

LEGAL AND GENERAL (STRATEGIC LAND NORTH HORSHAM) LIMITED

PHASE 2 RM AREA 13 RESIDENTIAL RESERVED MATTERS APPLICATION

**BS:5837 SURVEY, ARBORICULTURAL IMPACT ASSESSMENT
& METHOD STATEMENT**

ISSUE: Wednesday, 24 June 2026

CLIENT Legal and General (Strategic Land North Horsham) Limited

PROJECT Mowbray (Formerly Land North of Horsham) – Phase 2 RM Area 13 Residential Reserved Matters Application

REPORT TITLE BS:5837 Arboricultural Survey / AIA / AMS

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1. INTRODUCTION

Background

- 1.1 This report has been prepared on behalf of Legal and General (Strategic Land North Horsham) Limited (The Applicant).
- 1.2 David Jarvis Associates have been commissioned to provide an Arboricultural Impact Assessment & Arboricultural Method Statement in accordance with the guidelines and recommendations in the British Standard (BS) 5837:2012 *Trees in Relation to Design, Demolition and Construction* in relation to the proposed outline planning application for the development of Mowbray (Formerly land north of Horsham).
- 1.3 The Arboricultural Impact Assessment will consider the short or longer-term impact the construction of the RM Area 13 residential development will have on the surrounding trees and make recommendations for amendments or mitigation where appropriate.
- 1.4 The Arboricultural Method Statement details the steps which will be taken to ensure retained trees are adequately protected and preserved during the construction works once planning consent is granted.

Scope

- 1.5 The scope and level of detail included in this report, complies with the requirements of British Standard (BS) 5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations* (BS:5837 Table B.1) and includes reference to the following:
 - Arboricultural Impact Assessment
 - Arboricultural Method Statement
 - Tree Protection Plan.
- 1.6 The British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction' is designed to assist those concerned with trees in relation to construction to form balanced judgments. This report does not therefore seek to put arguments for or against development but provides a means of protecting trees which may be affected during development.
- 1.7 The report is for the sole use of the client and their appointed agents. Its reproduction or use by anyone else is forbidden unless written consent is given by the author.

2. CONTACTS

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3. PLANNING BACKGROUND

- 3.1 An application for outline Planning Permission (LPA ref. DC/16/1677: 'the OPP') for the following development was submitted to Horsham District Council on 4th August 2016.
- 3.2 'Outline planning application with all matters reserved except access for a mixed-use strategic development to include housing (up to 2,750 dwellings), business park (up to 46,450m²), retail community, leisure facilities, education facilities, public open space, landscaping and related infrastructure.'
- 3.3 Permission was granted subject to conditions on the 1st of March 2018
- 3.4 Condition 16 of outline planning permission ref DC/16/ 1677 (as amended by s96A Application ref. DC/19/0984) relates to the preservation of trees and reads as follows:

No development shall commence within any Reserved Matters Area or on works to construct the accesses hereby approved, including demolition pursuant to the permission granted, ground clearance, or bringing equipment, machinery or materials onto the relevant part of the site, until the following preliminaries have been completed in the sequence set out below:

a) A plan shall be submitted to show all trees on the relevant part of the site to be retained as well as those off-site whose root protection areas ingress into the relevant part of the site, such trees shall be fully protected by tree protective fencing affixed to the ground in full accordance with section 6 of BS 5837 'Trees in Relation to Design, Demolition and Construction - Recommendations' (2012).

b) Once installed, the fencing shall be maintained during the course of the development works for that phase or sub-phase and until all machinery and surplus materials have been removed from the site.

c) Areas so fenced off shall be treated as zones of prohibited access, and shall not be used for the storage of materials, equipment or machinery in any circumstances. No mixing of cement, concrete, or use of other materials or substances shall take place within any tree protective zone, or close enough to such a zone that seepage or displacement of those materials and substances could cause them to enter a zone.

Reason: As this matter is fundamental to ensure the successful and satisfactory retention of important trees and hedgerows on the site in accordance with Policy 33 of the Horsham District Planning Framework (2015).

- 3.5 The proposal that is subject to this Reserved Matters planning application is for the approval of matters pursuant to Condition 16 of outline planning permission ref DC/16/1677 for the construction of the RM Area 13 Residential Development within the wider Mowbray development area (as amended by s96A Application DC/19/0984).

4. LEGAL PROTECTION (TREES)

Tree Preservation Orders

- 4.1 I have confirmed on the Horsham District Council TPO Map that at the time of this report (01/06/2026), that there are no Tree Preservation Orders within the build area.

Conservation Areas

- 4.2 I have confirmed on the Horsham District Council online mapping portal that the RM Area 13 development area is not within a Conservation Area.

Ancient Woodland

- 4.3 Woodland beyond the eastern boundary of the site is designated Ancient Woodland.

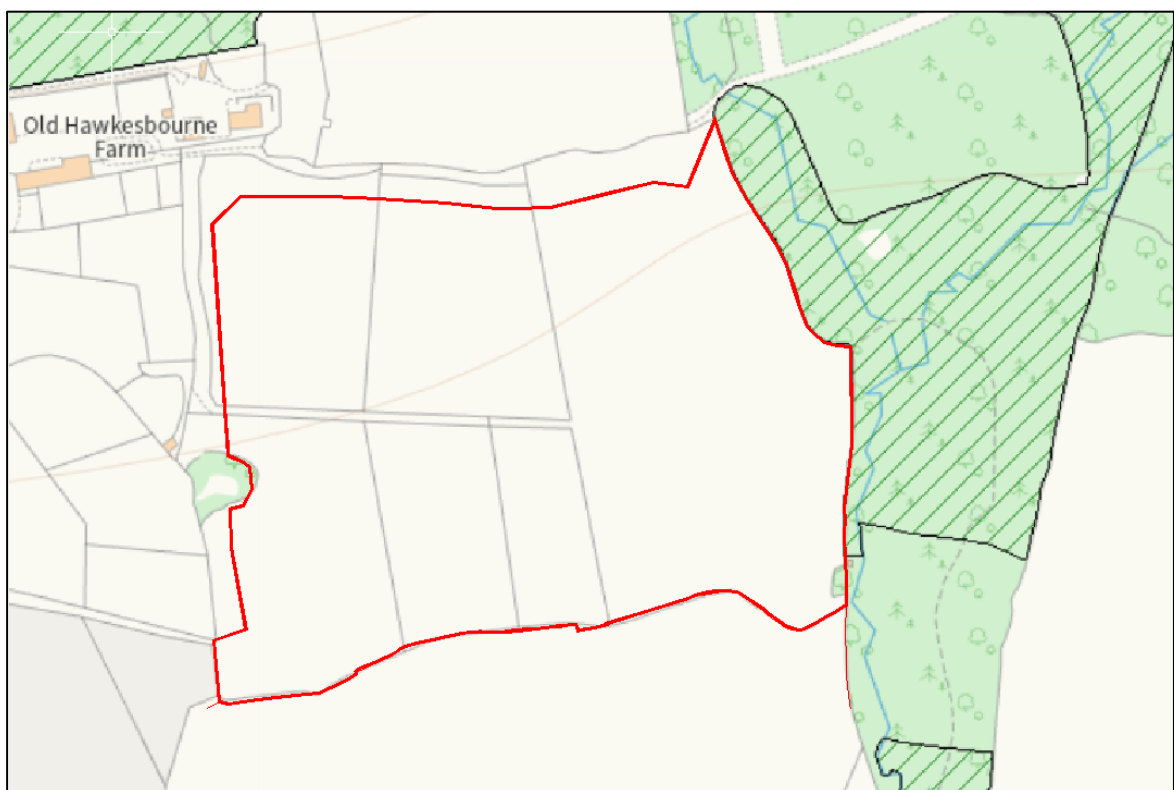


Figure 1 – Horsham DC Map showing Ancient Woodland (green hatch) in relation to the RM Area 13 Residential Development Area

- 4.4 For ancient woodlands, Government guidelines recommend a buffer zone of at least 15 metres from the boundary of the woodland. Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone.
- 4.5 In accordance with the National Planning Policy Framework, the RM Area 13 Development Area maintains a minimum 15m boundary from the edge of the designated Ancient Woodland area to ensure all development sits outside of the Ancient Woodland Buffer Zone.

5. ARBORICULTURAL IMPACT ASSESSMENT

Introduction

- 5.1 The purpose of this Arboricultural Impact Assessment is to evaluate the direct and indirect effects of the proposed RM Area 13 Residential Development and associated works on trees growing within and adjacent to the site.
- 5.2 This assessment will identify any potentially damaging activities proposed near the trees growing on and adjacent to the site. Where conflict is identified, this report will recommend design solutions or mitigation as appropriate.

Site Description

- 5.3 The site 'Land North of Horsham' is a strategic allocation covered by Policy SD1 to SD9 of the HDPF. The masterplan for development which includes the residential development of Mowbray has been agreed in principle under outline planning permission ref DC/16/ 1677.



Figure 2 – RM Area 13 Residential Development Area Masterplan

- 5.4 The RM Area 13 Residential Development Area is accessed from the south via RM Area 13 which connects to the Bailey Road extension road which is approved under planning ref: **DISC/25/0292** (Approval of details reserved by condition 18(c)&(d) to approved application DC/16/1677 (Bailey Road Extension).
- 5.5 The RM Area 13 Residential Development Area consists of an agricultural field which has been divided up into a series of irregularly sized paddocks for equine use. The site is broadly level and has no pre-existing development.
- 5.6 RM Area 13 is bordered to the north and west by the 2A Landscape Buffer which provides a degree of separation between the residential development and the mature hedgerows and trees to the north and west of the site.

- 5.7 Along the western boundary there is a small pond area surrounded by suckering Goat willow and other small trees.
- 5.8 The southern boundary is bordered by an existing mature hedgerow in which there are growing a number of mature trees.
- 5.9 Dense woodland beyond the eastern edge of the site is designated as Ancient Woodland.

Soil

- 5.10 The British Geological Survey 1:50 000 scale bedrock geology description for this area is Weald Clay Formation - Mudstone. Weald Clay Formation can become very soft when wet and vulnerable to compaction.
- 5.11 Most Weald Clay Formation soils fall within the low-to-medium Volume Change Potential (VCP) range. However, variations can exist and where high plasticity clay is present the potential for volumetric change will be greater.
- 5.12 There is an outcrop of Horsham Stone Member-Sandstone which crosses east-west across the centre of the site. These sedimentary rocks were deposited by an ancient, river-dominated system creating a seam of sandstone along the route of an ancient river channel which had periodic inundation from the sea.
- 5.13 Due care must be taken to construct building foundations to a depth sufficient to resist soil shrinkage through desiccation, taking into account the presence and future growth of existing trees and future tree planting.

Site specific Assessment

- 5.14 The suitability of planning development in relation to trees is assessed by the Local Authority in accordance with the British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction.
- 5.15 This document requires that the conception and design of the final development layout must take into account the constraints posed by the trees on site. These constraints include not only the existing canopy and likely root spread but also:
- The ultimate height and spread of the trees.
 - Potential impact of species characteristics for future residents – evergreen / deciduous, density of foliage, seasonal leaf drop / berries etc.
 - Current and future shade patterns.
- 5.16 The default position in the British Standard is that every effort should be made to retain and protect the category A and B trees on site and that new structures should be located outside of the identified RPAs of trees to be retained.
- 5.17 The position of development has been proposed to ensure all individual trees will be retained within the design, ensuring that their long-term contributions to local amenity and the character of the developed site is maintained.

- 5.18 Three key areas of the site have been identified where the RM Area 13 Residential Development will impact on trees / hedgerows.

These are listed as follows:

- 1) New road minor incursion into the RPA of T018 (Oak)
- 2) Facilitative Tree Works: Partial clearance of existing hedge (G023) for new access road and cutting back of lateral branches of group G183 for the new no-dig pedestrian footpath.
- 3) New pedestrian footpath within RPA of T024 & T179.

Roadway incursion within RPA of T018 (Oak)

- 5.19 The new perimeter road along the southern boundary requires a minor incursion of 3.2m² into the RPA of T018 (Oak). This is a small but mature specimen Oak, in good health and with the potential for a long-life expectancy.
- 5.20 BS:5837 advises that where new areas of hard landscaping are essential within the rooting areas of trees, they should not exceed 20% of the previously undeveloped rooting area of the tree.
- 5.21 The roadway encroachment covers an area equivalent to 1.9% of the rooting area of the tree. This encroachment will result in a minor loss of fine fibrous roots on the very outer periphery of the RPA and will not be significant in terms of tree health.
- 5.22 As the incursion is very small - well below the 20% threshold deemed acceptable within BS:5837 2012 and any impact on the tree will be negligible. Therefore, no special engineering solutions are proposed on this occasion. All other areas of the tree's RPA will be fully protected and undisturbed during construction.



Photo 1 – T018 (Oak).

Facilitative Tree Works

5.23 The following tree works are proposed to facilitate the building work:

Ref.	Species	Works	BS:5837 Cat.
G023	Field Maple, Hawthorn Blackthorn	Clear 15m gap in hedge along southern boundary for new access road between RM Area 13 and RM Area 13 development areas.	C2
G183	Mixed Species Group	Selectively reduce branches of broad leaf shrubbery around dried pond area by approximately 4.5m	C2

Figure 3 – Trees groups / hedgerows to be part cleared / cut back to facilitate the build.

- 5.24 In both cases, the partial clearance or cutting back of vegetation represents a small area of each group, and the larger part of each group will remain.
- 5.25 Facilitative tree works will be undertaken in accordance with BS:3998 2010 'Tree Work Recommendations'.
- 5.26 In accordance with the Wildlife and Countryside Act - 1981, Conservation - Natural Habitats - Regulations 1994 and Countryside Rights of Way Act - 2000, facilitative tree works will be scheduled to avoid causing disturbance to any nesting or breeding birds that may be present within trees / hedges.



Photo 2 – Area of G026 (Field Maple, Hawthorn Blackthorn) to be cleared for new connecting access road.



Photo 3 – T018 (Oak).

Low-Dig Pedestrian Footpath

- 5.27 New pedestrian footpaths will encroach slightly within the Root Protection Areas of two trees - T024 (Oak) and T179 (Oak).
- 5.28 A new pedestrian footpath encroaches over approximately 7.5m² of the rooting area of T024, a mature Oak of moderate vitality. This pedestrian footpath connects with a footpath north of RM Area 13 Development Area. The combined incursion of the footpath which straddles both RM Area 13 and RM Area 13 is 19m². This equates to 6.5% of the Root Protection Area of the tree.
- 5.29 West of the site around the pond area, a new pedestrian footpath also encroaches over 9.2m² of the rooting area of T179. This equates to 8% of the overall Root Protection Area of the tree.
- 5.30 In both cases for T024 and T179, the encroachment is below the 20% threshold deemed acceptable within the BS:5837 2012 and the works will not have any significant harm on the trees' health.
- 5.31 Both footpaths will be of a 'low-dig' construction with the removal of surface vegetation only to limit the impact on trees and tree roots. In addition, the footpath surface will be porous to ensure tree roots can continue to thrive under the footpaths on completion of construction.
- 5.32 Both T024 and T179 are mature, established Oaks in good physiological health. The trees will be able to tolerate this minor encroachment within their root protection areas without detriment to their long-term health.

Tree Protection

- 5.33 Standard protective fencing and temporary ground protection will be implemented around the site in accordance with BS 5837:2012 guidance, ensuring trees are safeguarded throughout all phases of construction.
- 5.34 The structure of the Tree Protection Fencing used on the Mowbray Site is provided in Appendix 5 and has been confirmed as being fit-for-purpose by Horsham District Council's Tree Officer.
- 5.35 Public information signage will be attached to the fencing (See Appendix 6).

Landscaping

- 5.36 Provision has been made for a robust scheme of tree and landscape planting to enhance the new residential development.
- 5.37 The scheme includes street trees to be planted within the adopted highway. These trees will create a visually prominent landscape feature and enhance the verdant character of the residential area.

Conclusions

- 5.38 This Reserved Matters application for the RM Area 13 Residential Development has been fully considered in accordance with the guidelines and recommendations from BS:5837 'Trees in Relation to Design, Demolition and Construction'.
- 5.39 Trees on site have been surveyed and categorised in terms of quality and amenity value in accordance with the British Standard.
- 5.40 The proposed position of the new residential development has been determined by the constraints presented by the existing tree stock to provide an appropriate and sympathetic layout as it relates to trees.
- 5.41 On completion of the infrastructure works, the development will be enhanced by a robust scheme of new tree and landscape planting.
- 5.42 This application is therefore respectful to the preservation of trees and provided the methodology in the attached Arboricultural Method Statement is adhered to in full, the application is considered to be acceptable as it relates to trees.

6. ARBORICULTURAL METHOD STATEMENT (AMS)

Introduction

- 6.1 This Arboricultural Method Statement specifies the detailed methodology that will be employed to prevent damage to trees during the construction for the RM Area 13 Residential Development.
- 6.2 To ensure a commitment from all parties to the healthy retention of the trees, Tree Protection details – to include the Arboricultural Method Statement and Tree Protection Plan, will be passed to all contractors working on site, so that the practical aspects of the required tree protection is included in their method statements, and financial provision made for these.
- 6.3 A copy of the Arboricultural Method Statement and Tree Protection Plan will be available on site for reference.

Phasing of works

STAGE 1 (PRE-COMMENCEMENT)

FACILITATIVE HEDGE REMOVAL WORK /
REDUCTION OF TREES WITHIN G023 & G183



ERECTION OF TREE PROTECTION FENCING



PRE-COMMENCEMENT SITE MEETING
(NOTIFY LOCAL AUTHORITY -MIN 5 DAYS)



STAGE 2 (DEMOLITION AND CONSTRUCTION)

GROUND WORKS & CONSTRUCTION
TREE PROTECTION MEASURES TO REMAIN RIGID & INTACT THROUGHOUT



STAGE 3 (POST DEVELOPMENT)

REMOVE TREE PROTECTION FENCING, SITE HOARDING
& TEMPORARY SITE BUILDINGS
(NOTIFY LOCAL AUTHORITY -MIN 5 DAYS)



INSTALLATION OF LOW-DIG PEDESTRIAN FOOTPATH
WITHIN RPA OF T024 (OAK) & T179 (OAK)



TOPSOIL AND PLANTING OPERATIONS

Compliance

- 6.4 The correct and timely installation of tree protection measures such as tree protection fencing is critical to ensure the long-term retention of a healthy tree stock on and adjacent to the development.
- 6.5 This method statement will be read, approved and agreed to by all key personnel prior to the commencement of works within the site.

ADVISORY: FAILURE TO COMPLY WITH THE ARBORICULTURAL METHOD STATEMENT ONCE APPROVED CAN CAUSE HARM TO TREES AND MAY INVALIDATE YOUR PLANNING CONSENT.

Site Supervision and Monitoring

- 6.6 A pre-commencement site visit will be held once the Tree Protection Fencing is installed as shown on the Tree Protection Plan and prior to the commencement of building works on site. The Local Authority Tree Officer will be given a minimum of five days' notice of the time and date of the meeting so that they may attend should they wish to do so.
- 6.7 The purpose of the pre-commencement meeting will be to confirm the location and construction of the Tree Protection Measures and ensure a common understanding of the requirements for Tree Protection within the site.
- 6.8 If the Local Planning Authority is unable to attend, photographic evidence of the tree protection fencing will be emailed to the appointed planning officer once it has been erected.

On-site Supervisor

- 6.9 In addition to the appointed Arboricultural Consultant, there will be a designated on-site Supervisor who will be responsible for ensuring no works are undertaken on site except in complete accordance with the approved Arboricultural Method Statement when the Arboricultural Consultant is not present.
- 6.10 The on-site Supervisor will:
- Be present on site most of the time.
 - Be aware of the arboricultural responsibilities relating to the retained trees on site.
 - Have the authority to stop any work that will, or have the potential to, cause harm to any tree.
 - Be responsible for ensuring that all site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
 - Make immediate contact with Horsham District Council and/or the retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.
 - Notify the local authority 5 days prior to the tree protection measures being removed on completion of development.

Tree Works

- 6.11 Facilitative tree works which include the partial clearance and cutting back of tree groups G023 and G183 are listed in Fig. 3 and shown on the Tree Protection Plan ref: 2898-5-2-33-DR-0014

Tree Works Best Practice

- 6.12 No vehicles will be driven under the canopies of retained trees onto unprotected ground during the tree work operations.
- 6.13 Chippings arising from the work will not be piled around the bases of trees on or off the site. Wood, brash and any other arisings from the tree work will not be burnt on site.
- 6.14 A properly qualified and experienced company will be employed who carry Public and Products Liability Insurance with a minimum of £2,000,000 cover and the relevant Employers Liability Insurance. A List of approved contractors is available from the Arboricultural Association – www.trees.org.uk.

Protected Species

- 6.15 In accordance with the Wildlife and Countryside Act - 1981, Conservation - Natural Habitats - Regulations 1994 and Countryside Rights of Way Act - 2000, the site manager will schedule hedge clearance operations to avoid causing disturbance to any nesting or breeding birds.
- 6.16 It is an offence (subject to exceptions) to intentionally kill, injure, or take, possess, or trade in any wild animal listed, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places.
- 6.17 Non-urgent hedge cutting operations should not be undertaken during the bird nesting or breeding season, which is from 1 March to 31 July. However, depending on seasonal temperatures, some birds continue breeding into August and September.
- 6.18 All wild birds, their young, their eggs and active nests are protected under law. It is an offence to damage a nest intentionally while it is in use or being built and hedge cutting is highly likely to damage nests or cause them to be deserted.

Tree Protection Fencing

- 6.19 Following the facilitative hedge clearance, no further works will be undertaken in relation to the build, including receipt of deliveries, excavation or construction, prior to the Tree Protection Fencing being installed as per the Tree Protection Plan.
- 6.20 The structure of Tree protection fencing within the North Horsham Strategic Development Area consists of Heras fence panels supported on wooden posts sunk into the ground. This style of fencing has been agreed with Horsham District Council and is necessary to prevent injury to operatives where fencing is required near to over / underground services. The fencing will be robust and fit for purpose. Panels will be rigidly attached to the posts to prevent movement.
- 6.21 All-weather signage stating 'TREE PROTECTION AREA – KEEP OUT' will be attached to the outer perimeter of the Tree Protection Fencing. A sample sign is attached in Appendix 6 of this report.
- 6.22 The fencing will be located to protect the trees and their rooting areas and will remain rigid and complete during the demolition and ground works. At no time will Tree Protection Fencing be removed or relocated contrary to the recommendations in this report, without professional arboricultural advice and without the prior consent of the Local Authority Tree Officer.
- 6.23 The appointed Site Manager will notify the Tree Officer once Tree Protection Measures are installed on site and 5 days prior to the Protection Fencing being removed on completion of ground works so that a representative from the Local Authority may visit the site if considered necessary.

General Considerations

- 6.24 Roots can be killed by pollution of their rooting areas by chemicals and leaching. Loose, granular or liquid materials, including cement mix and fuel will be stored on an impermeable membrane on the existing areas of tarmac and away from tree root protection areas.
- 6.25 Building waste including lightweight packaging / foam etc. will be stored and disposed of responsibly and will not be permitted to be windblown or deposited offsite.
- 6.26 Care will be taken in the planning of deliveries if they require wide or tall loads and plants with booms, rigs or counterweights which can cause serious and permanent damage to trees.
- 6.27 Any transit or traverse of plant in proximity to the Tree Protection Fencing will be conducted under the supervision of a banksman to ensure that fencing is not damaged or displaced.
- 6.28 There will be no open fires on site during the building works.

Unforeseen Circumstances

- 6.29 In the event of unforeseen circumstances whereby it is not possible to work in accordance with the Arboricultural Method Statement then advice should be sought immediately from a qualified Arboriculturist.
- 6.30 **THERE SHALL BE NO DEVIATION FROM THIS METHOD STATEMENT WITHOUT CONSULTATION WITH A QUALIFIED ARBORICULTURIST AND / OR THE WRITTEN CONSENT OF THE LOCAL PLANNING AUTHORITY.**

7. POST CONSTRUCTION

Low-Dig Pedestrian Footpath within Rooting Areas of T179 (Oak) and T024 (Oak).

- 7.1 Within the identified rooting areas of trees, existing turf can be scraped back by hand or with the toothless bucket of a long-armed excavator working from outside the trees' rooting areas. Grass and roots will be removed no deeper than 50mm taking care not to damage surface woody tree roots.
- 7.2 If woody roots are exposed during this work, they will be covered by a fine layer of topsoil to prevent desiccation. Any ruts in the ground following the removal of the hardcore / vegetation will be levelled with the application of a coarse pH neutral sand or clean angular stone.
- 7.3 Timber or aluminium edging boards will be installed to provide an upstand of approximately 150mm between the ground level and finished road surface to contain the gravel as per the manufacturer's recommendations. A Geotextile Fabric will be laid across the site, overlapping adjacent rolls by a minimum of 150mm. It may be necessary to lightly pin the Geotextile in place until the overlying layers are installed.
- 7.4 A Cell web system minimum 100mm deep will then be opened out and pinned in place between the edging boards. Pin spacing will vary according to the site conditions but will generally be required at 1m – 2m centres on flat surfaces, mainly placed around the perimeter of the area and where adjacent sections of the cellular confinement system abut each other, with less in the middle of the area.
- 7.5 The open cells will be filled with clean, open graded aggregate with particles between 20 and 45mm, (no fines Roadstone of a non-marine source) working toward the tree from the furthest point away and using the filled cells as a platform.
- 7.6 Once the Geo-textile grid has been installed and filled with aggregate as per the manufacturer's recommendation it can be used as root protection and access to the build area during the construction process. The final aesthetic porous surface will be installed on completion of the landscaping works and prior to the tree protection measures being removed. This will be filled as required to level off the pathway surface up to the point of the adjacent kerb or edging boards.
- 7.7 Where necessary, following completion of the path construction, quality topsoil can be used to grade the edge of the pathway to meet the adjacent ground levels.

APPENDIX 1

Survey Key

Ref:	T001 = Tree 1 A001 = Area 1	G001 = Group 1 W001 = Woodland 1
Species:	Common name (Botanical name)	
Height:	Measured with a clinometer (m) where possible or estimated when part of a group	
Stem:	Stem diameter taken at 1.5m with girth tape or rule and recorded in millimetres	
Branch spread:	Paced measurements at compass points or with a laser measure.	
	Crown clearance: Existing height above ground level of canopy and / or first significant branch direction of growth in metres e.g. 2.4 (N) where relevant.	
Epics:	Lower canopy created by epicormic growth.	
Age Class:	Newly planted - 3 years following planting Young - Tree well established but with juvenile crown form Young Mature - Tree in first third of usual life expectancy for species Mature - Tree in second third of usual life expectancy for species Over Mature - Tree in final third of usual life expectancy for species / exhibiting signs of crown retrenchment & senescence Veteran - Older than usual for species or with historical/ cultural / ecological value	
General Observations:	Made with reference to physiological condition (health, vigour) and structural condition, noting evidence of decay, structural weakness and physical defect and preliminary management recommendations.	
Estimated Remaining Contribution:	Estimated in years - less than 10, 10-20, 20-40, 40+	
BS: 5837:2012 category rating:	In accordance with the guidelines of the British Standard.	
	● Category 'A' tree (Green) ● Category 'C' tree (Grey) ● Category 'B' tree (Blue) ● Category 'U' tree – Fell (Red)	
RPA Area:	BS:5837 (2012) Root Protection Area calculation in square metres	
RPA Radius	BS:5837 (2012) Root Protection Area calculation circle radius in metres. ¹	

¹ The root protection area radius is for information only and may not be appropriate in every case. BS:5837 advises that 'the RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting may have occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distributions.'

APPENDIX 2**BS:5837 (2012): Cascade chart for tree quality assessment**

CATEGORY & DEFINITION	CRITERIA (INCLUDING SUB-CATEGORIES WHERE APPROPRIATE)		
Trees unsuitable for retention			
CATEGORY U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	- Trees that have a serious, irremediable, structural defect such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning. - Trees that are dead or 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. - NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve		
	Mainly Arboricultural Qualities	Mainly Landscape Qualities	Mainly cultural values including conservation
Trees considered suitable for retention			
CATEGORY A Trees of High Quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and / or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
CATEGORY B Trees of Moderate Quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little contribution to the wider locality.	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.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands but without this conferring on them significantly greater collective landscape value; and/ or trees offering low or only temporary / transient landscape benefits.	Trees with no material conservation or other cultural value.

APPENDIX 3

Survey Appraisal

The trees were surveyed as part of a wider survey of trees within the Phase 2 North Horsham Development Area in July 2023. This report includes an extract of the tree survey data which is relevant to this application. For other trees within the Phase 2 North Horsham Development Area, please refer to the Tree Survey Report

Trees were viewed from ground level only. Heights were estimated where part of a group. Girth and canopy spread was measured with a laser measure or estimated where trees were not accessible. Soil samples were not taken.

The trees on site were assessed for their quality and benefits within the context of the proposed development and categorised in accordance with the recommendations in the BS:5837:2012.

Obvious defects have been noted on the trees, however, this survey is for planning use only and does not constitute a detailed health and safety survey of the trees. Its use as such is invalid.

Trees are dynamic living organisms subject to change, whose health and condition can be subject to significant change influenced by internal and external factors. The assessment of trees in this report are based on the condition assessed at the time of inspection and are valid for 18 months.

If the condition of the trees evidently changes or the trees are subject to extreme weather conditions before this date; further inspection may be required. No tree is ever absolutely safe due to the unpredictable laws and forces of nature.

APPENDIX 4**Tree Survey Data**

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T014	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam (mm): 1030 Crown Clearance (m): 4 Life Stage: Veteran Rem. Contrib.: 40+ Years	N:7 E:10 S:6.5 W:12	Basal and stem decay. Possible historic lightning strike. Numerous cavities and decay pockets and deadwood. Best retained in low occupancy area	B1,3	Radius: 15.0m. Area: 707 sq m.	Physiological Cond: Fair Structural Cond: Physical defect
G015	Mixed Species Group	Group	Height (m): 4 Stem Diam (mm): 100 Crown Clearance (m): 0 Rem. Contrib.: 40+ Years	N:2 E:2 S:2 W:2	Mature broadleaf hedgerow. Mostly blackthorn, field maple, hazel, crab apple.	C2	Area: 1249 sq m, plus a 1m buffer.	Physiological Cond: Good Structural Cond: Fair
T016	Field Maple (<i>Acer campestre</i>)	Tree 8 stems	Height (m): 6 8 stems, avg.(mm): 50 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:4 S:4 W:2	Mature coppice stool clipped into surrounding hedgerow.	C2	Radius: 1.7m. Area: 9 sq m.	Physiological Cond: Fair Structural Cond: Poor
T017	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam (mm): 1300 Crown Clearance (m): 4 Life Stage: Veteran Rem. Contrib.: 40+ Years	N:7.5 E:10 S:12 W:10	Basal and stem decay. Possible historic lightning strike. Numerous cavities and decay pockets and deadwood. Best retained in low occupancy area. Detailed risk assessment required if tree is incorporated into regularly accessed residential area.	B1,3	Radius: 15.0m. Area: 707 sq m.	Physiological Cond: Fair Structural Cond: Physical defect
T018	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 11 Stem Diam (mm): 600 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:5 E:6 S:5 W:6	Well-formed tree. Good vitality.	A1,2	Radius: 7.2m. Area: 163 sq m.	Physiological Cond: Good Structural Cond: Good
T019	Field Maple (<i>Acer campestre</i>)	Tree 2 stems	Height (m): 6 2 stems, avg.(mm): 200 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:4 S:3 W:4	Mature coppice stool clipped into surrounding hedgerow.	C2	Radius: 3.4m. Area: 36 sq m.	Physiological Cond: Fair Structural Cond: Poor
T020	Field Maple (<i>Acer campestre</i>)	Tree	Height (m): 6 Stem Diam (mm): 160 Crown Clearance (m): 2 Life Stage: Young Rem. Contrib.: 40+ Years	N:3 E:3 S:3 W:3	Young tree within dense Blackthorn hedge	C2	Radius: 1.9m. Area: 11 sq m.	Physiological Cond: Good Structural Cond: Fair

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T021	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 14 Stem Diam (mm): 950 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:8 E:8 S:10 W:7	Mature tree with splits and fissures throughout canopy. Asymmetrical canopy. Habitat value.	B1	Radius: 11.4m. Area: 408 sq m.	Physiological Cond: Good Structural Cond: Good
G022	Field Maple (<i>Acer campestre</i>) Blackthorn (<i>Prunus spinosa</i>)	Group	Height (m): 6 Stem Diam (mm): 100 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:1.5 E:1.5 S:1.5 W:1.5	Slender hedgerow trees, marginally taller than the surrounding hedgerow.	C2	Area: 91 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Fair
G023	Field Maple (<i>Acer campestre</i>) Hawthorn (<i>Crataegus monogyna</i>) Blackthorn (<i>Prunus spinosa</i>)	Group	Height (m): 5 Stem Diam (mm): 120 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:2.5 E:2.5 S:2.5 W:2.5	Mature boundary hedge.	C2	Area: 1721 sq m, plus a 1m buffer.	Physiological Cond: Good Structural Cond: Fair
T024	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 800 Crown Clearance (m): 3.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:9 E:9 S:9 W:9	Swollen base and stilted buttressing. Basal decay (<i>Pseudoinonotus dryadeus</i>) likely. Full canopy. Mature epicormic growth on lower trunk.	B1	Radius: 9.6m. Area: 290 sq m.	Physiological Cond: Good Structural Cond: Physical defect.
G025	Common Hawthorn x3 (<i>Crataegus monogyna</i>)	Group 3 trees	Height (m): 4 3 stems, avg.(mm): 100 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:3 S:3 W:3	Isolated old hedgerow trees.	C2	Area: 15 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Poor
T026	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 530 Crown Clearance (m): 7 Life Stage: Mature Rem. Contrib.: 40+ Years	N:6.5 E:3 S:4 W:6.5	Ivy clad. No access to base.	B2	Radius: 6.4m. Area: 129 sq m.	Physiological Cond: Good Structural Cond: Fair
G129	Hornbeam x3 (<i>Carpinus betulus</i>)	Group 3 trees	Height (m): 16 3 stems, avg.(mm): 430 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 10+ Years	N:5 E:5 S:5 W:5	Significant stem decay at base of two larger trees. Weak fork. Reasonable vitality.	C1	Area: 5 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Physical Defect
T130	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 550 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4 E:4 S:4 W:6	Barbed wire occluded into lower trunk. Asymmetrical canopy, ivy clad.	B2	Radius: 6.6m. Area: 137 sq m.	Physiological Cond: Good Structural Cond: Fair

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T131	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 350 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:1 S:4 W:4	Asymmetrical canopy & suppressed form.	B2	Radius: 4.2m. Area: 55 sq m.	Physiological Cond: Good Structural Cond: Fair
T132	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 550 Crown Clearance (m): 9 Life Stage: Dead	N:4 E:4 S:4 W:4	Standing dead tree, habitat value	U	None - due to Retention Category of U.	Physiological Cond: Dead Structural Cond: Fair
T133	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 480 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:2 S:5 W:3	Asymmetrical canopy, previously twin stem. Wound at base where second stem failed. Ivy clad.	B2	Radius: 5.8m. Area: 106 sq m.	Physiological Cond: Good Structural Cond: Fair
T134	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 610 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:5 E:4 S:3 W:6	Barbed wire occluded into lower trunk. Asymmetrical canopy, ivy clad.	B2	Radius: 7.3m. Area: 167 sq m.	Physiological Cond: Good Structural Cond: Fair
T135	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 480 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:2 S:3 W:5	Bankside tree, asymmetrical canopy. Dieback in crown. Low vitality.	C2	Radius: 5.8m. Area: 106 sq m.	Physiological Cond: Good Structural Cond: Fair
T136	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 17 Stem Diam (mm): 380 Crown Clearance (m): 4 Life Stage: Dead	N:3 E:3 S:3 W:3	Advanced Dieback. 80% defoliated.	U	None - due to Retention Category of U.	Physiological Cond: Dead Structural Cond: Fair
T137	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 19 Stem Diam (mm): 600 Crown Clearance (m): 3 Life Stage: Over Mature Rem. Contrib.: <10 years	N:4 E:4 S:4 W:4	Advanced Dieback. 50% defoliated.	U	None - due to Retention Category of U.	Physiological Cond: Poor Structural Cond: Fair
T138	Common Ash (<i>Fraxinus excelsior</i>)	Tree 2 stems	Height (m): 19 2 stems, diam(mm): 490, 350 Crown Clearance (m): 3 Life Stage: Over Mature Rem. Contrib.: <10 years	N:6 E:6 S:6 W:6	Cavities under buttress roots. Lapsed coppice stool. Broad canopy with reasonable vitality. No significant dieback symptoms.	C3	Radius: 7.2m. Area: 163 sq m.	Physiological Cond: Fair Structural Cond: Poor

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T139	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 520 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:2 S:3 W:5	Asymmetrical canopy, no significant defects	B2	Radius: 6.2m. Area: 121 sq m.	Physiological Cond: Good Structural Cond: Fair
T140	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 19 Stem Diam (mm): 680 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:5 E:5 S:5 W:7	Asymmetrical canopy, moderate vitality	B2	Radius: 8.2m. Area: 211 sq m.	Physiological Cond: Fair Structural Cond: Fair
T141	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 430 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4 E:1 S:4 W:6	Asymmetrical canopy, no significant defects	B2	Radius: 5.2m. Area: 85 sq m.	Physiological Cond: Good Structural Cond: Fair
T142	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 350 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:2 E:1 S:4 W:4.5	Asymmetrical canopy, no significant defects	B2	Radius: 4.2m. Area: 55 sq m.	Physiological Cond: Good Structural Cond: Fair
T143	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 700 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N:2 E:4 S:8 W:3	Asymmetrical canopy, moderate vitality. Dead branch stubs in canopy.	B2	Radius: 8.4m. Area: 222 sq m.	Physiological Cond: Fair Structural Cond: Fair
T144	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 19 Stem Diam (mm): 620 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:7 E:5 S:6 W:5	No significant defects.	B2	Radius: 7.4m. Area: 172 sq m.	Physiological Cond: Fair Structural Cond: Fair
T145	Common Ash (<i>Fraxinus excelsior</i>)	Tree 3 stems	Height (m): 15 Stems, diam(mm): 230, 420, 350 Crown Clearance (m): 3 Life Stage: Over Mature Rem. Contrib.: <10 years	N:3 E:2 S:3 W:3	Lapsed coppice stool. Advanced decline, canopy 50% defoliated.	C3	Radius: 7.1m. Area: 158 sq m.	Physiological Cond: Fair Structural Cond: Poor
T146	Field Maple (<i>Acer campestre</i>)	Tree 3 stems	Height (m): 12 Stem, diam(mm): 320, 290, 110 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: <10 years	N:3 E:1 S:3 W:4	Lapsed coppice stool. Broken out leader in upper canopy	C3	Radius: 5.4m. Area: 92 sq m.	Physiological Cond: Fair Structural Cond: Poor

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T147	Common Ash (<i>Fraxinus excelsior</i>)	Tree 4 stems	Height (m): 19 4 stems, diam(mm): 380, 370, 370, 400 Crown Clearance (m): 3 Life Stage: Over Mature Rem. Contrib.: <10 years	N:6 E:6 S:6 W:6	Cavities under buttress roots. Lapsed coppice stool. Broad canopy with reasonable vitality. No significant dieback symptoms.	C3	Radius: 9.1m. Area: 260 sq m.	Physiological Cond: Fair Structural Cond: Poor
T148	Common Ash (<i>Fraxinus excelsior</i>)	Tree 2 stems	Height (m): 14 2 stems, avg.(mm): 300 Crown Clearance (m): 8 Life Stage: Over Mature Rem. Contrib.: <10 years	N:3 E:2 S:3 W:3	Cavities under buttress roots. Canopy in decline, 80% defoliated.	U	None - due to Retention Category of U.	Physiological Cond: Poor Structural Cond: Poor
T149	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 17 Stem Diam (mm): 700 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4 E:4 S:4 W:5	Asymmetrical canopy, moderate vitality. Dead branch stubs in canopy.	B2	Radius: 8.4m. Area: 222 sq m.	Physiological Cond: Fair Structural Cond: Fair
T150	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam (mm): 670 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4.5 E:3.5 S:3 W:4	Asymmetrical canopy, moderate vitality. Dead branch stubs in canopy.	B2	Radius: 8.0m. Area: 201 sq m.	Physiological Cond: Fair Structural Cond: Fair
T151	Field Maple (<i>Acer campestre</i>)	Tree 2 stems	Height (m): 9 2 stems, avg.(mm): 250 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: <10 years	N:4 E:4 S:4 W:4	Entwined stems, weak fork. Large wound where stem broken out.	C3	Radius: 4.2m. Area: 55 sq m.	Physiological Cond: Fair Structural Cond: Poor
T152	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 18 Stem Diam (mm): 720 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4.5 E:4.5 S:4.5 W:6	Pronounced buttress roots. Large dead branches in canopy.	B2	Radius: 8.6m. Area: 232 sq m.	Physiological Cond: Fair Structural Cond: Fair
T153	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 17 Stem Diam (mm): 600 Crown Clearance (m): 3 Life Stage: Over Mature Rem. Contrib.: <10 years	N:4 E:4 S:4 W:4	Cavities where second stem failed. Canopy in decline, 50% defoliated.	U	None - due to Retention Category of U.	Physiological Cond: Poor Structural Cond: Poor
T154	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 16 Stem Diam (mm): 470 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 20+ Years	N:5 E:3 S:4 W:5	Moderate vitality, no obvious dieback in canopy.	B2	Radius: 5.6m. Area: 99 sq m.	Physiological Cond: Fair Structural Cond: Fair

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
G156	Hornbeam x3 (<i>Carpinus betulus</i>) Field Maple x2 (<i>Acer campestre</i>)	Group 5 trees	Height (m): 6.5 5 stems, avg.(mm): 260 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.5 S:3.5 W:3.5	Old hedgerow trees. Decay pockets on trunks.	C3	Area: 2 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Fair
T157	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 5 Stem Diam (mm): 300 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.5 S:3.5 W:3.5	Small hedgerow tree, managed as pollard	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Fair Structural Cond: Fair
T158	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 6 Stem Diam (mm): 300 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:3 S:3 W:3	Small hedgerow tree, managed as pollard. Early symptoms of Ash Dieback in canopy.	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Poor Structural Cond: Fair
T159	Not identified (<i>Not identified</i>)	Tree	Height (m): 6.5 Stem Diam (mm): 400 Life Stage: Mature Rem. Contrib.: 40+ Years	N:5.5 E:5.5 S:5.5 W:5.5	No access to base. Twin stem from ground level. Reasonable vitality	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Fair
T160	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 6 Stem Diam (mm): 400 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:3 S:3 W:3	Low branching lapsed pollard in dense hedgerow.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Fair
T161	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 6 Stem Diam (mm): 320 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.4 S:3.4 W:3.4	Small hedgerow tree.	C2	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Fair Structural Cond: Fair
T162	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 6 Stem Diam (mm): 320 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4.2 E:4.2 S:4.2 W:4.2	Small hedgerow tree.	C2	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Fair Structural Cond: Fair
T163	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 6 Stem Diam (mm): 150 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.5 S:3.5 W:3.5	Small hedgerow tree.	C2	Radius: 1.8m. Area: 10 sq m.	Physiological Cond: Fair Structural Cond: Fair

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T164	Field Maple (<i>Acer campestre</i>)	Tree	Height (m): 6 Stem Diam (mm): 420 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.5 S:3.5 W:3.5	Old, gnarled hedgerow tree.	C2	Radius: 5.0m. Area: 79 sq m.	Physiological Cond: Fair Structural Cond: Fair
T165	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 6 Stem Diam (mm): 200 Crown Clearance (m): 1.5 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3.5 E:3.5 S:3.5 W:3.5	Small hedgerow tree.	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Fair Structural Cond: Fair
T166	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 17 Stem Diam (mm): 1200 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:9 E:9.5 S:10 W:9	Well-formed bankside mature tree. Beyond fence, no access to base due to dense vegetation. Superficial bark damage to buttress roots from grazing livestock.	A1	Radius: 14.4m. Area: 651 sq m.	Physiological Cond: Good Structural Cond: Good
T167	Field Maple (<i>Acer campestre</i>)	Tree	Height (m): 7 Stem Diam (mm): 250 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:2 S:1 W:3	Small, old hedgerow tree. Cavities at base.	C2	Radius: 3.0m. Area: 28 sq m.	Physiological Cond: Fair Structural Cond: Fair
T168	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 13 Stem Diam (mm): 710 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:7.5 E:7.5 S:7.5 W:7.5	Barbed wire occluded into lower trunk. Remains of fungal bracket at base on west side - to decayed to identify. Canopy slightly sparse.	B1	Radius: 8.5m. Area: 227 sq m.	Physiological Cond: Fair Structural Cond: Physical Defect
T169	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 12 Stem Diam (mm): 600 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+ Years	N:4 E:6 S:4 W:4	No access to base. Dense vegetation around base. High canopy with numerous pruning cuts. Bark necrosis indicative of possible basal decay.	C3	Radius: 7.2m. Area: 163 sq m.	Physiological Cond: Poor Structural Cond: Physical Defect
G170	Mixed Broadleaves (<i>Mixed Broadleaves</i>)	Group	Height (m): 4 Stem Diam (mm): 120 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:3 E:3 S:3 W:3	Mature field hedgerow considering mostly of blackthorn and hawthorn.	C2	Area: 1607 sq m, plus a 1m buffer.	Physiological Cond: Good Structural Cond: Fair
G171	Mixed Broadleaves (<i>Mixed Broadleaves</i>)	Group	Height (m): 4 Stem Diam (mm): 120 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:1 E:1 S:1 W:1	Mixed hawthorn/blackthorn hedge with bramble throughout.	C2	Area: 155 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Fair

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
T172	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 5 Stem Diam (mm): 180 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:1.5 E:1.5 S:1.5 W:1.5	Small, pollarded hedgerow tree.	C2	Radius: 2.2m. Area: 15 sq m.	Physiological Cond: Fair Structural Cond: Fair
T173	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam (mm): 800 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N:6.5 E:6.5 S:6.5 W:6.5	Off site, no access to base. Pronounced buttress skirt with sup petticoat bark wounds to roots. Fungal bracket – <i>Ganoderma</i> spp.(?) at base on east side – too far away to identify with certainty. Canopy dense and even. Good vitality.	B1	Radius: 9.6m. Area: 290 sq m.	Physiological Cond: Fair Structural Cond: Physical Defect
G174	Mixed Broadleaves (<i>Mixed Broadleaves</i>)	Group	Height (m): 2 Stem Diam (mm): 200 Crown Clearance (m): 0 Life Stage: Over Mature Rem. Contrib.: 20+ Years	N:1.5 E:1.5 S:1.5 W:1.5	Gappy and sparse hawthorn and Blackthorn hedge.	C1,2	Area: 358 sq m, plus a 1m buffer.	Physiological Cond: Poor Structural Cond: Poor
T175	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 9 Stem Diam (mm): 320 Crown Clearance (m): 3 Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:2 S:2 W:3	Early Ash Dieback in canopy.	C1	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Poor Structural Cond: Fair
T176	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 8 Stem Diam (mm): 320 Crown Clearance (m): 2 Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:4 E:4 S:4 W:1	Early Ash Dieback in canopy. Significant bark damage and cavities on lower trunk	C1	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Fair Structural Cond: Poor
T177	Common Ash (<i>Fraxinus excelsior</i>)	Tree 2 stems	Height (m): 8 2 stems, diam(mm): 260, 100 Crown Clearance (m): 3 Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:2.5 E:2.5 S:2.5 W:2.5	Early Ash Dieback in canopy. Significant bark damage around lower trunks.	C1	Radius: 3.3m. Area: 34 sq m.	Physiological Cond: Poor Structural Cond: Poor
T178	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam (mm): 800 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:6 E:6 S:6 W:6	Off-site tree, no access to base. Previously reduced. A number of wounded branches throughout canopy.	B1	Radius: 9.6m. Area: 290 sq m.	Physiological Cond: Fair Structural Cond: Physical Defect
T179	Pedunculate Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam (mm): 500 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N:6 E:6 S:6 W:6	Off-site tree, no access to base. Prolific ivy throughout canopy. Foliage dense and even. Good vitality.	B1	Radius: 6.0m. Area: 113 sq m.	Physiological Cond: Good Structural Cond: Unknown.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
G180	Mixed Broadleaves	Group	Height (m): 5 Stem Diam (mm): 120 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:2 E:2 S:2 W:2	Mixed hawthorn / blackthorn hedge.	C2	Area: 298 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Fair
G181	Goat Willow x5 (<i>Salix caprea</i>)	Group 5 trees	Height (m): 5 5 stems, avg.(mm): 420 Crown Clearance (m): 0 Life Stage: Over Mature Rem. Contrib.: 40+ Years	N:5 E:12 S:6 W:2	Collapsed broken trees layered on ground	C1	Area: 48 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Collapsing
T182	Field Maple (<i>Acer campestre</i>)	Tree	Height (m): 8 Stem Diam (mm): 350 Crown Clearance (m): 2 Life Stage: Mature	N:2 E:3 S:3.5 W:3.5	Livestock damage to bark	C2	Radius: 4.2m. Area: 55 sq m.	Physiological Cond: Fair Structural Cond: Poor
G183	Mixed Broadleaves	Group	Height (m): 6 Stem Diam (mm): 350 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 20+ Years	N:4 E:4 S:4 W:4	Mixed broad leaf shrubbery around dried pond area. Hazel, hawthorn, blackthorn, goat willow, elder etc. Many dead / low grade trees.	C2	Area: 781 sq m, plus a 1m buffer.	Physiological Cond: Poor Structural Cond: Poor
T184	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 7 Stem Diam (mm): 320 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 20+ Years	N:2.5 E:2.5 S:2.5 W:2.5	Lapsed pollard tree in hedgerow	C2	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Fair Structural Cond: Fair
T185	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 6.5 Stem Diam (mm): 180 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 20+ Years	N:2.5 E:2.5 S:2.5 W:2.5	Lapsed pollard tree in hedgerow	C2	Radius: 2.2m. Area: 15 sq m.	Physiological Cond: Fair Structural Cond: Fair
T186	Common Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 6.5 Stem Diam (mm): 200 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 20+ Years	N:2 E:2 S:2 W:2	Lapsed pollard tree in hedgerow	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Fair Structural Cond: Fair
T187	Field Maple (<i>Acer campestre</i>)	Tree	Height (m): 6 Stem Diam (mm): 220 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: <10 years	N:3 E:3 S:3 W:3	Lapsed pollard tree in hedgerow. Split base.	U	None - due to Retention Category of U.	Physiological Cond: Fair Structural Cond: Collapsing

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements
G188	Mixed Broadleaves	Group	Height (m): 5 Stem Diam (mm): 100 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N:1.5 E:1.5 S:1.5 W:1.5	Boundary hedge	C2	Area: 397 sq m, plus a 1m buffer.	Physiological Cond: Fair Structural Cond: Fair

APPENDIX 5

Tree Protection Fencing ²



² The structure of Tree protection fencing within the North Horsham Strategic Development Area consists of Heras fence panels supported on wooden posts sunk into the ground. This style of fencing has been agreed with Horsham District Council and is necessary to prevent injury to operatives where fencing is required near to over / underground services. The fencing will be robust and fit for purpose. Panels will be rigidly attached to the posts to prevent movement.

APPENDIX 6**All-weather Tree Protection Fencing Signage**

APPENDIX 7

Qualifications

This Arboricultural report has been prepared by Sarah Duckworth, Independent Arboricultural Consultant, trading as Duckworth's Arboriculture Limited.

I have over 20 years' experience working in the field of Arboriculture and for the past 18 years I have worked as a Local Authority Tree Officer both directly and independently providing contracted support. Since 2010 I have worked as a private consultant carrying out a range of Arboricultural Reports and Assessments for private clients.

I hold the Royal Forestry Society's Professional Diploma (Level 6) for which I received the Lockhart Garrett Award. I also hold the Arboricultural Association's Technicians Certificate (with Distinction).

I am a LANTRA qualified Professional Tree Inspector and a Professional Member of the Arboricultural Association.