

Arboricultural Assessment

Land off Toddington Lane, Littlehampton, West Sussex
(Parcel C1 and part Parcels B2, B4 and C2)

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11th September 2017
16267-AA-Parcels C1+B2+B4+C2-080917-AN

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 standard planning application validation requirements.

The development proposal by Persimmon Homes Thames Valley is to construct 126 mixed residential units on land identified as Parcel C1 and part Parcels B2, B4 and C2, on land on land off Toddington Lane, Littlehampton, West Sussex.

This report includes:

- a **BS 5837 compliant tree survey**, including a tree plan showing the location of the existing trees, their categorisation, the location of the new structures and hard surfacing, and the trees to be removed;
- an **arboricultural assessment**, which describes how the development proposal will affect local character from a tree perspective; and
- two **appendices** setting out the background administrative information and a schedule of tree information.

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1. Table 1: Summary of trees and hedges affected by the proposal

From my review of the constraints and the proposed layout, I summarise the impact on trees and hedges as Table 1:

	British Standard 5837 Category		
	A (High quality)	B (Moderate quality)	C (Low quality)
Trees to be removed	-	T2, T3, T6, T8, T9, T19, T20, T21	H1, H2, H3, T4, H5 (part), T10, T18, H24a, H24b
Totals	0	8 trees	3 trees and 6 hedges

H = Hedge; T = Tree

The trees to be removed are shown on the tree plan with a red outline and red numbers.

2. The impact of tree removals on local character

The site is relatively flat and not at all prominent in the landscape from any views beyond the immediate vicinity. Although eight moderate quality category B trees are to be removed, these trees are not prominent as skyline features from any distant viewpoints, and so their loss will have no significant adverse impact on local character in the wider setting. A further three trees and six hedges will be removed, but these are low quality category C, with very little potential to contribute to local character because they are either too small or have no realistic potential for retention beyond the short term. For these reasons, although the tree and hedge losses will be noticeable in the immediate vicinity, there will be no significant adverse impact on character in the wider setting.

3. Enhancement through new tree planting

To enhance local character, the project landscape architect, WYG Environment Planning Transport Ltd, has prepared a comprehensive tree planting scheme, their reference Drawing A 088461 LA100-106, dated 24th March 2017, submitted under a separate cover, heeding the feedback from me and the project ecologist. That proposal includes one new hedge and 82 assorted new standard, selected standard, heavy standard, and semi-mature trees, and one hedge, to be planted around the site in sustainable locations. The species choice has been carefully selected to suit the space available for each individual tree as it matures, and thus avoid the potential for future inconvenience to occupiers. Additionally, a varied species palette focused on ecological enhancement provides the significant benefits of high biosecurity and climate change resilience. These new trees have the potential to reach their full mature size, thus optimising the canopy cover of the site, without causing excessive inconvenience to future occupants. This will more than mitigate the tree and hedge losses, and significantly improve the potential of the site to contribute to local character.

4. Summary of the impact on local character

This proposal will result in the loss of eight moderate quality category B trees and nine low quality category C trees and hedges. Although this tree and hedge loss will be noticeable in the immediate

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vicinity, there will be no significant adverse impact on character because the site is not prominent in the wider setting. To mitigate these losses, a comprehensive new tree planting scheme of 82 substantial trees and one hedge using a variety of species planted in sustainable locations is included as part of the proposal. The size of these new trees at planting and their future growth will significantly enhance the contribution of this site to local character and more than compensate for the loss of existing trees.

Appendix 1: Background administrative information, data collection and any additional relevant information

5. Table 2: Background administrative information

	Background administrative information
Report date & reference	11 th September 2017 16267-AA-Parcels C1+B2+B4+C2-110817-AN
Tree protection plan reference	BT6
Our instructing client	Persimmon Homes Thames Valley
Our instructions	Visit the site to review the data for the category A and B trees, updating where necessary, and prepare a schedule of their details, describe the impact of the proposal on those trees and identify the tree protection issues, if any arise.
Provided documents	Land survey, drawing number 141178,01,02,03, A089072-TCP-01 Rev A, received by email on 27 th July 2016, and layout, drawing number 543_PL_SITE LAYOUT_100 REV B, received by email on 6 th September 2017. We were provided with a previous tree survey carried out by WYG Planning & Environmental dated 2 nd March 2015 and agreed that this would be used as the baseline data. We re-inspected in October 2016 and updated it with recent changes and any discovered inconsistencies.
Report author and credentials	Alex Needs is a Chartered Arboriculturist (www.charteredforesters.org) and fully qualified to undertake the assessments in this report. Further details of his credentials can be found at www.barrelltreecare.co.uk/assets/Uploads/A-Needs-CV-amended.pdf
Report limitations	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, detailed consideration was given to 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 http://www.legislation.gov.uk/ukpga/1990/8/contents • National Planning Policy Framework ("NPPF"), published by the DCLG www.gov.uk/government/publications/national-planning-policy-framework--2 • BS 5837 (2012) <i>Trees in relation to design, demolition and construction – Recommendations</i>, BSI http://shop.bsigroup.com/ • BS 8545 (2014) <i>Trees: from nursery to independence in the landscape – Recommendations</i>, BSI http://shop.bsigroup.com/ • BS 3998 (2010) <i>Tree work – Recommendations</i>, BSI http://shop.bsigroup.com/ • <i>Trees in the Townscape: A Guide for Decision Makers</i>, published by the Trees & Design Action Group http://www.tdag.org.uk/ • <i>Trees in Hard Landscapes: A Guide for Delivery</i>, published by the Trees & Design Action Group http://www.tdag.org.uk/

6. Table 3: Data collection

	Data collection
Date of site visit	5 th , 7 th & 12 th October 2016
People present during site visit	Jeremy Barrell, accompanied by Alex Needs
Weather & visibility	Clear, still, and dry, with good visibility
Limitations to observations	• Our inspection of the trees for the purposes of assessing their condition and work requirements is made on the basis that they will be annually inspected in the future to identify any changes in condition and review

Appendix 1: Background administrative information, data collection and any additional relevant information

	Data collection
	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 location and numbering	Each tree identified on the provided survey was inspected and the original numbering scheme was retained as indicated on the tree plan. Where significant trees were found on site that were not included on the provided plan, their approximate positions and canopy extents are indicated on the plan.
Recording of tree data	The original survey data was taken as read for each tree, group, and hedge, unless our observations indicated that it needed updating. All category A and B trees were checked, whereas the bulk of the data relating to category C and U trees was taken as read. The information collected was recorded on the tree schedule in Appendix 2 and the tree 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	The recorded diameter of each tree was used to establish the radius of a nominal circle to calculate the RPA. This information is listed for each tree in the tree schedule in Appendix 2.

Appendix 2: Tree and hedge 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)
T2	Hybrid black poplar	20	45	Maturing	-	B	-	Fell for development	5.4	92
T3	Hybrid black poplar	20	45	Mature	-	B	-	Fell for development	5.4	92
T4	Goat willow	4	20 17	Young	-	C	-	Fell for development	3.2	31
T6	Ash	12	78	Over mature	-	B	-	Fell for development	9.4	275
T8	Italian alder	11	44	Young	-	B	-	Fell for development	5.3	88
T9	Italian alder	11	40	Young	-	B	-	Fell for development	4.8	72
T10	Italian alder	11	33	Young	-	C	-	Fell for development	4.0	49
T18	Hawthorn	5	12 15 13 12	Young	-	C	-	Fell for development	3.1	31
T19	Cherry plum	4	15 16 16 12 17	Mature	-	B	-	Fell for development	4.1	53
T20	Field maple	6	26	Young	-	B	-	Fell for development	3.1	31
T21	Field maple	6	25	Young	-	B	-	Fell for development	3.0	28
H1	Leyland cypress	6	16	Maturing	-	C	-	Fell for development	1.9	12
H2	Mixed broadleaves	4	35	Maturing	-	C	-	Fell for development	4.2	55
H3	Hawthorn & elder	6	15	Maturing	-	C	-	Fell for development	1.8	10
H5	Hawthorn	6	15	Maturing	-	C	-	Fell part for development	1.8	10
H24a	Hawthorn	4	15	Maturing	-	C	-	Fell for development	1.8	10
H24b	Hawthorn	4	15	Maturing	-	C	-	Fell for development	1.8	10

Note: This schedule is based on a previous tree survey carried out by WYG Planning & Environment dated 2nd March 2015. We used this to provide the baseline data, which was updated based on a review inspection carried out in October 2016.

Appendix 2: Tree schedule and explanatory notes

Explanatory Notes

- **Abbreviations:**

H : Hedge
T : Tree
RPA : Root protection area

- **Botanical tree names:**

Ash : *Fraxinus excelsior*
Cherry plum : *Prunus cerasifera* sp
Elder : *Sambucus nigra*
Field maple : *Acer campestre*
Goat willow : *Salix caprea*
Hawthorn : *Crataegus monogyna*
Hybrid black poplar : *Populus nigra* x *deltoides*
Italian alder : *Alnus cordata*
Leyland cypress : *X Cuprocyparis leylandii*

- **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 because of ivy on the trunk or the tree is assessed as poor 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

Appendix 2: Tree schedule and explanatory notes

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.



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