



**Arboricultural Impact Assessment and Method
Statement
(Amended June 2023)**

CAS/2021/127

**For
Mr Huw Winstone**

**Proposed Development Site
Graveney Lodge, Wrotham Road, Meopham,
Gravesend DA13 0AQ**

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Dip Arb L4- Tech 'Arbor A'**

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1.0 Introduction

1.1 Instruction

1.1.1 Cantia Arboricultural Services were instructed to undertake a tree survey and provide arboricultural advice on the site known as Graveney Lodge, Wrotham Road, Meopham, Gravesend DA13 0AQ to accompany a planning application.

1.1.2 The site visit was carried out on the Thursday 4th March 2021 between the hours of 1000-1145hrs (105 minutes) and weather conditions were noted as overcast with visibility conducive of surveying.

1.2 Aim of Report

1.2.1 To survey in accordance with BS 5837: 2012 ‘Trees in Relation to Design, Demolition and Construction – Recommendations’ to plot and assess the quality of the existing trees located on site and within 15m of proposed development operations.

1.2.2 To assess the impact of the proposed development upon trees located on site and within the immediate vicinity. To provide advice on trees requiring removal and outline protective measures for trees marked for retention.

1.2.3 To provide a work specification as required by retained trees to accommodate the proposed development.

1.2.4 To provide recommendations and guidance on how trees and other vegetation may be successfully retained within the proposed development.

1.3 Documentation & Disclosure

1.5.1 The following documentation has been made available-

- Existing and Proposed Site Plans - 0529-052b.pdf & 0529-027a.pdf

2.0 Site & Tree Discussion

2.1 Site Description

- 2.1.1 Graveney Lodge is a two-storey detached house set in a plot of approx. 3,282 square metres (0.8 Acre). The property faces Westwards onto Wrotham Road with the property sat back approx. 12m from the highway.



- 2.1.2 The plot is L-shaped with the rear garden extending approx. 72m before running Southwards down behind the gardens of adjacent properties. The garden is bordered on all sides by neighbouring properties located in Wrotham Road and Cheyne Walk.

- 2.1.3 The front garden is split between areas of hard surfacing which are utilised as a driveway and grass verges. The rear garden is laid mainly to lawn with planting beds, trees and shrubs concentrated around the border areas. The gradient of the plot is generally level.

2.2 Proposal

- 2.2.1 The proposal is to partition off the rear garden into two plots and construct a three bedroom bungalow in the rear garden.

2.3 Scope of Report / Limitations

- 2.3.1 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.
- 2.3.2 All individual trees within a 15m radius of the development that have a stem diameter over 75mm at 1.5m above ground level have been surveyed. Each tree is surveyed and allocated an identifying number. Then data is collected and individual trees measured with regards to their height, stem size, canopy size and potential to pose a material constraint to development. Subject trees are each allocated one of four grade categories (A, B, C or U) indicating their quality. Trees, groups and hedges have been graded upon individual merit in the context of their existing surroundings regardless of any proposed development of the site.
- 2.3.3 Any conclusions relate to conditions found at the time of inspection. Any alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.
- 2.3.4 Trees are living organisms and even apparently healthy trees cannot be considered completely safe due to forces of nature and environmental fluctuations which dictate a natural failure rate of intact and healthy trees.
- 2.3.5 Where there are access restrictions data has been estimated. This is reflected in the survey schedule with a (#) symbol before measurement.
- 2.3.6 The survey was carried out with the assistance (where required) of the following inspection equipment-
- Binoculars – Inspection of upper sections of the tree
 - Sounding Mallet – Assessment of wood quality, decay extent

- Steel Probe – To test resistance of wood and depth of cavities
- Secateurs – Removal of basal growth & ivy to allow inspection
- DBH (diameter) Tape – Measurement of stem diameter
- Clinometer- To measure height of tree
- Laser measure – Measurement of canopy dimensions & tree location

2.4 Tree Discussion

2.4.1 A total of twenty individual trees, six groups of trees and five hedges have been assessed in detail from ground level by visual means only. The Tree Survey Schedule, at Appendix 2, details the trees in respect of dimension and quality in accordance with the methodology set out in the British Standard 5837:2012. The following categories were recorded-

Category	Quantity	Identification Numbers
B	5	G04, H04, T02, T03 and T08
C	24	G01-G03, G05, G06, H01-H03, H05, T01, T04-T07, T09-T15, T17-T20
U	1	T16

2.4.2 The majority of trees located on site and within the immediate vicinity are individually unremarkable specimens with limited visibility in the public realm. However, as a collective they form part of a green corridor which runs along the rear of the gardens and contributes significantly to the landscape softening and habitat of the area.

2.4.3 Trees categorised as A or B are viewed as a constraint to development. Should any proposed development require the removal of trees/groups (or parts of groups) within these categories then it is likely that local authorities would require mitigation in the form of a robust soft landscaping/planting plan. Trees classed as category C are generally not viewed as a constraint although plans to remove large numbers of these

would likely still require mitigation. Trees classed as category U are trees in irreversible decline unlikely to be in situ for more than 10 years. These trees are therefore not considered a constraint and also have no RPA (Root Protection Area) plotted.

- 2.4.4 Where trees have been surveyed and plotted in groups they typically contain specimens of varying age class and size. Please take note of survey schedule for indication of average height/size and maximum height/size within group.

3.0 Arboricultural Impact Assessment on Retained Trees

3.1 Access

- 3.1.1 Vehicle and plant access to site is unencumbered via Wrotham Road with access to the rear garden via existing hard surfaced areas located to the front and South of the property.

3.2 Demolition

- 3.2.1 The demolition of an existing shed located in the Northeastern corner of the plot is scheduled to take place within the measured RPAs' of trees located within H02. Therefore, this must be undertaken as outlined in section P4.0 of the Arboricultural Method Statement.

3.3 Construction

- 3.3.1 The foundations of the proposed construction do not conflict with the measured RPAs' of trees marked for retention and therefore in this instance no specialised foundation design or installation techniques are required.
- 3.3.2 No service runs plans have been provided. It is assumed that existing ducts and runs will be utilised and augmented where possible within the design. Adequate space exists on site so that any requirement for fresh runs can be located outside of the measured RPAs' of trees marked for retention.

3.4 Trees Requiring Removal

3.4.1 The proposal requires the removal of the following trees –

Tree Number	Category	Reason
T01, T10, T15, G01, G02 (part), G03, G06 (part), H01	C	Removal required to accommodate proposal and landscaping.
T16	U	Removal required to accommodate proposal and landscaping.

3.4.2 Visibility of removed trees within the public realm is limited. There is good scope and adequate space for replacement planting which can match and in time enhance the arboricultural, habitat and wider landscape contribution of the area to the public.

3.5 Cultural Implications for Retained Trees

3.5.1 Hedge numbered H02 Privet currently has a lapsed pruning regime. It is likely that significant pruning will be required to bring the hedge back to a managed level prior to construction operations beginning. Once carried out periodic trimming will be required to avoid the risk of physical contact with the new building. Privet hedge responds well to such pruning and maintenance and thus this will likely be beneficial.

4.0 Conclusions

- 4.1.1 So long as the precautionary and protective measures outlined within this report are strictly observed and adhered to then the proposed development will have neutral impact upon the arboricultural and wider landscape contribution of the site.
- 4.1.2 Mitigation for tree removals will be made with a soft landscaping / planting plan provided by Bloomfields. Adequate space exists for replacement and in time enhancement of the arboricultural contribution of the site to the public realm.

Arboricultural Method Statement

1.0 Summary

- 1.1 This document outlines the principles that are approved and enforced by the local planning authority, including site specific instructions on the methods required to protect the existing tree stock agreed for retention. These methods are set out in a logical sequence of operations with location of protective measures shown on the accompanying Tree Protection plan CAS/2021/127.

2.0 Important Tree Information

- 2.1 As the majority of tree roots are found in the upper metre of soil, development works, including for example even shallow excavation, soil compaction and soil contamination, can be harmful to trees in close proximity. Trees differ in their tolerance of root loss or disturbance, according to their age, species and/or condition. All protection works within this document will be in accordance with BS 5837: 2012 ‘Trees in Relation to Design, Demolition and Construction – Recommendations’
- 2.2 An assessment of the site’s tree stock has been undertaken and those trees to be retained are clearly shown on the Tree Protection Plan (TPP). A calculation has been made of the volume of soil required to ensure the survival of these and this is represented by the Root Protection Area (RPA) indicated by the magenta circles or squares around the retained tree on the plan.
- 2.3 The RPA has been used to inform the Construction Exclusion Zone (CEZ), the area to be protected during development by the use of barriers, ground protection and specialised construction techniques - outlined below:-

3.0 Sequenced Methods of Construction and Tree Protection

P1.0 Phase 1 - Pre-Contract Meeting

P1.1 If stipulated by the local authority an onsite meeting will be held with all relevant parties including the developer, appointed arboricultural supervisor and Local Planning Authority (LPA) representative.

P2.0 Phase 2 - Execute Agreed Tree Works

Tree Number	Proposed Works	Reason
T01, T10, T15, T16, G01, G02 (part), G03, G06 (part), H01	Removal	Removal required to accommodate proposal and landscaping scheme.

P2.1 All tree work is to conform to BS 3998:2010 and to current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover and following formal approval from the LPA

P3.0 Phase 3 - Tree Protection Barriers and ground protection

P3.1 In order to protect the tree stems from significant construction activity, protection barriers will be erected. See Plan for fencing location. Fencing should be of a reasonable standard and suitable for the purpose of preventing machinery entering the protected zones see example given below in appendix 1.

P3.2 BS5837 Trees in Relation to Design, Demolition and Construction (2012) requires that the root protection area be calculated for each tree marked for retention on the development. The root protection area is the minimum area in m² which should be left undisturbed around each retained tree, including the delivery of machinery, materials, plant or equipment to the site or any adjacent land. The protective measures will remain in situ until final completion or a time agreed by the LPA and Contractor.

- P3.3 Tree protection fencing will be required to be installed as shown on the Tree Protection Plan CAS/2021/127. Fit for its purpose fencing must be installed after any required tree works and prior to any construction operations on site. Once the barriers have been properly erected in position, they are to be considered as sacrosanct and are not to be removed or altered in any way without prior approval from the LPA.
- P3.4 Clear notices as shown below are to be fixed to the outside of the fencing with words such as ‘Tree Protection Zone – Do not remove this fencing’. All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their importance. Protective fencing should remain in situ throughout the entire construction process. The site manager should be aware that it is his responsibility to maintain protective measures adequately and these should be casually inspected at regular intervals with written records of inspection.



- P3.5 Where stipulated on the Tree Protection Plan ground protection should be laid. The gross weight of predicted traffic in the area should be calculated and ground protection laid as stipulated below –
- *For pedestrian access, a single thickness of scaffold boards placed on a driven scaffold frame, so as to form a suspended walkway or on a compressive- resistant*

layer such as, e.g. woodchip 100mm min, laid onto a geotextile membrane will be sufficient.

- *For pedestrian operated machinery up to a gross weight of 2t inter linked ground protection boards places on top of a compression- resistant layer, as above, will be required.*
- *For machinery greater than 2t and engineered specification will be required.*

P3.6 If there is a requirement to move or carry out operations inside the area of protective fencing then ground protection should be laid over any exposed ground prior to movement or works commencing. This should be laid in accordance with section P3.5 of the Arboricultural Method Statement.

P3.7 When there is a requirement to carry out work in an area covered with ground protection then only the immediate area of work should have the protection rolled/scraped back. Once the task in hand is completed then ground protection should be instantly re-instated.

P3.8 Adequate room is available for the locating of compounds and material storage within the site boundaries and outside of any measured RPA.

P4.0 Phase 4 – Demolition Operations within Root Protection Areas

P4.1 When demolishing a structure (including underground structures) within what would otherwise be the RPA, barriers should be erected, and ground protection installed, to protect the underlying soil to the edge of the existing structure.

P4.2 Where trees stand adjacent to structures to be removed, the demolition must be undertaken inwards within the footprint of the existing building (often referred to as “top down, pull back”).

P4.3 Where underground structures present within the RPA are, or will become, redundant. In general, it is preferable to leave such structures in situ, as their removal could damage adjacent tree roots.

P4.4 Where an existing hard surface is scheduled for removal, care should be taken not to disturb tree roots that might be present beneath it. Hand-held tools or appropriate machinery should be used (under arboricultural supervision) to remove the existing surface, working backwards over the area, so that the machine is not moving over the exposed ground.

P4.5 All plant and vehicles engaged in demolition works should either operate outside the RPA, or run on the ground protection. Where such ground protection is required, it should be installed prior to commencement of operations.

P5.0 Phase 5 - Ground works

P5.1 Spoil, including soil and rubble surplus to requirements will be removed from site and not stored against any protective fencing.

P5.2 Service runs to be located outside any indicated RPA.

P6.0 Phase 6 - Dismantling Protection Barriers and Landscaping Works

P6.1 A minimum notice period of seven days will be given to the LPA prior to the dismantling of the protection barriers.

P6.2 All landscaping once the barriers have been removed will avoid soil re-grading and disturbance within the CEZ and no soil levels be altered after the protection barriers have been removed. All vehicles are strictly prohibited from entering any RPA once barriers are removed.

4.0 General Principles for Tree Protection

4.1 A copy of this AMS and the attached TPP is to be retained on site at all times and all personnel associated with the construction process will be made familiar with the principles within.

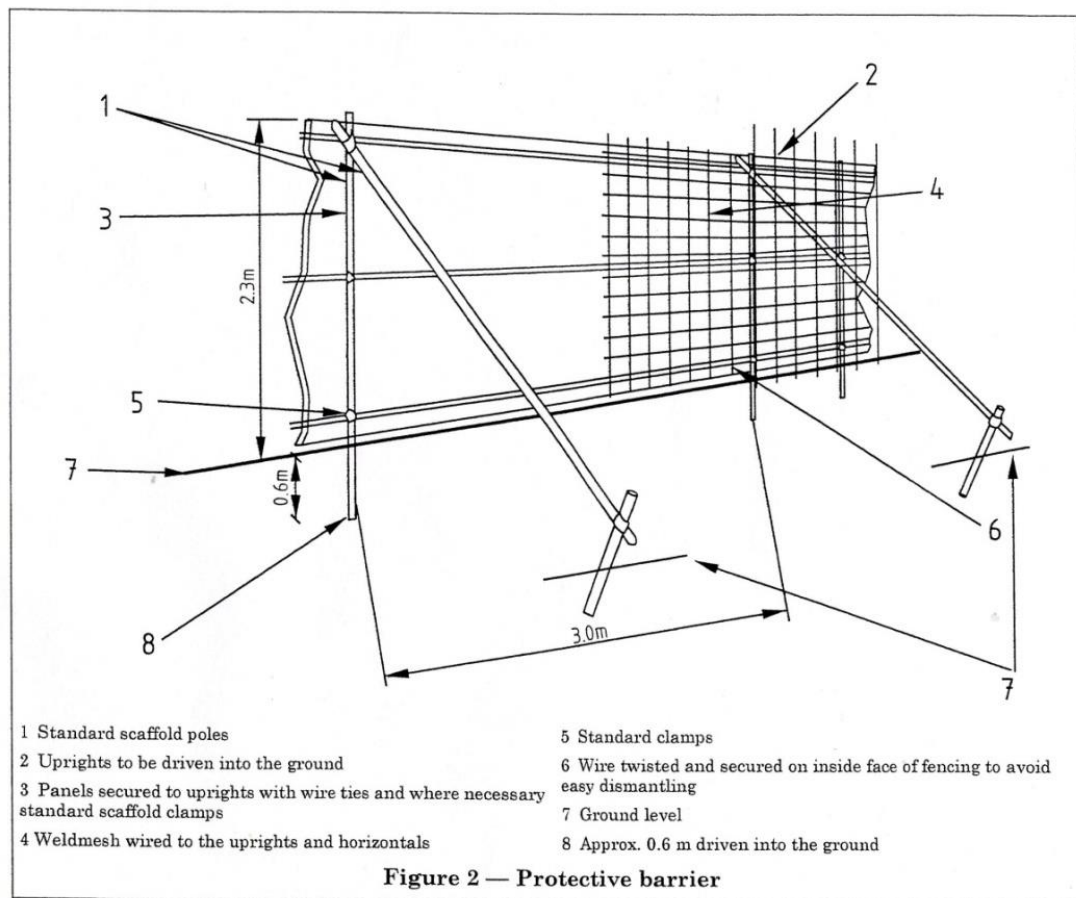
- 4.2 No fires are to be lit on site at any stage during the construction process.
- 4.3 A designated storage area is to be created away from retained trees. All materials for construction purposes are to be stored in this compound. Care must be taken to avoid the leakage or leaching of noxious materials into the soil.
- 4.4 No materials will be stored or left stacked in positions around the site other than within the storage compound area.

5.0 Communication Details, Monitoring and Compliance

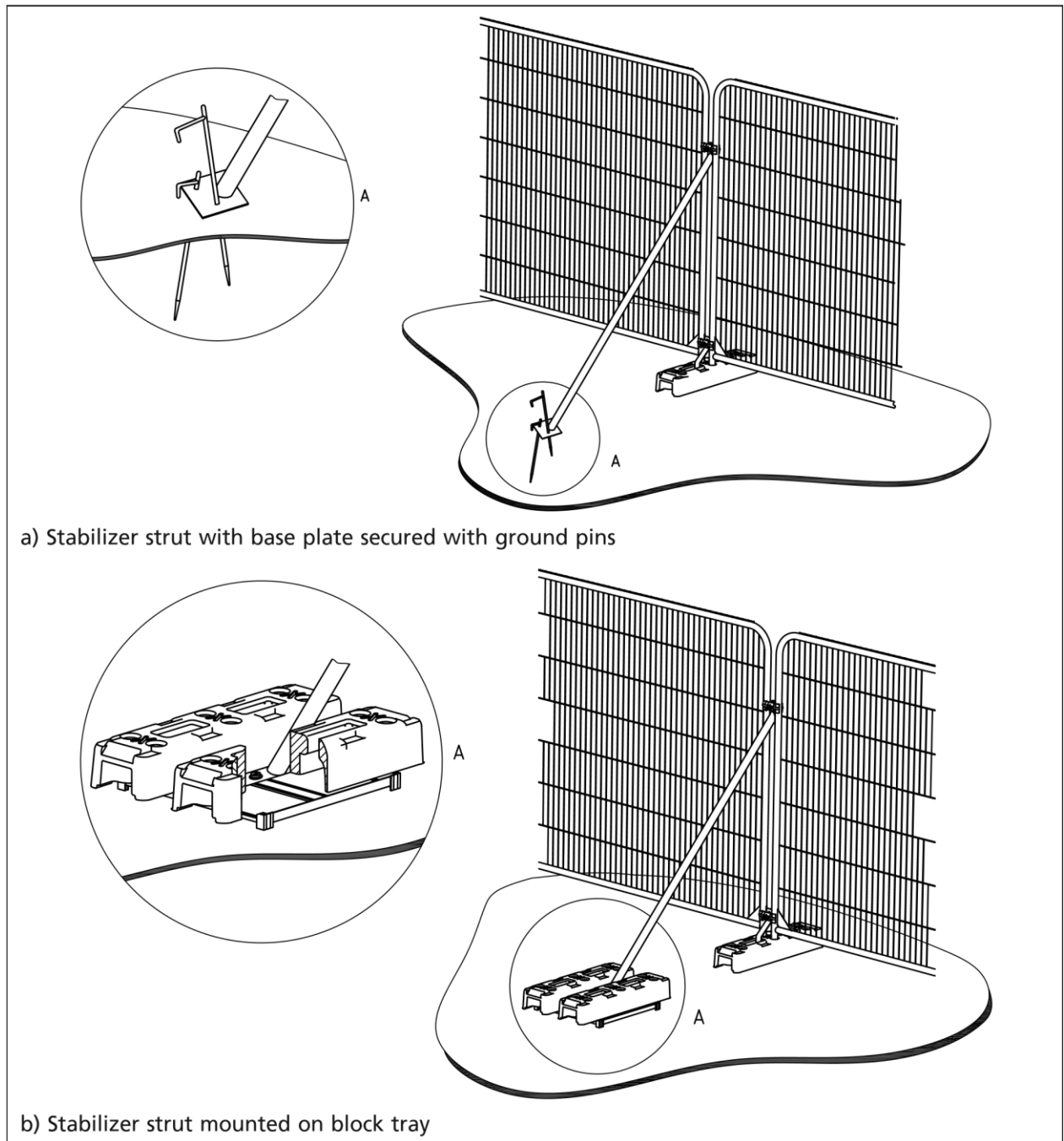
- 5.1 In order to ensure that the principles of tree protection set out in the statement are adhered to, it is important to set out communication details for key individuals and tasks that require monitoring. These details should be retained by all relevant parties and available on site at all times. Relevant parties will be advised of any changes in personnel or contractor during the development process.
- 5.2 Before construction begins written confirmation that the developer/contractor or its agents agree to comply in full with the principles set out within this Method Statement will be lodged with the LPA.

Appendix 1: Tree Protection Fencing

High Traffic Areas



Low Traffic Areas



Appendix 2 - Tree Schedule Explanatory Notes

Ref.no	Identifies trees, groups and hedges on the accompanying plan.
Species	Common names are provided to aid wider comprehension.
Height	Describes the approximate height of the tree measured in metres from ground level
Canopy Spread	Indicates the crown radius from the base of the tree in four compass directions, recorded to the nearest metre.
Ground Clearance	Height of crown clearance above adjacent ground in metres.
DBH (mm)	DBH is the diameter of the stem measured in cm at 1.5m from ground level for single stemmed trees or just above root flare for multi-stemmed trees. Stem Diameter may be estimated where access is restricted.
RPR (cm)	Root Protection Radius (RPR) is area required to be protected measured radially from the trunk centre.
RPA (m2)	Root Protection Area (RPA) is the minimum rooting area in m2 which should remain undisturbed around each tree.
Age Class	Age of the tree expressed as Y- Young, MA- Middle-Aged, EM- Early Mature, M- Mature or OM- Over-Mature
General Condition	Overall condition of tree expressed as :Good, Fair, Poor, Dead
Physiological and structural condition	May include general comments about growth characteristics, how it is affected by other trees and any previous surgery works. Also specific problems such as dead wood, pests, diseases, broken limbs. Etc
Estimated Remaining Years	Categorised in year bands of less than 10, 10+, 20+, 40+
BS Category	B.S. Cat refers to (BS 5837:2005 Table 1) and refers to tree/overall group quality and value; 'A' - High; 'B' - Moderate; 'C' - Low; 'U' - Remove.
Sub Category	Sub Cat refers to the retention criteria values where 1 is arboricultural, 2 is landscape and 3 is cultural including conservational, historic and commemorative

Appendix 3 – Tree Retention Category (as per cascade chart, Table 1, B.S. 5837:2012)

Tree Category	Description
A	Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years. 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).
B	Category B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. 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.
C	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 150 mm. 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.
U	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. Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

BS5837 Survey Data



Ref.	Species	Measurements	General Observations	Category	Recommendations
G01	Holly (Ilex sp.) Birch (Betula sp.) Lawson Cypress (Chamaecyparis lawsoniana) Pine (Pinus sp.) Hazel (Corylus avellana)	Height (m): 8 Stem Diam (mm): 150 Life Stage: Mature Rem. Contrib.: 20+ Years	Group of small trees / woody shrubs with average DBH approx 80-120mm	C2 RPA Area: 57.67 sq m.	
G02	Lilac (Syringa sp.)	Height (m): 5 Stem Diam (mm): 100 Life Stage: Mature Rem. Contrib.: 20+ Years	Group of lilac with DBHs' up to 100mm	C1 RPA Area: 55.32 sq m.	
G03	Ash (Fraxinus sp.) Hawthorn (Crataegus sp.) Elder (Sambucus nigra)	Height (m): 6 Stem Diam (mm): 120 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Group of young trees and woody shrubs with max DBH noted 120mm. Most DBH under 80mm	C2 RPA Area: 78.72 sq m.	

Ref.	Species	Measurements	General Observations	Category	Recommendations
G04	Hawthorn (Crataegus sp.) Lawson Cypress (Chamaecyparis lawsoniana) Leyland Cypress (Cupressocyparis leylandii X)	Height (m): 14 Stem Diam (mm): 300 Life Stage: Mature Rem. Contrib.: 20+ Years	Group of mixed trees predominated by conifers with DBH up to 300mm	B2 RPA Area: 38.23 sq m.	
G05	Elder (Sambucus nigra) Hazel (Corylus avellana)	Height (m): 4 Stem Diam (mm): 80 Life Stage: Mature Rem. Contrib.: 10+ Years		C1 RPA Area: 22.33 sq m.	
G06	Ash (Fraxinus sp.) Elder (Sambucus nigra) Hazel (Corylus avellana) Rhododendron (Rhododendron ponticum)	Height (m): 7 Stem Diam (mm): 100 Life Stage: Early Mature Rem. Contrib.: 10+ Years		C1 RPA Area: 49.74 sq m.	
H01	Privet (Ligustrum vulgare)	Height (m): 4 Life Stage: Mature Rem. Contrib.: 20+ Years	Boundary privet hedge with DBHs' up to 60mm	C2 RPA Area: 81.55 sq m.	
H02	Privet (Ligustrum vulgare)	Height (m): 7 Stem Diam (mm): 100 Life Stage: Mature Rem. Contrib.: 20+ Years	Privet hedge with DBH up to 100mm	C2 RPA Area: 19.92 sq m.	Prune hadge to return to managed level
H03	Lawson Cypress (Chamaecyparis lawsoniana)	Height (m): 5 Stem Diam (mm): 300 Life Stage: Mature Rem. Contrib.: 20+ Years	Majority of hedge has been maintained at approx 2.5m. Most southerly section has been left higher	C1,2 RPA Area: 73.22 sq m.	

Ref.	Species	Measurements	General Observations	Category	Recommendations
H04	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Height (m): 14 Stem Diam (mm): 420 Life Stage: Mature Rem. Contrib.: 20+ Years		B2 RPA Area: 113.51 sq m.	
H05	Privet (<i>Ligustrum vulgare</i>) Hawthorn (<i>Crataegus</i> sp.) Holly (<i>Ilex</i> sp.)	Height (m): 2 Stem Diam (mm): 80 Life Stage: Mature Rem. Contrib.: 10+ Years		C2 RPA Area: 14.91 sq m.	
T01	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Height (m): 6 Stem Diam (mm): 500 Spread (m): 5N, 3E, 4S, 2W Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 20+ Years	Tree is heavily pruned with poor form	C1 RPA Radius: 6.0m. Area: 113 sq m.	
T02	Ash (<i>Fraxinus</i> sp.)	Height (m): 17# Stem Diam (mm): 400# Spread (m): 5#N, 2#E, 6#S, 5#W Life Stage: Mature Rem. Contrib.: 10+ Years	Main stem has prolific ivy cover	B1,2 RPA Radius: 4.8m. Area: 72 sq m.	
T03	Ash (<i>Fraxinus</i> sp.)	Height (m): 18# Stem Diam (mm): 500# Spread (m): 5#N, 7#E, 5S, 2W Life Stage: Mature Rem. Contrib.: 10+ Years		B1,2 RPA Radius: 6.0m. Area: 113 sq m.	
T04	Not identified (Not identified)	Height (m): 11# Stem Diam (mm): 300 Spread (m): 2#N, 5#E, 3#S, 1#W Life Stage: Mature Rem. Contrib.: 20+ Years	Tree heavily laden in ivy	C1 RPA Radius: 3.6m. Area: 41 sq m.	

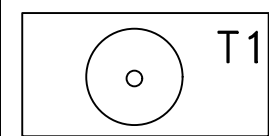
Ref.	Species	Measurements	General Observations	Category	Recommendations
T05	Hawthorn (Crataegus sp.)	Height (m): 8# 3 stems, diam(mm): 300, 300, 200 Spread (m): 4#N, 5#E, 2#S, 5#W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 5.6m. Area: 99 sq m.	
T06	Hawthorn (Crataegus sp.)	Height (m): 9# Stem Diam (mm): 350# Spread (m): 2#N, 4#E, 3#S, 3#W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 4.2m. Area: 55 sq m.	
T07	Holly (Ilex sp.)	Height (m): 6 Stem Diam (mm): 170 Spread (m): 3N, 1#E, 1.5S, 2W Crown Clearance (m): 0 Life Stage: Early Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 2.0m. Area: 13 sq m.	
T08	Spruce (Picea sp.)	Height (m): 18 Stem Diam (mm): 400# Spread (m): 4#N, 4#E, 4#S, 4#W Life Stage: Mature Rem. Contrib.: 30+ Years		B1,2 RPA Radius: 4.8m. Area: 72 sq m.	
T09	Ash (Fraxinus sp.)	Height (m): 8 2 stems, diam(mm): 160, 120 Spread (m): 2N, 4E, 5S, 1W Life Stage: Early Mature Rem. Contrib.: 10+ Years		C1 RPA Radius: 2.4m. Area: 18 sq m.	
T10	Apple (Malus sp.)	Height (m): 7 Stem Diam (mm): 470 Spread (m): 5.5N, 5E, 5S, 4W Crown Clearance (m): 1.5 Life Stage: Over Mature Rem. Contrib.: 20+ Years	decay / cavity noted in main stem	C1 RPA Radius: 5.6m. Area: 99 sq m.	

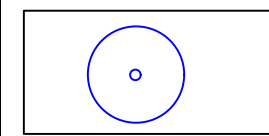
Ref.	Species	Measurements	General Observations	Category	Recommendations
T11	Fig (Ficus carica)	Height (m): 7 3 stems, diam(mm): 230, 160, 120 Spread (m): 5N, 5.5E, 6.5S, 3W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 3.7m. Area: 43 sq m.	
T12	Cherry (Prunus sp. (Cherries))	Height (m): 8# Stem Diam (mm): 100# Spread (m): 3N, 4E, 5S, 3W Life Stage: Semi Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 1.2m. Area: 5 sq m.	
T13	Hazel (Corylus avellana)	Height (m): 5 3 stems, diam(mm): 80, 80, 80 Spread (m): 1#N, 4#E, 3#S, 4#W Life Stage: Early Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 1.7m. Area: 9 sq m.	
T14	Rowan (Sorbus aucuparia)	Height (m): 7 2 stems, diam(mm): 150, 100 Spread (m): 3#N, 4#E, 3#S, 3#W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 2.2m. Area: 15 sq m.	
T15	Elder (Sambucus nigra)	Height (m): 4 Stem Diam (mm): 90 Spread (m): 2N, 2E, 2S, 2W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 1.1m. Area: 4 sq m.	
T16	Apple (Malus sp.)	Height (m): 3.5 Stem Diam (mm): 250 Spread (m): 1N, 5E, 4S, 1W Life Stage: Over Mature Rem. Contrib.: <10 years	Ivy covered tree in retrenchment	U RPA None - due to Retention Category of U.	
T17	Hazel (Corylus avellana)	Height (m): 7 2 stems, diam(mm): 180, 120 Spread (m): 3#N, 2#E, 1#S, 4#W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 2.6m. Area: 21 sq m.	

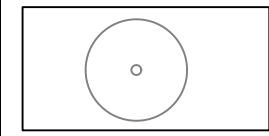
Ref.	Species	Measurements	General Observations	Category	Recommendations
T19	Holly (Ilex sp.)	Height (m): 2 Stem Diam (mm): 350 Spread (m): 1N, 1E, 1S, 1W Life Stage: Mature Rem. Contrib.: 20+ Years	mature Holly maintained in cube shape	C2 RPA Radius: 4.2m. Area: 55 sq m.	
T20	Bay Tree (Laurus nobilis)	Height (m): 2 7 stems, diam(mm): 80, 80, 80, 80, 80, 80, 80 Spread (m): 2N, 2E, 2S, 2W Life Stage: Mature Rem. Contrib.: 20+ Years	Mature tree maintained as cube	C2 RPA Radius: 2.5m. Area: 20 sq m.	

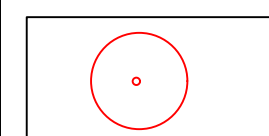
Arboricultural
Constraints
Plan
(Amended June 2023)

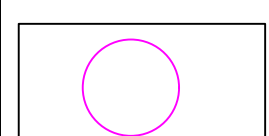
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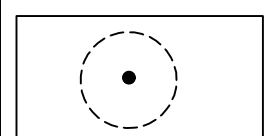
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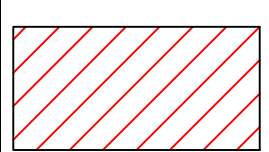
T1 Existing Tree colour referenced in accordance with BS 5837 2012 as shown below
- 

Blue - Cat B Trees of moderate quality and value
- 

Grey - Cat C Trees of low quality and value
- 

Red - Cat U Trees that are dead or showing signs of irreversible decline
- 

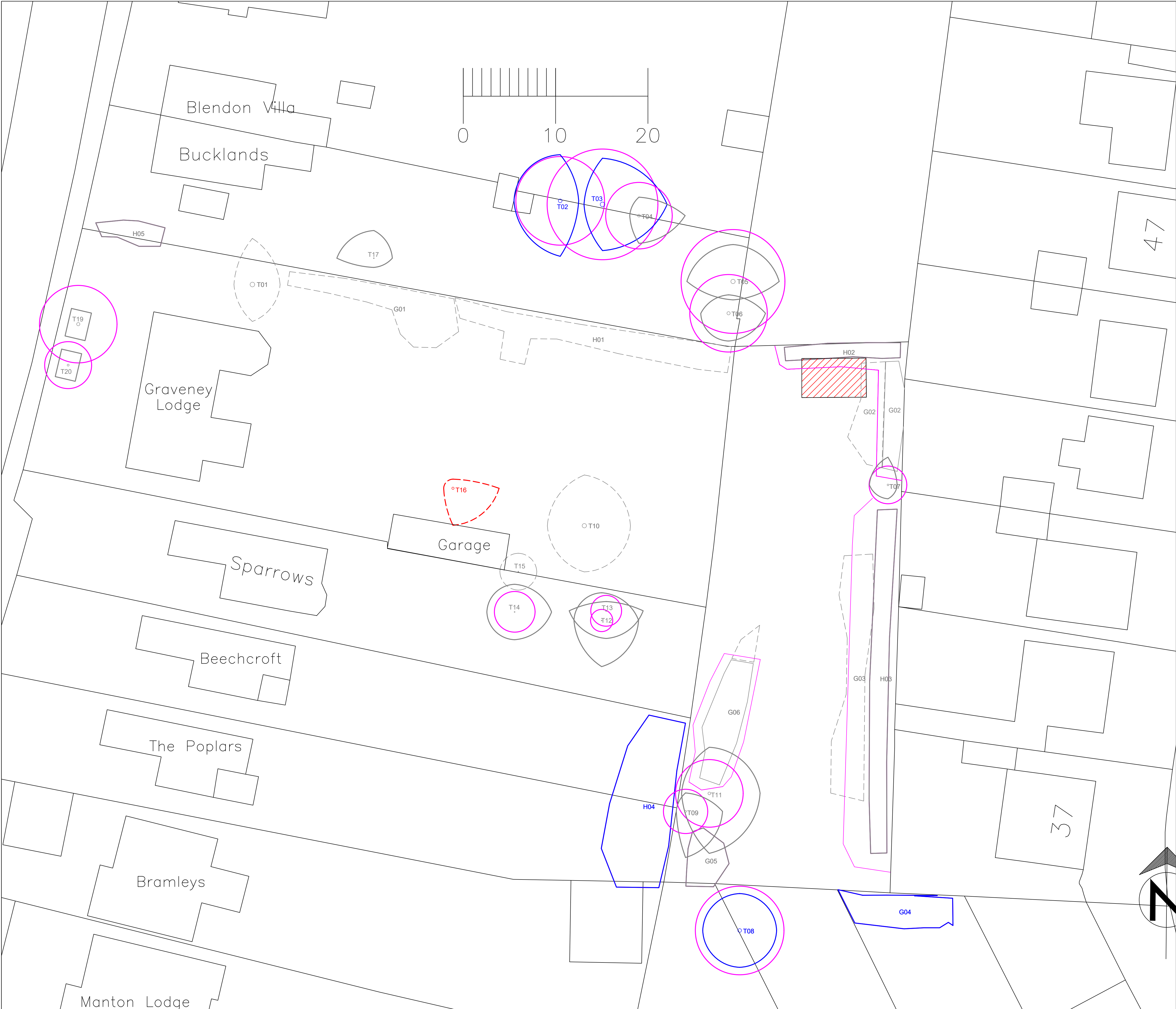
Root Protection Area as calculated in accordance with BS 5837 2012
- 

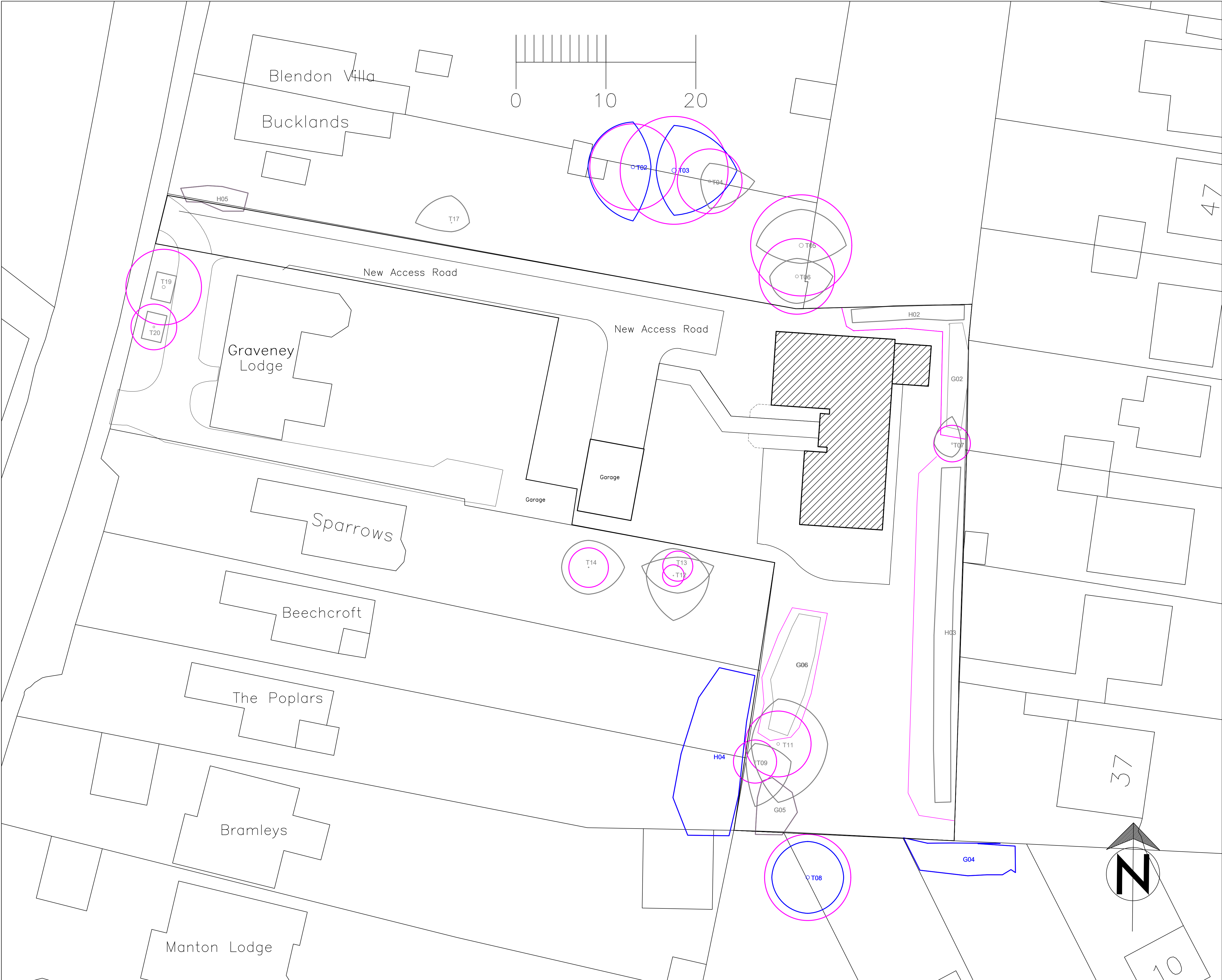
Existing tree to be removed colour in accordance with BS 5837 as shown below.
- 

Existing building to be demolished.

1	2	3	4
5	6	7	8
REV. DATE		INITIALS DETAILS	
CLIENT Mr Huw Winstone		DWG. TITLE Arboricultural Constraints Plan	
SITE Graveney Lodge, Wrotham Road, Meopham, Gravesend DA13 0AQ			
DRAWN BY BJS	CHECKED BY BJS	SCALE 1:200 ● A1	DATE June 2023
DWG NO. CAS/2021/127		REV.	

Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.





Proposed Development Plan

(Amended June 2023)

KEY

T1

Existing Tree colour referenced in accordance with BS 5837 2012 as shown below

Blue – Cat B Trees of moderate quality and value

Grey – Cat C Trees of low quality and value

Red – Cat U Trees that are dead or showing signs of irreversible decline

Root Protection Area as calculated in accordance with BS 5837 2012

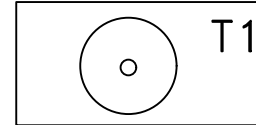
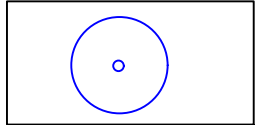
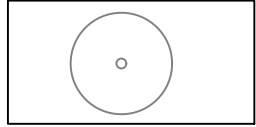
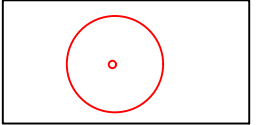
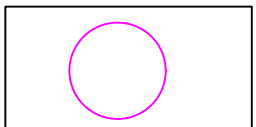
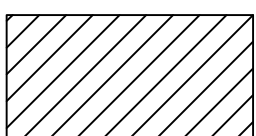
Area of proposed new building

REV.	DATE	INITIALS	DETAILS

CLIENT		DWG. TITLE	
Mr Huw Winstone		Proposed Development Plan	
SITE			
Graveney Lodge, Wrotham Road, Meopham, Gravesend DA13 0AQ			
DRAWN BY	CHECKED BY	SCALE	DATE
BJS	BJS	1:200 @ A1	June 2023
DWG NO.		REV.	
CAS/2021/127			

Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.

Tree Protection Plan
(Amended June 2023)

- KEY
-  T1 Existing Tree colour referenced in accordance with BS 5837 2012 as shown below
 -  Blue – Cat B Trees of moderate quality and value
 -  Grey – Cat C Trees of low quality and value
 -  Red – Cat U Trees that are dead or showing signs of irreversible decline
 -  Root Protection Area as calculated in accordance with BS 5837 2012
 -  Area of proposed new building
 -  Approximate line of protective fencing to be erected in accordance with BS5837 and to be maintained throughout entire development process.

REV.	DATE	INITIALS		DETAILS			
CLIENT				DWG. TITLE			
Mr Huw Winstone				Tree Protection Plan			
SITE							
Graveney Lodge, Wrotham Road, Meopham, Gravesend DA13 0AQ							
DRAWN BY	CHECKED BY	SCALE	DATE	DWG NO.		REV.	
BJJ	BJJ	1:200 @ A1	June 2023	CAS/2021/127			

Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.

