

<b>Arboricultural Report - Preliminary</b>		<b>Prepared by:</b>	<b>Hal Appleyard</b> Dip. Arb(RFS), F. Arbor.A MICFor
<b>Project:</b>	<b>Royla Free Hospital - Maggies</b>	<b>Produced for:</b>	<b>Maggies Centres</b>
<b>Date: 19<sup>th</sup> March 2018</b>	<b>Ref: ha/an1/rf</b>		
<b>Planning Ref:</b>			

1. The trees have been inspected from ground level (with the use of binoculars where necessary) on the date shown on the survey schedule.
2. The details of the trees have been recorded in line with the recommendations set out in paragraphs 4.4.2 to 4.5.11 of BS5837:2012 Trees in relation to design, demolition and construction – recommendations (The BS).
3. The trees have been recorded for their quality and value and which can be influenced by their physiological or structural condition, their expected useful life span and their suitability to the location.

4. A summary of the categorization method is as follows:

**A – Trees of high quality with an estimated remaining life expectancy of at least forty years.**

**B – Trees of moderate quality with an estimated remaining life expectancy of at least twenty years.**

**C – Trees of low quality with an estimated remaining life expectancy of at least ten years, or young trees with a stem diameter of below 150mm.**

**U – Those trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than ten years.**

5. The trees are normally shown on the tree survey plans with a coloured stem base in line with its allocated category. (C grade trees may be left blank).
6. The tree's BS root protection area (an area surrounding the tree's base) (RPA), is calculated in line with paragraph 4.6 (a) and (b). Modifications to the form of the RPA may be provided where site circumstances dictate. The RPA is depicted upon the plan as a dashed circle or magenta irregular form. In general, the radius of the circle equates to 12 x the diameter of the trunk measured at 1.5m above ground level.

## Summary of findings

Table 1

<b>Total Tree records 14</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>U</b>
By grading	0	6	6	2
% of Total	-	45%	45%	10%

## Primary Observations

1. The tree stock is pretty poor and I've erred slightly on the generous side with the BS grading.
2. There's a 1m + level change between the site containing T7 and G8 and the car park so I've shown the RPAs outside the site in respect of these trees as roots passing the boundary into the site would be unusual.
3. I'm not really sure how the boundary wall would be affecting the RPA of T1 and which will depend upon existing foundation depths and surfacing in the neighbouring property. However, I would expect that the vast majority of root growth for all the trees T1 to G6 are confined to the soft landscaping 'bank' and would not favour the ground under the hard surfacing of the car park.
4. T9 to G13 are 'functional' in context of the current site use (screening), but these trees are unlikely to be a major constraint on development in my view, despite the 'B' grade of a few of these.

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 Institute of  
 Chartered Foresters  
 Registered Consultant

enc. Tree survey schedule  
 Tree survey constraints plan

Site: Royal Free Hospital, NW3

Surveyor: E. B.

Date: 6th March 2018

Ref:ts1/rfh

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	Protection Multiplier	Protection Radius	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	Observations
T1	Chestnut, Horse	12	6 5 7 6	1/3w	Mature	860	12	10.3	Moderate	Fair	Medium	B	1,2	20-40	Lapsed Pollard with weak unions in new growth, secondary reduction points Inspection limited by ivy Boundary wall to west with potential to modify root morphology
T2	Maple, Norway	9	5 2 5 3	2/2n	Middle Aged	290	12	3.5	Normal	Good	Low	C	1	20-40	Self sown One-sided form/suppressed
T3	Maple, Norway	14	6 4 9 5	4/3e	Mature	560	12	6.7	Normal	Good	Medium	B	2	20-40	Self sown, forks at 2m, asymmetric canopy to east Inspection limited by ivy Borderline C grade
G4	Maple, Norway and Catoneaster understory	8	2 2 2 2	2/2e	Middle Aged	270	12	3.2	Normal	Good	Low	C	1	10-20	Boundary self-set group Inspection limited by ivy
T5	Elder	5	2 2 2 2	1/1n	Middle Aged	170	12	2.0	Moderate	Fair	Low	U	1	<10	Self sown Reduced in past
G6	Maple, Norway and Catoneaster understory	6	3 3 3 3	1/1n	Middle Aged	280	12	3.4	Moderate	Fair	Low	C	1	10-20	Minor dieback on Maple Boundary tree (group) Self set Maples

**Notes:**

1. Height describes the approximate height of the tree in meters from ground level.
2. The Crown Spread refers to the crown radius in meters from the stem centre and is shown above on each of the four compass points (i.e. N, E, S, W) clockwise.
3. Ground Clearance is the height in meters of crown clearance above adjacent ground level together with the height and direction of the lowest branch
4. Stem Diameter is the diameter of the stem measured in millimetres at 1.5m from ground level. The diameter may be estimated (e), where access is restricted. An average (a) may be taken for tree groups. A full inspection is always recommended.
5. Protection Multiplier is 12 for single-stemmed trees; for multi-stemmed a cross-sectional area is calculated to derive the DBH, which in turn is multiplied by 12.

6. Protection Radius is a radial distance measured from the trunk centre and is used to calculate the BS RPA.
7. Growth Vitality - Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
8. Structural Condition - Good (no or only minor defects), Fair (remediable defects), Poor - Major defects present or suspected.
9. Landscape Contribution - High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
10. B.S. Cat. refers to British Standard 5837:2012 Table 1 category and refers to tree/group quality and value; 'A' - High, 'B' - Moderate, 'C' - Low, 'U' - Remove or very poor quality.
11. Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservation/ecological, historic and commemorative.
12. Useful Life is the tree's estimated remaining effective contribution in years.

Site: Royal Free Hospital, NW3

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Tree No.	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	Protection Multiplier	Protection Radius	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	Observations
T7	Sycamore	12	7 7 6 7	4/4s	Mature	450e	12	5.4	Moderate	Good	Medium	B	1,2	20-40	Boundary self-set tree, off site tree Boundary wall to north with potential to affect root morphology 7 meter overhang into site
G8	Sycamore	16	6 5 5 5	5/5s	Mature	400e	12	4.8	Moderate	Good	Medium	B	2	20-40	Boundary self-set tree, off site tree Boundary wall to north with potential to affect root morphology 5 meter overhang into site
T9	Maple, Norway	11	3 3 3 3	3/2e	Middle Aged	300	12	3.6	Normal	Good	Low	B	1,2	20-40	A tree with insignificant defects Functional planting
G10	Maple, Norway	8	2 2 2 2	3/3w	Middle Aged	230	12	2.8	Normal	Fair	Low	C	1,2	10-20	Bark wounds (decay entry point) Functional planting,
T11	Maple, Norway	9	4 4 3 3	2;3w	Middle Aged	340	12	4.1	Normal	Fair	Low	C	1	10-20	Bark wounds (decay entry point) Functional planting, branch decay
T12	Whitebeam	5	2 2 2 2	3/1e	Middle Aged	310	12	3.7	Moderate	Fair	Low	C	1	10-20	Suppressed by nearby tree(s) Subordinate tree

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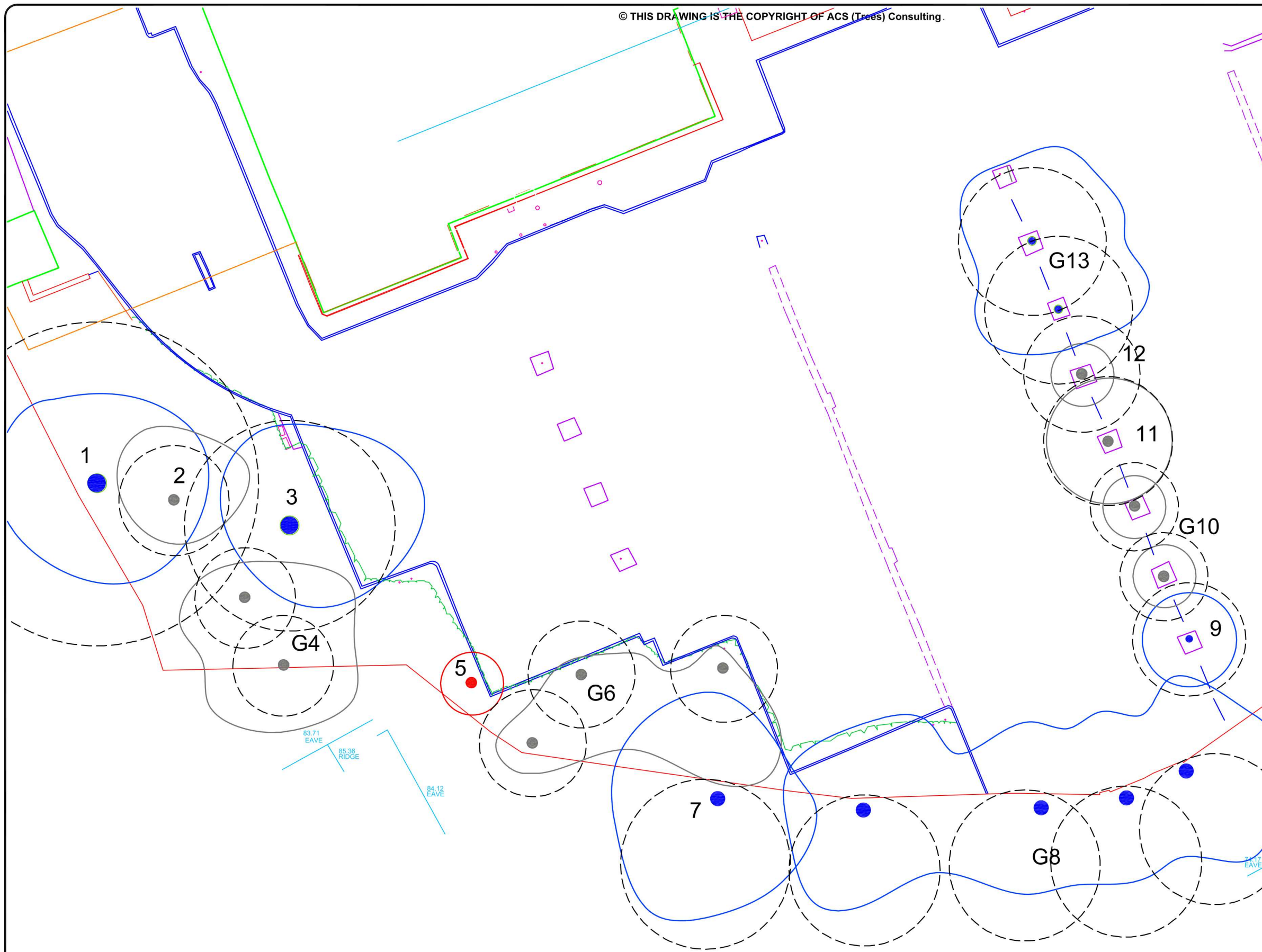
Refs:ts1/rfh

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	Protection Multiplier	Protection Radius	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	Observations
G13	Whitebeam	8	4 5 5 3	2/2e	Middle Aged	390	12	4.7	Moderate	Fair	Medium	B	1	20-40	Included bark in branch unions Bark wounds (decay entry point)
T14	Sycamore	9	2 2 3 3	2/2e	Mature	370	12	4.4	Moderate	Fair	Low	U	1	<10	Pollard (Old) Unsustainable position Self sown

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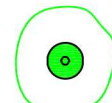
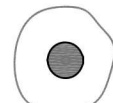


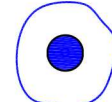
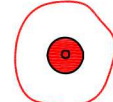
**ACS (Trees) Consulting LEGEND**

Indicative



BS Root Protection Area, (RPA) shown uniform but site features such as roadways, retaining walls and foundations, may modify root patterns and therefore the position of the RPA.

A grade trees  C grade trees 

B grade trees  U grade trees 

0 5 m 10 m 25 m



Scale: 1:250

Client : Royal Free Hospital - Maggies		
Project : Maggies Centre		
Title : Tree Survey/Constraints Plan		
Scale : 1: 250 A3	Dwg No : TCP1_RF	Rev : -
Date : Mar 2018		

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