AIA

ARBORICULTURAL IMPACT ASSESSMENT

(INC. TREE SURVEY TO BS 5837:2012)



PROJECT - Spillers Yard
CLIENT - Shelford Tree Services Ltd
DOC. REF - P4200–AIA01 V1
PLANNING REF - N/A
CREATION DATE - 19/12/2024

W. www.lignaconsultancy.co.uk T. 01284 598008 E. info@lignaconsultancy.co.uk

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PURPOSE OF DOCUMENT

This document assesses the anticipated impact that the proposed scheme will have on the surrounding tree population, and outlines possible technical design considerations and mitigation measures that should be implemented in order to minimise the overall arboricultural impact.

ARBORICULTURAL DOCUMENT REGISTER

Planning Documents		Version Issued	
Document	Ref.	Current Version	Document Date
Arb. Impact Assessment	P4200-AIA01	V1	19/12/2024
Arb. Site Plan (Existing)	P4200-ASP01	V1	19/12/2024
Arb. Site Plan (Proposed)	P4200-ASP02	V1	19/12/2024

1. SUMMARY

1.1 PROPOSED DEVELOPMENT

1.1.1 Installation of shed, greenhouse, decking and new surfacing.

1.2 TREE SURVEY

1.2.1 The following woody vegetation was considered to be of note in relation to any development of the site: 11 individual trees.

1.3 MITIGATION AND PROTECTION MEASURES

1.3.1 The required arboricultural mitigation measures can be found in *Section 3* of this report.

1.4 CONCLUSION

1.4.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category				
	A	B	C	U	Total
Trees to be removed	-	-	2	1	3
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Trees to be pruned	-	2	-	-	2
Site clearance	-	-	-	-	-
Routing and installation of utility apparatus	-	-	-	-	-
Instances of trees being affected by the installation of buildings/structures	-	1	-	-	1
Instances of trees being affected by the installation of surfacing	-	4	1	-	5
Number of new tree plantings (recommended)	-	-	-	-	3

1.4.2 Considering the anticipated arboricultural impact from the construction activities associated with the development of the site, and the

implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **acceptable.**

2 GENERAL INFORMATION

2.1 BRIEF

2.1.1 Ligna Consultancy Ltd were instructed by the client, Shelford Tree Services Ltd, to undertake a tree survey in accordance with BS 5837:2012 and to prepare an arboricultural impact assessment for the proposed scheme at Spillers Yard.

2.2 PROPOSED DEVELOPMENT

2.2.1 Installation of shed, greenhouse, decking and new surfacing.

2.3 SITE

2.3.1 The site discussed within this report is located at:

Spillers Yard, Raunds Road, Keyston, Huntingdon

2.4 SCOPE OF REPORT

2.4.1 This report consists of the following:

- Appraisal of arboricultural impact
- Outline of tree protection & mitigation measures

2.4.2 Appendices included with this report are:

No.	Appended Document
1	Tree Survey
2	Site Photos
3	Arboricultural Site Plan (Existing) (P4200-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P4200-ASP02 V1)

2.5 DOCUMENTS PROVIDED

2.5.1 The following documents were submitted to Ligna Consultancy Ltd for consideration:

No.	Supplied Document
1	Existing Site Plan (3. Existing and Proposed site plan-compressed)
2	Proposed Site Plan (3. Existing and Proposed site plan-compressed)

2.6 PROJECT CONTACT

Role	Name	Telephone	Email
Arboricultural Consultant	[redacted]	[redacted]	[redacted]@lignaconsultancy.co.uk

2.7 AUTHOR

2.7.1 [redacted] is a tree surveyor. [redacted] has worked in arboriculture for over 6 years, initially working with tree surgery firms to carry out domestic tree work operations. [redacted] has worked at Cambridge University Botanic Gardens for 3 years on the Tree and Shrub team and has recently worked on a large-scale tree planting plan with the National Trust. [redacted] has a level 4 Certificate in arboriculture and LANTRA Professional Tree Inspection.

2.7.2 This report has been checked and edited by [redacted] MArborA.

2.8 LIMITATIONS

2.8.1 Detailed inspections and recommendations relating to tree condition and health are not included within this report.

2.8.2 Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.

2.8.3 Information provided by third parties, considered in the creation of this report, is assumed to be correct.

2.9 PROTECTED TREES

2.9.1 Details of trees (if any) that are protected by Tree Preservation Orders (TPOs) or are situated within Conservation Area are available upon request.

2.9.2 It is the standard approach of Ligna Consultancy not to obtain this information from the LPA prior to an application, as the LPA will provide details of nearby protected trees as part of the consultation.

2.9.3 It should also be noted that granted planning permission that includes tree work specifications overrides Tree Preservation Orders and Conservation Area protections (approved works only).

2.10 NESTING BIRDS / BATS

2.10.1 Officially, the 'Bird Nesting Season' is between February and August (Natural England). During this time, it is recommended that vegetation works (tree or hedge cutting) or site clearance is avoided if there is a reasonable potential for the disruption of nesting birds.

2.10.2 All parties involved in the management and/or development of a site must actively avoid causing disturbance and disruption to nesting birds. Failure to do this may result in an infringement of the *Wildlife and Countryside Act 1981* and the *European Habitats Directive 1992 / Nesting Birds Directive*.

2.10.3 When tree or vegetation clearance work has to be undertaken during the nesting season, a pre works survey needs to be carried out by a suitably competent person.

2.10.4 All bats and their roosts are protected by domestic and international legislation. They are protected by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations (2017 – as amended). This means you may be committing a criminal offence if you: Deliberately take, injure or kill a wild bat; Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats; Damage or destroy a place used by bats for breeding or resting (roosts) (even if bats are not occupying the roost at the time); Intentionally or recklessly obstruct access to a bat roost.

2.10.5 Prior to carrying out any tree works it is recommended that a survey of the tree/trees is carried out to confirm whether there are any nesting birds or bat roosts. This should be carried out by a suitably trained person.

2.11 SUMMARY OF TERMS

Term	Definition
Species	The type of tree.
Stem	The main woody upright portion of a tree that is supported by the roots and supports the crown.
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
BS 5837	The commonly used name for the official guidance document relating to trees and development *(BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations)*
Canopy / Crown	The branches, leaves, and reproductive structures extending from the trunk or main stems of a tree/trees.
DBH	Diameter of a tree's stem, measured as per BS 5837:2012
RPA	The root protection area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Category (Cat.)	Categorisation of the tree's value based on the methodology shown in Appendix 1, A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

2.12 COPYRIGHT

2.12.1 This report was prepared for use by the Clients and their contractors for planning purposes. The report and its appendices may not be copied, modified, or distributed beyond the necessary parties without the written consent of Ligna Consultancy Ltd.

3 ARBORICULTURAL IMPACT ASSESSMENT

ASSESSMENT & APPRAISAL OF IMPACTS

The following section lists and discusses any aspects of the proposed design and its implementation that has the potential to harm nearby trees, and outlines possible mitigation measures:

If approved, the mitigation measures outlined below should be detailed within a Tree Protection Scheme (Arboricultural Method Statement and Tree Protection Plan) prior to the commencement of any development associated works:

3.1 TREES TO BE REMOVED

Affected Trees	Cat. C: T8 (Laburnum anagyroides), T9 (Crataegus monogyna) Cat. U: T6 (Fraxinus excelsior)
Impact Appraisal & Mitigation	3 trees are to be removed as part of the proposed scheme. 2 trees (T8, T9) of category 'C' value are to be removed. Owing to their relative small size and low value, no arboricultural mitigation is required. 1 tree (T6) of category 'U' value is to be removed because of its poor condition and lack of future potential. It should be noted that this is not a loss resulting from the development of the site, but for the purpose of responsible site management. No mitigation is required.
Significance (with mitigation)	Low

3.2 TREES TO BE PRUNED

Affected Trees	Cat. B: T2 (Fraxinus excelsior), T3 (Aesculus hippocastanum),
Pruning works	The following trees are to be pruned as part of the proposed scheme. The pruning specification for each tree is shown below: - T2 (B2) - Crown lift tree by up to 3 meters to allow clearance with shed. - T3 (B2) - Crown lift tree by up to 3 meters to allow clearance with shed and greenhouse.
Significance (with mitigation)	Negligible

3.3 INSTALLATION OF SHED AND GREENHOUSE SUBBASE

Affected Trees	Cat. B: T2 (Fraxinus excelsior), T3 (Aesculus hippocastanum)
Impact Appraisal & Mitigation	The installation of the proposed outbuildings (greenhouse and shed) foundations would result in RPA incursions of 7% to T2 (for shed), 2% to T3 (for greenhouse), 9% to T3 (for shed) if traditional methods were used. To avoid impacting tree roots, in place of traditional foundations, a specialist no-dig system (such as Cellweb TRP) is to be used. This type of specialist system allows for the retention of underlying tree roots while protecting against possible soil compaction damage and allowing the continuation of water and gas exchange between soil and air. Owing to the nature of no-dig surfacing the FSL of the system is likely to be higher than surfacing based upon a traditional subbase. This will need to be considered in detail by the design team, and it is recommended that the system manufacturer is consulted to ascertain recommended system thickness at an early stage to ensure that the proposed FFLs are viable (typical thickness specification based on use: ≥75mm for pedestrians/bicycles; ≥100mm for cars, sheds and greenhouses; ≥150mm for vans/HGVs) . <u>Mitigation</u> - Specialist no-dig surfacing (such as Cellweb TRP) is to be installed as per the locations shown on the Arb. Site Plan (Proposed). - The thickness and fill material must be as per the manufacturer's recommendations. - The surface finish must comprise of permeable materials to allow continued gas and moisture exchange.
Significance (with mitigation)	Low

3.4 INSTALLATION OF DECKING

Affected Trees	Cat. B: T4 (Fraxinus excelsior).
Impact Appraisal & Mitigation	The installation of the proposed decking foundations will result in allowable RPA incursions of <2% to T4. Owing to the relative tolerance of the trees to root disturbance and loss, and considering the size of the proposed incursions, any lasting impact on the overall health and condition of the trees are believed to be well within tolerable limits. <u>Mitigation</u> - During the excavation of the foundations, should any roots with a diameter in excess of 20mm be uncovered , they will require cutting

	with pruning loppers. This task must be done under the supervision of the project's Arboricultural Clerk of Works.
Significance (with mitigation)	Negligible

3.5 INSTALLATION OF NEW SURFACING

Affected Trees	Cat. B: T2 (Fraxinus excelsior), T3 (Aesculus hippocastanum), T4 (Fraxinus excelsior), T5 (Fraxinus excelsior). Cat. C: T7 (Chamaecyparis Lawsoniana)
Impact Appraisal & Mitigation	New surfacing is to be installed within the RPAs of T2, T3, T4, T5 and T7. To avoid impacting tree roots, in place of traditional surfacing, a specialist no-dig system (such as Cellweb TRP) is to be used. This type of specialist system allows for the retention of underlying tree roots while protecting against possible soil compaction damage and allowing the continuation of water and gas exchange between soil and air. Owing to the nature of no-dig surfacing the FSL of the system is likely to be higher than surfacing based upon a traditional subbase. This will need to be considered in detail by the design team, and it is recommended that the system manufacturer is consulted to ascertain recommended system thickness at an early stage to ensure that the proposed FFLs are viable (typical thickness specification based on use: ≥75mm for pedestrians/bicycles, ≥100mm for cars, ≥150mm for vans/HGVs) . Mitigation - Specialist no-dig surfacing (such as Cellweb TRP) is to be installed as per the locations shown on the Arb. Site Plan (Proposed). - The thickness and fill material must be as per the manufacturer's recommendations. - The surface finish must comprise of permeable materials to allow continued gas and moisture exchange.
Significance (with mitigation)	Acceptable

3.6 IMPLEMENTATION OF PROPOSED SCHEME

Affected Trees	All retained trees
Impact Appraisal & Mitigation	During the construction process, all retained trees are susceptible to damage from general construction related activities. *In order to reduce the risk of construction damage to the site's retained trees, tree protection barriers and temporary ground protection must be installed before the commencement of any site works.*
Significance (with mitigation)	Negligible

TREE RELATED SHADING AND NUISANCES

3.7 LONG-TERM IMPACT OF RETAINED TREES ON PROPOSED SCHEME

3.7.1 Shading

3.7.1.1 n/a

Note - Shading arcs, as discussed in BS 5837, have not been included on the Arb. Site Plans owing to their poor accuracy, and the extreme unlikelihood that the shading will not be within tolerable levels. Ligna Consultancy Ltd have undertaken many detailed shading assessments, and in all situations, light levels have been shown to be well within acceptable levels (BRE 209). Situations where lighting levels may not be suitable are most likely to involve rows of large dense conifers near to dwellings.

3.7.2 Canopy Growth

3.7.2.1 The layout of the scheme has been designed with consideration of the location and growth potential of nearby trees. Owing to such, no noteworthy contention between tree canopies and property are anticipated.

3.7.3 Nuisances

3.7.3.1 Owing to the tree species present within and around the site, and the layout of the proposed scheme, additional unreasonable tree-related nuisances, such as leaf and fruit-fall, are not thought to exist beyond what might generally be considered as acceptable limits.

OPPORTUNITIES FOR NEW TREE PLANTING

3.8 PROVISION OF NEW TREE PLANTINGS

3.8.1 Although no new tree plantings are required as mitigation for the proposed tree losses, it is recommended that 3 new tree plantings are included within the landscaping of the proposed scheme.

CONCLUSION

3.9 SUMMARY OF THE DEVELOPMENT'S OVERALL IMPACT

3.9.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category				
	A	B	C	U	Total
Trees to be removed	-	-	2	1	3
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Trees to be pruned	-	2	-	-	2
Site clearance	-	-	-	-	-
Routing and installation of utility apparatus	-	-	-	-	-
Instances of trees being affected by the installation of buildings/structures	-	1	-	-	1
Instances of trees being affected by the installation of surfacing	-	4	1	-	5
Number of new tree plantings (recommended)	-	-	-	-	3

3.9.2 Considering the anticipated arboricultural impact from the construction activities associated with the development of the site, and the implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **acceptable**.

4 APPENDICES

4.1 APPENDICES

4.1.1 The following appendices are included within this document:

No.	Appended Document
1	Tree Survey
2	Site Photos
3	Arboricultural Site Plan (Existing) (P4200-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P4200-ASP02 V1)

APPENDIX 1
TREE SURVEY

APPENDIX 1 – TREE SURVEY

A1.1 SITE VISIT

i) A site visit was undertaken by [redacted] of Ligna Consultancy, on the 10/12/2024

A1.2 METHOD OF DATA COLLECTION

i) Data was collected using the recommendations laid out in British Standard 5837:2012 as a guide. All observations were from ground level without detailed or invasive investigations.

ii) Measurements have been calculated using a laser measurer and diameter tape/calipers. Where this was not possible or reasonably practical, measurements have estimated by eye.

iii) The trees were surveyed and assessed impartially and irrespective of the proposed development. Management recommendations should be implemented regardless of any proposed development for reasons of sound arboricultural management or safety.

iv) The method used for categorising the trees can be seen in section A1.3. This is an improved variation of the method suggested in BS 5837:2012.

v) BS 5837:2012 recommends that better quality (category A and B trees) are retained where possible. Planning permission overrides a Tree Preservation Order and Conservation Area. Furthermore, trees are a material consideration in the UK planning system irrespective of their legal status. Trees in land adjacent to the site are considered where they may be impacted by development; for example, when roots or branches encroach onto the site.

vi) Trees may be recorded as group or woodland where:

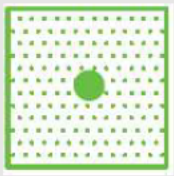
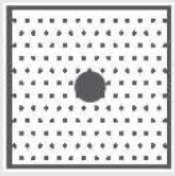
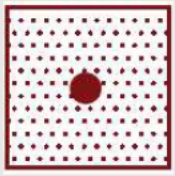
- The canopies touch.
- The trees have more group value than individual merit.
- They are part of a formal landscape feature like an avenue.
- It is impractical to record them individually.

vii) Trees within groups or woodlands etc. are recorded individually where it is necessary to distinguish them from others.

A1.3 SURVEY KEY & GLOSSARY OF TERMS

Term	Definition
Ref.	Tree reference number
Tag	Physical tag attached to some trees with unique identification number (not the same as Ref.)
Species	The trees' scientific and common name
Height	The measured/estimated height of the tree (measured in metres)
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
Crown Clearance	Crown clearance is the measurement of height between the trees branches in the outer third of its crown and the floor. Crown clearance has only been recorded where it is considered to be of relevance to the proposed scheme. The height of the first significant branch is also generally recorded and is discussed where relevant.
DBH	Diameter of a trees' stem, measured as per BS 5837:2012
RPA	The root protection area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
Life Stage	A quantification of a trees' state of physical maturity: • Young • Semi-mature • Early-Mature • Mature • Late-mature • Veteran • Dead
Structural	Summary statement relating to the structural condition of a tree: • Good (no apparent problems / normal optimal condition for a tree of its species.) • Fair (minor problems, no instabilities) • Poor (major problems, potential instabilities) • Unstable (extreme problems, likely to result in failure)
Vitality	Summary statement relating to the overall observed vitality of a tree: • Good (no apparent problems / normal optimal vitality for a tree of its species) • Fair (minor / temporary reduction in tree vitality) • Poor (major reduction in tree vitality, often with some branch dieback) • Dead / Dying (extreme / total reduction in tree vitality)
General Management Recommendations	Remedial tree works recommended regardless of whether the site is developed or not.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Development Related Tree Works	Tree works that are required as part of the proposed scheme.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Cat.	Categorisation of the tree's value based on the methodology shown in A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

A1.4 TREE CATEGORISATION METHODOLOGY

Category and definition	Criteria / Subcategories			Label on plan
	1 – Mainly arboricultural qualities	2 – Mainly landscape qualities	3 – Mainly cultural values/conservation	
Trees worthy of being a material constraint:				
Category A Trees of high quality, capable of providing a significant contribution to local amenity (usually large in size) and that generally possess an estimated remaining life expectancy of 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 and with an estimated remaining life expectancy of 20+ years, that are capable of providing a notable contribution to local amenity but are lacking the condition of category A trees (usually medium to large in size).	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage); or trees lacking the special quality necessary 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 visual contribution to the wider locality	Trees with material conservation or other cultural value	
Trees worthy of material consideration:				
Category C Trees of a low quality, small size, or incapability to be protected within the legal framework. These trees generally possess an estimated remaining life expectancy of 10+ years.	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	
Trees unsuitable for retention owing to condition:				
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 are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality			

A1.5 SUMMARY OF DATA

i) The following woody vegetation was considered to be of note in relation to any development of the site: 11 individual trees.

ii) The following tables show the category distribution and life stage of the trees distributed within the site:

	Tree Category				
	A	B	C	U	Total
Individual Trees	-	5	5	1	11
Groups	-	-	-	-	-
Woodland Groups	-	-	-	-	-
Hedges	-	-	-	-	-
Shrubs	-	-	-	-	-

Table 1 - Table showing category distribution within site.

	Life Stage						
	Young	Semi-Mature	Early-Mature	Mature	Late-Mature	Veteran	Dead
Individual Trees	3	-	1	4	3	-	-
Groups	-	-	-	-	-	-	-
Woodland Groups	-	-	-	-	-	-	-
Hedges	-	-	-	-	-	-	-
Shrubs	-	-	-	-	-	-	-

Table 2 - Table showing life stage distribution within the site.

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m^2)	Cat.
T1		Prunus avium (Cherry)	6.5	4 / 4 / 4 / 3.5	2	470	Mature	Good	Good	The tree is growing in a car park. Dense ivy on tree structure, obscuring full visual assessment. Branch tips in close proximity to BT pole. Lights wrapped around the tree. Exposed surface roots. Minor deadwood (<50mm diameter) in crown.	Sever the ivy at the base of the tree by removing a 30cm strip. Care must be taken not to damage the cambium of the tree while removing the ivy. Target prune canopy to provide a 1m clearance with BT pole.	Optional		-	5.6	99.9	B2
T2		Fraxinus excelsior (Ash)	14	4.5 / 6 / 5 / 6	2.5	520	Mature	Fair	Fair	Dense ivy on tree structure, obscuring full visual assessment. Estimated dimensions used. A power line is running through the tree crown with tension and rubbing of the line. Minor deadwood (<50mm diameter) in crown.	Sever the ivy at the base of the tree by removing a 30cm strip. Care must be taken not to damage the cambium of the tree while removing the ivy. Target prune tree to provide a 1m clearance with the powerline.	Optional	Crown lift tree by up to 3 meters to allow clearance with shed.	Moderate	6.2	122.1	B2
T3		Aesculus hippocastanum (Horse chestnut)	18	5 / 5 / 5 / 5	2	880	Late-Mature	Fair	Fair	Stem bifurcates at 3 meters. Stem bifurcates again at 7 meters. Historic structural failure of secondary branches. Ivy recently severed. Minor deadwood (<50mm diameter) in crown (Broadly acceptable risk - code 334). A power line is running through the tree crown - no work needed. Bleeding Canker of Horse Chestnut (Pseudomonas syringae pv. aesculi) was thought to be present on the tree on branches. Minor decay at the base of the tree - not of concern at this moment in time. Epicormic growth at base of tree.	Deadwood <50mm in diameter can be removed to prevent minor damage or for aesthetics. Consider carrying out the following works: Reduce tree crown by up to 3 meters to manage trees decline. Remove epicormic growth.	Optional	Crown lift tree by up to 3 meters to allow clearance with shed and greenhouse.	Moderate - Good	10.6	350.3	B2
T4		Fraxinus excelsior (Ash)	20	8 / 10 / 10 / 9	2	801	Late-Mature	Fair	Good	Stem separates in to multiple stems at 0.5 meters. Minor deadwood (<50mm diameter) in crown. Compression union with included bark. Affected stem to the east has been heavily reduced (Broadly acceptable risk - code 542). Cup union - not of concern at this point in time. Compression union with included bark on union to the west (Unacceptable risk where imposed on others - code 421). Epicormic growth within the canopy of the tree. Small snapped branches in the canopy of the tree - not of concern.	Deadwood <50mm in diameter can be removed to prevent minor damage or for aesthetics (IBA). Reduce tree crown by up to 3 meters (24 Months).	24 months		Moderate	9.6	290.4	B2
T5		Fraxinus excelsior (Ash)	20	7 / 7 / 6 / 7	3	870	Mature	Fair	Fair	Stem bifurcates at 2.5 meters (Unacceptable risk where imposed on others - code 422). Stem bifurcates again at 3.5 meters. Moderate sized cambial damage. Moderate size deadwood (<150mm diameter) in crown (Unacceptable risk where imposed on others - code 323).	Remove significant deadwood (>50mm diameter and 1m in length). Reduce tree crown by up to 3 meters.	24 months		Moderate	10.4	342.4	B2

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m^2)	Cat.
T6		Fraxinus excelsior (Ash)	20	9 / 7 / 3.5 / 8	3	796	Mature	Poor	Fair	Dense ivy on tree structure, obscuring full visual assessment. Prunus growing as one with the tree. Twin-stemmed tree. Fungal fruiting body present at base of tree in union and around base of secondary stem. Decay extent unknown. Hollow when smaller stem tapped (Unacceptable risk - code 321). Minor deadwood (<50mm diameter) in crown. Epicormic growth at base of tree. Garden waste dumped at the base of the tree.	Remove tree to ground level or fell/dismantle tree leaving a standing habitat stem of 6 meters.	24 months	Remove	Moderate	9.6	286.9	U
T7		Chamaecyparis Lawsoniana (Lawson cypress)	12	2.5 / 2.5 / 2.5 / 2.5		200	Early-Mature	Fair	Good	Stem separates in to multiple stems at 3 meters.				Good	2.4	18.1	C3
T8		Laburnum anagyroides (Common laburnum)	2.5	1.5 / 1.5 / 1.5 / 1.5		105	Young	Fair	Good				Remove	Moderate	1.3	5.0	C1
T9		Crataegus monogyna (Hawthorn)	2.5	1.5 / 1.5 / 1.5 / 1.5		100	Young	Good	Good	Twin-stemmed tree.			Remove	Moderate - Good	1.2	4.5	C1
T10		Prunus spp. (Cherry)	2.5	2 / 2 / 2 / 2		100	Young	Good	Good					Moderate - Good	1.2	4.5	C1
T11		Aesculus hippocastanum (Horse chestnut)	14	6 / 6 / 6 / 6		600	Late-Mature	Fair	Poor	The tree is on a neighbouring property, therefore a full survey was impeded. Estimated dimensions used. Stem bifurcates at 5 meters. Dead stem within the canopy of the tree.	Remove significant deadwood (>50mm diameter and 1m in length).	Optional		Moderate - Good	7.2	162.9	C1

APPENDIX 2
SITE PHOTOGRAPHS

Note - Below is a selection of site photographs intended for general site context. Should you require supplementary site/tree photographs please contact info@lignaconsultancy.co.uk:



Figure 1 – Looking west over the site.



Figure 2 – Looking northwest over the site.



Figure 3 – T6 Ganoderma spp at the base of the tree.



Figure 4 – T2 and T3 looking west over the garden area.

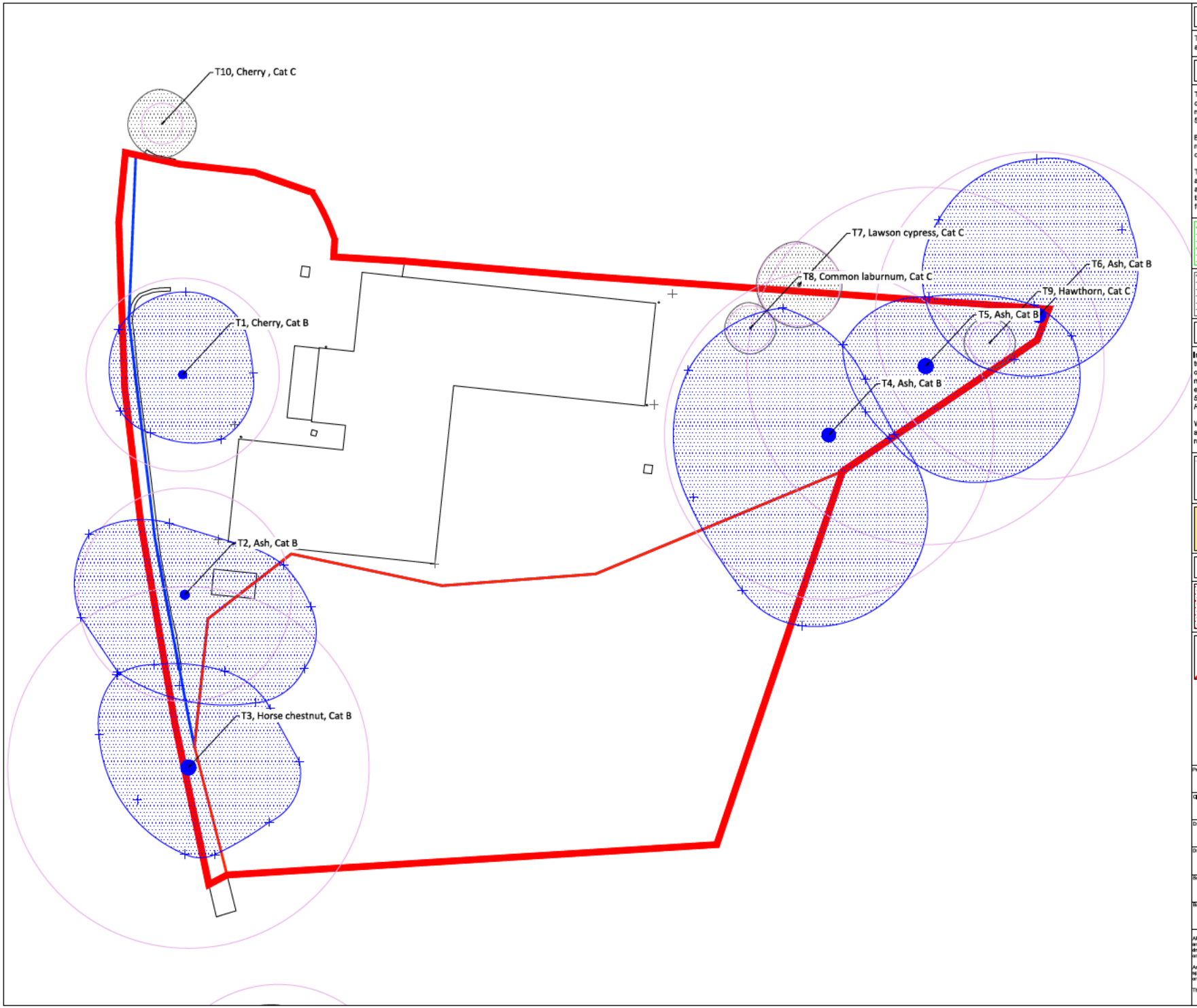


Figure 5 – Looking east towards the house from T2 over the existing oil tank.



Figure 6 – Looking north towards T4-T9.

APPENDIX 3
ARB. SITE PLAN (EXISTING)



Use of This Document

This document should be viewed in conjunction with the relevant arboricultural impact assessment and/or tree survey schedule.

Tree Categorisation & Numbering

The method used for categorising the trees can be seen in Appendix 1 of the Tree Survey/Arboricultural Impact Assessment. The categorisation method used is an improved variation of the method suggested in BS 5837:2012.

BS 5837:2012 recommends that better quality trees (Cat. A & B) are retained where possible. Trees in and adjacent to the site are considered where they may be impacted by development.

The trees considered significant within the context of the development are numbered and assigned a prefix of 'T' or 'G' to describe whether they are an individual or a group, and 'S' or 'H' for a shrub or hedge. Using this identification number, further information for each tree/group can be found within the survey schedule.

Category A : High or exceptional arboricultural, landscape or ecological value. (Worthy of being a material constraint.)

Category B : Moderate arboricultural, landscape or ecological value. (Worthy of being a material constraint.)

Category C : Low quality or small in size. (Not worthy of being a material constraint.)

Category U : Such poor quality or condition that renders it unsuitable for retention. (Not worthy of being a material constraint.)

Root Protection Areas

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPA's) should be plotted around each of the category A, B and C trees. This is a notional depiction of the minimum rooting area in m2 which should be left undisturbed around each tree. The RPA is calculated using the *British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'*, unless otherwise stated within the survey schedule.

Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Root Protection Area (RPA): The notional area around each tree which should be left undisturbed during the development of the site

RPA Incursion: Anticipated incursion into the root protection area of a proposed tree which may result in root loss/damage.

Arboriculturally Sensitive Demolition/ Removal: A structure or surfacing is to be removed using special methods to avoid damage to trees.

Specialist Foundations: Low impact foundations to be used to preserve underlying tree roots.

Further Object Key

Tree Removal: Trees designated for removal will comprise of a red dotted canopy fill.

Buildings/Surfacing to be Removed: Buildings or surfacing to be removed will generally be depicted with a dashed red line.

Site Boundary: Extent of site boundary (illustrative only)

Proposed Services Route: Proposed routing for new services

Ligna Consultancy

Project: Spillers Yard

Client: Shelford Tree Services Ltd

Drawing: Arboricultural Site Plan (Existing)

Drawing Ref:	Rev:	Date:
P4200-ASP01	V1	19/12/2024

Scale: 1:200 - A3

Drawn: [redacted]

Based on: 3. Existing and Proposed site plan-compressed

All dimensions should be checked on site. No dimensions to be scaled from this drawing. Please notify us of any discrepancies found. Ligna Consultancy Ltd, cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.

An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.

This drawing was produced in colour - a monochrome copy should not be relied upon.

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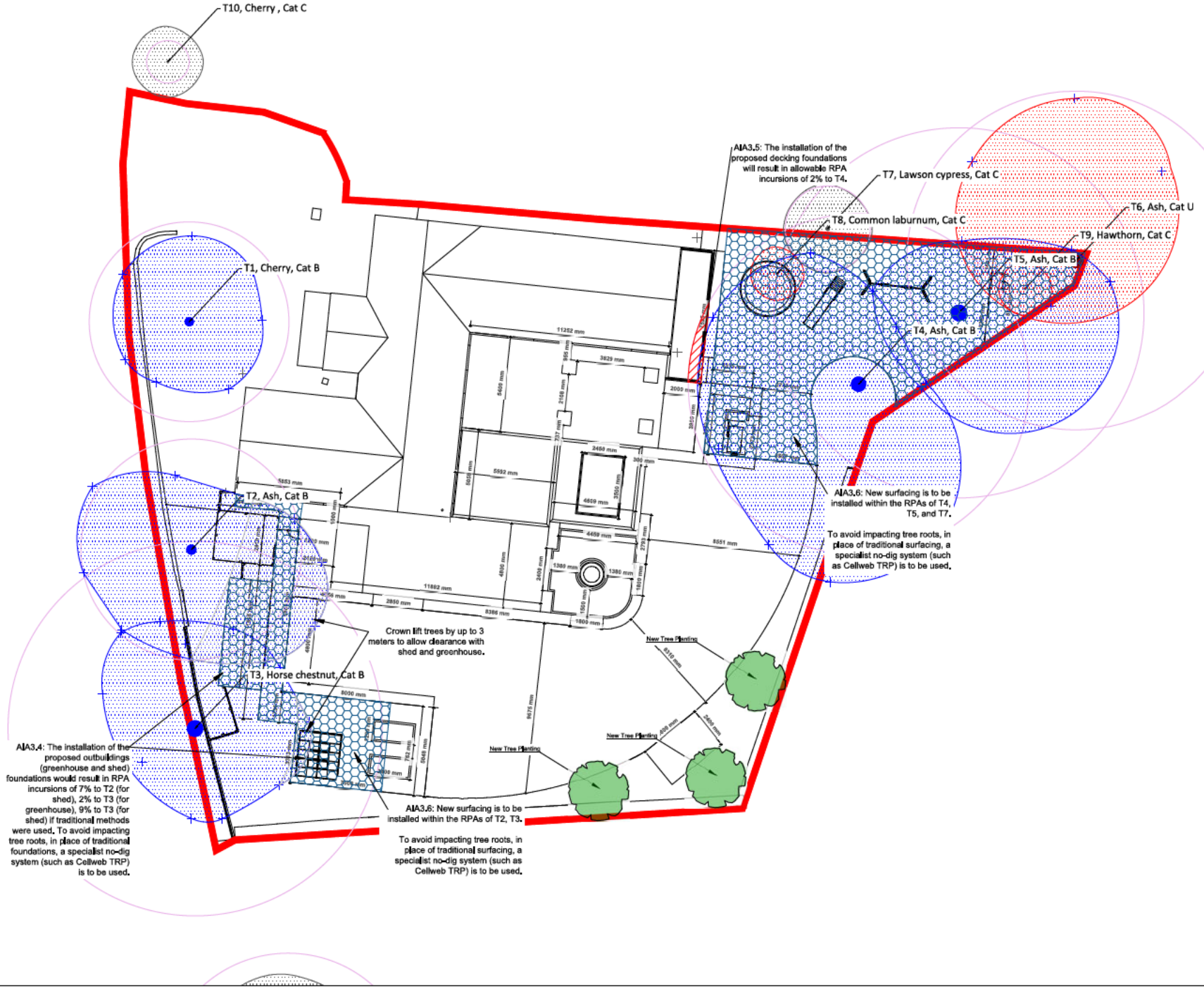
APPENDIX 4
ARB. SITE PLAN (PROPOSED)



Use of This Document

This document should be viewed in conjunction with the relevant arboricultural impact assessment and/or tree survey schedule.

Tree Categorisation & Numbering

The method used for categorising the trees can be seen in Appendix 1 of the Tree Survey/Arboricultural Impact Assessment. The categorisation method used is an improved variation of the method suggested in BS 5837:2012.

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Root Protection Areas

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPA's) should be plotted around each of the category A, B and C trees. This is a notional depiction of the minimum rooting area in m2 which should be left undisturbed around each tree. The RPA is calculated using the *British Standard BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'*, unless otherwise stated within the survey schedule.

Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Root Protection Area (RPA): The notional area around each tree which should be left undisturbed during the development of the site

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Proposed Services Route: Proposed routing for new services

Ligna Consultancy

Project: Spillers Yard

Client: Shelford Tree Services Ltd

Drawing: Arboricultural Site Plan (Proposed)

Drawing Ref:	Rev:	Date:
P4200-ASP02	V1	20/12/2024

Scale: 1:200 - A3

Drawn: [redacted]

Based on: 3. Existing and Proposed site plan-compressed

All dimensions should be checked on site. No dimensions to be scaled from this drawing. Please notify us of any discrepancies found. Ligna Consultancy Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.

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W. www.lignaconsultancy.co.uk
E. info@lignaconsultancy.co.uk
T. 01284 598008

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