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CLINTON HOUSE, PONDFIELD LANE, GRAVESEND, DA12 3LD.

BS 5837: 2012 Arboricultural Report

24026

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Version control

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Executive Summary

Silva Arboriculture Ltd has been commissioned by Randhir Sidhu to provide Arboricultural services to support a planning application at Clinton House, Pondfield Lane, Gravesend, DA12 3LD referred to as 'the Site'.

The Site is located within the Local Authority of Gravesham District Council, approximately 6km southeast of Gravesend town centre. The Site is currently residential with associated gardens, parking and grounds.

A total of 44 arboricultural items have been recorded within the Study Area. The trees were recorded as:

- Four individual trees and one group of trees were recorded as Category B.
- Twenty-nine individual trees and two groups of trees were recorded as Category C.
- Eight individual trees were recorded as Category U.

None of the recorded trees fall under Tree Preservation Orders and the Site does not fall within a Conservation Area.

The Site holds potential for development, however, existing root protection areas (RPA) should be considered during proposed design stages and trees retained where possible.

1 Introduction

1.1 Overview

Silva Arboriculture Ltd has been commissioned by Randhir Sidhu to provide Arboricultural services to support a planning application at the Site, referred to as: Clinton House, Pondfield Lane, Gravesend, DA12 3LD.

This report presents the results of an Arboricultural Survey conducted in line with *BS 5837: 2012 - Trees in relation to design, demolition and construction – Recommendations*¹ and is designed to identify arboricultural constraints that could impact development of the Site.

1.2 Site Location and Setting

The Site is located within the Local Authority of Gravesham District Council, approximately 6km southeast of Gravesend town centre. The Site is currently residential with associated gardens, parking and grounds. The Site is presented in Figure 1 Tree Constraints Plan.

1.3 Proposed Scheme

No design details have been made available.

¹ British Standards Institution (2012) BS 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*

2 Methodology

2.1 Tree Survey Methodology

An arboricultural survey was undertaken by Darren Hood FdSc MA ArborA (Arboricultural Consultant) on 9th February 2024 in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*.

Observations were conducted from ground level, utilising the “Visual Tree Assessment” (VTA) system as outlined in *The Body Language of Trees, A Handbook for Failure Analysis Research for Amenity Trees No.4*², with the aid of binoculars. For reference, individual trees have been identified with the letter ‘T’ and groups of trees with the letter ‘G’ and an associated number on the tree schedules and plans. The stem diameter of the Site trees was recorded using a rounded down diameter tape and scaled tree calipers at 1.5m above ground level. Measurements were taken in centimetres. The height of the subject tree was estimated to the nearest metre using a digital laser range finder.

Maximum crown spread of the subject tree was measured from the centre of the trunk to the tips of the live lateral branches taken at four compass points (N-E-S-W) using a digital laser range finder where access allowed. Crown spread measurements were taken in metres.

Tree age was estimated from visual indicators (such as tree size and appearance of bark) and should only be taken as a provisional guide. Age estimates often need to be modified based on further information such as historical records and local knowledge.

In compliance with Table 1 of *BS 5837:2012* the trees surveyed in this report have been categorised according to their arboricultural quality and value. A glossary of survey terms can be found in Appendix A - Explanation of Terms.

Document / Plan Title and Author	Date	Information Type
Topographical Plan Drawing number 66147BWLS-01	March 2024	Topographical base mapping information - DWG

2.2 Root Protection Area

The Root Protection Area (RPA) is a recommendation in *BS 5837:2012* and is based upon a minimum area (in m²) calculated from the measurement of the tree stem diameter. The resulting area is usually recorded as a generalised circle surrounding the tree on the Tree Constraints and Impact Plan. The RPA presents an exclusion zone for construction activity to protect the health of the tree. In this study RPA has been amended to take in consideration of existing roads and built structures in line with section 4.63 *BS 5837:2012*. The RPA is represented in purple in Figure 1.

2.3 Survey Limitations

Topographical base mapping was available with full locations of the Site trees, therefore tree positions are considered exact. For the purposes of *BS 5837:2012*, only trees with a stem diameter greater than 75mm, (measured at 1.5m above ground level), have been included within the survey; however, it should be noted that a number of individual trees and shrubs with a stem diameter of less than 75mm were present within the Site. Only trees within the likely zone of influence of the proposed scheme have been included within this report.

² Mattheck, C. and Broeler, H. DETR (1994) *The Body Language of Trees: A Handbook for Failure Analysis Research for Amenity Trees No.4*

Any protective fencing distances are based on a given trees stem diameter taken at 1.5 metres above ground level with each RPA (see Appendix B - Tree Schedules) being calculated from the above ground portions of the tree. It should be recognised that the RPA may not entirely encompass all of the tree rooting material.

Trees are living organisms and as such their health and condition are naturally subject to change over time. Unforeseen future circumstances such as neglect, wilful damage or severe/extreme weather conditions may affect the future health and condition of the trees included in this report.

3 Survey Results

3.1 Tree Assessment and Categorisation

A total of 44 arboricultural items were recorded within the Study Area. These were recorded as 41 individual trees (T) and three group of trees (G). Full details of the survey data can be found in the Tree Schedule in Appendix B - Tree Schedule and Figure 1: Tree Constraints Plan.

Each arboricultural item was assigned to one of four categories, as listed below:

- Category A arboricultural items: No individual trees were graded as category A (trees of high quality) as part of this survey.
- Category B arboricultural items: Four individual trees and one group of trees have been graded as category B (trees of moderate quality) as part of this survey.
- Category C arboricultural items: Twenty-nine individual trees and two groups of trees were graded as category C (trees of low quality) as part of this survey.
- Category U arboricultural items: Eight individual tree have been graded as category U (trees of poor quality unsuitable for retention) as part of this survey.

3.2 Tree Species Recorded

A total of 22 different tree species were recorded during the survey and were represented throughout the survey area. A summary of the species surveyed can be found within the Tree Survey Schedule located in Appendix B - Tree Schedule and within Table 2 below.

Table 2 Tree Species Recorded

Common Name	Botanical Name	Presence within the Survey Area - High, Moderate or Low
Ash	<i>Fraxinus excelsior</i>	Low
Aspen	<i>Populus tremula</i>	Low
Balsam poplar	<i>Populus trichocarpa</i>	Low
Beech	<i>Fagus sylvatica</i>	Low
Common hornbeam	<i>Carpinus betulus</i>	Low
Common laburnum	<i>Laburnum anagyroides</i>	Low
Common lime	<i>Tilia x europaea</i>	Low
Common oak	<i>Quercus robur</i>	Moderate
Common walnut	<i>Juglans regia</i>	Low
Deodar cedar	<i>Cedrus deodara</i>	Low
Holly	<i>Ilex aquifolium</i>	Low
Japanese maple	<i>Acer palmatum</i>	Low

Common Name	Botanical Name	Presence within the Survey Area - High, Moderate or Low
Lawson cypress	<i>Chamaecyparis lawsoniana</i>	Low
Leyland cypress	<i>X Cupressocyparis leylandii</i>	Low
Norway maple	<i>Acer platanoides</i>	Low
Norway spruce	<i>Picea abies</i>	Low
Prunus Kanzan	<i>Prunus Kanzan</i>	Low
Silver birch	<i>Betula pendula</i>	Low
Sweet chestnut	<i>Castanea sativa</i>	High
Sycamore	<i>Acer pseudoplatanus</i>	Moderate
Western red cedar	<i>Thuja plicata</i>	Low
Yew	<i>Taxus baccata</i>	Low

3.3 Age Diversity

Table 3: Age Diversity

Age Class	Number of Arboricultural Items	Approximate Percentage
Young	2	4.56%
Semi-mature	9	20.45%
Early-mature	9	20.45%
Mature	24	54.54%
Over-mature	0	0%
Totals	44	100%

3.4 Statutory Tree Protection

Email correspondents with Gravesham District Council was undertaken in April 2024. The Site is not protected by any Tree Preservation Areas (TPO) and the Site does not fall within a Conservation Area.

3.5 Soil Type

British Geological Society records show the site Bedrock Geology being of Harwich Formation - Sand and gravel. Sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period.

Conclusions

A total of 44 arboricultural items have been recorded within the Study Area, this comprises 41 individual trees and three groups of trees.

Four individual trees and one group of trees was recorded within the Study Area as Category B.

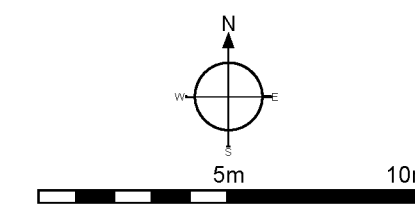
Twenty-nine individual trees and two groups of trees were recorded within the Study Area as Category C. The Category C group of trees is currently managed as a boundary hedge.

Eight individual trees were recorded within the Study Area as Category U. This being to its structural and physical condition.

None of the recorded trees are protected by TPO legislation and the Site does not fall within a Conservation Area.

The Site holds potential for development, however existing root protection areas (RPA) should be considered during proposed design stages.

FIGURE 1. Tree Constraints Plan.



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APPENDIX A. Explanation of Terms

Age Class

Young – Trees in the first fifth of full life expectancy

Semi-mature – Trees in the second fifth of full life expectancy

Early-mature – Trees in the third fifth of full life expectancy

Mature – Trees in the fourth fifth of full life expectancy

Over Mature – Trees having reached full life expectancy and trees in natural decline

Veteran – Trees of interest biologically, culturally and aesthetically because of their age

Stem Diameter

The diameter of the stem measured in millimetres (mm) at a height of 1.5m above ground level

Crown Spread

Average measured in metres using a ground tape where possible

Physiological Condition

Good – Healthy tree with no signs of ill health and signs of good extension growth for species

Fair – Trees with signs of disease, minor defects and decreased life expectancy due to physical damage

Poor – Trees with significant disease, significantly reduced life expectancy and/or under major physiological stress

Dead – Dead tree or trees with over 70% crown dieback

Structural Condition

Good – Trees with no significant defects

Fair – Trees with remedial defects which require minor tree surgery works

Poor – Trees with remedial defects which require significant tree surgery works or felling

Dead – Trees which require felling

BS 5837 Retention Category

Each tree, group of trees or hedge is assigned to a retention category where:

Table A1 Categorisation of trees

Category	Description
A	Trees of high quality and value, retention is highly desirable
B	Trees of moderate quality and value where retention is desirable
C	Trees of low quality and value, or young trees with a stem diameter <150mm. Category C trees may be retained, replaced or in the case of younger trees, relocated
U	Trees of poor quality unsuitable for retention or trees which should be removed

In addition, each tree, group of trees or hedge is assigned to a retention sub-category where categorisation is for:

Table A2 Reasons for Categorisation

Sub-category	Reason for Categorisation
1	Mainly arboricultural qualities
2	Mainly landscape qualities
3	Mainly cultural values, including conservation

APPENDIX B. Tree Schedules

Client: **Randhir Sidhu**

Project: **Clinton House, Pondfield Lane, Gravesend, DA12 3LD**

Survey date: **23rd April 2024**

Surveyor: **Darren Hood FdSc MArborA**

Table B1 - Tree Schedule

Tree reference number	Species	Height (m)	Stem diameter (mm)	Crown spread (m)	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Estimated remaining contribution (years)	Category
T1	Sycamore (<i>Acer pseudoplatanus</i>)	14	190	2	8	SM	Poor	Poor	Dead/dying.	<10	U
T2	Sycamore (<i>Acer pseudoplatanus</i>)	7	190	2	8	SM	Poor	Poor	Dead/dying.	<10	U
T3	Sweet chestnut (<i>Castanea sativa</i>)	19	370	4	5	EM	Good	Fair	Coppice regeneration.	10+	C (1)
T4	Sycamore (<i>Acer pseudoplatanus</i>)	20	320	N2 E3 S3 W2	7	SM	Fair	Fair	Partially suppressed.	10+	C (1)
T5	Sweet chestnut (<i>Castanea sativa</i>)	18	3 stems @ 360	N4 E4 S2 W2	5	EM	Fair	Fair	Coppice regeneration, overstood.	10+	C (1)
T6	Yew (<i>Taxus baccata</i>)	6	280	2	0	SM	Good	Fair	Supressed. Trimmed as hedge on drive side.	20+	C (1)
T7	Western red cedar (<i>Thuja plicata</i>)	20	430	3	3	EM	Good	Fair	No clear leader.	10+	C (1)
T8	Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	17	380	2	2	EM	Fair	Fair	Multi leader at 3m included union.	10+	C (1)

Tree reference number	Species	Height (m)	Stem diameter (mm)	Crown spread (m)	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Estimated remaining contribution (years)	Category
T9	Norway spruce (<i>Picea abies</i>)	20	500	N3 E4 S2 W2	6	M	Fair	Fair	Ivy on stem.	10+	C (1)
T10	Norway spruce (<i>Picea abies</i>)	14	230	N1 E3 S2 W0	3	SM	Fair	Fair	Ivy on stem; suppressed. Not on topographical plan.	10+	C (1)
T11	Prunus Kanzan (<i>Prunus Kanzan</i>)	15	380	N3 E2 S4 W4	3	M	Good	Fair	Suppressed. Not on topographical plan.	10+	C (1)
T12	Common Oak (<i>Quercus robur</i>)	13	460	N2 E2 S2 W1	4	EM	Fair	Fair	Topped out. Climbing plant in crown.	10+	C (1)
T13	Aspen (<i>Populus tremula</i>)	25	750	N7 E7 S6 W5	9	M	Fair	Fair	Pruning history. Lean east.	10+	C (1)
T14	Norway maple (<i>Acer platanoides</i>)	15	500	N2 E4 S2 W3	5	EM	Fair	Fair	Pruning history.	10+	C (1)
T15	Balsam poplar (<i>Populus trichocarpa</i>)	13	620	2	10	M	Fair	Poor	Major storm damage. Not on topographical plan.	<10	U
T16	Common Oak (<i>Quercus robur</i>)	16	760	N4 E3 S5 W6	7	M	Poor	Fair	Dieback; outside hedge boundary.	10+	C (1)
T17	Beech (<i>Fagus sylvatica</i>)	19	330	N1 E2 S5 W4	4	SM	Good	Fair	Suppressed.	20+	C (1)
T18	Common lime (<i>Tilia x europaea</i>)	22	420	N4 E2 S3 W5	7	EM	Good	Fair	Topped at 3m multi stemmed leader.	10+	C (1)
T19	Norway maple (<i>Acer platanoides</i>)	15	190	N0 E3 S4 W1	3	SM	Fair	Fair	Suppressed.	10+	C (1)

Tree reference number	Species	Height (m)	Stem diameter (mm)	Crown spread (m)	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Estimated remaining contribution (years)	Category
T20	Sweet chestnut (<i>Castanea sativa</i>)	25	370	2	12	EM	Poor	Poor	Dieback in crown.	<10	U
T21	Sweet chestnut (<i>Castanea sativa</i>)	21	3 stems @ 320	N2 E7 S8 W4	9	EM	Fair	Fair	Coppice regeneration, overstood.	10+	C (1)
T22	Sweet chestnut (<i>Castanea sativa</i>)	14	2 stems @ 230	N0 E5 S5 W0	4	SM	Fair	Fair	Coppice regeneration, overstood.	10+	C (1)
T23	Deodar cedar (<i>Cedrus deodara</i>)	13	150	1	2	Y	Good	Fair	Suppressed. Not on topographical plan.	20+	C (1)
T24	Yew (<i>Taxus baccata</i>)	7	220	N4 E2 S3 W4	2	SM	Good	Fair	Suppressed. Not on topographical plan.	20+	C (1)
T25	Common Oak (<i>Quercus robur</i>)	28	1,000	N9 E9 S9 W8	8	M	Fair	Good	Dominant tree in local setting, minor crown dieback.	20+	B (1)
T26	Silver birch (<i>Betula pendula</i>)	12	220	N2 E0 S2 W3	4	SM	Fair	Fair	Suppressed.	10+	C (1)
T27	Sweet chestnut (<i>Castanea sativa</i>)	24	3 stems @ 400	N4 E3 S4 W5	9	EM	Poor	Poor	Advanced dieback. Coppice regeneration, overstood.	<10	U
T28	Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	9	130	1	0	SM	Good	Fair	None.	10+	C (1)
T29	Common Oak (<i>Quercus robur</i>)	17	720	N5 E7 S6 W4	6	M	Good	Fair	Suppressed.	20+	B (1)
T30	Leyland cypress (<i>X Cupressocyparis leylandii</i>)	9	270	3	1	EM	Fair	Fair	Not on topographical plan.	10+	C (1)

Tree reference number	Species	Height (m)	Stem diameter (mm)	Crown spread (m)	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Estimated remaining contribution (years)	Category
T31	Common walnut (<i>Juglans regia</i>)	5	150	N2 E2 S1 W2	2	Y	Fair	Fair	Suppressed.	10+	C (1)
T32	Sweet chestnut (<i>Castanea sativa</i>)	18	520	N5 E7 S6 W4	7	M	Poor	Fair	Dieback in crown.	10+	C (1)
T33	Common Laburnum (<i>Laburnum anagyroides</i>)	4	100	1	1	SM	Good	Fair	None.	10+	C (1)
T34	Sweet chestnut (<i>Castanea sativa</i>)	18	330	N2 E2 S2 W1	3	SM	Fair	Fair	Singled coppice.	10+	C (1)
T35	Sycamore (<i>Acer pseudoplatanus</i>)	25	450	N4 E3 S4 W5	9	EM	Fair	Fair	None.	10+	C (1)
T36	Japanese maple (<i>Acer palmatum</i>)	8	150	N2 E3 S3 W3	4	SM	Good	Fair	Fused stems.	20+	B (2)
T37	Common Oak (<i>Quercus robur</i>)	19	600	N4 E6 S4 W4	7	EM	Good	Fair	Historic storm damage.	20+	B (1)
T38	Common Oak (<i>Quercus robur</i>)	27	720	N4 E3 S6 W4	12	EM	Poor	Fair	Advanced dieback.	<10	U
T39	Common Oak (<i>Quercus robur</i>)	26	760	N6 E8 S5 W4	10	EM	Fair	Fair	Dieback.	10+	C (1)
T40	Common Oak (<i>Quercus robur</i>)	23	730	N4 E8 S8 W7	7	EM	Poor	Fair	Advanced dieback.	<10	U
T41	Sweet chestnut (<i>Castanea sativa</i>)	19	400	N9 E3 S0 W2	7	EM	Poor	Poor	Decay at base. Tree leaning over neighbouring property.	<10	U

Table B2 Group Schedule

Tree reference number	Species	Height (m)	Stem Ø (mm)	Average Radial Crown Spread (m) N-E-S-W	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Estimated remaining contribution (years)	Category grading
G1	Sweet chestnut (<i>Castanea sativa</i>) x40, Sycamore (<i>Acer pseudoplatanus</i>) x10, Yew (<i>Taxus baccata</i>) x5 and Common Oak (<i>Quercus robur</i>) x1	19	Avg 340	3	7	EM	Good	Fair	20+	B (1)
G2	Sweet chestnut (<i>Castanea sativa</i>) x12, Leyland cypress (<i>X Cupressocyparis leylandii</i>) x3, Common Hornbeam (<i>Carpinus betulus</i>), Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	20	Avg 350	3	7	SM	Good	Fair	10+	C (1)

Tree reference number	Species	Height (m)	Stem Ø (mm)	Average Radial Crown Spread (m) N-E-S-W	Height of crown clearance (m)	Age class	Physiological condition	Structural condition	Estimated remaining contribution (years)	Category grading
	x2, Deodar cedar (<i>Cedrus deodara</i>), Holly (<i>Ilex aquifolium</i>) x2 and Prunus Kanzan (<i>Prunus Kanzan</i>) x1									
G3	Sweet chestnut (<i>Castanea sativa</i>) x6, Common Hornbeam (<i>Carpinus betulus</i>) x3, Ash (<i>Fraxinus excelsior</i>) x2 and Sycamore (<i>Acer pseudoplatanus</i>) x5	23	Avg 450	5	6	M	Fair	Fair	10+	C (1)

Table B3 Root Protection Area

Tree reference number	Species	Stem diameter (mm)	Radius of nominal circle (m)	RPA (m ²)
T1	Sycamore (<i>Acer pseudoplatanus</i>)	190	2.3	16.3
T2	Sycamore (<i>Acer pseudoplatanus</i>)	190	2.3	16.3
T3	Sweet chestnut (<i>Castanea sativa</i>)	370	4.4	61.9
T4	Sycamore (<i>Acer pseudoplatanus</i>)	320	3.8	46.3
T5	Sweet chestnut (<i>Castanea sativa</i>)	3 stems @ 360	7.5	175.9
T6	Yew (<i>Taxus baccata</i>)	280	3.4	35.5
T7	Western red cedar (<i>Thuja plicata</i>)	430	5.2	83.6
T8	Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	380	4.6	65.3
T9	Norway spruce (<i>Picea abies</i>)	500	6	113.1
T10	Norway spruce (<i>Picea abies</i>)	230	2.8	23.9

Tree reference number	Species	Stem diameter (mm)	Radius of nominal circle (m)	RPA (m ²)
T11	Prunus Kanzan (<i>Prunus Kanzan</i>)	380	4.6	65.3
T12	Common Oak (<i>Quercus robur</i>)	460	5.5	95.7
T13	Aspen (<i>Populus tremula</i>)	750	9	254.5
T14	Norway maple (<i>Acer platanoides</i>)	500	6	113.1
T15	Balsam poplar (<i>Populus trichocarpa</i>)	620	7.4	173.9
T16	Common Oak (<i>Quercus robur</i>)	760	9.1	261.3
T17	Beech (<i>Fagus sylvatica</i>)	330	4	49.3
T18	Common lime (<i>Tilia x europaea</i>)	420	5	79.8
T19	Norway maple (<i>Acer platanoides</i>)	190	2.3	16.3
T20	Sweet chestnut (<i>Castanea sativa</i>)	370	4.4	61.9
T21	Sweet chestnut (<i>Castanea sativa</i>)	3 stems @ 320	6.7	139

Tree reference number	Species	Stem diameter (mm)	Radius of nominal circle (m)	RPA (m ²)
T22	Sweet chestnut (<i>Castanea sativa</i>)	2 stems @ 230	3.9	47.9
T23	Deodar cedar (<i>Cedrus deodara</i>)	150	1.8	10.2
T24	Yew (<i>Taxus baccata</i>)	220	2.6	21.9
T25	Common Oak (<i>Quercus robur</i>)	1,000	12	452.4
T26	Silver birch (<i>Betula pendula</i>)	220	2.6	21.9
T27	Sweet chestnut (<i>Castanea sativa</i>)	3 stems @ 400	8.3	217.1
T28	Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	130	1.6	7.6
T29	Common Oak (<i>Quercus robur</i>)	720	8.6	234.5
T30	Leyland cypress (<i>X Cupressocyparis leylandii</i>)	270	3.2	33
T31	Common walnut (<i>Juglans regia</i>)	150	1.8	10.2
T32	Sweet chestnut (<i>Castanea sativa</i>)	520	6.2	122.3

Tree reference number	Species	Stem diameter (mm)	Radius of nominal circle (m)	RPA (m ²)
T33	Common Laburnum (<i>Laburnum anagyroides</i>)	100	1.2	4.5
T34	Sweet chestnut (<i>Castanea sativa</i>)	330	4	49.3
T35	Sycamore (<i>Acer pseudoplatanus</i>)	450	5.4	91.6
T36	Japanese maple (<i>Acer palmatum</i>)	150	1.8	10.2
T37	Common Oak (<i>Quercus robur</i>)	600	7.2	162.9
T38	Common Oak (<i>Quercus robur</i>)	720	8.6	234.5
T39	Common Oak (<i>Quercus robur</i>)	760	9.1	261.3
T40	Common Oak (<i>Quercus robur</i>)	730	8.8	241.1
T41	Sweet chestnut (<i>Castanea sativa</i>)	400	4.8	72.4
G1	Sweet chestnut (<i>Castanea sativa</i>) (x40), Sycamore (<i>Acer pseudoplatanus</i>) (x10), Yew (<i>Taxus baccata</i>) (x5) and Common Oak (<i>Quercus robur</i>)	340	4.1	52.3

Tree reference number	Species	Stem diameter (mm)	Radius of nominal circle (m)	RPA (m ²)
G2	Sweet chestnut (<i>Castanea sativa</i>) (x12), Leyland cypress (<i>X Cupressocyparis leylandii</i>) (x3), Common Hornbeam (<i>Carpinus betulus</i>), Lawson cypress (<i>Chamaecyparis lawsoniana</i>) (x2), Deodar cedar (<i>Cedrus deodara</i>), Holly (<i>Ilex aquifolium</i>) (x2) and Prunus Kanzan (<i>Prunus Kanzan</i>)	350	4.2	55.4
G3	Sweet chestnut (<i>Castanea sativa</i>) (x6), Common Hornbeam (<i>Carpinus betulus</i>), Ash (<i>Fraxinus excelsior</i>) and Sycamore (<i>Acer pseudoplatanus</i>) (x5)	450	5.4	91.6

Table B3 Key to Categories

Tree Reference Number	Category
T/GXX	Category A
T/GXX	Category B
T/GXX	Category C
T/GXX	Category U

Appendix D Protective Fencing

The purpose of this fencing is to provide protection to the RPA of retained trees/groups. The type of fencing used shall be appropriate to the level of adjacent construction activity and shall be agreed with the Local Authority tree officer. Weather-proof notices shall be attached to any protective fencing located adjacent to retained trees displaying the words “Construction Exclusion Zone” and listing restrictions which apply. All personnel must be made aware of these restrictions.

It is anticipated that one specification for fencing would be employed during construction.

Stabilizer Strut mounted Fencing

This system comprises anti-climb weldmesh panels connected by clamps and supported by rubber or concrete bases and bracing struts. The system is illustrated in Figure C2 and is based on *BS 5837:2012*¹ guidelines. This kind of system is robust enough to withstand occasional knocks by plant machinery.

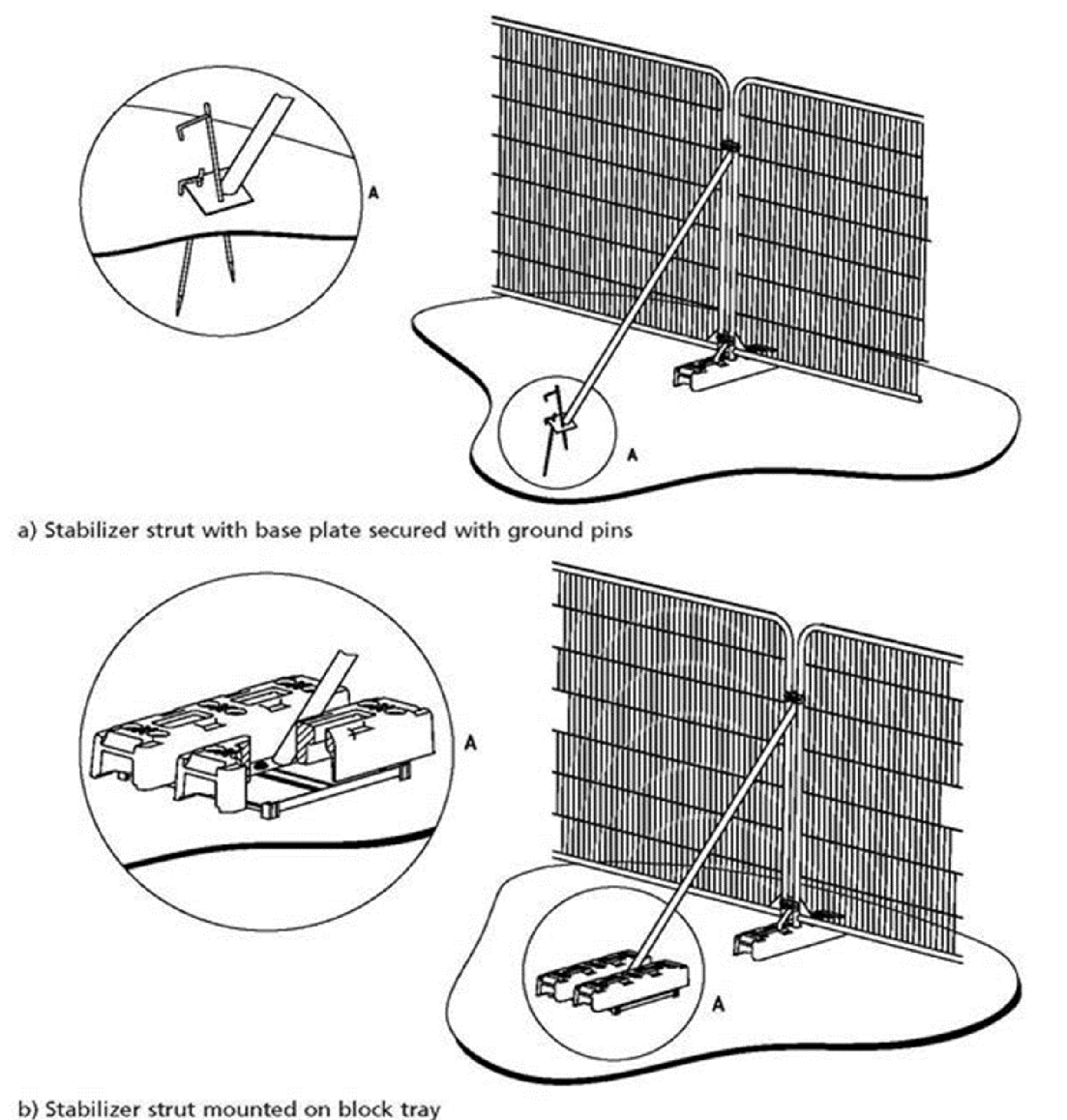


Figure C2 Tree Protection Fencing specification (extract from BS 5837)

Example of Protective Fencing Signs

