







ARBORICULTURAL IMPLICATIONS ASSESSMENT

PROPOSED DEVELOPMENT

AT

LAND BETWEEN
BEVINGTON BUSH, GARDENERS ROW
AND EDGAR STREET
LIVERPOOL

Author: C. Salisbury
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Ref: TRE/BBGRES



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1.0 Introduction

- 1.1 Mulberry Tree Management were instructed by Mr Shah, to carry out an arboricultural survey of trees at his site in Bevington Bush, Liverpool.
- 1.2 This report details the arboricultural implications of developing the site, including:
 - a survey of the trees on and near the development which may impact the proposal- from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc;
 - providing advice on the removal, retention and management of trees;
 - assessment of the potential effects of the proposal on retained trees and vice versa;
 - assessment of the requirement for tree protection for the duration of the works;
 - mitigation for any loss;
 - preparation of a tree schedule;
 - and report on the above matters.
- 1.3 The survey was carried out on 1 August 2015 by means of inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.
- 1.4 Under BS5837: 2012 Trees in Relation to Construction Recommendations, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.
- 1.5 The following documents have been made available by the client:
 - Drawing- 13C044 2D.dwg
 - Drawing- PL1488.GA.001-General Arrangement.pdf
- 1.6 The supplied drawing included some tree positions plotted. Any dimensions regarding tree positions and protective fencing must be checked on site.
- 1.7 Weather conditions during the survey were dry and still.
- 1.8 The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore the contents of this report are valid for one year only. After this period, re-inspection may be necessary.

2.0 Survey Methodology

- 2.1 The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in appendix one. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.
- 2.2 All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in appendix two.
- 2.3 Where appropriate, canopy spread for each tree was recorded at four cardinal points in order to reproduce an accurate representation of the crown shape of the tree on the tree plan in appendix three.
- 2.4 The survey included all trees within the proposal area and trees near to the proposal.

3.0 Development Proposals

- 3.1 Due to the proposed development and its associated infrastructure there are a number of locations where the proposals are in close proximity to the trees surveyed. The Site Layout Plan within appendix three identifies the trees in relation to the proposed development.
- 3.2 In order to fully assess the impact of the proposals an Impact Table has been created detailing each tree, which shows the proximity of the associated works to the tree.
- 3.3 This can then be assessed in accordance with BS 5837:2012 to determine whether the development will have a detrimental impact on the health of each tree. Once this has been determined remedial measures can be detailed to reduce the impact the proposals will have on the treescape.

3.4 Impact Table:-

Tree No.	Root Protection Area identified in Table 2 of BS 5837:2012	Distance to Proposed Hard Standing (m)	Distance to Proposed Development (m)	Can the Tree/s be Successfully Retained						
T1	Fell Due to Condition									
T2		Fell Due 1	to Development							
Т3	24m ² = Circle with a radius of 2.76m	17.30	26.10	Yes						
T4	9m ² = Circle with a radius of 1.68m	10.80	21.70	Yes						
G1	Fell Due to Development									
G2		Fell Due 1	to Development							
G3		Fell Due 1	to Development							
G4		Fell Due 1	to Development							
G5		Fell Due	to Development							
G6		Fell Due	to Development							
G7		Fell Due 1	to Development							
G8	43m ² = Circle with a radius of 3.72m	7.30	22.10	Yes						

4.0 Impact Assessment

4.1 To assess the implications of the Impact Table each tree can be categorised in the following way: -

	Trees to b	oe retained	Trees to be removed			
	With No	With detailed	Due to	Due to		
	Impact	construction	Condition	Development		
Tree No.	T3, T4 & G8	N/A	T1	T2, G1, G2, G3, G4, G5, G6 & G7		

5.0 Mitigation Proposals

5.1 Compensatory Planting

5.1.1 Due to the loss of the trees identified in section 3.4 it is proposed that along with the general soft landscaping for the development, further more substantial supplementary tree planting will support the application.

- 5.1.2 This will have a number of benefits for the development and the character of the area. These being:-
 - Give a greater diversity of age class on the site; increasing sustainability.
 - Give a greater diversity of species and therefore wildlife habitat.
- 5.1.3 The proposed landscaping scheme is detailed within Appendix Three of this report.

6.0 Conclusions and Arboricultural Recommendations

- 6.1 The tree categorisation method identifies the quality and value of the existing tree stock but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.
- 6.2 A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement.
- 6.3 Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.
- 6.4 It is considered that in following the advice in this document, any negative factors affecting trees on the site will be minimised.

Appendix One Tree Survey Schedule

Arboricultural Implications Study- Bevington Bush, Liverpool

TREE SURVEY SCHEDULE

Arboric	ultural Data Sheet:	Bevingto	on Bush, I	iverpoo	l					Date	of Survey: 01/08/15	Surveyor: J. E	Barnes		
Tree	Species	DBH (mm)	Height	Age	Λαe	٨٥٥	Cro	Crown Spread (m)		m)		Condition	Comments and preliminary management	Estimated remaining	Tree quality
No.	Opecies		(m)	Age	N	E	S	W	clearance	rating	recommendations	contribution	category rating		
T1	Silver Birch	150	10	EM	3	3	3	3	1.5	3	An individual specimen with poor form situated adjacent to a highway with the tree tie still in place constricting the stem and resulting structural weakness. Fell.	0-10	U		
T2	Sycamore	290 Est.	12	EM	3.5	3.5	3.5	3.5	4.5	2	An individual specimen with reasonable form situated within dense vegetation.	20-40	C1		
Т3	Swedish Whitebeam (off site)	230	8	EM	2.5	2.5	2.5	2.5	2.5	2	An individual specimen with reasonable form situated in a grass verge adjacent to a highway with minor stem damage.	20-40	C1		
T4	Dawn Redwood (off site)	140	8	SM	1.5	1.5	1.5	1.5	2	2	An individual specimen with reasonable form situated in a grass verge adjacent to a highway with minor stem damage.	40+	C1		
G1	Crab Apple x1, Myrobalan Plum x1 & Goat Willow x1	260 Avg.	8 Avg.	EM	ı	-	-	-	1	2	A mixed species group with poor form situated adjacent to a highway with low branches. Crown lift to 3m, 5m on highway side.	10-20	C2		
G2	Silver Birch x2	310 Avg.	14 Avg.	EM	ı	-	-	-	2	2	A single species group with reasonable form situated adjacent to a highway with low branches. Crown lift to 5m.	20-40	C1		
G3	Whitebeam x2	250 Avg.	8 Avg.	EM	1	1	-	-	2	2	A single species group with reasonable form situated adjacent to a highway with low branches. Crown lift to 5m.	20-40	C1		

Arboricultural Implications Study- Bevington Bush, Liverpool

Arboric	Arboricultural Data Sheet: Bevington Bush, Liverpool								Date of Survey: 01/08/15			Surveyor: J. Barnes	
Tree	Species	DBH (mm)	Height (m)		Crown Spread (m)		m)	Crown	Condition	Comments and preliminary management	Estimated	Tree quality	
No.					Age	N	E	S	w	clearance	rating	recommendations	remaining contribution
G4	Cockspur Thorn x2 (off site)	120 Avg.	6 Avg.	SM	-	-	-	-	1	2	A single species group with reasonable form situated in a highway with some low branches. Crown lift to 3m.	20-40	C1
G5	Cherry x3 (off site)	170 Avg.	12 Avg.	EM	-	-	-	-	4	2	A single species group with reasonable form situated in a highway.	20-40	C1
G6	Sycamore x5, Willow x2 & Elderberry x2	190 Avg.	14 Avg.	EM	-	-	-	-	0.5	2/3	A mixed species group with poor form situated adjacent to a highway and impacting the boundary fence. Consider removal.	10-20	C2
G7	Maple x3 & Cypress x4 (off site)	300 Avg.	16 Avg.	М	-	-	-	-	2	1	A mixed species group with reasonable form situated in a grass verge. Crown lift to 5m and reduce remaining canopy overhang by 2m on site side.	40+	B1
G8	Swedish Whitebeam x3 & Cypress x2	310 Avg.	15 Avg.	М	-	-	-	-	1.5	2	A mixed species group with reasonable form situated in a grass verge adjacent to a highway with low branches over the footpath. Crown lift to 3m.	40+	B1

Appendix Two Tree Survey Key

Arboricultural Implications Study- Bevington Bush, Liverpool

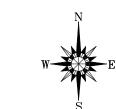
Trees for removal									
Category and definition	Criteria								
Category U	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become								
Those in such a condition that any existing	unviable after removal of other R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)								
value would be lost within 10 years and	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline								
which should, in the current context, be	Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch elm disease), or very low quality trees								
removed for reasons of sound	suppressing adjacent trees of better quality								
arboricultural management	Note – Habitat reinstatement may be approp	priate (e.g. R category tree used as a bat roost: installation of bat	box in nearby tree).						
Trees to be considered for retention									
Catagory and definition	Criteria - Subcategories								
Category and definition	1 Arboriculture values	2 Landscape values	3 Conservation values						
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum 40 years is suggested)	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 arboriculture features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)						
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)	Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits						
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum	Trees not qualifying 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 screening benefit	Trees with very limited conservation or other cultural benefits						
of 10 years is suggested), or young trees with a stem diameter below 150 mm	Note - Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation								

Age C	Class
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Age O	1033		Condition		
Υ	Young	Trees that have not yet established	Α	Goo	
SM	Semi-Mature	Established trees up to 1/3 of expected height and crown	В	Fair	
EM	Early mature	Between 1/3 and 2/3 expected height and crown	С	Poor	
M	Mature	Between 2/3 and full expected height and crown	D	Dea	
FM	Fully Mature	Full expected height and crown			
OM	Over-Mature	Crown beginning to break up and decrease in size			
S	Senescent	Crown in advanced stage of break-up			

Good Fair Poor Dead

Appendix Three Plans





Category A Trees



Category B Trees



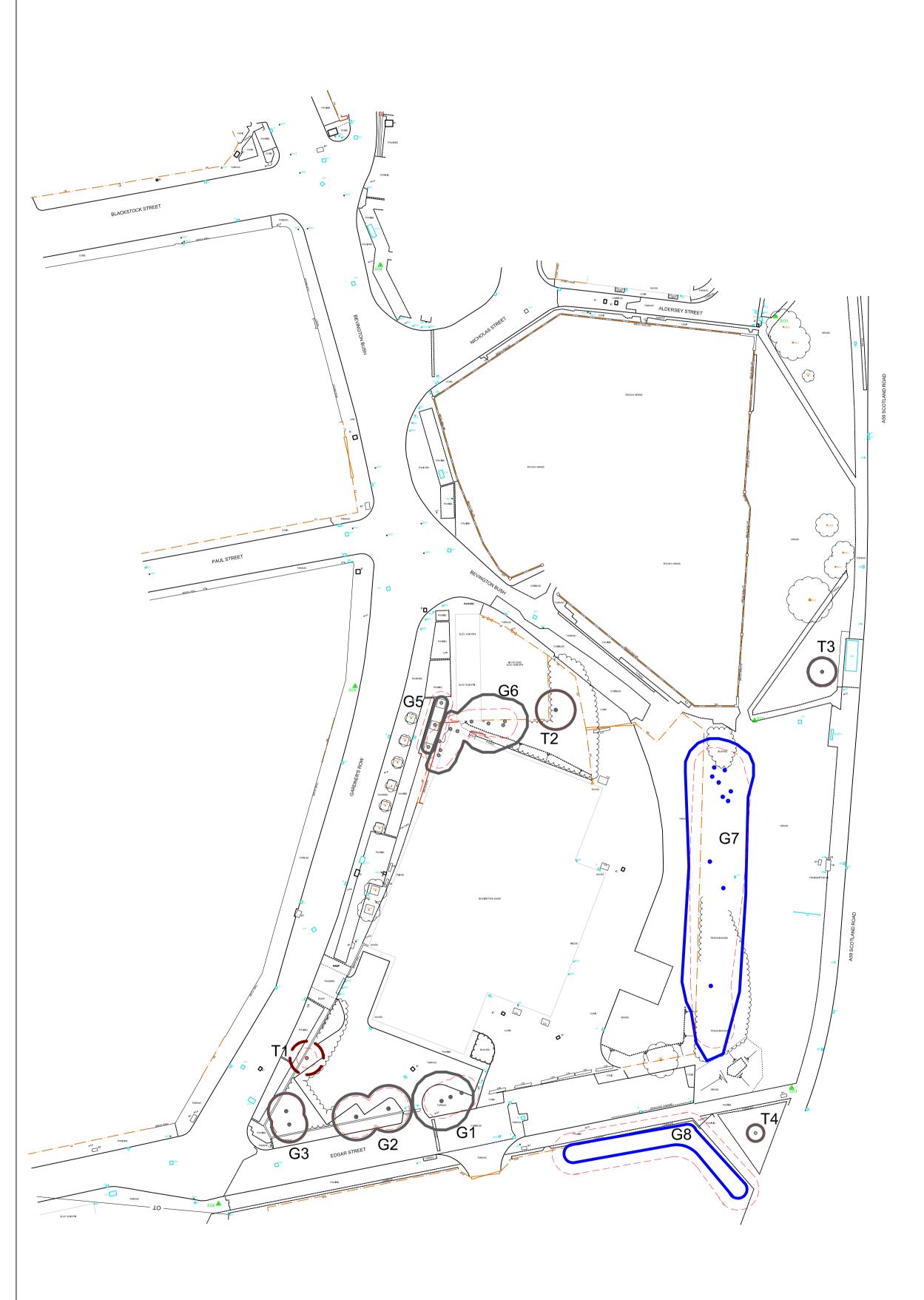
Category C Trees



Category U Trees



Root protection area



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Tel: 0161 955 3628 Email: info@mulberrytmc.co.uk

Site Address: Bevington Bush Liverpool

Drawing Title: Tree Survey Plan

Drawing No: BB/TS/01 Date:

05/08/15

Scale: Drav 1:500@A2 ST

Drawn by:

Note: Dimensions are not to be scaled from this drawing.
All written measurements are to be checked on site by
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