Arboricultural Impact Assessment

RIBA Stage 3

Rose Avenue, Gravesend

A Report To: Baily Garner LLP
Report Number: RT-MME-182248
Date: August 2025

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Report Verification

Report Version	Date	Completed by:	Checked & Approved by:
Final	17/07/2025	Christian Daems BSc (Hons) MArborA Arboricultural Consultant	Stefan Harrison BSc (Hons) MArborA Principal Arboricultural Consultant

Declaration of Compliance

This study has been undertaken in accordance with British Standard 5837:*2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'.*

Disclaimer

The contents of this report are the responsibility of Middlemarch. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Validity of Data

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified and experienced arboriculturist to assess any changes to the trees, groups, and hedgerows on site and to inform a review of the conclusions and recommendations made.

It should be noted that trees are dynamic living organisms that are subject to natural changes as they age or are influenced by changes in their environment. As such, following any significant meteorological event or changes in the growing environment of the trees they should be re-assessed by a suitably qualified and experienced arboriculturist.

This Arboricultural Impact Assessment has been produced following a review of a proposed development layout for the site based on data provided by the client. Should the development proposals change, this report will need to be updated to assess the impact of the amended development.

Contents

1. Introduction

1.1 Project Background

This Arboricultural Impact Assessment was commissioned by Baily Garner LLP to accompany a planning application for residential development at Rose Avenue, Gravesend. A survey of the trees on site and within influencing distance of the boundaries was undertaken on the 14th of January of 2025 as part of a Preliminary Arboricultural Assessment to aid design and avoid unnecessary tree removal.

This Arboricultural Impact Assessment has been carried out in accordance with British Standard 5837:2012 *'Trees in Relation to Design, Demolition and Construction - Recommendations'*[1] (hereafter referred to as BS5837).

The purpose of this report is to:

- Review the relationship between the proposed development and the existing trees and hedgerows identified during the Preliminary Arboricultural Assessment.
- Review and quantify the trees most likely to be impacted by a development proposal and to highlight potential options to reduce the impact.
- Provide a Tree Retention Plan to determine trees and hedgerows to be retained and removed in the context of the proposed development.
- Identify mitigation to offset any tree or hedgerow loss as part of the development proposals.
- Identify all areas where specific working methods are required to ensure protection of retained trees and hedgerows as part of an Arboricultural Method Statement.

1.2 Site Description, Drawings and Appendices

Attribute	Description
National Grid Reference	TQ 66419 73334
Topography	Flat, housing estate.
Tree Cover	Garden and landscape trees.
Appendices	Appendix A: Tree Schedule Appendix B: Tree Survey Plan – C181336-04-01 Appendix C: Tree Retention Plan – C182248-05-01

Table 1.1: Summary of Site and Surroundings

[1] British Standards Institution. (2012). *British Standard 5837:2012, Trees in relation to design, demolition, and construction – Recommendations.* British Standards Institution, London.

1.3 Results of Preliminary Arboricultural Assessment

The Preliminary Arboricultural Assessment report (prepared by Middlemarch environmental Ltd and supplied separately) identified 8 individual trees and 4 groups of trees, as detailed in the Tree Schedule (Appendix A) and Table 1.2 below.

BS5837:2012 Category	Tree/ Group/ Woodland/ Hedgerow Reference
U	None surveyed.
A	None surveyed.
B	G3
C	T1, T2, T3, T4, T5, T6, T7, T8 G1, G2, G4

Table 1.2: Summary of Trees and Groups in BS5837:2012 Categories

The survey site was a block of 5 houses with associated gardens, and a small public square along Rose Avenue. The main arboricultural interest of the site were the larger trees in group G3 the northwest corner of the site. These consisted of large, mature sycamore trees and a row of beech trees. These were situated along the boundary between the houses on Rose Avenue, the adjacent Little Explorers nursery and the back gardens of the houses along Dickens Road. Due to their size they were considered to be Category B trees.

The remaining trees were generally smaller and younger trees with a more limited arboricultural value. These were mostly located in the boundary area between the Riverside Community Centre and the houses. T1, T2 and T3 were located on the public square, but due to their small size provided limited amenity value and were considered to be Category C.

It should be noted that trees T4, T6 and T7 and (parts of) groups G1, G2, G3 and G4 are right on the boundary lines between the site and the adjoining properties, with some being right on the fence line.

1.4 Development Proposals

The proposed development of the site includes the demolition of the current houses, followed by the construction of four new housing blocks and associated access roads, hard and soft landscaping.

1.5 Documentation Provided

This assessment is based upon the information provided by the client in addition to information collected by Middlemarch during the Preliminary Arboricultural Assessment, as detailed below.

Author	Document	Drawing Number	Date
Standerwick Land Design	Rose Avenue Landscape strategy Rev A	-	28/05/2025
Baily Garner	Proposed Site Plan	1101	01/08/2025

Table 1.3: Documentation Provided

2. Assessment Methodology

2.1 Tree Categorisation

Trees assessed as retention category A, B or C are a material consideration in the planning process and provide future value to the new site use, however, the prioritisation for tree retention should be based upon the guidance contained within BS5837, and follows this order:

Retention Category A

Trees of high quality should be given the highest priority when deciding which trees should be retained and incorporated into proposed development layouts. These trees offer the opportunity to significantly contribute to the future of the site in arboricultural and landscape terms, and their loss should be avoided unless there is overriding justification to remove them.

Retention Category B

Moderate quality trees should be retained and incorporated into development proposals as they offer the potential to provide medium to long term benefits to the site. These trees are typically found to have remediable defects that are likely to improve over time. The removal of Category B trees should generally be avoided unless there is overriding justification to remove them.

Retention Category C

When considering which Retention Category C trees to retain in the new development, priority should be given to those trees that have been included within this category solely due to their young age and limited proportions (stem diameters of less than 150 mm at 1.5 m above ground level). These young specimens offer future potential as established tree cover but could be removed and replaced or translocated to areas away from potential development to avoid their loss. The remaining trees in this category would provide only temporary or transient landscape benefits until new tree planting becomes established and therefore, should not constrain the development of a site.

Retention Category U

Trees found unsuitable for retention. These trees have limited, transient retention value due to their poor current condition. In most circumstances, such specimens will not be considered for retention within new development unless they offer wildlife habitat potential and are situated in areas with limited access.

2.2 Root Protection Area (RPA)

To avoid damage to the roots or rooting environment of retained trees, the RPA has been calculated for each of the Category A, B and C trees in accordance with Section 4.6 of BS5837. BS5837 recommends this as the minimum area around a tree that contains sufficient roots and rooting volume to maintain viable tree vigour and structure. Where groups of trees have been assessed, the Root Protection Area has been shown based on the maximum sized tree stem in each group.

Protection of the roots and soil structure within the RPAs of retained trees should be treated as a priority. These figures have been calculated utilising the formulas within Section 4.6 and Annex D of BS5837.

2.3 Impact Review

In line with the guidance within BS 5837, we are to evaluate the direct and indirect effects of the proposed design, and where necessary recommend mitigation.

Below ground impacts (those which can affect the roots within the RPA) or above ground impacts (those which affect branches and crowns) shall be expressed as a percentage of RPA or crown volume lost by the installation of a new structure, and an overall impact assigned qualitatively, such as *Low*, *Medium* or *High*.

The species type, age class and physiological condition will also be taken into consideration when assessing the impact, as certain species or those in later life stages will be much less tolerant to changes in their rooting area, or significant pruning.

As an example, it is observed and generally accepted that around 90% of all tree roots are found within the upper 600mm of the soil, therefore even shallow excavations can lead to an extensive damage to or loss of structural and conductive roots which could lead to tree instability, death or decline.

Where there is overriding justification to site new development within the RPA or canopy spread of a retained tree, it must be constructed in such a way that impact or damage of the tree root system or crown will be avoided as far as practicable. Mitigating impacts shall follow the preferred hierarchy of **Avoid, Minimise,** or **Compensate.**

Hierarchy	Example activities
Avoid	• By amending the design to relocate a structure so it is completely outside of the RPA.
Minimise	• Re-routing a footpath to reduce its encroachment on the RPA as far as possible, or utilising “no-dig” solutions to avoid direct root loss.
Compensate	• Soil remediation works improve the rest of the RPA as needed. • The tree is lost, but new planting is carried out nearby.

This Arboricultural Impact Assessment aims to highlight these and suggest lower impact solutions, such as avoiding the tree entirely, or specific working or construction methods, where considered practicable.

2.4 Tree Retention Plan

Initial review of the overlaid proposed detail has highlighted conflicts with some trees. Where these conflicts are either substantial and are and not reasonably remediable, or affect small trees, those trees are assumed to removed and their loss is recorded for compensatory planting.

The Tree Retention Plan (Appendix C) identifies which trees and hedgerows are to be retained and incorporated as part of the site development and which are to be removed.

3. Statutory Protection

3.1 Tree Preservation Order and Conservation Area Protection

A desk-based study was undertaken to identify if any of the trees present within or near the site are affected by statutory constraints as detailed below.

Statutory Constraint	Present ✓ ✗	Source	Details
TPO	✗	Gravesham Borough Council consultation	None present
Conservation Area	✗	Gravesham Borough Council consultation	None present
Ancient Woodland	✗	Multi Agency Geographical Information for the Countryside (MAGIC)	Not present

Table 3.1: Summary of Statutory Constraints that Affect the Site

No protected trees were found to be on or within 15 metres of the site boundary.

3.2 Protected Species

Bats

Mature trees often contain cavities, hollows, peeling bark or woodpecker holes which provide potential roosting locations for bats. Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017)[2]. They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981[3], as amended. Consequently, causing damage to a bat roost constitutes an offence.

Generally, should the presence of a bat roost be suspected whilst completing works on any trees on site then an appropriately licensed bat worker should be consulted for advice.

Birds

Trees offer potential habitat for nesting birds which are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are

[2] HM Government – The National Archives (2017) [online] *The Conservation of Habitats and Species Regulations 2017*. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made

[3] HM Government – The National Archives 2017. *Wildlife and Countryside Act 1981*. [online] Available at: http://www.legislation.gov.uk/ukpga/1981/69/contents

protected by special penalties. This legislation makes it an offence to intentionally or recklessly damage or destroy an active bird nest or part thereof.

As the trees on, and adjacent, to the site provide potential habitat for nesting birds all tree work should ideally be completed outside the nesting bird season (Generally March to September).

If this is not possible then the vegetation should be subject to a nesting bird inspection by a suitably experienced ecologist prior to commencement of works. If any active nests are identified then the vegetation, and a defined buffer zone, will need to remain in place until the young have naturally fledged.

4. Arboricultural Impact Assessment

4.1 Introduction

This section of the report details the potential impacts that the proposed development may have upon the site's tree stock. The assessment has been based upon the documents detailed in Table 1.1 with reference to the results of the Preliminary Arboricultural Assessment.

4.2 Tree Retention and Removal

The trees to be removed are detailed below and are identified on the Tree Retention Plan. All trees, groups and hedgerows *not* featured within the table below are to be retained within the proposed development.

Tree/ Group Reference	Species	Retention Category	Full or Partial Removal	Reason for Removal
T1	Pear	C	Full	Construction of new housing blocks and access road.
T2	Cherry	C	Full	Construction of new housing blocks and access road.
T3	Himalayan birch	C	Full	Construction of new housing blocks and access road.
T5	Torquay palm	C	Full	Construction of new housing blocks and access road.
T8	Elder	C	Full	Within the footprint of building.
G1	Mixed species	C	Full	Soft landscaping.
G2	Mixed species	C	Partial	Construction of new housing block.

Table 4.1: Trees and Groups to be Removed

The trees and groups that are to be removed or partially removed were all considered to be of a low value (Retention Category C) during the Preliminary Arboricultural Assessment. The proposed removal of these trees should not unduly constrain a favourable development as new tree planting of higher quality trees more suited to the new development, if appropriately selected, planted and cared for will make a lasting positive contribution to the visual amenity value and canopy coverage of the site.

It should be noted that most trees in group G2 were located within the grounds of the neighbouring Riverside Centre.

N.B: A Biodiversity Net Gain calculation may reveal that to successfully offset any proposed removal of trees, a large number of replacement trees/habitats may be required. If the site does not have sufficient space for offsetting on top of the 10% gain required by law, it may mean that the majority or even all trees are to be retained in order to achieve the required gain on-site. As such, the client is strongly advised to review the advice given in their BNG report prior to preparing detailed designs which involve the removal of trees or other habitats.

4.5 Trees and Foundations

Any structures built on the site should comply with current building regulations and NHBC Chapter 4.2 - *Building near Trees* (2022)[4]. Foundation depths for buildings near or adjacent to trees should consider the potential size of the trees at maturity and their subsequent water demand. The soil types throughout the site should be fully investigated and appropriate measures taken. If trees are removed across the site, the potential for soil heave should be assessed and foundations designed accordingly. This survey has been undertaken in accordance with BS5837 and further assessment in accordance with current building regulations will be required to inform foundation design.

4.6 Tree Pruning

Indicative pruning requirements have been specified in Table 4.3 below. This is to ensure pruning requirements have been considered and to allow for the potential impact of pruning to be assessed.

Tree/ Group/ Woodland / Hedgerow Reference	Species	BS5837 Category	Pruning Works
G2	Mixed species	C	Slight pruning works to provide access and future clearance of proposed buildings

Table 4.3: Indicative Tree Pruning Requirements

Some minor pruning will likely be required to ensure access and future clearance of the proposed housing block in the northeast corner. It is unlikely these works will have a significant impact on the trees in group G2. It should be noted that most of the trees in group G2 are located in the neighbouring property, care should be taken to ensure that the trees are not significantly damaged.

This is based on the currently available information, is not exhaustive and will potentially change when further elements of the development are finalised. Consequently, a final specification of all tree pruning works should be detailed as part of an Arboricultural Method Statement and completed in accordance with the current best practice guidance set out within BS3998:2010 *"Tree Work – Recommendations"*[5] by suitably competent, qualified, and insured arboricultural contractors. The extent of pruning should be identified to contractors in a pre-commencement site meeting as part of enabling works.

4.7 New Tree Planting

As part of the development proposals, an adequate quantity of tree planting has been demonstrated 23 new trees of various species are to be planted across the site. The purpose and function of the new tree planting should be carefully considered so that key objectives from a wildlife habitat and landscape perspective can also be achieved.

[4] National House Building Council. (2022). *NHBC Standards 2022: Chapter 4.2 - Building Near Trees*. NHBC, Milton Keynes.

[5] British Standards Institution. (2010). *British Standard 3998:2010, Tree Work – Recommendations*. British Standards Institution, London.

4.8 Shading

The shade from trees can be considered both a constraint and opportunity and therefore its effect upon the new development should be fully considered to ensure a harmonious and sustainable relationship can be achieved. Where residential development is proposed, the position and orientation of new buildings in relation to existing trees, primary living areas should receive the largest proportion of natural sunlight. BRE[6] guidelines recommend *"at least half of the garden or open space should receive at least two hours sunlight on March 21 (Spring Equinox)"*.

4.9 Tree Protection Measures

In addition to the measures above, this assessment assumes that all retained trees will be protected by temporary barriers or ground protection measures throughout the development.

These protective measures will be installed to exclude all ground either within the RPA or crown spread (whichever is greater) and therefore these areas will not be available for access for development works, or for the storage of plant, materials or spoil or for the placement of welfare units.

The design, specification and location of all tree protection measures will be detailed in a future Arboricultural Method Statement.

[6] Littlefair P. (2011). *Site layout planning for daylight and sunlight: a guide to good practice* (BR 209). British Research Establishment, Watford.

5. Conclusion

5.1 Summary of Impacts

The proposed development of the site is unlikely to significantly impact the visual amenity of the local area as a result of the proposed tree removal.

An Arboricultural Method Statement will be required for the site as various aspects of the proposed development affect retained trees. The purpose of an Arboricultural Method Statement is to ensure that all site operations occur with minimal risk of adverse impact upon trees that are to be retained.

In relation to this development the Arboricultural Method Statement should address the following:

Action	Required
Tree surgery / removals	✓
Temporary branch tie-back	✗
Pre-commencement site meeting	✓
Protective barrier and ground protection location and specification	✓
Site set up and logistics	✗
Site access, material storage contractor's parking and site compound location	✗
Building demolition and removal of hard surfaces within RPAs	✗
Working space to construct new buildings within RPAs	✗
Installation of utilities within RPAs	✗
Arboricultural Clerk of Works supervision	✓
Audit timetable	✗

6. Appendices

The following documents are attached below:

Appendix A: Tree Schedule

Appendix B: Tree Survey Plan – C181336-04-01

Appendix C: Tree Retention Plan – C182248-05-01

Appendix A

Tree Schedule

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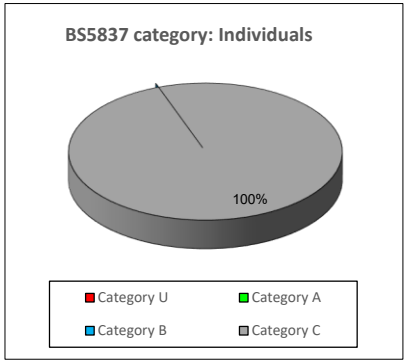
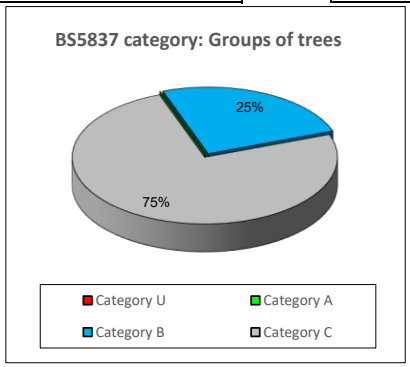
Appendix A - Tree Schedule

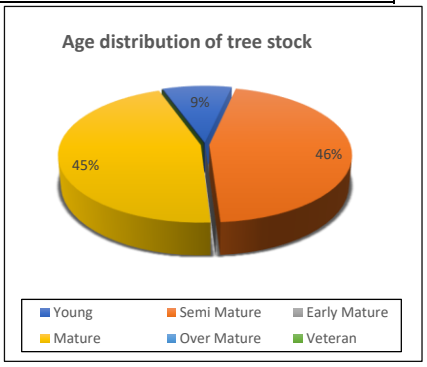
Measurements	Age Class	Overall Condition	Root Protection Area (RPA)
Height - measured from ground level at base of stem/s (m).	YNG: Juvenile trees that have been recently planted.	G - Good: Trees with only a few minor defects and in good overall health needing little, if any attention.	• The RPA column gives the required area (m²). • The RPA Radius column gives the radius (m) of an equivalent circle. • The RPA is calculated using the formulae described in paragraph 4.6.1 of British Standard 5837: 2012 and is indicative of the required rooting area in order for a tree to be retained.
Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837.	SM: Semi-mature, trees upto 1/3 life expectancy.	F - Fair: Trees with minor, but rectifiable, defects or in the early stages of stress from which it may recover.	
Crown - crown spread estimated radially from the main stem (m).	EM: Early mature, trees 1/3 – 2/3 life expectancy.	P - Poor: Trees with major structural and/or physiological defects such that it is unlikely the tree will recover in the long term.	
Abbreviations Est - Estimated stem diameter Avg - Average stem diameter Max - Maximum stem diameter	M: Mature trees, upto 2/3 life expectancy.	D - Dead: Trees no longer alive. This could also apply to trees that are dying and unlikely to recover.	
	OM: Over mature, declining or moribund trees of low vigour.	In the assessment, of the BS category, particular consideration has been given to the following • The health, vigour and condition of each tree • The presence of any structural defects in each tree and its future life expectancy • The size and form of each tree and its suitability within the context of a proposed development • The location of each tree relative to existing site features e.g. its screening value or landscape features • Age class • Life expectancy	
	V: Veteran, tree possessing certain attributes relating to veteran trees.		

Structural Condition
The following has been considered when inspecting structural condition: • The presence of fungal fruiting bodies around the base of the tree or on the stem, as they could possibly indicate the presence of possible internal decay. • Soil cracks and any heaving of the soil around the base. • Any abrupt bends in branches and limbs resulting from past pruning. • Tight or weak 'V' shaped forks and co-dominant stems. • Hazard beam formations and other such biomechanical related defects (as described by Claus Mattheck, Body Language of Trees HMSO Research for Amenity Trees No. 4 1994). • Cavities as a result of limb losses or past pruning. • Broken branches or storm damage. • Canker formations. • Loose or flaking bark. • Damage to roots. • Basal, stem or branch / limb cavities. • Crown die-back or abnormal foliage size and colour. • Any changes to the timing of normal leaf flush and leaf fall patterns.

Quality Assessment of Retention Category
Category U - Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Category C - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value







Appendix A - Summary

	Individual Trees	Totals	Tree Groups	Totals
Category U		0		0
Category A		0		0
Category B		0	G3	1
Category C	T1, T2, T3, T4, T5, T6, T7, T8	8	G1, G2, G4	3
	Total	8	**Total**	4

	Hedgerows	Totals	Woodlands	Totals
Category U		0		0
Category A		0		0
Category B		0		0
Category C		0		0
	Total	0	**Total**	0

Tree No	Species	Height (m)	Crown Clearance (m)	No. of Stems	Stem Dia. (mm)	Crown Radius				Age Class	Structure	Vigour	RPA (m)	RPA Radius (m)	Cat	Comments
						N	E	S	W							
T1	Pear	5.0	2.0	1	120	2.0	2.0	2.0	2.0	M	G	G	7	1.5	C 2	Basal epicormic growth observed No obvious defects observed Hard surfaces within the rooting area
T2	Cherry	3.0	2.0	1	210	3.0	3.0	3.0	3.0	M	F	G	23	2.7	C 2	Hard surfaces within the rooting area Wound present on main stem Ingrown fence
T3	Himalayan birch	4.0	1.5	1	140	3.0	3.0	3.0	3.0	SM	G	G	10	1.8	C 2	Hard surfaces within the rooting area
T4	Elder	2.0	1.0	3	80 140 120	1.0	1.0	1.0	1.0	M	F	G	23	2.7	C 2	Pollarded form Hard surfaces within the rooting area Large shrub
T5	Torquay palm	3.0	2.0	1	100	0.5	0.5	0.5	0.5	SM	G	G	5	1.2	C 2	No obvious defects observed
T6	Cherry	3.0	0.0	1	100	0.5	0.5	0.5	0.5	M	P	F	5	1.2	C 2	Epicormic growth on the main stem Exposed heartwood Wound present on main stem Tree grown in fence, vertically cut in half.
T7	Ash	6.0	0.0	1	200	2.5	2.5	2.5	2.5	SM	G	G	18	2.4	C 2	No obvious defects observed
T8	Elder	6.0	0.5	6	180	3.5	3.5	3.5	3.5	SM	F	F	18	2.4	C 1	Self-set multi stemmed elder of low value

Tree No	Species	Height (m)	Crown Clearance (m)	No. of Stems	Stem Dia. (mm)	Crown Radius				Age Class	Structure	Vigour	RPA (m)	RPA Radius (m)	Cat	Comments
						N	E	S	W							
G1	Elder Sycamore	6.0	0.0	-	150	3.0	3.0	3.0	3.0	Y	F,P	G	10	1.8	C 2	Large hanging branches in the crowns Self seeded trees present Limited inspection due to access Building within the rooting area
G2	Bird cherry Elder Hornbeam	8.0	0.0	-	300	4.0	4.0	4.0	4.0	SM	F	G	41	3.6	C 2	Group is sparse in areas Ivy suppressing a number of trees Group is located off site but overhangs the study area Group mostly located in community centre grounds.
G3	Beech Sycamore	15.0	0.0	-	500	6.0	6.0	6.0	6.0	M	G	G	113	6.0	B 2	Group is sparse in areas Hard surfaces within the rooting area Included unions observed Major deadwood in the crowns Limited inspection due to access Typical crown forms Group on boundary
G4	Sycamore Ash	6.0	0.0	-	150	2.0	2.0	2.0	2.0	SM	P	F	10	1.8	C	Dense ivy on the stems Group is located off site but overhangs the study area

Appendix B

Tree Survey Plan

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C181336-04-01-RevA

Legend

- Tree location and stem diameter
- Category B
- Category C
- Current canopy extent
- Root Protection Area
- Indicative tree shadow
- Site boundary

N

NOTES
All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with Project Arboriculturist. Drawing to be read in conjunction with Preliminary Arboricultural Assessment and Tree Schedule.
The positions of trees and their current crown spread, root protection area and shade pattern (where appropriate) havenbeen shown on the Tree Survey Plan.
All survey data is based on a topographical survey where possible, supplied by the client.
Where topographical information has not identified tree positions or Ordnance Survey mapping has been utilised, trees have been positioned using GPS and aerial photography to provide approximate locations in relation to existing surrounding features. Further confirmation of tree and hedgerow locations through a topographical survey of the site is recommended to ensure future design accuracy.
The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken.
Further survey work would be required for calculating foundation depths in accordance with current Building Regulations requirements.
Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the Project Arboriculturist should works commence 12 months after the date of this survey.
TREES INCLUDED DURING THE ASSESSMENT MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

Project	Rose Avenue, Gravesend
Drawing	Tree Survey Plan
Client	Baily Garner LLP

Drawing Number: C181336-04-01-RevA	Revision: RevA
Scale @ A3: 1:500	Date: July 2025
Approved By: CD	Drawn By: VO

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Appendix C

Tree Removal and Retention Plan

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C181336-05-01

Legend

- Tree location and stem diameter
- Category B group
- Category C group
- Tree to be removed
- Tree group to be removed
- Current canopy - tree to be retained
- Current canopy - tree to be removed
- Root Protection Area
- Indicative tree shadow
- Proposed site layout
- Proposed drainage
- Site boundary

N

NOTES
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The positions of trees and their current crown spread, root protection area and shade pattern (where appropriate) havenbeen shown on the Tree Survey Plan.
All survey data is based on a topographical survey where possible, supplied by the client.
Where topographical information has not identified tree positions or Ordnance Survey mapping has been utilised, trees have been positioned using GPS and aerial photography to provide approximate locations in relation to existing surrounding features. Further confirmation of tree and hedgerow locations through a topographical survey of the site is recommended to ensure future design accuracy.
The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken.
Further survey work would be required for calculating foundation depths in accordance with current Building Regulations requirements.
Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the Project Arboriculturist should works commence 12 months after the date of this survey.
TREES INCLUDED DURING THE ASSESSMENT MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

Project	Rose Avenue, Gravesend
Drawing	Tree Retention Plan
Client	Baily Garner LLP

Drawing Number: C181336-05-01	Revision: Rev A
Scale @ A3: 1:500	Date: July 2025
Approved By: CD	Drawn By: JR

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