Sylva Consultancy
expert arboricultural advice

Arboricultural Report

Casina Lodge
8 Park Village West
London
NW1 4AE

September 2020

Ref: 20135

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CONTENTS

APPENDICES

1. INTRODUCTION

1.1 Instructions

1.1.1 Instructions have been received to carry out an Arboricultural Implication Assessment on the likely impact and effect regarding the proposal to construct a basement-level extension on land at Casina Lodge, London (Appendix 1).

1.1.2 This appraisal assesses the impact of the proposal in relation to the trees surveyed and discusses mitigation measures that may have to be adopted.

1.2. Arboricultural Survey

1.2.1 During September 2020 a tree survey was carried out in accordance with British Standard 5837:2012 'Trees in relation to Design, Demolition and Construction-Recommendations' and good arboricultural practice. This is a basic data collection exercise and a record of the trees condition at the time of surveying. The tree survey data can be viewed at Appendix 2, root protection area data at Appendix 3 with the tree constraints plan listed at Appendix 4.

1.2.2 A desk top study of information posted on The London Borough of Camden's website (LBC) details that the site is located within Regents Park Conservation Area. In addition, the website reveals that no Tree Preservation Orders (TPO's) are present on trees within or adjacent to the site.

1.2.3 Trees in a Conservation Area that are not protected by a TPO are protected by the provisions in section 211 of the Town and Country Planning Act 1990. Anyone who ***cuts down, uproots, tops, lops, wilfully destroys or wilfully damages a tree*** in a Conservation Area (if that tree is not already protected by a Tree Preservation Order), or causes or permits such work, without giving a section 211 notice (or otherwise contravenes section 211 of the Town and Country Planning Act 1990 is guilty of an offence, unless an exception applies.

1.3 Site Description

1.3.1 The site is located in a quiet residential area which is characterized by detached houses. To the north of the site is Regents Canal with Park Village West road to the south. Residential properties are adjacent to the eastern and southern boundaries. The existing house is constructed over split levels to accommodate the difference in levels across the site.

1.4 Proposed Development

1.1.2 It is proposed to construct a basement-level extension with the purpose of this report is to assist with the design process.

1.4.2 All tree numbers referred to in this document relate to the tree numbers annotated on the arboricultural implication assessment plan (Appendix 5).

2. ARBORICULTURAL SURVEY

2.1 Eleven trees and 2 groups have been recorded within this assessment. The tree quality is assessed as follows:

U: Trees that are considered to be of such condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboriculture management. However, if category 'U' trees are placed in an inaccessible location such that concerns over public safety are reduced to an acceptable level, it may be preferable or possible to defer this recommendation.

A: Trees of the highest quality and value and are considered to be of such a condition as to be able to make a substantial contribution (e.g. 40 years +).

B: Trees of moderate to high value and are considered to be of such a condition as to be able to make a significant contribution (e.g. 20 years +).

C: Trees of low quality with an estimated life expectancy of at least 10 years. Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories. Young trees with a stem diameter of less that 150mm should be considered for relocation or replacement through mitigation (e.g. 10 years).

Category A, B & C trees are further divided into sub-categories. These sub-categories carry equal weight and are selected for either arboricultural values, landscape values or cultural values, including conservation. Within the British Standard 5837:2012 it is recommended to record hedge and shrub masses, however in the context of the standard it is not necessary to assess the quality of these or to provide a category classification.

The numbers of trees falling under each classification within the arboricultural survey are as follows:

U: 0 trees

A: 0 trees

B: 5 trees and 1 group

C: 6 trees and 1 group

3. PRINCIPLE ARBORICULTURAL IMPLICATIONS

3.1 Introduction

3.1.1 Consideration is given to the significance of the trees identified in the arboricultural tree survey, the constraints that they are likely to pose to any development that may occur, post development implications (if any) and work requirements to trees for reasons of sound arboricultural management in order to facilitate the development (BS5837:2012 Section 5.4).

3.1.2 This appraisal assesses the impact of the potential to re-develop the site in relation to the trees and discusses mitigation measures that may have to be adopted. The following documents have been provided by the client:

- Existing Layout
- Proposed Layout

3.2 Trees

3.2.1 The tree stock is confirmed to the boundaries of the site with two third party trees recorded as part of this appraisal.

3.2.2 The Wildlife & Countryside Act 1981, as amended by the Countryside Rights of Way Act 2000, provides statutory protection to birds, bats and other species that inhabit trees. These have the potential to pose additional constraints on the use and timings of works that may occur to trees located at the site. These issues are beyond my expertise and it is recommended that appropriate advice is sort prior to the implementation of any works considered within this report.

3.3 Overview

3.3.1 The tree survey concludes that the most noteworthy trees within influencing distance of the potentially developable area are the category ‘B’ trees and group. The trees form a pleasant feature which contribute to the visual amenity of the immediate environment.

3.3.2 The arboricultural impact plan illustrates the proposals in relation to the tree stock. In addition to pre-development concerns, post development matters such as shading, debris and concerns of the tree’s proximity and juxtaposition to the proposal have also be considered during the design process.

3.3.3 An assessment of the design on the tree stock reveal that 1 category ‘C’ tree requires relocating or removal to implement the proposal.

3.3.4 The scheme has undergone a careful design process to ensure an efficient use of the site, whilst safeguarding the continued contribution to the greening of the immediate landscape. On the bases of the appraisal it is considered that the arboricultural impact of the scheme on the tree stock will not result in an adverse impact on the character and appearance of the conservation area, site or wider landscape.

3.4 Impact of the proposal on the tree stock

Overview

3.4.1 Whilst trees in categories ‘A’, ‘B’ and ‘C’ are all a material consideration in the development process, the retention of category ‘C’ trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary where they impose a significant constraint on development. Furthermore, BS 5837:2012 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature “*need not necessarily be a significant constraint on the site’s potential*”.

3.5 Proposed Development

3.5.1 The arboricultural impact assessment plan illustrates that the footprint of the new basement falls within close proximity to newly planted tree T8. Given the juxtaposition of this tree and the required excavation works it is considered that the tree will be a constraint to the works. The tree is newly planted and consequently could be transplanted if desired.

3.5.2 The British Standard highlights that Category 'C' trees are assessed as being either of low quality, limited merit, low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameter below 150mm; or a combination of these. As such these trees should not be considered as a significant constraint to the development of the site.

3.6 Construction

3.6.1 Careful consideration has been given regarding the buildability of the proposals. The arboricultural impact assessment plans illustrate that sufficient room exists to locate the site compound and contractor parking outside the RPA’s of the retained trees.

3.6.2 Fence protection is required for retained trees and will comprise of Heras fencing and will be based on Figure 2 ‘Default Specification for Protective Barrier’ as recommended within the British Standard 5837:2012. Where appropriate the fencing will be braced to withstand impacts.

3.6.3 A tree works schedule to facilitate the proposal has not yet been finalised, however it is not anticipated that pruning will be required. Should pruning works be necessary it is judged that trees can be pruned to acceptable standards in accordance with British Standard 3998:2010 ‘Tree Works - Recommendations’.

3.6.4 New services will connect to existing.

4. SUMMARY

4.1 Conclusions

4.1.1 The British Standard 5837:2012 states that there is the need to avoid misplaced tree retention; for example, to attempt to retain too many unsuitable trees on a site may result in excessive pressure on the trees during the development work and subsequent demands for their removal post development. However, where design permits, the retention of lower category trees can be beneficial providing screening and softening to a development and a sense of maturity to a scheme.

4.1.2 It is acknowledged that consideration for both the direct impact and indirect impact of a development with respect to retained trees needs to be assessed. With respect to the retained tree stock it is considered that their successful integration into the layout can been achieved.

4.1.3 Careful planning of site operations will be carried to avoid any adverse impact to the retained trees. To safeguard the trees through the development a site specific Arboricultural Method Statement will be drawn up and implemented.

4.1.4 It is concluded that there is an adequate juxtaposition with the retained tree stock and proposal therefore reducing any post development concerns. As such it is regarded that there will not be any future pressure to significantly prune, or to seek permission to remove trees within the site. With further regard to any concerns of debris and seasonal nuisances it is considered that this can be managed by good design and as part of the overall general maintenance of the site.

4.2 Post development tree management.

4.2.1 Section 8.8.2 of the British Standard: 2012 recommends post development aftercare of trees following the completion of development works. It is recommended the following is considered with regard to post development inspection of retained trees:

1. Trees that grow on a site prior to development may, if adversely affected, be in decline over a period of several years before they die. This varies due to age, species, condition prior to development, extent of damage during development, soil conditions and climate. It is recommended that regular inspections are undertaken.

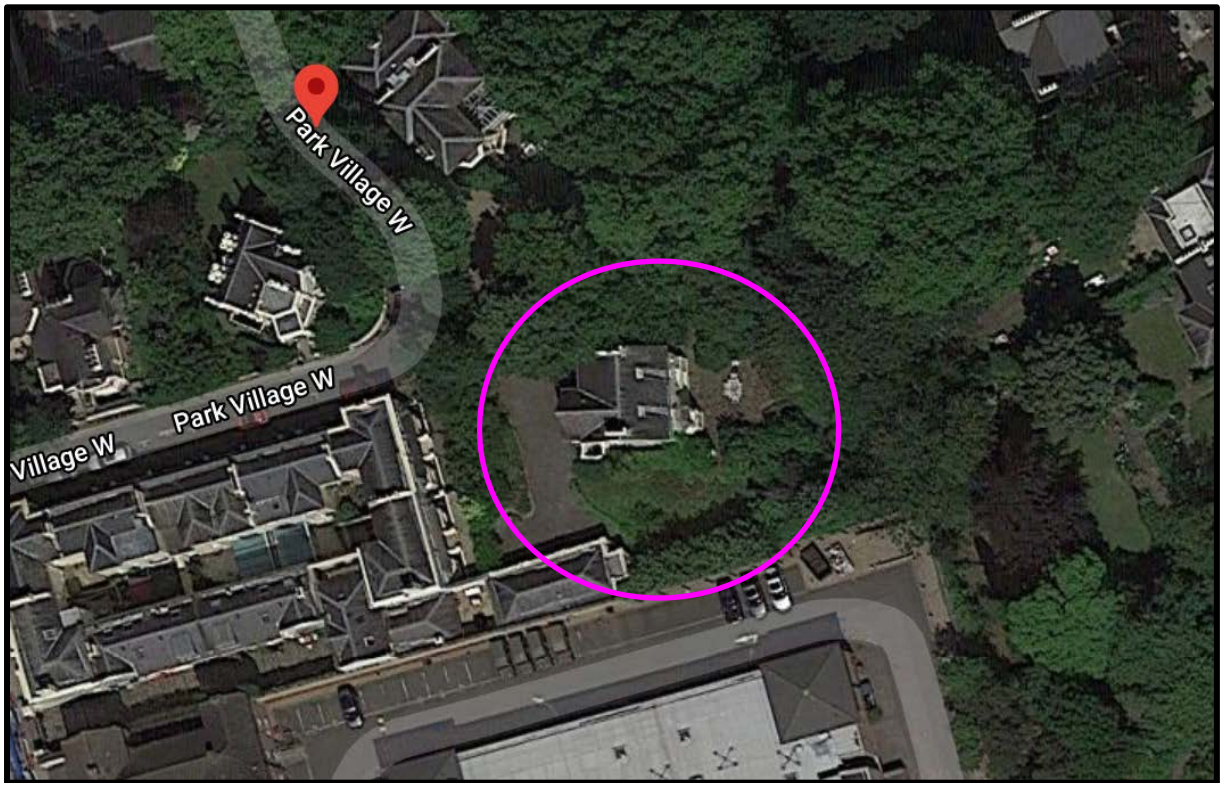
2. Where trees are protected by planning controls, it is recommended that the LPA is informed, and necessary agreements obtained prior to any remedial works.

3. Following completion of a development it is recommended that the arboricultural consultant inspects the trees for signs of intolerance to the change of conditions and the effect of the development. There may be a need for additional tree works to those originally specified.

APPENDIX 1

Site Location Plan

Site Location Plan



APPENDIX 2

Tree Survey Data

KEY TO TREE SCHEDULE

Tree No:	Relates to individual trees identified within the Tree Survey Schedule and Tree Constraints Plan
Species:	Common name
Height:	Estimated height expressed in meters
ST:	Stem diameter of the main trunk taken at 1.5m above ground level or in accordance with Annex C BS5837:2012.
Height in M of Canopy:	Information of the first significant branch and direction of growth in order to inform on ground clearance.
Abbreviations:	#: Estimated Ave: Average A.G.L: Above ground level SULE: Safe Useful Life Expectancy
Branch Spread:	Estimated crown radius expressed in meters, taken for each cardinal compass point.
Age Class:	Y Young - Less than one third of natural life expectancy MM Middle aged - One to two thirds of natural life expectancy M Mature - More than two thirds of natural life expectancy OM Over mature NP Newly Planted
Physiological Condition:	G Good F Fair P Poor D Dead

Notes:

Root Protection Area: This is a layout tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability and where the protection of the roots and soil structure is treated as a priority (detailed in paragraph 3.7 British Standard 5837:2012 'Trees in relation to Construction-Recommendations').

Young trees with a stem diameter of less than 150mm: Whilst the presence of young trees of good form and vitality is generally desirable (i.e those which have the potential to develop into quality mature specimens), they need not necessarily be a significant constraint on the site's potential (detailed in paragraph 4.5.10 British Standard 5837:2012 'Trees in relation to Construction-Recommendations').

Table 1 **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.*			Dark Red
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Light Green
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Mid Blue
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Grey

TREE NO.	SPECIES	Height in (M)	CALCULATED STEM DIA (MM)	BRANCH SPREAD				HEIGHT IN M OF CANOPY	AGE CLASS	PHYS. COND	COMMENTS	LIFE EXPECTANCY (EST YEARS)	BS5837:2012 CATEGORY GRADING
	(Latin)			N	E	S	W				Recommendations		
T1	Robinia *Robinia pseudoacacia*	15	180	1.5	3.5	3.5	1	5	MM	F	Growing adjacent to the front boundary, influenced by adjacent off site Robinia. Contributes to the greening of the immediate street scene. No work	20 to 40	B2
T2	Lime *Tilia europaea*	21	600#	5	5	5	5.5	5	M	G	1 of 2 offsite tree adjacent to the boundary. Dimensions estimated. Crown lifted on site side. Upper canopy overhangs existing building. No work	20 to 40	B2
T3	London Plane *Platanus x hispanica*	19	620#	5	7	6	2	5	MM	F	1 of 2 offsite tree adjacent to the boundary. Dimensions estimated. Upper canopy overhangs existing building. Biased growth habit. No work	20 to 40	B2
T4	Hornbeam *Carpinus betulus*	18	390	5	4	7.5	4.5	5	M	G	Growing adjacent to boundary in the lower garden. Pleasant feature. No work	20 to 40	B2
T5	Ash *Fraxinus excelsior*	19	565	2.5	4	4	3	N/A	M	F	Growing on the rear garden boundary. Sparse canopy. Has been pruned back from neighbour's - has not regenerated as what one would expect. Further inspection recommended. Further inspection	10 to 20	C2
T6	Ash *Fraxinus excelsior*	18	680	2	3	5	6.5	N/A	M	F	Growing on the rear garden boundary. Sparse canopy. Has been pruned back from neighbour's - has not regenerated as what one would expect. Further inspection recommended. Low end of category grading. Further inspection	10 to 20	C2
T7	Yew *Taxus baccata*	6	180	3	2	2	2	N/A	MM	F	Component of boundary screening. Not a constraint. No work	10 to 20	C2
T8	Cotoneaster *Cotoneaster sp*	3	80	1	1.5	1	1	N/A	MM	G	Feature specimen growing in upper garden area. No work	10 to 20	C2
T9	Cherry *Prunus sp*	5	140	3	3	1.5	1.5	N/A	MM	F	1 of 2 Cherries growing on the front boundary. Contributes to front boundary screening. Not a constraint. No work	10 to 20	C2
T10	Cherry *Prunus sp*	7	240	3.5	3.5	2	1	N/A	MM	F	1 of 2 Cherries growing on the front boundary. Contributes to front boundary screening. Not a constraint. No work	10 to 20	C2
T11	Silver Birch *Betula pendula*	14.5	250	1	2.5	3.5	2	5	MM	F	Growing adjacent to the front boundary. Component of front boundary screening. No work	20 to 40	B2
G1	Hornbeam *Carpinus betulus*	Ave 15	Ave 320	3	3	3	5.5	N/A	M	F	Growing adjacent to the rear boundary. Ground level changes to neighbouring property. Considered originally planted as a hedge feature. Average dimensions recorded. Pleasant screening to the lower garden. No work	20 to 40	B2
G2	Lime *Tilia europaea*	Ave 6	Ave 145	0.5	1	0.5	1	N/A	Y	G	Young group of pollarded Limes to provide boundary screening. Not a constraint. Average dimensions recorded. No work	10 to 20	C2

APPENDIX 3

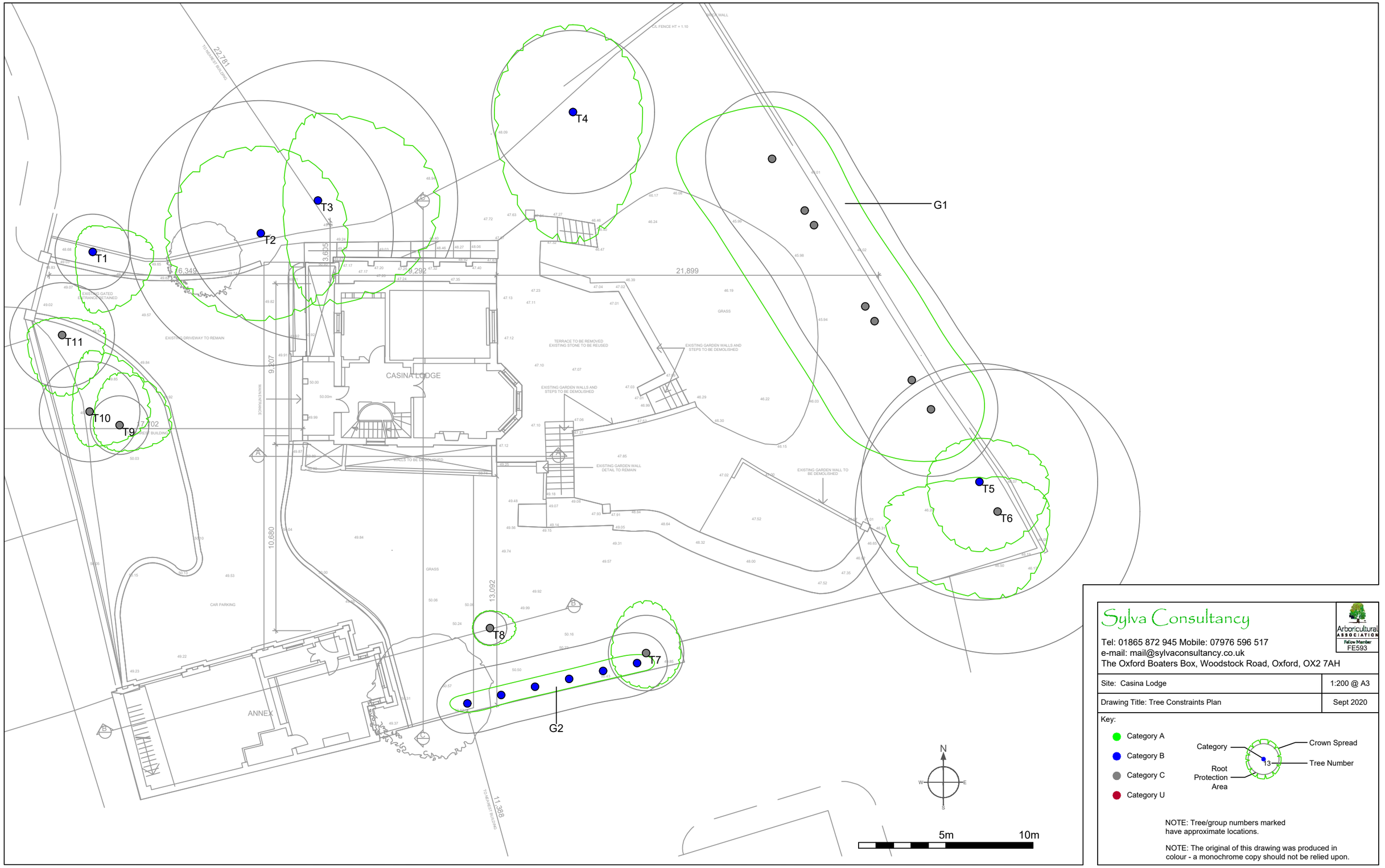
Root Protection Area

ROOT PROTECTION AREA

TREE NO.	SPECIES	NO. OF STEMS	SINGLE STEM DIA (mm)	2-5 STEMS					> 5 STEMS	ROOT PROTECTION AREA - RPA (RADIUS IN M)	RPA (M^2)	LIFE EXPECTANCY (EST YEARS)	BS5837:2012 CATEGORY
				STEM 1 (mm)	STEM 2 (mm)	STEM 3 (mm)	STEM 4 (mm)	STEM 5 (mm)	MEAN STEM DIA (mm)				
T1	Robinia	1	180							2.16	15	20 to 40	B2
T2	Lime	1	600							7.20	163	20 to 40	B2
T3	London Plane	1	620							7.44	174	20 to 40	B2
T4	Hornbeam	1	390							4.68	69	20 to 40	B2
T5	Ash	1	565							6.78	144	10 to 20	C2
T6	Ash	1	680							8.16	209	10 to 20	C2
T7	Yew	1	180							2.16	15	10 to 20	C2
T8	Cotoneaster	1	80							0.96	3	10 to 20	C2
T9	Cherry	1	140							1.68	9	10 to 20	C2
T10	Cherry	1	240							2.88	26	10 to 20	C2
T11	Silver Birch	1	250							3.00	28	20 to 40	B2
G1	Hornbeam	1	320							3.84	46	20 to 40	B2
G2	Lime	1	145							1.74	10	10 to 20	C2

APPENDIX 4

Tree Constraints Plan



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Site: Casina Lodge	1:200 @ A3
Drawing Title: Tree Constraints Plan	Sept 2020

Key:

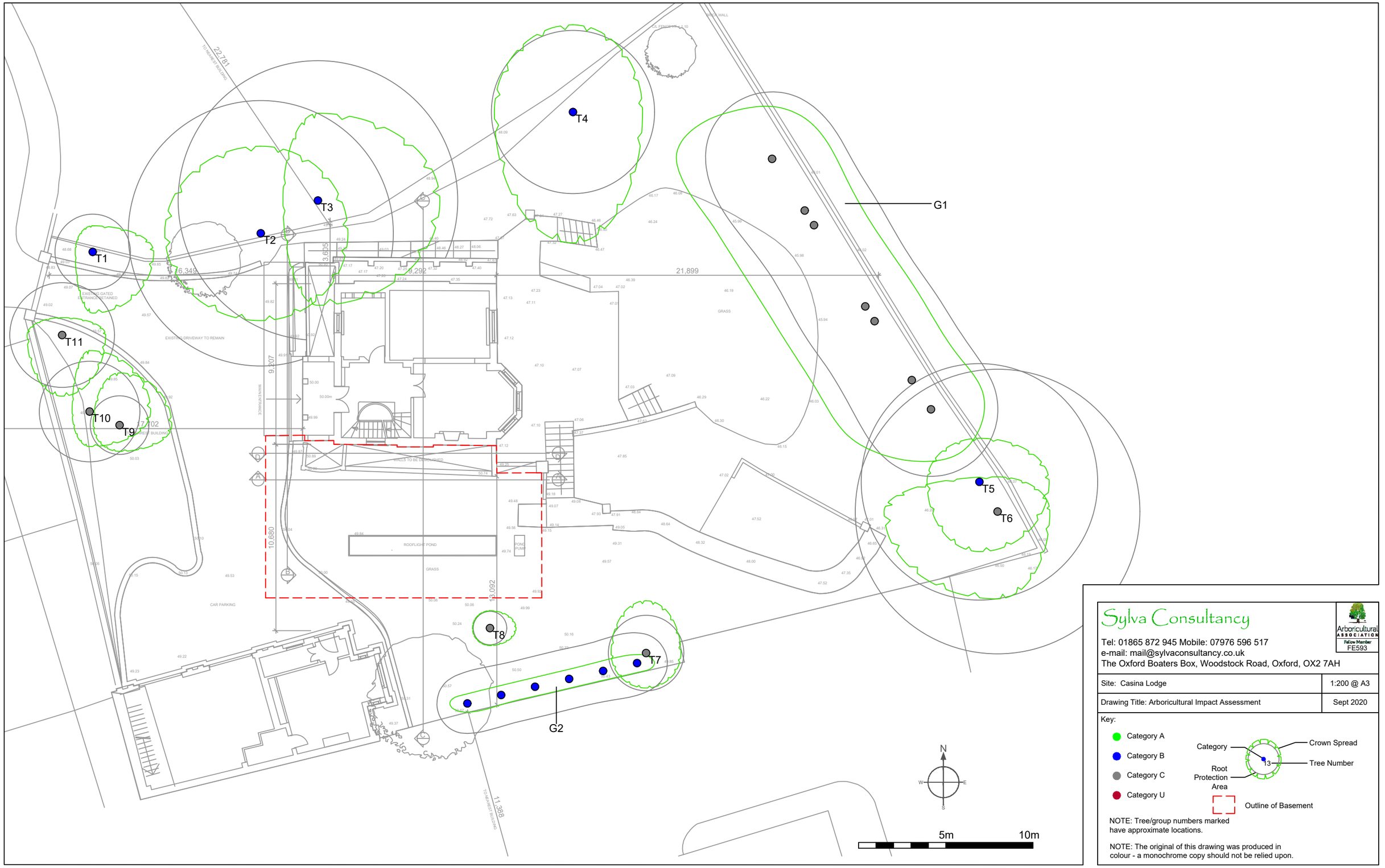
- Category A
- Category B
- Category C
- Category U

NOTE: Tree/group numbers marked have approximate locations.

NOTE: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

APPENDIX 5

Arboricultural Impact Plan



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Site: Casina Lodge	1:200 @ A3
Drawing Title: Arboricultural Impact Assessment	Sept 2020

Key:

- Category A
- Category B
- Category C
- Category U

Outline of Basement

NOTE: Tree/group numbers marked have approximate locations.

NOTE: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

APPENDIX 6

Qualifications