C92266v2



5 August 2021

Mr Rob Long Senior Project Manager Case Meallin 2/19 Cato Street Hawthorn East VIC 3123

Letter of Addendum (refer to AIA Xavier C92266) – Design proposal/methodology Barkers Road Intersection/Southern entrance – Xavier College.

Dear Rob,

I am able to provide the following addendum (letter) in support of proposed design methodologies as relate to construction/excavation within the Tree Protection Zones (TPZs) of Trees within the vicinity of the Barkers Road intersection (Xavier College, Kew).

This letter is to be submitted as an addendum to the accompanying AIA (Arboricultural Impact Assessment – C92266, July 2021) as pertains to the Xavier College site.

### Proposed Tree Removals – Trees 189-195

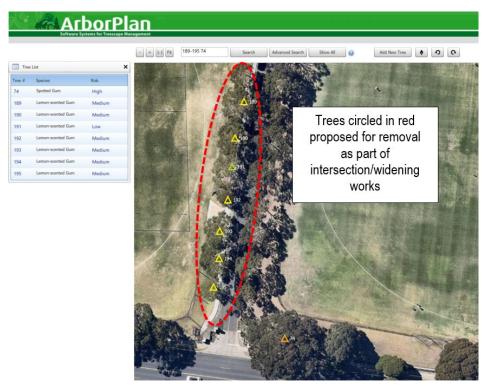


Figure 1. Tree location, Tree 189-195. (ArborPlan, Aug. 2021).



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In order to facilitate the retention of Tree 74 (see Figure 3), proposed intersection/widening works (Barkers Road) have been reconfigured (shifted west). These works shall require the removal of seven (7) trees as per Figure 2 below (circled in red);



Figure 2. Excerpt from southern entry/intersection plan - DP0104 TP3. (Client, July. 2021).

Where trees are located within the design footprint and/or have documented, major encroachments (as defined by Australian Standard AS 4970–2009: *Protection of Trees on Development Sites*) within their respective TPZs, tree removal and replacement may be required.

## Tree 74 – TPZ Encroachment

Figure 3 shows the location of Tree 74 and its proximity to the existing Barkers Road intersection/southern entrance.

Figure 4 is an excerpt from the TPZ plan (Barkers Road Intersection – TPZ001 P1) which shows the extent of civil works (including leveling and retaining components) and total incursion calculations.

In keeping with root sensitive design, proposed intersection widening works have previously been shifted west of the existing entrance way (off Barkers Road) to minimise the potential impact(s) on Tree 74.

Design calculations indicate a 12.5% TPZ encroachment, which is deemed 'major' (i.e. >10%) by the Australian Standard AS 4970–2009: *Protection of Trees on Development Sites*. Incursions of this type and proportion may be considered tolerable with the implementation of additional controls.

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## ArborPlan



Figure 3. Tree location. (ArborPlan, August 2021).

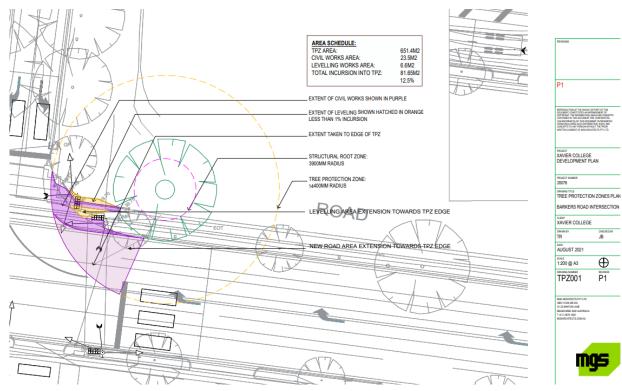


Figure 4. Excerpt from Barkers Road Intersection plan – TPZ001 P1. (Client, August 2021).

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Tree roots are known to be opportunistic, with the upper lawn areas, to the north-east of Tree 74 (see Figure 3), likely to offer a more hospitable environment for root growth due to regular irrigation/feeding than lower areas along the existing embankment.

Preference should be given, where excavation is required, to radial trenching, as with the spokes of a wheel, as opposed to cutting across the radius of the TPZ, in order to reduce total root mass lost to severance/root pruning.

### Recommendations

### Trees 189-195

Where proposed excavation works (as per supplied plan(s) – TPZ Plan Southern Entry – DP0104 DP3 – July 2021) are located within the documented TPZs of Trees 189–195, and as such represent a major TPZ encroachment (refer to AIA), the proposed encroachment shall not be considered acceptable.

• Trees 189–195 are recommended for removal in advance of works, to be replaced as per the provisions of Section 7 'Offset Tree Planting' (Arboricultural Impact Assessment – C92266, July 2021).

#### Tree 74

Where proposed excavation works (as per supplied plan(s) - Barkers Road Intersection – TPZ001 P1 – August 2021) are located within the documented TPZ of Tree 74, and as such represent a TPZ encroachment (refer to AIA), the proposed encroachment shall be considered acceptable where:

- Other relevant generic tree protection measures (as listed in AIA) can be met, and;
- The TPZ for Tree 74 is extended in a contiguous manner in an opposite direction to works (i.e. to the north and east) by a minimum of 12.5%, and;
- Where all proposed excavations within the TPZ are undertaken in a root sensitive manner (e.g. manually dug and/or through the use of a hydrovac/air spade), and;
- Where excavations within the TPZ are undertaken under the direct supervision (or with the express consent) of the project arborist, with;
- A degree of root severance, where documented and considered tolerable, which may be undertaken by the project arborist.
- Where root mass deemed significant by the project arborist is encountered in the course of works, further reporting and remediation may be required.
- Plant health care measures (i.e. mulching and irrigation/drenching) are installed and implemented by a competent person(s) and documented by the project arborist post installation (but before project sign-off).
- Any variation to this proposal will need to be reviewed by the project arborist in advance of works.

Please feel free to contact me directly should you require further guidance or clarification regarding these recommendations.

Regards,

Nick Arnold Consulting Arborist