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Enquiries: Colin Cameron File: A/4691-04

5 January 2022

The Hon. John Carey MLA
Minister for Lands; Housing;
Homelessness; Local Government
7th Floor, Dumas House
2 Havelock Street
WEST PERTH WA 6005

Sent by email: Minister.Carey@dpc.wa.gov.au

Dear Minister Carey

CITY OF SUBIACO COUNCIL RESOLUTION - NUMBER OF SIGNIFICANT TREES

At its Ordinary Council Meeting (OCM) of 14 December 2021, the City of Subiaco Council unanimously resolved motions relating to a number of significant trees in the Subiaco East Redevelopment Area. Specifically, the trees in question are three Hills Weeping Fig (*Ficus microcarpa va hilli*) (fig trees) in close proximity to Subiaco Oval, generally located within the existing carpark on the north-western side of Subiaco Oval near Haydn Bunton Drive. A copy of the Council resolution is attached at **Annexure 1**. A site plan of the Fig trees is also enclosed to this correspondence at **Annexure 2**.

On 13 March 2018, the City of Subiaco Council resolved to include the three fig trees on the City's Significant Tree Register under the City's (former) Town Planning Scheme No. 4 (TPS 4). The Significant Tree Register affords statutory protections to trees that don't otherwise ordinarily exist. TPS 4 has since been revoked by the City's Local Planning Scheme No. 5 (LPS 5) in February 2020, with those trees on the Significant Tree Register carrying forward to be protected by LPS 5. The fig trees were considered significant and worthy of protection due to their iconic form and structure, having regard to their excellent health and vitality, and noting the trees are a dominant and critical element of the public realm. However, the Significant Tree Register does not currently have statutory weight as the Subiaco Redevelopment Scheme No. 2 has suppressed the LPS5 provisions, including those relating to the protections afforded by the significant tree register.

A report on the condition of the fig trees was undertaken by Classic Tree Services after storm damage to the area in February 2020. This report was commissioned by DevelopmentWA and provided to the City. The report noted that the three fig trees had minimal root damage and negative tree health was not expected. The report recommended ongoing monitoring and maintenance of the remaining fig trees. A copy of this report is attached at **Annexure 3**.



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The City has concerns regarding the future plans for the fig trees. The recently approved Subiaco Oval and Railway Precinct Design Guidelines appear to contemplate the possibility of the fig trees being relocated elsewhere in the Subiaco East Redevelopment Area. The City is concerned that if one or more of the fig trees were to be relocated, it would have a detrimental impact on any remaining fig trees given the complex and intertwined root systems.

The City of Subiaco is seeking confirmation that, in relation to the Subiaco East Redevelopment Area, the Minister for Lands confirms that:

- 1. DevelopmentWA retain in situ and as a group the three (3) fig trees (inclusive of their main root systems), in the north-western portion of the Subiaco East Oval precinct.
- 2. During subdivision works and construction of development on adjoining lots, the three (3) fig trees and their root systems be protected by physical barriers erected around the trees including a tree protection buffer surrounding the trees to prevent their root systems from being adversely impacted. The trees shall also be watered, maintained and monitored on an ongoing basis during the construction phase of any development of adjoining lots.
- 3. The three (3) fig trees, in addition to a tree protection buffer zone, be situated in the public realm as a public reserve and not be incorporated wholly or partly into development lots in the area.

The City has sent a similar letter to DevelopmentWA to raise this matter and highlight the City's concern. I am available to discuss the matter further on 92379222 or at colinc@subiaco.wa.gov.au.

Yours sincerely

COLIN CAMERON

CHIEF EXECUTIVE OFFICER

ANNEXURE 1 – COUNCIL RESOLUTION

11.1 SUBIACO EAST – NUMBER OF SIGNIFICANT TREES

Submitted by: Cr Lynette Jennings
Date: 1 December 2021

Voting requirements: Simple - more than half elected members present required to

vote in favour

COUNCIL DECISION

Moved Cr Jennings / Seconded Cr Stroud

- 1. The Chief Executive Officer is requested to send a letter as a matter of urgency to the Chairman and Chief Executive Officer of DevelopmentWA, as well as the Minister for Lands, to raise the following matters pertaining to the retention of the three (3) Hills Weeping Fig Trees at the north-western portion of the Subiaco Oval precinct within the Subiaco East Redevelopment Area:
 - a) That DevelopmentWA retain in situ and as a group the three (3) fig trees (inclusive of their main root systems), in the north-western portion of the Subiaco East Oval precinct.
 - b) That during subdivision works and construction of development on adjoining lots, the three (3) fig trees and their root systems be protected by physical barriers erected around the trees including a tree protection buffer surrounding the trees to prevent their root systems from being adversely impacted. The trees shall also be watered, maintained and monitored on an ongoing basis during the construction phase of any development of adjoining lots.
 - c) That the three (3) fig trees, in addition to a tree protection buffer zone, be situated in the public realm as a public reserve and not be incorporated wholly or partly into development lots in the area.
 - d) Providing details of previous submissions or requests from the City to this effect (if any) and referencing any arboricultural assessments held by the City regarding the trees highlighting in the letter the sections (if any) in the assessment/s that discusses the need or desirability of retaining them in situ as a group and why they are significant trees and including any other information the Chief Executive Officer considers is supportive of the requests.
 - e) Request that DevelopmentWA responds to the letter advising whether the requests are to be implemented and if not, why not.
- 2. The CEO is requested to cause a copy of the letter sent by the City in accordance with Resolution 1 to be provided to Elected Members, that the letter is referred to as part of a news item published on the City's website with a link to a copy of the letter and that Resolution 1 is referenced and notified in Subiaco Scene.

CARRIED 9/0 6.47pm

ANNEXURE 2 – SITE PLAN OF FIG TREES



ANNEXURE 3 – REPORT BY CLASSIC TREE SERVICES



ARBORICULTURAL SITE INSPECTION ASSESSMENT

SUBIACO OVAL DEMOLITION FINAL REPORT

Craig Robinson Project Manager RJV

Re: Assessment of completed development with regards to the City of Subiaco's tree assets.

Craig,

Please find attached a report regarding tree assessment at the above location. If you would like any further information regarding matters contained in the report, please call me anytime during normal business hours.

THOMAS SMITH

DIP ARBORICULTURE GRAD. CERT. ARB. UNI. MELB (Burnley) QTRA LIC USER No. 2323 (Quantified Tree Risk Assessment UK Ltd)







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1 SUMMARY – After months of demolition works both above and below ground, numerous site visits and excavation supervision, the work at the Subiaco Oval demolition project is almost complete. This summary report will outline major works carried out within TPZ's of many trees within the site, general condition of the tree population and highlight any additional ongoing work and assessment which will need to be carried out.

2 INTRODUCTION

- **2.1** The development site was outlined in email attachments, phone conversations and site inspection with RJV. (**Image 1**). Since the last inspection report which was concerned with the destruction of the grandstands, the majority of this assessment was involved with excavations and removal of footings etc.
- 2.2 The concerns with excavations within a trees TPZ and SRZ are health, vitality and stability. AS4970-2009 Protection of trees on development sites provides guidance with regards to retaining trees on sites such as this. One such guideline is the area a tree needs to remain viable, both in health and stability. These measurements are calculated on the trees stem diameter at breast height (DBH) and diameter at ground level (DGL) and are essential as a starting point for tree retention. Depending on site conditions, tree species and local evidence-based knowledge, excavations can occur within these areas under supervision which is what has occurred on this occasion. Supporting evidence provided on root disturbance and tree stability is contained further within the report.
- **2.3** TPZ The Tree Protection Zone is an area above and below the ground at a calculated distance from the main trunk to provide protection of a tree's roots and canopy from potential damage during construction of a nearby development site. This is the area the tree needs to maintain its health and vitality.
- **2.4** SRZ Structural Root Zone is the area directly around the base of a tree which is required for the tree's stability. The large woody root extension, the soils cohesion and their association together in this area are necessary to hold the tree upright. This zone considers a trees structural stability only and not the root zone required for a tree's health, vitality or viability due to the transportation of solutes from distal absorptive roots.

3 DISCUSSION

3.1 Between the 2nd, 8th and 14th of October 2019 the removal of the footing of the northern grandstand was undertaken and supervised. This excavation work was well within the TPZ of all the trees along the Subiaco Rd frontage. Prior to the works commencing, exploratory vacuum excavation was carried out to determine the extent of root development next to the footing. The findings were surprising with only absorptive roots found and no structural roots. This evidence suggests a deeper, more vertical structural root system so the footing removal was approved. The demolition of this section of the wall was carried out under arborist supervision with the use of a large excavator working from the south of the trees. The wall footing was slowly pulled away from the trees, any exposed roots noted, clean fill placed back in place of the wall and slightly compacted with the use of a front end loader. The quick replacement of the fill soil ensured any exposed roots were covered to avoid drying out and the edaphic nature of the remaining soil is maintained. General arboricultural knowledge which is taught and learnt typically states tree root systems spread out laterally throughout the soil profile, with the majority of roots found

within the top 900mm. In this instance and throughout the site we have found evidence contrary to this statement which can be attributed to the species of tree, its direct environment within hardstand infrastructure and the sandy soils present. Based on these findings and methods used it is not likely these trees will be compromised structurally but there is expected to be some vitality loss, with future environmental conditions playing a large role in this outcome therefore additional watering and nutrient application will be recommended.





Image 1 - Exploratory vacuum excavation

Image 2 – Absorptive roots within excavation





Image 3 – Footing adjacent *C. maculata*

Image 4 – Soil replaced after footing removal

3.2 On the 1st of November 2019 a meeting was held with RJV City of Subiaco representative Gray Stead and CTS to discuss options to remove a deeply constructed footing which halted previous work in October. The footing was extremely close to trees on Subiaco Rd and retaining of the soil behind the footing needed to be undertaken before its removal to ensure the whole road and footpath surface did not slide into the excavation. Two methods were discussed and the installation of piling behind the wall was agreed to be carried out. The wall was removed and piling not long after leaving the trees and their root zones in place. Some minor root severance is expected to have taken place in the installation of the piling but is not structurally significant.

3.3 The Subiaco Rd side of the demolition also required the removal of an existing storm water pipe. This was located just behind the footing wall in between the wall and the *C. maculata* towards the east of the project. Again, vacuum excavation was carried out to ascertain the development of roots within the area and after confirmation of no significant roots within the area, the work was approved. This was carried out with the same method used previously on 10th December 2019 with sections excavated, pipework removed and backfilled promptly. As a result, no structural issues were identified with regards to these trees and all roots found during the works were retained.





Image 5 - Storm water pipe removal

Image 6 - Battering of fill soil post excavation

3.4 The three large Ficus hillii and *Casuarina cunninghamiana* within the redevelopment footprint and on the western side of the development also needed extensive excavation within their TPZ's along with arboricultural work within the canopy of one of the *F. hillii*. This began with the removal of an old sea container from the base of the middle tree. The tree had grown around the sea container and concerns were outlined as to the structural stability of this limb once the container was removed. The limb was braced using an eight-tonne dynamic cable to ensure the limb could not fail if it were compromised and the container was removed. The damage to the limb was better than anticipated and the limb was retained with the cable bracing in situ.





Image 5 – Wound from container

Image 6 - Limestone wall removal

- **3.4 Cont.** The Limestone wall on the western side of the trees needed to be removed and was done so under arborist supervision on 22nd January 2020. The wall was broken up manually and with a mini excavator but where the limestone blocks were too close or too hard to remove, they were left in place so to not damage the tree roots or render the trees unstable. The completed sections were then immediately backfilled and slightly compacted to ensure exposed roots did not dry out or retain further damage and the soil maintained its structure, with evidence of this process contained within Image 6.
- 3.5 On the 25th February 2020 a strong, unexpected and localised storm passed through the suburbs of Belmont, Rivervale, Leederville, Dianella and Subiaco to name a few. This storm cell uprooted many trees and caused many others serious canopy damage over a wide area. At this site, around the Subiaco Oval development, no less than ten trees were uprooted with many more seriously damaged with all trees pushed over from a North-Easterly direction. Unfortunately, the three large Ficus trees and the Casuarina next to the limestone wall which was removed were all uprooted and damaged beyond retention. All four trees failed at the root plate with no evidence of prior root damage as the significant structural roots were either pulled from the ground or snapped off. The soil under these trees and within their respective TPZ's had not been disturbed and the only work which had been carried out within this area was the asphalt removal from the surface. With the evidence of previous work and supervision of work within trees TPZ's, the failure of the trees at this site were all due to the extreme weather event and root damage or excavation work could not have possibly been the cause of failure.
- **3.6** The week following the storm, RJV initiated a contractor to attend site to remove the fallen trees and carry out remedial canopy pruning to the trees which sustained damage during the storm. The site arborist outlined the work which needed to be carried out and walked through the site with the Cert III qualified arborists from Thomas Contracting. The work consisted of hanging branch removal, failed limb removal and cleaning up of failure stubs and wounds. All work was carried out to a high pruning standard.





Image 7 – Ficus and Casuarina failures

Image 8 - C. maculate failure on Roberts Rd





Image 9 – Hanging branch that was removed

Image 10 - Remedial work carried out

3.7 Since the remedial storm work has been carried out there have been two occasions requiring supervision of work around trees. The first was the removal of asphalt around the root zones of the three *Ficus* within the western carpark and the reconstruction works for the footing of the heritage gates next to a *Corynocarpus laevigatus* (Karaka). In these instances, the site arborist attended site to ascertain the scope of works and outline the limitations to the contractors when working around the trees root zones and then followed up with a visit during and after work was completed to ensure directions were followed. In both instances, tree root damage was minimal and negative tree health is not expected. The areas around these trees has been mulched which will aid in soil moisture retention and new absorptive root development.

4 RECOMMENDATIONS

- **4.1** Carry out nutrient application throughout site along with a soil wetting agent diluted into approximately 200L per tree. Apply this at 3 monthly intervals for the next 12 months.
- **4.2** An installation of Medicap[™] tree nutrients should be carried out on the *Corymbia ficifolia* on the Roberts Rd side of the development to boost tree health. These trees have been in declining health since before the start of demolition works and now, they have survived will need some additional care if they are to be retained.
- **4.3** An inspection of the site in January 2021 is recommended to pick up on any tree health decline or water deficiencies as the warmer weather will exacerbate any underlying issues.

5 CONCLUSIONS

5.1 Again, throughout this development work RJV have carried themselves professionally and openly with regards to tree retention and tree health. It is due to their diligence the tree health on site is as good as it is now.

Thomas Smith

DATE 08/06/20

Liability and Limitation

Tree inspections are based on reasonably practicable assessment methods. Every condition that could possibly lead to stem or tree failure cannot expect to be detected. Trees may fail from a range of singular or cumulative reasons, some of which are not yet fully understood. Recommendations following inspections may or may be accepted by clients.

Assessment tools are variable and unless otherwise stated inspections are undertaken at ground level based on the permissible access granted. Inspection of underground portions is limited and potential reasons for failure are not always available for consideration. CTS cannot guarantee against tree or limb failure.

It is not possible to make a tree "safe" rather they can be managed to reduce the potential risk of harm to acceptable levels, should the consultant feel this is necessary. Recommendations in this report are based on qualifications, experience, knowledge and the use of assessment tools deemed necessary for the individual inspection.

The report is to be considered in full and sections are not to be selected for legal consideration without advice and approval from CTS.

No portion of this report may be forwarded without the expressed permission of the author.