



ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel.: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA.,
RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), RCArborA, MArborA, TechCert
(ArborA). (Operations)

Arboricultural Implications Report
Proposed development at
Pondtail Farm
Mercer Road
Horsham
West Sussex

December 2024

Ref. SJA air 23536-01b

SUMMARY

S1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

S2. There are no incursions into the adjacent ancient woodland, or into the associated 15m minimum buffer zone; and consequently, the proposals will not result in any loss of ancient woodland, will avoid any potentially harmful effects on the woodland, and will comply with current UK Planning and development guidance.

S3. Our assessment of the impacts of the proposals on the existing trees concludes that no mature, ancient, veteran or notable trees, no category 'A' or 'B' trees, and no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site, nor any veteran trees are to be removed. The proposed removal of individuals and groups of trees will represent only a very minor alteration to the main arboricultural features of the site, only a minor alteration to the overall arboricultural character of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

S4. The proposed pruning is minor in extent, will not detract from the health or appearance of these trees, and complies with current British Standards.

S5. The incursions into the Root Protection Areas of trees to be retained are within tolerable limits, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

S6. None of the proposed dwellings or apartments or their associated amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

S7. As the proposed development maintains and enhances the arboricultural elements of the site's green infrastructure network, protects the pattern of woodlands, hedgerows and fields, and provides replacement planting, it complies with Policies 25 and 26 of the Horsham District Planning Framework (November 2015).

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1. INTRODUCTION AND BACKGROUND INFORMATION

1.1. Instructions

1.1.1. SJAtrees has been instructed by Riverdale Developments to visit Pondtail Farm, Mercer Road, Horsham, and to survey the trees growing on or immediately adjacent to this site.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during construction.

1.2. Scope of report

1.2.1. This report and its appendices reflect the scope of our instructions, as set out above. It is intended to accompany a planning application to be submitted to Horsham District Council (“the LPA”) and complies with local validation requirements.

1.2.2. It complies also with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* (‘BS 5837’). However, the British Standard is not a Code of Practice that consists of written rules outlining how actions or decision must be taken and it “should not be quoted as if it were a specification¹”; it is a set of recommendations intended to “assist decision-making with regard to existing and proposed trees in the context of design, demolition and construction²”.

1.2.3. The proposed development comprises the erection of 304 residential dwellings (65 apartments and 239 houses) with 2048sq ft of retail space together with associated landscaping, open space, parking, drainage infrastructure and the construction of site accesses with associated works.

1.2.4. This report summarises and sets out the main conclusions of the baseline data

¹ British Standard BS 5837:2012. Trees in relation to design, demolition and construction – Recommendations; Foreword. *The British Standards Institution*.

² Ibid., p.1, Introduction.

collected during the tree survey and identifies those trees, groups of trees or woodlands whose removal could result in a significant adverse impact on the character or appearance of the local area (Section 3). It then details and assesses the impacts of the proposed development on the adjacent ancient woodland (section 4) and on individual trees and groups of trees, including those to be removed (Section 5), those to be pruned (Section 6), those which might incur root damage that might threaten their viability (Section 7) and those that might become under pressure for removal after occupation because of shading or apprehension (Section 8). A summary and conclusions, with regard to local planning policy, are presented in Section 9.

1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Matt Jones, Jeff Mashburn, Anthony Harte and James Bradford of SJAtrees on 12th, 13th and 18th December 2018. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in leaf.

1.3.2. An additional site visits were undertaken by Finn Cullerne on 21st October 2020 and 18th November 2021. Weather conditions were overcast with persistent rain in October 2020 and clear, dry and bright in November 2021. Deciduous trees were in partial leaf in October 2020, but out of leaf in November 2021.

1.4. Site description

1.4.1. The site is approximately 14.25ha in size and is located on the west side of Langhurstwood Road and either side of Mercer Road, as shown at **Figure 1** below. The north site boundary abuts a narrow-wooded belt with an industrial area further north. The west boundary adjoins a railway line connecting to Warnham station with a stream and agricultural fields beyond. The south site boundary adjoins dense vegetation with Dorking Road (A264) and Horsham further south.

1.4.2. The east site boundary adjoins Langhurstwood Road with open grassland and agricultural fields beyond, albeit this land is subject to an outline consent (ref: DC/16/1677) for mixed use strategic development to include housing (up to 2,750 dwellings), business park (up to 46,450m²), retail, community centre, leisure facilities, education facilities, public open space, landscaping and related infrastructure.



Figure 1: Site location shown on Google aerial image

1.4.3. The site is on undulating topography with the high point along the north boundary, falling by 4m to Mercer Road and gently dropping further to the stream (low point) in the southern section of site before rising again towards the south site boundary. The site comprises grassed agricultural fields with specimen trees, avenues, hedgerows and groups of trees.

1.4.4. Historical maps indicate that the site has remained largely unchanged from the present day with similar arrangements of agricultural fields and boundaries to the earliest Ordnance Survey map, dated 1871 (as shown in **Figure 2**). This map shows several trees growing within the site, with trees shown in similar location to English oaks nos. 57, 79, 87, 91 and 102-105, these specimens are of sufficient size and age that we consider they may be the same trees.

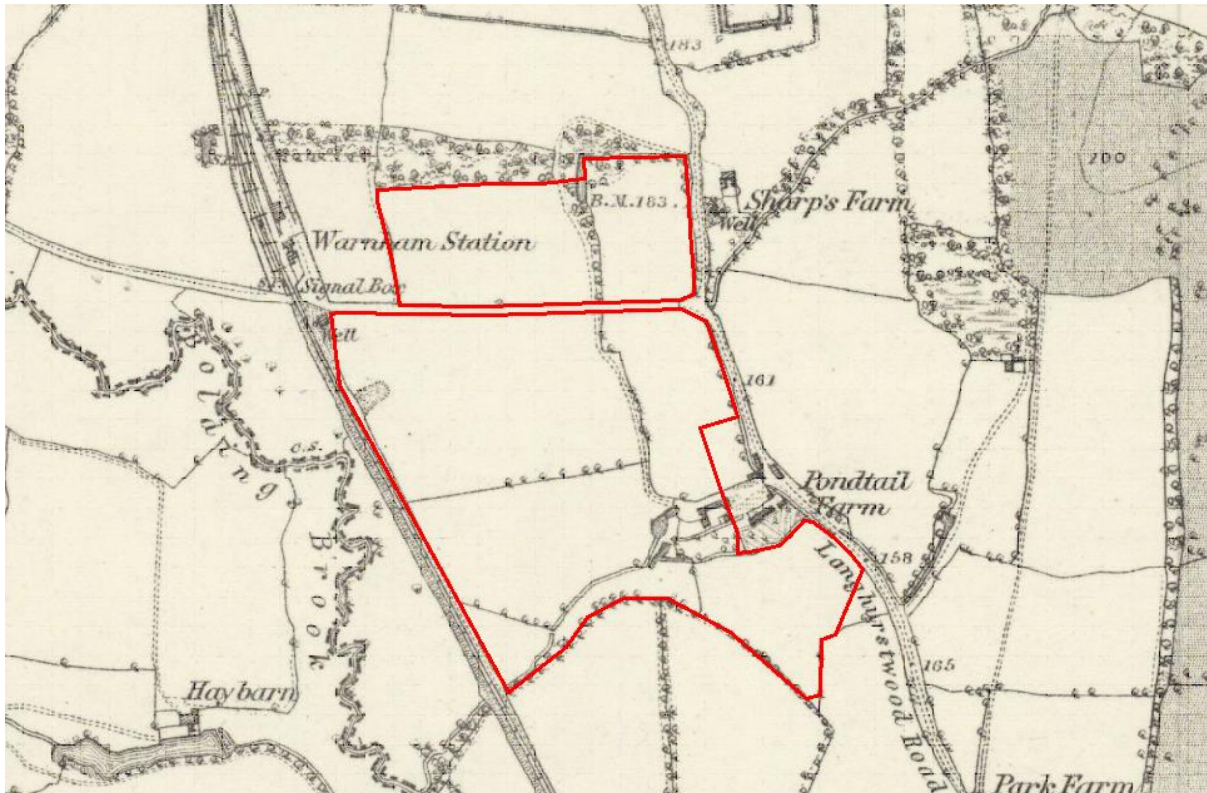


Figure 2: Extract from OS map of 1871, showing some of the trees present at that time

1.5. Soil type

1.5.1. The British Geological Survey Solid and Drift Geology map of the area indicates the site overlies superficial deposits of Arun Terrace Deposits (sand and gravel) over a bedrock of Weald Clay (Mudstone). A review of the borehole records within 100m of the site detail a variety of clays with gravel and sand in the upper 1.5m of the soils.

1.5.2. The class of soil in this area is recorded on the Soilscape (England) maps on the Department for Environment, Food & Rural Affairs ('Defra') Magic website as a slightly acid, loamy and clayey soil with impeded drainage.

1.5.3. We are not aware of a site investigation or soil analysis having been undertaken; but the class of soil and the indications of the British Geological Survey map suggest that trees may be shallow-rooted and that the soil is likely to be highly susceptible to compaction.

1.6. Statutory controls

1.6.1. At the time of writing none of these trees are covered by a tree preservation

order (TPO).

1.6.2. The site is not within a conservation area, and therefore there are no constraints relating to existing trees in this regard.

1.7. Non-statutory designations

1.7.1. As shown at **Figure 3** below, the 1.12ha area of woodland abutting the north boundary of the site is classified as ‘Ancient’. Ancient woodland is defined as “any area that’s been wooded continuously since at least 1600 AD” and is considered an important and irreplaceable habitat. The National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient woodland should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.

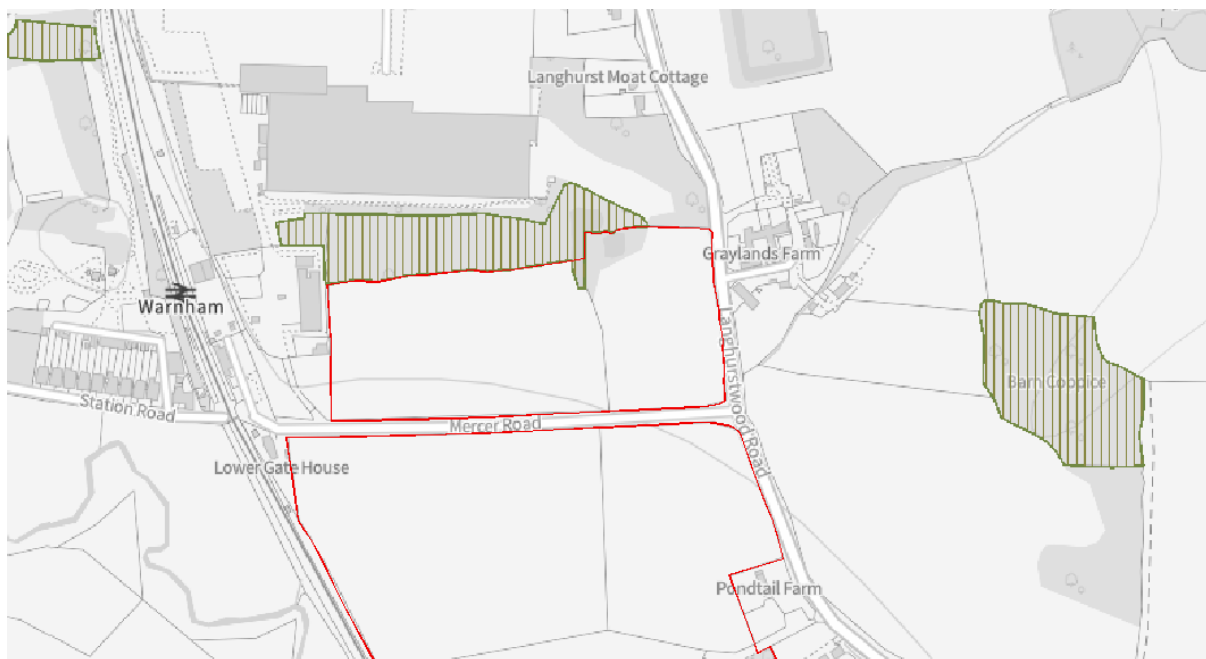


Figure 3: ‘Magic’ map image showing ancient woodland adjacent to the site

1.7.2. Current UK planning and development guidance in relation to the development of sites adjacent to ancient woodland³ is that to avoid negative effects on ancient woodland an appropriate buffer zone of semi-natural habitat of at least 15m should be left between the development and the woodland, but if other impacts are likely to

³ Ancient woodland and veteran trees: protecting them from development (14 January 2022). www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

extend beyond this distance, a larger buffer may be needed.

1.7.3. The woodland to the west of the site (“Round Wood”) is shown as ‘Deciduous Woodland’ on the Natural England ‘Priority Habitats Inventory (England)’, updated 08 December 2023. This means it is a habitat “of principal importance” in accordance with Section 41 of the Natural Environment and Rural Communities Act (2006). However, this does not by itself prohibit the removal of parts or all of this woodland; or the management of the woodland: the weight accorded to any proposals for that include full or partial removal depends on whether it is ancient, whether it is protected by means of a TPO or being within a conservation area, and on regional and local planning policies.

1.7.4. There are two oak trees within the site (nos. 57 and 79 in the tree survey schedule) which, despite not being included in the Woodland Trust Ancient Tree Inventory⁴, display attributes consistent with them being ‘Veterans’. Ancient and veteran trees are also considered to be irreplaceable habitats, and contribute to a site’s biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. Current government guidance states that ancient or veteran trees should be protected from root damage by inclusion of a buffer zone at least 15 times larger than the diameter of the trunk, or 5m from the edge of the tree’s canopy if that area is larger.

⁴ <https://ati.woodlandtrust.org.uk/>

2. PLANNING CONTEXT

2.1. Planning policy - national

2.1.1. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when considering planning applications. The effects of proposed development on trees are therefore a material consideration, and this is normally reflected in local planning policies.

2.1.2. The National Planning Policy Framework ('NPPF')⁵ sets out the Government's planning policies for England and how these should be applied in both plan and decision-making. Paragraph 2 makes it clear that the NPPF is itself a material consideration in the determination of planning application. Paragraph 11 states that **"Plans and decisions should apply a presumption in favour of sustainable development."**

2.1.3. In paragraph 135, within Section 12 "Achieving well-designed places" the NPPF states: **"Planning policies and decisions should ensure that developments:**

- a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;**
- b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;**
- c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);**
- d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;**
- e) optimise the potential of the site to accommodate and sustain an appropriate amount**

⁵ The National Planning Policy Framework (NPPF) (December 2024). Department for Levelling Up, Housing & Communities

and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

2.1.4. Paragraph 136 in this section states: **“Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”**

2.1.5. The section titled “Meeting the challenge of climate change, flooding and coastal change” states at paragraph 162: “Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating and drought from rising temperatures . Policies should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.”

2.1.6. In paragraph 187, within Section 15 “Conserving and enhancing the natural environment” the NPPF states: **“Planning policies and decisions should contribute to and enhance the natural and local environment by:**

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider

benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

[...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; [...]

2.1.7. In paragraph 193, under the ‘Habitats and biodiversity’ section, the NPPF states: **“When determining planning applications, local planning authorities should apply the following principles:**

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists....”

2.2. Local planning policy

2.2.1. Local planning policies are contained in the Horsham District Planning Framework (November 2015).

2.2.2. The relevant section of Policy 25 of the Planning Framework states, *inter alia*:

“The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which: (...)

2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.”

2.2.3. The relevant section of Policy 26 of the Planning Framework states, *inter alia*:

“(...) In addition, proposals must be of a scale appropriate to its countryside character

and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, and/or conserves, and/or enhances, the key features and characteristics of the landscape character area in which it is located, including;

1. The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;
2. The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features; (...)"

"1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.

2. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:

- i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)
- ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
- iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.

b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated

that:

i. The reason for the development clearly outweighs the need to protect the value of the site; and,

ii. That appropriate mitigation and compensation measures are provided.

4. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan”

2.3. Neighbourhood planning policy

2.3.1. At the time of writing there is no Neighbourhood Plan covering the North Horsham Neighbourhood Plan area within which the site is found.

2.4. Emerging local plan

2.4.1. Horsham District Council has released its emerging Horsham District Local Plan 2023-2030 (Regulation 19 dated January 2024), which contains the following relevant policies.

2.4.2. Strategic Policy 14 ‘Countryside Protection’ states *inter alia*:

“[...]2. In addition, all proposals must be appropriately integrated within the landscape and be of a scale appropriate to its countryside character and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, conserves, and seeks to enhance, the key features and characteristics of the landscape character area in which it is located, including;

a) The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;

b) The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features;[...]”

2.4.3. Strategic Policy 17 ‘Green infrastructure and Biodiversity states *inter alia*:

“1. Development will be supported where it can demonstrate that it maintains and

enhances the existing network of green infrastructure and contributes to the delivery of public open space, the Local Nature Recovery Strategy, Nature Recovery Network, natural capital, ecosystem services and / or biodiversity. Green Infrastructure should be integral to the design and layout of development, and new provision, including green linkages, should be provided taking into account Natural England's green infrastructure guidance and the council's green infrastructure strategy. Provision should seek to optimise public access to open space and nature via foot, bicycle, wheeling, and also horse as appropriate[...]

3. Proposals will be expected to retain and enhance existing priority habitats and trees, and accord with the aims and objectives of the Green Infrastructure and Local Nature Recovery Strategies. Habitat enhancement including additional hedgerow and tree planting must take account of the local landscape and habitat context. It should seek to optimise biodiversity, ecological connectivity and function, and climate change resilience. [...]

Protected Sites and Species

9. Particular consideration will be given to the hierarchy of sites and habitats, including buffer areas, within the District, or functionally linked to, as follows: [...]

b) Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Veteran Trees, Ancient Woodland and other irreplaceable habitats; [...]

10. An appropriate buffer around woodland will be required, this will be at least 15m around Ancient Woodland or greater in accordance with good practice, and consideration should be given to the potential for protected species, such as bats, and impacts on hydrology. Around ancient and veteran trees a minimum buffer zone of at least 15 times larger than the diameter of the tree, or 5 metres from the edge of the tree's canopy whichever is the larger, will be required.

11. Where the felling of a tree is necessary, for example due to disease, replacement planting with a suitable tree species, age and location to retain and enhance the link with the wider network of habitats and Green Infrastructure, will be required. [...]"

3. THE TREES

3.1. Survey findings

3.1.1. We surveyed 224 individual trees, 15 groups of trees, three hedgerows and one area of woodland growing within or immediately adjacent to the site. Their details can be found in the tree survey schedule at **Appendix 2**.

3.1.2. The arboricultural character of the site can be summarised as tree, woodland and hedgerow lined fields with scattered field grown trees in the southern section of the site. The trees are predominantly native deciduous specimen with horse chestnut, lime and English oak being the most dominant species in the local landscape.

3.1.3. In terms of age class distribution, the veteran, mature and semi-mature age classes are well represented but there is lack of young trees. This is reflected in the sizes of trees, with numerous large mature specimens. The mosaic of avenues, tree groups and hedgerows is consistent with the surrounding arboricultural landscape.

3.2. Assessment of suitability for retention

3.2.1. As noted above in Section 2.2, local planning policies require the retention of trees that contribute to the “**key features of the landscape character area.**” The individuals and groups of trees within or adjacent to the site, whose attributes we consider meet these criteria, are as follows:

- The ridge-top woodland (W1) along the northern boundary, most of which is ancient woodland and readily visible from Warnham Rail Station, the railway, Mercer Road, Langhurst Wood Road and a small number of residential properties to the east, south and west;
- The avenue of trees along Mercer Road (trees nos. 7-55 and 110-117) leading to Warnham Rail Station, consisting mainly of horse chestnut and large-leafed lime and with high visual amenity from this road, Langhurst Wood Road, the railway and a small number of residential properties to the east, south and west;
- The five English oaks (nos. 101-105) in the centre of the site which, although one is nearly dead and the others show moderate-to-major bark stripping along

their trunks, are very much in keeping with the rural landscape and readily visible from the railway, Mercer Road, Langhurst Wood Road and several residential properties to the north, east and west and, due to their veteranizing characteristics, are likely to have significant ecological value;

- The veteran English oak (no. 57) to the west of Pondtail Farm which, due to its age and condition, is likely to be of high ecological value and is visible in long-range views from Mercer Road and the railway; and
- The off-site veteran English oak (no. 79) near the south-east corner of the site which, due to its age and condition, is likely to be of high ecological value and is readily visible from the Horsham Bypass (A264).

3.2.2. Twenty-two individual trees are unsuitable for retention, irrespective of the proposals, in that they are 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. However, as can be seen below, these trees are not necessarily shown to be removed as part of the proposals; some may be outside the development footprint or may be outside the red line boundary and in third-party ownership. These trees have been assessed as category 'U' and are indicated on the accompanying tree protection plan by **bracketed red** numbers.

3.2.3. There are 102 mature trees growing on or immediately adjacent to the site; but six of these (nos. 83, 90, 107, 109, 232 and 148) are of species that are of small ultimate size; and one (no. 139) is of a short-lived species, and which is therefore of only short-term potential. Of the remaining 95 mature trees of large ultimate size and long-term potential, some of these are readily visible in views from public viewpoints and so make a significant contribution to the landscape; others do not.

3.2.4. There are three category 'A' trees (English oaks nos. 59, 79 and 229) and 105 category 'B'. The remaining 94 trees are assessed as category 'C' trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameters below 150mm; or a combination of these.

3.2.5. Of the groups of trees, hedges, hedgerows and woodlands, one (W1) has been assessed as category 'A', four as category 'B', and the remaining 14 as category

‘C’.

3.3. Assessment of arboricultural impacts

3.3.1. The arboricultural impacts of the proposed site layout by CMYK Ltd, drawing no. 1644/P/10.03 Rev G, have been assessed by overlaying this onto the TCP and are discussed in the following sections of this report and are shown on the tree protection plan (TPP) presented at **Appendix 4**.

3.3.2. The TPP identifies the trees to be removed to accommodate the proposed development, either because they are situated within the footprints of proposed structures or surfaces, or because in our judgment they are too close to these structures or surfaces to enable them to be retained. These are shown by means of **red crosses** on the TPP.

3.3.3. The TPP also shows how trees to be retained will be protected from damage during construction, and the measures identified are set out and described in the outline arboricultural method statement at **Appendix 2** of this report. The implementation of, and adherence to, these measures can readily be secured by the imposition of appropriate planning conditions.

3.3.4. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 8 below.

3.3.5. Based on these findings, we have assessed the magnitude of the overall arboricultural impact of the proposals according to the categories defined in **Table 1** below.

Impact	Description
High	Total loss of or major alteration to main elements/ features/ characteristics of the baseline, post-development situation fundamentally different
Medium	Partial loss of or alteration to main elements/ features/ characteristics of the baseline, post-development situation will be partially changed
Low	Minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be discernible but the underlying situation will remain similar to the baseline
Negligible	Very minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be barely discernible, approximating to the ‘no change’ situation

Table 1: Magnitude of impacts⁶

⁶ Determination of magnitude based on DETR (2000) Guidance on the Methodology for Multi-Modal Studies, as modified and extended.

4. IMPACTS ON ANCIENT WOODLAND

4.1. Details

4.1.1. As noted above, current planning policy guidance requires that unless there are wholly exceptional reasons and a suitable compensation strategy exists, development resulting in the loss or deterioration of ancient woodland should be refused.

4.1.2. The proposed development does not encroach into the ancient woodland adjacent to the north boundary.

4.1.3. No parts of the proposed dwellings, gardens, or areas of hard surfacing encroach into the minimum 15m ancient woodland buffer.

4.2. Assessment

4.2.1. There will be no loss of ancient woodland, and no direct damage to it as a result of either construction or occupation of these proposals.

4.2.2. As there are no incursions into the 15m wide buffer zone around the boundary of the ancient woodland, the closest built development is 5m from the buffer zone and 20m from the woodland itself. The proposals incorporate tree planting within the buffer zone between the development and the woodland, which will help reduce the light and noise radiating towards the woodland.

4.2.3. In addition, the proposals do not include footpaths within the buffer zone so that access to the woodland is not encourage, and if necessary, the landscape proposals could incorporate a formal barrier (chestnut fencing or similar) along with native barrier planting.

4.2.4. Our assessment concludes that the proposals comply with current UK planning and development guidance on ancient woodland and should avoid any potentially harmful effects on the woodland in terms of pollution or trampling.

5. TREES TO BE REMOVED

5.1. Details

5.1.1. None of the veteran trees on the site are to be removed to facilitate the proposed development.

5.1.2. To accommodate the proposed development, as shown on the proposed layout plan, five individual trees (nos. 27, 70 and 104) are to be removed, either because they are situated within the footprints of proposed structures or surfaces, or because they are too close to these to enable them to be retained.

5.1.3. Details of the trees to be removed, including their dimensions, age class and British Standard categorisation, are shown and listed on the TPP and at **Table 2** below.

Tree no.	Species	Height	Trunk diameter	Age class	BS category
27	Large-leafed lime	11m	400mm est.	Semi-mature	C (1)
70	Horse chestnut	16m	720mm	Mature	U
104	English oak	15m	860mm	Over-mature	U
G2	Various (partial- 32%)	Min. 5m Max. 10m	Min 75mm Max 250mm	Young	C (1)
G4	Various (partial- 6.9%)	13m	Min 100mm. Max 300mm	Semi-mature	C (23)
G15	Various (partial- 2.2%)	5m	Min 60mm Max 280mm Avg 150mm	Various	C (2)
G17	Various (partial-11.6%)	Min 3m Max 9m	Min 75mm Max 150mm.	Young	C (3)
H3	Various (partial – 23.4%)	3m	Avg 35mm	Semi-mature	C (1)

Table 2: Trees to be removed

5.1.4. Two (nos. 70 and 104) of the three trees to be removed, have been assessed as moribund and should be felled for arboricultural management reasons, irrespective of the proposed development.

5.1.5. Four groups of trees (G2, G4, G15 and G17) and one hedgerow (H3) are to be partially removed as part of the proposals. These too are included in **Table 2** above.

5.2. Assessment

5.2.1. All those trees that constitute the main arboricultural features of the site and which make the greatest contribution to the character and appearance of the local landscape, to amenity or to biodiversity (see paragraph 3.2.1), will be retained.

5.2.2. None of the veteran or notable trees on the site are to be removed.

5.2.3. Whilst two mature trees (nos. 70 and 104) are to be removed, both of these are moribund and of very short-term potential. All the other trees and small sections of the groups to be cleared are young, semi-mature or of small ultimate size. The significance of this is threefold. Firstly, for obvious reasons mature trees tend to be larger in size and therefore are likely to be more visible and to make a greater contribution to the landscape. Secondly, mature trees are more likely to have formed associations with wildlife and to support other flora or fauna (for example, young trees infrequently contain splits, cracks or cavities that might provide roosting sites for bats); and thirdly, mature trees have a significantly greater capacity than smaller trees to actively sequester and store carbon⁷. Accordingly, the removal of no large mature trees of long-term potential on or adjacent to the site minimises the impacts on the benefits that mature trees provide in relation to smaller ones.

5.2.4. Two of the groups of trees (G2 and G17) to be partially removed are young specimens, which BS 5837 states “**need not necessarily be a significant constraint on the site’s potential**”.

5.2.5. None of the trees to be removed are covered by a TPO (see 1.6.1 above).

5.2.6. As mentioned above, English oak no. 104 and horse chestnut no. 70 to be removed are unsuitable for retention, irrespective of the proposed development, in that they cannot realistically be retained for longer than 10 years. The oak is in poor physiological and structural condition with very limited future potential, the specimen may even have perished since the latest survey. The horse chestnut has a large wound that compromises the structural condition of the specimen such that it cannot

⁷ Stephenson N. L., Das A. J., Zavala M. A. (2014) Rate of tree carbon accumulation increases continuously with tree size. *Nature*, volume 507.

be safely retained in situ. To retain the ecological value of the deadwood habitat, the felled trees could be relocated elsewhere within the site to provide sitting deadwood.

5.2.7. The remaining individuals and groups of trees to be removed are assessed as category 'C' trees: these are either of low quality, low value, or short-term potential. For these reasons, their removal will have no significant impact on the character or appearance of the area.

5.2.8. The large-leaved lime no. 27 is to be removed to accommodate a proposed site access from Mercer Road. The access arrangement was subject to significant scrutiny to ensure that the avenue feature that forms a significant feature of the road was retained. The lime is the only specimen from the avenue to be removed, furthermore, as this specimen is small (no taller than 11m in height) the impact on the avenue will be very limited.

5.2.9. The three groups of trees (G2, G4 and G17) and one hedgerow (H3) are to have sections to be removed to accommodate access points (roads or footpaths) either from outside the site or between the separate fields. As the site is surrounded by tree belts and vegetation, access into the site and between the fields is not possible without some form of tree or vegetation removal. SJA trees has been involved in designing the layout so that these features follow the most 'tree friendly' routes, as summarised below:

- G2: the proposed footpath of the diverted PRow provides an important pedestrian link across the site, but avoids requiring the removal of any avenue trees along Mercer Road;
- G4: the proposed road connection between the northern and southern fields of the south site avoids conflicting with the RPA of the notable oak no. 91 and the veteran buffer zone of oak no. 79. Alternative routes would impact on either one or both of these key arboricultural features. The development of the design has limited the area to be removed as far as possible, so only 6.% of the group area is proposed to be removed;
- G15: the proposed pumping station in the southern section of the site has been located to avoid the ash no. 124, but a small section (42m² or 2.2%) will need

to removed/ pruned back as appropriate to accommodate the pumping station;

- G17: the proposed footpath and service trench require to link the eastern and western fields in the northern site, the location of this feature avoids impacting the significant arboricultural components (trees nos. 147-149) of this green corridor; and
- H3: the proposed access from Langhurstwood Road is designed to balance the highways constraints for a safe access and the Wyche elms (nos. 96-100 & 140-141). In any event, an access from this road would not be possible without the removal of the boundary vegetation.

5.2.10. Furthermore, the proposals incorporate considerable replacement tree planting. This will mitigate the proposed removals, provide a net increase in tree numbers of the site, improve the age class balance of the trees on site, enhance the local landscape, and strengthen the existing arboricultural framework for the ongoing and long-term character of the site.

5.2.11. In the light of these considerations, and taking account of the numbers, sizes and locations of the trees to be retained, including those that are off-site, the felling of the trees and groups identified for removal will represent only a very minor alteration to the main arboricultural features of the site.

6. TREES TO BE PRUNED

6.1. Details

6.1.1. The south canopy of the ash no. 89 is to be crown lifted to 5m above ground level above the visitor parking bay. In addition, the deadwood in the south and central canopy will be stabilised.

6.2. Assessment

6.2.1. The extent of pruning proposed to the ash is minor, branches to be removed are small in size and will result in a maximum wound size no greater than 100mm in diameter; this will have an insignificant effect on the health and physiological condition of these trees and complies with the recommendations of British Standard BS 3998:2010, *Tree work – Recommendations*. The deadwood that could present a risk to future users of the visitor parking bay will be stabilised, or if necessary removed.

6.2.2. In terms of impact upon the landscape, the proposed pruning is minor in extent, and will be screened in views the remainder of the trees' canopies and by other trees growing within or adjacent to the site. It will have a negligible effect on the appearance of the trees when viewed from outside the site itself, and accordingly will not detract from the character or appearance of the local area.

6.2.3. Following the pruning specified, none of the proposed dwellings will lie within 5.2m of the extents of the canopies of trees to be retained, thereby providing adequate working space for construction, and a reasonable margin of clearance for future growth.

7. ROOT PROTECTION AREA INCURSIONS

7.1. Details

7.1.1. There will be no development within the buffer zones of the veteran oaks nos. 57 and 79.

7.1.2. Parts of the proposed roads, footpaths and attenuation basins will encroach within the RPAs of 23 of the trees to be retained.

7.2. Assessment

7.2.1. The incursions into the RPAs of the 11 trees, listed in **Table 3** below, are by proposed roads, footpaths and parking bays, and subject to proposed levels, some degree of excavation will be required. To minimise impacts on these specimens, excavation within these RPAs will be undertaken manually, under the direct control and supervision of an appointed arboricultural consultant, so that any over dig into the RPAs is avoided, and any roots encountered can be treated appropriately.

Tree no.	Species	Incursion	Extent of incursion	% of RPA
21	Horse chestnut	Proposed site access	27m ²	13.4%
22	Horse chestnut	Proposed site access	20.4m ²	9%
26	Horse chestnut	Proposed site access	29.5m ²	13.3%
28	Horse chestnut	Proposed site access	17.2m ²	8%
32	Horse chestnut	Proposed footpath	0.5m ²	0.15%
69	Horse chestnut	Proposed site access	3.3m ²	8.7%
89	Ash	Proposed visitor parking bay	72.8m ²	11.7%
96	Wych elm	Proposed site access	15.6m ²	12.7%
103	English oak	Proposed footway	8.7m ²	1.4%
114	Horse chestnut	Proposed footway and access	9.4m ²	2.8%
115	Large-leaved lime	Proposed site access	8.4m ²	2.4%
116	Horse chestnut	Proposed site access	30.1m ²	12.5%

Table 3: Proposed areas of supervised excavation within RPAs

7.2.2. As described in 2.4. above, the site is well contained with tree belts and vegetation growing along the boundaries of Mercer Road and Langhurstwood Road, and these features make a positive contribution to the character of the local area.

Accordingly, it is clear that designing an access arrangement without any arboricultural impacts would not be possible. SJA trees was instructed to aid the design of 'tree friendly' access points that would minimise the harm to the significant components of the tree belts. We utilised a hierarchy of harm to establish the least harmful routes possible, this is summarised with the most harm to least harmful impacts listed below:

- Removal of important arboricultural features, most notably the lime and horse chestnut avenue along Mercer Road;
- Removal of significant components of the avenue or tree belts that would result in fragmentation of the group or significant loss of amenity;
- Incursions into the RPAs of the significant components of the tree belts;
- Removal of inessential components of the avenue or tree belts that would not lead to fragmentation or significant loss of amenity.

7.2.3. Our assessment identified locations that access roads could be provided that would not necessitate the removal of the arboricultural features or their significant components. The only way that this is feasible is to allow for relatively significant incursions into the RPAs of the trees along the existing roads.

7.2.4. The BS 5837 states that the default position is that structures should be located outside of RPA, except where there is an overriding justification for encroachment and technical solutions are present to mitigate the harm. As set out above, no alternative routes are possible and the overriding justification is based on the wider benefit of the scheme and the fact that the proposed access arrangements have the least arboricultural harm possible. Any potential adverse impacts can be satisfactorily mitigated as set out below.

7.2.5. To minimise impacts on these specimens, excavation within these RPAs will be undertaken manually, under the direct control and supervision of an appointed arboricultural consultant, so that any over dig into the RPAs is avoided, and any roots encountered can be treated appropriately.

7.2.6. As a species, horse chestnut and limes have been identified as good to

moderate at tolerating root pruning and disturbance⁸. Our review of impacts highlights that the most impacted specimens (nos. 21, 22, 26, 28, 96 and 116) have incursions into their RPAs by between 8% to 13.4%, these specimens have been identified as having average physiological condition (the highest value possible under SJA survey methodology), as such, we consider that these specimens will be able to tolerate the cutting of roots within these sections of their RPAs.

7.2.7. A review of the current rooting environments highlights that as these specimens grow along an existing road with grassed fields in all other directions, we consider that the trees will likely be preferentially rooting into site where there is an abundance of favourable rooting environment, as opposed to beneath or along the road where there will be significant levels of soil compaction as well as potential high levels of pollutants such as salt and oil that would impede root growth.

7.2.8. As such, we consider that the areas lost to encroachment within the RPAs of these trees can be compensated for in the grassed areas adjacent to the trees contiguous to the RPAs. There is likely to already be significant rooting within these areas, and as it is to remain as soft landscape, root growth can continue in the future. Therefore, there will be no net loss of suitable rooting area, and no foreseeable risk of future cumulative impacts, so there is no reason to suggest that they will not be able to tolerate the cutting of roots within these small sections of their RPAs or that they will not remain viable.

7.2.9. Furthermore, within the site boundary the opportunity exists for the soil used by these trees for root growth to be improved. Subject to proposed landscaping, the soil and rooting environments within the RPAs of these specimens could be enhanced to promote improved root growth by de-compaction, aeration fertilisation or mulching, as appropriate, and this can be ensured by condition. As these trees can remain viable by being able to root in other areas, contiguous to their RPAs, and the soil environment in which they are rooting can be improved, these incursions comply with paragraph 5.3.1 of BS5837.

7.2.10. The remaining incursions requiring excavation are for internal roads and

⁸ MATHENY, N. P. and CLARK, J. R. (1998). Trees and Development. International Society of Arboriculture.

footpaths, in both situations the same mitigation approach will be undertaken as set out above with supervised excavation and, if necessary, soil remediation if any physiological decline is observed.

7.2.11. The proposed footways are not likely to require excavation deeper than 400mm. Studies have shown that typically as much as 90% of tree root length occurs in the upper metre of the soil⁹ and so it is highly unlikely that the incursions into the RPAs of trees nos. 103 and 114 will result in all the roots in these areas being severed. For example, as only the upper 400mm of the upper metre of soil will be removed, the 2.8% incursion into the RPA of the horse chestnut no. 114 may result in a reduction of only 1.1% of roots within the RPA.

7.2.12. The ash no 89 was not identified as a constraint in the baseline arboricultural assessment based on the extensive tip dieback and epicormic reaction growth indicative of well progressed infection with ash dieback, accordingly, the specimen is expected to be lost from the tree population over the next ten to twenty years. Nonetheless, the proposals recognise the benefit to retaining the specimen for deadwood habitat, potential ecological value and its contribution to the canopy continuity of the group of trees along the ditch.

7.2.13. The encroachment of the proposed road and parking bay is as a result of not being considered a development constraint, and it should be noted that re-designing the scheme around a specimen of such short-term potential should not be considered as necessary. Instead, the impacts of the installation of the road and parking bays will be mitigated through a supervised excavation (as set out above) with a program of annual tree inspections to ensure the safety of road users.

7.2.14. The inspection program can be designed to safely retain the specimen for as long as possible with soil remediation, successional planting, pruning and eventually removal recommended as required.

7.2.15. The incursions into the RPAs of the remaining 12 trees listed in **Table 4** are by areas of proposed footpaths. These areas extend to no more than 6.5% of individual

⁹ Roberts J., Jackson N., & Smith M. (2006). Tree Roots in the Built Environment. TSO.

RPA's, and do not exceed the 20% maximum incursion into currently unsurfaced ground recommended in BS 5837¹⁰.

Tree no.	Species	Incursion	Extent of incursion	% of RPA
4	Horse chestnut	Proposed footpath	10.2m ²	2.7%
5	Large-leaved lime	Proposed footpath	21.5m ²	9.7%
6	Horse chestnut	Proposed footpath	31.6m ²	13.6%
7	Large-leaved lime	Proposed footpath	22.7m ²	14%
22	Horse chestnut	Proposed footpath	27m ²	11.9%
23	Horse chestnut	Proposed footpath	19.3m ²	10.3%
24	Horse chestnut	Proposed footpath	22.7m ²	8.4%
26	Horse chestnut	Proposed footpath	26.2m ²	11.8%
28	Horse chestnut	Proposed footpath	22.1m ²	10.3%
29	Large-leaved lime	Proposed footpath	14.1m ²	17.5%
45	Horse chestnut	Proposed footpath	25m ²	8.2%
49	Horse chestnut	Proposed footpath	16.4m ²	5.1%
87	English oak	Proposed private drive	17.6m ²	2.5%
110	Large-leaved lime	Proposed parking bays	6.2m ²	5.7%
111	Large-leaved lime	Proposed parking bays	5.8m ²	4.8%

Table 4: Proposed areas of supervised excavation within RPA's

7.2.16. Taking account of existing ground levels and likely proposed levels of these areas these will allow for design and construction of the new surfaces to be entirely above existing soil level, and accordingly no excavation will be required. Furthermore, where appropriate, new surfaces could incorporate an appropriate cellular confinement system, filled and finished with suitable porous materials, to minimise soil compaction. To ensure no damage occurs to the roots or rooting environments of the relevant trees, installation will be undertaken under the control and supervision of the arboricultural consultant.

7.2.17. Implementation of measures to prevent other incursions into the RPA's of retained trees and to protect them during construction can be assured by the erection of appropriate protective fencing and the installation of ground protection, as shown on the TPP at **Appendix 4**.

¹⁰ BS 5837, paragraph 7.4.2.3.

7.2.18. Accordingly, subject to implementation of the above measures, and considering the ages, current physiological condition and tolerance of disturbance of these retained trees, no significant or long-term damage to their root systems or environments will occur as a result of the proposed development.

8. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS

8.1. Shading

8.1.1. In none of the proposed new dwellings or apartments does the fenestration of main habitable rooms (living rooms, kitchens) exclusively and directly face trees within the shadow patterns¹¹ of which they are situated. That is, where proposed dwellings or apartments sited in an arc between the north-west and the east of retained trees are closer to them than the current heights of these specimens.

8.2. Apprehension

8.2.1. Apprehension in relation to trees occurs normally with residents or occupiers who live beneath or close to the crowns of large trees, and become fearful that branches, stems or even a whole tree could fail and harm them or their property. Consequently, this is most likely to occur if trees are large, particularly in relation to the size or height of the house or apartment in which the resident lives, if properties are located close to or even beneath their crowns, and if there has been a history of recent failures nearby. Other factors might include the wind exposure of the tree concerned, the orientation of the property in relation to the tree and the prevailing winds, and the noise made by the tree as the wind passes through the crown (there can be significant differences in the type and volume of noise made by wind as it passes through trees).

8.2.2. In this case apprehension is most unlikely to be common, or to be of a degree that might force the LPA to accede to requests to fell any of these trees as a result. This is because the proposed dwellings and apartment are located at considerable distances from the retained trees with at least 10m clearance from canopies and 15m or greater from the nearest trunks.

¹¹ BS 5837:2012, 5.2.2, Note 1: "An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day."

8.3. Future requests for consent to fell

8.3.1. Former government advice, contained in the DETR “Blue Book”¹², stated at paragraph 5.11 (1) (ii) that **“incoming occupiers of properties will want trees to be in harmony with their surroundings without casting excessive shade or otherwise unreasonably interfering with their prospects of reasonably enjoying their property. Layouts may require careful adjustment to prevent trees from causing unreasonable inconvenience, leading inevitably to requests for consents to fell.”**¹³

8.3.2. Whilst this document was superseded in March 2014 by online government guidance on ‘Tree Preservation Orders and trees in conservation areas’ (www.gov.uk), this is sound advice. This suggests that for there to be requests for removal, all the following elements should be capable of being demonstrated:

- That the proximity of retained trees to the proposed development is unreasonable, taking account of their size, species, orientation, growth and other relevant factors;
- That requests for consent to fell or unacceptably or repeatedly prune retained trees will inevitably be forthcoming from future occupiers, rather than merely being possible;
- That such future pressure will be for the felling or heavy pruning of the trees concerned, rather than for minor pruning or tree surgery work; and finally
- That such requests to fell or prune could not reasonably be refused by the LPA.

8.3.3. As discussed above, the proposed scheme provides dwellings and apartments that are significantly set back from the retained tree canopies and that do not conflict with the shadow patterns of any of the retained trees. Furthermore, the arboricultural landscape of the site is well established with many of the trees already reaching fully mature canopies, as such, future growth is unlikely to result in any adverse impact on the future occupiers.

¹² (2000) Department of the Environment, Transport and the Regions (2000). Tree Preservation Orders – A guide to the Law and Good Practice. *Building Research Establishment*

¹³ British Standard BS 8206: Part 2 (1992). *British Standards Institute*.

8.3.4. Accordingly, the proposals comply with British Standard guidance on the probable impact of the existing trees on the proposed development, as set out at paragraph 5.3.4.¹⁴

¹⁴ BS 5837:2012, 5.3.4.

9. CONCLUSIONS

9.1. Summary

9.1.1. There are no incursions into the adjacent ancient woodland, or into the associated 15m minimum buffer zone; and consequently, the proposals will not result in any loss of ancient woodland, will avoid any potentially harmful effects on the woodland, and will comply with current UK Planning and development guidance.

9.1.2. Our assessment of the impacts of the proposals on the existing trees concludes that no mature, ancient, veteran or notable trees, no category 'A' or 'B' trees, and no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site, nor any veteran trees are to be removed. The proposed removal of individuals and groups of trees will represent only a very minor alteration to the main arboricultural features of the site, only a minor alteration to the overall arboricultural character of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

9.1.3. The proposed pruning is minor in extent, will not detract from the health or appearance of these trees, and complies with current British Standards.

9.1.4. The incursions into the Root Protection Areas of trees to be retained are within tolerable limits, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

9.1.5. None of the proposed dwellings or apartments or their associated amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist

9.2. Compliance with national planning policy

9.2.1. As the proposals will retain all the main arboricultural features of the site, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 135 of the National Planning Policy Framework.

9.2.2. Whilst some trees are to be removed, there is no duty in planning policy to retain all existing trees in all circumstances. Paragraph 131 of the NPPF states (*italics added for emphasis*): “**Planning policies and decisions should ensure... that existing trees are retained wherever possible**”; and thereby recognises circumstances in which it might not be possible to retain every tree. Accordingly, the proposed removal of trees does not mean that this application must thereby be refused; and does not mean it conflicts with Paragraph 136 of the NPPF.

9.2.3. As the proposals will not result in the loss or deterioration of any ancient woodland or any ancient or veteran trees, they comply with paragraph 193 (c) of the NPPF.

9.3. Compliance with local planning policy

9.3.1. As the proposed development maintains and enhances the arboricultural elements of the site’s green infrastructure network, protects the pattern of woodlands, hedgerows and fields, and provides replacement planting, it complies with Policies 25 and 26 of the Horsham District Planning Framework (November 2015).

9.3.2. As the proposals integrate the main arboricultural features of the landscape, including the important hedgerows, groups of trees and individual trees thereby protecting the arboricultural elements of the Green Infrastructure, and provides adequate replacements for the trees and section of hedgerow to be lost to facilitate the access, it complies with Strategic Policies 14 and 17 of the emerging Horsham District Local Plan 2023-2030.

9.4. Conclusion

9.4.1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

APPENDIX 1.

Methodology

A1.1. Tree survey and baseline information

A1.1.1. We surveyed individual trees with trunk diameters of 75mm and above¹⁵, trees with trunk diameters of 150mm and above growing in groups or woodlands, and shrub masses, hedges and hedgerows¹⁶ growing within or immediately adjacent to the site; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.

A1.1.2. The baseline information collected during the site survey was recorded on site using a hand-held digital device. This information was then imported into an Excel spreadsheet and used to produce the tree survey schedule at **Appendix 2**. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree removals and protection plans.

A1.1.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion shelter), visually (e.g., avenues or screens) or culturally¹⁷. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.

A1.1.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We took no samples of wood, roots or fungi. We did not undertake a full hazard or risk assessment of the trees, and therefore can give no guarantee, either expressed or implied, of their safety or stability.

A1.1.5. We have categorised the trees in accordance with BS 5837, and details of the criteria used for this process can be found in the notes that accompany the tree survey schedule.

A1.1.6. We have applied this methodology in line with the NPPF's presumption in favour of sustainable development, giving greater weighting to the contribution of a

¹⁵ BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

¹⁶ Ibid, 4.4.2.7

¹⁷ Ibid, 4.4.2.3

tree to the character and appearance of the local landscape, to amenity, or to biodiversity, where its removal might have a significant adverse impact on these factors.

A1.2. Tree constraints

A1.2.1. In line with the NPPF's presumption in favour of sustainable development, we have assessed whether any trees should be retained in the context of a proposed development. To do this, we identified the main arboricultural features within or immediately adjacent to the site, whose removal we considered could have an adverse impact on the character and appearance of the local landscape, on amenity or on biodiversity.

A1.2.2. Whilst BS 5837 states that trees in categories 'A', 'B' and 'C' are all a material consideration in the development process, the retention of category 'C' trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary should they impose a significant constraint on development.

A1.2.4. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature **"need not necessarily be a significant constraint on the site's potential"**¹⁸.

A1.2.5. Moreover, BS 5837 states that **"... care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal"**¹⁹.

A1.2.6. The 'Root Protection Areas' (RPAs)²⁰ of the trees identified for retention were calculated in accordance with Section 4.6 of BS 5837; and were assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions

¹⁸ Ibid. 4.5.10.

¹⁹ Ibid. 5.1.1.

²⁰ The minimum area around a retained tree "deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority." BS 5837, paragraph 3.7.

(including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs (although not their areas) were modified based on these considerations, so that they reflect more accurately the likely root distribution of the relevant trees.

A1.2.7. The British Standard BS 5837 calculates RPAs based on a standard 12 times trunk diameter. However, in our experience the response of trees to root severance or damage is not standard and tends to be less effective in the case of large mature specimens of species with a known intolerance of disturbance. Accordingly, where considered appropriate, we have increased the RPAs of such specimens by calculating them based on an increased factor of trunk diameter.

A1.2.8. To assess whether the trees identified for retention would be in a sustainable relationship with the proposed development (without casting excessive shade or otherwise unreasonably interfering with incoming residents' prospects of enjoying their properties, and thereby leading inevitably to requests for consents to fell), we plotted a segment or "shading arc" from each trunk, with a radius equal to the current height of the tree concerned, from due north-west to due east. This gave an indication of potential direct obstruction of sunlight and the shadow pattern cast through the main part of the day²¹.

A1.2.9. Based on these principles and recommendations, the tree survey and assessment of suitability for retention informed the production of a tree constraints plan (TCP) which indicates the most suitable trees for retention, and their associated below-ground and above-ground constraints.

A1.2.10. As a design tool, the TCP also indicates how close to those trees selected for retention the proposed development could be positioned, in terms of three key criteria:

- a). avoidance of unacceptable root damage;
- b). avoidance of the necessity for unacceptable pruning works; and

²¹ BS 5837, paragraph 5.2.2 Note 1.

- c). avoidance of future felling or pruning works to prevent unacceptable shading or apprehension on behalf of the occupants.

A1.2.11. The TCP was then used to inform the siting of the proposed dwellings and areas of hard surfacing, about both of which we were consulted on several occasions during the design process. In this way, it has been ensured that the existing trees have made a significant contribution to the design of the proposed development, rather than the design having dictated which trees are to be removed.

APPENDIX 2.

Outline Arboricultural Method Statement

A2.1. Tree Protection Plan

A2.1.1. A2.1.1. The TPP at **Appendix 4** shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in proximity to, retained trees, as described in the relevant panels on the drawing.

A2.2. Pre-start meeting

A2.2.1. A2.2.1. Prior to the commencement of any site clearance, ground preparation, demolition or construction works the developer will convene a pre-start site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. If appropriate, the tree felling/surgery contractor should also attend. At that meeting contact numbers will be exchanged, and the methods of tree protection shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to the TPP required as a result of the meeting shall be circulated to all attendees.

A2.3. Site clearance

A 2.3.1. No clearance of trees or other vegetation shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below). If any vegetation clearance is required behind the line of the protection fencing this will be made clear at the pre-start meeting and arrangements will be made to do this prior to the fencing's erection, under the supervision of the arboricultural consultant, who will ensure it doesn't cause any soil compaction or damage to the roots of trees to be retained.

A2.3.2. Except where within the RPAs of trees to be retained, all trees and other vegetation to be removed may be cut down or grubbed out as appropriate; but within the RPAs of trees to be retained, trees and vegetation will be cut by hand to ground level and stumps will be either left in place or ground out with a lightweight self-powered stump grinding machine. No excavators, tractors or other vehicles will enter the RPAs.

A2.4. Ground preparation and demolition

A2.4.1. No ground preparation or excavation of any kind, including topsoil stripping or ground levelling, shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below).

A2.4.2 Demolition of existing buildings and removal of existing areas of hard surfacing that abut or overlie RPAs will be undertaken with care, under the control and supervision of an appointed arboricultural consultant, to ensure that the adjacent soil is not unacceptably excavated, disturbed or compacted.

A2.5. Tree protection fencing

A2.5.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837, Section 6.2, prior to the commencement of construction. This will consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, welded mesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document. "**TREE PROTECTION ZONE - KEEP OUT**" or similar notices will be attached with cable ties to every third panel.

A2.5.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

A2.5.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

A2.5.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in

advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

A2.6. Manual excavation within RPAs

A2.6.1. The first 750mm depth of excavations required within the RPAs of the trees to be retained (as shown by **bold orange lines** on the TPP) will be dug by hand, using a compressed air soil pick if appropriate, and under on-site arboricultural supervision, to safeguard against the possibility of unacceptable root damage being caused to these specimens. Any roots encountered of over 25mm diameter will be cut back cleanly to the face of the dig nearest to the tree, using a sharp hand saw or secateurs, and their cut ends covered with hessian to prevent desiccation.

A2.7. Proposed hard surfaces within RPAs

A2.7.1. Unacceptable damage to the roots and rooting environments of the trees to be retained during the construction of proposed hard surfaces that encroach within RPAs will be avoided by building them above existing soil level, to avoid digging and thus severing of roots; and an appropriate ground covering will be used beneath the sub-base, to prevent or minimise compaction of the soil. This will be done in accordance with Section 7.4 of BS 5837. The locations where these measures will be required are marked by red **cross-hatching** on the TPP.

APPENDIX 3.

Tree Survey Schedule



ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA.,
RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), MArborA, TechCert (ArborA)
(Operations)

Tree Survey Schedule

Pondtail Farm, Horsham, West Sussex

November 2021

SJA ref: 21605-01

Tree Survey Schedule: Explanatory Notes

Pondtail Farm, Horsham, West Sussex

This schedule is based on a tree inspection undertaken by Matt Jones, Jeff Mashburn, Anthony Harte and James Bradford of SJAtrees (the trading name of Simon Jones Associates Ltd.), on 12, 13 and 18 December 2018. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in leaf. An additional site visit was undertaken by Finn Cullerne on 21 October 2020 and 18 November 2021. Weather conditions were overcast with persistent rain and deciduous trees were in partial leaf in October 2020 and clear, dry and bright with deciduous trees out of leaf in November 2021.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given.

Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree no.

Given in sequential order, commencing at "1". Numbers correspond with numbering on tree locations plan.

2. Species

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

3. Height

Estimated with the aid of a hypsometer, given in metres.

4. Trunk diameter

Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

5. Radial crown spread

The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

6. Crown break

Height above ground and direction of growth of first significant live branch.

7. Crown clearance

Distance from adjacent ground level to lowest part of lowest branch, in metres.

8. Age class

Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.

Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.

Mature: Apical dominance lost, tree close to ultimate height.

Over-mature: Mature, but in decline, no crown retrenchment

Veteran: Mature, with a large trunk diameter for species; but also showing signs of veteranisation, with significant decay or hollowing, and a crown showing retrenchment and a structure characteristic of the latter stages of life.

Ancient: Beyond the typical age range and with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has a structure characteristic of the latter stages of life.

9. Physiology

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

10. Structure

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Very good: No significant physiological or structural defects, an upright and reasonably symmetrical structure; a particularly good example of its species.

Good: No significant physiological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired physiological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant physiological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irreparable physiological or pathological defects, such that there may be a risk of collapse.

Hazardous: Significant and irreparable physiological or pathological defects, with a risk of imminent collapse.

11. Comments

Where appropriate comments have been made relating to:

-Health and condition

-Safety, particularly close to areas of public access

-Structure and form

12. Category

Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012, Table 1, adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to biodiversity.

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 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.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.

(1) Trees that are particularly good examples of their species, especially if rare or unusual.

(2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.

(3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

(1) 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 minor 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.

(2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.

(3) Trees with material conservation or other cultural value.

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

(1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.

(2) 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 landscape benefits.

(3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE

Pondtail Farm, Horsham, West Sussex

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
1	English oak	16m	800mm ivy est.	N 4.8m E 6m S 8.2m W 6.4m	2.5m	E 3m W 2.5m	Mature	Average	Indifferent	Off-site tree; heavily ivy-covered; ivy impedes inspection of base and lower trunk; field boundary specimen; readily visible in views from Langhurst Wood Road; significant component of group in which it stands.	B (12)
2	Horse chestnut	14m	705mm	N 5m E 6m S 5.5m W 6.25m	3m	E 5m W 4m	Mature	Average	Indifferent	Off-site tree; trunk diameter taken at 1.25m; three-stemmed from 1.5m; tight compression forks with evidence of included bark; ivy-covered; readily visible in views from Langhurst Wood Road; significant component of group in which it stands.	B (12)
3	Large-leafed lime	15m	680mm ivy est.	N 3.3m E 6m S 2.3m W 5.4m	NW 5m	E 7m W 5m	Semi-mature	Below average	Indifferent	Off-site tree; ivy-covered; three-stemmed from 2m, appears to comprise tight compression forks beneath ivy; deadwood throughout consistent with species characteristics; overhangs road; member of a group of trees along E boundary; significant component of group in which it stands; readily visible in views from Langhurst Wood Road; above average dead wood in crown.	B (2)
4	Horse chestnut	17m	915mm over ivy	N 5.5m NE 8m E 6m S 4.6m W 8.3m	4m	E 5m W 2.5m	Mature	Average	Indifferent	Off-site tree; trunk displays helical growth consistent with species morphology; twin-stemmed from 2.5m; tight compression fork with evidence of included bark; dominant stem orientated E; sub-dominant W; protruding and wind-exposed branch with excessive end weight, at risk of failure; member of a group of trees along E boundary; significant component of group in which it stands.	B (12)
5	Large-leafed lime	18m	700mm ivy	N 7.5m E 6m S 3.5m W 7.75m	4m	E 3m W 5m	Mature	Average	Moderate	Off-site tree; single trunk; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along E boundary; significant component of group in which it stands; readily visible in views from Road.	B (12)
6	Horse chestnut	20m	760mm	N 5m E 7m S 4.2m W 4.75m	5m	E 3m W 3m	Mature	Average	Moderate	Off-site tree; single trunk; ivy-covered; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along E boundary; significant component of group in which it stands.	B (12)
7	Large-leafed lime	18m	600mm est.	N 5.5m E 5m S 4.25m W 3m	4m	N 3m E 3m S 3m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; single trunk; asymmetrical crown as suppressed by adjacent specimens; storm damage in crown; deadwood up to 75mm diameter in canopy; not inconsistent with a tree of this size, age, species or location; member of a group of trees along S side of Mercer Road; contributes to the avenue of trees along Mercer Road.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
8	Horse chestnut	18m	780mm ivy	N 7m E 4.5m S 7.75m SW 9m W 3m	4m	N 4m S 2m	Mature	Average	Poor	Off-site tree; moderate changes in tone when lower trunk tapped with acoustic hammer, consistent with internal defects; minor bacterial exudations found on W at 500mm; historic mechanical wounding on N between 1m and 1.5m, wound wood development noted; three-stemmed from 3m with tight compression fork and evidence of included bark; main central stem has failed 0.5m from union with a large 400mm diam. wound; two further instances of storm damage in N canopy; leaving two small stems remaining originating at weak union, with extensive fungal fruiting bodies of 150mm to 400mm wide, consistent with <i>Polyporus squamosus</i> . Poor quality specimen of very limited future potential.	U
9	Large-leafed lime	18m	460mm	N 5.4m E 3.75m S 4.8m W 3.5m	S 2.5m	N 4.5m	Semi-mature	Average	Indifferent	Off-site tree; single trunk; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along S side of Mercer Road; contributes to the avenue of trees along Mercer Road; significant component of group in which it stands.	B (12)
10	Horse chestnut	23m	920mm over ivy	N 4m E 5.25m S 8.9m W 5m	S 4m	N 7m S 2m	Mature	Average	Indifferent	Off-site tree; many surface roots extending to 4.25m from base on S side; upper sides damaged by horses; three-stemmed from 2.5-5m; tight compression forks with evidence of included bark; heavily ivy-covered; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along S side of Mercer Road; contributes to the avenue of trees along Mercer Road; significant component of group in which it stands.	B (2)
11	Horse chestnut	22m	775mm	N 4.8m E 4.9m S 7.5m W 3.4m	6m	N 6m S 3m	Mature	Average	Indifferent	Off-site tree; prominent buttress root on S with further surface rooting extending to 3m from base on S, damaged on upper side by horses; historic mechanical wounding on W between 300mm and 1m, surrounding wound wood reveals no significant changes in tone when tapped with acoustic hammer; single trunk; becomes twin-stemmed from 5m above ground level with a tight compression fork and evidence of included bark; codominant stems; asymmetric canopy due to suppression from adjacent specimens; significant component of group in which it stands; member of group along S boundary of Mercer Road; contributes to Avenue of trees along Mercer Road.	B (12)
12	Large-leafed lime	22m	675mm	N 8.3m E 3.8m SE 8.6m S 5.6m W 6.1m	2m	S 2m	Mature	Average	Moderate	Off-site tree; many basal suckers; single trunk; ivy-covered; lack of low canopy on N, epicormic growth becoming established on S forming asymmetric canopy; asymmetric canopy due to suppression by adjacent specimens; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
13	Large-leafed lime	19m	580mm	N 5.3m E 5m S 7.3m W 7.5m	4m	N 6m S 4m	Semi-mature	Average	Indifferent	Off-site tree; growing amongst hedgerow; twin-stemmed from 3m, dominant stem orientated S, subdominant N; wide, saddle-shaped union with only minor evidence of included bark; asymmetric canopy due to suppression by adjacent specimens; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
14	Horse chestnut	6m	550mm est.	N 0m E 0m SE 2.8m S 3.25m SW 0m W 0m	2.5m	3m	Semi-mature	Dead	Hazardous	Off-site tree; dead tree.	U
15	Large-leaved lime	16m	865mm	N 3m E 4.2m S 3.8m W 3m	2m	2m	Mature	Average	Indifferent	Off-site tree; crown has been heavily reduced or "topped" in past with 2.5-3m regrowth; heavy epicormic growth between 1.5m into upper canopy; ivy-covered trunk; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (2)
16	Horse chestnut	18m	670mm ivy	N 6.3m E 4.2m S 6.5m W 3.5m	5m	3m	Semi-mature	Average	Indifferent	Off-site tree; prominent buttress roots on all sides; single, ivy-covered trunk; becomes twin-stemmed from 4m with tight compression fork and evidence of included bark; codominant stems; asymmetric canopy due to suppression from adjacent specimens; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
Tree Survey Schedule	Large-leaved lime	12m	810mm est.	N 3m E 3m S 2.75m W 2m	2m	2m	Mature	Average	Poor	Off-site tree; many basal suckers; two fungal fruiting bodies on W, one on E consistent with <i>Ganoderma</i> ; much epicormic growth throughout canopy due to historic heavy pruning; extensive decay on S from ground level to 3m; evidence of decay in upper canopy; of limited life expectancy; significant component of group in which it stands due to large size.	C (2)
18	Horse chestnut	17m	635mm	N 6.3m E 4.5m S 6.75m W 7.5m	4m	N 7m S 2m	Mature	Average	Indifferent	Off-site tree; prominent buttress roots and fluting on trunk consistent with species; cavity at 1m above ground level on SE measuring 30mm x 80mm with inward depth of 200, minor changes in tone when surrounding wood tapped with acoustic hammer confirming internal defect; evidence of exudation from trunk consistent with water egress but wound wood surrounding showing evidence of horse chestnut bleeding canker; three-stemmed from 2.5m, one central dominant leader with two subdominant stems orientated SW and NW, tight compression forks with evidence of included bark; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
19	Horse chestnut	14m	715mm ivy	N 2.75m E 5m S 6.25m W 5.75m	3.5m	N 6m S 3m	Mature	Average	Indifferent	Off-site tree; helical growth on trunk consistent with species morphology; historic barbed-wire fence becoming embedded on S; historic wound on S between 600mm and 1.25m, 400mm wide reveals degraded sapwood within, minor changes in tone when surrounding wound wood tapped with acoustic hammer; twin-stemmed from 2.5m with tight compression fork and evidence of included bark; asymmetric canopy due to field boundary location; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
20	Horse chestnut	14m	625mm ivy est.	N 3.5m E 6.75m S 4.6m W 4.6m	2m	N 8m S 4m	Semi-mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots to N; inspection of base and lower trunk impeded by dense dog-rose; heavily ivy-covered trunk; asymmetric canopy; deadwood up to 50mm diameter in mid and upper canopy; slightly above average deadwood in canopy; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
21	Horse chestnut	13m	680mm ivy est.	N 4.5m E 6.3m S 5.5m W 5.25m	4m	S 2m	Mature	Average	Indifferent	Off-site tree; lack of buttress roots; heavily ivy-covered; asymmetric canopy due to suppression from adjacent specimens; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
22	Horse chestnut	15m	710mm est.	N 4.75m E 5.8m S 7.8m W 6.3m	4m	N 6m S 3.5m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots; single trunk to 3m; heavily ivy-covered; becomes three-stemmed at 3m with tight compression forks and evidence of included bark; asymmetric canopy; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
23	Horse chestnut	16m	645mm ivy	N 3.4m E 4.25m S 7.5m W 4.75m	4m	N 8m S 3m	Mature	Average	Moderate	Off-site tree; single trunk, ivy-covered; asymmetric canopy due to suppression from adjacent specimens; showing morphological and physiological characteristics typical of size, age, species and location; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
24	Horse chestnut	15m	780mm ivy	N 3.5m E 5.4m S 4.5m W 6.6m	4m	N 7m S 4m	Mature	Average	Indifferent	Off-site tree; twin-stemmed from 2.5m, dominant stem orientated E, subdominant W; tight compression fork with evidence of included bark; heavily ivy-covered; asymmetric canopy due to suppression from adjacent specimens; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
25	Horse chestnut	14m	595mm	N 3.25m E 5m S 5m W 6m	4.5m	S 3m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 3m; tight compression fork with evidence of included bark; ivy-covered; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along S side of Mercer Road; significant component of group in which it stands; contributes to the avenue of trees along Mercer Road.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
26	Horse chestnut	17m	700mm ivy	N 4m E 5.4m S 5m W 5m	6m	N 7m S 4m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots on all sides; historic mechanical wounding on N and NW at 1m above ground level, prominent wound wood formation, no more than minor changes in tone when tapped with acoustic hammer; heavily ivy-covered trunk; epicormic growth between 2 and 4m; asymmetric canopy due to suppression from adjacent specimens; twin-stemmed from 4m with tight compression fork and evidence of included bark; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
27	Large-leafed lime	11m	400mm est.	N 2.75m E 3.75m S 3.25m W 3.5m	1m	S 2m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; small suppressed specimen; inessential component of group in which it stands.	C (1)
28	Horse chestnut	14m	690mm ivy	N 3.6m E 4.9m S 6.25m W 4m	2.5m	N 7m S 4m	Mature	Average	Indifferent	Off-site tree; trunk diameter taken over ivy; twin-stemmed from 3.5m dominant orientated N, subdominant S; unable to make assessment of bifurcation point, likely to comprise tight compression fork with possible included bark; ivy extends into upper canopy; bud size, colour and density appears consistent with size, age, species and location; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
29	Large-leafed lime	11m	425mm est.	N 3m E 3.5m S 4.25m W 4m	2m	S 1.5m	Semi-mature	Average	Poor	Off-site tree; many basal suckers; significant wounding on S from ground level to 4m up to 100mm at widest point with inward depth of 210mm, changes in tone when tapped with acoustic hammer around lower circumference; leans slightly towards N; irremediable defect; largely overtopped by adjacent and more dominant horse chestnut, T28; inessential component of group in which it stands	C (12)
30	Horse chestnut	17m	700mm	N 4.8m E 4.9m S 5.8m W 4.2m	4m	N 8m S 3m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots; ivy-covered; twin-stemmed from 3m with tight compression fork and evidence of included bark; codominant stems; dominant specimen within location; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
31	Large-leafed lime	12m	475mm	N 2m E 5m S 4m W 2.75m	2.5m	3.5m	Semi-mature	Low	Poor	Off-site tree; moribund.	U
32	Horse chestnut	19m	800mm ivy	N 3.5m E 5.8m S 5.4m W 4.6m	4m	N 8m S 3.5m	Mature	Below average	Indifferent	Off-site tree; heavily ivy-covered; three stemmed from 3m; likely to comprise tight compression forks with evidence of included bark; above average dead wood in crown, but largely restricted to mid-canopy on N side; member of a group of trees along S side of Mercer Road; contributes to the avenue of trees along Mercer Road; significant component of group in which it stands.	B (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
33	Horse chestnut	18m	600mm	N 4.5m E 4.4m S 5.3m W 4.25m	4m	N 7m S 3m	Mature	Average	Moderate	Off-site tree; lack of prominent buttress roots; single trunk; ivy-covered; dominant canopy growing predominantly towards S due to competition for light; minor deadwood throughout canopy consistent with field boundary tree; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road; superficial trunk wounding, likely to be mechanical, on S from ground level to 1m and up to 175mm width, no differences in tone when surrounding wood tapped with acoustic hammer	B (12)
34	Large-leafed lime	14m	500mm	N 2.2m E 2.5m S 3m W 2.5m	4m	4m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; single trunk; appears to have lost its top; narrow crown; suppressed crown as overtopped by adjacent specimens; inessential component of group in which it stands.	C (1)
35	Horse chestnut	17m	780mm ivy	N 4.4m E 4.3m S 5.4m W 3.8m	4m	N 5m S 4m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress rooting; no evidence of changes in tone when lower trunk tapped with acoustic hammer; twin-stemmed from 3m with tight compression fork and evidence of included bark and cambial dysfunction with exposed sapwood on NW of bifurcation point, measuring 1.25m and more evidence on NE stem; bud size, colour and density appear average; member of group along S boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
36	Horse chestnut	16m	755mm ivy	N 3.8m E 4.6m S 6.8m W 5.4m	3.5m	N 6m S 3m	Mature	Average	Indifferent	Off-site tree; heavily ivy-covered; three-stemmed from 2.5m; tight compression forks with evidence of included bark; asymmetrical crown as suppressed by adjacent specimens; member of a group of trees along S side of Mercer Road; significant component of group in which it stands; contributes to the avenue of trees along Mercer Road.	B (12)
37	Horse chestnut	14m	880mm ivy	N 4.5m E 7.75m S 9.1m W 7.5m	2.5m	N4m S1m	Mature	Average	Indifferent	Off-site tree; single trunk; heavily ivy-covered; wide and spreading canopy; member of a group of trees along S side of Mercer Road; significant component of group in which it stands; contributes to the avenue of trees along Mercer Road.	B (12)
38	Horse chestnut	13m	680mm ivy	N 5.1m E 5.1m S 2.8m W 5.2m	3m	N 2m S 6m	Semi-mature	Average	Indifferent	Off-site tree; single, stout trunk but becomes multi-stemmed from 3.5m, consistent with total loss of canopy and subsequent regrowth either through natural causes or pruning, regrowth likely to be on weakened attachment points; member of group along N boundary of Mercer Road; inessential component of group in which it stands; contributes to avenue of trees along Mercer Road.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
39	Horse chestnut	16m	705mm	N 7m E 5.3m S 4.75m W 5.9m	6m	N 3m S 8m	Mature	Average	Indifferent	Off-site tree; single trunk; evidence of historic failure at 3m on E, likely to be branch failure rather than stem failure; surrounded by significant wound wood formation, underlying sapwood appears degraded; remaining canopy shows no evidence of physiological decline but becomes twin-stemmed from 6m with a tight compression fork and evidence of included bark; wide-spreading canopy; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
40	Horse chestnut	14m	665mm	N 6.75m E 5.75m S 7.3m W 6.8m	4m	N 3m S 6m	Mature	Average	Moderate	Off-site tree; lack of prominent buttress rooting; single trunk; dominant lateral branch originating at 3.5m on S beginning to form a tight compression fork but as of yet no evidence of included bark; evidence of recent pruning in lower canopy on E; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
41	Horse chestnut	18m	880mm ivy	N 7.8m E 6.8m S 6.1m W 5.3m	3.5m	N 3m S 5m	Mature	Average	Poor	Off-site tree; heavily ivy-covered; significant cavity formation at 2m on SE 375mm x 110mm inward depth at least 500mm, internal sapwood significantly degraded, significant changes in tone when circumference of trunk tapped with acoustic hammer, extensive hollowing; in a species known to be poor at decay compartmentalisation; no evidence of fungal fruiting bodies noted due to presence of ivy; wide-spreading canopy; ivy extends into upper third of canopy; no evidence of physiological decline but of limited potential due to cavity formation; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	C (2)
42	Horse chestnut	17m	740mm	N 5.9m E 4.5m S 5.1m W 5m	6m	N 2.5m S 7m	Mature	Average	Indifferent	Off-site tree; two areas of historic mechanical wounding, one at 700mm on S shows significant wound wood development but not yet fully occluded, one at 1.1m on SE which is almost fully occluded; cavity forming at site of previous pruning wound at 2m on SE, unable to quantify extent from ground level, underlying sapwood appears degraded consistent with weathering; becomes twin-stemmed at 5m, dominant stem orientated S, subdominant N; subdominant N stem shows evidence of historic stem failure at 11m above ground level on top side of branch, possible decay point; generally consistent with tree of age, size, species and location; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
43	Common lime	17m	475mm est.	N 3.5m E 2.3m S 2.4m W 2.25m	2m	N 2m S 9m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; single trunk with cavity formation at 1.5m on S side; insignificant defect; twin-stemmed from 8m; tight compression fork with evidence of included bark; appears to have lost its tops; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
44	Horse chestnut	16m	730mm	N 7.5m E 5.1m S 5m W 5.6m	4m	N 3.5m S 6m	Mature	Average	Indifferent	Off-site tree; single trunk with epicormic growth rising to 4m; previously twin-stemmed from 4m but N-most stem failed historically leaving significant wound of 1.25m x 400mm, appears to be cavity formation and possible decay at bifurcation point, unquantifiable from ground level; species has poor ability to successfully compartmentalise decay and therefore likely to be of only limited potential; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	C (2)
45	Horse chestnut	20m	820mm ivy	N 7.5m E 6.5m S 3.9m W 6.1m	4m	N 3m S 7m	Mature	Average	Indifferent	Off-site tree; three areas of exposed sapwood at base on SE separated by ribs of wound wood development, largest area up to 100mm wide and 1m high, underlying sapwood appears degraded but not decayed and moderate changes in tone when lower trunk tapped with acoustic hammer; twin-stemmed from 3m with tight compression fork and evidence of included bark, codominant stems; wide-spreading canopy; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (2)
46	Large-leafed lime	12m	190mm 250mm 200mm est. 235mm	N 5m E 4.8m S 3m W 4m	2m	N 2m S 5m	Semi-mature	Average	Indifferent	Off-site tree; multi-stemmed from base; tight compression forks with evidence of included bark; suppressed specimen; inessential component of group in which it stands.	C (1)
47	Horse chestnut	15m	710mm ivy	N 7.8m E 4.25m S 2.6m W 5.5m	3m	N 3m S 9m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots; helical growth on stems consistent with species morphology; evidence of significant tertiary stem historically removed on SW; twin-stemmed from 5m with tight compression fork and evidence of included bark, codominant; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
48	Large-leafed lime	18m	670mm	N 4.25m E 3.1m S 3m W 3m	2m	N 1.5m S 3m	Semi-mature	Below average	Indifferent	Off-site tree; evidence of fungal fruiting bodies consistent with the decay fungus <i>Ganoderma australe/applanatum</i> on N; twin-stemmed from 3m with a tight compression fork and evidence of included bark, codominant; profuse epicormic growth makes up majority of canopy; notable dieback at branch tips and above average levels of deadwood; of limited potential but currently makes some contribution to the avenue effect along Mercer Road.	C (2)
49	Horse chestnut	21m	845mm	N 7.5m E 8.4m S 7.75m W 4.2m	5m	N 2.5m S 7m	Mature	Average	Indifferent	Off-site tree; evidence of damage between ground level and 2m on N consistent with grazing animals; no significant changes in tone when tapped with acoustic hammer; three-stemmed from 3-4m with tight compression forks and evidence of included bark; helical growth on main trunk and all subsequent stems, consistent with species morphology; wide-spreading canopy; readily visible in long-range views from Langhurst Wood Road to NE; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
50	Large-leafed lime	14m	500mm est.	N 3.5m E 3m S 1.75m W 3m	2m	N 1.75m S 2m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; single trunk; narrow crown; largely lost against the backdrop of more significant trees in views from Langhurst Wood Road; inessential component of group in which it stands.	C (1)
51	Horse chestnut	19m	640mm	N 7.1m E 6.3m S 4.75m W 4.5m	4m	N 2.5m S 5.5m	Mature	Average	Moderate	Off-site tree; prominent buttress root on N, less so in other orientations; single trunk; high and suppressed canopy due to suppression from adjacent specimens; evidence of historic crown lifting; minor deadwood throughout typical of field boundary specimen; member of group along N boundary of Mercer Road; significant component of group in which it stands; contributes to avenue of trees along Mercer Road.	B (12)
52	Large-leafed lime	11m	540mm	N 7.3m E 2m S 1.5m W 2.5m	3.5m	N 3m S 1m	Semi-mature	Below average	Indifferent	Off-site tree; prominent buttress roots, with mechanical wounding; much epicormic growth comprising canopy; above average dead wood in crown; suppressed specimen; inessential component of group in which it stands.	C (12)
53	Horse chestnut	24m	1045mm	N 7.8m E 6.25m S 6m SW 8.3m W 7.25m	6m	N 3m S 6m	Mature	Average	Indifferent	Off-site tree; prominent buttress roots on all sides with notable trunk fluting; N side of trunk between ground level and 1.5m shows cambial degradation consistent with grazing animals, some of these have become fully occluded and reveal moderate changes in tone when tapped directly with acoustic hammer, however, surrounding wound wood reveals no significant changes in tone; distorted bark platelets at 2m on NW, semi-consistent with bacterial canker but no bleeding exudates noted; twin-stemmed from 3m, wide, saddle-shaped union with no significant evidence of included bark; codominant thereafter; N stem bifurcates again at 7m with a tight compression fork and evidence of included bark; wide-spreading canopy overtopping and suppressing adjacent specimens; the most visible individual in views from Langhurst Wood Road to N on approach to site; significant component of group in which it stands; contributes to avenue effect along Mercer Road.	B (12)
54	Large-leafed lime	14m	580mm	N 4.25m E 2.6m S 4.1m W 3.6m	2m	N 2m S 2m	Semi-mature	Average	Indifferent	Off-site tree; many basal suckers; profuse epicormic growth throughout, typical of species characteristics; twin-stemmed from 7m; tight compression fork with evidence of included bark; suppressed crown as overtopped by adjacent specimens; inessential component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
55	Horse chestnut	16.5m	820mm ivy	N 7.4m E 8.5m S 4.2m W 5.4m	4m	N 0m S 2.5m	Mature	Average	Poor	Off-site tree; prominent fluting and buttress rooting on SE and E; cavities forming at sites of previous pruning wounds; significant horizontal cavity on E at 3m above ground level, extends upwards for at least 1m with ivy obscuring entire cavity, 125-150mm wide, degraded sapwood beneath; trunk leans heavily towards N from this point putting additional biomechanical stress on cavity; lost apical dominance historically and grows predominantly towards N and canopy is largely offset from base; historical and significant stem failure at 400mm, currently lying on ground and resting on tree, at risk of failure in high winds and damage to underlying fence and livestock; two remaining principal branches both pendulous to lateral in nature with excessive end-weight, at risk of failure and should be removed for sound arboricultural management purposes; member of group on N side of Mercer Road; E-most specimen located at junction between Mercer Road and Langhurst Wood Road and prominent from these locations but suppressed by more dominant tree to E; significant component of group in which it stands.	C (2)
56	English oak	13m	1110mm est.	N 10.25m E 10m S 12m W 12.3m	2.5m	W 1.5m	Mature	Average	Moderate	Off-site tree; growing from within hedgerow; single trunk; wide-spreading canopy but squat in nature due to field boundary location; deadwood throughout canopy up to 100mm diameter, consistent with lack of management and field boundary location, overhangs Langhurst Wood Road to E, readily visible from this road; significant component of E boundary.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
57	English oak	17m	1760mm	N 8.9m NE 8.2m E 9.1m SE 11.7m S 8.9m SW 9.1m W 12.8m NW 7.8m	4m	N 3.5m E 4m S 3m W 4m	Veteran	Below average	Poor	Growing on raised bank with ground levels at least 1.25m higher to N than S where there is a track into farmhouse; as a result of level change, prominent buttress and surface roots extend to E and W; one prominent buttress root on E reveals significant changes in tone when tapped with acoustic hammer and this dull tone can be heard in entire segment between ground level and 1.5m above ground, as per existing ground level between E and S quadrant of tree; cavity on S where there is a lack of spreading buttress roots, can be probed to 400mm and measures 130mm x 130mm at extremity of differences in tone previously noted; second cavity between two buttress roots on SW, opening between two buttresses measures only 80mm wide by 100mm high but it can be probed beyond 500mm and lower buttress roots where they meet ground level in this orientation also reveal significant changes in tone, evidence of heavily degraded fungal fruiting body semi-consistent with beefsteak fungus (<i>Fistulina hepatica</i>); third area of decay on W at junction between existing soil level and buttress roots, degradation of lignin, very 'floppy' and smooth wood that is easily squashed and pulled apart by hand revealing significant basal decay; single trunk; historically crown lifted to 4m, pruning wounds fully occluded; main unions tensile; profuse epicormic growth on trunk extending into canopy; numerous woodpecker holes throughout, suggesting wildlife value; high levels of deadwood in canopy up to 200mm diameter; notably reduced shoot-extension growth; significant tip dieback and stag heads in upper canopy; largely screened from external viewpoints but a significant component of landscape from internal viewpoints. Internal decay detection required to confirm safe, useful life expectancy. Of no more than moderate quality but of high landscape and cultural value.	A (23)
58	Ash	14m	340mm	N 4m E 1.5m S 4.75m W 5.25m	2m	2m	Semi-mature	Average	Indifferent	Off-site tree; self-seeded specimen; suppressed specimen; inessential component of group in which it stands.	C (1)
59	Norway maple	15m	700mm	N 5.5m E 3.4m S 5.5m W 3.9m	2m	2m	Mature	Average	Hazardous	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed; significant hollowing at base infested with decay fungus <i>Ganoderma pfeifferi</i> ; at risk of failure and should be removed for sound arboricultural management purposes.	U
60	Sycamore	14m	425mm est.	N 3m E 5m S 6m W 5.75m	2m	2m	Semi-mature	Average	Moderate	Self-seeded specimen that makes no significant contribution to the arboricultural character of the site.	C (1)
61	Sycamore	16m	200mm est. 480mm est.	N 5m E 4.5m S 3.75m W 6.5m	2m	1.5m	Semi-mature	Average	Indifferent	Twin-stemmed from 1m; tight compression fork with evidence of included bark; crown overhangs adjacent building; screened in views from Langhurst Wood Road by other trees.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
62	Sycamore	11m	275mm est.	N 3.5m E 1.5m S 3m W 4m	3m	3m	Semi-mature	Average	Indifferent	Small, self-seeded specimen.	C (1)
63	Norway maple	13m	645mm	N 6.25m E 8m S 3m W 3.25m	3m	3m	Semi-mature	Average	Indifferent	Heavily leaning trunk; suppressed specimen; screened in views from Langhurst Wood Road by other trees.	C (1)
64	Scots pine	17m	480mm est.	N 3.9m E 4m S 3.5m W 3m	10m	10m	Semi-mature	Average	Moderate	Off-site tree; single trunk; upper canopy visible in long-range views; significant component of group in which it stands.	B (12)
65	Horse chestnut	18m	475mm 600mm 200mm 575mm all est.	N 3.25m E 7.5m S 6.5m W 5.75m	3m	W 1m	Mature	Average	Indifferent	Off-site tree; multi-stemmed from base; tight compression forks with evidence of included bark; upper canopy visible in long-range views.	B (12)
66	Sycamore	15m	400mm est.	N 4m E 4m S 4m W 4m	3m	2m	Semi-mature	Average	Moderate	Off-site tree; tree displaying morphological and physiological features consistent with size, age, species and location.	C (1)
67	Common lime	17m	725mm est.	N 1.75m E 4.25m S 5.5m W 3m	1m	1m	Mature	Low	Hazardous	Heavily infected with decay fungus <i>Ganoderma</i> sp.; twin-stemmed from 1.5m, codominant, tight compression fork with evidence of included bark; extensive dieback within canopy; moribund and at risk of failure. Not possible to determine whether within or outside site boundary.	U
68	English oak	20m	795 mm	N 6m E 6.75m S 10.9m W 5.5m	2.5m	3m	Mature	Average	Moderate	Evidence of animal damage to lower trunk and buttress roots on S and E; located on river bank; single trunk; ivy in canopy; storm damage and deadwood throughout consistent with lack of management, typical of field boundary specimen; readily visible from internal viewpoints; significant component of group in which it stands.	B (12)
69	Horse chestnut	14m	290mm est.	N 4m E 4m S 3m W 2.75m	2m	3m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 2m; tight compression fork with evidence of included bark; asymmetrical crown as suppressed by adjacent specimens; suppressed crown as overtopped by adjacent specimens; largely lost against the backdrop of larger Scots pines in views from the S along Langhurst Wood Road.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
70	Horse chestnut	16m	720mm	N 5m E 7m S 5.25m W 5.75m	4m	S 3.5m	Mature	Average	Poor	Significant cavity at base on W 175mm x 300mm can be probed beyond 500mm; significant hollowing at base; significant changes in tone when tapped with acoustic hammer; twin-stemmed from 2m; subdominant stem orientated N, at risk of failing across road; no evidence of physiological decline noted within canopy; visible from Langhurst Wood Road; significant component of group along E boundary but with heavily compromised structure.	U
71	Horse chestnut	14m	860mm ivy	N 6m E 6.5m S 4.25m W 6.4m	2.5m	SW 3m	Mature	Average	Indifferent	Off-site tree; no visible defects at the base; heavily ivy-covered, obscuring full inspection; twin-stemmed from 2.5m with tight compression fork; member of a group of trees along W side of Langhurst Wood Road; significant component of group in which it stands.	B (12)
72	Horse chestnut	16m	750mm	N 4m E 6.5m S 5.5m W 5.75m	3m	SW 3m	Mature	Average	Moderate	Lack of prominent surface or buttress roots; loss of apical leader in N upper canopy leaving 2m dead stub 150mm diameter; member of a group of trees along W side of Langhurst Wood Road; significant component of group in which it stands; storm damage in crown.	B (12)
73	Common lime	9m	560mm	N 4.75m E 4.5m S 6m W 5.5m	2.5m	SW 2m	Semi-mature	Average	Indifferent	Many basal suckers; evidence of historical leader loss with further branch and failures throughout with associated reactive growth; member of a group of trees along W side of Langhurst Wood Road; inessential component of group in which it stands.	C (2)
74	Scots pine	5m	375mm est.	0m	0m	0m	n/a	Dead	Hazardous	Off-site tree; standing monolith.	U
75	English oak	16m	650mm est.	N 7.25m E 5.6m S 3m W 5.6m	4m	NW 3m	Mature	Average	Indifferent	Off-site tree; prominent buttress roots on N damaged on upper side likely by grazing animals; Sussex post and rail fence attached historically and tree is now occluding ends of rails; heavily burred trunk; much epicormic growth throughout canopy, consistent with onset of reduced physiology; no significant areas of sparsity within canopy; readily visible across open field to N and upper canopy visible in views from Langhurst Wood Road; largely screened from other orientations.	B (12)
76	Horse chestnut	12m	325mm est.	5.75m	2.5m	W 2m	Semi-mature	Average	Moderate	Off-site tree located in rear private garden; small specimen of no more than moderate quality; of limited value due to small size.	C (1)
77	English oak	17m	850mm est.	N 12m E 9.5m S 9.5m W 9.3m	2.5m	W 2.5m	Mature	Average	Indifferent	Off-site tree; lack of prominent buttress roots; single trunk with evidence of dark staining on NW, semi-consistent with water run-off from unions above; twin-stemmed from 3m, dominant orientated N, subdominant S, moderately tight compression fork but no evidence of significant included bark; dominant stem bifurcates further at 10m above ground level with a tight compression fork and evidence of included bark; wide-spreading canopy with evidence of storm damage throughout, consistent with a field boundary specimen; significant component of boundary on which it stands; readily visible in long-range views across site; upper canopy likely visible from Langhurst Wood Road to E.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
78	Wild cherry	13m	325mm est.	N 3.25m E 3m S 2.25m W 3m	3m	W 4m	Semi-mature	Average	Indifferent	Off-site tree; single trunk; trunk exudations consistent with bacterial bleeding canker; suppressed crown as overtopped by adjacent specimens.	C (1)
79	English oak	18m	1505mm	N 10.8m NE 12.8m E 9.2m SE 14.5m S 10.3m SW 8.6m W 8.8m NW 8.5m	4m	N 9.5m E 5.9m SE 8.6m S 5.7m SW 7.5m W 7.8m NW 7m	Veteran	Below average	Poor	Off-site tree; prominent buttress roots on all sides with large surface root growing S with 200mm wide wound on upper surface with decayed internal wood; significant amounts of fungal activity at base in two locations, both suggestive of it being beefsteak fungus (<i>Fistulina hepatica</i>): A) several fungal fruiting body scars from S buttress to E buttress between 0.5m and ground level on trunk base; heavily degraded fungal brackets up to 300mm diameter on ground around base of tree; high variance of tone when area above buttress roots when struck with acoustic hammer from ground level to 1.5m above buttress depressions. B) a 250mm wide heavily degraded bracket fungi at 0.3m on N trunk, due to state of degradation identification not possible; cavity formed below bracket fungi, can be probed to 500mm depth; in all orientations tapping lower extremities of buttress roots at junction with existing soil levels reveals moderate changes in tone, indicative of hollowing. Single trunk; evidence of large limb removal historically on NW at 3m; evidence of water run-off on all sides of trunk; significant and extensive storm damage throughout; 400mm diameter lateral limb growing horizontally directly south, originating at 5m on trunk extending at this level for 5.3m (6.7m above ground level at 5.3m from trunk) before bifurcating; lower bifurcation pruned at point of origin; remaining branch extends upwards in line with bank slope with a clearance of 6.5m; moderate epicormic growth in inner canopy; above average deadwood in canopy, with stag heads in outer canopy consistent with retrenchment; asymmetric canopy due to suppression from adjacent specimens; specimen displaying characteristics typical of a veteran oak. Upper canopy visible although not easily identifiable as an individual in long-range views from A264 to S; readily visible in long-range views across site from N; significant component of wider arboricultural landscape.	A (3)
80	English oak	17m	1015mm over ivy	N 8.4m E 11.1m S 11m W 11m	3.5m	2m	Mature	Average	Indifferent	Off-site tree; heavily ivy-covered; wide, spreading canopy overtopping adjacent trees; significant component of group in which it stands.	B (12)
81	English oak	12m	590mm	N 6.4m E 7.75m S 6m W 8m	3m	E 1m	Semi-mature	Average	Moderate	Off-site tree; prominent buttress roots on all sides; significant level changes, higher to E and lower to W, resulting in depression between two buttress roots on W and can be probed to 400mm but showing no significant degradation; single trunk; typical of field boundary specimen; significant component of boundary on which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
82	English oak	18m	965mm	N 5.1m E 6.5m S 7m W 7m	4m	N 5m E 5m	Mature	Average	Indifferent	Off-site tree; growing on historic ditch line and differences in soil level around base, lower on W and higher on E, resulting in depression between two buttress roots on W can be probed to 250mm but not revealing any significant changes in tone when tapped with acoustic hammer; prominent buttress roots run parallel with ditch; single trunk; twin-stemmed from 4.5m, co-dominant thereafter; fine, twiggy deadwood; significant component of boundary on which it stands.	B (12)
83	Field maple	11m	600mm est.	N 5.25m E 7m S 5m W 6m	2.5m	1.75m	Mature	Average	Indifferent	Off-site tree; large trunk diameter as a result of four individual stems all coming together to form a stout trunk with areas of included bark throughout; tight compression forks throughout canopy, typical of self-seeded specimen; inessential component of boundary on which it stands.	C (1)
84	Ash	12m	225mm 100mm 200mm all est.	N 4.5m E 4.5m S 4.5m W 4.5m	2m	2m	Semi-mature	Average	Indifferent	Off-site tree; three-stemmed from base; tight compression forks with evidence of included bark; asymmetrical crown as suppressed by adjacent specimens; inessential component of group in which it stands.	C (1)
85	English oak	13m	805mm	N 8.7m E 7.4m S 9.25m W 7.3m	3m	N 2.5m	Mature	Average	Moderate	Off-site tree; tree displaying morphological and physiological features consistent with size, age, species and location; significant component of group in which it stands.	B (12)
86	English oak	12.5m	800mm	N 7m E 6m S 4m W 3m	3m	3m	Mature	Low	Poor	Off-site tree; cavity at base; extensive hollowing; moribund.	U
87	English oak	15m	1485mm	N 8.75m NE 10.3m E 10.75m SE 11m S 14.3m SW 11m W 9.75m NW 8.5m	3.5m	N 2m S 3m	Mature	Average	Indifferent	Growing on bank of historic stream; ground levels considerably higher on N to S; stream 3m from base to S; one significant surface root extends towards SE across the river, evidence of severance on root, likely historic; depressions forming between buttress roots on all sides; heavily degraded fungus on the S trunk at 0.5m, too degraded to identify species, no variation in tone when struck with an acoustic hammer; trunk leans slightly towards S; main unions tensile; moderate levels of epicormic growth in inner canopy; above average deadwood and storm damage in canopy; deadwood up to 150mm diameter; historically crown reduced to 13m, regrowth up to 4m in length and 200mm in diameter; no significant evidence of veteranisation or retrenchment noted; typical field boundary specimen; significant component of group in which it stands; of moderate quality but high landscape value as readily visible in long-range views across field in views from Mercer Road to N. Of long-term potential; likely to be considered a 'notable' tree.	B (12)
88	Ash	13m	265mm 480mm	N 9.1m E 9m S 2m W 2m	3m	N 3m	Semi-mature	Below average	Indifferent	Twin-stemmed from base; tight compression fork with evidence of included bark; suppressed crown as overtopped by adjacent specimens; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
89	Ash	17m	1170mm	N 9.8m E 5.5m S 9.4m W 8.5m	S 1.5m	N 3m S 1m	Mature	Below average	Poor	Located immediately N of stream; prominent buttress roots on all sides, particularly in 180-degree area between E and W; twin-stemmed from 2m with tight compression fork and evidence of included bark, dominant orientated SE, subdominant NW; extensive dieback in upper canopy; profuse epicormic growth in upper canopy; of low arboricultural quality but currently of moderate landscape value due to size and visibility in views across open ground to N.	C (2)
90	Field maple	17m	805mm	N 9.5m E 2.1m S 9.25m W 9m	3m	N 3m S 1.5m	Over-mature	Average	Moderate	Likely to have suffered root damage due to creation of man-made stream to S; cavity forming at site of previous pruning wound (500mm diameter) at 2.5m on S can be probed to 500mm; S trunk has extensive woodpecker holes from 3m to 5m, indicating significant decay pockets; tapping around this reveals significant changes in tone; sparse upper canopy with evidence of tip die back, indicative of physiological stress; large specimen for species; significant component of group in which it stands although heavily overtopped and suppressed by adjacent English oak; significant animal damage (likely deer and horses) on NE between 500mm and 2m.	C (3)
91	English oak	18m	1400mm	N 10.4m E 12.25m S 13.7m W 6.25m	3m	N 3m S 2m	Mature	Below average	Indifferent	Lack of prominent buttress roots on S but evident on N; vertical darkened staining on SE, consistent with water run-off; likely to have suffered some extent of root damage during excavation for man-made stream to S; single upright trunk; tensile unions; dense epicormic growth in inner canopy; low and inner foliage healthy and dense but upper canopy displaying stag heads with tip dieback evident; above average deadwood in upper canopy; wide-spreading canopy overtopping adjacent field maple; essential component of group in which it stands. Of moderate quality but high landscape value; of long-term potential. Likely to be considered a 'notable' tree.	B (12)
92	English oak	17m	960mm	N 7.5m E 6m S 10m W 9.6m	3m	W 4m	Mature	Average	Indifferent	Off-site tree; superficial mechanical wounding on W side of trunk, consistent with damage from a high-sided vehicle; asymmetrical crown as suppressed by adjacent specimens; significant component of group in which it stands.	B (12)
93	English oak	17m	1110mm est.	N 7m E 8m S 8m W 9.6m	N 3m	W 4m	Mature	Average	Moderate	Off-site tree; heavily ivy-covered; asymmetrical crown as suppressed by adjacent specimens; typical roadside specimen; significant component of group in which it stands.	B (12)
94	English oak	17m	1050mm est.	N 8m E 8m S 9m W 7m	4m	4m	Mature	Average	Indifferent	Off-site tree; much epicormic growth on trunk; tight compression forks with evidence of included bark between 3-4m; significant component of group in which it stands.	B (12)
95	Field maple	9m	180mm est.	3m	3m	2m	Semi-mature	Average	Moderate	Off-site tree; typical of a hedgerow specimen; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
96	Wych elm	12m	520mm ivy	N 5.5m E 6m S 6m W 5.2m	3m	W 2.5m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 2m; tight compression fork with evidence of included bark; typical of a hedgerow specimen; significant component of group in which it stands.	B (12)
97	Wych elm	11m	280mm ivy est.	3m	2m	2m	Semi-mature	Average	Moderate	Off-site tree; asymmetrical crown as suppressed by adjacent specimens; suppressed specimen; inessential component of group in which it stands.	C (1)
98	Wych elm	12m	355mm 410mm	N 3m E 4.5m S 5.25m W 4.8m	3m	W 3m	Semi-mature	Average	Indifferent	Twin-stemmed from base; tight compression fork with evidence of included bark; typical of a hedgerow specimen; significant component of group in which it stands.	B (12)
99	Wych elm	12m	120mm ivy est. 320mm ivy	N 3.25m E 4m S 2.75m W 3.75m	3m	W 3m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from base; tight compression fork with evidence of included bark; asymmetrical crown as suppressed by adjacent specimens; significant component of group in which it stands.	B (12)
100	Wych elm	12m	350mm	N 4.5m E 4m S 2.5m W 4.75m	2m	W 2m	Semi-mature	Average	Moderate	Off-site tree; typical of a hedgerow specimen; significant component of group in which it stands.	B (12)
101	English oak	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	No longer present	n/a
102	English oak	20m	1010mm	N 4.5m E 6.4m S 10m SW 10.7m W 7.6m	2.5m	2.5m	Mature	Average	Indifferent	Protective fencing installed 1.5m from trunk. Large buttresses to N, E and S up to 1m in length, showing minor mechanical damage with expected woundwood growth and no cavity formation. Basal cavity facing SW (300mm x 100mm opening and 600mm deep), with no evidence of fungal fruiting bodies. Soil excavation to E beneath buttress (200mm deep) with no clear evidence of cavity formation or fungal fruiting bodies. Minor mechanical damage at base facing E (up to 150mm x 80mm), showing decay but no cavities or fungal fruiting bodies and expected woundwood growth up to 80mm diam. On sounding full circumference with acoustic hammer, no tonal differences noted. Single upright trunk; tensile main unions; large, established epicormic growth on trunk up to 150mm diameter; deadwood consistent with age, species and location. Multiple large tear-out wounds throughout crown (up to 1.5m x 0.3m) showing some cavity formation and expected woundwood growth; dead limb in upper crown facing S (diam. at origin 400mm); some large deadwood in other areas of crown; foliage density appears typical throughout crown; two large stumps to the N, which explains the asymmetric canopy shape; Visible in long-range views from Mercer Road, Langhurst Wood Road, properties to E and W and railway line to SW. Of no more than moderate quality; of high landscape value.	B (23)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
103	English oak	19m	1160mm	N 12.8m NE 11.5m E 10.2m SE 12.6m S 8.9m SW 11.1m W 10.1m	3m	2.5m	Mature	Average	Indifferent	Protective fencing 1.5m from trunk. Large buttresses to E, S and W (up to 800mm length) showing significant bark loss; this bark loss extends upwards on trunk to 1.5m to the N, E and W, with no cavity formation or fungal fruiting bodies apparent. Dark staining on trunk to E between 1-2m above ground, and up to 200mm in length; orange-brown, cloudy, viscous substance present at origin of some staining lines, no exit holes apparent. Large wound on trunk facing S at 3.5m, showing 250mm of exposed heartwood and woundwood growth up to 250mm wide; partially-degraded fungal bracket (200mm wide) in centre of wound, possibly beefsteak fungus (<i>Fistulina hepatica</i>). On sounding full circumference of trunk with acoustic hammer, no tonal differences noted (except where corky outer bark has been lost). Single upright trunk; crown lifted to 4m with significant pruning wound on S trunk at 3m of 350mm diameter with small cavity; large tear-out wounds throughout crown (up to 1m long and 250mm diam.) showing some cavity formation and expected woundwood growth; major deadwood throughout crown; tear-out wounds and dead wood consistent with age, species and location; main unions tensile. Visible in long-range views from Mercer Road, Langhurst Wood Road, properties to E and W and railway line to SW. Of no more than moderate quality; of high landscape value.	B (23)
104	English oak	15m	860mm	N 6m E 8.5m S 11.5m W 8.75m	2.5m	2.5m	Over-mature	Low	Poor	Protective fence 1.5m from trunk. Large buttresses to N, E and W (up to 800mm in length). Large basal cavity facing NE (300mm x 200mm opening and 0.5m deep); entire circumference of the base has been stripped of bark by grazing animals with sap wood decayed to 25mm and soil excavation extending under root plate beneath centre of trunk. Large basal cavity facing W (500mm x 550mm opening and 400mm deep), with 300mm wide bracket of decay fungus <i>Ganoderma resinaceum</i> within cavity; second smaller <i>G. resinaceum</i> bracket (140mm wide) in basal fissure facing S. Three clumps of fungal fruiting bodies consistent with spindle shank (<i>Collybia fusipes</i>) growing from buttresses/soil to W, one of 250mm width, the remaining two are small at with 50mm width. Single upright trunk with bark loss extends to 2m on trunk and extends to the entire circumference of the base; numerous exit holes visible in areas of bark loss. On sounding trunk with acoustic hammer, minor tonal differences found within 200mm above smaller, S-facing <i>G. resinaceum</i> bracket. Small isolated areas of stained bark at 2m facing N and S. Moderate epicormic growth throughout crown, leaves marcescent. Outer canopy entirely defoliated with dieback extending to the inner epicormic growth; high levels of major and minor deadwood. Specimen in a state of terminal decline and of only short-term potential. Visible in long-range views from Mercer Road, Langhurst Wood Road, properties to E and W and railway line to SW.	U

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
105	English oak	19m	1190mm	N 8.75m NE 8.9m E 11m S 10.75m W 8m	3.5m	3m	Mature	Below average	Indifferent	Protective fencing 1.5m from trunk. Moderate buttressing in all directions (up to 400mm in length); entire circumference of base showing bark loss (except four 100mm wide columns still intact) consistent with horse damage, with minor woundwood response growth (up to 80mm in places); some buttresses to S and W show cavity formation to 60mm depth and small, isolated fungal fruiting bodies (heavily decayed, but likely saproxylic species). Bark loss extends to 1.5m on trunk to N, with numerous exit holes visible in areas of bark loss. On sounding full circumference of trunk with acoustic hammer, no tonal differences noted (except where corky outer bark is lost). Single upright trunk; crown lifted to 3.5m with historic pruning wounds up to 400mm in diameter, showing good woundwood response; main unions tensile; becomes co-dominant at 8m; two large historic wounds to SE, the larger showing 300mm of exposed heartwood and up to 200mm of woundwood growth; smaller wound fully occluded; major deadwood throughout crown (up to 2.5m long and 300mm diam.); field grown dominant canopy; outer canopy slightly sparse with some tip dieback, likely as a result of disrupted physiological pathways from the animal wounding at base. Visible in long-range views from Mercer Road, Langhurst Wood Road, properties to E and W and railway line to SW. Remains of long-term potential subject to decompaction and mulching of surrounding soil.	B (23)
106	Cider gum	7m	150mm est. 250mm est.	N 4m E 3m S 2m W 2m	2m	2m	Young	Average	Indifferent	Off-site tree; large wounds consistent with removal of co-dominant stem and limbs.	C (12)
107	Pear	13m	400mm est.	N 3.5m E 3.5m S 3.5m W 3.5m	1.5m	1.5m	Mature	Average	Indifferent	Off-site tree; twin-stemmed from 2m showing a tight compression fork and natural bracing.	B (12)
108	English oak	13m	550mm	N 6.5m E 6.5m S 5m W 5m	2.5m	E 2.5m	Semi-mature	Average	Indifferent	Off-site tree; some large pruning wounds on trunk and lower branches up to 250mm diam. with expected woundwood growth.	C (12)
109	Goat willow	10m	300mm est. 250mm est. 485mm	N 5.5m E 5.5m S 5.5m W 5.5m	2m	S 4m	Mature	Average	Poor	Off-site tree; twin-stemmed from base, showing a tight compression fork with evidence of included bark and much outer bark loss; sounding trunk with acoustic hammer produces significant tonal differences to the N and S; many marcescent leaves throughout crown; damage to S-facing branches consistent with large vehicle impacts.	C (23)
110	Large-leaved lime	15m	500mm est.	N 5.75m E 4m S 3.5m W 4m	2m	N 3m S 3m	Semi-mature	Average	Indifferent	Off-site tree; large, dense suckering growth up to 150mm diam. and historically managed at 1m height. Much epicormic growth along trunk, consistent with age and species. Some historic pruning wounds up to 200mm diam. and mostly occluded. Some large dead wood at top of crown. Significant component of avenue along Mercer Road.	B (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
111	Large-leafed lime	10m	500mm est.	N 6m E 4m S 4.25m W 4.5m	1.5m	N 3.5m S 6m	Semi-mature	Average	Indifferent	Off-site tree; large, dense suckering growth up to 150mm diam. and historically managed at 1m height. Much epicormic growth along trunk, consistent with age and species. Some historic pruning wounds up to 200mm diam. and mostly occluded. Some large dead wood at top of crown. Significant component of avenue along Mercer Road.	B (2)
112	Horse chestnut	10m	350mm est.	N 3.75m E 4m S 4m W 1.5m	3m	N 2m S 6m	Young	Below average	Indifferent	Off-site tree; greater-than-expected amounts of epicormic growth along trunk and branches; large wounds on trunk showing exposed heartwood but no cavity formation; essential component of the avenue along Mercer Road.	C (23)
113	Large-leafed lime	15m	500mm est.	N 4.5m E 2m S 3.5m W 4.5m	2.5m	N 3m S 6m	Semi-mature	Average	Indifferent	Off-site tree; large, dense suckering growth up to 150mm diam., historically managed at 1m above ground. Main stem bifurcates at 2m showing a tensile union. Two pruning wounds below main union facing E (up to 200mm diam.) showing little woundwood growth or cavity formation. Much epicormic growth along both stems, consistent with age and species. Some large dead wood throughout crown. Essential component of avenue along Mercer Road.	B (2)
114	Horse chestnut	18m	870mm	N 6m E 7.5m S 5m W 5m	5m	N 3m S 6m	Mature	Average	Moderate	Off-site tree; some moderate buttressing (up to 400mm in length) in all directions, with some deep fissuring but no evidence of cavity formation or fungal fruiting bodies. Large but sparse epicormic growth along trunk with numerous pruning wounds up to 100mm diam., consistent with the removal of established epicormic growth and crown lifting away from overhead lines; most wounds fully occluded. Three-stemmed from 6m showing tensile unions. Minor dead wood throughout crown, consistent with age and species. Essential component of avenue along Mercer Road.	B (12)
115	Large-leafed lime	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	No longer extant, fallen into site	U
116	Horse chestnut	17m	730mm	N 6.25m E 6m S 6m W 6m	5.5m	N 3m S 6m	Mature	Average	Moderate	Off-site tree; ivy-covered along half of trunk and midway into crown. Large but sparse epicormic growth along trunk (up to 100mm diam.). All major visible unions appear sound and tensile. Minor dead wood throughout crown, consistent with age and species. Essential component of avenue along Mercer Road.	B (12)
117	Horse chestnut	18m	900mm over ivy	N 6m E 7m S 6m W 6m	4m	N 3m S 6m	Mature	Average	Indifferent	Off-site tree; large (1m x 0.5m) basal wound facing W, with central cavity 430mm deep. Sounding trunk with acoustic hammer produces no tonal differences, though full sounding is inhibited by dense undergrowth. Some ivy cover from base up to mid-crown. Some large buttresses in all directions up to 0.6m in length. Twin-stemmed from 2.5m showing a tensile union. Dominant stem to N bifurcates at 3.5m showing a tight compression fork. Numerous wounds on all stems up to 120mm diam., consistent with pruning away from overhead lines; these wounds show limited woundwood growth but limited cavity formation. Essential component of avenue along Mercer Road.	B (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
120	Ash	14m	400mm est.	N 4m E 3m S 3.5m W 3.5m	N 3m	NE 3m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 2.5m, showing compression fork with included bark; contributes to screening of W site boundary.	C (2)
121	Field maple	11m	750mm	N 6.6m E 5.5 S 4.5m W 4.5m	N 3m	N 2.5m	Mature	Average	Indifferent	Trunk base to S showing small hole, 120mm height x 80mm width, leading into cavity which can be probed to 270mm depth; directly above cavity a patch of partially necrotic bark extends to 1m height x 200mm width, with very small fungal fruiting bodies growing over it; these fungi are also found growing sporadically on trunk base to N & E & are consistent with a saprobic fungus and therefore of limited significance; directly above this patch of bark there is a small hole, 30mm diameter, leading into cavity which can be probed to 180mm. On sounding lower trunk and base with acoustic mallet, no significant variations in tone noted. Lower trunk shows slightly fluted form with numerous ribs; twin-stemmed at 2m showing compression fork with included bark, extending for 600mm. Small-diameter deadwood (up to 70mm diameter) sparsely scattered throughout lower crown, consistent with tree's age. Contributes to screening of W site boundary. Significant boundary tree with an uncommonly large stem diameter for species.	B (1)
122	English oak	16.75 m	770mm	N 7.9m NE 8.3m E 8.6m S 8m W 8m	E 4m	NE 2.5m	Mature	Average	Moderate	Twin-stemmed from 3m, showing tensile fork; moderate amount of small-diameter deadwood (up to 70mm diameter) scattered throughout crown, consistent with tree's species, age and location; single piece of moderately sized deadwood on N stem, at 4m to S, 120mm diameter at base and 3.5m length. Open-grown, evenly balanced crown. No significant defects observed. Species in-keeping with rural character of the area; contributes to screening of W site boundary; crown visible from Mercer Road to NE & a significant boundary tree.	B (1)
123	Ash	16.5m	655mm	N 6.4m NE 7.4m E 7.7m S 6m W 6m	N 3m	NE 1.75m E 1.75m	Mature	Below average	Indifferent	Off-site tree; open-grown, evenly balanced crown; three-stemmed at 3m; contributes to screening of W site boundary; outer canopy entirely defoliated with dense epicormic reaction holding onto leaves, indicative of physiological stress or incipient infection with ash dieback; lower canopy to E could be reduced by up to 3m to allow extra developable space.	C (3)
124	Ash	17m	460mm	N 5.6m NE 7.7m E 7.7m S 7.5m W 5m	E 2.5m	N 1.5m NE 1.75m	Semi-mature	Average	Indifferent	Off-site tree; contributes to screening of W site boundary; twin-stemmed from 3m, with compression fork; E crown face could be reduced by up to 2.5m to allow for extra developable space.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
125	English oak	14m	820mm	N 10.7m NE 9.5m E 7m S 0.5m W 5m	N 3m	N 0m	Mature	Below average	Poor	Suppressed by adjacent trees to S resulting in significant lean and asymmetric canopy to N, with lowest lateral limb to N touching ground and providing support. Large crack in centre of trunk at 0.5m from ground and extending for 2m, 50mm at widest point, with remnants of degraded, white fungal fruiting body; crack can be probed to depth of at least 500mm. Large tear-out wound on main trunk at 4m to N, 500mm width x 700mm height, showing exposed heart wood; multiple brackets consistent with decay fungus oak mazegill (<i>Daedalea quercina</i>) growing on tear-out wound. Non-occluded wound on main stem at 8m to N and appearing to lead into cavity, 400mm height x 150mm width, with bat roost potential. As there are no surrounding targets, tree's hazard rating is currently low. Visible from railway line to W & contributes to screening of W site boundary. Overall, tree has good conservation potential.	C (3)
126	Ash	18m	560mm ivy	N 5.5m E 0.5m S 3m W 8m	W 3.5m	N 8m W 4m	Semi-mature	Average	Indifferent	Ivy-covered trunk and stem; asymmetrical crown as suppressed by adjacent specimens; contributes to screening of W site boundary.	C (2)
127	English oak	20.5m	820mm	N 8m NE 8.2m E 8.8m S 9m W 8m	NW 6m	N 8m SW 3m	Mature	Average	Moderate	Twin-stemmed from 5m, showing good tensile fork. Small-diameter deadwood (up to 80mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location; dominant, evenly-balanced crown. No significant defects observed. Up to 4m upper canopy possibly visible from A264 to S and readily visible in views from across the site to N & from railway line to W. Contributes to screening of S & W site boundaries & a notable boundary tree. Significant component of the group in which it stands.	B (1)
128	English oak	16m	840mm	N 7.5m E 7.6m S 7m W 7.8m	NE 4m	N 5m	Mature	Average	Moderate	Prominent buttress roots to N, consistent with location. Small animal burrow 1.5m to W. Very minor bark damage at trunk base to N, 30mm diameter. Small-diameter deadwood (up to 80mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location; dominant, evenly-balanced crown. No significant defects observed. Readily visible in views across the site to N & from railway line to W. Upper canopy possibly glimpsed from A264 to S. Contributes to screening of S site boundary & a notable boundary tree. Significant component of the group in which it stands.	B (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
129	English oak	16m	870mm ivy	N 6m E 5.4m S 6.5m W 6.6m	S 4m	N 5m	Mature	Below average	Indifferent	Trunk base showing pronounced root-flare, consistent with location; large, non-occluded wound on lower trunk, extending from base to 1m, 250mm width, exposed wood showing signs of degradation by fungal decay, being of a crumbly texture and with distinct black markings; degraded remnants of fungal fruiting body found, but unable to identify due to extent of degradation; wound shows evidence of incipient cavity formation, with edge of wound, to S, probed to 300mm depth. Trunk showing slight bulging around wound to N, indicative of adaption to decay. Trunk and stems ivy-covered with ivy extending along main limbs and therefore only outer crown visible. Crown showing above average amount of small-diameter deadwood sparsely scattered throughout. Readily visible in views across the site to N, and from railway to W. Upper canopy possibly glimpsed from A264 to S. Notable boundary tree and a significant component of the group in which it stands, but showing impaired form and physiology.	B (1)
130	English oak	16m	740mm	N 8.5m E 2.5m S 5m W 6.5m	SE 4.5m	NW 3m	Mature	Average	Indifferent	Large root adjacent to SE of trunk base, 2m length x 190mm width, partially growing into and girdling buttress root to E. Twin-stemmed from 2.5m, showing good tensile fork. N stem slightly suppressed. Faint line of dark staining on main trunk, extending from main union to trunk base. Large tear-out wound on S stem at 6m to S, 600mm height x 500mm width, with exposed heart wood showing no visible evidence of decay; large failed limb, 400mm diameter at base, currently on ground to S. Partially suppressed by adjacent tree no.131. Readily visible in views across the site to N, and from railway to W. Upper canopy possibly glimpsed from A264 to S. Notable boundary tree, contributing to screening of S site boundary. Showing slightly suppressed form but a significant component of the group in which it stands.	B (1)
131	Ash	20m	600mm	N 4m E 4.5m S 5m W 4m	S 8m	N 15m S 4.5m	Semi-mature	Average	Indifferent	Trunk base growing into adjacent holly trees to S and W; stem of holly to W almost entirely engulfed by this tree; pronounced root-flare, consistent with location. Twin-stemmed at 6m, with good tensile union. Tall, drawn-up form. No significant defects observed. Readily visible in views across the site to N, and from railway to W. Upper canopy possibly glimpsed from A264 to S. Contributes to screening of S site boundary, and a notable boundary tree. Significant component of the group in which it stands.	B (1)
132	English oak	15m	615mm	N 6m E 3.8m S 4.1m W 6.7m	NW 3.5m	N 2m	Semi-mature	Average	Indifferent	Small-diameter deadwood (up to 70mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location. No significant defects observed, but slightly suppressed and overtopped by adjacent trees to S. Visible in views from across the site to N, but obscured in any possible views from A264 to S by intervening canopies of adjacent trees. Although a significant component of group in which it stands, removal would be mitigated by the presence of trees nos. 131 and 134 which are larger and would form the new tree-line.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
133	English oak	18m	680mm	N 7.5m E 2.1m S 2.7m W 5.3m	NW 4m	NW 2.5m	Semi-mature	Average	Indifferent	Especially large buttress root to NW, consistent with location. Non-occluded wound at 4m to S, 40mm diameter, and appearing to lead into cavity; multiple small diameter woodpecker holes on trunk, adjacent to this wound. Suppressed by no.134 resulting in sparse scaffold branches and above average deadwood throughout crown; large piece of deadwood at 7m to N, 150mm diameter. Visible in views from across the site to N, but obscured in any possible views from A264 to S by intervening canopies of adjacent trees. Contributes to screening of S site boundary. Significant component of group in which it stands, but showing slightly impaired physiology and structure.	C (2)
134	English oak	20m	910mm	N 8m E 7.4m S 9.5m W 5m	NW 4m	NW 1m	Mature	Average	Indifferent	Deadwood (30mm to 120mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location. Partly snapped-out limb at 9m to NE; upper half of branch snapped-out whilst lower half is still attached, with branch currently resting in crown of no.135; resulting in moderate-sized tear-out wound, 300mm diameter and split 700mm along its length. Dominant crown, overtopping adjacent specimens. Visible in views across the site to N and from railway line to W. Upper crown possibly glimpsed in views from A264 to S. Contributes to screening of S site boundary and a notable boundary tree. Significant component of the group in which it stands.	B (1)
135	English oak	14m	580mm	N 8m E 2.5m S 2m W 5.5m	NW 5m	NW 1.75m	Semi-mature	Below average	Poor	In a state of heavy decline; bark flaking off trunk in large sheets with many parts of trunk, stem and main limbs showing patches of exposed wood as a result, especially in upper 9m of tree. Upper crown almost entirely dead, resulting in moderate-diameter deadwood; live growth almost entirely restricted to lowest lateral limb to NW. Could be potentially hazardous if development takes place nearby, but as there are currently no surrounding 'targets' tree could be retained for its conservation value.	U (3)
136	English oak	17m	705mm	N 9m E 5.8m S 6.9m W 4.3m	NW 5m	NW 2m	Mature	Average	Moderate	Twin-stemmed from 6m, showing good tensile union. Two moderately sized pieces of deadwood on trunk at 5m to N, up to 200mm diameter and 1.5m in length. Small-diameter deadwood (up to 70mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location. Faint streak of dark staining on trunk to NW at 6m, extending to ground level. No significant defects observed. Readily visible in views across the site to N and from railway line to W. Upper canopy obscured in possible views from A264 to S by intervening canopies of adjacent trees. Contributes to screening of S site boundary and a notable boundary tree. Significant component of the group in which it stands.	B (2)
137	Ash	16m	525mm	N 1.5m E 7m S 8m W 2.5m	SE 5m	S 3m	Semi-mature	Average	Indifferent	Suppressed by adjacent trees to N resulting in lean and asymmetric canopy to S. Upper crown partially visible from A264 to S, but obscured in views to N by adjacent trees. Contributes to screening of S site boundary. Removal could be mitigated by presence of trees nos.134 and 136, which are larger and more dominant.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
138	Ash	23m	990mm	N 9.3m E 8m S 10m W 8m	N 5m	NW 3m	Mature	Average	Indifferent	Prominent buttress roots; twin-stemmed from 5m, showing good tensile union; stem growing to NE originating at 5m on trunk has large tear wound of 5m in length, with good woundwood response, woodpecker holes below indicating a large column of decay; small-diameter deadwood (up to 75mm diameter) sparsely scattered throughout crown, consistent with tree's species, age and location. Large, dominant crown, slightly overtopping adjacent trees. No significant defects observed. Readily visible in views across the site to N. Upper canopy likely visible in views from A264 to S. Contributes to screening of S site boundary and a notable boundary tree. Significant component of the group in which it stands.	B (2)
139	Crack willow	13m	3 stems @ 270mm 400mm 320mm 430mm all est.	N 14m E 10.5m S 8.8m W 10.5m NW 13m	1m	N 0m	Mature	Average	Indifferent	Trunk historically wind-thrown, and now resting on the ground with numerous stems growing from the fallen trunk and consequently growing as a 'harp' tree. Stem to N collapsed into site and resting on ground. Several fungal fruiting bodies, consistent with decay fungus <i>Phellinus</i> sp. found on main trunk and on several collapsed stems to S. Multiple deadwood found throughout crown, especially on stems with fungal fruitbodies.	C (1)
140-141	Wych elm	12m	#T140 350mm est. #T141 350mm est.	N 3.5m E 4m S 3.25m W 2.75m	2m	W 2.5m	Semi-mature	Average	Moderate	Off-site trees; typical of a hedgerow specimen; significant component of group in which it stands.	B (12)
142	English oak	22m	1130mm	N 9m E 10.7m S 11.3m W 8.4m	3.5m	S 0m SW 2m	Mature	Average	Moderate	Off-site tree; single trunk; heavily ivy-covered; ivy extends into upper third of canopy; low branch originating at 5m on S snapped out and currently lying on ground but still hung-up within canopy, should be removed for sound arboricultural management purposes; typical woodland boundary specimen; readily visible in long-range views across lower-lying ground to S; significant component of group in which it stands.	B (12)
143	English oak	18m	770mm	N 7.3m E 9m SE 10.6 S 11m W 7.5m	3m	E 2m	Mature	Average	Moderate	Off-site tree; single trunk growing on edge of depression within adjacent woodland; showing morphological and physiological characteristics consistent with a tree of this size, age, species and location; readily visible in long-range views from S due to sloping topography.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
144	English oak	18m	1105mm	N 6m E 12.7m S 10.8m W 3.5m	2.5m	S 2m	Mature	Average	Indifferent	Off-site tree; trunk diameter measured below burr growth; prominent buttress roots in all directions; extensive burrowing in depressions between buttress roots, indicative of hollow base; historical woundwood development with partially occluded wound on S on S-most buttress root; single trunk becoming heavily burred; ivy-covered; main unions tensile; asymmetric canopy due to suppression from adjacent specimens; significant component of group in which it stands; readily visible in long-range views from S due to topography; storm damage in crown.	B (12)
145	English oak	19m	755mm	N 5m E 3.75m S 7.75m W 6m	5m	S 4.5m	Mature	Average	Moderate	Off-site tree; single trunk; much epicormic growth on trunk; asymmetrical crown as suppressed by adjacent specimens; significant component of group in which it stands; readily visible in views from Mercer Road and Langhurst Wood Road.	B (12)
146	English oak	18m	975mm est.	N 6m E 8.75m S 9.25m W 8m	3m	E 4m	Mature	Below average	Indifferent	Off-site tree; access to base impeded due to steep topography and dense understory; single stem; significantly lower soil levels to W and E; above average dead wood in canopy consistent with reduced physiological condition; storm damage in canopy; unable to confirm presence of decay fungus at base or within canopy; significant component of group in which it stands; overtopping and suppressing adjacent trees.	C (2)
147	English oak	17m	1220mm	N 7m E 11.7m S 11.5m W 9.7m	3m	E 2m	Mature	Average	Good	Off-site tree; prominent buttress roots on all sides; significant level changes around base, lower to N and higher to S; surface roots extend to at least 2.2m to S; single uptight trunk with ivy- cover; tensile mean unions; field grown specimen with broad spreading canopy; deadwood in canopy consistent with size, age and species; significant component of group in which it stands; S-most component in linear belt segregating two N fields; visible in long-range views from Langhurst Wood Road and Mercer Road; of long-term potential.	B (12)
148	Field maple	12m	525mm 450mm 475mm all est.	N 7.5m E 8m S 8.75m W 6.5m	1.5m	E 2m	Mature	Average	Indifferent	Three-stemmed from base; tight compression forks with evidence of included bark; established hedgerow specimen; significant component of hedgerow in which it stands.	C (2)
149	English oak	15m	820mm	N 10.3m NE 11.2m E 9.9m S 8.6m SE 9.1m W 8.3m NW 10.3m	3m	E 2m W 2.5m	Mature	Average	Moderate	Growing at S end of hedgerow separating two N-most fields; prominent buttress roots with a bulge in the buttress, with small 100m wide cavity that can be probed to 500mm; single upright trunk; main unions tensile; wide-spreading canopy with minor dead wood throughout consistent with size, age, species and location; readily visible in views from Mercer Road; does not contribute to avenue along Mercer Road but is significant component of wider arboricultural landscape; of long-term potential.	B (12)
150	English oak	13m	475mm est.	N 2m E 2m S 3m W 6.5m	2m	W 3m	Semi-mature	Low	Hazardous	Off-site tree; moribund; inessential component of group in which it stands.	U

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
151	English oak	16m	450mm est.	N 5m E 5m S 5m W 5m	2m	2m	Semi-mature	Average	Indifferent	Off-site tree; single trunk; well-rounded canopy; of moderate quality, but currently of low value due to screening by surrounding trees.	C (1)
152	English oak	17m	615mm	N 2m E 3.9m S 7.5m W 6.25m	3m	S 4.5m	Mature	Average	Moderate	Off-site tree; single trunk; asymmetrical crown as suppressed by adjacent specimens; significant component of group in which it stands; member of a group of trees along S side of the ancient woodland adjacent to N boundary.	B (12)
153	English oak	13m	500mm	N 1.5m E 6m S 7.3m W 6.2m	2m	S 2.5m	Semi-mature	Average	Indifferent	Off-site tree; single trunk; one-sided crown as suppressed by adjacent specimens; poor woundwood formation throughout; significant component of group in which it stands; member of a group of trees along S side of the ancient woodland adjacent to N boundary.	B (12)
154	Field maple	14m	n/a	n/a	n/a	n/a	n/a	n/a	n/a	No longer extant, fallen into the woodland	U
155	English oak	19m	650mm est.	N 4m E 5.25m S 4.5m W 4.5m	4m	4m	Mature	Average	Indifferent	Off-site tree; ivy-covered; drawn-up woodland specimen; tree displaying morphological and physiological features consistent with size, age, species and location; significant component of group in which it stands; member of a group of trees along S side of the ancient woodland adjacent to N boundary.	B (12)
156	English oak	18m	610mm	N 5m E 5.5m S 11.5m W 4.25m	S 6m	S 3m	Mature	Average	Moderate	Single trunk; asymmetrical crown as suppressed by adjacent specimens; significant component of group in which it stands; member of a group of trees along S side of the ancient woodland adjacent to N boundary; appears to have lost its top.	B (12)
157	English oak	14m	510mm	N 2m E 3m S 7.75m W 3.75m	4m	S 4m	Semi-mature	Average	Indifferent	Off-site tree; suppressed specimen; field boundary specimen; small, suppressed specimen as overtopped by adjacent specimens; inessential component of group in which it stands.	C (1)
158	English oak	21m	840mm ivy	N 7m E 6m SE 11.4m S 10.3m W 6m	S 4.5m	SW 4m	Mature	Average	Moderate	Off-site tree; heavily ivy-covered; prominent buttress roots on all sides; asymmetric canopy due to suppression from adjacent specimens, growing predominantly towards S; significant component of group in which it stands; readily visible in long-range views from Mercer Road to S.	B (2)
159	English oak	15.5m	485mm	N 6m E 4.5m S 8m W 8m	S 5m	S 2.5m	Semi-mature	Average	Moderate	Off-site tree; animal damage at base; prominent buttress roots; single trunk; asymmetric canopy due to suppression from adjacent specimens; member of group growing along S boundary of ancient woodland near N boundary of site; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
160	Ash	18m	770mm	N 7m E 6m S 8m W 6.5m	3m	S 2.5m	Mature	Below average	Indifferent	Off-site tree; prominent buttress roots on all sides, particularly noticeable on E extending to 2.2m from base; moderate changes in tone when lower trunk tapped with acoustic hammer; three-stemmed from 2m with tight compression forks and evidence of included bark; one central dominant stem supported by two subdominant stems orientated N and S; storm damage throughout, typical of isolated woodland edge position; historic tear-out wound with associated bacterial exudation; above average dead wood in canopy; significant tip die back in outer canopy, indicative of incipient infection with ash dieback; significant component of group in which it stands.	C (2)
161	English oak	16m	550mm	N 2m E 6.5m S 9.75m W 2.5m	4.5m	SE 3m	Semi-mature	Average	Indifferent	Off-site tree; single trunk; asymmetric canopy due to suppression by adjacent specimens; woodpecker holes noted between 4m and 6m on S, unable to quantify extent of degradation from ground level; significant component of group in which it stands; member of group growing along S boundary of ancient woodland along N boundary of site.	B (2)
162	English oak	15.5m	535mm	N 3.5m E 2m S 8.25m W 4.5m	3m	S 2.5m	Semi-mature	Average	Moderate	Off-site tree; prominent buttress roots on S; single trunk; epicormic growth between 1m and 4m; suppressed as overtopped by adjacent specimens; twin-stemmed from 7m with no evidence of tight compression fork; significant component of group in which it stands; member of group growing along S side of ancient woodland along N boundary of site.	B (12)
163	English oak	16m	665mm	N 1.75m E 4.5m S 5m W 4.5m	4m	SE 4m	Mature	Low	Indifferent	Off-site tree; prominent buttress roots on all sides; cavity can be probed to 250mm between buttress roots on N; minor changes in tone when lower trunk tapped with acoustic hammer; significant dieback in upper canopy with standing dead wood; likely to be of habitat value; deadwood up to 125mm diameter in canopy; significant component of group in which it stands; member of ancient woodland along N boundary of site.	C (23)
164	English oak	16m	675mm	N 5m E 5m S 10.8m W 5m	3m	S 2m	Mature	Average	Fair	Off-site tree; prominent buttress roots on all sides; single trunk; heavily one-sided due to woodland location, growing predominantly towards S; dead wood throughout consistent with size, age, species and location; one low branch on S slightly wind-exposed and at above average risk of failure if companion shelter is removed; significant component of group in which it stands; member of group growing within ancient woodland along N boundary of site.	B (12)
165	Ash	19.5m	510mm 500mm 405mm	N 3.5m E 7m S 9.3m W 8m	5m	S 4.5m	Mature	Average	Fair	Off-site tree; three-stemmed from base, previously four-stemmed but one has failed historically; tight compression forks with evidence of included bark; heavily leaning stems; fungal fruiting body consistent with decay fungus shaggy polypore (Inonotus hispidus) noted at 8m on S of E-most stem, suggesting decay in this stem; significant component of group in which it stands; readily visible in long-range views from Mercer Road to S; member of group growing within adjacent ancient woodland along N boundary of site.	B (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
166	English oak	18m	770mm.	N 6m E 7m S 10.4m W 7m	4.5m	S 3m	Mature	Average	Moderate	Off-site tree; single trunk; epicormic growth from 2m extending into mid-canopy suggestive of reduced physiological capacity; dead wood throughout consistent with size, age, species and location; asymmetric canopy due to suppression from adjacent specimens; significant component of group in which it stands; member of group forming ancient woodland along N boundary of site.	B (12)
167	Ash	16m	600mm est.	N 5m E 6m S 9.8m W 8m	4.5m	S 1.5m	Mature	Average	Moderate	Off-site tree; single trunk; suppressed; growing predominantly towards S and SW; fine, twiggy deadwood throughout canopy consistent with size, age, species and location; W-most specimen along S boundary of ancient woodland growing over N boundary of site; significant component of group in which it stands; readily visible in long-range views from Mercer Road to S.	B (12)
168	English oak	9m	280mm	NE 0m SE 3m S 5m SW 7m W 5m NW 3m	2m	0.5m	Semi-mature	Average	Poor	Off-site tree; small heavily suppressed specimen; canopy bias to SW; upper canopy visible from the A264; inessential component of group in which it stands.	C (3)
169-170	Hawthorn	6m	#T169 215mm #T170 200mm 155mm	N 3m E 1m S 3m W 4m	1m	1.5m	Semi-mature	Average	Indifferent	Off-site trees; small suppressed specimens of very limited quality or value.	C (3)
171-172	English oak	8m	#T171 150mm #T172 240mm	2.7m	2m	2.5m	Semi-mature	Average	Moderate	Off-site trees; of moderate quality, but currently of low value due to small size.	C (1)
173	Field maple	4.5m	120mm	2m	0.5m	1m	Young	Average	Moderate	Off-site tree; upper canopy visible from the A264; young tree with stem diameter below 150mm.	C (1)
174	English oak	6m	185mm	NE0m SE3m SW4m NW2.5m	2m	2.5m	Semi-mature	Average	Indifferent	Off-site tree; small suppressed specimen.	C (1)
175	English oak	11m	390mm	N2.8m E3m SE4m S5m SW4m W4m	1.5m	0.5m	Semi-mature	Average	Moderate	Off-site tree growing on road embankment; no significant defects at base; single upright trunk; main unions tensile; moderate epicormic growth; significant component of the group in which it stands; upper canopy visible in glimpses from A264, but small canopied specimen that makes limited individual contribution to the roadside group.	C (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
176-182	English oak	8m	#T176 160mm #T177 260mm #T178 125mm #T179 195mm #T180 190mm #T181 155mm #T182 155mm	2.5m	1.5m	2m	Semi-mature	Average	Moderate	Off-site trees growing on road embankment; collection of small, drawn-up oaks; individually of limited size, quality and value but together form a significant component of the group in which they stand; upper canopies of trees to S visible in glimpses from A264, but not a significant feature of the local landscape.	C (1)
183	Scots pine	10m	210mm	2m	4m	4m	Semi-mature	Average	Indifferent	Upper canopy intermingling with vet oak canopy; suppressed.	C (3)
184-185	Ash	12m	#T184 280mm #T185 275mm	3.3m	2m	4m	Semi-mature	Low	Indifferent	Off-site trees; significant tip die back evident in both canopies; above average deadwood; symptoms consistent with well-progressed infection with ash dieback; of limited future potential.	U (3)
186	Wild cherry	12.5m	270mm	2.9m	3m	S4m	Semi-mature	Average	Moderate	Off-site tree; single upright trunk; narrow canopied woodland grown specimen; of limited individual merit.	C (1)
190-192	Norway maple	12m	#T190 350mm #T191 245mm #T192 280mm	3m	1.5m	1.5m	Semi-mature	Average	Indifferent	Off-site trees; row of mutually suppressed trees; #192 triple-stemmed from 2m with tight compression forks; drawn-up specimens.	C (13)
193	English oak	10m	330mm	N 1m E 4m S 4m W 4m	1m	2m	Semi-mature	Average	Moderate	Off-site tree; prominent buttress to N, down the embankment; small suppressed canopy; upper canopy visible from A264 but limited individual amenity value.	C (1)
194	English oak	9m	2 stems @ 130mm	N 0m E 2m SE 3m S 3m W 1m	1m	2m	Semi-mature	Average	Poor	Off-site tree; twin-stemmed from 1m with tight compression fork and evidence of branch bark inclusion; of low quality and value.	C (3)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
195-197	Wild cherry	13m	#T195 300mm #T196 230mm #T197 205mm	3m	5m	6m	Semi-mature	Average	Indifferent	Off-site trees; #195 twin-stemmed from 2m with tight compression fork and evidence of branch bark inclusion; remaining trees free from significant observable defects; collection of mutually suppressed cherries; of limited individual merit.	C (1)
198-201	Ash	12m	#T198 240mm #T199 190mm #T200 210mm #T201 230mm	2.3m	1.5m	7m	Semi-mature	Below average	Indifferent	Off-site trees; significant tip die back evident in both canopies; above average deadwood; symptoms consistent with well-progressed infection with ash dieback; of limited future potential.	U (3)
202	Goat willow	12m	110mm 4 stems @ 245mm	N 5m E 5m S 2.4m W 3.4m	0.5m	2.5m	Semi-mature	Average	Indifferent	Off-site tree; multi-stemmed from 0.5m with tight acute unions; canopy suppressed to S and W; significant component of group in which it stands, but not visible from public vantage points.	C (13)
203-204	English oak	#T203 14.5m #T204 13m	#T203 340mm #T204 280mm	N 0m E 2m S 6m W 2m	2m	0.5m	Semi-mature	Average	Moderate	Off-site trees; single upright trunks; heavily suppressed canopies.	C (13)
205	Scots pine	14m	270mm 340mm	NE 2.8m SE 4m SW 2m NW 4m	8m	8m	Semi-mature	Average	Poor	Off-site tree; twin-stemmed from 0.2m with tight compression fork; union obscured by dense rose undergrowth; mutually suppressed; tall, drawn-up stems at risk of failure if companion support removed; significant component of group in which it stands; screened in views from A264.	C (23)
206	Goat willow	12m	6 stems @ 120mm 310mm	5m	0m	4m	Semi-mature	Average	Indifferent	Off-site tree; multi-stemmed from 0.5m with tight acute unions; canopy suppressed to S and W; significant component of group in which it stands, but not visible from public vantage points.	C (3)
207	Norway maple	13.5m	180mm 190mm	NE 4m SE 3m SW 4m NW 2.5m	1m	1.5m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 1m with tight compression fork; snub nosed response growth below union, likely stabilising union; significant component of group in which it stands.	C (3)
208	Norway maple	10m	180mm	N 0m E 3m S 5m W 2m	1m	1m	Semi-mature	Average	Moderate	Off-site tree; small suppressed specimen.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
209	Scots pine	8m	340mm	N 0m E 2m SE 4m S 5.5m SW 4m W 4m	0.5m	0m	Semi-mature	Average	Poor	Off-site tree; single upright trunk to 2.5m where the trunk lean significantly to S (40 degree angle) before correcting to a steeper angle at 3m from trunk; heavily suppressed canopy; low quality specimen.	C (3)
210-213	English oak	14m	#T210 180mm #T211 160mm #T212 290mm #T213 220mm	3m	1m	2.5m	Semi-mature	Average	Moderate	Off-site trees; #210 twin-stemmed from 1m with tight compression fork and evidence of branch bark inclusion; collection of similar aged and sized oaks; mutually suppressed canopies; inessential components of the group in which they stand.	C (1)
214	Scots pine	13.5m	315mm	N 4m E 4m S 3m W 1m	5m	7m	Semi-mature	Average	Moderate	Off-site tree; trunk leans heavily to Se before correcting at 0.5 before forming single upright trunk; mutually suppressed canopy; significant component of group in which it stands.	C (1)
215	Silver birch	13.5m	320mm	2m	8m	9m	Semi-mature	Average	Indifferent	Off-site tree; drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	C (1)
216	Goat willow	10m	140mm 2 stems @ 100mm 190mm	N 5m E 2m S 3.3m W 3m	0.5m	0.5m	Semi-mature	Average	Indifferent	Off-site tree; multi-stemmed from 0.5m with tight acute unions; canopy suppressed to S and W; significant component of group in which it stands, but not visible from public vantage points.	C (1)
217-219	Ash	10m	#T217 145mm #T218 190mm #T219 235mm	2m	1.5m	5m	Semi-mature	Low	Poor	Off-site trees; significant tip die back evident in both canopies; above average deadwood; symptoms consistent with well-progressed infection with ash dieback; of limited future potential.	U (3)
220-221	Norway maple	10m	#T220 220mm #T221 300mm	N 2m E 3.5m S 4.5m W 2.5m	0.5m	0.5m	Semi-mature	Average	Moderate	Off-site trees; of moderate quality but limited value due to small size.	C (1)
222	Goat willow	12m	285mm 175mm 310mm	N 5m E 4.7m S 3.8m W 3.6m	0.5m	4m	Semi-mature	Average	Indifferent	Off-site tree; triple-stemmed from 0.5m with tight compression forks; dominant canopied specimen, screened in views from Langhurst Wood Road and A264 by surrounding trees.	C (13)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
223-224	English oak	10m	#T223 140mm #T224 240mm	2.5m	1m	4m	Semi-mature	Average	Moderate	Off-site trees; tall, drawn-up specimens; no further significant defects observed; screened in views from public vantage points.	C (1)
225	English oak	9m	280mm	N 4m E 6.2m S 5m W 0.5m NW 3m	0.5m	0.5m	Semi-mature	Average	Moderate	Off-site tree; short squat canopy form; suppressed to W; free from significant observable defects; upper canopy visible from A264 and the junction with Langhurst Wood Road.	C (1)
226	English oak	11m	380mm	N 4m E 5.1m S 4.9m W 4.4m	1m	2m	Semi-mature	Average	Moderate	Off-site tree; no significant defects at base; single upright trunk; main unions tensile; squat but dominant canopy; significant component of group in which it stands; of at least moderate quality. Readily visible from Langhurst Wood Road and the A264 but limited contribution to the character of either due to small canopy size.	B (1)
227-228	Lombardy poplar	18m	#T227 460mm #T228 450mm	3m	4m	4m	Semi-mature	Average	Moderate	Off-site poplars growing adjacent to a footpath link that connects to Pondtail Drive; of at least moderate quality; tall specimens readily visible in long range views from Pondtail Drive, Langhurst Wood Road and the A264.	B (12)
229	English oak	16m	1170mm	W6m	3m	4m	Over-mature	Below average	Indifferent	Off-site tree; large diameter trunk; significant amounts of hard surface and road within root system; main unions tensile; storm damage evident throughout canopy; evidence of canopy retrenchment; above average deadwood; crown retrenchment evident but lack of hollowing trunk, fungal activity and epicormic growth highlights specimen is in early stages of veteranisation but is unlikely to be considered a full veteran; notable tree visible in glimpses from the A264.	A (3)
230-231	English oak	17m	#T230 780mm #T231 735mm	8m	3m	4m	Mature	Average	Moderate	Off-site trees; mature specimens growing adjacent to Pondtail Drive; dominant canopied trees of at least moderate quality; significant components of the group in which they stand; visible from the footpath and Pondtail Drive.	B (123)
G2	Various	Min. 5m Max. 10m	Min 75mm est. Max 250mm est.	3m	1m	1m	Young	Average	Indifferent	Off-site group of trees; species include large-leaved lime, hawthorn and dog rose; small, self-seeded, understorey specimens growing amongst overstorey of horse chestnuts and larger common limes along S extent of Mercer Road; all consistent in morphology and physiology with species showing typical characteristics such as basal growth, multiple stems and deadwood within canopies; not easily identifiable as individuals in long-range views across field; inessential component of group in which they stand; low-level screening value only.	C (1)

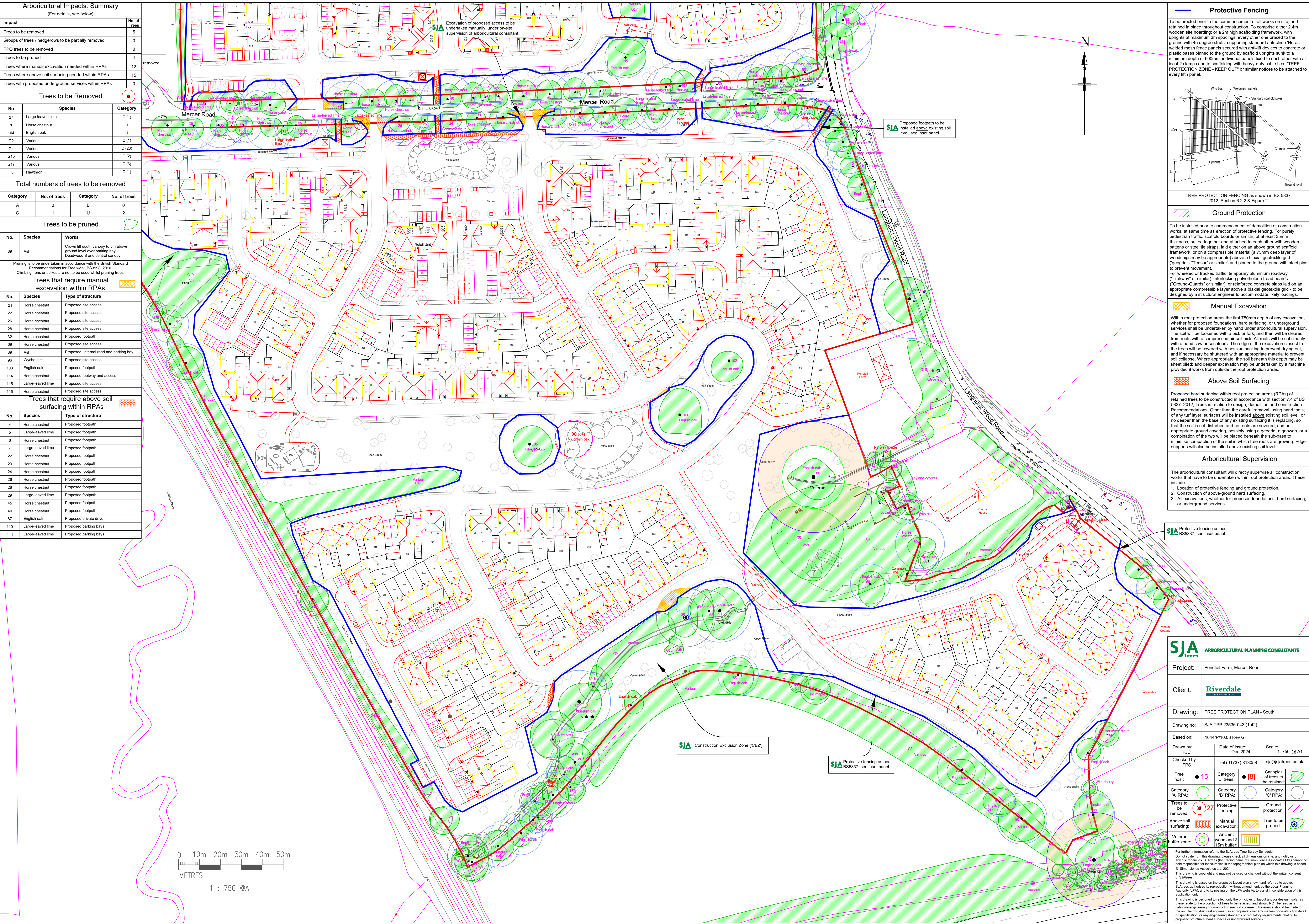
No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
G3	Leyland cypress	Min. 8m Max. 18m	Min 100mm est. Max 350mm est.	2m	0m	0m	Semi-mature	Average	Indifferent	Off-site group of trees; row of closely planted specimens, designed to form a hedge or screen; dense canopies screen on-site trees in views from Langhurst Wood Road.	B (12)
G4	Various	13m	Min 100mm est. Max 300mm est.	2.5m	1m	1m	Semi-mature	Average	Indifferent	Group of trees growing in area of wet ground; species include goat willow, sycamore, hawthorn and holly, with some ash, field maple, elder, silver birch and common pear; many individuals of low quality with tight compression forks, mutual suppression and multi-stems; multiple specimens failed at base; generally of low arboricultural quality and value; largely screened from external viewpoints; group does not make a significant contribution to the character of the immediate locality or of the wider landscape. However, provides some separation between site and property to the east.	C (23)
G5	Ash	18m	Min 250mm est. Max 450mm est.	5m	3m	4m	Semi-mature	Below average	Indifferent	Group of ash within the centre of G4; tall, drawn-up specimens at risk of failure if companion support is removed; many individuals with tight compression forks; several specimens exhibiting signs of incipient ash dieback infection with tip dieback and sparser than usual outer canopies. The ash are taller than the surrounding trees and are visible in long-range views across open ground to N and S but not a significant feature of the local landscape; collectively of no more than moderate arboricultural value but of less importance individually; of short to medium-term potential only.	C (2)
G6	Various	Min. 6m Max. 18m	Min 100mm est. Max 400mm est.	3m	1.5m	1.5m	Semi-mature	Average	Indifferent	Off-site group of trees; species include Lombardy poplar, sycamore, ash, common pear, aspen and field maple; growing primarily within curtilage of adjacent property but extending to S of ditch line where species become mainly native, broadleaf species as opposed to non-native or exotic species such as Lombardy poplar; skyline comprises upper canopies of Lombardy poplar, aspen and with understorey group comprising mainly hawthorn and holly as might be expected in rural location; readily visible in glimpsed views from gateway between S-most field and Langhurst Wood Lane; largely screened in views from A24 by presence of trees along S boundary; species on S of boundary are of limited visibility	B (2)
G7	Various	11m	Avg 200mm est.	2m	1m	1m	Semi-mature	Average	Moderate	Off-site group of trees; mixed species group of trees growing over S boundary between site and A264; typical of motorway shelter belt planting; significant feature but largely screened in views by acoustic in views from A264.	C (1)
G8	Various	Min 3m Max 8m	Min 75mm est. Max 175mm est.	2m	1m	1m	Young	Average	Indifferent	Off-site group of trees; group of small self-seeded specimens; forms the site boundary; of only low-level screening value.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
G9	Various	Min 3m Max 7m	Min 75mm Max 350mm est.	2m	1m	1m	Semi-mature	Average	Indifferent	Off-site group of trees growing on embankment adjacent to the A264; comprised of densely planted semi-mature trees; species include English oak, hawthorn, Norway maple, Scots pine, goat willow, silver birch and ash; individuals generally etiolated and suppressed; belt of trees readily visible from the A264 and form a significant green canopy mass in views from the road.	B (2)
G10	Ash	12m	Min 75mm est. Max 225mm est.	2m	2m	2m	Semi-mature	Average	Indifferent	Group of small self-seeded specimens; not visible from outside the site.	C (1)
G15	Various	5m	Min 60mm Max 280mm Avg 150mm est.	N 2m E 2m S 2m W 2m	0m	0m	Various	Average	Indifferent	Growing as a line of trees along W site boundary and extending along fence line into middle of field. Comprised predominantly of semi-mature to mature hawthorn but includes myrobalan plum. Straddles boundary fence line and so partially off-site. Provides low-level screening of W site boundary; density greater at N half of site, becoming sparser with more gaps in-between individual specimens towards S half of group. Species are in keeping with rural character of area. The collective mass of prunus species provides a food source for local wildlife and is, therefore, of moderate conservation value.	C (2)
G16	Various	Min 12m Max 16m	Min 200mm est. Max 900mm est.	6m	3m	3m	Various	Average	Indifferent	Off-site group of trees; growing immediately to E of Pondtail Farm; comprises three English oak, one horse chestnut and self-seeded sycamore along E frontage supplemented by false acacia, Douglas fir and sycamore species set further in towards property which collectively make a significant contribution to street scene along Langhurst Wood Road; understory of holly and cherry laurel.	B (12)
G17	Various	Min 3m Max 9m	Min 75mm Max 150mm est.	1.5m	0m	0m	Young	Average	Indifferent	Field boundary hedgerow; predominantly blackthorn; of only low-level screening value.	C (3)
G18	Various	Min 2m Max 9m	Min 30mm Max 225mm est.	2m	0.5m	0.5m	Semi-mature	Average	Indifferent	Field boundary group of trees; predominantly hawthorn with one English oak midway along W boundary; of only low-level screening value.	C (1)
G19	Various	13m	Max 400mm est.	5m	0m	0m	Semi-mature	Average	Indifferent	Species include goat willow, ash, hawthorn and other native, broadleaved trees and shrubs. Self-sown vegetation growing along edge of and within pond. Heavily bramble-covered in places. No signs of recent management. Highly visible in short-range views from railway line only; visible in long-range glimpses from Mercer Road to NE.	C (3)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
G20	Various	Max 12m Avg 9m	Min 75mm Avg 200mm	5m	0.5m	0.5m	Semi-mature	Average	Indifferent	Off-site belt of trees growing along field boundary adjacent to Langhurst Wood Road and the A264; comprised of goat willow, crack willow, field maple, hazel and hawthorn; individuals of variable quality; form a boundary feature, readily visible from the respective roads that the group lines.	C (12)
H1	Various	2m	Avg 30mm est.	1.25m	0m	0m	Young	Average	Indifferent	Species include hawthorn, holly, elder and bramble; length of regularly spaced native species forming a hedgerow; of only low-level screening value.	C (1)
H3	Hawthorn	3m	Avg 35mm est.	1.25m	0m	0m	Semi-mature	Average	Indifferent	Roadside hedgerow; appears to be regularly managed; of only low-level screening value.	C (1)
H5	Hawthorn	8m	Min 130mm	2m	1m	1m	Young	Average	Poor	Off-site hedgerow; linear row of densely planted hawthorn adjacent to boundary fence designed to form a screen or hedge with scattered oak, goat willow and ash; tall, drawn-up specimens forming etiolated stems at risk of failure if companion support removed; of very limited arboricultural quality and value.	C (3)
W1	Various	18m	Min 150mm est. Max 1000mm	5m	1m	1m	Mature	Average	Indifferent	Off-site woodland; area of ancient semi-natural woodland (ASNW) located over N boundary of site; comprises predominantly English oak and ash interspersed with understory level of hawthorn and blackthorn; generally low levels of natural regeneration beneath other than bramble; generally mature in age class; high landscape value due to visibility from Mercer Road, Langhurst Wood Road and in extended views, all be them glimpsed, from A264 further to S; essential component of overall arboricultural landscape.	A (23)

APPENDIX 4.

Tree Protection Plan



Arboricultural Impacts: Summary		
(For details, see below)		
Impact		No. of Trees
Trees to be removed		5
Groups of trees / hedgerows to be partially removed		0
TPO trees to be removed		0
Trees to be pruned		1
Trees where manual excavation needed within RPAs		12
Trees where above soil surfacing needed within RPAs		15
Trees with proposed underground services within RPAs		0

Trees to be Removed		
No	Species	Category
27	Large-leaved lime	C (1)
70	Horse chestnut	U
104	English oak	U
G2	Various	C (1)
G4	Various	C (23)
G15	Various	C (2)
G17	Various	C (3)
H3	Hawthorn	C (1)

Total numbers of trees to be removed			
Category	No. of trees	Category	No. of trees
A	0	B	0
C	1	U	2

Trees to be pruned		
No.	Species	Works
89	Ash	Crown lift south canopy to 5m above ground level over parking bay Deadwood S and central canopy
Pruning is to be undertaken in accordance with the British Standard Recommendations for Tree work, BS3998: 2010. Climbing irons or spikes are not to be used whilst pruning trees.		

Trees that require manual excavation within RPAs		
No.	Species	Type of structure
21	Horse chestnut	Proposed site access
22	Horse chestnut	Proposed site access
26	Horse chestnut	Proposed site access
28	Horse chestnut	Proposed site access
32	Horse chestnut	Proposed footpath
69	Horse chestnut	Proposed site access
89	Ash	Proposed internal road and parking bay
96	Wyche elm	Proposed site access
103	English oak	Proposed footpath
114	Horse chestnut	Proposed footway and access
115	Large-leaved lime	Proposed site access
116	Horse chestnut	Proposed site access

Trees that require above soil surfacing within RPAs		
No.	Species	Type of structure
4	Horse chestnut	Proposed footpath
5	Large-leaved lime	Proposed footpath
6	Horse chestnut	Proposed footpath
7	Large-leaved lime	Proposed footpath
22	Horse chestnut	Proposed footpath
23	Horse chestnut	Proposed footpath
24	Horse chestnut	Proposed footpath
26	Horse chestnut	Proposed footpath
28	Horse chestnut	Proposed footpath
29	Large-leaved lime	Proposed footpath
45	Horse chestnut	Proposed footpath
49	Horse chestnut	Proposed footpath
87	English oak	Proposed private drive
110	Large-leaved lime	Proposed parking bays
111	Large-leaved lime	Proposed parking bays

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding, or a 2m high scaffolding framework, with uprights at maximum 3m spacings, every other one braced to the ground with 45 degree struts, supporting standard anti-climb 'Heras' welded mesh fence panels secured with anti-lift devices to concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm; individual panels fixed to each other with at least 2 clamps and to scaffolding with heavy-duty cable ties. "TREE PROTECTION ZONE - KEEP OUT" or similar notices to be attached to every fifth panel.

TREE PROTECTION FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 2.

Ground Protection

To be installed prior to commencement of demolition or construction works, at same time as erection of protective fencing. For purely pedestrian traffic: scaffold boards or similar, of at least 35mm thickness, butted together and attached to each other with wooden battens or steel tie straps, laid either on an above ground scaffold framework, or on a compressible material (a 75mm deep layer of woodchips may be appropriate) above a biaxial geotextile grid ('geogrid' - "Tensar" or similar) and pinned to the ground with steel pins to prevent movement.

For wheeled or tracked traffic: temporary aluminium roadway ("Trakway" or similar), interlocking polyethylene tread boards ("Ground-Guards" or similar), or reinforced concrete slabs laid on an appropriate compressible layer above a biaxial geotextile grid - to be designed by a structural engineer to accommodate likely loadings.

Manual Excavation

Within root protection areas the first 750mm depth of any excavation, whether for proposed foundations, hard surfacing, or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be cleared from roots with a compressed air soil pick. All roots will be cut cleanly with a hand saw or secateurs. The edge of the excavation closest to the trees will be covered with hessian sacking to prevent drying out, and if necessary be shuttered with an appropriate material to prevent soil collapse. Where appropriate, the soil beneath this depth may be sheet piled; and deeper excavation may be undertaken by a machine provided it works from outside the root protection areas.

Above Soil Surfacing

Proposed hard surfacing within root protection areas (RPAs) of retained trees to be constructed in accordance with section 7.4 of BS 5837: 2012. Trees in relation to design, demolition and construction - Recommendations. Other than the careful removal, using hand tools, of any turf layer, surfaces will be installed above existing soil level, or no deeper than the base of any existing surfacing it is replacing, so that the soil is not disturbed and no roots are severed; and an appropriate ground covering, possibly using a geogrid, a geoweb, or a combination of the two will be placed beneath the sub-base to minimise compaction of the soil in which tree roots are growing. Edge supports will also be installed above existing soil level.

Arboricultural Supervision

The arboricultural consultant will directly supervise all construction works that have to be undertaken within root protection areas. These include:

1. Location of protective fencing and ground protection.
2. Construction of above-ground hard surfacing.
3. All excavations, whether for proposed foundations, hard surfacing, or underground services.

SJA trees ARBORICULTURAL PLANNING CONSULTANTS

Project: Pondtail Farm, Mercer Road

Client: Riverdale

Drawing: TREE PROTECTION PLAN - South

Drawing no: SJA TYP 23536-043 (1of2)

Based on: 1644/P/10.03 Rev G

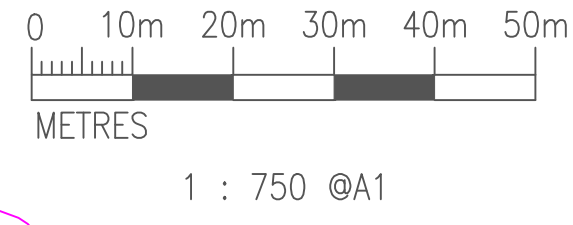
Drawn by: FJC	Date of Issue: Dec 2024	Scale: 1: 750 @ A1
Checked by: FFS	Tel: (01737) 813058	sja@sjatrees.co.uk

Tree nos.: ● 15	Category 'U' trees: ● [8]	Canopies of trees to be retained:
Category 'A' RPA:	Category 'B' RPA:	Category 'C' RPA:
Trees to be removed:	Protective fencing:	Ground protection:
Above soil surfacing:	Manual excavation:	Tree to be pruned:
Veteran woodland & 15m buffer:	Ancient woodland & 15m buffer:	

For further information refer to the SJA Trees Tree Survey Schedule. Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. SJA Trees (the trading name of Simon Jones Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd. 2024. This drawing is copyright and may not be used or changed without the written consent of SJA Trees.

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This drawing is designed to reflect only the principles of layout and /or design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.



Arboricultural Impacts: Summary

(For details, see below)

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