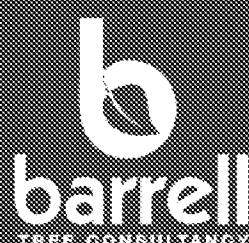




Arboricultural assessment & method statement

Ford Airfield, Yapton Road, Ford, Yapton



Andy Sherlock TechCert DipArb FArborA MICFor CEnv

25th October 2019 18189-AA7-AS

Site location and report purpose

Site location



This aerial image is provided courtesy of Google. The image is centred on the airfield and is provided to illustrate the position of the site 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, this report deals with outline planning application (with all matters reserved except for access) for the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1-A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing buildings and part removal of existing runway hardstanding

This report includes:

- A **Tree plan** illustrating tree locations, categories, and the location of the proposed development.



Site location and report purpose

- 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.
- 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 2.1)***, which provides explanations of how retained trees will be managed on site in the form of Site Guidance Notes (SGNs) covering the relevant issues.

1: Arboricultural assessment

1.1 Table 1: Summary of trees lost by the proposed site access.

	British Standard 5837 Category		
	A (High quality)	B (Moderate quality)	C (Low quality)
Remove for site access	None	G1 (part)	H2 (part), H92 (part), H98 (part), H99 (part)

H = Hedge; G = Group

1.2 The impact of tree removals, due to the access points, on local character

Trees G1 (part), H2 (part), H92 (part), H98 (part), and H99 (part)

These trees are not prominent as a skyline features. The majority of them are low quality trees with very little potential to contribute to local character. They are predominantly rural hedges which have been managed over the years by cutting with a flail, meaning that there are no good quality trees within the hedges. The removal of a small part of these hedges will have no long term detrimental impact on local character as the bulk of the hedges will be retained.

1.3 The impact of tree pruning on local character

Other than pruning for normal maintenance, no trees will be pruned due to the construction of the main site access points.

1.4 The impact of works in precautionary areas

All the RPAs of retained trees will be protected and there will be no encroachment during the development activity for the site access points.

1.5 Post development considerations

My assessment is that there will be no adverse impacts on retained trees once the access points are completed.

1.6 Land use parameters

The land use parameter information has been overlaid to create three tree plans. Looking at these plans, they show extensive areas of buffer planting and open space. I would expect the majority of the trees within these areas to be retained and protected during the development. The areas shown for residential development and employment areas are likely to require tree/hedge loss. However, the character of the site is one of open fields with rural hedges and few significant trees. Based on this, the loss of some trees over such a large area will have a limited detrimental impact on the visual amenities of the locality. There is also opportunity to plant hundreds of new trees across the site to mitigate any tree losses.

1.7 New tree planting to enhance local character

New tree planting is feasible as a means of supplementing retained trees and enhancing local character, which could include heavy-standard or semi-mature specimens. All new trees will be specified and planted in accordance with the recommendations in BS 8545 (2014) *Trees: from nursery to independence in the landscape –Recommendations*. My preliminary assessment is that there is sufficient space for new trees to be planted in locations where they will have the potential



1: Arboricultural assessment

to reach a significant height without excessive inconvenience and be sustainable into the long term, significantly improving the potential of the site to contribute to local character.

1.8 Summary of impact on local character

Most of the trees to be lost because of this proposal are low category because of their poor condition or small size. All the significant tree cover will remain intact. There is plenty of space for tree planting and a comprehensive new tree planting scheme is feasible. The size of these new trees 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. 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 an arboricultural method statement included in this report, the development proposal will have no impact on the contribution of trees to local character. Indeed, new sustainable planting will increase the potential of the site to contribute to local character well beyond the short term.

For these reasons, I conclude that the proposed development would not cause an unacceptable or adverse impact on the long-term vitality of the retained trees, and therefore the character and appearance of the area.

2: Arboricultural method statement

2.1 Site Guidance Notes (SGNs)

This section of the report sets out how the retained trees will be protected and managed, and by what means. As it is not known precisely which trees will be lost or those that require protection this report can only set out principles which will be followed. These are shown in a compilation of 12 individual SGNs addressing the following tree protection and management issues that regularly arise in the construction phase of development:

- SGN 1 *Monitoring tree protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn01?stage=Stage>)
- SGN 2 *Fencing protected trees* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn02?stage=Stage>)
- SGN 3 *Ground protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn03?stage=Stage>)
- SGN 4 *Pollution control* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn04?stage=Stage>)
- SGN 5 *Site cranes & piling rigs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn05?stage=Stage>)
- SGN 6 *Height restrictions* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn06?stage=Stage>)
- SGN 7 *Excavating in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn07?stage=Stage>)
- SGN 8 *Removing surfacing and structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn08?stage=Stage>)
- SGN 9 *Installing/upgrading surfacing in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn09?stage=Stage>)
- SGN 10 *Installing structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn10?stage=Stage>)
- SGN 11 *Installing services in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn11?stage=Stage>)
- SGN 12 *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 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;
- 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 SGN 1 *Monitoring tree protection* in the accompanying Manual.

2: Arboricultural method statement

2.3 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 SGN 1. <u>Will be carried out before any significant site works begin.</u>	All trees	SGN 1 <i>Monitoring tree protection</i>
Tree felling (for the access points only): Contractor will carry out agreed works as described in Appendix 2. <u>Will be completed before any significant site works begin.</u>	G1 (part), H2 (part), H92 (part), H98 (part), H99 (part)	Appendix 2
Installing fencing and/or ground protection: Agreed tree protection measures will be installed and checked, as described in SGN 2 and SGN 3. <u>Will be completed before any significant site works begin.</u>	All trees	Tree protection plan, SGN 2 <i>Fencing protected trees</i> , and SGN 3 <i>Ground protection</i>
Pollution control near retained trees: Any pollution control measures identified during risk assessment will be installed as described in SGN 4. <u>Will be completed before any potential pollutants arrive on site.</u>	All trees	SGN 4 <i>Pollution control</i>
Operation of site cranes and piling rigs: Provision will be made to prevent site cranes and piling rigs damaging trees, as described in SGN 5.	All trees	SGN 5 <i>Site cranes & piling rigs</i>
Installing height restrictions: Provision will be made to prevent damage to low branches by high vehicles, as described in SGN 6. <u>Will be installed before high vehicles arrive on site.</u>	Where necessary	SGN 6 <i>Height restrictions</i>
Regular arboricultural supervision: Provision will be made to carry out and record agreed arboricultural supervision, as described in SGN 1.	All trees	SGN 1 <i>Monitoring tree protection</i>
Excavating in RPAs: These operations will be carried out as described in SGN 7.	Where necessary	SGN 7 <i>Excavating in RPAs</i>
Removing surfacing and structures in RPAs: These operations will be carried out as described in SGN 8.	Where necessary	SGN 8 <i>Removing surfacing and structures in RPAs</i>
Installing/upgrading surfacing in RPAs: These operations will be carried out as described in the SGN 9.	Where necessary	SGN 9 <i>Installing/upgrading surfacing in RPAs</i>
Installing structures in RPAs: These operations will be carried out with care, as described in SGN 10.	Where necessary	SGN 10 <i>Installing structures in RPAs</i>
Installing services in RPAs: These operations will be carried out with care, as described in SGN 11.	Where necessary	SGN 11 <i>Installing services in RPAs</i>
Landscaping in RPAs: These operations will be carried out with care, as described in SGN 12.	All trees	SGN 12 <i>Landscaping in RPAs</i>

2: Arboricultural method statement

Brief operation summary	Trees affected	Location of detailed explanations
Removing tree protection: <u>Protection can only be removed when there is no risk of damage to retained trees, as described in SGN 1.</u>	All trees	SGN 1 <i>Monitoring tree protection</i>

2.4 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 could 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 demolition, site clearance, the installation of protective measures, the phasing of successive work locations, the removal of existing structures/surfacing, the installation of new structures/surfacing, the removal of tree protection, and any necessary reinstatement.
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. Details of facilitation pruning and access into site. What size vehicles will be used under canopies and will large machinery be lifted over trees.
8. The parking arrangements for workers and visitors.
9. A schedule of emergency contact numbers relating to trees.
10. Areas for loading and unloading of materials and storage of materials and plant.
11. Where site facilities will be located and when will they be installed.
12. 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.
13. Pollution control to specifically consider chemical storage and wheel washing facilities in relation to trees.
14. Recycling and storage of waste in relation to trees.
15. Details of earthworks, grading and mounding and removal of spoil, including any planned lowering or raising of ground levels.
16. Precise services locations, including the method of excavation when near trees.
17. Crane location and zones of movement.
18. Details of upgrading/removing/replacing existing surfacing and areas where this will happen, including detailed and precise cross-sections where no-dig surfacing is to be installed.
19. How and when any temporary surfacing will be laid and removed.
20. How post-construction impacts through compaction to soil near trees will be ameliorated.

Appendix 1: Background administrative information and data collection

A1.1 Table 3: Background administrative information

	Background administrative information
Report date & reference	25th October 2019; 18189-AA7-AS
Tree protection plan reference	BT8a, BT8b and BT8c
Instructing client	Barton Wilmore
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 with a tree protection plan, if appropriate.
Provided documents	Topographical survey, drawing number WD/1704042/OS, received by email on 7 th June 2018, and drawing numbers RG-M-122 RevC and RG-M-123 RevD, received on 22 nd October 2019. and RG-M-121 RevE received on the 25 th October 2019.
Report author and credentials	Andrew Sherlock has taken and passed the LANTRA Professional Tree Inspection course (https://www.lantra.co.uk/awards/product/professional-tree-inspection), is a Chartered Forester (www.charteredforesters.org), and a Fellow the Arboricultural Association (www.trees.org.uk), and is fully qualified to undertake the assessments in this report (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) <i>Trees in relation to design, demolition and construction – Recommendations</i>, BSI www.shop.bsigroup.com/ • BS 8545 (2014) <i>Trees: from nursery to independence in the landscape – Recommendations</i>, www.shop.bsigroup.com/ • BS 3998 (2010) <i>Tree work – Recommendations</i>, BSI www.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 www.tdag.org.uk/ • National Joint Utilities Group (2007) Volume 4, Issue 2: <i>Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees</i> www.njug.org.uk/publications/

Appendix 1: Background administrative information and data collection

A1.2 Table 4: Data collection

	Data collection
Date of site visit	13 th June 2018
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. Where important 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	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.



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 (m ²)
All retained trees & hedges								Carry out safety check and lift over site to 3-4m as necessary.		
G1	Oak, lime, ash, sweet chestnut, field maple	9	25	Maturing	-	B	Dense landscaping strip	Fell (part)	3.0	28
H2	Hawthorn	3	10	Maturing	-	C	Well maintained hedge	Fell (part)	1.2	5
T3	Oak	9	30	Maturing	-	B	-	-	3.6	41
T4	Apple	7	30	Mature	-	C	-	-	3.6	41
G5	Aspen	10	20	Maturing	-	C	-	-	2.4	18
G6	Holm oak	12	35	Maturing	-	B	-	-	4.2	55
G7	Corsican pine	14	40	Maturing	-	B	-	-	4.8	72
T8	Horse chestnut	15	80	Maturing	-	B	-	-	9.6	290
G9	Leyland cypress	15	30	Maturing	-	C	Overgrown hedge	-	3.6	41
T10	Sycamore	18	70	Mature	-	B	-	-	8.4	222
T11	Sycamore	18	100	Mature	-	B	-	-	12.0	452
T12	Ash	15	45	Maturing	-	B	-	-	5.4	92
G13	Ash	12	40	Maturing	-	B	-	-	4.8	72
T14	Field maple	12	40	Maturing	-	B	-	-	4.8	72
G15	Poplar	25	60	Maturing	-	B	Ivy covered trunks	-	7.2	163
T16	Oak	20	70	Mature	-	B	Ivy covered	-	8.4	222
G17	Hazel, elder	5	20	Maturing	-	C	-	-	2.4	18
T18	Hawthorn	7	40	Mature	-	C	-	-	4.8	72
T19	Oak	12	65	Maturing	-	B	-	-	7.8	191
G20	Oak, hawthorn	12	60	Maturing	-	B	-	-	7.2	163



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 (m ²)
G21	Monterey cypress, Monterey pine, aspen	12	40	Maturing	-	C	-	-	4.8	72
T22	Holm oak	10	50	Maturing	-	B	-	-	6.0	113
G23	Holm oak	18	70	Mature	-	B	Topped at 9m in past	-	8.4	222
T24	Norway maple	8	30	Maturing	-	C	-	-	3.6	41
G25	Poplar	18	45	Maturing	-	B	-	-	5.4	92
T26	Corsican pine	10	40	Maturing	-	U	Storm damaged	-	4.8	72
T27	Elm	8	20	Maturing	-	C	-	-	2.4	18
G28	Poplar, ash	18	50	Maturing	-	B	-	-	6.0	113
T29	Elm	8	20	Maturing	-	C	-	-	2.4	18
G30	Poplar, ash	18	50	Maturing	-	B	-	-	6.0	113
G31	Poplar, ash	20	45	Maturing	-	B	-	-	5.4	92
T32	Horse chestnut	12	45	Maturing	-	B	-	-	5.4	92
H33	Leyland cypress	7	30	Maturing	-	C	Overgrown hedge	-	3.6	41
T34	Corsican pine	15	55	Maturing	-	B	-	-	6.6	137
G35	Poplar, sycamore	20	55	Maturing	-	B	-	-	6.6	137
G36	Leyland cypress	12	40	Maturing	-	C	-	-	4.8	72
G37	Poplar, cherry, willow, birch, alder	15	40	Maturing	-	B	-	-	4.8	72
G38	Aspen	18	40	Maturing	-	B	-	-	4.8	72
H39	Leyland cypress	15	40	Maturing	-	B	Good screening value	-	4.8	72
G40	Poplar	18	40	Maturing	-	B	-	-	4.8	72
G41	Poplar	20	40	Maturing	-	B	-	-	4.8	72
H42	Poplar	4	30	Maturing	-	C	Maintained hedge	-	3.6	41
T43	Laburnum	5	35	Mature	-	C	-	-	4.2	55
G44	Hawthorn	5	30	Maturing	-	C	-	-	3.6	41
H45	Leyland cypress	12	50	Maturing	-	C	Overgrown hedge	-	6.0	113



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 (m ²)
G46	Lime, ash, hornbeam, willow, sycamore, poplar	18	50	Maturing	-	B	-	-	6.0	113
G47	Alder, hawthorn, willow, beech	12	50	Maturing	-	B	-	-	6.0	113
G48	Poplar, ash	12	40	Maturing	-	B	-	-	4.8	72
H49	Hawthorn, hazel	10	4	Maturing	-	C	Maintained hedge	-	0.5	1
G50	Leyland cypress	15	40	Maturing	-	C	Overgrown hedge	-	4.8	72
G51	Ash	15	40	Maturing	-	B	-	-	4.8	72
G52	Leyland cypress	15	40	Maturing	-	C	-	-	4.8	72
G53	Leyland cypress	15	40	Maturing	-	C	-	-	4.8	72
G54	Elder, hawthorn	5	15	Maturing	-	C	-	-	1.8	10
G55	Ash, apple, lime, hawthorn, willow, field maple, hazel	10	40	Maturing	-	B	-	-	4.8	72
G56	Oak, lime, ash, sweet chestnut	10	35	Maturing	-	B	-	-	4.2	55
G57	Poplar, ash, sycamore	18	45	Maturing	-	B	-	-	5.4	92
G58	Willow, sweet chestnut, field maple, hazel	12	35	Maturing	-	B	-	-	4.2	55
H59	Hawthorn	3	10	Maturing	-	C	Maintained hedge	-	1.2	5
T60	Horse chestnut	9	35	Maturing	-	B	-	-	4.2	55
T61	Horse chestnut	9	35	Maturing	-	B	-	-	4.2	55
T62	Horse chestnut	9	35	Maturing	-	B	-	-	4.2	55
T63	Horse chestnut	9	35	Maturing	-	B	-	-	4.2	55
T64	Horse chestnut	9	45	Maturing	-	B	-	-	5.4	92
T65	Horse chestnut	9	45	Maturing	-	B	-	-	5.4	92
T66	Sycamore	10	50	Maturing	-	B	-	-	6.0	113



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 (m ²)
T67	Horse chestnut	9	40	Maturing	-	B	-	-	4.8	72
T68	Horse chestnut	9	40	Maturing	-	B	-	-	4.8	72
T69	Horse chestnut	9	40	Maturing	-	B	-	-	4.8	72
T70	Sycamore	10	50	Maturing	-	B	-	-	6.0	113
T71	Horse chestnut	9	30	Maturing	-	C	-	-	3.6	41
T72	Horse chestnut	9	35	Maturing	-	B	-	-	4.2	55
H73	Poplar	3	30	Maturing	-	C	Maintained hedge	-	3.6	41
H74	Leyland cypress	4	20	Maturing	-	C	Maintained hedge	-	2.4	18
G75	Pine, oak, willow, hawthorn, poplar, birch, ash	12	30	Maturing	-	B	-	-	3.6	41
H76	Leyland cypress	4	30	Maturing	-	C	Maintained hedge	-	3.6	41
G77	Ash, willow, hornbeam, alder, birch	10	30	Maturing	-	B	-	-	3.6	41
G78	Poplar	22	50	Maturing	-	B	-	-	6.0	113
G79	Poplar	10	15	Maturing	-	C	-	-	1.8	10
G80	Ash, birch, field maple, hornbeam	10	30	Maturing	-	B	-	-	3.6	41
G81	Poplar	20	45	Maturing	-	B	-	-	5.4	92
G82	Leyland cypress	18	50	Maturing	-	B	Good screen	-	6.0	113
G83	Ash, field maple, hornbeam	10	30	Maturing	-	B	-	-	3.6	41
G84	Leyland cypress	15	45	Maturing	-	B	Good screen	-	5.4	92
G85	Poplar	22	50	Maturing	-	B	-	-	6.0	113
G86	Ash, field maple, alder, sycamore	12	35	Maturing	-	B	-	-	4.2	55
G87	Field maple, poplar, ash, lime, willow	10	35	Maturing	-	B	-	-	4.2	55



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)
G88	Field maple, poplar, ash, lime, willow	10	35	Maturing	-	B	-	-	4.2	55
G89	Ash	8	40	Maturing	-	C	-	-	4.8	72
G90	Willow, ash, elder, lime hawthorn	10	40	Maturing	-	B	-	-	4.8	72
H91	Hawthorn	2	10	Maturing	-	C	Maintained hedge	-	1.2	5
H92	Hawthorn	3	10	Maturing	-	C	Maintained hedge	Fell (part)	1.2	5
T93	Horse chestnut	8	40	Maturing	-	B	-	-	4.8	72
T94	Horse chestnut	5	30	Maturing	-	C	-	-	3.6	41
G95	Lime	10	45	Maturing	-	B	-	-	5.4	92
T96	Elm	10	40	Maturing	-	B	-	-	4.8	72
G97	Horse chestnut	10	40	Maturing	-	B	-	-	4.8	72
H98	Field maple, hawthorn	3	15	Maturing	-	C	Maintained hedge	Fell (part)	1.8	10
H99	Field maple, hawthorn	3	15	Maturing	-	C	Maintained hedge	Fell (part)	1.8	10
H100	Field maple, hawthorn	3	15	Maturing	-	C	Maintained hedge	-	1.8	10
H101	Field maple, hawthorn	3	15	Maturing	-	C	Maintained hedge	-	1.8	10
G102	Ash	5	20	Maturing	-	C	-	-	2.4	18
G103	Ash, willow	15	40	Maturing	-	C	-	-	4.8	72

Appendix 2: Tree schedule and explanatory notes

Explanatory Notes

- **Abbreviations:**

G: Group
H: Hedge
T: Tree

- **Botanical tree names:**

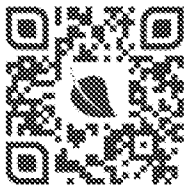
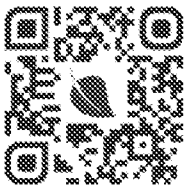
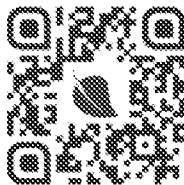
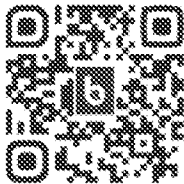
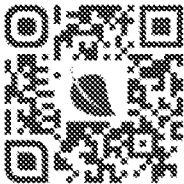
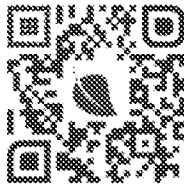
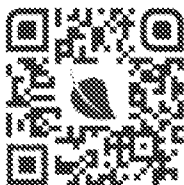
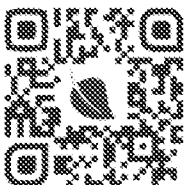
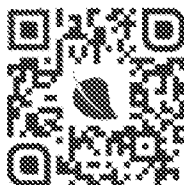
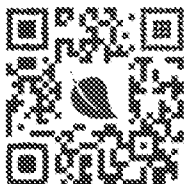
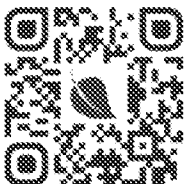
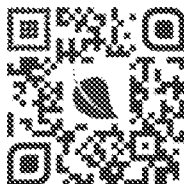
Alder	: <i>Alnus cordata</i>
Apple	: <i>Malus</i> sp
Ash	: <i>Fraxinus excelsior</i>
Aspen	: <i>Populus tremula</i>
Birch	: <i>Betula pendula</i>
Cherry	: <i>Prunus</i> sp
Corsican pine	: <i>Pinus nigra</i> var. <i>calabrica</i>
Elder	: <i>Sambucus nigra</i>
Elm	: <i>Ulmus</i> sp
Field maple	: <i>Acer campestre</i>
Hawthorn	: <i>Crataegus monogyna</i>
Hazel	: <i>Corylus avellana</i>
Holm oak	: <i>Quercus ilex</i>
Hornbeam	: <i>Carpinus betulus</i>
Horse chestnut	: <i>Aesculus hippocastanum</i>
Leyland cypress	: <i>X Cuprocyparis leylandii</i>
Lime	: <i>Tilia</i> sp
Monterey cypress	: <i>Cupressus macrocarpa</i>
Monterey pine	: <i>Pinus radiata</i>
Norway maple	: <i>Acer platanoides</i>
Oak	: <i>Quercus robur</i>
Poplar	: <i>Populus</i> sp
Sweet chestnut	: <i>Castanea sativa</i>
Sycamore	: <i>Acer pseudoplatanus</i>
Willow	: <i>Salix</i> 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 otherwise indicated with an asterix (*) after the figure.
- **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 (with a diameter tape), at the discretion of the consultant, and recorded in 2.5cm increments as advised in BS 5837 Table D1. Estimates may be made where access is restricted, direct measurement is prevented 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.

Appendix 2: Tree schedule and explanatory notes

- **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.

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

		
<i>SGN 1 Monitoring tree protection</i>	<i>SGN 2 Fencing protected trees</i>	<i>SGN 3 Ground protection</i>
		
<i>SGN 4 Pollution control</i>	<i>SGN 5 Site cranes & piling rigs</i>	<i>SGN 6 Height restrictions</i>
		
<i>SGN 7 Excavating in RPAs</i>	<i>SGN 8 Removing surfacing and structures in RPAs</i>	<i>SGN 9 Installing/upgrading surfacing in RPAs</i>
		
<i>SGN 10 Installing structures in RPAs</i>	<i>SGN 11 Installing services in RPAs</i>	<i>SGN 12 Landscaping in RPAs</i>

