



Arboricultural Implications Assessment and Method Statement



The Rose in June (PH), Selshire Road
Hayling Island

Arboricultural Implications Assessment and Method Statement

THE ROSE IN JUNE (PH), SELSMORE ROAD, HAYLING ISLAND

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1 INTRODUCTION

- 1.1 **Instruction:** I am instructed by Monterrey Properties Ltd to report on trees that could be affected by a new development proposal at The Rose in June (PH), Selsmore Road, Hayling Island and prepare an Arboricultural Implications Assessment (AIA) and preliminary Arboricultural Method Statement (AMS) to support a planning application on the site.
- 1.2 **Document disclosure:** I have been provided with a topographical survey, drawing reference 'Land Survey'. This shows the positions of the significant trees on or near the site, together with the existing buildings and other important features. I was also supplied with a copy of the proposed layout, drawing reference 'Barrie' showing a new site configuration.
- 1.3 **Scope of report:** All my observations are of a preliminary nature and the tree survey was carried out from ground level without any investigations using invasive or diagnostic equipment. I was not able to fully view all the trees detailed in this report from all directions, as one was located on an adjacent private property. I have therefore confined observations of it to what was visible from within the site. I have not checked the accuracy of the positions of the trees shown on the provided plans and I have estimated all dimensions unless otherwise indicated.
- 1.4 **The Tree Protection Plan:** This is included in Appendix 1 and is a composite drawing derived from the information provided. It shows the existing landscape features (from the land survey) in grey and the proposed layout shown superimposed over the top in blue. This allows the relationship between the two to be clearly seen. The Tree Protection Plan has also been annotated to show tree protection measures for the trees that could realistically be affected by the proposed development.
- 1.5 **Qualifications and experience:** This report is based on my site observations, and I have come to my conclusions in the context of my experience as a former local government tree officer and a private practice arboricultural consultant. I have qualifications in both

arboriculture and forestry, and details of these, together with a career summary are provided in Appendix 4.

- 1.6 **Ecological issues and statutory tree protection:** Providing guidance on ecological issues is not within my sphere of expertise. However, trees and other vegetation can often provide nesting, roosting and feeding opportunities for protected species. Therefore, before any tree work proceeds on site, I advise that appropriate advice is sought to see whether the trees to be removed are being utilised by any protected species. At the time of writing, I have made no checks to ascertain whether any of the trees discussed are covered by tree preservation orders, or if the site is located in a conservation area. Therefore, any person intending to carry out any operations involving trees (before a formal planning consent is issued) should consult the council before any works are carried out.
- 1.7 **Relevant background information:** This report is an updated version of an earlier document (ecourban ref: 12357 - AIA 2) that has been revised to take account of a site layout change.

2 SITE VISIT, DESCRIPTIONS, OBSERVATIONS AND SURVEY METHODOLOGY

2.1 **Site visit:** I visited the site on 28 September 2012 to gather my tree data. The weather at the time of my survey was clear, still and dry, with good visibility.

2.2 **Description of site and surrounds:** The site is located in Selsmore Road, which is situated on the southern tip of Hayling Island (Figure 1). The Rose in June is on the southern side of the road and consists of a derelict main 'pub' building, with car parking to the east. The site has residential development further to the east, south and west, with retail and office space to the north.

2.3 **Observations of trees and other vegetation:** Small groups of mixed species trees and shrubs are located in the public domain to the east and west of the site and there is a large walnut tree located in the garden area of the property to the rear (south) of the site.

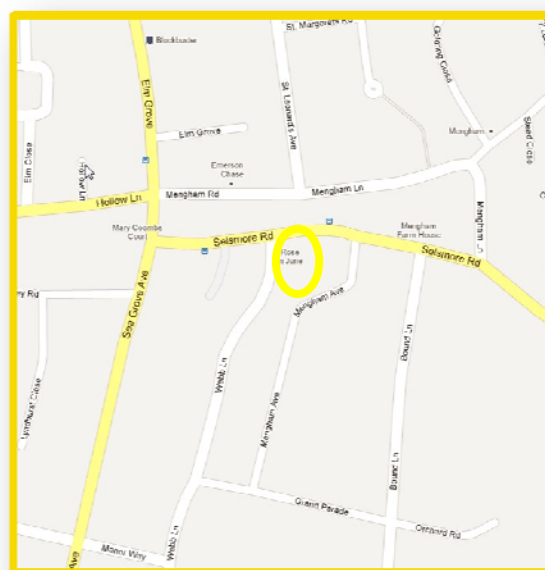


Figure 1: Approximate geographical location of site in yellow

2.4 **Description of proposed development:** This development proposal is to construct four new dwellings on the existing pub car parking area.

2.5 **Soil assessment:** BS 5837 (2012) advocates that a soil assessment should be carried out to inform decisions relating to RPAs, tree protection, new planting and foundation design. I have consulted the British Geological Survey (BGS) website and their Geology of Britain viewer and this advises that the bedrock geology for the site is Portsmouth Sand Member and Whitecliff Sand Member (Undifferentiated) - Sand. I did not undertake any excavations on site to confirm this and a full geotechnical site investigation may need to be undertaken to provide a more in-depth level of information regarding soil type for the site.

- 2.6 **Tree survey methodology:** My inspection of the trees was visual, and did not involve any climbing or exploratory investigation. During my visit, I identified obvious groups where this was appropriate and I assigned an identification number to each tree or group, as shown on the plan in Appendix 1. I then collected the tree data included in Appendix 2 and placed the vegetation in one of four categories (U, A, B or C), as set out in British Standard (BS) 5837: 2012 Trees in relation to design, demolition and construction – Recommendations. I have included the BS categorisations in Appendix 3 for easy reference. Where of relevance, I also estimated the crown spreads for each tree at the appropriate cardinal compass points and this information is also shown in the tree schedule in Appendix 2.

Although this document is not meant to be a full and detailed report on tree health and safety, any significant visible structural defects or physiological conditions identified, together with preliminary tree works, are also noted in the appropriate columns in the tree schedule in Appendix 2. However, a full post development tree inspection is recommended to establish that the trees retained during construction pose acceptable levels of risk once the development has been completed.

- 2.7 **Data interpretation:** The Root Protection Area (RPA) calculations are included in Appendix 2. As set out in paragraphs 4.6.2 and 4.6.3 of the BS, the RPAs may have been adjusted as a matter of arboricultural judgement, to indicate the estimated likely position of tree roots. These modified (or unmodified) RPAs dictate the location of the tree protection barriers, which encompass the Construction Exclusion Zones (CEZs) and other protective measures as shown on the plan included in Appendix 1. Where there is a need for incursions into RPAs, an assessment of the implications of these activities is set out in Section 3 (Arboricultural Implications Assessment) of this report. Where appropriate, details of suitable work methodologies to mitigate any impact are set out in Section 5 (Arboricultural Method Statement).

- 2.8 **Revisions to the provided land survey:** During my site visit, I noted that the stem position and canopy for tree T1 were not shown on the provided survey. I have plotted the tree on the plan in Appendix 1 by triangulating its position from known points on site. I am satisfied that this is a reasonable interpretation of its actual position and I do not believe that this issue impacts on the analysis or conclusions of this report.

3 ARBORICULTURAL IMPLICATIONS ASSESSMENT

3.1 Overview of the implications of the development proposal on trees: BS 5837 (2012) – Trees in relation to design, demolition and construction – Recommendations sets out in some detail how trees on development sites should be managed. It is generally accepted that Category A (high quality) and Category B (moderate quality) trees are considered potential constraints on any development proposal, whereas those belonging to Category C (low quality) are considered to be generally less important. Category U trees are in such poor condition that they are considered unsuitable for retention as they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Therefore, these trees can be effectively discounted in the context of the planning process.

On this site a total of THREE individual trees and groups were recorded during the tree survey and were assigned to the BS 5837 (2012) categories, as set out in Table 1 below:

Category A and B trees	A total of ONE tree (T1) was rated Category A
Category C trees	A total of TWO groups (G2 and G3) were rated Category C
Category U trees	No trees, groups or hedges were rated Category U

Table 1: Tree numbers and BS categories

I have focussed on the implications of the development proposal mainly on the important trees on or near the site (Category A) in terms of tree loss/retention and by the extent of any incursions into and/or disturbance to Root Protection Areas (RPAs). To a lesser extent I have also considered the implications for the Category C trees present.

Of the total of THREE trees and groups surveyed, ONE group (G2) will need to be removed to facilitate this development proposal and ONE tree (T1) will have activities arising from the development occurring within its RPA. I have set these aspects out in more detail in the following paragraphs.

3.2 **Direct implications of the development proposal - Tree retention and tree loss**

3.2.1 **BS Category A and B trees to be retained (trees of high and moderate quality):** The Category A tree surveyed will be retained and protected in accordance with the guidance set out in BS 5837 (2012). Consequently, no high or moderate category trees will need to be removed to facilitate this development proposal.

3.2.2 **BS Category C trees to be removed (or those of low quality):** As discussed, trees belonging to Category C are not normally retained where they would impose a significant constraint on the development or redevelopment of a site. In this instance, ONE group of Category C trees (G2) will need to be removed to facilitate the development proposal. These trees are small in size and suitable replacements along the site frontage (as shown on the provided plan) could mitigate their loss. I therefore do not believe that the loss of these trees will have any significant amenity implications.

3.3 **Additional implications arising from the development proposal**

3.3.1 **BS Category A trees and activities in RPAs:** Tree T1 will have a new dwelling installed within part of its RPA. At the current time no investigations have been undertaken to establish the position and extent of tree root activity within the car parking area. If there is significant tree root activity where the new dwelling is to be constructed, then the building foundation will need to be piled and then support a ground beam and floor slab set at ground level. The intention of this would be to minimise disturbance within the RPA, with the only incursion being that required for the small diameter piles. If there is no tree root activity within the RPA, then a normal approach to foundation design can be adopted.

Detailed site investigations and foundation design details could be secured by way of a planning condition attached to any subsequent planning consent. In the meantime, a preliminary Arboricultural Method Statement is included in Section 5 and deals with tree protection issues and installation of piled foundations close to trees.

In addition, it will be necessary to prune back the branch extremities of the tree to give sufficient separation between it and the closest new building. In my view this work is relatively modest and if carried out professionally this should not detract from the amenity of the tree, or have any implications on its health and well being.

4 PRELIMINARY ARBORICULTURAL METHOD STATEMENT

4.1 Tree protection issues

4.1.1 Tree Protection Plan (TPP): The plan in Appendix 1 is illustrative, and based on the layout drawings and topographical survey provided. Therefore, all scaled measurements should be checked against the original design documents. The attached plan and all other information in this report should only be used for dealing with the tree protection issues and all other uses are prohibited, unless authorised by Ecourban Ltd. Normally, all the existing trees will have been numbered, with higher categories (A and B) highlighted in green and blue rectangles and low categories (C and U) highlighted in grey and red respectively. However, on this site no Category B or U trees were recorded. The plan also shows the locations of the proposed protective measures. The TPP is an important document, and a copy of it should be kept on site for reference whilst the development is under construction.

4.1.2 Ground protection: The position of ground protection is shown on the plan included in Appendix 1. The ground protection will be installed before any materials or machinery are brought onto the site, and before any clearance or construction activities occur. In this instance it is proposed that the ground protection will consist of retained areas of existing tarmac surfacing, which will then be upgraded to match the proposed surfacing around the new building.

4.2 Additional tree-related issues

4.2.1 Construction of new dwelling: I set out the following methodology to be adopted during site operations for Tree T1 (subject to in-depth site investigations to assess the extent of tree root activity from it into the existing car park area):

- **Installation of foundation:** Disturbance within the RPAs will be reduced by supporting the above ground part of the dwelling on small diameter piles, with the ground beams or the floor slab set above ground level. The design should be sufficiently flexible to allow the piles to be moved if significant roots are

encountered in the preferred locations. Before the actual installation of the new structure starts, all RPAs that may be affected should be covered with temporary ground protection as set out in BS 5837 (2012). Gaps in the ground protection should be left where it is expected to install the piles. Pile locations should be initially hand dug to a depth of 600mm to establish if there are any significant roots over 25mm in diameter that could be damaged. If significant roots are found, then the pile location must be moved slightly and a new exploratory hole dug. Once the piles have been installed, the lowest points of the supporting beams for the structure must be above the ground level between the piles and there should not be any further excavation.

The beams can be pre-cast and imported to the site ready to fix or can be cast in position using shuttering for the sides and a biodegradable void-former for the base. However, the ground protection must remain in place until the construction is completed and there is no risk of damage to RPAs.

4.3 **Additional tree-related issues**

- 4.3.1 **Site supervision:** Site personnel will be properly briefed regarding the tree protection issues before any work starts, and the tree protection will be inspected periodically to ensure the retained trees are protected in accordance with this document and any conditions imposed by the council.
- 4.3.2 **Installation of new services or upgrading of existing services:** Final details relating to services are traditionally left until after planning consent has been granted by the council. Where practicable, all new services will be outside RPAs, but where existing services within RPAs require upgrading or new provision is required, great care will be taken to minimise any disturbance. Trenchless installation will be the preferred option, but if this is not feasible, any excavation will be carried out by hand in accordance with the guidelines set out in NJUG Volume 4 - Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

- 4.3.3 **Storage of materials, cement mixing and washing points:** All construction storage areas, cement mixing and washing points for equipment and vehicles will be outside RPAs, unless otherwise agreed with the council.
- 4.3.4 **Contractors car parking, site offices and welfare facilities:** Whilst it is possible to have site offices and welfare facilities within RPAs, care is needed in their positioning and also in the connection of water, electricity and drainage to service them. Therefore, these will generally be sited outside the RPAs, unless agreed previously with the council. Contractor's car parking facilities will also be located away from retained trees.
- 4.3.5 **Tree works:** Any tree pruning or tree removal operations are set out in the tree schedule included in Appendix 2. Additionally, those trees scheduled for removal are also shown on the Tree Protection Plan included in Appendix 1.
- 4.3.6 **Planning, communication and preliminary timing of events:** It is not unusual for the details of timing of operations that could impact on important trees to only be finalised once planning consent has been given. Site managers, clearance and construction teams, and other important personnel are normally only appointed at this stage and it is these people who will be crucial in delivering the tree protection detailed in this report. My experience is that the pre commencement site meeting is critical in terms of avoiding damage to trees and this particular aspect, along with tree protection issues should be specifically referenced in a suitably worded planning condition imposed by the council. In the intervening time I propose the following preliminary cascading timetable of events to help minimise any risk of impact on important trees. However, the following schedule may be modified at the pre-commencement meeting, subject to discussion with all parties and agreement with the council:
1. Pre-commencement site meeting
 2. Extent of arboricultural supervision agreed
 3. Tree works undertaken
 4. Site investigations to establish extent of tree root activity from tree T1 into site car parking area

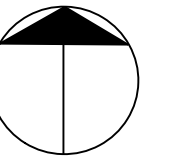
5. Ground protection installed before any clearance or construction activities occur on site and notification to the council that this is in place
6. Installation of new dwelling with piled foundation (if required)
7. Installation of services
8. Tree protection only removed at the end of the construction phase when there is no longer any risk to trees

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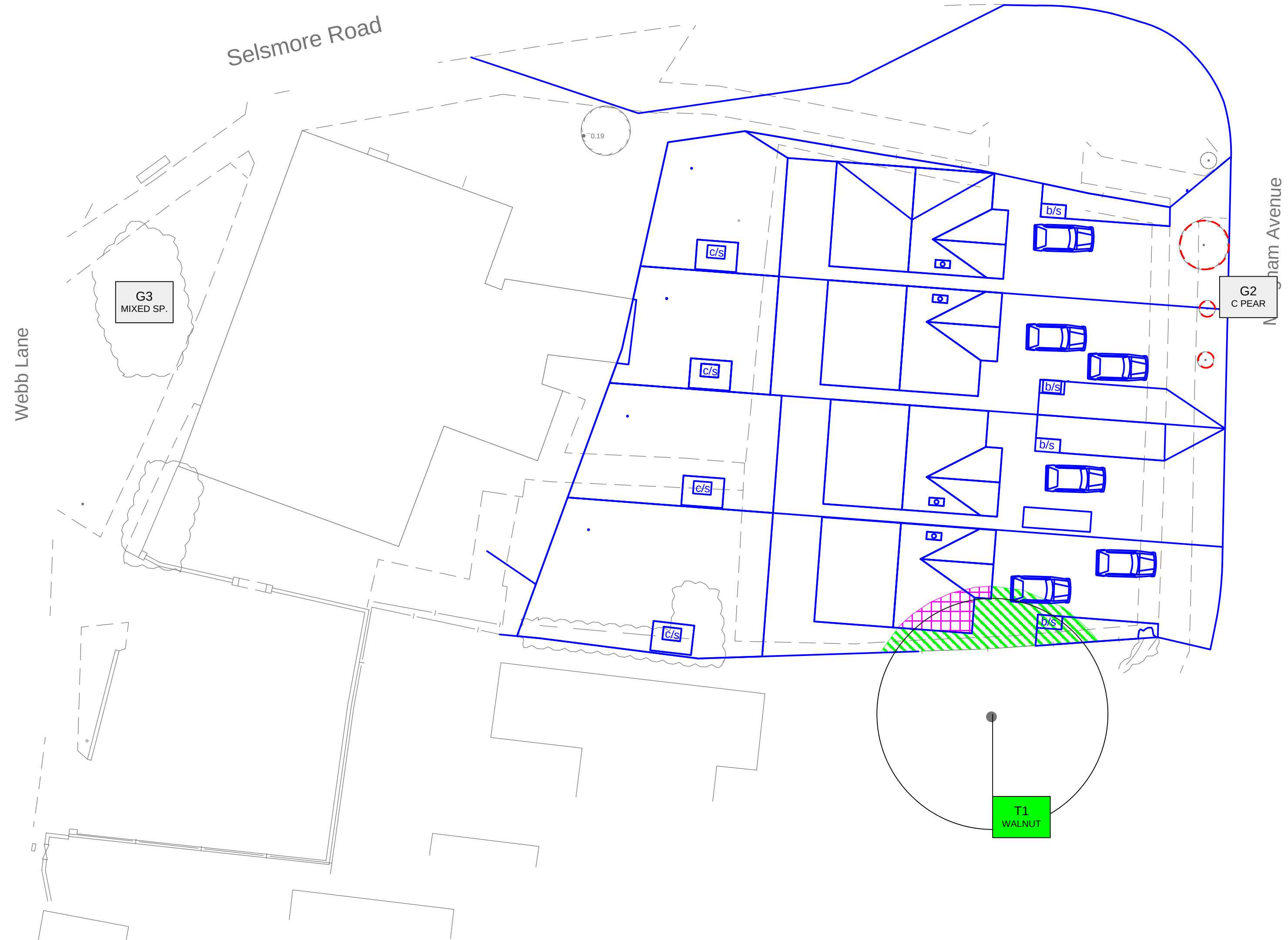
Date: **11 September 2013**

APPENDIX 1: TREE PROTECTION PLAN

1 A2 plan



Indicative
North

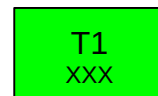


ECO 7 - REVISED TREE PROTECTION AT THE ROSE IN JUNE (PH), SELSMORE ROAD, HAYLING ISLAND

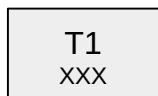
SCALE: 1:200 @ A2

This drawing was originally produced in colour,
therefore any subsequent monochrome photocopies
may not show appropriate levels of detail and should
not be relied upon for the purposes of dealing with
site tree issues

COMPOSITE PLAN: LAND SURVEY OUTLINED IN GREY,
PROPOSED DEVELOPMENT SHOWN IN BLUE



BS Category A: Trees
of high quality



BS Category C: Trees
of low quality



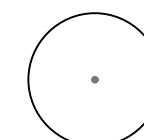
Extent of existing surfacing retained as
temporary ground protection



Extent of foundation affecting RPA
(if tree roots are found)



Approximate position of trees to be removed



Approximate position of offsite tree
with estimated canopy spread

APPENDIX 2: TREE SCHEDULE AND INVENTORY

Background fill colour represents BS 5837 (2012) categories: A Category trees have green backgrounds, B Category trees have light blue backgrounds, C Category trees have grey backgrounds and U Category trees have red backgrounds.

Tree No.	Species	Ht (m)	Single stem dia. at 1.5m (cm)	STEM DIAMETERS (MULTIPLE)								Branch spread (m)				Height above ground (m)	Age class	Notes	Management proposals	BS cat	RPA area (m ²)	RPA radius (m)
				Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems												
				1	2	3	4	5		Mean stem dia. (cm)	No. of stems	N	E	S	W							
T1	Walnut	11	65*	-	-	-	-	-	-	-	-	2.5m to boundary	-	-	-	2	M	Offsite tree, no access	Cut back from new building to give 1m seperation	Prelim A1	191	7.8
G2	Chanticleer Pear	5	11*	-	-	-	-	-	-	-	-	1	1	1	1	2	Y	Young street tree planting	FELL	C1	5	1.3
G3	Field maple, elder and elm	6	10*	-	-	-	-	-	-	5*	15*	2	2	2	2	n/a	M	Small trees/shrubs		C1	5	1.2

ABBREVIATIONS:

Abbreviations	Meaning	Abbreviations	Meaning	Abbreviations	Meaning
T	Individual tree	M	Mature	RPA	Root Protection Area
G	Groups of trees	MA	Maturing	<	Less than
H	Hedge	Y	Young	>	More than

APPENDIX 2: TREE SCHEDULE AND INVENTORY

TREE SCHEDULE GUIDANCE NOTES:

Tree number	Assigned during the site visit and also referenced on the plan in Appendix 1.
Species	Common name and referenced to scientific name in the above list. Where I have some doubt over the actual tree species, the genus will have been noted followed by sp. Where trees are numerous and present in groups, not every individual species may have been noted.
Height	Measurement of total tree height using a laser hypsometer to nearest metre.
Stem diameters	Measurement of stem diameter either at 1.5m above ground (or in accordance with BS guidance where trees have multiple stems) with a forester's girth measuring tape. Diameters followed by asterisk symbol indicate estimated diameters because of access difficulties, presence of ivy or other obstructions. Where trees are present in a group, the tree with the largest stem diameter within the group will have been measured/estimated.
Branch spread	Where appropriate and where ground conditions allow, an estimate of the crown spread at each of the cardinal compass points. Where only part of the site is affected by trees, measurement may be in one or two directions only
Existing height above ground level	Distance in metres to first significant branch or canopy
Age class	Simplistic estimate of tree age in one of FOUR categories (young, maturing, mature or over mature).
Notes	Although this document is not intended to be a full and detailed report on tree health and safety, any significant structural defects or physiological conditions have been identified where these were visible. Where no entries are recorded, this indicates no observable issues were identified. Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access. Climbing inspections are not carried out during a walkover tree survey and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground.
Management proposals	The inspection of all trees was of a preliminary nature and only defects visible from the ground have been identified. Each individual tree may not have been inspected closely because of access difficulties and only defects visible from the inspection point have been identified. Monitoring may be indicated where tree risk can be adequately managed by increased frequency of site inspections. Further investigation may be indicated where additional data may be required beyond a purely visual assessment. However, a full post development tree inspection is recommended to establish that the trees retained during construction pose acceptable levels of risk once the development has been completed.
BS 5837 (2012) Category	Either U, A, B or C based on the BS 5837 (2012) guidance.
RPA and RPA radius	RPA and RPA radius calculations have been undertaken in accordance with the guidance set out in BS 5837 (2012).

APPENDIX 2: TREE SCHEDULE AND INVENTORY

TREE INVENTORY:

Common Tree Names	Scientific Tree Names		Common Tree Names	Scientific Tree Names
Elder	<i>Sambucus nigra</i>		Pear	<i>Pyrus calleryana</i> 'Chanticleer'
Elm	<i>Ulmus</i> sp		Walnut	<i>Juglans regia</i>
Field maple	<i>Acer campestre</i>			

APPENDIX 3: BS 5837 (2012) – ASSESSMENT CATEGORIES

TREES FOR REMOVAL				
Category and definition	Criteria			Identification on plan
<u>Category U</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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve.</i>			RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	Criteria — Subcategories			Identification on plan
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
<u>Category A</u> 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)	GREEN
<u>Category B</u> 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	BLUE
<u>Category C</u> 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

APPENDIX 4: QUALIFICATIONS AND EXPERIENCE OF BARRIE DRAPER

- 1 Qualifications:** I have a BSc degree (with Honours) in Arboriculture from the University of Central Lancashire. I also hold a BTEC Higher National Diploma (HND) in Forestry (Lowland Management), the Arboricultural Association's Technician's Certificate in Arboriculture (Tech Cert), the Royal Forestry Society's Certificate in Arboriculture (Cert Arb) and the National Examinations Board Certificate in Forestry.
- 2 Career experience:** I began my arboricultural career in 1993 as an arborist with Portsmouth City Council. During my time with the council I worked for both the direct labour organisation and for a private contractor where I obtained valuable hands on experience in all aspects of arboriculture. From 1999 to 2002 I was employed as Senior Arborist by Parchment Housing Group, a housing association based near Portsmouth. I managed the Groups' tree stock on their behalf, carrying out tree inspections and practical management operations. I have also worked in local government, spending time with Thurrock Borough Council in Essex where I was the Tree and Landscape Officer, and with Winchester City Council, where I was Arboricultural Officer for a period of 2 years. During my time working in local government I was responsible for making Tree Preservation Orders, administering applications to work on protected trees and advising on planning applications when trees were considered material constraints on development. Working within a planning environment allowed me to gain valuable experience in the management of trees in development situations and an understanding of the planning process and how it relates to trees. From January 2005 I worked for Barrell Tree Consultancy Ltd advising clients on a wide range of tree related issues. I left the company in September 2008 and set up ecourban ltd, where I am currently the sole practitioner.



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