



Level 5 and 8 Arboriculturist

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Reference: **3355B**
9th January 2020

Urbis Pty Ltd.

Arborist Response

**Re: Royal Hall of Industries
Lot 3, (D.P.861843) and Lot 52 (D.P.1041134)
No. 1 Driver Avenue, MOORE PARK**

The following document provides a response to the request for additional information¹ regarding the application for the 'Adaptive reuse of the Royal Hall of Industries' (SSD-9726)¹. This document is based on the data provided in the Arboricultural Impact Assessment (referenced D3355, Date: May 2019) and related Addendum (referenced D3355A, Date: 18th October 2019). This response addresses Section 7 and 7.1 from the council document¹ and cites each Section and the response.

- a) *The group planting of Trees 10-79 on Errol Flynn Boulevard are identified to have a young age rating. This is inaccurate as many of the trees are semi-mature and mature.*

Response

The age rating applied to these trees has no relevance to the proposal or outcome of the application or impact imposed on these trees. This is inconsequential and is not considered to offer any form of constraint on the determination of the proposal.

The species is documented to offer a life span in excess of 200-400 years². Although hampered by the urban environment, the recognised age of this tree group (31 years³) coupled with the average height (8.5m) and Dbh (0.18m) relative to the referenced height (30m⁴- 40m⁵) and Dbh (1.15m⁵) for the mature specimen supports a young tree. Taking into account the fast growth rate documented⁴ for this species, and the average height/dbh for this group relative to the potential size for the species, the proportional difference supports the applied age class as 'young'. This is consistent with the definition contained in Appendix A of the Arboricultural Impact Assessment.

¹ Referenced R/2018/32/B, dated 29 November 2019

² Jacobs R., 1955, Growth Habits of the Eucalypts, Forestry and Timber Bureau, Australia

³ Maintenance Department; Centennial Park & Moore Park Trust

⁴ University of Melbourne, 2013, Burnley Plant Guide, Data Sheet; *Corymbia maculata*

⁵ Boland D.J., Brooker M.I.H., et al. 1992, Forest Trees of Australia, CSIRO Publishing

- b) *Section 7.1.3 - Trees directly conflicting with design of the Arborist Addendum does not include the removal of Tree 60 for the proposed driveway crossover.*

Response

Tree No. 60 does not conform for inclusion into the Section 7.1.3, however, has been included in Section 7.1.5 'Trees subject to a major encroachment', because this is the Section for which it applies. This Section of the report has been superseded by the Addendum, where a discussion relative to the type and proportion of encroachment and the reason why the tree warrants removal is provided.

- c) *The encroachment within the Tree Protection Zone (TPZ) of Trees 8 and 9 has not been included, however a minimum of 20% canopy loss for Tree 8 and 13% for Tree 9 is proposed.*

Response

The potential encroachment for trees No. 8 and 9 is discussed in Section 7.1 (Arboricultural Impact Assessment), beneath the heading 'Observation 1', referring to the modified area of the TPZ. This is concluded in Section 7.1.1.

The lack of root ingress (that is TPZ) has been supported during the last assessment of the area (on the 22nd October 2019, part of data collection for the Addendum), where works adjacent to the trees (No. 8 and 9) on the northern side and flush with the wall had excavation works in progress by external contractors unrelated to the project. The areas of excavation were assessed by the author at this time, and feedback from the contractors performing this excavation stated the wall footing to be approximately 600mm below grade and the excavated pits disclosed no apparent root mass.

- d) *The six trees located within the plaza have not been assessed or included for tree protection measures.*

Response

These trees are outside the area of proposed works for the RHI, and the respective TPZ's. That is, no part of the TPZ or dripline encroaches into the area proposed for work. Site fencing required for the RHI upgrade works will function as sufficient protection. These trees have not formed the scope of works for this report.

- e) *The Landscape Details indicate trees are planted into 'structural vaults'. The landscape plans do not clearly show where these vaults will be located*

Response

This has been included in the Landscape drawing by *Arcadia*, January 2020, Issue G.

7.1 Tree Removal

*The City reiterates that Trees 58, 59, and 60 on Errol Flynn Boulevard **must be retained**..... As such, consideration should be made to Trees 42-46, which are of less significance and remove Tree 43 and 45.*

Response

The request for consideration for the removal of trees No. 42-46 in preference to No. 57-60 based on the difference for significance is unfounded. A comparison of the trees

contained in these two sites is summarised in parts of Table 1, (Section 6.0) extracted from the Arboricultural Impact Assessment, and contained in Appendix B (Arborist Response). This data has been assigned an average value for some variables for discussion. Based on the design proposed (Appendix A; Arborist Response) to accommodate the request, tree No. 42 is subject to a minor encroachment (9%) and has been removed from the discussion.

Each option conflicts with four trees (No. 43-46, and No. 57-60) and therefore offer equivalent loss.

The two tree groups provide an average difference in height of 1m and 30mm between the Dbh values. That is, the trees No. 57-60 provide a marginally higher average value. The vitality/SULE rating between the two groups provides a single tree, No. 57, which offers limited life expectancy and could be removed irrespective of the proposed works. Although, the tree group 43 to 46 offers a single tree of SULE rating, A3 which does not constitute removal based on condition. That is the tree group No. 57-60 can be considered to require the removal of three of these four trees based on the limited SULE rating. Both tree groups cater to an equivalent tally for the significance rating (STAR). Other variables for consideration consist of the crown class and bias. Trees No. 43-46 has three of the four trees rated as 'forest class' and a 'symmetrical' crown mass, which offers specimens of typical form. Unlike the crown bias and 'co-dominant class' for trees No. 58-60. Although the habits related to either tree group is not considered to offer any significant risk, the amenity value based on the atypical habit could be considered to impede the significance rating.

In conclusion, the difference in the average size of these two tree groups is considered as negligible, although the assigned ratings and habits refer to the trees No. 43-46 to offer marginally increased amenity value. Both tree groups are considered from an arboricultural perspective to maintain equivalent significance, and the assigned significance ratings applied in the Arboricultural Impact Assessment are valid.

That is, no difference exists regarding the loss of either trees No. 43-46 or 58-60, and therefore the design should be influenced by the practical location for the cross-over.

It should be noted that the photos of excavation (test pits) within the TPZ of Trees 56-61 have not been provided. Observation 4 of the Arborist Addendum states that the photos are available on request. These photos must be submitted to assess the impacts of excavation.

Response

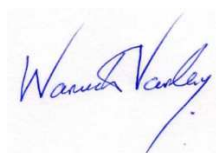
A file has been issued containing these photos. These photos are contained in Appendix C, Arborist Response.

Additionally, it is recommended that only minor pruning of less than 10% of street Trees 8 and 9 be undertaken. It is reiterated that all trees surrounding the site on Council owned land be retained as well as all other trees impacted by the development, including the six trees in the plaza, be protected.

Response

- The nomination for the pruning of trees No. 8 and 9 to be limited to no more than 10% is unfounded. The determination for this figure has not been referenced or appears to be contained in any policy related to Sydney City Council or industry standards. A thorough discussion relating to the purpose, impact, proportion, and class of pruning has been referenced in the addendum with supporting evidence by recognised industry standards and academia.
- No council trees have been referred to for removal. Council owned trees will be retained and protected. The six plaza trees have been discussed in Section *d* and it is understood these trees are to be retained.

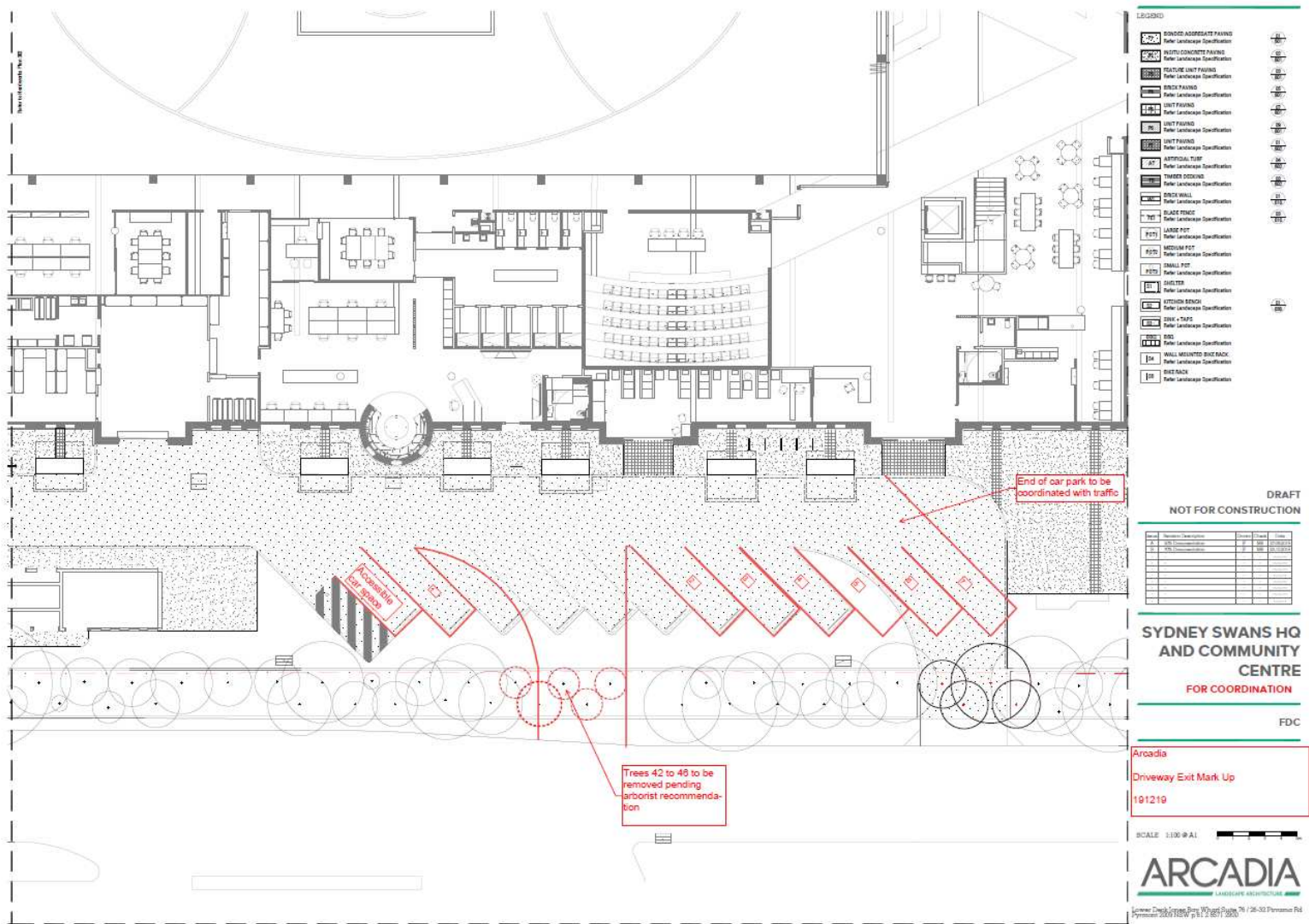
The opinions expressed in this brief by the author have been provided within the capacity of a Consulting Arborist. Any further explanation or details can be provided by contacting the author.



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Appendix A; Plan, Potential Crossover Location relative to trees No. 42-46



Appendix B; Table 1; Data for trees No. 42-46 and 57-60, including average

Tree No.	Botanical Name Common Name	Height (m)	DBH (m)	Crown Spread (m)	Age	Crown Class	Crown Aspect	Vitality	SULE Rating	STARS Rating	TPZ	SRZ
43	<i>Corymbia maculata</i> Spotted Gum	6	0.09	1 x 1	Y	C	E	B	A3	LOW	2.0	1.5
44	<i>Corymbia maculata</i> Spotted Gum	9	0.14	1 x 3	Y	F	Sym.	A	A2	MEDIUM	2.0	1.5
45	<i>Corymbia maculata</i> Spotted Gum	6	0.13	3 x 3	Y	F	Sym.	A	A2	MEDIUM	2.0	1.5
46	<i>Corymbia maculata</i> Spotted Gum	11	0.17	3 x 3	Y	F	Sym.	A	A2	MEDIUM	2.1	1.6
Average		8	0.13	2 x 2	Y	-	Sym.	A	-	-	-	-

57	<i>Corymbia maculata</i> Spotted Gum	7	0.12	5 x 5	Y	I	Sym.	C	A4	LOW	2.0	1.5
58	<i>Corymbia maculata</i> Spotted Gum	9	0.13	1 x 3	Y	C	E	A	A2	MEDIUM	2.0	1.5
59	<i>Corymbia maculata</i> Spotted Gum	12	0.23	4 x 5	Y	C	W	A	A2	MEDIUM	2.7	1.8
60	<i>Corymbia maculata</i> Spotted Gum	8	0.15	1 x 3	Y	C	E	A	A2	MEDIUM	2.0	1.5
Average		9	0.16	2.5 x 4	Y	-	E	A	-	-	-	-

Appendix C; Photos of test pits; Test Pit 1



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10

Photos of test pits; Test Pit 2



Photo 11

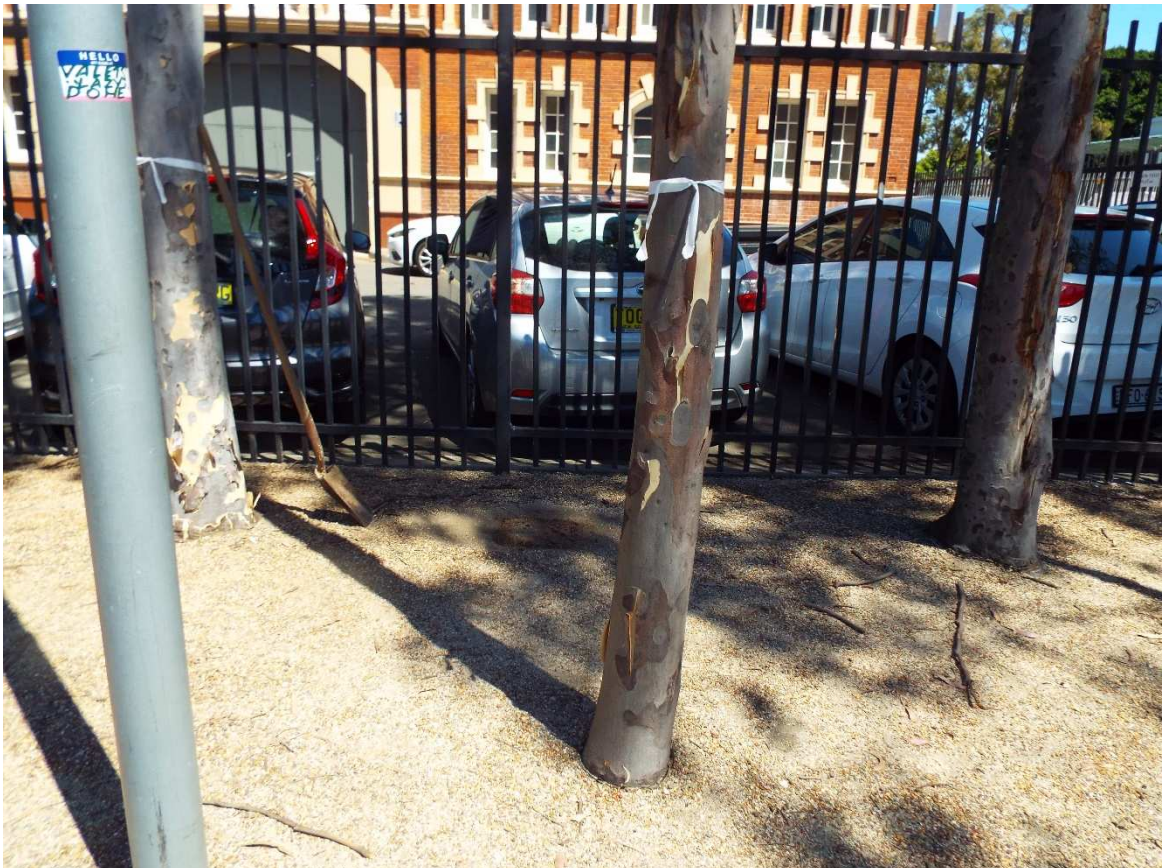


Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18