Arboricultural assessment & method statement

Redlands House & The Coach House, 42 Long Copse Lane, Emsworth, Hants

barrell
TREE CONSULTANCY

Andy Sherlock TechCert DipArb FArborA MICFor CEnv RCArborA

20th July 2018 17294-AA2-AS

Site location and report purpose

Site location

This aerial image is provided courtesy of Google. The yellow lines indicate the approximate site boundaries and is illustrative only.

Report purpose

This arboricultural assessment report provides sufficient information for the Local Planning Authority (LPA) to consider the effect of the proposed development on local character from a tree perspective. It is fully compliant with the BS 5837 advice relating to the planning application stage of the process and it meets national standard planning application validation requirements.

More specifically, the development proposal is to construct two new dwellings at Redlands House & The Coach House, Long Copse Lane, Emsworth, Hampshire.

This report includes:

- A **Tree protection plan** illustrating tree locations, categories, the location of the proposed development, and the proposed tree protection measures.
- An **Arboricultural assessment** (section 1 of the report) providing an analysis of the tree issues to assist the LPA in assessing the impact on local character.

© Barrell Tree Consultancy 2018

Site location and report purpose

- An **Arboricultural method statement** (section 2 of the report) describing how retained trees will be protected and managed during the development activity.
- **Appendices** (**Appendix 1** –Background administrative information and data collection; **Appendix 2** – Tree schedule and explanatory notes; and, **Appendix 3** – QR Codes for SGNs).
- A companion document to supplement the main report titled ***Manual for managing trees on development sites*** **(Version 1)**, which provides explanations of how retained trees will be managed on site in the form of Site Guidance Notes (SGNs) covering the relevant issues.

© Barrell Tree Consultancy 2018

1: Arboricultural assessment

1.1 Table 1: Summary of trees affected and protected by the proposal

From my review of the constraints and the proposed layout, my assessment of the impact on trees, both during and after development, and those that need protection using special precautions, is summarised in Table 1:

	British Standard 5837 Category		
	A (High quality)	**B (Moderate quality)**	**C (Low quality)**
Remove	None	None	G16 (part), G36 (part), G39 (part), G41, G43
Prune	None	None	None
Protect using special precautions See Notes below	None	T3, T4, T8, T30	T9, G16 (part)
Post development considerations	None	None	None

T = Tree; G = Group

Note on types of protection: All retained trees will be protected during development by using fencing and ground protection, and only those requiring special precautions to limit the impact of encroachment are listed in Table 1.

Note on RPA adjustment: Special precautions are only necessary where encroachment into RPAs occurs.

Note on category U trees: Trees categorised as U (T17, T42) are in such poor condition that they have been assessed as needing removal for management reasons irrespective of any development proposals. Removal of any category U trees will be a management decision and not caused by this proposal, so should not be considered a direct impact.

1.2 The impact of tree removals on local character

My assessment of the impact of tree removals on local character is as follows:

Category C trees (G16 (part), G36 (part), G39 (part), G41, G43): These trees are well within the site and are not prominent as a skyline features from any public viewpoints. They are low quality, with very little potential to contribute to local character because of the backdrop of large trees to be retained. The retained trees that will buffer any loss to the extent that there will be no impact on local character.

1.3 The impact of tree pruning on local character

Other than pruning for normal maintenance, no trees will be pruned because of this development.

1.4 Special precautions to limit RPA encroachment impact

My assessment of the protective measures to limit the impact RPA encroachment is as follows:

T8 and T9: These trees may be affected by the installation of the new access bridge and its associated decking parking area in front of the house. I have reviewed the levels carefully and believe that it would be feasible to install a bridge supported by piles to form the entrance, which would cause no significant disturbance to these trees, the decking would be formed in the same way as the bridge. I have provided advice on the necessary design principles to the project team.

© Barrell Tree Consultancy 2018

1: Arboricultural assessment

From our previous experience at installing such bridges (www.barrelltreecare.co.uk/case-studies/BridgesNearTrees.pdf), I am confident that this can be implemented without any long term detrimental impact on tree health, with the detail to be agreed as part of a planning condition. This bridge solution is within the advice set out in BS 5837 (7.5) and would be appropriate in this situation. In summary, if the guidance set out in and SGN10 *Installing structures in RPAs*, is observed, I believe that the proposed works can be implemented without any long term detrimental impact on tree health, and therefore local character.

T3, G16 (part), and T30: There will be encroachment into the RPAs of these trees in the form of new no-dig surfacing and suspended decking. I have carefully reviewed the levels in these areas and it would be feasible to install custom designed no-dig specification surfacing and suspended decking without causing any significant disturbance to the RPA.

From our previous experience at installing such surfacing (www.barrelltreecare.co.uk/case-studies/SurfacingNearTrees.pdf), I am confident that this can be implemented without any long term detrimental impact on tree health, with the detail to be agreed as part of a planning condition. This surfacing solution is within the advice set out in BS 5837 (8.6) and would be appropriate in this situation. In summary, if the guidance set out in SGN7 *Excavating in RPAs* and SGN9 *Installing/upgrading surfacing in RPAs* is observed, I believe that the proposed works can be implemented without any long term detrimental impact on tree health, and therefore local character. All new surfacing must be installed before any construction access to prevent damage to the RPA from the construction activity.

T3, T4, and G16 (part): These trees may be affected by the installation of the garage. I have reviewed the levels carefully and believe that it would be feasible to install a structure supported by piles with the ground beams located above ground level. All the rainwater that falls on the roof od the garage will need to be redirected under the structure to continue the current level of moisture penetration. An air gap of approximately 50mm must also be maintained under the garage to allow gaseous exchange to take place. I am confident that this can be implemented without any long term detrimental impact on tree health, with the detail to be agreed as part of a planning condition. This solution is within the advice set out in BS 5837 (7.5) and would be appropriate in this situation. In summary, if the guidance set out in and SGN10 *Installing structures in RPAs*, is observed, I believe that the proposed works can be implemented without any long term detrimental impact on tree health, and therefore local character.

T8, T3, and T4: These trees may be affected by the installation of new services or upgrading of existing services. However, it is often difficult to clearly establish the detail of services until the construction is in progress, and so this advice is precautionary. Where possible, it is proposed to use the existing services into the site and keep all new services outside RPAs. Where existing services within RPAs require upgrading, or new services must be installed in RPAs, great care must be taken to minimise any disturbance. Trenchless installation will be the preferred option, but if that is not feasible, any excavation must be carried out by hand according to the guidelines in SGN11 *Installing services in RPAs*.

1.5 Post development considerations

My assessment is that there will be no adverse impact on retained trees once the development is completed and occupied.

© Barrell Tree Consultancy 2018

1: Arboricultural assessment

1.6 Summary of impact on local character

This proposal will result in the loss of a small number of trees that are all low category because of their poor condition or small size. Their loss will have no long term detrimental impact on tree health or the present character of the area. All the significant boundary tree cover will remain intact and no high category trees will need to be removed. The matter of adverse impacts on retained trees due to post-development pressures to fell or prune has been considered and I concluded that no further trees will be affected. The construction activity may affect further trees if appropriate protective measures are not taken. However, if adequate precautions to protect the retained trees are specified and implemented through the arboricultural method statement included in this report, the development proposal will have no long term detrimental impact on tree health or the contribution of trees to character in the wider setting.

© Barrell Tree Consultancy 2018

2: Arboricultural method statement

2.1 Site Guidance Notes (SGNs)

This section of the report identifies which trees on this site will be protected and managed, and by what means. This site-specific summary is supplemented by more detailed explanations and descriptions of specific operations set out in the accompanying *Manual for managing trees on development sites*. That document is a compilation of 12 individual SGNs addressing the following tree protection and management issues that regularly arise in the construction phase of development:

- SGN1 *Monitoring tree protection* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn01?stage=Stage)
- SGN2 *Fencing protected trees* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn02?stage=Stage)
- SGN3 *Ground protection* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn03?stage=Stage)
- SGN4 *Pollution control* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn04?stage=Stage)
- SGN5 *Site cranes & piling rigs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn05?stage=Stage)
- SGN6 *Height restrictions* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn06?stage=Stage)
- SGN7 *Excavating in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn07?stage=Stage)
- SGN8 *Removing surfacing and structures in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn08?stage=Stage)
- SGN9 *Installing/upgrading surfacing in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn09?stage=Stage)
- SGN10 *Installing structures in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn10?stage=Stage)
- SGN11 *Installing services in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn11?stage=Stage)
- SGN12 *Landscaping in RPAs* (https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn12?stage=Stage)

NOTE: Each individual SGN can be downloaded by using the links above and the QR Code links in Appendix 3.

2.2 Identification of areas to be protected

The tree protection plan shows the areas where protective measures are necessary. The fencing location is shown by the heavy black dashed lines, with the construction exclusion zone behind as the lighter black diagonal hatch. Precautionary areas are shown by a yellow fill and temporary ground protection is shown by a blue fill.

2.3 Arboricultural supervision

An arboricultural consultant will be appointed to advise on the tree management for the site and to attend:

- a pre-commencement meeting before any work starts;

© Barrell Tree Consultancy 2018

- regular supervision visits to oversee the agreed tree protection, as agreed at the pre-commencement meeting; and
- further supervision visits, as necessary, to oversee any unexpected works that could affect trees.

The detail of how the arboricultural supervision will be carried out is explained in SGN1 *Monitoring tree protection* in the accompanying Manual.

2.4 Table 2: Summary of the site operations requiring arboricultural input

For this site, arboricultural input will be needed for the following operations:

Brief operation summary	Trees affected	Location of detailed explanations
Pre-commencement meeting: Meeting on site with all parties to agree protective measures, as described in SGN1. Will be carried out before any significant site works begin.	All trees	SGN1 *Monitoring tree protection*
Tree felling: Contractor will carry out agreed works as described in Appendix 2. Will be completed before any significant site works begin.	Fell G16 (part), G36 (part), G39 (part), G41, G43	Appendix 2
Installing fencing and ground protection: Agreed tree protection measures will be installed and checked, as described in SGN2 and SGN3. Will be completed before any significant site works begin.	Fencing all trees Ground protection for T3, T4, G16 (part), G39 (part)	Tree protection plan, SGN2 *Fencing protected trees*, and SGN3 *Ground protection*
Pollution control near retained trees: Any pollution control measures identified during risk assessment will be installed as described in SGN4. Will be completed before any potential pollutants arrive on site.	All trees	SGN4 *Pollution control*
Operation of site cranes and piling rigs: Provision will be made to prevent site cranes and piling rigs damaging trees, as described in SGN5.	All trees	SGN5 *Site cranes & piling rigs*
Regular arboricultural supervision: Provision will be made to carry out and record agreed arboricultural supervision, as described in SGN1.	All trees	SGN1 *Monitoring tree protection*
Excavating in RPAs: These operations will be carried out as described in SGN7.	T3, T4, G16 (part)	SGN 7 *Excavating in RPAs*
Installing surfacing in RPAs: These operations will be carried out as described in the SGN9.	T3, G16 (part), T30	SGN9 *Installing/upgrading surfacing in RPAs*
Installing structures in RPAs: These operations will be carried out with care, as described in SGN10.	T3, T4, T8, T9, G16 (part)	SGN10 *Installing structures in RPAs*
Installing services in RPAs: These operations will be carried out with care, as described in SGN11.	All trees	SGN11 *Installing services in RPAs*
Landscaping in RPAs: These operations will be carried out with care, as described in SGN12.	All trees	SGN12 *Landscaping in RPAs*

© Barrell Tree Consultancy 2018

2: Arboricultural method statement

Brief operation summary	Trees affected	Location of detailed explanations
Removing tree protection: Protection can only be removed when there is no risk of damage to retained trees, as described in SGN1.	All trees	SGN1 *Monitoring tree protection*

The operations summarised in this table, and supplemented by the more detailed explanations set out in the SGNs and the rest of this document, form the arboricultural method statement for this site. The Site Manager will ensure that its details and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents will be available on site. All personnel who could have an impact on trees will be briefed on the specific tree protection requirements as part of the site induction procedures. This requirement will be written into the site management documentation.

If unanticipated issues arise on site not referenced in the above explanations, further guidance on how to manage them can be found in the accompanying Manual.

2.5 Construction method statement (heads of terms summary)

A construction method statement is a description of how operations that may affect trees will be carried out to minimise any adverse impact on them. The details of how the site will be managed are construction and contractual matters that can only be finalised once the post-consent detailed planning begins. For that reason, at this stage in the planning process, as explained in clause 5.5.6 of BS 5837, it is normally sufficient to list a heads of terms summary of the issues requiring more detailed consideration once consent is issued. On this site, those issues are likely to include:

1. Preparation of a written site management protocol for dealing with tree issues, to be incorporated into formal site management procedures, and to specifically include induction training for all operatives related to tree protection.
2. The order of work on site, including, site clearance and building work.
3. Erection and maintenance of tree protection measures.
4. Who will be responsible for protecting the trees on site.
5. Detailed proposals for inspecting and supervising the tree protection.
6. How accidents and emergencies involving trees will be managed, including accidental damage to roots and their treatment.
7. The parking arrangements for workers and visitors.
8. A schedule of emergency contact numbers relating to trees.
9. Areas for loading and unloading of materials and storage of materials and plant.
10. Where site facilities will be located and when will they be installed.
11. How machinery and equipment (such as excavators, cranes and their loads, concrete pumps and piling rigs) will enter, move on, work on, and leave the site.
12. Pollution control to specifically consider chemical storage and wheel washing facilities in relation to trees.
13. Recycling and storage of waste in relation to trees.
14. Details of earthworks, grading and mounding and removal of spoil, including any planned lowering or raising of ground levels.
15. Precise services locations, including the method of excavation when near trees.
16. Details of new surfacing and areas where this will happen, including detailed and precise cross-sections where no-dig surfacing is to be installed.
17. How and when any temporary surfacing will be laid and removed.

© Barrell Tree Consultancy 2018

Appendix 1: Background administrative information and data collection

A1.1 Table 3: Background administrative information

	Background administrative information
Report date & reference	20th July 2018; 17294-AA2-AS
Tree protection plan reference	BT2
Instructing client	Mr & Mrs Gilgraine
Instructions	Visit the site, assess the relevant trees, prepare a schedule of their details, describe the impact of the proposal on those trees and identify the tree protection issues in an arboricultural method statement confined to the heads of terms.
Provided documents	Topographical survey, drawing number ENC/17/01/17, received by email on 21st September 2017 and layout drawing numbers PL.130.18. -01 received 10th July 2018 and PL.130.18. -03, received by email on 6th February 2018.
Report author and credentials	Andrew Sherlock is a Chartered Forester (www.charteredforesters.org) and an AA Registered Consultant (www.trees.org.uk), and fully qualified to undertake the assessments in this report. Further details of his credentials can be found at https://www.barrelltreecare.co.uk/who-we-are/
Report limitations	• We have not checked if there is any statutory protection on the trees because this can delay the production of the report. If any tree works are proposed before a planning consent is given, then the possible existence of any statutory protection must be checked with the LPA. • This report does not consider ecological or archaeological issues, or any other matter beyond the assessment of the trees.
Technical references	In preparing the analysis in this report, we considered the guidance and advice in the following technical references: • Climate Change Act (2008) www.legislation.gov.uk/ukpga/2008/27/contents • Town and Country Planning Act 1990 www.legislation.gov.uk/ukpga/1990/8/contents • National Planning Policy Framework, published by the DCLG www.gov.uk/government/publications/national-planning-policy-framework--2 • BS 5837 (2012) *Trees in relation to design, demolition and construction – Recommendations*, BSI www.shop.bsigroup.com/ • BS 8545 (2014) *Trees: from nursery to independence in the landscape – Recommendations*, www.shop.bsigroup.com/ • BS 3998 (2010) *Tree work – Recommendations*, BSI www.shop.bsigroup.com/ • *Trees in the Townscape: A Guide for Decision Makers*, published by the Trees & Design Action Group http://www.tdag.org.uk/ • *Trees in Hard Landscapes: A Guide for Delivery*, published by the Trees & Design Action Group www.tdag.org.uk/ • National Joint Utilities Group (2007) Volume 4, Issue 2: *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees* www.njug.org.uk/publications/

© Barrell Tree Consultancy 2018

Appendix 1: Background administrative information and data collection

A1.2 Table 4: Data collection

	Data collection
Date of site visit	22nd September 2017
People present during site visit	Andrew Sherlock
Weather & visibility	Clear and dry, with good visibility
Limitations to observations	• The inspection of the trees for the purposes of assessing their condition and work requirements was made on the basis that they will be annually inspected in the future to identify any changes in condition and review the original recommendations. For these reasons, the tree assessment advice only remains valid for one year from the date that the trees were last inspected. • All observations were of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level. • Observations of trees outside the site boundaries are confined to what was visible from within the site. • All dimensions were estimated unless otherwise indicated.
Tree Preservation Orders (TPOs), Conservation Areas, and tree categorisation	TPOs cannot always be reliably interpreted from the documentation to identify which trees are protected, especially as time passes and site conditions change from when they were originally made. It is common for TPO plans to be inaccurate and schedules often become out of date as trees die or are removed. Frequently, trees deteriorate and, although they may be technically protected by the TPO, are in such poor condition or causing such unreasonable inconvenience that their suitability for retention becomes questionable. In a planning context, if poor trees are assessed as unsuitable for retention, then it would be inappropriate to show them as a material constraint in development planning. For these reasons, although TPOs do need to be considered, they do not form the primary basis for tree categorisation. Poor quality trees assessed as not worthy of retention will be shown as such, irrespective of whether they are protected or not. Similarly, good quality trees that are not protected will still be shown as material constraints. The same rationale will be applied to Conservation Areas.
Tree location and numbering	Each tree, hedge and group, was inspected, and the numbering scheme is indicated on the tree protection plan.
Recording of tree data	For each identified tree, hedge, and group, the information collected was recorded on the tree schedule in Appendix 2 and the tree protection plan.
Compliance of data collection with BS 5837	The data collection is fully compliant with the advice in subsection 4.4.2 of BS 5837. When collecting this information, specific consideration was given to any low branches that may influence future use, age class, physiological condition, structural condition, and remaining contribution. Where appropriate, crown spreads were also noted where they differed from those shown on the provided land survey.
Calculation of RPAs	Following the recommendations in Table D1 of BS 5837, the diameter of each tree was rounded up to the next 2.5cm increment, with the radius of a nominal circle and the resultant RPA taken directly from that table. This information is listed for each tree in the tree schedule in Appendix 2.

© Barrell Tree Consultancy 2018

Appendix 2: Tree schedule and explanatory notes

NOTE: Colour annotation is A & B trees with green background; C & U trees with blue background; trees to be removed in red text.

Tree No	Species	Height (m)	Diameter (cm) @ 1.5m	Maturity	Low Branches	Category	Notes	Tree Works	RPA radius (m)	RPA area (m2)
All retained trees & hedges								Carry out safety check and lift over site to 3-4m as necessary.		
G2	Field maple	10	45	Maturing	-	B	-	-	5.4	92
T3	Ash	16	57.5	Maturing	-	B	-	-	6.9	150
T4	Oak	18	45	Maturing	-	B	-	-	5.4	92
T5	Oak	10	20	Maturing	-	C	Supressed by adjacent tree	-	2.4	18
G6	Oak	18	50	Maturing	-	B	-	-	6.0	113
G7	Oak, ash, purple plum	15	50	Maturing	-	B	-	-	6.0	113
T8	Oak	15	50	Maturing	-	B	-	-	6.0	113
T9	Monterey pine	12	65	Mature	-	C	-	-	7.8	191
T10	Laurel	5	30	Maturing	-	C	-	-	3.6	41
G16	Beech, leyland cypress, holly	8	25	Maturing	-	C	-	Fell (part)	3.0	28
T17	Ash	3	30	Maturing	-	U	Dead stump	Fell (for management)	3.6	41
T18	Horse chestnut	10	45	Maturing	-	B	-	-	5.4	92
T19	Poplar	18	55	Maturing	-	C	Topped at 9m in the past	-	6.6	137
T20	Ash	16	47.5	Maturing	-	B	-	-	5.7	102
T21	Oak	18	70	Maturing	-	B	-	-	8.4	222
T22	Poplar	20	75	Maturing	-	C	Topped at 9m in the past	-	9.0	254
H23	Leyland cypress	4	7	Young	-	C	-	-	0.8	2
T24	Hawthorn	8	50	Maturing	-	B	-	-	6.0	113
G25	Willow, fruit	4	20	Maturing	-	C	-	-	2.4	18
T26	Cherry	5	30	Maturing	-	U	Dead	-	3.6	41
T27	Monterey pine	6	70	Maturing	-	U	Windblown in the past	-	8.4	222

© Barrell Tree Consultancy 2018

Appendix 2: Tree schedule and explanatory notes

Tree No	Species	Height (m)	Diameter (cm) @ 1.5m	Maturity	Low Branches	Category	Notes	Tree Works	RPA radius (m)	RPA area (m2)
T28	Indian bean tree	6	30	Maturing	-	A	-	-	3.6	41
G29	Poplar, birch, ash, leyland cypress	6	15	Young	-	C	-	-	1.8	10
T30	Apple	5	40	Mature	-	B	-	-	4.8	72
G31	Fruit	5	10	Young	-	C	-	-	1.2	5
T32	Oak	16	65	Maturing	-	B	-	-	7.8	191
H33	Laurel, portuguese laurel	3	10	Maturing	-	C	Maintained hedge	-	1.2	5
T34	Atlantic cedar	4	15	Young	-	C	-	-	1.8	10
G35	Cypress, birch	6	50	Maturing	-	C	-	-	6.0	113
G36	Holly, birch, plum	5	30	Maturing	-	C	-	Fell (part)	3.6	41
T37	Monterey cypress	12	75	Maturing	-	C	Thin canopy	-	9.0	254
T38	Eucalyptus	5	25	Maturing	-	C	-	-	3.0	28
G39	Birch, hazel, magnolia, ash	6	30	Maturing	-	C	-	Fell (part)	3.6	41
T40	Birch	6	35	Maturing	-	U	Dead stump	-	4.2	55
G41	Ash, oak, cherry	6	20	Maturing	-	C	-	Fell	2.4	18
T42	Birch	6	40	Maturing	-	U	Dead stump	Fell (for management)	4.8	72
G43	Bay, ash, willow, apple, laurel, hawthorn, Noway maple	5	20	Maturing	-	C	-	Fell	2.4	18

© Barrell Tree Consultancy 2018

Appendix 2: Tree schedule and explanatory notes

Explanatory Notes

- **Abbreviations:**
  G : Group
  H : Hedge
  T : Tree

- **Botanical tree names**

Apple	: *Malus* sp
Ash	: *Fraxinus excelsior*
Atlantic cedar	: *Cedrus libani atlantica*
Bay	: *Laurus nobilis*
Beech	: *Fagus sylvatica*
Birch	: *Betula pendula*
Cherry	: *Prunus* sp
Cypress	: *Cupressus* sp
Eucalyptus	: *Eucalyptus* sp
Field maple	: *Acer campestre*
Fruit	: *Malus* sp, *Prunus* sp or *Pyrus* sp
Hawthorn	: *Crataegus monogyna*
Hazel	: *Corylus avellana*
Holly	: *Ilex aquifolium*
Horse chestnut	: *Aesculus hippocastanum*
Indian bean tree	: *Catalpa bignonioides*
Laurel	: *Prunus laurocerasus*
Leyland cypress	: *X Cuprocyparis leylandii*
Magnolia	: *Magnolia* sp
Monterey cypress	: *Cupressus macrocarpa*
Monterey pine	: *Pinus radiata*
Norway maple	: *Acer platanoides*
Oak	: *Quercus robur*
Plum	: *Prunus* sp
Poplar	: *Populus* sp
Portugal laurel	: *Prunus lusitanica*
Purple plum	: *Prunus cerasifera* 'Nigra'/'Pissardii'
Willow	: *Salix* sp

- **BS 5837 (2012) compliance:** All data has been collected based on the recommendations set out in subsection 4.4 of BS 5837.
- **Tree inspections and site limitations:** Each tree was subjected to a quick visual check level of inspection. 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 this level of inspection and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground. A separate note is recorded if further investigation may be required to clarify its status.
- **Crown spreads:** Crown spread dimensions are not listed in the tree schedule because they are illustrated on the land survey base to all the plans in this document. Where crown spreads of significant trees on site are found to deviate from those shown on the provided land survey, we have noted it in the text of the report and annotated it on our plans.
- **Dimensions:** All dimensions are estimated unless annotated with a '*'.
- **Species:** Species identification is based on visual observations. Where there is some doubt over tree identity, sp is noted after the genus name to indicate that the species cannot be reliably identified at the time of the survey. Where there is more than one species in a group, only the most frequent are noted and not all the species present may be listed.
- **Height:** Height is estimated to provide a broad indication of the size of the tree.
- **Trunk diameter:** Trunk diameter is estimated or measured and recorded in 2.5cm increments as advised in BS 5837 Table D1. It is measured with a diameter tape unless access is restricted, direct measurement is not possible

© Barrell Tree Consultancy 2018

Appendix 2: Tree schedule and explanatory notes

because of ivy on the trunk or the tree is assessed as low quality. The point of measurement and the adjustments for stem variations are as advised in Figure C1 of BS 5837.

- **Maturity:** In planning context, maturity provides a simplistic indication of a tree's ability to cope with change and its potential for further growth. For the purposes of this report, young indicates a potential to significantly increase in size and a high ability to cope with change, maturing indicates some potential to increase in size and a medium ability to cope with change, and mature indicates little potential to increase in size and limited ability to cope with change.
- **Low branches:** Any low branches that would not be feasible for removal during normal management and should be considered as a design constraint are noted here and explained in the notes.
- **Category:** Our assessment automatically considered tree physiological/structural condition (BS 5837, 4.4.2.5h), and so these are not listed separately in the schedule. Additionally, the category accounts for the remaining contribution (BS 5837, 4.4.2.5i) as greater than 40 years for A trees, greater than 20 years for B trees, at least 10 years for C trees and less than 10 years for U trees, so this is also not listed separately in the schedule. Category A, B and C trees are automatically listed as sub-category 1 unless otherwise stated.
- **Notes:** Only relevant features relating to physiological or structural condition and low branches that may help clarify the categorisation are recorded. If there are no notes, then the presumption should be that no relevant features were observed.
- **Tree works:** The recommended tree works are based on the quick visual check level of inspection and only intended to address significant hazards identified during that inspection. The following points should also be considered before carrying out any works:
  1. **Reporting during work operations:** In the context of the preliminary nature of the tree inspection, any defects that may affect tree safety discovered by the contractor when carrying out the work recommendations should be reported to the supervising officer. Modification to the schedule of works may be required because of these reports. The contractor should be specifically instructed on this point.
  2. **Implementation of works:** All tree works should be carried out to BS 3998 *Recommendations for Tree Work* as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association. Their Register of Contractors is available free from The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL; phone 01242 522152; website www.trees.org.uk.
  3. **Statutory wildlife obligations:** The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All tree work operations are covered by these provisions and advice from an ecologist must be obtained before undertaking any works that might constitute an offence.
  4. **Stumps:** Stumps to be removed within the RPAs of retained trees should be ground out with a stump grinder to minimise any disturbance unless otherwise authorised by the supervising officer.
- **Future tree safety inspections:** Due to the time that may elapse between the original survey and the start of development, all trees should be re-inspected as part of the standard risk management process before any works start on site. Our assessment of the trees was carried out on the basis that a re-inspection would be carried out within a year of the assessment visit and our advice on tree condition must be reviewed annually from the date of that visit.

© Barrell Tree Consultancy 2018

Appendix 3: QR Codes for SGNs (Scan with reader to download)

SGN1 *Monitoring tree protection*	SGN2 *Fencing protected trees*	SGN3 *Ground protection*
SGN4 *Pollution control*	SGN5 *Site cranes & piling rigs*	SGN6 *Height restrictions*
SGN7 *Excavating in RPAs*	SGN8 *Removing surfacing and structures in RPAs*	SGN9 *Installing/upgrading surfacing in RPAs*
SGN10 *Installing structures in RPAs*	SGN11 *Installing services in RPAs*	SGN12 *Landscaping in RPAs*

© Barrell Tree Consultancy 2018

barrell
TREE CONSULTANCY

Field House Fordingbridge Business Park Fordingbridge Hampshire SP6 1BD
☎ 01425 651470 ✉ info@barrelltreecare.co.uk www.barrelltreecare.co.uk