths. While access is tight, there is space for maintenance access to either side of the tanks within the southern and eastern setback areas

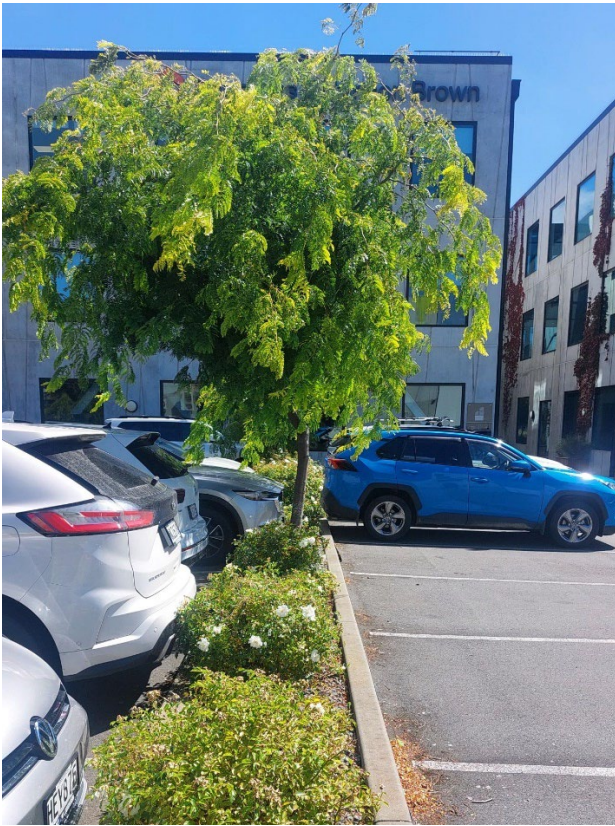
Initial Feedback 1. For successful tree establishment, and tree longevity, all landscape strips should be 1.5m minimum width (internal dimensions) to ensure minimum tree pit soil volumes are achieved (see below for guidance). In particular, the landscape strips in the car park area are not dimensioned but seem to be about 1.0m wide. The landscape strips on the southern boundary (western end nearest to road frontage) are only 1.1m wide. These will not be wide enough to support successful tree establishment.

Size classes	Height (m)	Projected canopy size (m ²)	Soil area (m ²) and volume requirements (m ³)	Minimum berm/planting area width
Small	0 to 6	10.0	3.8	1.5m
Medium	6 to 12	66.9	25.5	2m
Large	12 to 20	185.9	70.8	2.5m
Very large	20+	250.4	95.4	3m

The landscape areas within the car park area are nominally 1.0m wide, along with the 1.1m wide landscape strip on the southern boundary.

Please note we have allowed for revised tree species that fit the 'small' categorisation in the table above, in response to **Initial Feedback 3** below.

In Christchurch, smaller trees are commonly installed in bays and landscape strips within car parks that are less than 1.5m in width and establish well and grow into well-formed mature specimens. The photos below show successful establishment of kowhai trees in .9m to 1m wide planting strips in the car park at 132 Kilmore Street adjacent to the Sanders Robinson Brown building. There are 16 – 20 trees in this car park that have established successfully and are in good health.



Images: Kowhai trees in 132 Kilmore Street Car Park 18 February 2025

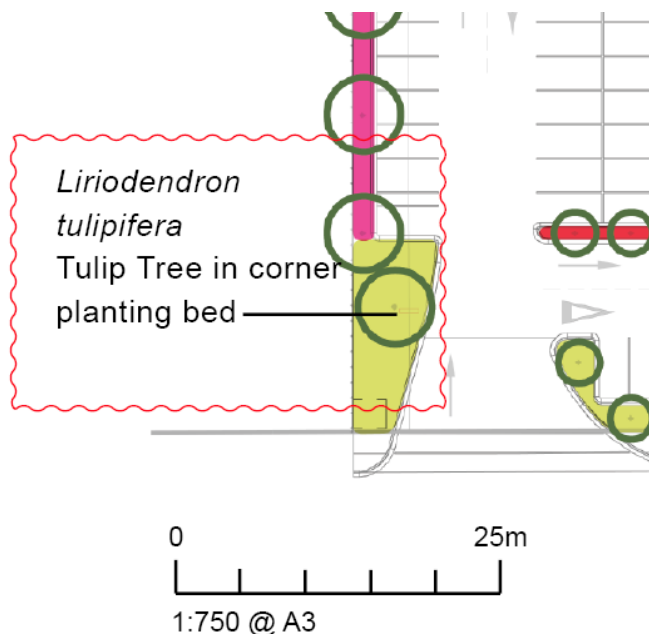
The soil volumes noted in the table included with the s92 request can be achieved by alternative methods and tree pit construction (noting 1m x 1m x 1m tree pits are not uncommon) In this instance, elongated tree pits making use of the length of each planting bed can allow for tree pits with a volume that meets the requirements set out in the table (e.g. 1.1m wide x 3m long x 1.2m deep) and sufficient space for small trees to establish.

The trees proposed in the planting beds at the end of the car park rows are further protected when compared to situations such as those in the photos of 132 Kilmore Street. The tree locations are not in locations that conflict with cars nosing or backing into adjacent car parks that can impact and damage the tree. This commonly happens when trees are located between the ends of car park spaces and is not part of the proposed design.

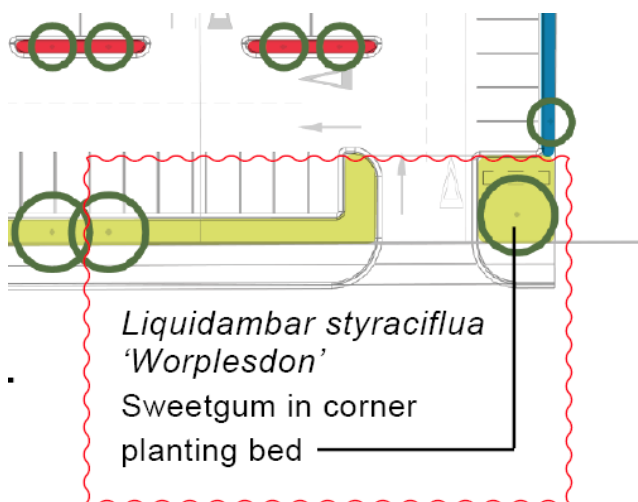
In addition to the above, the southern boundary treatment / landscape strip measuring 1.1m wide between the site / car park and Lot 3 is kept intentionally simple as the final form of development next door is currently unknown, and there remains the prospect that boundary treatment along the southern edge may be amended through a future process to provide improved integration with any neighbouring development.

Initial Feedback 2. The two corners on Madras Street have largish landscape beds – a good opportunity to add some larger trees, such as the *Liriodendron tulipifera* (an upright variety of this tree has been proposed for the small park).

Yes, large to medium size trees are anticipated in these locations, as shown on plan – we have updated the Planting Concept Plan and Planting Palette Species List (refer to images below) to clarify the inclusion of a *Liriodendron tulipifera* in the northwest corner. Please note that the southwest corner of the site adjacent to Madras Street is proposed as the location for the development’s water supply pump and backflow preventer, which practically limits the size of the tree to a medium sized specimen. A *Liquidambar styraciflua* ‘Worplesdon’ is indicated in this location.



Plan Update: *Liriodendron tulipifera* in the northwest corner



Plan Update: *Liquidambar styraciflua* ‘Worplesdon’ in the southwest corner

Initial Feedback 3. Tree species selection – some tree species selections such as lancewoods, Plagianthus, Hoheria and Kowhai will do ok, however the Hinau and the Red Beech will really struggle in these growing conditions and should be replaced with a more suitable tree.

Hinau and Red Beech species have been replaced with smaller *Pseudopanax crassifolius* Lancewood and *Hoheria angustifolia* Houhere / Narrow-Leaved Lacebark within the Area F Car Park species list.

In the Area A East Boundary Planting – Building Setback, Area B South Boundary Planting – Building Setback species lists, Hinau have been replaced with *Magnolia grandiflora* 'Blanchard' Evergreen Magnolia.

Lastly, in the Area E North Boundary Planting – Car Park Setback species list Hinau and Red Beech species and been replaced with *Magnolia grandiflora* 'Blanchard' Evergreen Magnolia and *Plagianthus Regius* Manata / Ribbonwood

Refer to species list updates below and to the attached updated Landscape Design Report page 18.

The original design intention was to include medium sized indigenous species where possible, as well as meeting the operational requirements of the supermarket. Smaller indigenous species are now proposed with in the car park, and medium sized exotic and indigenous species are proposed on the northern boundary and to the southern and eastern supermarket setbacks.

Species	Common Name	Max Height	Width
Area A – East Boundary Planting			
Trees			
<i>Magnolia grandiflora</i> "Blanchard"	Evergreen Magnolia	7m	4m
<i>Plagianthus regius</i>	Manatu / Ribbonwood	8 - 10m	3m
Screen / Hedge			
<i>Coprosma robusta</i>	Karamu	4m	2 - 3m
<i>Griselinia littoralis</i> 'Canterbury'	Kapuka / Broadleaf	4m	2m
Area B – South Boundary Planting – Building Setback			
Trees			
<i>Magnolia grandiflora</i> "Blanchard"	Evergreen Magnolia	7m	4m
<i>Plagianthus regius</i>	Manatu / Ribbonwood	8 - 10m	3m
Screen / Hedge			
<i>Coprosma robusta</i>	Karamu	4m	2 - 3m
<i>Griselinia littoralis</i> 'Canterbury'	Kapuka / Broadleaf	4m	2m
Area D – Madras Street Frontage			
Trees			
<i>Liquidambar styraciflua</i> 'Worplesdon'	Sweet Gum	8m	4m
<i>Liriodendron tulipifera</i>	Tulip Tree	15m	8m
<i>Pseudopanax crassifolius</i>	Horoeka / Lancewood	8m	2m
<i>Sophora microphylla</i>	South Island Kōwhai	6m	4m
Area E – North Boundary Planting – Car Park Setback			
Trees			
<i>Magnolia grandiflora</i> "Blanchard"	Evergreen Magnolia	7m	4m
<i>Plagianthus regius</i>	Manatu / Ribbonwood	8 - 10m	3m
Area F – Car Park			
Trees			
<i>Hoheria angustifolia</i>	Houhere / Narrow-leaved Lacebark	6m	3m
<i>Pseudopanax crassifolius</i>	Horoeka / Lancewood	8m	2m

Plant Palette Species List Update: Revised Tree Species

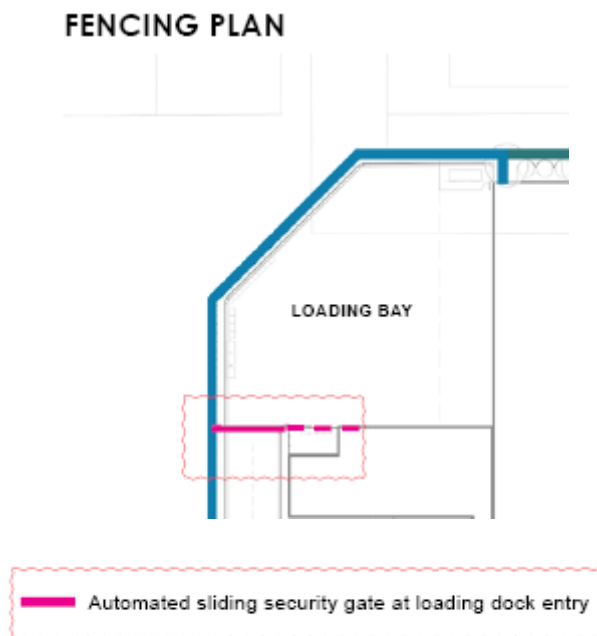
Initial Feedback 4. Security measures to control access may need to be considered for the loading bay and the landscape strip on the eastern and southern boundaries. Also has lighting been addressed for safe nighttime use of the carpark?

Sliding security gates for the loading bay were proposed in the original application documents and shown on the architectural drawings. A secure access gate is also proposed adjacent to the southwest corner of the supermarket to allow access to the southern and eastern setback areas.

For clarity we have included these on a revised fencing plan, shown below and in the attached updated Landscape Design Report page 16.

The application architectural plans show proposed lighting poles in the carpark and include an offered condition (pg. 33 of the application) confirming that the carpark would include sufficient lighting to comply with district plan standards "Lighting within the carpark shall be lit to a minimum of 2 lux. Lighting received at the internal boundaries shall not exceed 4 lux."

Again for clarity, we have updated the Landscape Concept Strategy and Overall Landscape Concept Plan to show the proposed light pole locations more clearly. These are included in the appended updated Landscape Design Report.



Fencing Plan Update: Loading Bay Gate Shown



Fencing Plan Update: Access Gate Location Shown