



Arboricultural Consultancy
Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

Tree Survey
Arboricultural Impact Assessment
Arboricultural Method Statement

Relating to:

Walnut and Well Cottage, The Street, Bolney, West Sussex
RH17 5QW

Produced for:

Mr. Richard and Mrs. Emily Webster

Prepared by:

Challice Consulting Ltd.
Mr. David Challice
Dip. Arb. (RFS), F. Arbor. A, MICFor
Chartered Arboriculturist

Date:

27th August 2025

Our Ref:

AR5799

Challice Consulting Ltd.
VAT Registration No. 886 2277 82
Registered Office: Ellis Atkins Chartered Accountants Constable Court 62 Dene Street
Dorking Surrey RH4 2DP United Kingdom
Registered in England and Wales No. 06080792

INTRODUCTION**SECTION**

Frequently Used Key Terms and Abbreviations	1.0
The Proposal	2.0
Instructions and Purpose	3.0
Scope	4.0
Documents Supplied/Used	5.0
Site Details	6.0

TREE SURVEY

Survey Method	7.0
Tree Details	8.0

ARBORICULTURAL IMPACT ASSESSMENT

Introduction to Arboricultural Impact Assessment	9.0
Tree Removal and Retention	10.0
Tree Pruning Works	11.0
Incursions into Root Protection Areas	12.0
Proximity Issues and Shading	13.0
Summary of Arboricultural Impact	14.0

ARBORICULTURAL METHOD STATEMENT

Introduction to Arboricultural Method Statement	15.0
Pre-Commencement Meeting	16.0
General Site Precautions	17.0
Tree Works	18.0
Tree Protective Fencing	19.0
Ground Protection	20.0
Site Access/Hard Surfaces	21.0
Demolition	22.0
Underground Services	23.0
Foundations	24.0
Hard Landscaping/Material Storage	25.0
Soft Landscaping/Boundary Fencing	26.0
Sequencing/Supervision, Responsibility and Incident Reporting	27.0
Amendments	28.0

Challice Consulting Ltd.

Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

APPENDICES

Appendix 1	Tree Survey Schedule with Recommended Tree Works
Appendix 2	Tree Protection Plan in Colour at A1 and Scale 1:100 with Tree Protective Fencing and Ground Protection Specifications
Appendix 3	Example of Site Inspection Record
Appendix 4	Induction Form for Personnel
Appendix 5	Hand Digging Methodology and Installation of Services within Root Protection Areas

INTRODUCTION

1.0 Frequently Used Key Terms and Abbreviations

Tree Preservation Order	TPO
Arboricultural Method Statement	AMS
British Standard 5837:2012 – Recommendations for Trees in Relation to Design, Demolition and Construction	BS 5837
British Standard 3998:2010 - Recommendations for Tree Work	BS 3998
Root Protection Area/Root Protection Areas	RPA/RPAs
Local Planning Authority	LPA

2.0 The Proposal

2.1 Proposed rear single storey extension with internal alterations.

3.0 Instructions and Purpose

3.1 This report has been commissioned by Mr. Richard and Mrs. Emily Webster to;

- Visit site and survey the trees in accordance with British Standard (BS 5837) 5837:2012 - Trees in Relation to Design, Demolition and Construction- Recommendations.
- Make suggestions to decrease the arboricultural impact of the proposed scheme on the retained trees during the design process.
- Detail the arboricultural impact of the proposed project.
- Prepare a tree work schedule to BS 3998:2010 - Recommendations for Tree Work.
- Develop a tree protection strategy for the duration of the development including any demolition works.

3.2 Provision of the above information is designed to address the requirements of the LPA in terms of the arboricultural information necessary to register and determine the planning application.

4.0 Scope

4.1 In surveying the trees to the requirements of BS 5837, trees on and immediately adjacent to the site with a stem diameter over 75mm have been included. Large shrubs and hedges have been included where these are considered to be of significant amenity value. These are particularly important where they provide boundary screening. For clarity and ease of data interpretation, large shrubs have been classified as trees.

- 4.2 A full hazard assessment of the trees (including the assessment of decay or defects and their impact), has not been undertaken as this is considered beyond the scope of this report. Any obvious hazards and defects have been identified in the Tree Survey Schedule and appropriate works recommended for immediate action.
- 4.3 It is the Client or their representative's responsibility to review the contents of this report to ensure it meets their requirements before it is sent to the LPA.

5.0 Documents Supplied/Used

Document	Obtained From	Format/Ref.
Existing and proposed layout plans	Ecotecture Ecological Design Ltd.	Dwg.
Topographical Survey	Ecotecture Ecological Design Ltd.	Dwg.

6.0 Site Details

- 6.1 The site is comprised of a residential dwelling with associated gardens and hard surfaces.
- 6.2 There are no significant inclines in any direction that would affect the recommendations in this report.
- 6.3 The site is within the administrative jurisdiction of Mid Sussex District Council.
- 6.4 I have not been instructed to ascertain the protection status of any of the trees on or near the site.

TREE SURVEY

7.0 Survey Method

- 7.1 The site and trees were inspected on 21st August 2025.

7.2 The trees were inspected from ground level and no climbing inspections were undertaken.

7.3 Stem diameters were measured using a diameter tape at 1.5m from ground level unless stated in the Tree Survey Schedule at **Appendix 1**. The locations of the surveyed trees have originated from the drawings supplied by the Client unless otherwise stated in the Tree Survey Schedule.

8.0 Tree Details

8.1 The total number of records is as follows:

Individual Trees (T): 6

Tree Groups (G): 2

8.2 The tree details and proposed works are presented in the Tree Survey Schedule with Recommended Tree Works at **Appendix 1** and tree positions are shown on the Tree Protection Plan at **Appendix 2**.

8.3 The quality and value of the tree stock has been broken down by BS 5837 quality grade. The grading system can be summarised as follows:

A Grade – trees of high quality and value with a life expectancy of more than 40 years

B Grade – trees of moderate quality and value, with a life expectancy of more than 20 years

C Grade – trees of low quality and value, with a life expectancy of more than 10 years

U Grade – trees usually for removal (unless otherwise stated), with a life expectancy of less than 10 years

Quality and Value of Existing Tree Stock

	A Grade	B Grade	C Grade	U Grade
No. of Tree Records by Grade	1	4	3	0

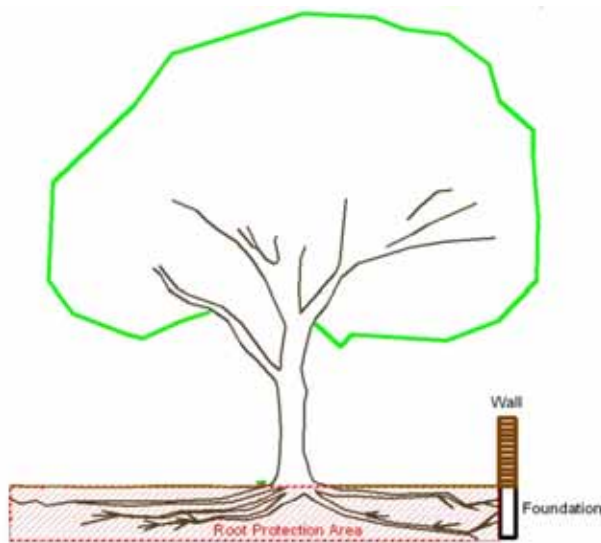
8.4 The RPAs of the trees are included in the Tree Survey Schedule with reference to Table 1 of BS 5837. The RPA is the area, measured in m²,

Challice Consulting Ltd.

Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

which is calculated in accordance with the BS 5837 using the stem diameter of the trees. This should provide retained trees with sufficient rooting environment to survive the proposed development. Section 4.6.3 of BS 5837 provides for the shape of the RPA to be modified from the starting point of a circle to account for site features where rooting may be restricted, as long as the total area remains the same.

Diagrammatic Representation of a Restricted Root Protection Area



Modified RPAs

Tree No.	Impediments to Normal Rooting
Magnolia T5	Existing hard surfacing and structures

ARBORICULTURAL IMPACT ASSESSMENT

9.0 Introduction to Arboricultural Impact Assessment

- 9.1 This section comprises an assessment of the impact the proposed works detailed in Section 2 above have on trees. It considers the arboricultural impact and how this may be mitigated.

10.0 Tree Removal and Retention

- 10.1 The proposed scheme provides for the retention and protection of all the trees surveyed with the exception of Cypress T4 which is lifting the existing hard surfacing and is likely to cause damage to the adjacent garage.

11.0 Tree Pruning Works

- 11.1 Minor tree pruning is recommended for good arboricultural practice and to ensure reasonable clearance from the proposed construction. The pruning described in the Tree Survey Schedule with Recommended Tree Works at **Appendix 1** will not adversely affect the trees' vitality or their contribution to local amenity.

12.0 Incursions into Root Protection Areas

- 12.1 There are no significant incursions into the RPAs of the retained trees within this scheme.
- 12.2 No new underground services are to be installed within the RPAs of the retained trees.

13.0 Proximity Issues and Shading

- 13.1 The approximate shade segments for key surveyed trees have been plotted using the OTISS software system, which identifies the approximate area of the site which may be affected by shade during the course of the day. The shade segment does not represent the area which will be in shade all day long; however, it represents an area which **may** be affected **at some point** during the course of a day by shade depending on the time of day and season.
- 13.2 The juxtaposition between retained trees and the proposed development is in accordance with Section 5.3 of the BS 5837 and should not lead to future pressure to heavily prune or remove retained trees for the following reasons:

1. Tree pruning has been recommended to provide adequate separation between the proposed development and the retained trees.
2. Any future tree pruning works are unlikely to surpass the recommendations in BS 3998:2012 or exceed those generally accepted as good arboricultural practice in an urban environment.
3. Low maintenance gutters can be specified to negate the need for removing leaves from the rainwater collection system.

14.0 Summary of Arboricultural Impact

- 14.1 In summary, the arboricultural impact of the proposed scheme is minor as only Cypress T4 is shown for removal as it is lifting the existing hard surfacing and is likely to cause damage to the adjacent garage. Minimal pruning is required to enable construction works to be completed.
- 14.2 The specified tree pruning complies with both BS 3998 and BS 5837 standards and aligns with common practices in urban environments.
- 14.3 The retained trees can be afforded an appropriate degree of protection in accordance with the BS 5837 as detailed in the AMS.
- 14.4 I have evaluated the impact of the proposed development and consider it to be consistent with the guidance outlined in BS 5837:2012.

ARBORICULTURAL METHOD STATEMENT

15.0 Introduction to Arboricultural Method Statement

- 15.1 To safeguard the retained trees (both above and below ground parts) during the development works and preserve the soil structure of areas which could be allocated for new planting, it will be necessary to implement tree protection measures as outlined below.
- 15.2 The basic principle is that a construction exclusion zone will be formed inside the tree protective fencing which is to be maintained for the duration of the construction works.

- 15.3 A copy of this AMS shall be maintained on site at all times and made available to all site personnel.
- 15.4 All site personnel shall be made aware of the key impact of this AMS and be given an arboricultural induction by the Site Manager. An Induction Form is attached at **Appendix 4**. A copy of the Induction Form will be signed by all site personnel to confirm that they have understood the issues involved.
- 15.5 As of 2005, Local Planning Authorities have powers to serve **Temporary Stop Notices** if agreed tree protection measures are not carried out. Adhering to this AMS will ensure that such costly and time consuming action is avoided.

16.0 Pre-Commencement Meeting

- 16.1 A pre-commencement site meeting, involving representatives from the Development Company, the Arboricultural Consultant and the LPA Tree Officer will be held to ensure that all aspects of the tree protection process are understood and agreed. A record of the meeting will be communicated to all parties by the Arboricultural Consultant within five days of the meeting.
- 16.2 Attendance at a pre-commencement site meeting and for any site supervision (see Section 27.0) is chargeable at the standard hourly rate as stated in the terms and conditions attached to the quotation for this report.

17.0 General Site Precautions

- 17.1 The following points will be observed at all times:
- o No fires will be lit on site during the construction or demolition phases.
 - o No access will be permitted inside the tree protective fencing.
 - o No materials, equipment or debris will be stored within the tree protective fencing.
 - o Notice boards, telephone cables or other services will not be attached to any parts of the retained trees.

- o Materials which will contaminate the soil (e.g. diesel oil and vehicle washings) will not be permitted to migrate into the RPAs of the retained trees.
- o A dedicated mixing and cleaning area will be set up to prevent concrete, cement and cleaning residue leaching into the RPAs of the retained trees (see Tree Protection Plan for specification).
- o Site cranes are to be automatically programmed to avoid loads striking the crowns, stems and branches of the retained trees.
- o Scaffolding will be erected outside the RPAs of the retained trees or on top of the ground protection if specified.
- o Site and lorry mounted cranes are to be automatically programmed (or a banksman will be present) to avoid loads striking the crowns, stems and branches of the retained trees.
- o All vehicle movements associated with the site (including skips) will be supervised by the on-site Arboricultural Liaison. This will ensure that the crowns or roots of any retained trees are not damaged during movement, loading or unloading and soil damage and soil compaction does not occur.
- o All cement/toxic materials are to be stored inside the site and not in the RPAs of any retained trees.

18.0 Tree Works

- 18.1 All tree works will be carried out in accordance with BS 3998:2010 'Recommendations for Tree Work' (as amended) and to current arboricultural best practice. Tree works will be carried out by a suitably qualified and experienced Arboricultural Contractor holding the necessary insurance cover. This contractor should carry out the relevant site specific risk assessments and record such information prior to commencement of tasks and work in accordance with current health and safety standards, practices and legislation. A list of such contractors is available from the Arboricultural Association at www.trees.org.uk.
- 18.2 The subject trees may be protected by virtue of being within a Conservation Area or covered by a TPO. Submission of this AMS in connection with a planning application should be construed as a formal application to carry out those works specified in the Tree Survey Schedule with Recommended Tree Works at **Appendix 1**. It is recommended that

Challice Consulting Ltd.

Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

this matter be clarified by the Client in writing with the LPA prior to any works commencing.

- 18.3 In addition, prior to the commencement of any tree works, an ecological assessment of specific trees may be required to ascertain whether protected species (e.g. nesting birds, bats, badgers and certain invertebrates) may be affected.
- 18.4 Tree ownership should be clarified in writing by the Client before any trees are removed or pruned.
- 18.5 If additional pruning of trees is required to facilitate the proposed works or access for machinery/plant, the Arboricultural Consultant will be contacted to advise on appropriate works and liaise with the LPA as necessary.

19.0 Tree Protective Fencing

- 19.1 Tree protective fencing is used to ensure that the RPAs of the retained trees are safeguarded. These measures may also be employed to protect areas of ground for new landscaping.
- 19.2 The positioning and specification of the fencing is shown in **Appendix 2**. In this case, the default specification of BS 5837 consisting of **fixed Heras** fencing would be effective.
- 19.3 The protective fencing will remain in position for the duration of the development, including the removal of any existing structures. Clear signs will be attached to the fencing once erected – suggested wording will be **‘Construction Exclusion Zone No Access’**.

20.0 Ground Protection

- 20.1 A provision has been made to install ground protection between the edge of the proposed development and the tree protective fencing. This provides adequate working space to permit the safe and practical completion of construction works whilst protecting the rooting environment of the retained trees. In this instance (and unless agreed otherwise by the Tree Officer) the proprietary trackway system for traffic over 2 tonnes will

Challice Consulting Ltd.

Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

be the default specification (position and specification shown in **Appendix 2**). The ground protection will remain in place for the duration of the development, including the removal of any existing structures.

21.0 Site Access/Hard Surfaces

- 21.1 The existing vehicle and pedestrian accesses into the site are suitable for ingress and egress during demolition and construction and no damage is anticipated to the root systems of the retained trees.

22.0 Demolition

- 22.1 There is no requirement for demolition within the RPAs or crowns of the surveyed trees.

23.0 Underground Services

- 23.1 The proposed scheme can make use of existing services located inside and outside the site boundary and any new services and soakaways will be located in the adequate space outside the RPAs of the retained trees.
- 23.2 The locations, specifications and installation methods of all new services will be available for review at the pre-commencement site meeting before any works start on site.

24.0 Foundations

- 24.1 The foundations for the proposed development are located outside the RPAs of the retained trees, therefore, the design and installation of specialised foundations is not required.

25.0 Hard Landscaping/Material Storage

- 25.1 There is no requirement for additional hard landscaping or hard surfacing within the RPAs of the surveyed trees.
- 25.2 Any excavations required within the RPAs and crowns of the retained trees to replace existing hard surfacing will be carried out by hand under

direct arboricultural supervision to enable the retention of the existing rooting environment and to limit root disturbance to an acceptable level (see **Appendix 5 Method 1**) A heavy duty Polythene barrier will be installed under direct arboricultural supervision for all new and kerb edgings within the RPAs of these trees.

- 25.3 The storage of all materials required to complete the construction process will be located outside the RPAs of the surveyed trees and the line of the tree protective fencing.
- 25.4 Subject to all of the above tree protection measures being implemented, construction works may proceed without risk of damage to the surveyed trees.

26.0 Soft Landscaping/Boundary Fencing

- 26.1 Soft landscaping will be undertaken when heavy machinery has been removed from site and tree protective fencing taken down. The following points will be observed:
- Care will be taken not to compact the soil within the RPAs of the retained trees or where new tree planting is to be carried out.
 - No changes in ground levels will occur within the RPAs of the retained trees.
 - Unwanted vegetation will be removed manually or using contact herbicides that will not damage existing tree roots.
 - No irrigation or drainage pipes will be installed within the RPAs of the retained trees.
 - If soil has been compacted in areas where planting is proposed, measures to improve soil structure (e.g. decompaction) may be necessary to facilitate successful plant establishment.
 - Where fence and gate post holes are to be installed within the RPAs of the retained trees, they shall be excavated by hand retaining all roots over 25mm in diameter and post holes will be lined with heavy duty Polythene to prevent the harmful cement leaching into the soil and damaging the roots of the retained trees.

27.0 Sequencing/Supervision, Responsibility and Incident Reporting

- 27.1 Effective tree protection relies on following a logical sequence of events and arboricultural inspection/supervision.
- 27.2 All the works detailed in this report which have the potential to affect trees will be supervised by a suitably qualified and experienced Arboricultural Consultant. Regular inspection visits will also be undertaken to ensure that tree protection measures are being adhered to. The final details of supervision and the frequency of inspection visits will be agreed with the Tree Officer at the pre-commencement meeting. The Arboricultural Consultant will make a record of visits, which will be attached to the site copy of the AMS for inspection and communicated in writing to the LPA within five days of the site visit. An example of the Site Inspection Record is found in **Appendix 3**.
- 27.3 Daily inspection of the physical tree protection measures will be carried out by the on-site Arboricultural Liaison, who does not have to be a trained Arborist, but will be responsible for the implementation of the approved tree protection. Any deviation from the approved methodologies will need to be agreed by the Arboricultural Consultant who may need to visit site to authorise the revised tree protection measures. It is the responsibility of the Client or the Arboricultural Liaison to instruct the Arboricultural Consultant to attend site for the key events requiring supervision or monitoring. Any required modifications to the tree protection measures, building techniques or access arrangements within the crowns or RPAs of any trees will be communicated in writing to both the appointed Arboricultural Consultant and the Tree Officer before the changes occur.
- 27.4 Any damage to stems, branches or any size roots of the retained trees will be reported immediately by email and telephone by the Arboricultural Liaison to the Arboricultural Consultant. The Arboricultural Liaison will take photographs of the damage and send these to the Arboricultural Consultant who will visit site to assess the scale of the damage and report to the LPA Tree Officer. Mitigation for the damage will be agreed with the LPA Tree Officer.

Sequencing and Supervision

Stage	Action/Task	Personnel Responsible
1.	Issue arboricultural report to site manager	Client/Developer
2.	Give the Arboricultural Consultant (AC) and the Local Authority Tree Officer at least a week's notice of pre-commencement meeting	Client/Developer
3.	Arboricultural induction and appointment of the Arboricultural Liaison	Site Manager
4.	Carry out tree works (the Client is to establish tree ownership and protection status in writing before any tree works are carried out)	Site Manager
5.	Install all tree protective measures	Site Manager
6.	Pre-commencement meeting to review the hard surfacing and service plan and the installed tree protection measures	AC, Tree Officer, Client and Site Manager
7.	Construct foundations	Site Manager
8.	Install underground services	AC to supervise
9.	Erect scaffolding and carry out construction (including hard landscaping)	Site Manager
10.	Remove machinery/plant	Site Manager
11.	Remove all tree protective measures	Site Manager
12.	Carry out soft landscaping, tree planting and erect boundary fencing	Site Manager to brief landscaping company on site and supervise

28.0 Amendments

- 28.1 Issues sometimes arise on development sites which require amendments to the previously agreed tree protection details. Any amendments to this AMS will be discussed with the Arboricultural Consultant and approved in writing by the LPA prior to being implemented. Copies of paperwork relating to any amendments shall be attached to the site copy of the AMS to provide a definitive record of what has been agreed.

Appendix 1

Tree Survey Schedule with Recommended Tree Works

Site: Walnut and Well Cottage, The Street, Bolney, West Sussex RH17 5QW

Our Ref: AR5799

Surveyor: Mr. David Challice

Date Surveyed: 21.08.2025

BS Cat	No. Records
A	1
B	4
C	3
U	0
	Total 8

No.	Species	Measurements	BS Cat	RPA	Tree Observations	Tree Assessments	Recommendations
G1	English yew x20	Height (m): 4 20 stems, avg.(mm): 100# Spread (m): 0.5N, 0.5E, 0.5S, 0.5W Crown Clearance (m): 0 Lowest Branch (m): 0(N) Life Stage: Early Mature Useful Life: 40+ Years	C2	Area: 52 sq m.	Regularly trimmed hedge.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Moderate RPA: Circular	No works proposed.
T2	Red maple	Height (m): 7 Stem Diam(mm): 300# Spread (m): 4N, 4E, 4S, 4W Crown Clearance (m): 2 Lowest Branch (m): 1(N) Life Stage: Early Mature Useful Life: 40+ Years	B2	Radius: 3.6m. Area: 41 sq m.	Regularly trimmed tree.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Moderate RPA: Circular	Development: Crown lift to approximately 3m over footpath. Before development commences.
T3	Magnolia	Height (m): 4 Stem Diam(mm): 150# Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 1 Lowest Branch (m): 1(N) Life Stage: Semi Mature Useful Life: 10+ Years	C2	Radius: 1.8m. Area: 10 sq m.	A tree with insignificant defects.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Low RPA: Circular	No works proposed.
T4	Cypress	Height (m): 15 2 stems (mm): 400, 100 Spread (m): 1N, 1E, 1S, 1W Crown Clearance (m): 3 Lowest Branch (m): 0.5(N) Life Stage: Mature Useful Life: 10+ Years	B2	Radius: 4.9m. Area: 75 sq m.	A tree with insignificant defects. Roots are lifting concrete hard surfacing and limiting access to the site and eventually will damage the adjacent garage.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Moderate RPA: Circular	Development: Remove. Before development commences. Development: Replace with suitable species. During the landscape phase.

Tree Survey Schedule with Recommended Tree Works

No.	Species	Measurements	BS Cat	RPA	Tree Observations	Tree Assessments	Recommendations
T5	Magnolia	Height (m): 7 Stem Diam(mm): 500# Spread (m): 0.5N, 6E, 5S, 4W Crown Clearance (m): 1 Lowest Branch (m): 0.5(SE) Life Stage: Mature Useful Life: 20+ Years	A2	Radius: 6.0m. Area: 113 sq m.	Tree is located off site.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: High RPA: Circular	Development: Crown lift to approximately 3m over footpaths and approximately 4m over driveway and roads. Before development commences.
T6	Atlas cedar	Height (m): 14 Stem Diam(mm): 430 Spread (m): 5N, 5E, 5S, 5W Crown Clearance (m): 3 Lowest Branch (m): 2(E) Life Stage: Early Mature Useful Life: 40+ Years	B2	Radius: 5.2m. Area: 85 sq m.	A tree with insignificant defects.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Moderate RPA: Circular	No works proposed.
T7	Ash	Height (m): 22 Stem Diam(mm): 850 Spread (m): 8N, 8E, 8S, 8W Crown Clearance (m): 5 Lowest Branch (m): 6(N) Life Stage: Mature Useful Life: 20+ Years	B2	Radius: 10.2m. Area: 327 sq m.	Ivy smothering stem prevented inspection and stem measurement. Decay pocket at stem base on the south side.	Growth Vitality: Good Structural Condition: Fair Landscape Contribution: High RPA: Circular	Safety: Remove Ivy up to 1m from ground level and carry out a detailed re-inspection. 3 months.
G8	Mixed species	Height (m): 8 Stem Diam(mm): 200 Spread (m): 4N, 4E, 4S, 4W Crown Clearance (m): 1 Lowest Branch (m): 1(N) Life Stage: Early Mature Useful Life: 40+ Years	C2	Area: 410 sq m.	Trees with insignificant defects.	Growth Vitality: Good Structural Condition: Good Landscape Contribution: Moderate RPA: Circular	No works proposed.

Key for the Tree Survey Schedule with Recommended Tree Works

- **No.** refers to the tree reference number and the prefix of **T** (single tree), **G** (tree or shrub group), **H** (hedge) or **W** (woodland).
- **Species** refers to the tree's common name.
- **Measurements** include: **Height** describes the height of the tree measured in meters (m) from ground level. **Stem Diam(mm)** is the diameter of the stem measured in millimeters at 1.5m from ground level unless otherwise stated. The stem diameter may be estimated (#) where access is restricted or an average (avg) taken for groups or multi-stemmed trees with more than five stems. The number of stems is also indicated. **Spread** refers to the crown radius in meters from the stem centre and can be labelled as the four compass points of N, E, S, W unless symmetrical. **Crown Clearance** refers to the lowest point of the crown height in meters above ground level, lowest branch is the height of the first significant branch and the cardinal point to which it is growing. **Lowest Branch**. **Life Stage**. **Useful Life** is the tree's estimated remaining contribution in years.
- **BS Cat** refers to British Standard 5837:2012 Table 1 and refers to tree/group quality and value. **A** (high), **B** (moderate), **C** (low) or **U** (remove if within site ownership or control). The sub-category is the number next to the BS Cat and refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservational, Historic and/or Commemorative.
- **RPA** is the radial root protection distance measured in meters from the trunk centre and the root protection area in square meters. The RPA will be modified to account for site features such as hard surfacing and building foundations where necessary.
- **Tree Observations** provide additional information where it is necessary.
- **Tree Assessments** include: **Growth Vitality** - Good, Fair, Poor or Dead. **Structural Condition** - Good, Fair, Poor or Hazardous. **Landscape Contribution** - Very High, High, Moderate or Low. **RPA** may be modified to account for site features or circular.
- **Recommendations** details the reason why the tree works have been specified and the timescale (from the survey date) that the tree works should be completed.

Appendix 2

Appendix 3



Arboricultural Consultancy
Holmwood Farm Grange Horsham Road North Holmwood Dorking Surrey RH5 4JR
Tel: 01306 743374 Email: info@challiceconsulting.co.uk Web: www.challiceconsulting.co.uk

(Sample) Arboricultural Site Supervision Record

Our Ref: ARxxxx

Site: xxxx

Application Number: xxxx/xxxx

Proposal: Front boundary wall, entrance gates and hard and soft landscaping.

Inspected by: Mr. David Challice

Date of Inspection: xx/xx/xxxx

Client: Mr. xxxx

Site Contact: Mr. xxxx

Local Authority: xxxx

Persons Present:

Mr. David Challice - Tree Consultant

Mr. xxxx – Landscape Architect

Tree Protective Fencing:

The tree protective fencing was installed according to the approved documentation.

Photograph of the Tree Protective Fencing



Works Within the Construction Exclusion Zone:

During the site meeting, the screw piles were installed under arboricultural supervision to discharge Condition 6 of the planning application reference xxxx/xxxx (drawing reference xxxxxx-x) for the approved boundary wall. This was undertaken as per the agreed specification to protect the roots of the off site hedge G8.

Photograph of the Screw Pile Installation within the Rooting Areas of Off Site Trees**Amendments to the Approved Arboricultural Documentation:**

There is no requirement for any amendments to the approved arboricultural documentation.

Remedial Work:

There is no requirement for any remedial tree works at this time as all the tree protective measures were installed according to the approved documentation.

General Comments:

I recommend that no further arboricultural site monitoring is required for this project. This report should be emailed by the Client to the Local Planning Authority.

Date of the Next Arboricultural Inspection:

No further arboricultural inspections are required.

Appendix 4

Induction Form for all Site Personnel:

Site Name:

- I have had explained to me by the Site Manager the key implications of the Arboricultural Method Statement relating to the development at the above site.
- I am aware that the tree protective fencing must remain in its original position and must not be moved without the approval of the appointed Arboricultural Consultant.
- I understand that certain operations must be supervised by the appointed Arboricultural Consultant and that these operations must not start until the consultant is present and has given approval.
- I confirm that I will bring any concerns about potential damage to trees to the attention of the Site Manager.
- I am aware that I must not cause damage to any of the retained trees on or adjacent to the site. Damage may be caused by direct means (i.e. physical damage caused to roots or the trunk/branches of the tree) or by indirect means (e.g. by fire or toxic materials entering the rooting environment of the tree).

Print Name:

Sign Name:

Date:

Appendix 5

Hand Digging Methodology and Installation of Services within Root Protection Areas

Introduction

- Trees need roots to stay upright and to obtain water and nutrients from the soil
- Any excavation within the Root Protection Area of a tree may affect its stability and health
- Roots over 25mm in diameter are likely to be of particular structural significance
- Roots less than 25mm in diameter are likely to be important to the tree for survival and structural significance. Cutting many small roots may have an impact on tree health and stability
- Most tree roots are within 0.6 -1m from the soil surface
- Desiccation and exposure to rapid temperature change is likely to cause root death
- Hand digging carried out correctly is less likely to damage tree roots than digging with machinery
- All digging within the Root Protection Areas of trees should be supervised by an Arboriculturalist
- Whether digging is acceptable and how it should be carried out depends on tree species and characteristics (age, vigour, past management etc.)
- Site conditions are also important when deciding whether digging is acceptable (soil type, ground levels, existing structures etc.)
- Carry out a suitable risk assessment prior to starting work. In particular, take care when working in the vicinity of underground services

Why/What For?

- Service installation/maintenance
- Demolition
- Foundations
- Hard surface installations
- Decay detection

Relevant Documents

- British Standard 5837:2012 - Section 7.2 - Trees in Relation to Design, Demolition and Construction – Recommendations
- National Joint Utilities Group Volume 4 2007: Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook

Principles

The key principles are as follows:

- Avoid compaction of the soil when carrying out the works
- Sever as few roots as possible
- Do not leave damaged or poorly cut roots as these are likely to lead to decay in the future
- Do not let exposed roots dry out
- Do not use materials containing harmful chemicals or salt as these will harm the trees (including builders' sand)

How/What to Use?

Method 1 - Hand Digging Retaining all Roots Above 25mm in Diameter to British Standard 5837:2012 Section 7.2:

- Hand tools –pick, fork, spade, wheel barrow and trowel
- Brush - it is useful to brush away loose soil from exposed roots prior to cutting them
- Secateurs/sharp pull-saw - roots that need to be cut must be cut cleanly using suitable hand tools
- Damp Hessian sacking – this should immediately cover the sides of the trench down to a depth of 1m below ground level and is effective in preventing roots drying out following excavation
- Suitable back-fill - covering the exposed or cut roots with a 100mm layer of topsoil or a mixture of 50% composted organic matter and 50% un-compacted sharp sand is suitable
- Supervision - ***a suitably qualified and experienced Arboriculturalist should be present when the works are carried out***

Method 2 - Hand Digging Removing all Roots to a Depth of 1m Below Ground Level to British Standard 5837:2012 Section 7.2:

- Hand tools –pick, fork, spade, wheel barrow and trowel
- Brush - it is useful to brush away loose soil from exposed roots prior to cutting them
- Secateurs/sharp pull-saw - roots that need to be cut must be cut cleanly using suitable hand tools
- Damp Hessian sacking – this should immediately cover the sides of the trench down to a depth of 1m below ground level and is effective in preventing roots drying out following excavation
- Suitable back-fill - covering the exposed or cut roots with a 100mm layer of topsoil or a mixture of 50% composted organic matter and 50% un-compacted sharp sand is suitable
- Excavations below 1m from ground level can be carried out using an excavator or similar due to health and safety requirements
- Supervision - ***a suitably qualified and experienced Arboriculturalist should be present when the works are carried out***

Method 3 - Compressed Air Soil Displacement Combined with Hand Digging Retaining all Roots Above 5mm in Diameter to British Standard 5837:2012 Section 7.2:

- Air spade - this uses a high pressure jet of air, delivered from a compressor to a hand held lance
- Hand tools – pick, fork, wheel barrow and trowel
- Brush - it is useful to brush away loose soil from exposed roots prior to cutting them
- Secateurs/sharp pull-saw - roots that need to be cut must be cut cleanly using suitable hand tools
- Damp Hessian sacking – this should immediately cover the sides of the trench down to a depth of 1m below ground level and is effective in preventing roots drying out following excavation
- Suitable back-fill - covering the exposed or cut roots with a 100mm layer of topsoil or a mixture of 50% composted organic matter and 50% un-compacted sharp sand is suitable
- Supervision - ***a suitably qualified and experienced Arboriculturalist should be present when the works are carried out***

Method 4 - Trenchless Technique Retaining all Roots to British Standard 5837:2012 Section 7.7:

- Micro-tunnelling, thrust boring or surfaced launched directional drilling is designed to avoid open trenches and can provide single service runs for up to 150m between starting pits
- Starting pits should be located outside the Root Protection Areas of the retained trees or can be hand dug using **Method 1**
- Bore holes should be a minimum of 500mm below ground level
- Only water should be used to lubricate the mole or drill to prevent root death due to soil contamination
- Supervision of hand digging using **Method 1 - a suitably qualified and experienced Arboriculturalist should be present when the works are carried out**