Project No: 127-129/FLO/18 Report No: 127-129/FLO/PAR/B

PRELIMINARY ARBORICULTURAL REPORT

127-129 Flowerdale Road
Liverpool

Prepared for: ST GEORGE COMMUNITY HOUSING

28th August 2018
Revision B

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1.0 INTRODUCTION

1.1 Background

1.1.1 This Preliminary Arboricultural Report was prepared for the St George Community Housing in relation to 127-129 Flowerdale Road, Liverpool. The purpose of this Preliminary Arboricultural Report is to provide an overview of the quality and value of the trees on site, and provide arboricultural advice early in the planning stages of the project.

1.1.2 In preparing this Report, the author is aware of and has considered the objectives of *State Environmental Planning Policy Vegetation in Non-Rural Areas (2017*), *Liverpool City Council's Tree Management Policy (2016)*, *Australian Standard 4970 Protection of Trees on Development Sites (2009), Australian Standard 4373 Pruning of Amenity Trees (2007)* and *Australian Standard 2303 Tree Stock for Landscape Use (2015).*

Refer to Methodology **(Appendix 1)**

1.2 Aims

1.2.1 The aims of this Report are to:

- Undertake a visual assessment of the trees
- Determine the trees' approximate height, canopy spread and trunk diameter
- Estimate the trees' Useful Life Expectancy
- Determine the trees' Landscape Significance
- Outline the trees' Retention Value
- Determine the trees' Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) in accordance with *Australian Standard 4970 Protection of Trees on Development Sites (2009)*
- Prepare a Preliminary Arboricultural Report summarizing site conditions, tree assessment, findings and recommendations

2.0 RESULTS

2.1 The Site

2.1.1 The site is a rectangular shape which comprises of two (2) residential allotments (nos. 127 and 129) located on the eastern side of Flowerdale Road. The site is bound by Smith Crescent to the north, residential properties to the south and east and Flowerdale Road to the west.

2.1.2 A residential dwelling and detached garage is located within each separate allotment. The site is generally level with a slight fall to the east.

2.1.3 Landscape areas of each allotment contain lawn, pavement and garden bed areas.

Refer to Tree Location Plan **(Appendix 2)**

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2.2 The Trees

2.2.1 Thirty-one (31) trees were assessed using the VTA[1] criteria and notes, and comprise a mix of Australian native and exotic species. Tree 1 is a group of three (3) street trees located on the Smith Crescent road reserve and are managed by Liverpool City Council. The remaining trees are located within the alloments of 127 and 129 Flowerdale Road.

2.2.2 A search of the BioNet Atlas of NSW Wildlife Database was undertaken in August 2018. No individual threatened tree species listed within this database for the area were identified during the current field investigations of the site. The ecological significance and habitat value of the trees has not been assessed and is beyond the scope of this report.

2.2.3 As required by Clause 2.3.2 of *Australian Standard 4970 Protection of Trees on Development Sites (2009)*, each of the trees assessed has been allocated a Retention Value. The Retention Value is based on the tree's Useful Life Expectancy and Landscape Significance with consideration to its health, structural condition and site suitability. The Retention Values do not consider any proposed development works and are not a schedule for tree retention or removal. The trees have been allocated one of the following Retention Values:

- Priority for Retention
- Consider for Retention
- Consider for Removal
- Priority for Removal

2.2.4 Tree 1

Tree 1 has been identified as *Callistemon viminalis* (Weeping Bottlebrush) and is a group of three (3) trees located on the Smith Crescent road reserve. The trees have an estimated Useful Life Expectancy (ULE) of 5-15 years, are of low Landscape Significance and have been allocated a Retention Value of *Consider for Removal.* The trees are small in size, and if removed, replacement planting using healthy, advanced-size specimens could replace the loss of amenity within a short timeframe. However, the trees are managed by the Liverpool City Council and if possible should be retained as part of future development of the site.

2.2.5 Trees 2, 8, 10, 11, 17, 22, 23, 26, 29 & 30

Trees 2, 8, 10, 11, 17, 22, 23, 26, 29 and 30 are a mix of species including *Cupressus sempervirens* (Italian Cypress), *Flindersia* sp. (Native Ash), *Schefflera arboricola* (Hawaiian Elf Schefflera), *Acer negundo* (Box Elder), *Morus* sp. (Mulberry Tree), *Jacaranda mimosifoli*a (Jacaranda), *Cupressus macrocarpa* (Monterey Cypress), *Pinus radiata* (Monterey Pine), *Malus* sp. (Apple) and *Eribotrya japonica* (Loquat Tree). The trees have a ULE of less than 5 years, are of low Landscape Significance, and have been allocated a Retention Value of *Priority for Removal.* The trees should be removed and replaced as part of the future development of the site.

2.2.6 Trees 3, 6, 13, 16, 18, 19, 21 and 31

Tree 3 has been identified as *Schefflera actinophylla* (Queensland Umbrella Tree), Trees 6, 16, 18 and 19 have been identified as *Syagrus romanzoffianum* (Cocos Palm) and Trees 13, 21 and 31 have been identified *Ligustrum sinense* (Small Leaf Privet). These species are listed as environmental weeds species by the Department of Primary Industries[2] and are listed as exempt species within the Liverpool City Council's Tree Preservation Order.[3] The trees have a ULE of less than 5 years, are of low Landscape Significance, and have been allocated a Retention Value of *Priority for Removal.* The trees should be removed and replaced as part of the future development of the site.

[1] Mattheck & Breloer (2003)
[2] Department of Primary Industries (2017)
[3] Liverpool City Council (2017)

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2.2.7 Trees 4 & 7

Trees 4 and 7 have been identified as *Sapium sebiferum* (Chinese Tallow Tree). This species is listed as an environmental weed species by the Department of Primary Industries.[4] Tree 4 has an estimated ULE of 5-15 years, is of low Landscape Significance, and has been allocated a Retention Value of *Consider for Removal.* Tree 7 has a ULE of less than 5 years, is of low Landscape Significance, and has been allocated a Retention Value of *Priority for Removal.* If removed, replacement planting using healthy, advanced-size specimens could replace the loss of amenity within a short timeframe.

2.2.8 Trees 5, 9, 12, 15, 20, 24, 25, 27 & 28

Trees 5, 9, 12, 15, 20, 24, 25, 27 and 28 are a mix of species including *Phoenix canariensis* (Canary Island Date Palm), *Livistonia australis* (Cabbage Tree Palm), *Ficus benjamina* (Weeping Fig), *Eribotrya japonica* (Loquat Tree), *Lagerstroemia indica* (Crepe Myrtle), *Ceratonia siliqua* (Carob), *Morus* sp. (Mulberry Tree) and *Carya* sp. (Hickory). The trees have an estimated ULE of 5-15 years, are of low Landscape Significance and have been allocated a Retention Value of *Consider for Removal.* If removed, replacement planting using healthy, advanced-size specimens could replace the loss of amenity within a short timeframe.

2.2.9 Tree 14

Tree 14 has been identified as *Ficus binnendijkii* (Long Leaf Fig) and is a group of three (3) trees. The trees have an estimated ULE of 5-15 years, are of moderate Landscape Significance and have been allocated a Retention Value of *Consider for Retention.* The trees are small in size, and if removed, replacement planting using healthy, advanced-size specimens could replace the loss of amenity from tree removal within a short to medium timeframe.

3.0 DEVELOPMENT WORKS

3.1 Australian Standard 4970 (2009) Protection of Trees on Development Sites

3.1.1 *Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970)* outlines that a TPZ is the principal means of protecting trees on development sites. It is an area isolated from construction disturbance so that the tree remains viable.[5]

3.1.2 The TPZ is calculated as a radial measurement based on twelve (12) times the tree's Diameter at Breast Height (DBH).[6] For palms, other monocots, cycads and tree ferns, the TPZ should not be less than 1m outside the crown projection.[7] These formulas are based on extensive research and are generally accepted within the arboricultural industry as being suitable for calculating areas designed to maintain the long-term viability of trees on development sites. `

3.1.3 AS-4970 also provides calculations to determine a tree's Structural Root Zone (SRZ). The SRZ is described in AS-4970 as the area around the base of a tree required for the tree's stability in the ground. This zone considers a tree's structural stability only, not the root zone required for its vigor and long-term viability, which will usually be a much larger area. Severance of structural roots (>25mmØ) within the SRZ is generally not recommended as it may lead to the destabilisation and/or decline of the tree. The TPZ and SRZ of the trees have been calculated in accordance with the AS-4970 and are included in the Tree Assessment Schedule **(Appendix 3)**.

[4] Department of Primary Industries (2017)
[6] Standards Australia (2009)
[7] Standards Australia (2009)

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3.1.4 Ideally, works should be avoided within the TPZ. A *Minor Encroachment* is less than 10% of the TPZ and is outside the SRZ. A *Minor Encroachment* is considered acceptable by AS-4970 when it is compensated for elsewhere and contiguous within the TPZ. A *Major Encroachment* is greater than 10% of the TPZ or inside the SRZ. *Major Encroachments* generally require root investigations undertaken by non-destructive methods or the use of tree sensitive construction methods.

3.1.5 AS-4970 outlines that the TPZ may need to be modified (extended) to provide additional protection to the above ground parts of the tree. Where conflict between branches and structures/machinery could occur, branches may be protected with padding and timber battens, temporarily tied back or in some cases pruned, only where pruning would not impact the tree's health, structural condition, long-term viability or form.

3.2 Replacement Planting

3.2.1 Replacement tree planting should be provided where trees are to be removed. Replacement trees should be supplied as advanced-size stock to help offset the loss of amenity resultant from the tree removals. Replacement planting should be supplied in accordance with *Australian Standard 2303 (2015) Tree Stock for Landscape Use.*

4.0 CONCLUSION

4.1 Thirty-one (31) trees were assessed and comprise a mix of Australian native and exotic species. In general, the trees are relatively small specimens which are of low quality. In this regard, thirty (30) trees have low Landscape Significance and one (1) tree has moderate Landscape Significance. None of the trees should be considered a constraint to future development works. However, Tree 1 (group of 3x street trees) are managed by the Liverpool City Council and if possible should be retained as part of future development of the site. Council approval is not required for the removal of Trees 3, 6, 13, 16, 18, 19, 21 and 31.

4.2 Replacement tree planting should be provided where trees are to be removed. Replacement planting should be supplied in accordance with *Australian Standard 2303 (2015) Tree Stock for Landscape Use.*

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5.0 LIMITATIONS & DISCLAIMER

TreeiQ takes care to obtain information from reliable sources. However, TreeiQ can neither guarantee nor be responsible for the accuracy of information provided by others. Plans, diagrams, graphs and photographs in this Arboricultural Report are visual aids only and are not necessarily to scale. This Report provides recommendations relating to tree management only. Advice should be sought from appropriately qualified consultants regarding design/construction/ecological/heritage etc issues.

This Report has been prepared for exclusive use by the client. This Report shall not be used by others or for any other reason outside its intended target or without the prior written consent of TreeiQ. Unauthorised alteration or separate use of any section of the Report invalidates the Report.

Many factors may contribute to tree failure and cannot always be predicted. TreeiQ takes care to accurately assess tree health and structural condition. However, a tree's internal structural condition may not always correlate to visible external indicators. There is no warranty or guarantee, expressed or implied that problems or deficiencies regarding the trees or site may not arise in the future. Information contained in this report covers only the trees assessed and reflects the condition of the trees at the time of inspection. Additional information regarding the methodology used in the preparation of this Report is attached as Appendix 1. A comprehensive tree risk assessment and management plan for the trees is beyond the scope of this Report.

Reference should be made to any relevant legislation including Tree Management Controls. All recommendations contained within this Report are subject to approval from the relevant Consent Authority.

6.0 BIBLIOGRAPHY & REFERENCES

Department of Primary Industries, *NSW WeedWise*
http://weeds.dpi.nsw.gov.au/ (accessed 23.08.18)

Liverpool City Council (2016), *Tree Management Policy*
file:///D:/Downloads/Tree%20Management%20Policy%20Adopted%20by%20Council%2012%20October%202016%20PDF%20Version%20(10).pdf (accessed 23.08.18)

Liverpool City Council (2017), *Tree Management Information* – website
http://www.liverpool.nsw.gov.au/environment/trees (accessed 23.08.18)

Mattheck & Breloer (2003), *The Body Language of Trees: A Handbook for Failure Analysis*, The Stationary Office, London

Office of Environment and Heritage (2011), *BioNet Atlas of NSW Wildlife*

Standards Australia (2009), *Protection of Trees on Development Sites AS-4970*

Standards Australia (2007), *Pruning of Amenity Trees AS-4373*

Standards Australia (2015), *Tree Stock for Landscape Use AS-2303*

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7.0 APPENDICES

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Appendix 1: Methodology

1.1 **Site Inspection**: This report was determined as a result of a comprehensive site during August 2018.

1.2 **Visual Tree Assessment (VTA)**: The subject tree(s) was assessed using the Visual Tree Assessment criteria and notes as described in *The Body Language of Trees – A Handbook for Failure Analysis.*[8] The inspection was limited to a visual examination of the subject tree(s) from ground level only. No internal diagnostic or tissue testing was undertaken as part of this assessment. Trees outside the subject site were assessed from the property boundaries only.

1.3 **Tree Dimensions**: The dimensions of the subject tree(s) are approximate only.

1.4 **Tree Locations:** The location of the subject tree(s) was determined from the supplied plans.

1.5 **Tree Health**: The health of the subject tree(s) was determined by assessing:

I. Foliage size and colour
II. Pest and disease infestation
III. Extension growth
IV. Crown density
V. Deadwood size and volume
VI. Presence of epicormic growth

1.6 **Tree Structural Condition**: The structural condition of the subject tree(s) was assessed by:

I. Assessment of branching structure
(i.e co-dominant/bark inclusions, crossing branches, branch taper, terminal loading, previous branch failures)
II. Visible evidence of structural defects or instability
(i.e root plate movement, wounds, decay, cavities, fungal brackets, adaptive growth)
III. Evidence of previous pruning or physical damage
(root severance/damage, lopping, flush-cutting, lions tailing, mechanical damage)

1.7 **Useful Life Expectancy (ULE)**: The ULE is an estimate of the longevity of the subject tree(s) in its growing environment. The ULE is modified where necessary to take in consideration tree(s) health, structural condition and site suitability. The tree(s) has been allocated one of the following ULE categories (Modified from Barrell, 2001):

I. 40 years +
II. 15-40 years
III. 5-15 years
IV. Less than 5 years

1.8 **Landscape Significance**: Landscape Significance was determined by assessing the combination of the cultural, environmental and aesthetic values of the subject tree(s). Whilst these values are subjective, a rating of high, moderate, low or insignificant has been allocated to the tree(s). This provides a relative value of the tree's Landscape Significance which may aid in determining its Retention Value. If the tree(s) can be categorized into more than one value, the higher value has been allocated.

[8] Mattheck & Breloer (2003)

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Landscape Significance	Description
Very High	The subject tree is listed as a Heritage Item under the *Local Environmental Plan* with a local or state level of significance.
	The subject tree is listed on Council's Significant Tree Register or is considered to meet the criteria for significance assessment of trees and/or landscapes by a suitably qualified professional. The criteria are based on general principles outlines in the Burra Charter and on criteria from the Register of the National Estate.
	The subject tree is a remnant tree.
High	The subject tree creates a 'sense of place' or is considered 'landmark' tree.
	The subject tree is of local, cultural or historical importance or is widely known.
	The subject tree has been identified by a suitably qualified professional as a species scheduled as a Threatened or Vulnerable Species or forms part of an Endangered Ecological Community associated with the subject site, as defined under the provisions of the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999.
	The subject tree is known to provide habitat to a threatened species.
	The subject tree is an excellent representative of the species in terms of aesthetic value.
	The subject tree is of significant size, scale or makes a significant contribution to the canopy cover of the locality.
	The subject tree forms part of the curtilage of a heritage item with a known or documented association with that item.
Moderate	The subject tree makes a positive contribution to the visual character or amenity of the area.
	The subject tree provides a specific function such as screening or minimising the scale of a building.
	The subject tree has a known habitat value.
	The subject tree is a good representative of the species in terms of aesthetic value.
Low	The subject tree is an environmental pest species or is exempt under the provisions of the local Council's Tree Management Controls
	The subject tree makes little or no contribution to the amenity of the locality.
	The subject tree is a poor representative of the species in terms of aesthetic value.
Insignificant	The subject tree is declared a Noxious Weed under the Noxious Weeds Act

1.10 **Retention Value**: Retention Value was based on the subject tree's Useful Life Expectancy and Landscape Significance. The Retention Value was modified where necessary to take in consideration the subject tree's health, structural condition and site suitability. The subject tree(s) has been allocated one of the following Retention Values:

I. Priority for Retention
II. Consider for Retention
III. Consider for Removal
IV. Priority for Removal

<table>
<tr><th>ULE</th><th></th><th colspan="4">Landscape Significance</th></tr>
<tr><td></td><td>Very High</td><td>High</td><td>Moderate</td><td>Low</td><td>Insignificant</td></tr>
<tr><td>40 years +</td><td rowspan="3">Priority for Retention</td><td colspan="2">Priority for Retention</td><td rowspan="3">Consider for Removal</td><td rowspan="3">Priority for Removal</td></tr>
<tr><td>15-40 years</td><td>Priority for Retention</td><td>Consider for Retention</td></tr>
<tr><td>5-15 years</td><td colspan="2">Consider for Retention</td></tr>
<tr><td>Less than 5 years</td><td>Consider for Removal</td><td colspan="4">Priority for Removal</td></tr>
</table>

The above table has been modified from the Footprint Green Tree Significance and Retention Value Matrix.

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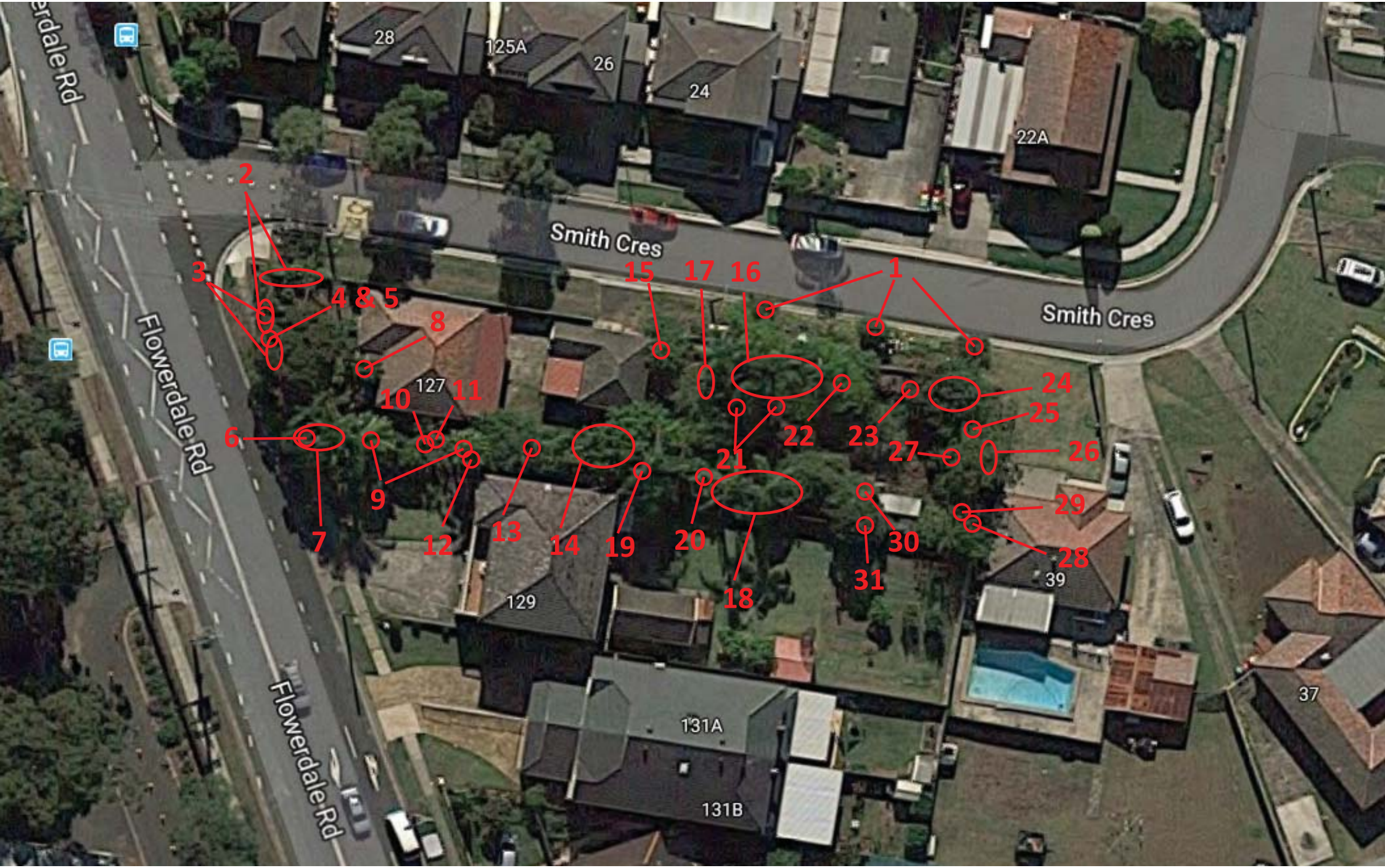
Appendix 2: Tree Location Plan


Flowerdale Rd
Flowerdale Rd
Flowerdale Rd
Smith Cres
Smith Cres
28
125A
26
24
22A
127
129
131A
131B
39
37
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Appendix 3: Tree Assessment Schedule

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating	Comments	Age Class	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
1	*Callistemon viminalis* (Weeping Bottlebrush)	4	3	130	Good	Fair	Group of 3 trees. Street trees. Branch inclusions, minor. Wounds, various stages of decay. Pruned/lopped for powerline clearance.	Mature	5-15	Low	Consider for Removal	2	1.5
2	*Cupressus sempervirens* (Italian Cypress)	7	2	50-250	Poor	Poor	Localised crown death. Group of 7 trees. Crown density 50-75%. Co-dominant inclusions, major. Structures within SRZ. Chlorotic foliage.	Mature	<5	Low	Priority for Removal	3	1.8
3	*Schefflera actinophylla* (Queensland Umbrella Tree)	7	2	90	Fair	Good	Group of 4 trees. Crossing branches. Crown density 50-75%. Structures within SRZ. Chlorotic foliage.	Semi-mature	<5	Low	Priority for Removal	2	1.5
4	*Sapium sebiferum* (Chinese Tallow Tree)	9	6	375	Dormant. No rating.	Fair	Trunk conflict with Tree 5. Wound(s), early signs of decay. Structures within SRZ.	Mature	5-15	Low	Consider for Removal	5	2.2
5	*Phoenix canariensis* (Canary Island Date Palm)	6	3	550	Fair	No access to base. Not rating.	Trunk conflict with Tree 4. Fronds tied. Structures within SRZ.	Semi-mature	5-15	Low	Consider for Removal	7	2.6
6	*Syagrus romanzoffianum* (Cocos Palm)	8	4	275	Fair	No access to base. Not rating.	Group of 6 trees. Crown density 50-75%. Structures within SRZ.	Mature	<5	Low	Priority for Removal	3	1.9
7	*Sapium sebiferum* (Chinese Tallow Tree)	7	4	214	Dormant. No rating.	Fair	Crown consists of mature epicormic branches. Wound(s), advanced stages of decay. Structures within SRZ.	Mature	<5	Low	Priority for Removal	3	1.7
8	*Flindersia* sp. (Native Ash)	4	3	50	Fair	Fair	Crossing branches. Co-dominant inclusions, minor. Wound(s), advanced stages of decay. Crown conflict with adjacent structures. Structures within SRZ.	Semi-mature	<5	Low	Priority for Removal	2	1.5

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating	Comments	Age Class	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
9	*Livistonia australis* (Cabbage Tree Palm)	7	3	475	Fair	No access to base. No rating.	Group of 2 trees. Crown density 50-75%. Structures within SRZ. Chlorotic foliage.	Mature	5-15	Low	Consider for Removal	6	2.4
10	*Schefflera arboricola* (Hawaiian Elf Schefflera)	4	3	375	Poor	Fair	Crossing branches. Small (<25mmø) epicormic growth in high volumes. Co-dominant inclusions, major. Wound(s), advanced stages of decay.	Mature	<5	Low	Priority for Removal	5	2.2
11	*Acer negundo* (Box Elder)	4	2	50	Dormant. No rating.	Fair	Wound(s), advanced stages of decay. Trunk cavity(s), major. Limited crown clearance.	Young	<5	Low	Priority for Removal	2	1.5
12	*Ficus benjamina* (Weeping Fig)	4	3	75	Good	Good	Crown conflict with Tree 9. Partially suppressed. Structures within SRZ.	Young	5-15	Low	Consider for Removal	2	1.5
13	*Ligustrum sinensis* (Small Leaf Privet)	7	5	300	Good	No access to base. No rating.	Crown conflict with adjacent structures. Structures within SRZ.	Mature	<5	Low	Priority for Removal	4	2.0
14	*Ficus binnendijkii* (Long Leaf Fig)	7	5	300	Good	No access to base. No rating.	Group of 3 trees. Partially suppressed.	Mature	5-15	Moderate	Consider for Retention	3.6	2.0
15	*Eribotrya japonica* (Loquat Tree)	6	4	225	Good	Good	Limited crown clearance.	Mature	5-15	Low	Consider for Removal	3	1.8
16	*Syagrus romanzoffianum* (Cocos Palm)	8	4	325	Good	No access to base. No rating.	Group of 6 trees.	Mature	<5	Low	Priority for Removal	4	2.1
17	*Morus* sp. (Mulberry Tree)	5	4	200	Fair	Poor	Group of 2 trees. Crown density 50-75%. Co-dominant inclusions, major. Wound(s), advanced stages of decay.	Mature	<5	Low	Priority for Removal	2	1.7

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating	Comments	Age Class	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
18	*Syagrus romanzoffianum* (Cocos Palm)	9	4	300	Good	No access to base. No rating.		Mature	<5	Low	Priority for Removal	4	2.0
19	*Syagrus romanzoffianum* (Cocos Palm)	9	4	300	Good	No access to base. No rating.	Group of 3 trees.	Mature	<5	Low	Priority for Removal	4	2.0
20	*Lagerstroemia indica* (Crepe Myrtle)	4	3	103	Dormant. No rating.	No access to base. No rating.	Wound(s), advanced stages of decay.	Mature	5-15	Low	Consider for Removal	2	1.5
21	*Ligustrum sinensis* (Small Leaf Privet)	5	3	117	Fair	Fair	Group of 2 trees. Crown density 50-75%. Co-dominant inclusions, minor.	Semi-mature	<5	Low	Priority for Removal	2	1.5
22	*Jacaranda mimosifolia* (Jacaranda)	4	3	112	Dormant. No rating.	Fair	Co-dominant inclusions, major. Wound(s), early signs of decay.	Young	<5	Low	Priority for Removal	2	1.5
23	*Pinus radiata* (Monterey Pine)	4	3	225	Fair	Poor	Lopped. Crown density 50-75%. Wound(s), advanced stages of decay. Phototrophic lean, severe.	Semi-mature	<5	Low	Priority for Removal	3	1.8
24	*Ceratonia siliqua* (Carob)	6	4	247	Dormant. No rating.	Fair	Group of 2 trees. Congested branches. Wound(s), advanced stages of decay. Crown conflict with adjacent structures. Structures within SRZ.	Mature	5-15	Low	Consider for Removal	3	1.8
25	*Morus* sp. (Mulberry Tree)	8	4	325	Good	No access to base. No rating.	Wound(s), advanced stages of decay.	Mature	5-15	Low	Consider for Removal	4	2.1
26	*Cupressus macrocarpa* (Monterey Cypress)	5	3	237	Poor	Poor	Group of 2 trees. Crown density 25-50%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes. Lopped. Co-dominant inclusions, major.	Mature	<5	Low	Priority for Removal	3	1.8

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating	Comments	Age Class	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
27	*Carya* sp. (Hickory)	8	4	283	Dormant. No rating.	Poor	Co-dominant inclusions, major.	Mature	5-15	Low	Consider for Removal	3	1.9
28	*Morus* sp. (Mulberry Tree)	6	3	300	Dormant. No rating.	Poor	Co-dominant inclusions, major. Structures within SRZ.	Mature	5-15	Low	Consider for Removal	4	2.0
29	*Malus* sp. (Apple)	4	3	117	Dormant. No rating.	Poor	Partially suppressed. Co-dominant inclusions, major. Wound(s), advanced stages of decay.	Semi-mature	<5	Low	Priority for Removal	2	1.5
30	*Eribotrya japonica* (Loquat Tree)	4	3	112	Fair	Poor	Partially suppressed. Co-dominant inclusions, major. Wound(s), advanced stages of decay. Structures within SRZ.	Mature	<5	Low	Priority for Removal	2	1.5
31	*Ligustrum sinensis* (Small Leaf Privet)	7	3	350	Fair	No access to base. No rating.		Mature	<5	Low	Priority for Removal	4	2.1

Appendix 4: Plates

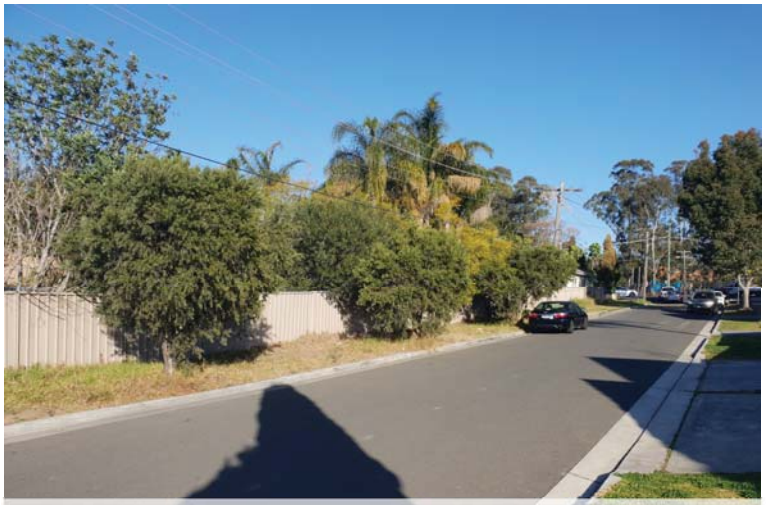

Plate 1: Looking west along Smith Crescent

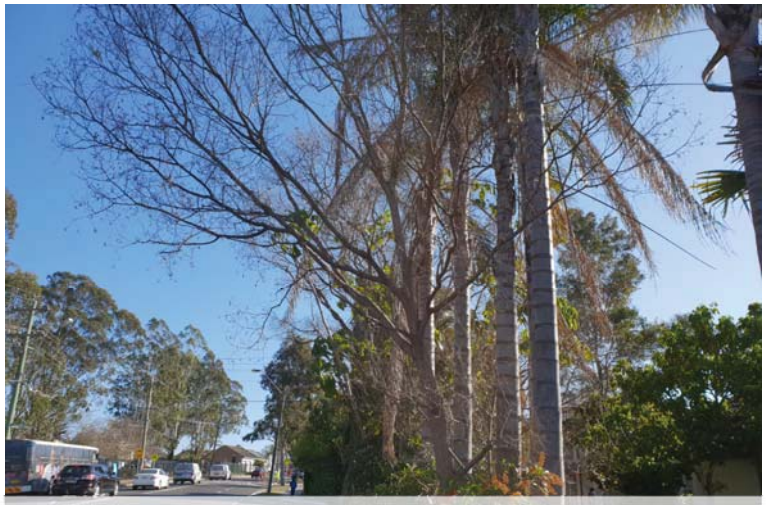

Plate 2: Showing front garden of 127 Flowerdale Road

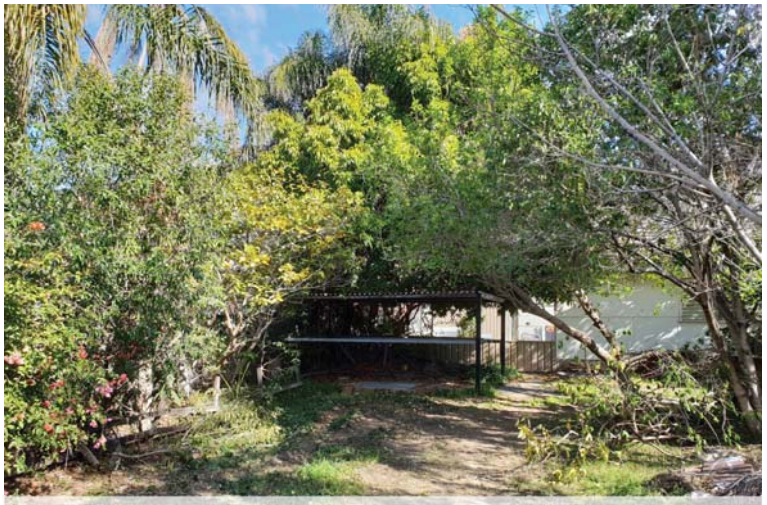

Plate 4: Showing rear garden at 127 Flowerdale Road

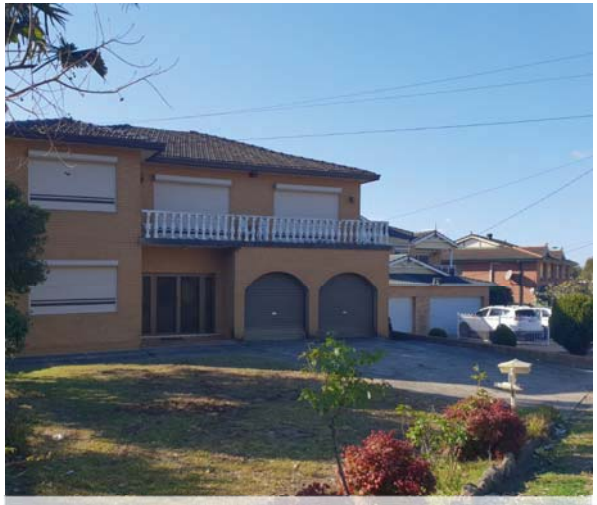

Plate 4: Showing front garden at 129 Flowerdale Road

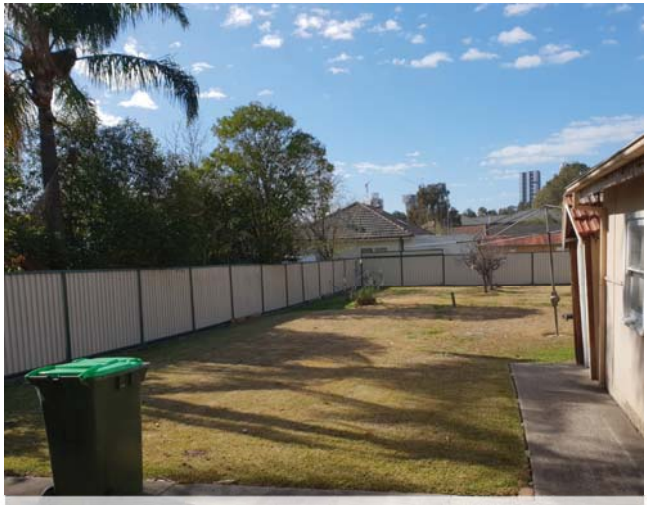

Plate 5: Showing rear garden at 129 Flowerdale Road