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Tree Care Consultancy
ARBORICULTURAL CONSULTANTS

Arboricultural Impact Assessment
2 Silkstone Lane
Silkstone

Report reference: TCC-1202-2
5 March 2019
Revised 7 April 2021

Report Title:	Arboricultural Impact Assessment
Report Reference:	TCC-1202-2
Written by:	Steve Waterson
Client:	David Gill
Date:	07/03/2021

Contents

Appendices

Introduction

1. Tree Care Consultancy was commissioned by Mr. David Gill to prepare a revised Arboricultural Impact Assessment to accompany a planning application for a proposed residential development at the above address. The report produced includes the following information:

    - A tree survey, undertaken in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations

    - A Tree Constraints and combined Site Plan which highlights the potential development limitations trees pose on site

    - An Arboricultural Impact Assessment which evaluates any potential impact the proposal may have on surrounding trees

2. This report is based on site observations and information provided. The client may choose to accept or disregard the recommendations made in this report or seek additional advice.

3. This report is only concerned with trees in relation to construction. This report makes no attempt to provide a full safety inspection of the trees surveyed. It should not be seen as an alternative for a Tree Hazard Assessment which is specific to minimising the risk and liability associated with trees. Climatic conditions including storms, drought and temperature-related factors can cause damage and failure in apparently healthy trees. It should be remembered that all trees do pose a risk and whilst every effort has been made to detect any major defects in inspected trees, no guarantee can be given as to their safety. Although the risk should be managed to an acceptable level, no tree can be guaranteed as safe at all times.

4. This report is based on Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). V.T.A is a ground level visual assessment of a tree, which is carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The survey is compiled in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations with all Root Protection Areas (RPA's) are based upon section 4.6 of the document.

Site visit

5. The tree survey previously undertaken has undertaken by Steve Waterson following a re-inspection of trees on 16 March 2021. No climbing inspections or decay detection analysis were undertaken.

6. Details explaining the criteria and methodology used in generating the tree survey schedule is included at Appendix 1 and 2. Trees were graded using table 1 of BS5837. The resulting tree survey data results are included within the tree survey schedule at Appendix 3.

7. This survey should be read in conjunction with the Tree Constraints and combined Site Plan (TCP), located in appendix 4 which has in the first instance been prepared by overlaying the tree survey data onto a topographical drawing and then

subsequently onto the revised layout drawing. The author has relied on the accuracy of the drawings in the production of this report.

Site Description

8. Please refer to the Planning Statement prepared by Richard Foster 2131 Limited, the scheme Architect for site context.

Tree protection status

9. It is understood none of the sites tree cover is subject of a Tree Preservation Order (TPO) or Conservation Area controls. In the case of trees that are subject of TPO, Conservation Area controls or planning application procedures it is essential the Local Authority's advice is sought and where necessary consent obtained before undertaking any tree removal or pruning operations.

Soil assessment

10. No soil testing was undertaken and no soil information was provided for the author.

Tree Quality Assessment

11. As shown in table 1 below, the tree survey now includes 10No. individual trees and 3No. tree groups. Of these, 4No. individual trees and 1No. tree group were identified as moderate retention category 'B' material, 6No. individual trees and 2No. tree groups were identified as low category 'C' material.

Table 1:

Category	Category Description	Tree Numbers
A	Trees of high quality, with life expectancy in excess of 40 years	Nil
B	Trees of moderate quality, with life expectancy in excess of 20 years	T1, G5, T8, T12 & T14
C	Trees/hedgerow of low quality with life expectancy in excess of 10 years or young trees	T3, T4, T6, T7, T9, G11, T13 & G15
U	Seriously defective trees that cannot be retained in present context for longer than 10 years	Nil
Total number of trees:		10No. trees & 3No. tree groups/hedgerows

12. Generally the Local Planning Authority is likely to accept the removal of trees in a poor condition or those with a minimal, safe, useful life expectancy. This usually includes category 'U' and 'C' trees. This presumption is also viewed reasonable where it accords with accepted arboricultural objectives.

Arboricultural Impact Assessment (AIA)

13. The following section assesses the relationship of the proposed layout and trees primarily immediately adjoining the site. Any tree and design conflicts are highlighted and possible remedial action recommended. The assessment is based on the surveyor's findings and drawings provided by 2131 Limited.

Trees to be removed to facilitate the proposal

14. The revised development will not require the removal of any additional tree cover, accepting that Sycamore T2 and Ash T10 have already been removed as per the previously approved scheme.

Below ground constraints

15. The area of roots that need to be protected around a tree to try to ensure it does not suffer damage during the construction process is called the Root Protection Area (RPA).

16. As recommended in BS5837 we have plotted the RPAs (in magenta) onto the attached Tree Constraints Plan (TCP) taking full account of the surrounding topographical factors, tree condition and the probable root disposition.

17. With regard to retained trees T1, T3, G5, T6, G7, T8, T9, G11, T12, T13, T14 and G15 the revised scheme does not include any additional impacts upon the RPA of these trees than that of the previously approved scheme accepting that trees T2 and T10 have now been removed, together with the presence of a newly constructed boundary wall fronting Lane Head Road.

18. Above ground constraints

19. There do not appear to be any conflicts between the proposal and the above ground parts of retained trees that cannot be readily addressed by routine pruning operations. More particularly trees bordering the site can be expected to grow to their overall dimensions subject to routine pruning operations.

Tree protection

20. The substantial boundary wall that has been constructed within or close to the RPA of the offsite trees T1, T3, G5, T6, G7, T8 and T9, provides an effective barrier to these retained trees from the effects of the proposed building works. Similarly in terms of retained items G11, T12, T13, T14 and G15 existing site features ensure no additional safeguards are required to be put in place. As such unlike the previous planning permission procedure which required the prior submission of an Arboricultural Method Statement this is not considered necessary in terms of the current proposal.

Material storage

21. No material storage or plant movement will be permitted within the Construction Exclusion Zone of retained trees.

Mitigation for associated tree loss

22. As per the previously approved scheme 1No. Liquidambar styraciflua 10-12cm girth will be planted on the site frontage to replace the earlier removal of T10.

Conclusion

23. From the tree survey findings, comments and observations, it will be seen the amended scheme will not require the removal of any further tree cover or detrimentally impact on the health and appearance of the retained offsite tree cover.

24. It is hoped that this report and recommendations provides all necessary information, however, should there be any queries or should clarification of any points be required, please contact the report author.

Appendix 1- Explanation of Survey Details

Tree Id- Each tree/group has been given a unique number, which coincides with the drawings located in appendix 3.

Species & botanical name- where identifiable the full botanical name has been given. Where a cultivar, variety or species cannot be accurately given the genus name only will be given.

Height (m) - measured approximately to the nearest 1m. If height issues are critical, measurements can be collected accurately using optical instruments.

No of stems- the number of separate stems each individual tree has.

Stem Dia @1.5m (mm) - the diameter of the given tree at 1.5m above soil level, (on sloping ground taken on the up-slope side of the tree base). Where the tree is multi-stemmed measurements will be record for each stem.

Spread- indicates the crown radius from the base of tree in four compass directions, recorded to the nearest metre.

Crown height + direction (m) - recorded as the first significant branch and direction of growth.

Life stage- described as young, semi-mature, early-mature, mature or over-mature.

Physiological condition (P) - an assessment of the trees health. Considers vitality, die back and the presence of disease. Described as **Good** = no significant health problems **Fair** = symptoms of ill health that can be remediated **Poor** = significant ill health.

Structural condition (S) - an assessment of the trees structural condition. Described as **Good** = no significant defects **Fair** = significant defects that can be remediated **Poor** = significant defects no remedy.

Observations – negative and positive- narrative comments on general condition, significant defects and overall appearance (e.g. the presence of any decay).

Preliminary management recommendations- e.g. requires pruning or further investigation of suspected defects is needed.

Life expectancy- preliminary management recommendations, e.g. requires pruning or further investigation of suspected defects is needed.

Retention Category- Each tree/group is identified with a retention category in accordance with BS5837 (an in depth explanation is provided on the following page)

RPA radius (m) - minimum area in metres which should be left undisturbed around each retained tree.

Appendix 2- Cascade Chart for Tree Quality Assessment (extract from BS5837 table 1)

Category and definition	Criteria (including subcategories where appropriate)	Identification on Plan
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 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	DARK RED

TREES TO BE CONSIDERED FOR RETENTION

Category and definition	Criteria – Subcategories			Identification on Plan
	1 Mainly arboricultural values	**2 Mainly landscape values**	**3 Mainly cultural values, including conservation**	
Category A **Trees of a 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 essential components of groups, or of 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 **Those of moderate quality** with and 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 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 **Those of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of a 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 landscape value; and/or trees offering low or only temporary/transient screening benefits	Trees with no material conservation or other cultural values	GREY

Appendix 3- Tree Schedule

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)
T1	Sycamore, *Acer pseudoplatanus*	15	2	400	5	5	6	5	4-n	Mature	S= Good, P= Good. Off-site tree. No accurate inspection could be undertaken. Deadwood present. Easterly extending root growth likely to be controlled by adjacent boundary retaining wall.	Retain, no work required	20 to 40 yrs	B1	6.8
T3	Mountain Ash, *Sorbus aucuparia*	6	3	100	1	1	1	1	1-w	Early-mature	S= Good, P= Good. Off-site tree. No accurate inspection could be undertaken. Ornamental item of collective value. Ivy on stem, minor deadwood. Newly constructed boundary wall straddles RPA.	Retain, no work required	10 to 20 yrs	C2	2.1
T4	Sycamore, *Acer pseudoplatanus*	13	2	330	4	5	4	4	1-n	Mature	S= Fair, P= Good. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling and garage. Growing from bank side, co-dominant stems with acute union. Liable to deteriorate with age. Newly constructed boundary wall straddles RPA.	Retain, no work required	10 to 20 yrs	C2	6.9

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)
G5	Common Oak, *Quercus robur*, Cherry, *Prunus spp*, Hawthorn, *Crataegus monogyna*, Sycamore, *Acer pseudoplatanus*	9	1	320	See plan.					Semi-mature	S= Good, P= Good. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling and garage. Ivy, minor snags and dead wood present. Newly constructed boundary wall straddles peripheral RPA.	Retain, no work required	20 to 40 yrs	B2	4
T6	Wild Cherry, *Prunus avium*	11	1	310	2	2	1	2	4-n	Early-mature	S= Fair, P= Good. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling. Previously suppressed item with unbalanced crown. Ivy present and major deadwood. Newly constructed boundary wall straddles peripheral RPA.	Retain, no work required	10 to 20 yrs	C2	3.7

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)
G7	Wild Cherry, *Prunus avium*	9	1	260					5-s	Semi-mature	S= Fair, P= Fair. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling. Over crowed group densely populated in ivy, lack of management has resulted in slender poorly formed material. Newly constructed boundary wall straddles peripheral RPA.	Retain, no work required	10 to 20 yrs	C2	3.1
T8	Common Oak, *Quercus robur*	13	1	560	6	6	3	2	3-e	Mature	S= Fair, P= Good. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling. Unbalanced crown due to previous suppression, stubs and moderate deadwood. Newly constructed boundary wall straddles peripheral RPA.	Retain, no work required	20 to 40 yrs	B2	6.7

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)
T9	Common Oak, *Quercus robur*	9	1	290	2	2	1	0	3-n	Semi-mature	S= Fair, P= Good. Off-site tree. No accurate inspection could be undertaken. Provides good screening between highway and newly constructed dwelling. Densely populated in ivy and suppressed by dominant neighbour. Newly constructed boundary wall straddles peripheral RPA.	Retain, no work required	10 to 20 yrs	C2	3.5
G11	Common Beech, *Fagus sylvatica*	2	1	50	See plan.				N/A	Early-mature	S= Good, P= Good. Maintained boundary hedge providing useful screening.	Retain and maintain at current proportions	10 to 20 yrs	C2	0.6
T12	Common Oak, *Quercus robur*	13	1	Est 650	3	5	5	4	5-e	Mature	S= Good, P= Good. Off site tree no accurate inspection could be undertaken.	Retain, no work required	20 to 40 yrs	B1	7.8
T13	Lawson Cypress, *Chamaecyparis lawsoniana*	8	1	Est 300	2				4-s	Semi-mature	S= Good, P= Good. Off site tree no accurate inspection could be undertaken.	Retain, no work required	10 to 20 yrs	C1	3.6
T14	Sycamore, *Acer pseudoplatanus*	11	1	Est 350	2	3	4	3	4-e	Early-mature	S= Good, P= Good. Off site tree no accurate inspection could be undertaken.	Retain, no work required	20 to 40 yrs	B1	4.2
G15	Leyland Cypress, *X Cupressocyparis leylandii*	6	1	Est 200	See plan.				N/A	Mature	S= Good, P= Good. Off site boundary hedgerow, no accurate inspection could be undertaken. Northerly extending root growth likely to be controlled by adjacent boundary retaining wall.	Retain and maintain at current proportions	10 to 20 yrs	C2	2.4

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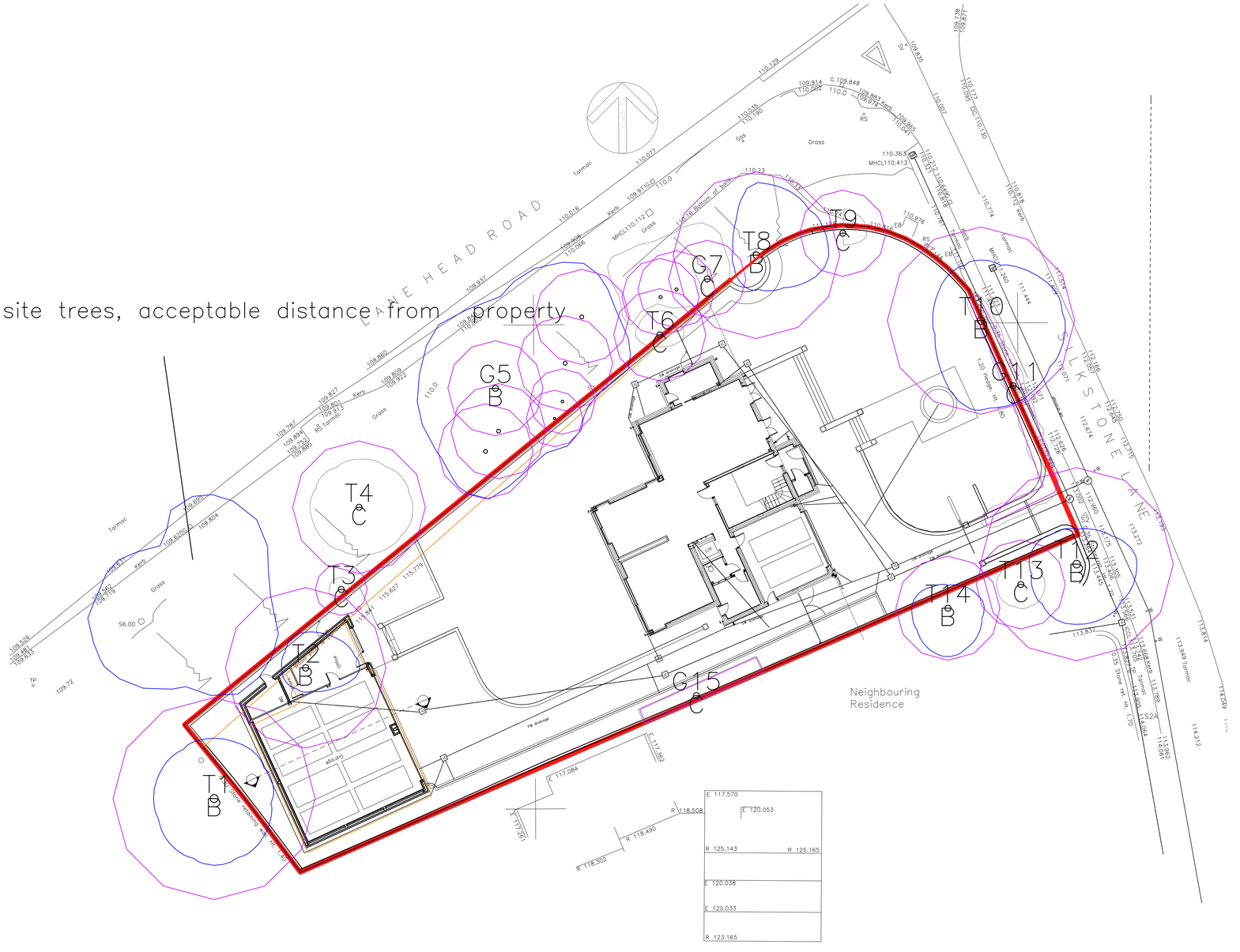
Off-site trees, acceptable distance from property.



Site Plan showing TCP

1:200 0 5 10 15 20 m

KEY

Crown Spread — Root Protection Area

Category 'A' Category 'B' Category 'C' Category 'U'

site boundary & garage footprint as granted

as built site boundary

Rev.		
/	/	/

2131

53 Bradfield Way
Waverley
Rotherham
S60 5WE

Status: NMA

Client: Mr & Mrs Gill

Project: 2 Silkstone Lane

Drawing title: site Plan showing TCP

scale:	date:	drawn:	checked:
1:200 @A1	Feb 21	rjf	

job no:	dwg no:	revision:
038	401	/