

AIA

ARBORICULTURAL IMPACT ASSESSMENT

(INC. TREE SURVEY TO BS 5837:2012)



PROJECT - 4 Lewis Close

CLIENT - Ester and Jez Bayes

DOC. REF - P3755-AIA01 V1

PLANNING REF - n/a

CREATION DATE - 24/07/2024

TABLE OF CONTENTS

1. SUMMARY 2

2. GENERAL INFORMATION 4

3. ARBORICULTURAL IMPACT ASSESSMENT 8

4. APPENDICES 11

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	P3755-AIA01	V1	24/07/2024
Arb. Site Plan (Existing)	P3755-ASP01	V1	24/07/2024
Arb. Site Plan (Proposed)	P3755-ASP02	V1	24/07/2024

1. SUMMARY

1.1 PROPOSED DEVELOPMENT

1.1.1 The client wishes to construct an extension to the rear of the existing dwelling.

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: 5 individual trees, 1 group of trees, 2 shrubs.

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	-	-	-	-	-
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Groups / Hedges to have sections removed	-	-	-	-	-
Trees to be pruned	-	-	-	-	-
Site clearance	-	-	-	-	-
Routing and installation of utility apparatus	-	-	-	-	-
Instances of trees being affected by the installation of buildings/structures	-	-	-	-	-
Instances of trees being affected by the installation of surfacing	-	-	-	-	-
Number of new tree plantings (minimum)	-	-	-	-	-

1.4.2 Considering the anticipated arboricultural impact from the demolition 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 **negligible**.

2 GENERAL INFORMATION

2.1 BRIEF

- 2.1.1 Ligna Consultancy Ltd were instructed by the client, Ester and Jez Bayes, to undertake a tree survey in accordance with BS 5837:2012 and to prepare an arboricultural impact assessment for the proposed scheme at 4 Lewis Close.

2.2 PROPOSED DEVELOPMENT

- 2.2.1 The client wishes to construct an extension to the rear of the existing dwelling.

2.3 SITE

- 2.3.1 The site discussed within this report is located at:

4 Lewis Close, Harefield, Uxbridge, UB9 6RB

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) (P3755-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P3755-ASP02 V1)

2.5 DOCUMENTS PROVIDED

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

No.	Supplied Document
1	50206_01-02_PES
2	1889_A100 Prop Site Plan_rev 02

2.6 PROJECT CONTACT

Role	Name	Telephone	Email
Arboricultural Consultant	Jake Duthie	01284 598008	jake@lignaconsultancy.co.uk

2.7 AUTHOR

- 2.7.1 Jake Duthie is a tree inspector with 9 years of experience in the arboricultural industry. He has extensive practical experience in tree surgery, including for high profile sites such as the Tower of London and Hampton Court Palace. He has worked as a tree inspector for Merton Borough Council, inspecting and ordering works on a large tree stock in high target areas. He has a level 4 advanced diploma in arboriculture and LANTRA Professional Tree Inspection training.
- 2.7.2 This report has been checked and edited by Benjamin Hallinan MArborA.
- 2.7.3 Benjamin Hallinan is a professional member of the Arboricultural Association. He has worked in arboriculture for over a decade, including management and supervisory roles undertaking both domestic and commercial arboricultural work. He possesses a FdSc in arboriculture, LANTRA Professional Tree Inspection training, and has also received advanced training in tree related subsidence and BS 5837. Benjamin is familiar with the use of the QTRA system.

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 (<i>BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations</i>)
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 n/a

Impact Appraisal & Mitigation No trees are to be removed as part of the proposed scheme.

Significance (with mitigation) n/a

3.2 TREES TO BE PRUNED

Affected Trees n/a

Pruning works No trees are to be pruned as part of the proposed scheme.

Significance (with mitigation) n/a

3.3 IMPLEMENTATION OF PROPOSED SCHEME

Affected Trees All retained trees

Impact Appraisal & Mitigation No trees are considered to be at any notable risk of harm from the proposed construction related activities.

The existing boundary wall and paving present on site provides adequate protection to stems and root protection areas from construction related activities.

Significance (with mitigation) Negligible

TREE RELATED SHADING AND NUISANCES

3.4 LONG-TERM IMPACT OF RETAINED TREES ON PROPOSED SCHEME

3.4.1 Shading

- 3.4.1.1 None of the trees observed are considered to possess a significant potential for a negative shading impact on the proposed extension; any tree-related shading of property is expected to be minimal, transient and well within the recommended levels outlined in BRE 209 guidance.

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.

3.4.2 Canopy Growth

- 3.4.2.1 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.

3.4.3 Nuisances

- 3.4.3.1 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

3.5 PROVISION OF NEW TREE PLANTINGS

- 3.5.1 No mitigation tree planting is required as part of the proposed scheme.

CONCLUSION

3.6 SUMMARY OF THE DEVELOPMENT'S OVERALL IMPACT

3.6.1 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	-	-	-	-	-
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Groups / Hedges to have sections removed	-	-	-	-	-
Trees to be pruned	-	-	-	-	-
Site clearance	-	-	-	-	-
Routing and installation of utility apparatus	-	-	-	-	-
Instances of trees being affected by the installation of buildings/structures	-	-	-	-	-
Instances of trees being affected by the installation of surfacing	-	-	-	-	-
Number of new tree plantings (minimum)	-	-	-	-	-

3.6.2 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 **negligible**.

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) (P3755-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P3755ASP02 V1)

APPENDIX 1 TREE SURVEY

APPENDIX 1 – TREE SURVEY

A1.1 SITE VISIT

- i) A site visit was undertaken by Jake Duthie of Ligna Consultancy, on the 23/07/2024

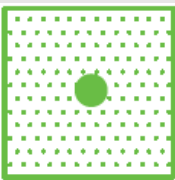
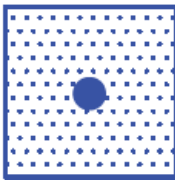
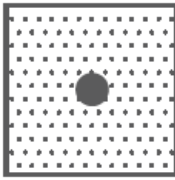
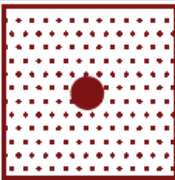
A1.2 METHOD OF DATA COLLECTION

- 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: <ul style="list-style-type: none"> • Young • Semi-mature • Early-Mature • Mature • Late-mature • Veteran • Dead
Structural	Summary statement relating to the structural condition of a tree: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none">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 declineTrees 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: 5 individual trees, 1 group of trees, 2 shrubs.
- 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
Groups	-	-	1	-	1
Woodland Groups	-	-	-	-	-
Hedges	-	-	-	-	-
Shrubs	-	-	2	-	2

Table 1 - Table showing category distribution within site.

	Life Stage						
	Young	Semi-Mature	Early-Mature	Mature	Late-Mature	Veteran	Dead
Individual Trees	-	3	2	-	-	-	-
Groups	-	-	-	1	-	-	-
Woodland Groups	-	-	-	-	-	-	-
Hedges	-	-	-	-	-	-	-
Shrubs	1	-	1	-	-	-	-

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		Fraxinus excelsior (Ash)	8.5	4.5 / 1.5 / 1 / 3.5	2.5	250	Semi-Mature	Good	Good	DBH estimated due to lack of access to stem. Ash tree pruned heavily to boundary leaving stubs. Minor deadwood in crown (<50mm diameter).				Moderate	3.0	28.3	C1
T2		Fraxinus excelsior (Ash)	11.5	4 / 1.5 / 1 / 3.5	2.5	280	Semi-Mature	Fair	Fair	Slightly sparse upper canopy, no other ash dieback symptoms visible at present. Tree has previously been heavily pruned to boundary, leaving stubs.				Moderate	3.4	35.5	C1
T3		Fraxinus excelsior (Ash)	11.5	3.5 / 3 / 1 / 1.5	2.5	250	Semi-Mature	Good	Fair	Previously reduced heavily to boundary, leaving stubs. DBH estimated due to lack of access to stem. Minor deadwood in crown (<50mm diameter).				Moderate	3.0	28.3	C1
T4		Sorbus aucuparia (Rowan)	5	1 / 1 / 0 / 1	4	100	Early-Mature	Fair	Fair	Small Rowan, pruned to site boundary. Tree health in early stage of decline.				Moderate	1.2	4.5	C1
T5		Sorbus aucuparia (Rowan)	4.5	1 / 1 / 0 / 1	3.5	100	Early-Mature	Good	Fair	Pruned to boundary. Minor deadwood in crown (<50mm diameter).				Moderate	1.2	4.5	C1
G1		Mixed group	12.5	3 / 2.5 / 1 / 2.5	2.5	200	Mature	Poor	Poor	Mixed species group to north of northern site boundary. Average DBH estimated due to lack of access to stems. 3x Goat Willow, 1x Rowan, 2x Cherry with Eleagnus present throughout group. Previously reduced hard past site boundary leaving stub cuts and large wounds. 1 Goat Willow in line with western site boundary is dead, unlikely to affect site in event of failure. 1 cherry has decaying west facing limb 2.8m up which has partially failed. Unlikely to affect site in event of complete branch failure. Overall group has low arboricultural value but decent habitat value.				-	2.4	18.1	C2
S1		Corylus avellana (Hazel)	2	1 / 1.3 / 1 / 1	0.1	40	Early-Mature	Good	Good	Contorted Hazel in shrub bed, no concern at present.				Good	0.5	0.7	C1
S2		Pinus spp. (Pine)	2.3	1 / 1 / 1 / 1	0.1	70	Young	Good	Good	Small pine with bushy habit.				-	0.8	2.2	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 – The rear of the existing dwelling taken from the west. Part of G1, as well as T1 and T2, can be seen behind the boundary wall.



Figure 2 – The western section of the northern boundary of the property, taken from the east. Part of G1 can be seen behind the boundary wall, with the edge of S2 visible at the far left of frame.



Figure 3 – The south western corner of the garden. S1 and S2 are visible centre left and centre right of frame respectively.



Figure 4 – T1 and T2, shown behind the boundary wall. The eastern edge of G1 can be seen in the far left of frame.

APPENDIX 3 – ARB. SITE PLAN (EXISTING)



Figure 5 – T2, T3 and T4, shown behind the boundary wall. Photo taken from the east of the existing dwelling.

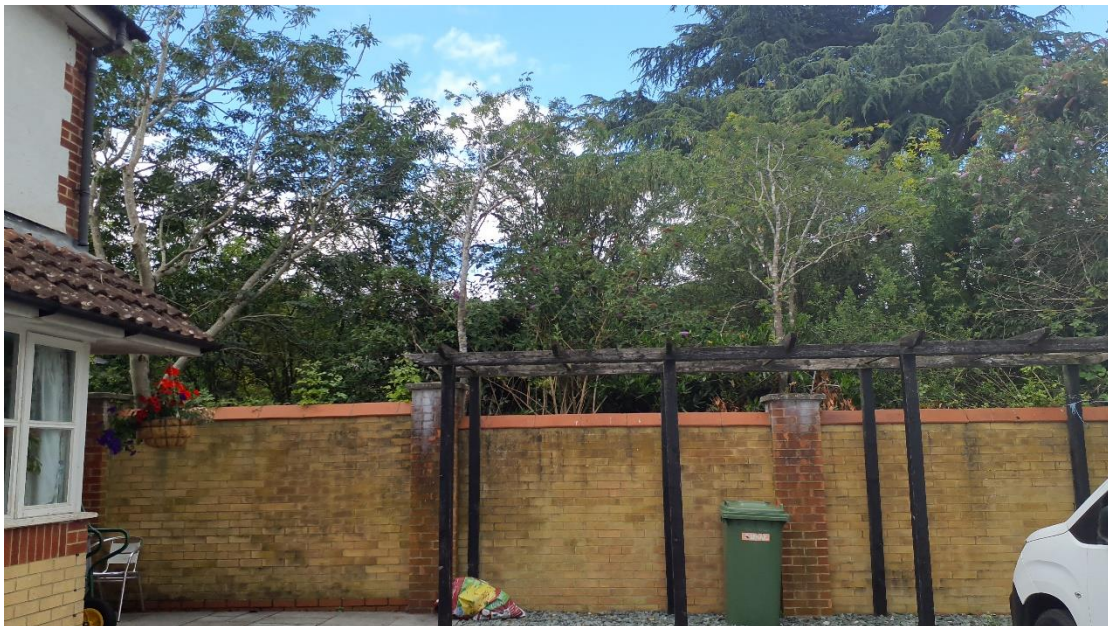
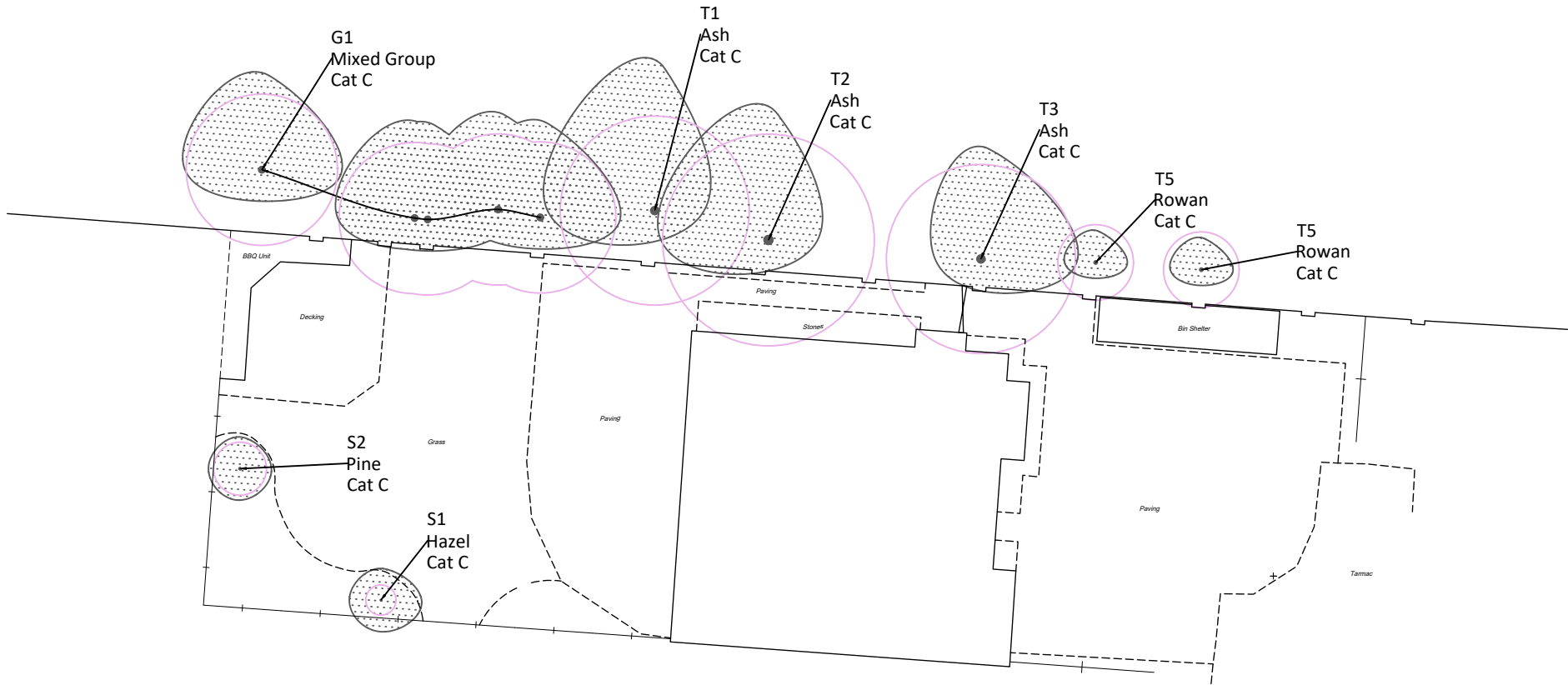


Figure 6 – The trees located to the front of the existing dwelling, taken from the south on the driveway. T3, T4 and T5 can be seen behind the boundary wall.

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 land 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



Project:	4 Lewis Close		
Client:	Esther and Jez Bayes		
Drawing:	Arboricultural Site Plan (Existing)		
Drawing Ref:	P3755-ASP01	Rev:	V1
Date:	24/07/2024		
Scale:	1:200 - A3		Drawn By:
		J. Duthie	
Based on:	50206_01-02_PES		

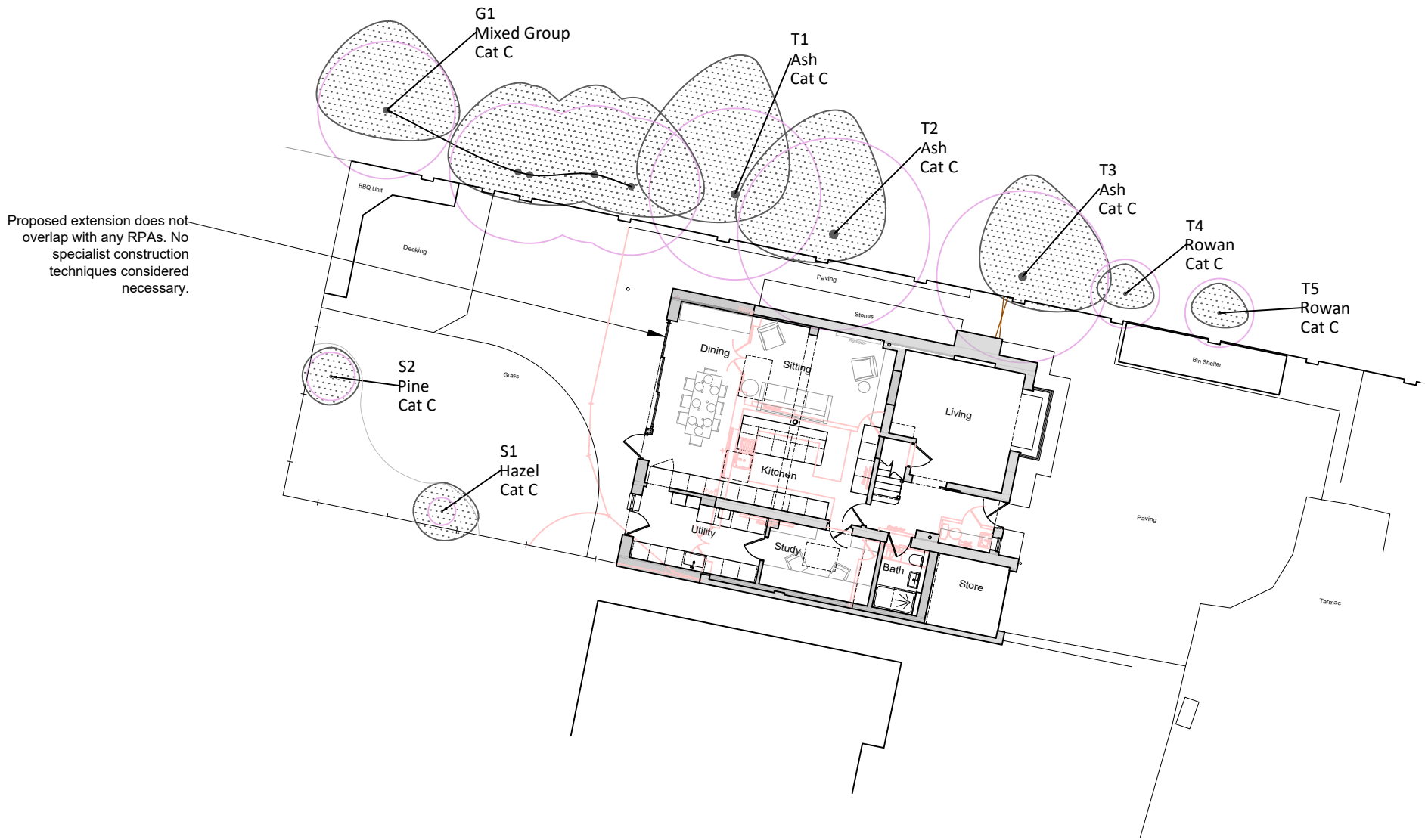
All dimensions should be checked on site. No dimensions to be scaled from this drawing. Please notify us of any discrepancies found. Ligna Consultancy Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of 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.
© Ligna Consultancy Ltd. 2024

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.

BS 5837:2012 recommends that better quality trees (Cat. A & B) are retained where possible. Trees in land 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



Project:	4 Lewis Close		
Client:	Esther and Jez Bayes		
Drawing:	Arboricultural Site Plan (Proposed)		
Drawing Ref:	P3755-ASP02	Rev:	V1
Date:	24/07/2024		
Scale:	1:200 - A3		Drawn By:
		J. Duthie	
Based on:	1889_A100 Prop Site Plan_rev 02		

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.
© Ligna Consultancy Ltd. 2024



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

This report was prepared for use by the Clients and their contractors for planning and design 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