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REPORT:

ARBORICULTURAL IMPACT ASSESSMENT

8 Jeffery Avenue
North Parramatta NSW

Prepared 11 November 2021
Reference 24013

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SUMMARY and CONCLUSIONS

A 600 mm diameter stormwater drainage pipe is to connect the proposed Senior Living Development dwellings at 1-5 Brown Street to Jeffery Avenue. The 1200 mm wide drainage easement is to be located parallel to the west side boundary of 8 Jeffery Avenue. Of the 6 trees assessed, 4 were located within the proposed drainage easement but can be protected by directional drilling for the pipe installation beneath the trees. The 6 trees were exempt from protection under the Parramatta Local Environmental Plan 2011 but are to be retained.

Appropriate setbacks from works to protect each tree proposed for retention, both above and below ground, are indicated in Appendix G – Tree Assessment and shown in Appendix I - Tree Location Plan.

Statutory Considerations

The site is located in the City of Parramatta Council (CPC) Local Government Area (LGA) and *the trees* require consideration for protection subject to development under the following legislation and planning instruments:

Parramatta Local Environmental Plan 2011, Part 3, 3.1, (5) (b), State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017, Part 1, 5, (1)(a) and Parramatta Development Control Plan 2011, Part 5 other, 5.4 Preservation of Trees or Vegetation. The DCP lists exempt trees (Appendix E - Table 5.4.3.1), and the Biosecurity Act 2015 lists noxious weeds and their status (Appendix F).

Environmental Planning and Assessment Act 1979, (EP&A Act) and amendments,

State Environmental Planning Policy (SEPP (Vegetation in Urban Areas) 2017, 5, (1) (a)

Parramatta Local Environmental Plan 2011, Part 3, (5)(b), exempt and Complying Development

3.1 Exempt development

(5) To be exempt development, the development must—
(b) not involve the removal, pruning or other clearing of vegetation that requires a permit, development consent or other approval unless it is undertaken in accordance with a permit, development consent or other approval.

Note—
See State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 and Part 5A of the Local Land Services Act 2013.

Parramatta Development Control Plan 2011, Part 5 Other, 5.4 Preservation of Trees or Vegetation (see Appendix E).

1. *Any tree or palm - whether indigenous, endemic, exotic or introduced species with a height equal to or exceeding 5 metres.*
2. *Any tree or mangrove vegetation located on public land, irrespective of size.*
3. *Any tree or plant, irrespective of size:*
    a. *that is listed in a Register of Significant Trees; or*
    b. *that is or forms part of a heritage item, or that is within a heritage conservation area; or*
    c. *that is or forms part of an Aboriginal object, or that is within an Aboriginal place of heritage significance.*

Exempted species are listed in Appendix E - Table 5.4.3.1. The site was not listed as a heritage item in the Parramatta Local Environmental Plan 2011.

The recommendations made in this report are subject to approval by the consent authority.

Tree Assessment

The trees assessed are numbered and their genus, species and common name included in Appendix G - Tree Assessment. Tree numbers are marked on Appendix H – Tree Location Plan.

Removal

No trees were to be removed from 8 Jeffery Avenue, North Parramatta.

Retention

Trees 1-6 (6 trees) were to be retained and protected.

No Encroachment

Trees 1 and 2 (2 trees) were unaffected by the development but each will require a Tree Protection Zone fence per (Appendix I – Tree Protection Plan).

Minor or No Encroachment

Trees 1 and 2 Are to be retained and the extent of encroachment for each is ≤10% of the idealised radial area of the Tree Protection Zone. Where encroachment per AS4970 (2009) Section 3, 3.3.2 *Minor Encroachment* is from development works within <10% of the radial area of the Tree Protection Zone. This is likely to be from pedestrian traffic and the movement of plant equipment which should be restricted within the site with access for the entry hole for the directional drilling positioned within the rear of 5 Brown Street to protect the trees and gardens within *the site*.

Major Encroachment

Trees 4 - 6 (4 trees) are to be retained per AS4970 (2009) Section 3, 3.3.3 *Major Encroachment* from development works within >10% of the radial area of the Tree Protection Zone. These trees are shrub like in form, due to repeated pruning to reduce their height and spread. Each tree is exempt from protection under the Paramatta DCP 2011, Part 5, C, (Appendix E - Parramatta Development Control Plan 2011 - extract - Trees or Vegetation). However, directional drilling beneath these trees with a minimum depth of 600 mm to top of bore should be satisfactory for them to remain viable and stable with minimal root disturbance.

Pruning

Trees 4 - 6 (4 trees) will undergo minor root pruning by the directional drilling process at a depth of 600 mm to top of bore within Tree Protection Zone of each tree (Appendix I – Tree Protection Plan, Pruning Specification).

Tree Significance

Determined by using the Tree Significance - Assessment Criteria of the *IACA Significance of a Tree, Assessment Rating System* (STARS)© (IACA, 2010), Appendix A. The trees are rated, High, Medium or Low. The number of trees in each category is summarised in Table 1.0. The STARS significance rating of each individual tree is shown in Appendix F – Tree Assessment.

Table 1.0 Tree Significance – summary of trees in different categories using the Significance of a Tree, Assessment Rating System (STARS)© (IACA, 2010) see Appendix D.

Significance Scale	High	Medium	Low
Number of trees in each category	0	6	0

Tree Retention Value

Determined by using the Retention Value – *Sustainable Retention Index Value* (SRIV)© (IACA, 2010) see Appendix D. The trees are rated, High, Medium, Low or Remove. The number of trees in each category is summarised in Table 2.0. The SRIV retention rating of each individual tree is shown in Appendix F – Tree Assessment.

Table 2.0 Retention Value - summary of trees in different categories using the Sustainable Retention Index Value (SRIV)© (IACA, 2010) see Appendix D.

Retention Value	**High** Priority for Retention	**Medium** Consider for Retention	**Medium / Low** Consider for Retention or Removal	**Low** Consider for Removal	**Remove** Priority for Removal
	(1)	(2)	(3)	(4)	(5)
Number of trees in each category	6	0	0	0	0

Tree Protection Setbacks

Where applied, Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) setbacks are based on Australian Standard AS4970 2009 Protection of trees on development sites, Section 3 Determining the protection zone of the selected trees, see Appendices B and D, respectively. Approved building works should be no closer, including excavation, than the dimensions stated above, save for AS4970(2009) sec. 3.3 Variations to the TPZ, 3.3.2 Minor Encroachment - *If the proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ; and sec 3.3.3 Major Encroachment - If the proposed encroachment is greater than 10% of the area of the TPZ or inside the SRZ the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ."* The trees requiring TPZ and SRZ protection setbacks are shown in a table in the Tree Protection Plan.

1.0 INTRODUCTION

Urban Tree Management© has prepared this report for LSB Architects, 29A West Street, Petersham NSW 2049 on behalf of NSW Land and Housing Corporation. The land is located in City of Parramatta Council (CPC) Local Government Area (LGA) and the trees are protected subject to the Parramatta Local Environmental Plan 2011 and Parramatta Development Control Plan 2011, and other instruments where appropriate.

The redevelopment of the adjoining upslope sites of 1-5 Brown Street, North Parramatta for Senior Living Development dwellings requires connection of the stormwater via an easement through 8 Jeffery Avenue. The rear of the site contained fruit trees and vegetable gardens. The fruit trees were of species not protected by Parramatta Development Control Plan 2011, Part 5 other, 5.4 Preservation of Trees or Vegetation (Appendix E). However, the 6 fruit trees were cultivated and expected to form an important part of the dietary intake for the residents. The trees were marked as shrubs on the survey (Appendix H – Tree Location Plan) because they were small and had been pruned possibly to a manageable size and likely also to stimulate fruit production and for accessibility. The 6 fruit trees (*the trees)* and their growing environments were examined by a Visual Tree Assessment (VTA) (Mattheck & Breloer, 1994) deduced from the photographs (Appendix I – Tree Protection Plan, Pruning Specification).

The drainage pipes should be installed by directional drilling at a sufficient distance beneath each tree, 600 mm to top of bore to protect the trees. The trees are shown in Appendix I – Photographs. It is possible that the trees could be removed and replaced with new fruit trees but there is likely to be a period of none or reduced fruit production until the replacement trees are established which may adversely impact the resident.

Danny Draper (*the author*) attended 8 Jeffery Avenue, North Parramatta NSW (*the site*) on Monday 27 September 2021. The site was not able to be accessed and the trees were assessed from recent photographs taken and provided by the Ryan Brown – Surveyor of Total Surveying Solutions, mobile 0448 161 900 and assessments extrapolated (Appendix G – Tree Assessment).

The site is subject to a Development Application for the drainage easement and this report and any works recommended herein, that require approval from the consenting authority are provided to form part of that development application and its consent conditions. The Tree Location Plan (Appendix H) and Tree Protection Plan (Appendix I) are to be included into and used in conjunction with the set of plans for the site.

The aims and objectives of this report are to detail and comply with the tree protection requirements specified in AS4970 (2009) *Protection of trees on development sites*, after the undertaking of the Preliminary Tree Assessment AS4970 sec. 2.3.2, and Preliminary Arboricultural Report AS4970 sec. 2.3.3 (which may be combined); Development Design and Review Report AS4970 sec. 2.3.4, prior to the undertaking of an Arboricultural Impact Assessment (AIA) Report AS4970 sec. 2.3.5. Where the other reports have not been undertaken the AIA Report will broadly endeavour to identify and assesses the condition of the subject tree/s; determine the impact of development on the subject tree/s; provide recommendations for retention or removal of the subject tree/s; provide specifications for protection of tree/s to be retained, and provide recommendations for replacement tree/s where appropriate. The information in this extensive report is intended to provided tree management and protection through all stages of development.

The tree/s are indicated in Appendix H – Tree Location Plan. This report has relied upon the following plan/s and documents:

NSW Government, Parramatta Local Environmental Plan 2011, Land Zoning Map – Sheet LNZ_009.

Detail and Contour Survey, 1-5 Brown Street, Lots 45, 46 and 47, DP 35290, North Parramatta, for NSW Land and Housing Corporation, Surveyors Ref: 210717, Job 210717, Type S, Sheet 1 of 5, Plotted scale 1:100 @ A1, File 210717-01, Date of survey 20/04/2021, prepared by TSS Total Surveying Solutions.

Senior Living Development, Site Stormwater Drainage Layout Plan, Sketch status,, date: 11/10/2021, Scale 1:200 @ A1, Sheet 1 of 2, Project No. BGXYZ, File 21024-C01, Type C, Rev. 2, prepared by Civil / Stormwater Engineer A & G Consulting Engineers Pty Ltd t. 9807 7971.

Senior Living Development, Site Plan, Stage SK, Date: October 20211, Scale 1:100, Sheet 1 of 2, Job No. 2102, Drawing No. A00 of A00, Issue / Rev X, prepared by L&B Architects, 29A West Street, Petersham NSW 2049, tel. 9672 9115.

METHODOLOGY

Note: Individual methodologies applied as applicable.

2.1 The method of assessment of tree/s applied is adapted from the principles of Visual Tree Assessment (VTA) (Mattheck & Breloer, 1994), undertaken from the ground, which considers and includes:

1. Tree health and subsequent stability, both long and short term
2. Sustainable Retention Index Value (SRIV) Version 4 (IACA, 2010) ©
3. Hazard potential to people and property
4. Amenity values
5. Habitat values
6. Significance – Significance of a Tree, Assessment Rating System (STARS) (IACA, 2010) ©

2.2 Tree Assessment - This assessment is undertaken using standard tree assessment criteria for each tree based on the values above and is implemented as a result of at least one comprehensive and detailed site inspection to undertake a visual tree assessment of each individual tree, or stand of trees, or a representative population sample. See Appendix F – Tree Assessment.

2.3 Any dimensions recorded as averages, or by approximation are noted accordingly.

2.4 This report adopts Australian Standard AS4970 (2009) *Protection of trees on development sites* as a point of reference and guide for the recommended minimum setbacks (Appendix B) from the center of a tree's trunk to development works and the distances may be increased or decreased by the author in accordance with AS4970 as a result of other factors providing mitigating circumstances or constraints as indicated by but not restricted to the following:

1. Condition of individual trees,
2. Tolerance of individual species to disturbance,
3. Geology e.g. physical barriers in soil, rock floaters, bedrock to surface
4. Topography e.g. slope, drainage,
5. Soil e.g. depth, drainage, fertility, structure,
6. Microclimate e.g. due to landform, exposure to dominant wind,
7. Engineering e.g. techniques to ameliorate impact on trees such as structural soil, gap graded fill, lateral boring,
8. Construction e.g. techniques to ameliorate impact on trees such as pier and beam, bridge footings, suspended slabs,
9. Root mapping,
10. Physical limitations - existing modifications to the environment and any impact to tree/s by development e.g. property boundaries, built structures, houses, swimming pools, road reserves, utility services easements, previous impact by excavation, or construction in other directions, soil level changes by cutting or filling, existing landscaping works within close proximity, modified drainage patterns,
11. Extraneous factors e.g. potential future impacts from development on adjoining land when the tree is located on or near to a property boundary.

2.5 Stands of Trees - Trees in groups may be referred to as stands and a stand may exclusively contain specimens to be either retained or removed or a combination of both. A stand may be used to discuss all the trees on a given site to expedite their assessment, or refer to trees growing proximate to one another or within a defined space. Stands may be comprised by mass boundary or screen plantings, to form a group of the same or a mixture of taxa. Each stand is considered as a single unit with each component tree assessed and expressed in tabular form, or indicated by a given percentage as a population sample of each stand. Where it is appropriate for a stand of trees to be retained in full or part, the location and setback of Tree Protection Zone fences or works, are prescribed to provide for the preservation of the stand or selected component trees, in a condition not less than that at the time of initial inspection for its incorporation into the existing landscape of the site, or in a reduced but sustainable condition due to the impact of the development but ameliorated through tree protection measures.

2.6 Tree Significance - The trees/s have been allocated a significance rating as determined by using the Tree Significance - Assessment Criteria of the IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA, 2010), Appendix A.

2.7 The meanings for terminology used herein are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

3.0 PRUNING STANDARDS

3.1 Any pruning recommended in this report is to be to the Australian Standard® AS4373 *Pruning of amenity trees*, and conducted in accordance with the *Guide to Managing Risks of Tree Trimming and Removal Work*, July 2016, Safe Work Australia.

3.2 All pruning or removal works are to be in accordance with the appropriate Tree Management Policy where applicable, or Tree Management Order (TMO), or Tree Preservation Order (TPO).

3.3 Tree maintenance work is specialised and in order to be undertaken safely to ensure the works carried out are not detrimental to the survival of a tree being retained, and to assist in the safe removal of any tree, should be undertaken by a qualified Arboriculturist with appropriate competencies recognised within the Australian Qualification Framework, with a minimum of 5 years of continual experience within the industry of operational amenity arboriculture, and covered by appropriate and current types of insurance to undertake such works.

4.0 DISCUSSION

This section addresses the relevant parts of the planning instruments for tree protection from the Parramatta Local Environmental Plan 2011 the Parramatta Development Control Plan 2011, and other instruments and comments where appropriate.

Parramatta Local environmental Plan 2011,

Part 3 Exempt and Complying Development

3.1 Exempt Development

(5) To be exempt development, the development must—

(b) not involve the removal, pruning or other clearing of vegetation that requires a permit, development consent or other approval unless it is undertaken in accordance with a permit, development consent or other approval.

Note —
See *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* and Part 5A of the *Local Land Services Act 2013*.

4.1 This is not Exempt and Complying Development as the proposed development requires the consent of the Council.

State Environmental Planning Policy (SEPP (Vegetation in Urban Areas) 2017, 5, (1) (a)

Part 1 Preliminary

(5) Land to which Policy applies

(1) This Policy applies to the following areas of the State (the non-rural areas of the State)—

(a) land in the following local government areas—

City of Parramatta.

4.2 The land is located within the City of Parramatta Council local government area and this SEPP Applies (Appendix G – Tree Location Plan, plans 1-3).

Parramatta Development Control Plan 2011, Part 5 Other, 5.4 Preservation of Trees or Vegetation (see Appendix E). Trees protected under the following terms were assessed:

1. Any tree or palm - whether indigenous, endemic, exotic or introduced species with a height equal to or exceeding 5 metres.
2. Any tree or mangrove vegetation located on public land, irrespective of size.
3. Any tree or plant, irrespective of size:
   a. that is listed in a Register of Significant Trees; or
   b. that is or forms part of a heritage item, or that is within a heritage conservation area; or
   c. that is or forms part of an Aboriginal object, or that is within an Aboriginal place of heritage significance.

4.3 Trees 1 - 6 (6 trees) were of dimensions or fruit tree species exempt from protection under Parramatta DCP 2011. (Appendix E - Appendix E - Parramatta Development Control Plan 2011 - extract - Trees or Vegetation, Exempted species were listed in Appendix E - Table 5.4.3.1). Trees 3, 4, 5 and 6 (4 trees) were exempt from consent for removal, but were important to the residents of 8 Jeffery Avenue and should be retained and protected.

4.4 The site was not listed as a heritage item in the Parramatta Local Environmental Plan 2011, Schedule 5 Environmental heritage, (Clause 5.10), Part 1 Heritage items.

4.5 No trees located within *the site* or on adjacent sites with the potential to be impacted by the proposal were listed on a *Register of Significant Trees,* as such a register no longer exists

as confirmed by City of Parramatta Council 10/11/2021. Therefore tree protection here reverts to the provisions of the DCP.

4.5 No trees located within *the site* with the potential to be impacted by the proposal formed part of an Aboriginal object, or were within an Aboriginal place of heritage significance as confirmed by as search of the Aboriginal Heritage Information Management System (AHIMS) Web Services site (NSW Government – Heritage NSW, 10/11/2021), see Appendix J.

5.0 RECOMMENDATIONS

5.1 Trees 1-6 (6 trees) are proposed to be retained and protected shown in Appendix H - Tree Location Plan and Appendix I – Tree Protection Plan.

5.2 Where Tree Protection Zone works are to be modified this must be undertaken in consultation with the Project Arborist to ensure that tree protection is maintained.

5.3 Trees 3 - 6 are to be root pruned at a depth of 600 mm below the root plate by the directional drilling process for a the installation of a 600 mm diameter stormwater pipe and each tree is expected to remain viable and stable per Appendix I – Tree Protection Plan, Pruning Specification.

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Assoc. Dip. Hort. (Pk. Mgmt.),
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TRAQ (ISA) Tree Risk Assessment

REFERENCES

1. Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

2. IACA, 2010, *Sustainable Retention Index Value (SRIV)*, Version 4, A visual method of objectively rating the viability of urban trees for development sites and management, based on general tree and landscape assessment criteria, Institute of Australian Consulting Arboriculturists, Australia, www.iaca.org.au .

3. IACA, 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, Australia, www.iaca.org.au

4. Mattheck K & Breloer H 1994, *The body language of trees.* A handbook for failure analysis, Published by TSO London, UK.

5. NSW Government, NSW Legislation, Parramatta City Council, Local Environmental Plan 2011, Land Zoning Map – Sheet LNZ_009, viewed 9/11/2021, https://eplanningdlprod.blob.core.windows.net/pdfmaps/6250_COM_LZN_009_010_20210602.pdf

6. NSW Government, Legislation, State Environmental Planning Policy (Vegetation in Non-Rural Areas), viewed 9/11/2021, https://legislation.nsw.gov.au/view/html/inforce/current/epi-2017-0454

7. NSW Government Department of local Land services (Greater Sydney), Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022, viewed 9/11/2021, Greater-Sydney-Regional-Weed-Mgmt-Plan-FINAL-Sept-2019.pdf

8. NSW Government, Heritage NSW, Aboriginal Heritage Information Management System (AHIMS) Web Services site (NSW Government – Heritage NSW, 10/11/2021), searches for 1-5 Brown Street, North Parramatta NSW, viewed 10/11/2021, https://www.environment.nsw.gov.au/awssapp/MySearches.aspx

9. Parramatta City Council, Development Control Plan 2011, viewed 9/11/2021, https://www.cityofparramatta.nsw.gov.au/sites/council/files/inline-files/05_OTHER%20PROVISIONS_0.pdf

10. Standards Australia 2006, *Australian Standard 4373 Pruning of amenity trees*, Standards Australia, Sydney, Australia.

11. Standards Australia 2009, *Australian Standard 4970 Protection of trees on development sites*, Standards Australia, Sydney, Australia.

12. Safe Work Australia, Managing Risks of Tree Trimming and Removal Work, July 2016, viewed 9/11/2021, https://www.safeworkaustralia.gov.au/system/files/documents/1702/guide-to-managing-risks-tree-trimming-removal-01082016.pdf

DISCLAIMER

The author and Urban Tree Management take no responsibility for actions taken and their consequences, contrary to those expert and professional instructions given as recommendations pertaining to safety by way of exercising our responsibility to our client and the public as our duty of care commitment, to mitigate or prevent hazards from arising or risks from being eliminated or mitigated or managed to reduce harm or damage, from a failure moment in full or part, from a structurally deficient or unsound tree or a tree likely to be rendered thus by its retention and subsequent deterioration from modification/s to its growing environment either existing or proposed, either above or below ground, either existing or proposed, either above or below ground, contrary to our advice.

Appendix A

IACA Significance of a Tree, Assessment Rating System (STARS) © (IACA 2010)©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria* and *Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

Tree Significance - Assessment Criteria

1. High Significance in landscape

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in situ* - tree is appropriate to the site conditions.

2. Medium Significance in landscape

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa *in situ*.

3. Low Significance in landscape

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.

Environmental Pest / Noxious Weed Species

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation.

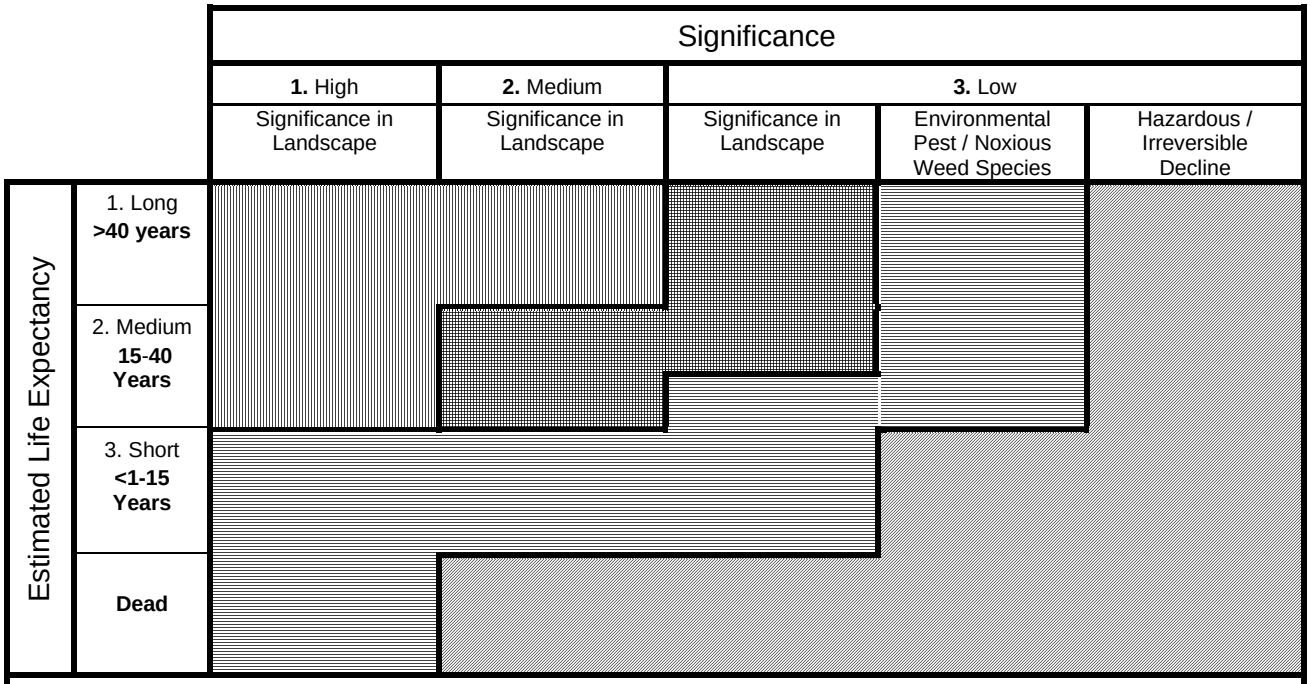
Hazardous/Irreversible Decline

- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

Table 1.0 Tree Retention Value - Priority Matrix.



Legend for Matrix Assessment

(1)	**Priority for Retention (High) -** These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 *Protection of trees on development sites*. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.
(2)	**Consider for Retention (Medium) -** These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
(3)	* **Consider for Retention or Removal (Medium / Low) -** These trees are considered to be of minor importance but may be retained and protected or removed. They are considered less important for retention, and may or may not require some special works or design modification to be implemented for their retention.
(4)	**Consider for Removal (Low) -** These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
(5)	**Priority for Removal -** These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

* Modified by UTMA in 2021 to include (Medium / Low).

REFERENCES

Australia ICOMOS Inc. 1999, *The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance*, International Council of Monuments and Sites, www.icomos.org/australia

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, www.footprintgreen.com.au

Appendix B

Extract from Australian Standard AS4970 2009 Protection of trees on development sites

Section 3, Determining the tree protection zones of the selected trees

3.1 Tree protection zone (TPZ)

"The tree protection zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

The TPZ incorporates the structural root zone (SRZ) (refer to Clause 3.3.5)."

3.2 Determining the TPZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

TPZ = DBH x 12

where

DBH = trunk diameter measured at 1.4 m above ground

Radius is measured from the centre of the stem at ground level.

Appendix C

Extract from Australian Standard AS4970 2009 Protection of trees on development sites

Section 3, Determining the protection zones of the selected trees

3.3.5 Structural root zone (SRZ)

"The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree. The SRZ only needs to be calculated when a major encroachment into a TPZ is proposed. Root investigation may provide more information on the extent of these roots."

Determining the SRZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

SRZ radius expressed by the curve is calculated by the following formula,

$$R_{SRZ} = (D \times 50)^{0.42} \times 0.64$$

where

D = trunk diameter, in metres measured immediately above the root buttress.

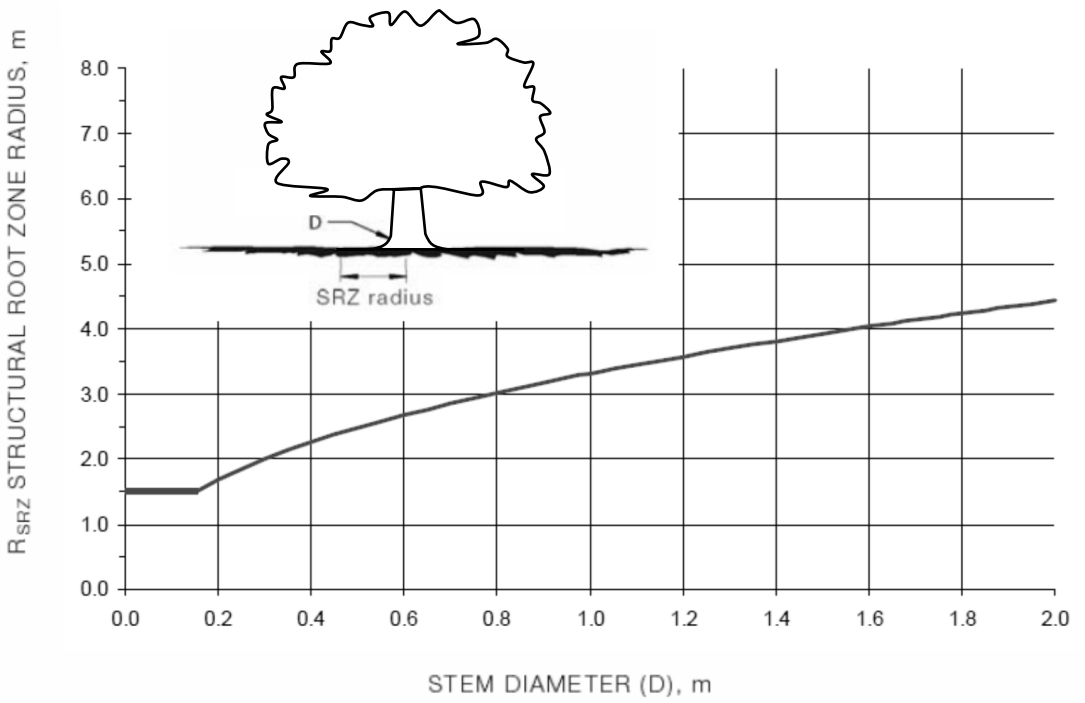


FIGURE 1 STRUCTURAL ROOT ZONE CALCULATION

(AS 4970 – 2009, Amendment No. 1 March 2010)

NOTES:

1 R_{SRZ} is the calculated structural root zone radius (SRZ radius).

2 D is the stem diameter measured immediately above root buttress.

3 The R_{SRZ} for trees less than 0.15 m diameter is 1.5 m.

4 The R_{SRZ} formula and graph do not apply to palms, other monocots, cycads and tree ferns.

5 This does not apply to trees with an asymmetrical root plate.

Appendix D

Matrix - Sustainable Retention Index Value (SRIV) ©

Version 4, 2010
Developed by IACA – Institute of Australian Consulting Arboriculturists www.iaca.org.au

The matrix is to be used with the value classes defined in the Glossary for Age / Vigour / Condition.
An index value is given to each category where ten (10) is the highest value.

Age Class	Vigour Class and Condition Class					
	Good Vigour & Good Condition (GVG)	Good Vigour & Fair Condition (GVF)	Good Vigour & Poor Condition (GVP)	Low Vigour & Good Condition (LVG)	Low Vigour & Fair Condition (LVF)	Low Vigour & Poor Condition (LVP)
	Able to be retained if sufficient space available above and below ground for future growth. No remedial work or improvement to growing environment required. May be subject to high vigour. Retention potential - Medium – Long Term.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work may be required or improvement to growing environment may assist. Retention potential - Medium Term. Potential for longer with remediation or favourable environmental conditions.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work unlikely to assist condition, improvement to growing environment may assist. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. No remedial work required, but improvement to growing environment may assist vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment may assist condition and vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	Unlikely to be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment unlikely to assist condition or vigour. Retention potential - Likely to be removed immediately or retained for Short Term. Potential for longer with remediation or favourable environmental conditions.
(Y) Young	**YGVG - 9** **Index Value 9** Retention potential - Long Term. Likely to provide minimal contribution to local amenity if height <5 m. High potential for future growth and adaptability. Retain, move or replace.	**YGVF - 8** **Index Value 8** Retention potential - Short – Medium Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium-high potential for future growth and adaptability. Retain, move or replace.	**YGVP - 5** **Index Value 5** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Low-medium potential for future growth and adaptability. Retain, move or replace.	**YLVG - 4** **Index Value 4** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium potential for future growth and adaptability. Retain, move or replace.	**YLVF - 3** **Index Value 3** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5m. Low-medium potential for future growth and adaptability. Retain, move or replace.	**YLVP - 1** **Index Value 1** Retention potential - Likely to be removed immediately or retained for Short Term. Likely to provide minimal contribution to local amenity if height <5 m. Low potential for future growth and adaptability.
(M) Mature	**MGVG - 10** **Index Value 10** Retention potential - Medium - Long Term.	**MGVF - 9** **Index Value 9** Retention potential - Medium Term. Potential for longer with improved growing conditions.	**MGVP - 6** **Index Value 6** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVG - 5** **Index Value 5** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVF - 4** **Index Value 4** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVP - 2** **Index Value 2** Retention potential - Likely to be removed immediately or retained for Short Term.
(O) Over-mature	**OGVG - 6** **Index Value 6** Retention potential - Medium - Long Term.	**OGVF - 5** **Index Value 5** Retention potential - Medium Term.	**OGVP - 4** **Index Value 4** Retention potential - Short Term.	**OLVG - 3** **Index Value 3** Retention potential - Short Term. Potential for longer with improved growing conditions.	**OLVF - 2** **Index Value 2** Retention potential - Short Term.	**OLVP - 0** **Index Value 0** Retention potential - Likely to be removed immediately or retained for Short Term.

Appendix E

Parramatta Development Control Plan 2011 - extract - Trees or Vegetation

Parramatta Development Control Plan 2011

Part 5 other

5.4 Preservation of Trees or Vegetation

This section outlines the trees or vegetation to which Clause 5.9 of the City of Parramatta Council Local Environmental Plan 2011 (LEP 2011) and Clause 34 Parramatta City Centre Local Environmental Plan 2007 applies by reference to species, size, or location.

5.4.1 Introduction

Trees to which the control applies:

1. Any tree or palm - whether indigenous, endemic, exotic or introduced species with a height equal to or exceeding 5 metres.

2. Any tree or mangrove vegetation located on public land, irrespective of size.

3. Any tree or plant, irrespective of size:

   a. that is listed in a Register of Significant Trees; or

   b. that is or forms part of a heritage item, or that is within a heritage conservation area; or

   c. that is or forms part of an Aboriginal object, or that is within an Aboriginal place of heritage significance.

5.4.3 Exempt works

Part B - Exemption applies to all land:

1. Removal of a dead tree in accordance with WorkCover NSW Code of Practice 'Amenity Tree Industry' - 1998.

4. Tree works on any tree of a species that has been declared a noxious plant under the Noxious Weeds Act 1993.

Part C - Exemption applies to all land, except for land/tree which:

- is listed on the Register of Significant Trees;

- is or is located on a site classified as being part of a vulnerable, threatened or endangered ecological community or provides or has the potential to provide habitat for native fauna or fauna classified as vulnerable or threatened under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth);

   - is or forms part of a heritage item or place;

   - is within a heritage conservation area;

   - is or forms part of an Aboriginal object;

   - is within an Aboriginal place of heritage significance; or

   - is on public land.

1. Tree works on a tree where the trunk of the tree at ground level is within 3 metres of:

a. the outside enclosing wall of a legally constructed building; or

b. the outside edge of the footings of a legally constructed carport; or

c. the outside edge of the coping of a legally constructed in-ground swimming pool.

Note: This exemption does not apply to a tree on adjoining land. The tree and the dwelling house or other structure referred to above must both be on the same land for the exemption to apply.

2. The tree is of a species *Populus* spp. - (Poplar), Salix spp. - (Willow), *Cinnamomum camphora* - (Camphor Laurel) and *Liquidambar styraciflua* - (sweet gum), where the trunk of such tree is located within 5 metres of any sewer or

a. the outside enclosing wall of a legally constructed building; or

b. the outside edge of the footings of a legally constructed carport; or

c. the outside edge of the coping of a legally constructed in-ground swimming pool.

Note: This exemption does not apply to a tree on adjoining land. The tree and the dwelling house or other structure referred to above must both be on the same land for the exemption to apply

3. Tree works on any tree on the following list (Table 5.4.3.1):

Note: The trees listed below are identified by their botanical name (common names are provided as reference only). Cultivated varieties (cvs.) of the trees listed are not included for exemption except where specified.

Table 5.4.3.1

Botanical name	Common name
Acacia baileyana	Cootamundra Wattle
Acacia decurrens	Green Wattle
Acacia salignus	W.A. / Golden Wreath Wattle
Acer negundo	Box Elder
Albizia lopantha	Crested Wattle / Persian silk
Ailanthus altissima	Tree of Heaven
Alnus jorullensis	Evergreen Alder
Cotoneaster pannosus	Cotoneaster
Eriobotrya japonica	Loquats
Erythrina spp.	Coral Trees
Ficus elastica	Rubber Tree
Gleditsia triacanthos	Honey Locust
Lagunaria patersonii	Norfolk Is. Hibiscus
Ligustrum lucidum & cvs	Large Leafed Privet
Ligustrum sinense	Small Leafed Privet
Melia azedarach	White Cedar
Nerium oleander	Oleander
Olea europaea var. africana	African Olive
Populus alba	White / Silver Poplar
Populus deltoides	White / Silver Poplar
Populus nigra	Black Poplar
Populus nigra Italica	Lombardy Poplar
Pyracantha augustifolia	Firethorn
Robinia pseudoacacia	False Acacia / Black Locust
Rhus toxicondendron (Toxicodendron seccudaneum)	Rhus / Sumac Tree
Salix alba ssp. babylonica	Weeping Willow
Salix matusdana 'Tortuosa'	Tortured Willow
Schefflera actinophylla	Umbrella Tree
Schinus terebinthifolius	Brazilian Mastic / Pepper Tree
Syagrus romanzoffianum	Cocos Island / Queen Palm

All edible fruit and nut trees except native species such as *Acmena* spp. (Lily Pilly), *Syzygium* spp. (Lily Pilly), *Elaeocarpus* spp. (Blueberry Ash) or *Macadamia* spp. (Macadamia Tree).

APPENDIX F

Greater Sydney Regional Strategic Weed Management Plan 2017 – 2022
(Reviewed September 2019) – extract containing tree weeds.

Source: NSW Government Department of local Land services (Greater Sydney), Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022, viewed 6 July 2021, Greater-Sydney-Regional-Weed-Mgmt-Plan-FINAL-Sept-2019.pdf

Appendix 1: Priority weeds for the Greater Sydney Local Land Services region

This appendix covers State level determined priorities (A1.1) and regionally determined priorities (A1.2). The Biosecurity Act 2015 and regulations provide specific legal requirements for state level priority weeds (A1.1) and high risk activities. For each state level priority weed, the state objective and how this objective is achieved through specific requirements under the Biosecurity Act 2015 and regulations is covered. These specific regulatory requirements include Prohibited Matter, Biosecurity Zones, Mandatory Measures, Control Orders (see Table 2.1 and Section 4.2).

A1.2 in this appendix identifies regionally prioritised weeds and outcomes to demonstrate compliance with the General Biosecurity Duty. Recommended measures for these weeds are provided in the NSW DPI web and mobile based application WeedWise, as practical advice on achieving these outcomes.

Hierarchy of A1.1 and A1.2

To be considered a priority weed, the species must appear in either A1.1 or A1.2. Species are generally listed in a hierarchical order based on management objective, with Prevention the highest priority followed by Eradication, Containment and Asset Protection. Specific legal requirements apply to State determined priorities (A1.1), while Regional Priorities (A1.2) include "outcomes to demonstrate compliance with the General Biosecurity Duty" and "Strategic responses in the region" to achieve the relevant management objective (ie Prevention, Eradication, Containment or Asset Protection).

Generally a priority weed species will appear in either A1.1 or A1.2, however some species appear in both of these lists. This can be for a number of reasons including:

• For alligator weed and water hyacinth – that the Greater Sydney Region occurs within the core infestations of these weeds. In these cases, the regional management objectives, outcomes to demonstrate compliance with the GBD, and strategic response are given in A1.2.

• The legal requirements specified in A1.1 need to be supplemented by outcomes to demonstrate compliance with the GBD in A1.2 to achieve the desired management objectives in the Greater Sydney region, e.g., Cat's claw creeper, Serrated tussock, Salvinia and some Asparagus species.

A1.1 State level determined priority weeds

State Priority Weed Objective – ASSET PROTECTION (Whole of State):
These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.

Species	Biosecurity Act requirements & Strategic Response in the region
†Willows - Salix spp.(excludes S.babylonica, S.x calodendron & S. x reichardtiji)	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell. Regional Strategic Response: Identify priority assets for targeted management. # Refer Appendix 1.2 Prevention. † Refer Appendix 1.2 Eradication. †† Refer Appendix 1.2 Containment. ‡ Refer Appendix 1.2 Asset Protection

A1.2 Regional priority weeds

Regional Priority Weed Objective – ERADICATION:
The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Species	
Black willow - *Salix nigra*	
The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.	Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations.
Grey sallow – *Salix cinerea*	
The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.	• Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations.
Mysore thorn - *Caesalpinia decapetala*	
The plant is eradicated from the land and the land is kept free of the plant. • The plant or parts of the plant are not traded, carried, grown, or released into the environment.	• Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations. • Implement quarantine and/or hygiene protocols.

Regional Priority Weeds objective – CONTAINMENT:

These weeds are widely distributed in the region. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.

Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
African olive - *Olea europaea* subsp. *cuspidata*		
An exclusion zone is established for all lands in the Blue Mountains local government area and lands to the west of the Nepean River in the Penrith local government area. The remainder of the region is classified as the core infestation area.	Whole region: • The plant or parts of the plant are not traded, carried, grown, or released into the environment. Within Exclusion zone: • The plant is eradicated from the land and the land is kept free of the plant. Within Core infestation: • Land managers prevent spread from their land where feasible. • Land managers reduce the impact on priority assets.	Whole region: • Implement quarantine and/or hygiene protocols. • Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives. • Monitor change in current distribution to ensure containment of spread. Within Exclusion zone: • Destruction of all infestations, aiming at local eradication where feasible Within Core infestation: • Identify priority assets for targeted management.

Appendix 2: Other weeds of regional concern

The following table recognises that whether a plant is a weed depends on the location, and that some plants grown as crops may function as weeds in other land uses. For example, kikuyu is a valuable pasture grass in grazing paddocks but is an invasive weed in the natural environment i.e., bushland and National parks. Agapanthus are very popular garden plants, often used as border plants or to hold low banks. However, agapanthus are also known to invade roadsides, bushland and waterways.

Weeds listed in Appendix 2 include species known to occur in the Greater Sydney region as well as species not currently known to occur but at risk of moving into the region in the future. They have been identified as a potential risk in some (not all) situations. Many of the species pose potential risks to biodiversity (i.e. the environment), for example if they were to spread to or be found in a National Park. Some of the species pose potential risks to agriculture and some of the weeds pose potential risks to human health. In most situations this is when ingested but can also include risks associated with asthma and other allergic reactions.

This plan recognises that many weeds are already so well established that they can only be managed and will never be eradicated from the region. The species included in Appendix 2 may warrant resources for control or management programs, or occur in neighbouring regions and are a priority to keep out of the region. Inclusion on the list may assist Local Control Authorities and/or land managers prioritise action in certain circumstances where it can be demonstrated the weed poses a threat to the environment, agriculture and/or the community/human health.

The Biosecurity Act 2015 provides powers to Local Control Authorities to take action in relation to these weeds in particular circumstances, for example where a weed threatens a high value asset and prevention, elimination or reduction of the risk is feasible and reasonable.

Common name	Scientific name	Asset/value at risk
American Cotton Palm, Cotton Palm, California fan palm.	*Washingtonia filifera*	Environment
Black cherry, Wild black cherry	*Prunus serotina*	Environment
Box elder	*Acer negundo*	Environment
Broad leaf pepper	*Schinus terebinthifolius*	Environment
Buckthorn	*Rhamnus alaternus*	Environment
Camphor laurel	*Cinnamomum camphora*	Environment, Agriculture, Human health
Cherry guava	*Psidium cattleyanum*	Environment, Agriculture
Chinese celtis/ Chinese hackberry	*Celtis sinensis*	Environment, Agriculture
Chinese elm	*Ulmus parvifolia*	Environment
Chinese tallow	*Triadica sebifera*	Environment
Cockspur coral tree	*Erthrina crista-galli*	Environment
Cocos palm	*Syagrus romanzoffiana*	Environment
Coral tree, Common coral tree	*Erythrina x sykesii*	Environment
European olive	*Olea europaea* subsp. *europaea*	Environment
Golden rain tree	*Koelreuteria elegans*	Environment
Golden wreath wattle	*Acacia saligna*	Environment
Holly, English holly	*Ilex aquifolium*	Environment
Honey locust	*Gleditsia triacanthos*	Environment, Agriculture
Lote tree, Nettle tree, Mediterranean hackberry	*Celtis australis*	Environment
Orange jessamine, Murraya	*Murraya paniculata*	Environment
Osage orange	*Maclura pomifera*	Environment
Patula pine, Mexican weeping pine	*Pinus patula*	Environment
Phoenix palm, Canary Island date palm	*Phoenix canariensis*	Environment
Privet spp.	*Ligustrum sinense, Ligustrum lucidum, Ligustrum vulgare*	Environment, Human health
Radiata pine, Pine wildings	*Pinus radiata*	Environment
Rhus tree	*Toxicodendron succedaneum*	Human health
Tree of heaven	*Ailanthus altissima*	Environment, Human health
Umbrella tree	*Schefflera actinophylla*	Environment

APPENDIX G – Tree Assessment

Tree ID number	**Botanical Name**	**Age** Y: Young M: Mature OM: Overmature (senescent)	**Height** (m)	**Spread** (m)	**DBH** (mm)	**DARB** (mm)	**TPZ** (m. rad) AS 4970 (2009)	**SRZ** (m. rad) AS 4970 (2009)	**SRIV** Age, Vigour, Condition / Index Rating (see Appendix D) www.iaca.org.au / Estimated Life Expectancy 1 = Long 2 = Medium 3 = Short	**STARS** Significance scale (see Appendix A) www.iaca.org.au 1 = High 2 = Medium 3 = Low / Retention Value 1 = High 2 = Medium 3 = Medium Low 4 = Low 5 = Remove	**Retain / Remove / Transplant** **pr = prune** **cr = crown** **rt = roots**	Comments and Recommendations
Tree ID number	**Botanical Name, common name**	**Age**	**Height**	**Spread**	**DBH**	**DARB**	**TPZ**	**SRZ**	**SRIV**	**STARS**	**Action**	**Comments and Recommendations**
1	*Diospyros kaki* Persimmon	M	2.5	2	150 @ ground	150	2.0	1.5	MGVG – 10 / 1	2 / 1	**Retain**	Acaulescent, bifurcated at or near ground. Branch bark included union appears stable. Previously top lopped. Crown cover 30%, crown density 80%. See Appendix I – Photographs, Photograph 1.0 and 1.1.
2	*Ficus carica* Edible Fig	Y	1.8	2	120	150	2.0	1.5	YGVG - 9 / 1	2 / 1	**Retain**	Crown cover 80%, crown density 80%. See Appendix I – Photographs, Photograph 1.0 and 1.1.
3	*Eriobotrya japonica* Loquat	Y	2.3	3.5 x 1.75	100	120	2.0	1.5	YGVG - 9 / 1	2 / 1	**Retain**	Crown asymmetrical, bias to North. Crown cover >90%, crown density >90%. See Appendix I – Photographs, Photograph 1.0 and 1.1.
4	*Eriobotrya japonica* Loquat	Y	2.3	3.5 x 1.75	100	120	2.0	1.5	YGVG - 9 / 1	2 / 1	**Retain**	Crown asymmetrical, bias to South. Crown cover >90%, crown density >90%. See Appendix I – Photographs, Photograph 1.0 and 1.1.
5	*Citrus limon* Lemon Tree	M	1.6	2	100	120	2.0	1.5	MGVG – 10 / 1	2 / 1	**Retain**	Crown cover >90%, crown density >90%. See Appendix I – Photographs, Photograph 1.2.
6	*Citrus sinensis* 'Washington Naval' Washington Naval Orange	M	2.3	3	150	170	2.0	1.7	MGVG – 10 / 1	2 / 1	**Retain**	Crown cover >90%, crown density >90%. See Appendix I – Photographs, Photograph 1.2.
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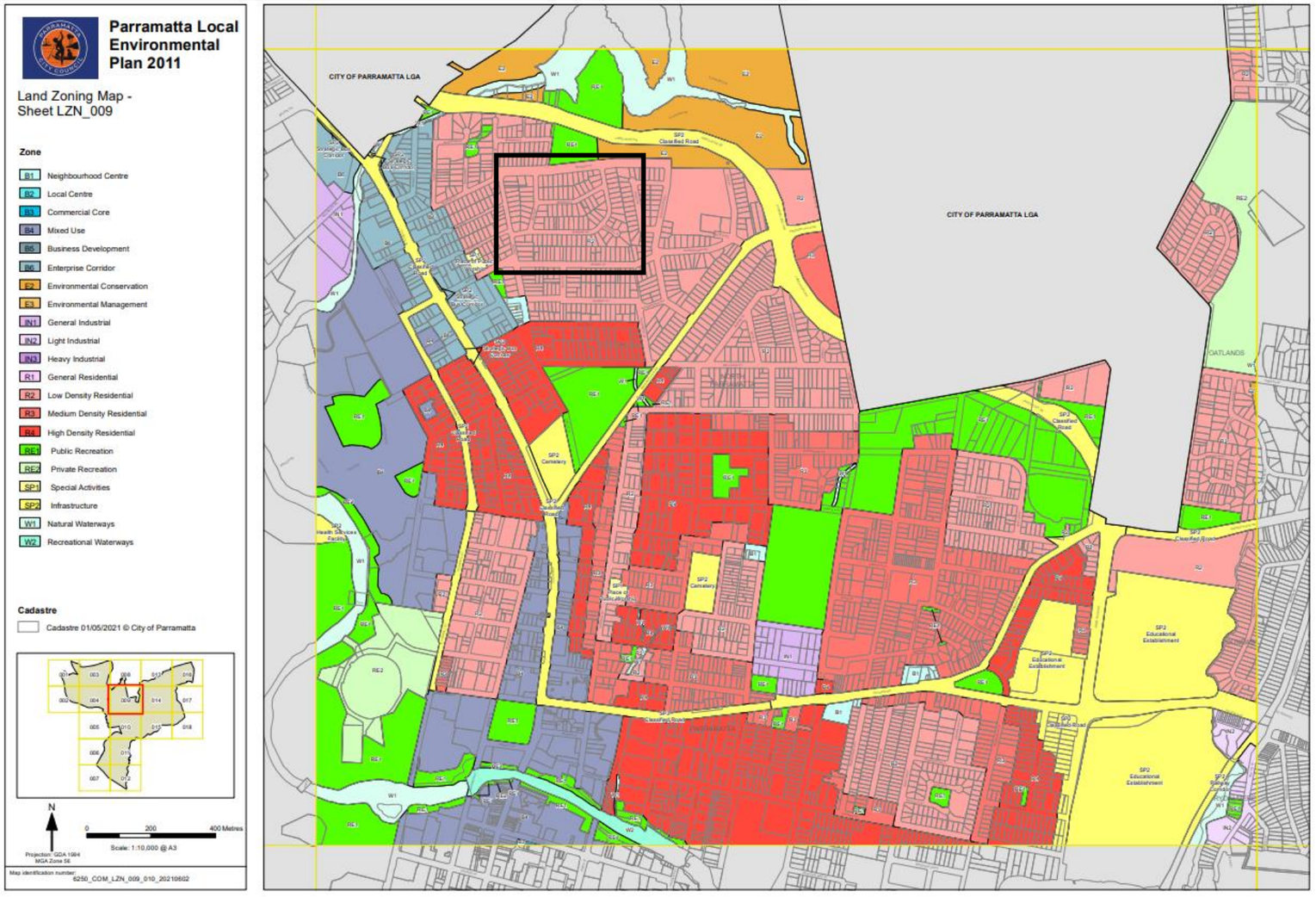
Appendix H – Tree Location Plan, Land Zoning Map, 1 of 2

8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

From NSW Government, Parramatta Local Environmental Plan 2011, Land Zoning Map – Sheet LNZ_009.

URBAN TREE MANAGEMENT

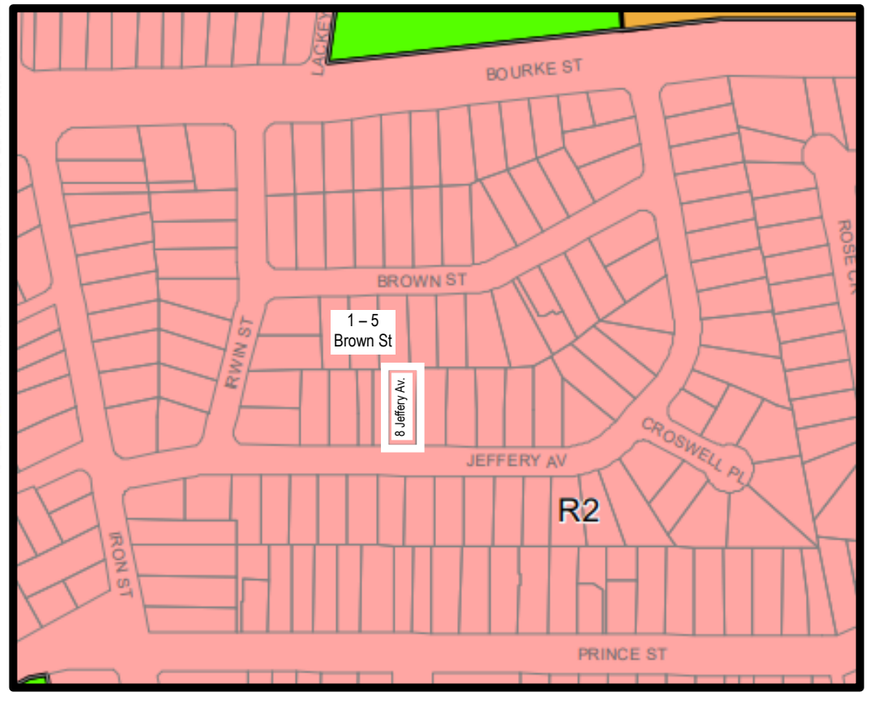


Land Zoning Map – Highlighted black section showing location of subject trees (see Inset Plan)

Legend

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor
- E2 Environmental Conservation
- E3 Environmental Management
- IN1 General Industrial
- IN2 Light Industrial
- IN3 Heavy Industrial
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- RE1 Public Recreation
- RE2 Private Recreation
- SP1 Special Activities
- SP2 Infrastructure
- W1 Natural Waterways
- W2 Recreational Waterways



Inset - Land Zoning Map – white outlined area showing location of subject trees

APPENDIX – **H**, Tree Location Plan, Stormwater Drainage Layout plan showing drainage from 1-5 Brown Street, 2 of 2

8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

from Senior Living Development, Site Stormwater Drainage Layout Plan, Sketch status,, date: 11/10/2021, Scale 1:200 @ A1, Sheet 1 of 2, Project No. BGXYZ, File 21024-C01, Type C, Rev. 2, prepared by Civil / Stormwater Engineer A & G Consulting Engineers Pty Ltd, t. 9807 7971.

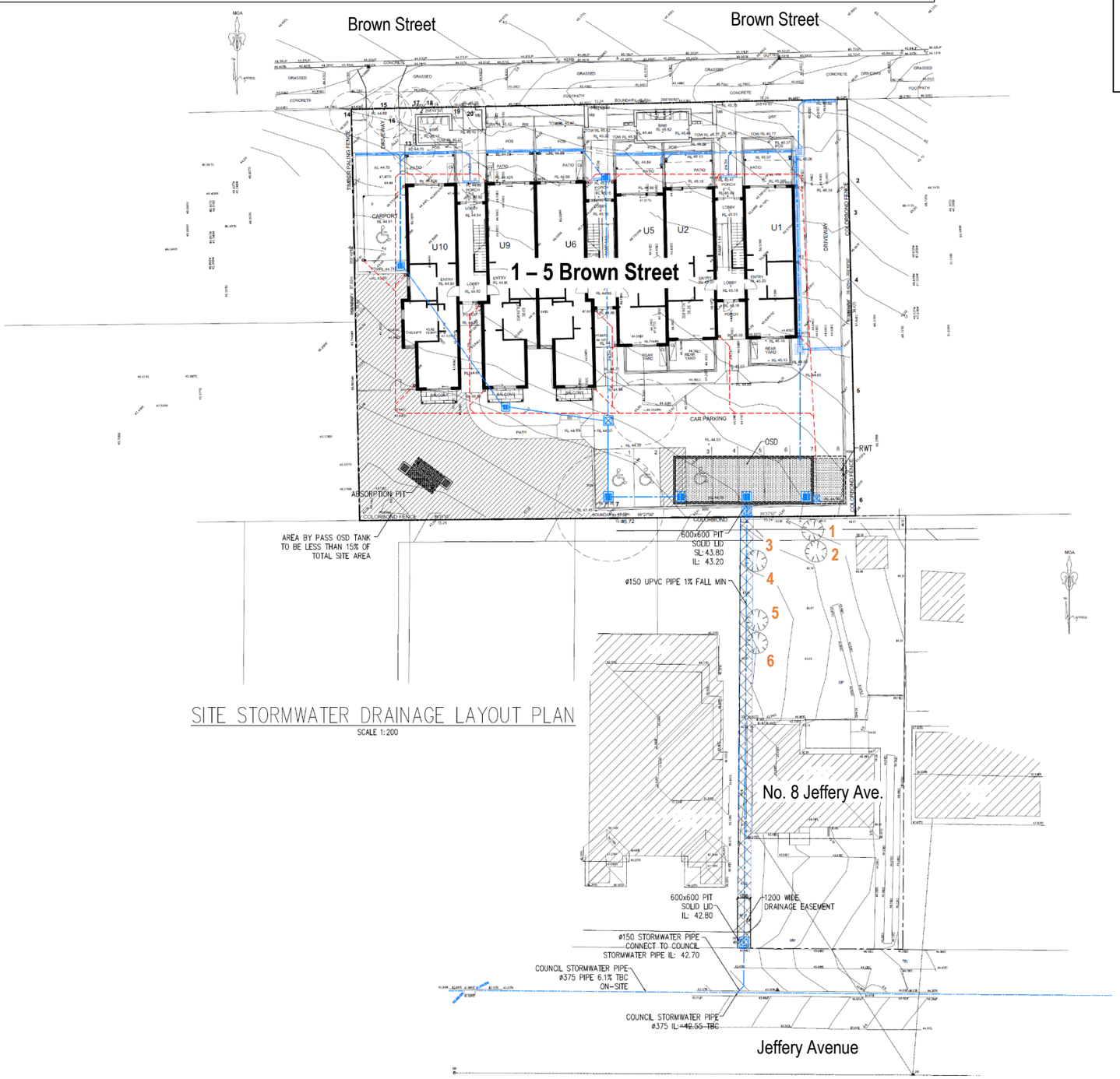
URBAN TREE MANAGEMENT

Legend

10. Tree/s or stands of trees numbered in orange and bold or surrounded by an unbroken line are recommended for retention.

11. Tree/s or stands of trees numbered in blue and not bold or surrounded by a broken line are recommended for removal.

Note: trees indicated, unnumbered are either shrubs, or trees of species, or dimensions, or condition class not protected by the Tree Preservation Order or trees not affected by the proposed works or were already removed.



SITE STORMWATER DRAINAGE LAYOUT PLAN
SCALE 1:200

APPENDIX I – TREE PROTECTION PLAN, Tree Protection Zones - Standard Procedure, plan 1 of 6

The Protective fencing where required may delineate the ***TPZ*** and should be located as determined by the project arborist in accordance with AS4970 *Protection of trees on development sites*, Section 4, 4.3. *"Fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works including demolition. Once erected, protective fencing must not be removed or altered without approval by the project arborist. The TPZ must be secured to restrict access. AS4687 Temporary fencing and hoardings specifies applicable fencing requirements. Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids into the protected area. Fence posts and supports should have a diameter greater than 20 mm and be located clear of roots. Existing perimeter fencing and other structures may be suitable as part of the protective fencing."*

AS4970 Section 4, Tree protection measures, Figure 3 Protective fencing shows examples of such fencing.

"Legend:
1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
2 Alternative plywood or wooden paling fence panels. The fencing material also prevents building materials or soil entering the TPZ.
3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots. "

AS4970 Section 4, Tree protection measures, 4.2 Activities restricted within the TPZ
"Activities generally excluded from the TPZ included but are not limited to-
(a) Machine excavation including trenching;
(b) Excavation for silt fencing;
(c) cultivation;
(d) storage;
(e) preparation of chemicals, including preparation of cement products;
(f) parking of vehicles and plant;
(g) refuelling;
(h) dumping of waste;
(i) wash down and cleaning of equipment;
(j) placement of fill;
(k) lighting of fires;
(l) soil level changes;
(m) temporary or permanent installation of utilities and signs, and
(n) physical damage to the tree."

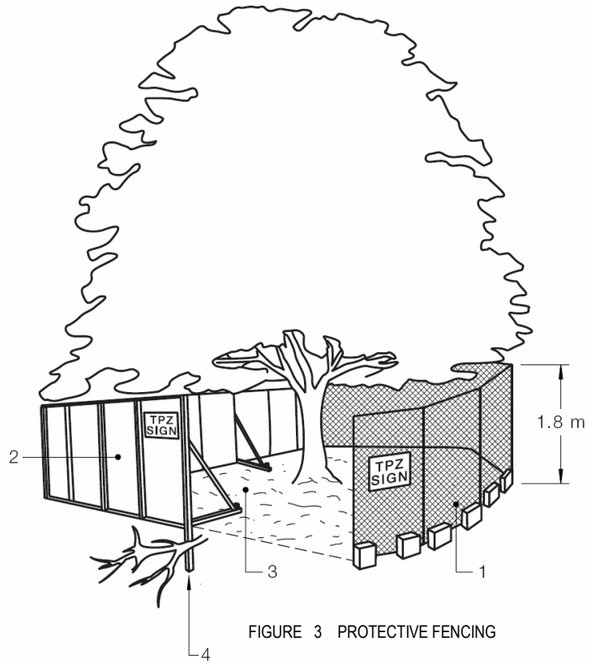


FIGURE 3 PROTECTIVE FENCING

FIGURE C1 TREE PROTECTION ZONE SIGN

Tree Protection signage is to be attached to each ***Tree Protection Zone*** and displayed from within the development site in accordance with AS4970 2009 *Protection of trees on development sites*, Section 4.4 and example Figure C1 (as shown) and lettering to comply with AS1319.

Where a tree is to be retained and a ***Tree Protection Zone*** cannot be adequately established due to restricted access e.g. tree located along side an access way, the trunk and branches in the lower crown will be protected by wrapping 2 layers of hessian or carpet underfelt around the trunk and branches for a minimum of 2 m or as lower branches permit, then wire or rope secures 75x50x2000 mm hardwood battens together around the trunk (do not nail or screw to the trunk or branches). The number of battens to be used is as required to encircle the trunk and the battens are to extend to the base of the tree (AS4970 2009 *Protection of trees on development sites*, Figure 4 Examples of Trunk, Branch and ground protection).

Trunk/Branch and root protection If a tree is growing down slope from an excavation, a silt fence located along the contours of the site in the area immediately above the ***Tree Protection Zone*** fencing may need to be installed and regularly maintained to prevent burial and asphyxiation of the roots of the tree. To allow for the maintenance of both fences, the silt fence must be constructed separately to the tree protection fence and the 2 fences must be constructed independently of each other and standalone. To reduce competition with the tree the area within the ***Tree Protection Zone*** is to be kept free of weeds. These are best removed by the application of foliar herbicide with Glyphosate as the active constituent. This is the preferred method rather than removal by cultivation of the soil within the dripline, to minimise root disturbance to the tree. The removal of woody weeds such as Privet should use the cut and paint method of herbicide application. Weeds to be controlled within the ***Tree Protection Zone***, for the duration of the project.

The area of the Tree Protection Zone to be mulched to a depth of 100 mm with organic material being 75% leaf litter and 25% wood, and this being composted material preferably from the same genus and species of tree as that to where the mulch is to be applied, i.e. species specific mulch. The depth of mulch and type as indicated, to be maintained for the duration of the project. Where deep excavation will expose the soil profile to drying out the root plate is to be protected by pegging jute matting across the ground surface 2 m back from the edge of the profile and 2 m down the face of the profile and is to be in one continuous sheet or layers up to 5 mm thick and overlapped 300 mm and pegged. Pegs are to be a minimum length of 200 mm and spaced at 500 mm increments in a grid pattern. Once installed mulch is to be placed on top of the jute matting previously described.

No services either temporary or permanent are to be located within the ***Tree Protection Zone***. If services are to be located within the ***Tree Protection Zone***, special details will need to be provided by the Project Arborist for the protection of the tree regarding the location of the service/s.

A tree will not be fertilised during its protection within the ***Tree Protection Zone***, as this may hasten its decline if it were to decline. If a tree is to be fertilised this should be in consultation with the Project Arborist as per AS4970 (2009).

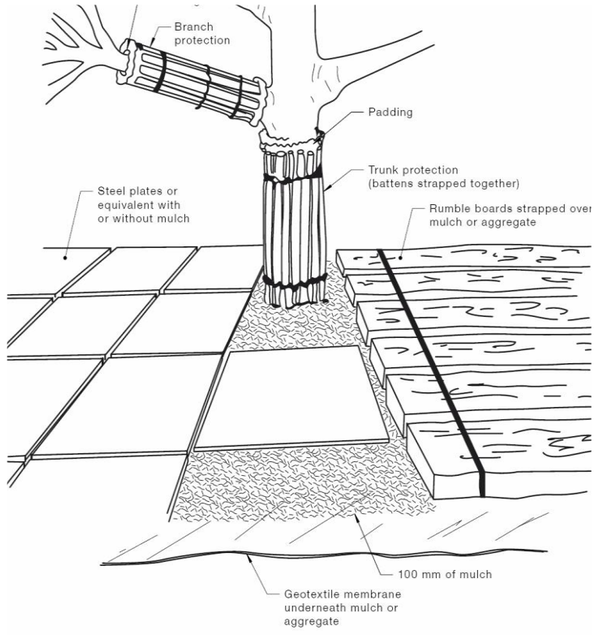
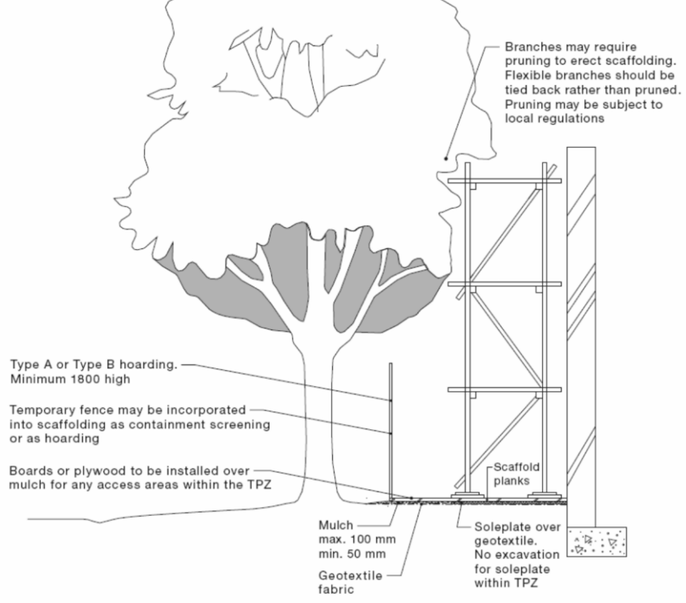


FIGURE 4 EXAMPLES OF TRUNK, BRANCH AND GROUND PROTECTION

In the event of prolonged dry periods, or where a tree has been transplanted, or where excavation nearby, especially up slope, leads to drying out of a soil profile, or modification to ground water flow, or flows across an existing ground surface to the tree and its growing environment; deep root watering thoroughly at least twice a week is to be undertaken to irrigate the tree. The need for such watering is determined readily by observing the dryness of the soil surface within the dripline of the tree by scraping back some mulch. Mulch is to be reinstated afterwards. In the event of disrupted ground or surface water flows to the tree due to excavation, filling or construction, a reticulated irrigation system may be required to be installed within the ***Tree Protection Zone***. If an irrigation system is to be installed, consideration must be given to volume, frequency, and drainage of water delivered, and this should be in consultation with the Project Arborist as per AS4970 (2009).

Scaffolding *"Where scaffolding is required it should be erected outside the TPZ. Where it is essential for scaffolding to be erected within the TPZ, branch removal should be minimized. This can be achieved by designing scaffolding to avoid branches or tying back branches. Where pruning is unavoidable it must be specified by the project arborist in accordance with AS4373. Ground below the scaffolding should be protected by boarding (e.g. scaffolding board or plywood sheeting) as shown in Figure 5. Where access is required, a board walk or other surface material should be installed to minimise soil compaction. Boarding should be placed over a layer of mulch and impervious sheeting to prevent soil contamination. The boarding should be left in place until the scaffolding is removed."* (Standards Australia 2009, p. 18).



NOTE: Excavation required for the insertion of support posts for tree protection fencing should not involve the severance of any roots greater than 20 mm in diameter, without the prior approval of the project arborist.

FIGURE 5 INDICATIVE SCAFFOLDING WITHIN A TPZ

APPENDIX I – Tree Protection Plan, 2 of 6
(trees numbered per Appendix G - Tree Assessment)
8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.
Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

URBAN TREE MANAGEMENT

All retained tree/s Existing levels are to be preserved and no excavation except by hand to protect structural roots is to be undertaken within the Tree Protection Zone/s. No cutting or filling is to be undertaken within any TPZ unless specified by the Project Arborist.

Induction for Tree Protection All workers entering the site involved in construction must be advised of the tree protection measures and specifications outlined within this report during the site induction. This is to be verbally acknowledged and signed off before commencement of work.

Tree Protection Works - Specific

Prior to Demolition – Before construction

Crown Pruning – Trees 1 - 6 No crown pruning is required.

TPZ Fencing or works Trees 1 and 2 No plant equipment is to enter this site. If plant equipment is to enter the site then these trees are to be isolated with a The tree Protection Zone fenced area is shown on plan 4 of 6. TPZ fences and works are to be maintained and retained until the completion of all building works. This is to be installed as shown in Appendix I – Tree Protection Plan – Tree Protection Zones - Standard Procedure, Plan 1 of 6. Tree Protection Zone signage is to be applied to the fences per Plan 1 of 6 Figure C1. To be certified by the Project Arborist.

Trunk and Branch protection Trees 1 - 6 Not required.

Remedial works to stimulate root growth and vigour – Not required.

Scaffolding within the Tree Protection Zone or any protected tree Not required.

Mulching Tree/s all retained trees Not required as trees in turf grassed area.

Movement of Plant Equipment within the TPZ – Trees 3 and 4 The entry hole for the directional drilling beneath Trees 3-6 is to be excavated outside of the TPZ of Trees 3 and 4 within the rear of 5 Brown Street. No plant equipment is to enter this site.

All exiting soil levels within the TPZ fenced area are to be retained unaltered to protect tree roots save for the driveway after hand excavation along its edge.

During Demolition and Earth Works

Crown Protection – Trees 1 - 6 No plant equipment is to enter this site. If plant equipment is to enter the site then these trees are to be protected. Plant equipment is to be kept away from the crown and work is to be conducted from outside of the TPZ reaching into the TPZ to minimise soil disturbance and compaction and branch and trunk damage.

Root Protection – Trees 4 - 6 Directional drilling to install the 600 mm diameter stormwater pipe is to have a top of bore of 600 mm beneath these trees to protect the root plates.

Where access is required within the TPZ, roots are to be protected from soil compaction by the application of ground protection as per AS4970 (2009) section 4, 4.5.3 Ground Protection, where a permeable membrane such as geotextile fabric is to be located at existing ground level beneath a layer of mulch or crushed rock with no fines 100 mm deep and covered with rumble boards or steel plates as per AS4970 (2009) Figure 4, (Appendix I, plan 1 of 6). Plant equipment is to work from outside of the TPZ reaching into the TPZ to minimise soil disturbance and soil compaction.

Root Protection from Soil Profile Desiccation - utility trenches – Trees 1 - 6 No plant equipment is to enter this site. If plant equipment is to enter the site and open trench excavation is required these trees are to be protected. Where an excavation profile is to be open for 1 day or more within or adjoining the TPZ, the exposed structural roots (roots >400 mm diameter) and those within the soil profile are to be protected from drying out. The exposed structural roots are to be wrapped with a triple layer of hessian which is to be fastened to itself with hessian to prevent unravelling. The soil profile to 2 m deep (or to the base of the excavation if less than 2 m) is to be achieved by applying a double layer of hessian fabric to cover the exposed soil profile from grade within the Tree Protection Zone of these trees and fixed into place by metal pegs at the bottom, and the fabric is to overlap the ground at surface by 300 mm and be pegged into place with metal pegs. The soil profile protection is to remain in place and be maintained until backfilling is completed. To be certified by the Project Arborist.

TPZ Fencing or works Trees 1 - 6 Tree Protection Zone fences and works are to remain in place during this part of the project.

Existing soil levels – Trees 1-6 The existing soil levels within the TPZ of each this tree (no topsoil stripping to 300 mm) are to be retained at extant grade.

APPENDIX I – Tree Protection Plan, 3 of 6 (trees numbered per Appendix G - Tree Assessment) **8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.**

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

URBAN TREE MANAGEMENT

During Construction

Crown Protection – Trees 1-6 No plant equipment is to enter this site. If plant equipment is to enter the site then these trees are to be protected. Plant equipment is to be kept away from the crown of this tree and work is to be conducted from outside of the TPZ, and where required, by reaching into the TPZ to minimise soil disturbance and compaction and branch and trunk damage.

Root Protection – Trees 1-6 No work is to be undertaken within the TPZ fenced area.

Root Protection – Trees 1-6 Where access is required within the TPZ, roots are to be protected from soil compaction by the application of ground protection as per AS4970 (2009) section 4, 4.5.3 Ground Protection, where a permeable membrane such as geotextile fabric is to be located at existing ground level beneath a layer of mulch or crushed rock with no fines 100 mm deep and covered with rumble boards or steel plates as per AS4970 (2009) Figure 4, (Appendix I, plan 1 of 6). Plant equipment is to work from outside of the TPZ reaching into the TPZ to minimise soil disturbance and soil compaction.

TPZ Fencing or works Trees 1 - 6 Tree Protection Zone fences and works are to remain in place during this part of the project.

Root Protection from Soil Profile Desiccation - utility trenches – Tree 1 Where an excavation profile is to be open for 1 day or more within or adjoining the TPZ, the exposed structural roots (roots >400 mm diameter) and those within the soil profile are to be protected from drying out. The exposed structural roots are to be wrapped with a triple layer of hessian which is to be fastened to itself with hessian to prevent unravelling. The soil profile to 2 m deep (or to the base of the excavation if less than 2 m) is to be achieved by applying a double layer of hessian fabric to cover the exposed soil profile from grade within the Tree Protection Zone of these trees and fixed into place by metal pegs at the bottom, and the fabric is to overlap the ground at surface by 300 mm and be pegged into place with metal pegs. The soil profile protection is to remain in place and be maintained until backfilling is completed. To be certified by the Project Arborist.

Location of underground utilities within a Tree Protection Zone – Trees 3 - 6 Directional drilling to install the 600 mm diameter stormwater pipe is to have a top of bore of 600 mm beneath these trees to protect the root plates The minimum top of bore is to be 600 mm below extant grade to protect the root plate. The Sending and Receiving trenches for the under bore are to be located outside of the TPZ of each tree. Works are to be monitored and certified by the Project Arborist.

Precautions in respect to temporary work – Trees 1 - 6 No plant equipment is to enter this site. If plant equipment is to enter the site then these trees are to be protected. If pedestrian or vehicular access is required within a Tree Protection Zone fenced area the roots of the tree are to be protected from soil compaction by the application of ground protection as per AS4970 (2009) Figure 4, (see Appendix I, plan 1 of 6), where a permeable membrane such as geotextile fabric is to be located at existing ground level beneath a layer of mulch or crushed rock with no fines 100 mm deep and covered with rumble boards or steel plates. Such works are to be monitored and certified by the Project Arborist. Any plant equipment is to work from outside of the TPZ reaching into the TPZ to minimise soil disturbance and compaction. Ground Protection Work is to remain in place until building works are completed. Maintain tree protection, waste material is to be kept clear of the TPZ.

Backfilling within a Tree Protection Zone Not to be undertaken within the Tree Protection Zone.

Any plant equipment is to work from outside of the TPZ reaching into the TPZ to minimise damage to overhanging branches and to protect roots.

All exiting soil levels within the TPZ fenced area are to be retained unaltered to protect tree roots.

Root Pruning Root pruning will be conducted by the operation of directional drilling to a depth of 600 mm to top of bore. Where roots are exposed or open trenching exposes roots within the TPZ, root pruning is to be conducted in accordance with (AS4373, 2007, p. 18) sec. 9 Root Pruning, Cuts are to be made with clean sharp tools with final cuts made to undamaged tissue. Final cuts should be made perpendicular to the length of the root with a final cut to undamaged tissue to remove injured or crushed tissues allowing the tree to develop strong internal boundaries and generate new roots.

Post Construction

Remove Tree Protection Zone works.

Remedial pruning to crown of tree/s as required to be conducted per AS4373 (2007), to be determined and certified by the Project Arborist.

APPENDIX – **I**, Tree Protection Plan, showing Tree Protection Zones, plan 4 of 6

(trees numbered per Appendix G - Tree Assessment)

8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

From Senior Living Development, Site Stormwater Drainage Layout Plan, Sketch status,, date: 11/10/2021, Scale 1:200 @ A1, Sheet 1 of 2, Project No. BGXYZ, File 21024-C01, Type C, Rev. 2, prepared by Civil / Stormwater Engineer A & G Consulting Engineers Pty Ltd, t. 9807 7971.

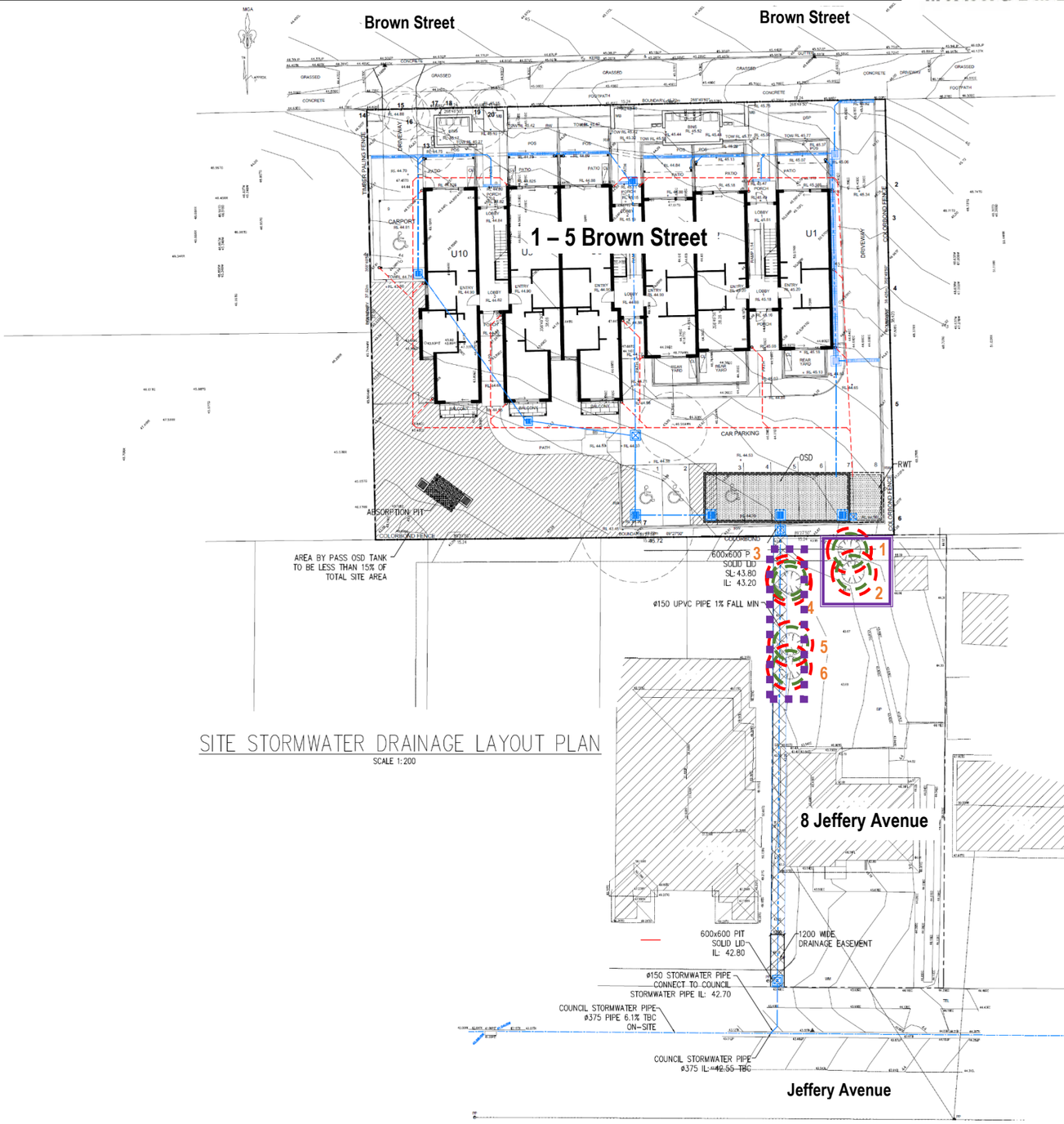
URBAN TREE MANAGEMENT

Legend

- ***Tree Protection Zone (TPZ),*** alternate setbacks as indicated, or other protection measures or works as indicated.
- ***Tree Protection Zone Fence.***
- ***Tree Protection Zone (TPZ).***
- ***Structural Root Zone (SRZ).***
- ***TPZ reduced by 10% of area.***

10. Tree/s or stands of trees numbered in orange and bold or surrounded by an unbroken line are recommended for retention.

11. Tree/s or stands of trees numbered in blue and not bold or surrounded by a broken line are recommended for removal.



Tree Protection Zone setbacks

1. UTM Tree No. / UTM Stand No.	2. Tree Protection Zone (TPZ) = **12 x DBH** (m) From center of trunk (COT) in metres AS4970 (2009) Section 3	3. Structural Root Zone **SRZ** From center of trunk (COT), trunk diameter above root buttress (DARB) AS4970 (2009) Section 3, 3.3.5 where applicable (m)	4. Distance of fence with TPZ setback **reduced by 10%** of area on one side of tree only, in metres equating to approx. 0.3 radius as per AS4970 (2009) Section 3, 3.3 (mm)	5. Proposed distance of works on the side closest to excavation / building construction in metres From center of trunk (COT), (m) [1]weeds species per Parramatta DCP.2011
1	2.0	1.5	N/A	2.0
2	2.0	1.5	N/A	2.0
3	2.0	1.5	N/A	2.0
4	2.0	1.5	N/A	2.0
5	2.0	1.5	N/A	2.0
6	2.0	1.7	N/A	2.0

Appendix I – Tree Protection Plan, Pruning Specification, plan 5 of 6

(trees numbered per Appendix G - Tree Assessment)

8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

URBAN TREE MANAGEMENT

Tree No.	Photograph showing tree and branches to be pruned (Appendix I, plans 6 of 6)	Order of branches and number of branches to be pruned and total No. of branches to be pruned	Orientation of branches to be pruned	Percent (%) of crown to be pruned	Pruning Classes per (AS4373, 2007)	Development activities requiring pruning including building envelope, hoarding, scaffolding, pilling rigging, cranage, work zones, vehicle access.	Comments, all trees.
3 - 6	1.0	**Live root** 1st order - 3 2nd order - 2 3rd order - 0 4th order - 0 5th order - 0 **TOTAL = 0**	North	≤10 of structural roots	*Root Pruning (AS4373, 2007, p. 18).*	Each tree will undergo minor root pruning by the operation of the directional drilling process at a depth of 600 mm to top of bore within Tree Protection Zone of each tree which will minimise harm as the trees are small and have a low center of mass.	Each tree will undergo minor root pruning by the operation of the directional drilling process at a depth of 600 mm to top of bore within Tree Protection Zone of each tree which will minimise harm as the trees are small and have a low center of mass.

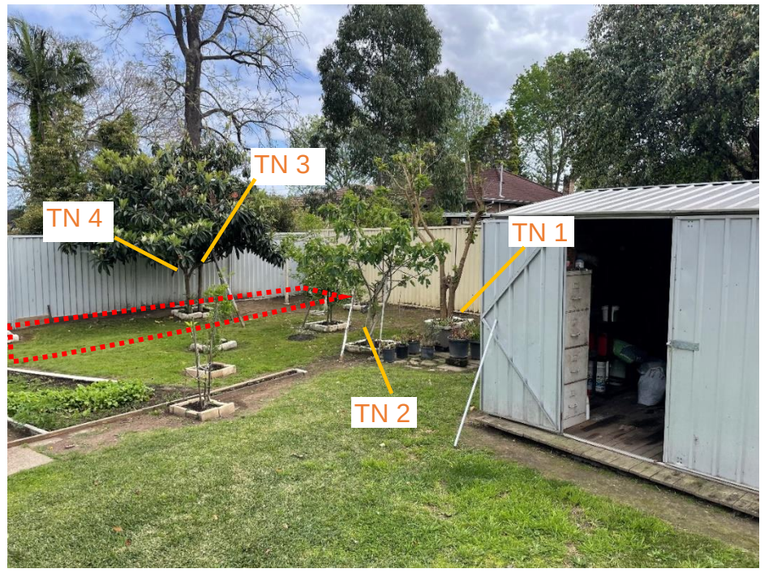
APPENDIX I – Tree Protection Plan, Photographs (taken by Ryan Brown – Surveyor of Total Surveying Solutions, September 2021), plan 6 of 6.
(Trees numbered per Appendix G - Tree Assessment)

8 Jeffery Avenue, North Parramatta NSW, Ref: 24013, 11/11/2021.

Prepared by Urban Tree Management Australia P/L, 65 Excelsior Street, Merrylands NSW 2160, tel. 02 9760 1389.

URBAN TREE MANAGEMENT

Photograph 1.0, view to North towards the rear boundary and rear of 5 Brown Street, showing Trees 1 and 2 as numbered. The importance of these trees is evident in the layout and cultivation of the rear garden. Dotted blue line shows approximate location of the Tree Protection Zone fence to be installed if plant equipment is to enter the and operate within the site.



Photograph 2.0, view to Northwest towards the rear boundary and rear of 3 and 5 Brown Street, showing Trees 1, 2, 3 and 4 as numbered. The importance of these trees is evident in the layout and cultivation of the rear garden. Red dotted lines show approximate location of the Tree Protection Zone works for directional drilling beneath these trees to install the 600 mm diameter stormwater pipe at a minimum depth to top of bore of 600 mm.

Photograph 3.0, view to West towards the side boundary with 6 Jeffery Avenue, showing Trees 5 and 6 as numbered. The importance of these trees is evident in the layout and cultivation of the rear garden. Red dotted lines show approximate location of the Tree Protection Zone works for directional drilling beneath these trees to install the 600 mm diameter stormwater pipe at a minimum depth to top of bore of 600 mm.

Appendix J - Aboriginal Heritage Information Management System (AHIMS) Web Services site (NSW Government – Heritage NSW, 10/11/2021), search for 8 Jeffery Avenue, North Parramatta NSW.

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : 004
Client Service ID : 637723

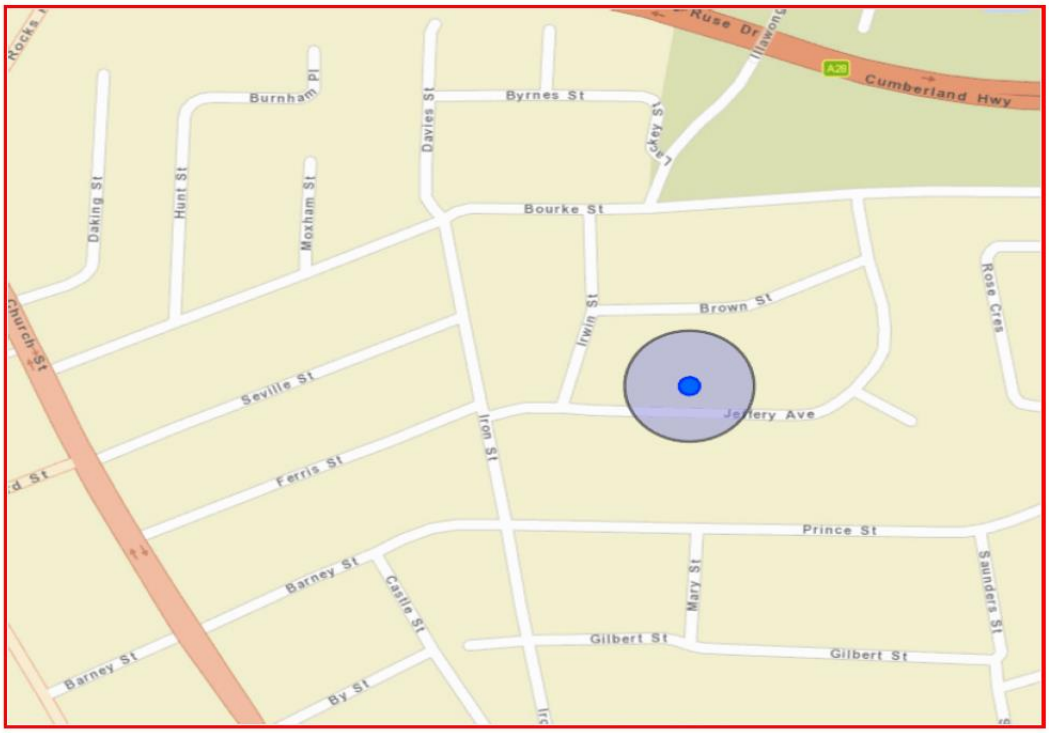
Danny Draper
65 Excelsior Str
Merrylands 2160
Attention: Danny Draper
Email: danny@utma.com.au

Date: 10 November 2021

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address : 8 JEFFERY AVENUE NORTH PARRAMATTA 2151 with a Buffer of 50 meters, conducted by Danny Draper on 10 November 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	**Aboriginal sites are recorded in or near the above location.**
0	**Aboriginal places have been declared in or near the above location. ***

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.