

ARBORICULTURAL ASSESSMENT

CLASSIC TREE SERVICES
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MIDGLEY STREET PUMP STATION

Water Corporation
629 Newcastle Street
Leederville
6007 WA

Senior Environment Advisor
Assets, Planning & Delivery
Elizabeth Hodges

04/04/2023

Re: Tree Plotter survey at the above address

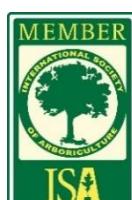
Elizabeth,

Please find attached a report regarding your request to assess and survey the trees in question. If you would like any further information regarding the assessment or matters contained in the report, please contact me anytime during normal business hours.

TOM ROBINSON
BSc (Hons) Ecology
ND Arboriculture – *Merrist Wood UK*

QTRA Registered User no.7000
VALID Licenced User

CONSULTANT
CLASSIC TREE SERVICES



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1 - SUMMARY

At the request of the client all trees within the Midgley Street Pump Station were assessed to determine Tree Protection Zones and Structural Root Zones with respect to planned excavation within the site. The report will conclude that the trees assessed maintain generally good vitality and structural integrity throughout. The overlapping Tree Protection Zones cover almost the entirety of the site with some room at the centre not covered by the Structural Root Zones. Any form of excavation within the site may therefore negatively impact the vitality of trees to some extent, with excavation within the SRZ area significantly impacting both vitality and structural integrity. The report will recommend any excavation within the site should be undertaken in accordance with AS 4970:2009 *"Protection of Trees on Development Sites"* with a consultant arborist on site during any excavation works to undertake pruning of any roots encountered during excavation.

2 - INTRODUCTION

2.1 Water Corporation has requested a survey of all trees within the Midgley Street Pump Station site. The trees were inspected from ground level in gusty and overcast weather on the 31st of March 2023. Individual specimens of note were then added to the Tree Plotter mapping software (27 trees in total). The gathered information is displayed within map and table format within Sections 3.1-3.3 of the report and can also be accessed directly through the program with the following login information:

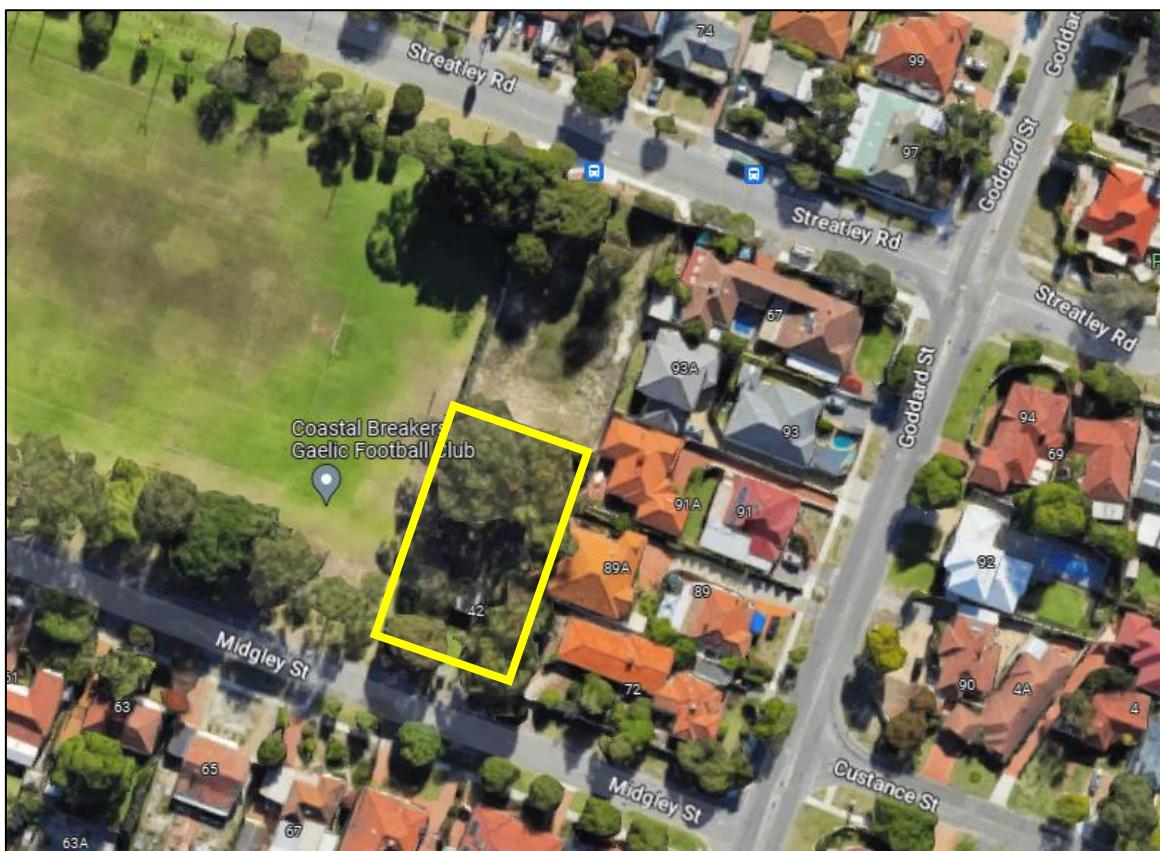
TREE PLOTTER

Website: <https://au.pg-cloud.com/ClassicTS/>

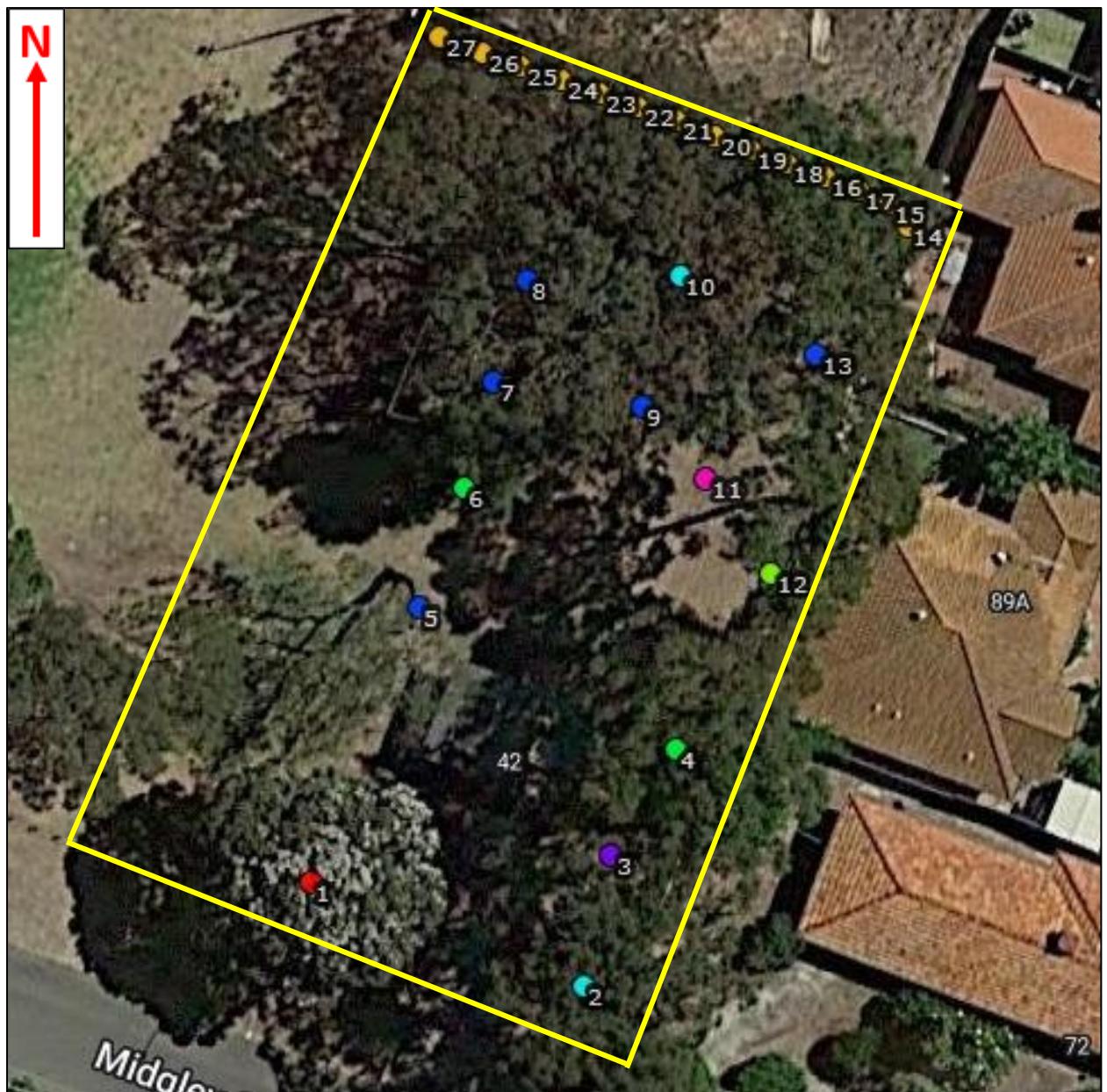
Username: Midgley Street

Password: midgleystreet

2.2 The following two maps indicate the site location, boundaries of the site and the number and location of trees assessed.



IMG.1 Site location. The pump station is located between Streatley Road and Midgley Street, Lathlain.



IMG.2 Shows boundaries of the site and location of trees within.

3 - OBSERVATIONS

3.1 Tree details and measurements are displayed within the following table;

TREE ID	BOTANICAL NAME	VITALITY	STRUCTURAL CONDITION	TREE HEIGHT (m)	DBH (cm)	DGL (cm)	TPZ (m)	SRZ (m)
1	Angophora costata	Excellent	Good	12	88	88	10.56	3.14
2	Eucalyptus botryoides	Good	Good	20	82	93	9.84	3.21
3	Eucalyptus grandis	Good	Good	22	70	74	8.4	2.92
4	Corymbia maculata	Good	Good	16	46	52	5.52	2.51
5	Eucalyptus camaldulensis	Fair	Good	12	77	77	9.24	2.97
6	Corymbia maculata	Excellent	Good	13	39	48	4.68	2.43
7	Eucalyptus camaldulensis	Good	Good	23	66	84	7.92	3.08
8	Eucalyptus camaldulensis	Good	Good	25	114	122	13.68	3.6
9	Eucalyptus camaldulensis	Good	Good	20	74	82	8.88	3.04
10	Eucalyptus botryoides	Good	Fair	20	114	114	13.68	3.5
11	Eucalyptus spp.	Fair	Good	20	54	59	6.48	2.65
12	Corymbia citriodora	Good	Good	22	59	70	7.08	2.85
13	Eucalyptus camaldulensis	Good	Good	18	73	78	8.76	2.98
14	Callistemon citrinus 'Kings Park Special'	Good	Good	5	16	20	2	1.68
15	Callistemon citrinus 'Kings Park Special'	Good	Good	5	16	20	2	1.68
16	Callistemon citrinus 'Kings Park Special'	Good	Good	5	11	20	2	1.68
17	Callistemon citrinus 'Kings Park Special'	Good	Good	4	8	10	2	1.26
18	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
19	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
20	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
21	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
22	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
23	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
24	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
25	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
26	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49
27	Callistemon citrinus 'Kings Park Special'	Good	Good	4	7	15	2	1.49

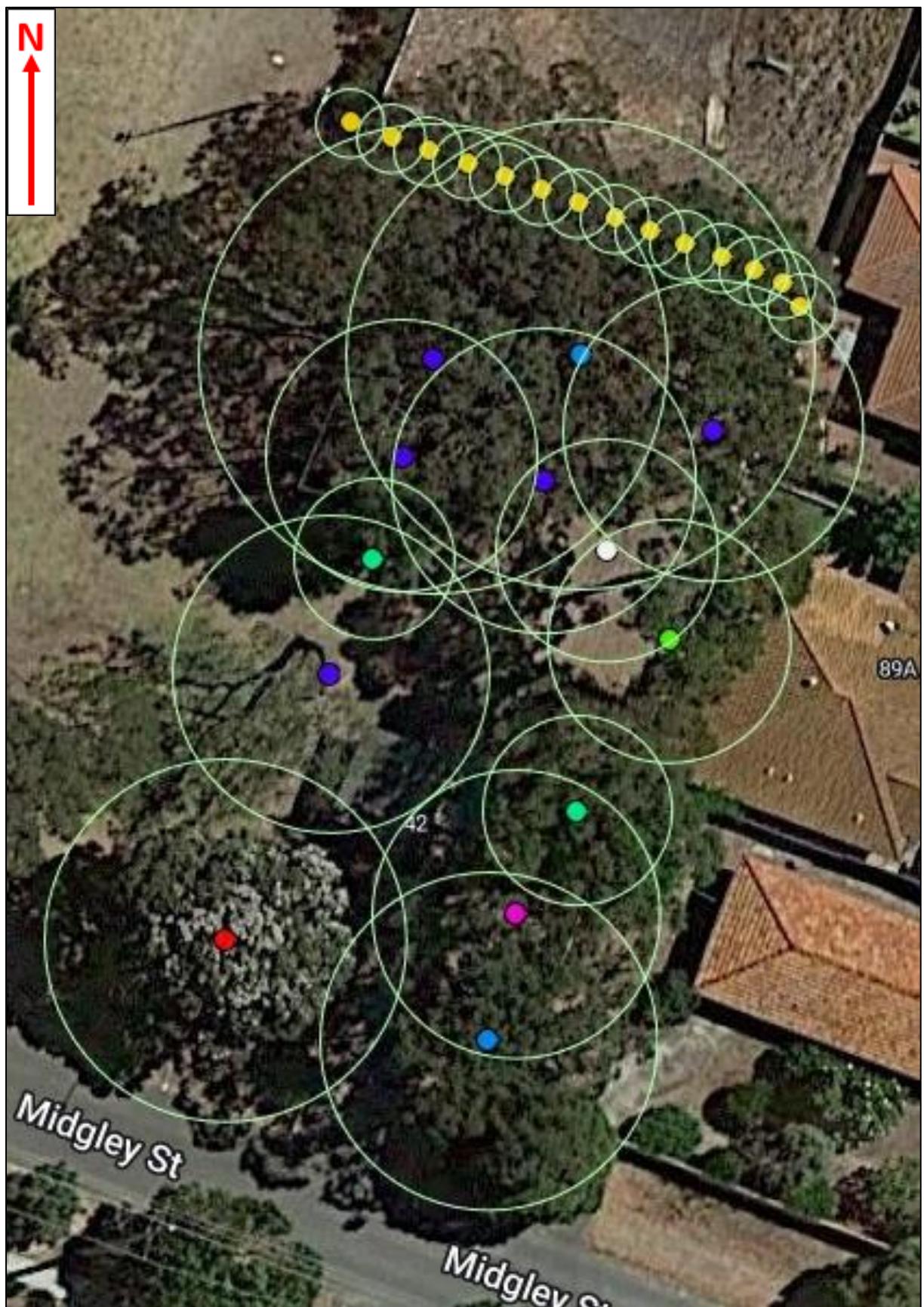
DBH: Diameter at Breast Height (measured at 1.4m).

DGL: Diameter at Ground Level (measured at ground level).

TPZ: Tree Protection Zone (calculated as a radius from the centre of the stem).

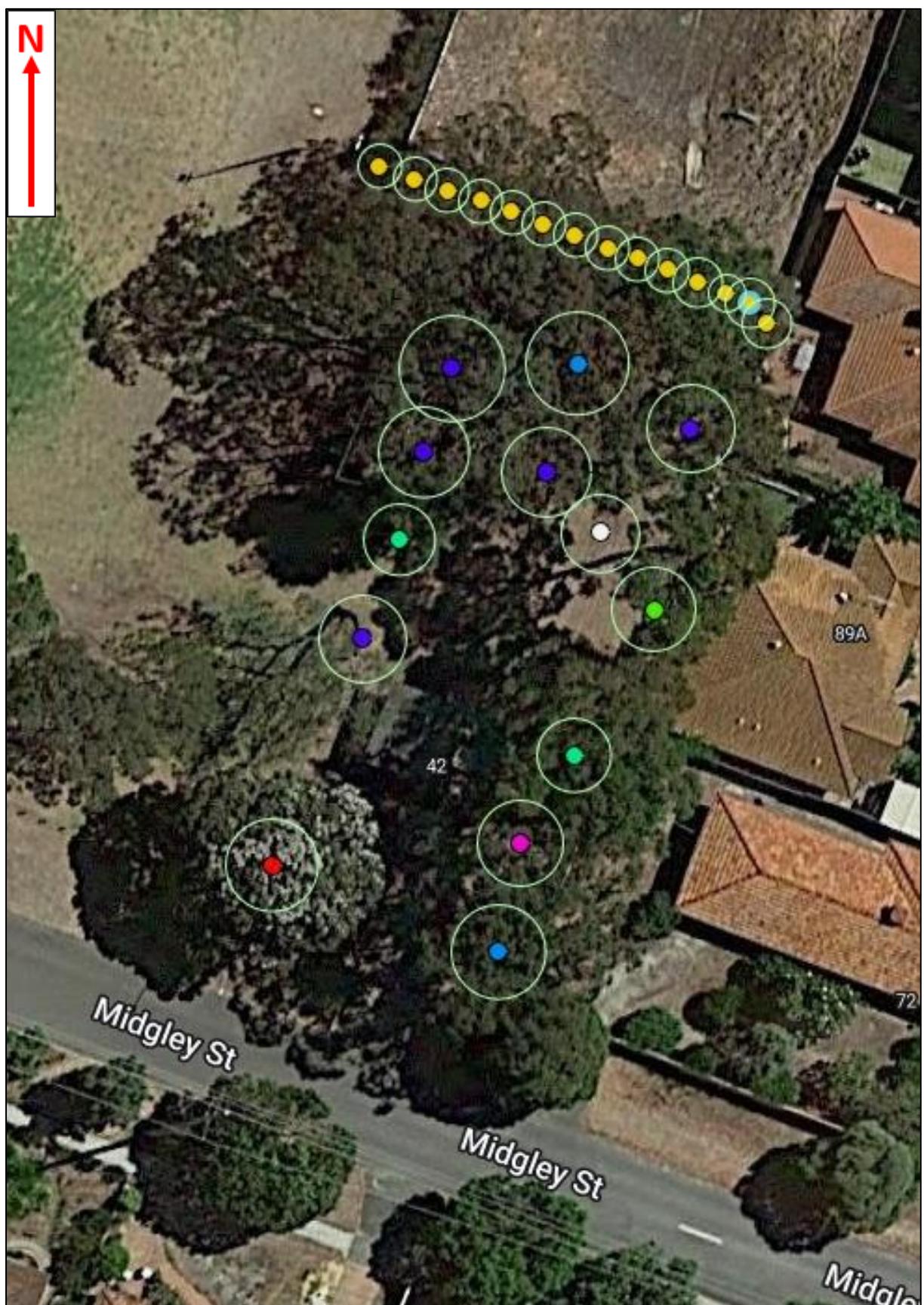
SRZ: Structural Root Zone (calculated as a radius from the centre of the stem).

3.2 Tree Protection Zones were plotted onto the map below;



IMG.3 Shows Tree Protection Zones of all trees on site.

3.3 Structural Root Zones were plotted onto the map below;



IMG.4 Shows Structural Root Zones of all tree on site.

4 – DISCUSSION

- 4.1 Located at the eastern end of the JA Lee Reserve the group of subject trees provide notable shade and amenity value for residents of the area and users of the reserve. All trees were found to be in generally good condition with high retention value, displaying good vitality and structural integrity throughout.
- 4.2 Due to the position of the Tree Protection Zones, any form of excavation within the site may negatively impact the vitality of trees to some extent depending on final designs and the footprint of the excavation.
- 4.3 Excavation within the Structural Root Zones (SRZ) of any trees is likely to have significant negative impact on both structural integrity and vitality. There is space within the site, to the northeast of the existing structure that does not fall within the SRZ of any trees, should significant excavation be required this location appears most suitable from a tree retention perspective.
- 4.4 Should excavation be required within the Structural Root Zones retention of the impacted trees is unlikely to be feasible. As such it is recommended that the footprint of any excavation be kept to a minimum and outside the SRZ of any trees where possible. Any excavation on the site will likely be within the Tree Protection Zone of at least one of the trees and it is likely that roots will be encountered. Excavations should be undertaken under supervision of a consultant arborist to assist in decision making and undertake any root pruning where required.

5 – RECOMMENDATIONS

- 5.1 Minimise the footprint of any excavations.
- 5.2 Undertake excavations in accordance with AS 4970:2009 "*Protection of Trees on Development Sites*".
- 5.2 Engage a consultant arborist to be on-site during any excavations to monitor and undertake any root pruning required.

Tom Robinson – April 2023

Literature cited

Council of Standards Australia. (2009, August 26). Australian Standard® Protection of trees on development sites AS4970 - 2009. Australia.

Liability and Limitation

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

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

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

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