



**TREE SURVEY & CONSTRAINTS PLAN
IN ACCORDANCE WITH BS 5837:2012**

Proj. No 10496	The Old Vicarage, The Street, Badwell Ash, Bury St Edmunds, Suffolk, IP31 3DH
Client:	Jenny Auchincloss Designs
Date of Report:	25/09/2023

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TREE SURVEY & CONSTRAINTS PLAN IN ACCORDANCE WITH BS 5837:2012

The Tree Constraints Plan (TCP) is an important tool that objectively evaluates, classifies and categorises trees in accordance with BS 5837 (2012). Simultaneously, it also provides the architect and designer with an assessment of the associated constraints they may create. As such, the data presented is aimed at pre-empting the requirements of the Local Planning Authority (LPA) by identifying and quantifying key constraints such as canopy dimensions, root protection areas (RPA), water demand and ground cover. The TCP also provides an assessment of the general condition of the trees.

The benefit of the TCP is that the developable area that is free from physical tree constraints, both above and below ground, is clearly identified. Ideally, all development should take place outside the canopy spread and RPA of the trees considered worthy or appropriate for retention thus allowing a traditional construction process. It is usually technically possible (though not necessarily desirable) to build within a very limited portion of the RPA of trees using specialist engineering techniques that provide for minimal or no root disturbance, but inevitably this is more difficult and expensive than traditional construction methods and may not be acceptable to the LPA. Similarly, and wherever possible, construction should take place a minimum of 2 metres beyond the maximum branch spread of retained trees to allow workspace for scaffolding etc.

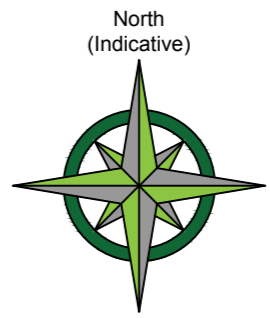
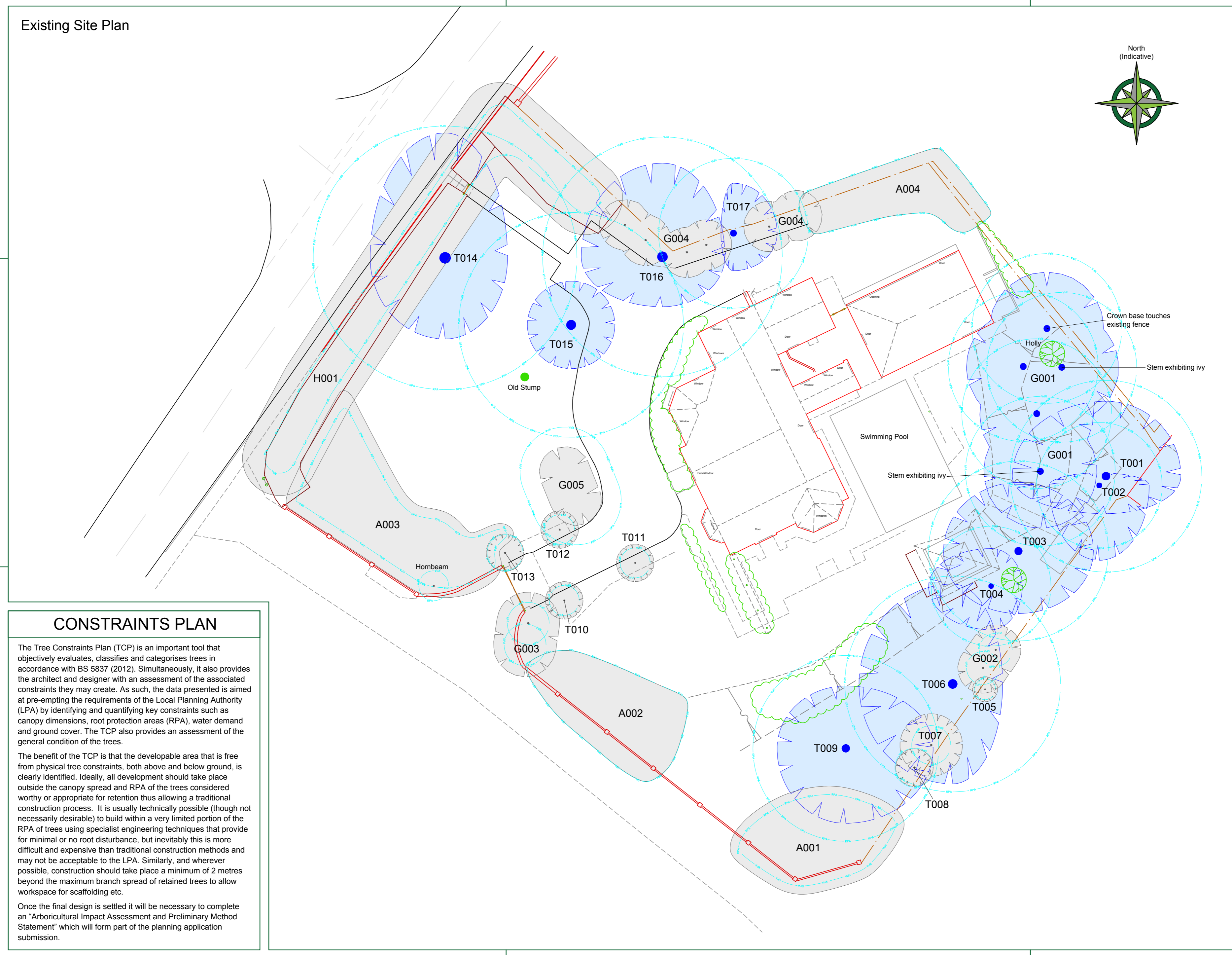
Once the final design is settled it will be necessary to complete an 'Arboricultural Impact Assessment and Preliminary Method Statement' (Prelim TS & AIA) which will form part of the planning application submission. The Prelim TS & AIA will also provide more detailed information regarding tree surgery and pests and diseases etc.

NB: This report is for design guidance only and not sufficient to support a planning application

Contents

- 1.0 Site Drawing**
- 2.0 Schedule of Trees**
- 3.0 Explanatory Notes**
- 4.0 Statutory Tree Protection**

Existing Site Plan



TREE PROTECTION STATUS

Hayden's sourced TPO & Conservation Area status from the Local Planning Authority's Online Mapping System on 14/09/23. We were informed that:

- TPO's are present on site
- The site is not located within a conservation area

We would advise it prudent that before any tree work commences, this is checked directly with the Local Planning Authority to confirm that their online mapping system is definitive.

NOTE:

Hayden's Arboricultural Consultants were provided with a Topographical Survey but these do not always show the positions of all the trees/features on site. The locations of any additional features have been fixed using GPS. As such the position of the trees/landscape features should not be taken as exact but gives a fair distribution of their locations on site.

CATEGORY AND DEFINITION

Trees unsuitable for retention	
Category U	Those in such condition that they cannot realistically be retained as living trees in the current land use for longer than 10 years
Trees to be considered for retention	
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

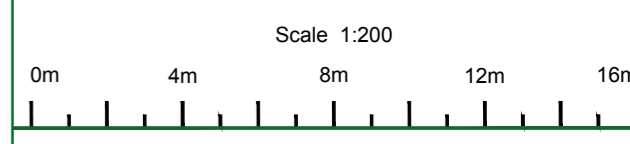
LEGEND

- Existing Tree/Feature BS 5837:2012 Category B
- Existing Tree/Feature BS 5837:2012 Category C
- Line of Root Protection Area (RPA) - calculated following guidelines set in BS 5837:2012
- Additional feature which doesn't meet BS 5837: 2012 categorisation but is included for reference

20/09/2023 KfJ Based on Alpha Surveys Topographical Survey Drawing: AS1910-01

Rev: Date: By: Revision: The position, condition, and dimensions of the trees are based on a site survey undertaken on 05/09/2023

"The original of this drawing was produced in colour - a monochrome copy should not be relied upon"



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Client:	Jenny Auchincloss Designs	Drawing Title:	Tree Survey and Constraints Plan
Site:	The Old Vicarage, The Street, Badwell Ash, Suffolk, IP31 3DH		
Date:	20/09/2023	Drawn By:	KfJ
Scale:	1:200 (A2)	Checked By:	AT
		Job File Ref:	C:\Pro\10496-D-CP - The Old Vicarage Badwell Ash.dwg
		Drawing No.:	10496-D-CP
		Rev.:	-

CONSTRAINTS PLAN

The Tree Constraints Plan (TCP) is an important tool that objectively evaluates, classifies and categorises trees in accordance with BS 5837 (2012). Simultaneously, it also provides the architect and designer with an assessment of the associated constraints they may create. As such, the data presented is aimed at pre-empting the requirements of the Local Planning Authority (LPA) by identifying and quantifying key constraints such as canopy dimensions, root protection areas (RPA), water demand and ground cover. The TCP also provides an assessment of the general condition of the trees.

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Once the final design is settled it will be necessary to complete an "Arboricultural Impact Assessment and Preliminary Method Statement" which will form part of the planning application submission.

SCHEDULE OF TREES

The Old Vicarage, The Street, Badwell Ash, Bury St Edmunds, Suffolk

Surveyed By: Alex Turner Date: 05/09/2023
Managed By: Alex Turner

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority	
			Min Dist	Crown Base	Lowest Branch	Age					Water Demand
			RPA (m ²)	Aspect	Aspect	SULE					Ground Cover
A001	Holly, English Yew, Hazel, Cherry Spp	110	5.5		Low	N2, E2, S2, W2	Mixed species area of young trees with crowns touching and overhanging the site boundary fence and wall. Average dimensions provided. Fair form and condition.	C1	No work required.	4	
		1.32	0.1		Y	Moderate					
Yes		5.5			20+ years	Ivy					
A002	Bay Laurel, Cherry Laurel, Crimson Norway Maple, Cherry Spp	210	6		Low	N2.5, E2.5, S2.5, W2.5	Mixed species area of young trees with crowns touching and overhanging the site boundary fence and wall. Average dimensions provided. Fair form and condition.	C1	No work required.	4	
		2.52	0.5		SM	Moderate					
Yes		20			10+ years	Building, Ivy					
A003	Cherry Laurel, Cherry Plum, Elder, Dogwood Spp, Hornbeam, Ash	100	6		Moderate	N2, E2, S2, W2	Dense mixed species area of small trees and shrubs. Unable to access due to low branches. Average dimensions provided. Close proximity with existing boundary wall. Fair form and condition.	C1	No work required.	4	
		1.2	0.1		SM	Moderate					
Yes		4.5			20+ years	Bare earth, Grass					
A004	Cherry Laurel, Hawthorn, Holly	210	3		Low	N2.5, E2.5, S2.5, W2.5	Mixed species area of maturing trees with crowns touching and overhanging the site boundary fence and wall. Stems are in close proximity with existing fence. Average dimensions provided. Dense screen. Fair form and condition.	C1	No work required.	4	
		2.52	0.1		SM	High					
Yes		20			20+ years	Bare earth, Grass					
G001	English Yew	500	11		Moderate	N4.5, E4.5, S4.5, W4.5	Group of five trees forming homogenous crown. Stem bases are at the top of the raised area of ground: higher by 1 metre to north-west over approximately 3 metres. Average dimensions provided. At present only one tree directly conflicts with existing boundary fence. Ivy is becoming established on two stems. Low branches inhibits access to stem and around stem base. Trees appear typical for species. Ground works have been undertaken to the south/south-west but thought to have not had particular impact on the root. Good form and condition.	B1	No work required.	4	
		6	0.1		EM	Moderate					
Yes		113.1			40+ years	Gravel, Bare earth					
G002	Holm Oak	110	5		Low	N2, E2, S2, W2	Pair of trees growing within 1 metre of site boundary fence. Comparatively new trees to site. Trees grow beneath crown of larger neighbouring tree and in close proximity with neighbouring dwelling building so potential conflict will need to be managed. Fair form and condition.	C1	No work required.	4	
		1.32	0.5		Y	High					
Yes		5.5			10+ years	Building, Bare earth					
G003	Hornbeam	140	8.5		Low	N2.5, E2.5, S2.5, W2.5	Pair of new/young trees growing within 0.5 metres of existing brick wall. Average dimensions provided. No obvious visual defects at time of inspection. Potential for conflict with wall depending on the existing footings. Fair form and condition.	C1	No work required.	4	
		1.68	1		Y	Moderate					
Yes		8.9			20+ years	Building, Bare earth					

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover				
G004	European Lime	120	7		Low	N2, E2, S2, W2	Group of six trees growing on site boundary. Stems are located within 0.5 metres of existing boundary fence. Average dimensions provided. Fair form and condition.	C1	No work required.	4
		1.44	0.5		Y	Moderate				
Yes		6.5			40+ years	Gravel, Off-site/no access				
G005	English Yew	300	3		Low	N2, E2, S2, W2	Pair of trees managed into rounded shapes. No clear access to stems to measure DBH so it is estimated. Average dimensions provided. Fair form and condition.	C1	No work required.	4
		3.6	0.1		SM	Moderate				
Yes		40.7			20+ years	Grass, Gravel				
H001	Hornbeam, Holly, Cherry Laurel	100	6		Moderate	N3, E3, S3, W3	Boundary hedge between site and road to west and property to the north. North extent of hedge is growing adjacent to existing fence. Average dimensions provided. Dense feature. Good screening value. Fair form and condition.	C1	No work required.	4
		1.2	0.1		SM	Moderate				
Yes		4.5			20+ years	Grass, Tarmac				
T001	Beech	640	20		High	N6, E6, S3, W7.5	Tree growing close (within 2 metres) to existing boundary fence. Poor access around crown extents so estimations have been made where the branches overhang fences or difficult terrain. Build up of green waste material east of stem base obscures levels. Evidence of past surgery to reduce crown on east aspect. No obvious visual defects at time of inspection. South crown extent partially suppressed by neighbouring tree. Good form and condition.	B1	No work required.	4
		7.68	2		EM	Moderate				
Yes		185.3			40+ years	Building, Bare earth				
T002	Beech	420	20		Moderate	N1, E4, S6, W4	Tree growing close (within 2 metres) to existing boundary fence. Poor access around crown extents so estimations have been made where the branches overhang fences or difficult terrain. Build up of green waste material east of stem base obscures levels. Evidence of past surgery to reduce crown on east aspect. No obvious visual defects at time of inspection. North crown extent suppressed by neighbouring tree. Good form and condition.	B1	No work required.	4
		5.04	2		SM	Moderate				
Yes		79.8			40+ years	Building, Bare earth				
T003	Sycamore	600	18.5		High	N5.5, E6, S5, W6	Tree growing close (within 4 metres) to existing boundary fence. Poor access around crown extents so estimations have been made where the branches overhang fences or above other trees. Multi-stemmed form from 2.5 metres with five codominant stems forming crown. Root damage is evident to the west where a vehicle has tracked and a swimming pool has been excavated in the rooting area. Roots up to 50mm diameter have been broken or snapped high in the soil profile. Fair form. Good physiological condition currently.	B1	Monitor condition in three years to assess implications of root damage.	3
		7.2	2.5		EM	Moderate				
Yes		162.9			20+ years	Bare earth				
T004	Box	400	8		Low	N3, E2.5, S3.5, W5	Multi-stemmed form from ground level. Large south stem has suffered a recent tear out wound leaving a 700mm long area of exposed wood. Crown is growing beneath larger neighbouring tree so there is a level of asymmetry. Excavation is evident in the rooting area but no visible damage to roots. Good example of species. Good form and condition.	B1	No work required.	4
		4.8	1.8		M	Moderate				
Yes		72.4			20+ years	Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover				
T005	Cherry Laurel	70	3		Low	N1, E1, S1, W1	Off-site multi-stemmed tree in close proximity with boundary fence. Crown overhangs fence. All dimensions estimated due to lack of access.	C1	No work required.	4
		0.84	1.8		Y	Moderate				
No		2.2			10+ years	Bare earth, Building, Off-site/no access				
T006	English Oak	720	20.5		High	N8, E4, S8, W7.5	Tree growing close (within 2 metres) to existing boundary fence. East crown extent is estimated due to fence. Evidence of past surgery to reduce crown on east aspect near neighbouring dwelling resulting in a somewhat asymmetric form. No obvious visual defects at time of inspection. Good form and condition.	B1	No work required.	4
		8.64	3		EM	High				
Yes		234.5			40+ years	Building, Bare earth				
T007	Holly	130	5.5		Low	N2.5, E2.5, S2.5, W2.5	Tree growing within 1 metre of boundary fence. Crown overhangs and touches fence. Fair form and condition.	C1	No work required.	4
		1.56	1.5		Y	Moderate				
Yes		7.6			20+ years	Grass				
T008	Holm Oak	130	6		Low	N1.5, E1.5, S1.5, W1.5	Tree growing within 1 metre of boundary fence. Crown overhangs and touches fence. Fair form and condition.	C1	No work required.	4
		1.56	1.5		Y	High				
Yes		7.6			20+ years	Grass				
T009	Sycamore	620	18		High	N5, E7, S6, W5.5	Evidence of past surgery to reduce crown and subsequent regrowth on all aspects. Pruning wounds closest to stem have not occluded well and there is localised insect activity and decay. Otherwise no obvious visual defects at time of inspection. Good form and condition.	B1	No work required.	4
		7.44	2		EM	Moderate				
Yes		173.9			20+ years	Bare earth				
T010	Holly	100	5		Low	N1.5, E1.5, S1.5, W1.5	Tree growing adjacent to gravel driveway. No obvious visual defects at time of inspection. Fair form and condition.	C1	No work required.	4
		1.2	0.5		Y	Moderate				
Yes		4.5			40+ years	Grass, Gravel, Building				
T011	Holly	100	5		Low	N1.5, E1.5, S1.5, W1.5	Tree growing adjacent to gravel driveway. No obvious visual defects at time of inspection. Fair form and condition.	C1	No work required.	4
		1.2	0.5		Y	Moderate				
Yes		4.5			40+ years	Grass, Gravel, Building				
T012	Holly	100	5		Low	N1.5, E1.5, S1.5, W1.5	Tree growing adjacent to gravel driveway. No obvious visual defects at time of inspection. Fair form and condition.	C1	No work required.	4
		1.2	0.5		Y	Moderate				
Yes		4.5			40+ years	Grass, Gravel, Building				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover				
T013	Holly	120	5		Low	N1.5, E1.5, S1.5, W1.5	Tree growing adjacent to gravel driveway. No obvious visual defects at time of inspection. Fair form and condition.	C1	No work required.	4
		1.44	0.5		Y	Moderate				
Yes		6.5			40+ years	Grass, Gravel, Building				
T014	Turkey Oak	880	19		High	N10, E5, S6.5, W6	Tree growing close to boundary. Long branch extends on north aspect. Telecoms cables run through crown. Black bleeds on stem but solid wood underneath when resonance tested. Possible acute oak decline but there is an absence in the D-shaped exit holes of Agrilus biguttatus so not able to confirm diagnosis. Potentially a Phytophthora infection. Crown is sparse but no one area is more strongly affected than others.	B1	Monitor annually condition of crown and extent of stem bleeds and possible beetle exit holes.	3
		10.56	0.5		M	High				
Yes		350.3			20+ years	Grass, Dense undergrowth, Tarmac				
T015	Tilia Platyphyllos	750	16.5		Moderate	N3.5, E3.5, S3.5, W3.5	DBH is estimated due to Epicormic growth. Epicormic growth inhibits full inspection of stem base. Evidence of past surgery to heavily reduce crown. Strong regrowth. Good form and condition.	B1	No work required.	4
		9	0.5		EM	Moderate				
Yes		254.5			20+ years	Bare earth, Grass, Gravel				
T016	Holm Oak	800	18		High	N7.5, E5, S4, W6.5	Tree growing between on site dwelling and off-site house. Crown overhangs boundary. Stem is located within 0.5 metres of existing boundary fence. No access to stem base due to construction materials and spoil. Long extending north branch. East aspect has been subject to surgery to reduce back from dwelling. No obvious visual defects at time of inspection. Good form and condition.	B1	No work required.	4
		9.6	2		M	High				
Yes		289.5			40+ years	Building, Bare earth, Gravel				
T017	Taxus Baccata	500	8		Moderate	N4, E3.5, S3, W1	Tree growing close to boundary. Stem is approximately 100mm from existing fence. West crown is difficult to see due to surrounding trees but it appears to have been reduced to be clear of the adjacent off-site house. DBH and west crown extent are estimated due to lack of access. Twin stemmed form. Tight union. Fair form and condition.	B1	No work required.	4
		6	0.5		SM	Moderate				
Yes		113.1			40+ years	Bare earth, Gravel, Off-site/no access				

Explanatory Notes for Tree Constraints Plans

DBH (mm)	Diameter of main stem in millimetres at 1.5 metres from ground level. Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.
RPA	This is the Root Protection Area, measured in square metres and defined in BS5837:2012 as “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”. The RPA is shown on the drawing. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations.
Crown Base	Recorded in metres, the distance from ground and aspect of the lowest branch material.
Crown Spread	Indicates the radius of the crown from the base of the tree in each of the northern, eastern, southern and western aspects.
Age	<p>Recorded as one of the following categories:</p> <p>Y Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.</p> <p>S/M Semi-mature. An established tree, but one which has not reached its prospective ultimate height.</p> <p>E/M Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.</p> <p>M Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.</p> <p>O/M Over-mature. A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.</p> <p>V Veteran. Although there is no exact definition this is usually a tree that is of interest biologically, culturally or aesthetically because of its age, size or condition.</p> <p>D Dead.</p>
Safe Useful Life Expectancy	<p>Relates to the prospective life expectancy of the tree and is given as one of 4 categories:</p> <p>40 years+;</p> <p>20 years+;</p> <p>10 years+;</p> <p>Less than 10 years.</p>

Water Demand This gives the water demand of the species of tree when mature, as given in the NHBC Standards Chapter 4.2 “Building Near Trees”.

BS 5837 Main Category Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;

Category B - Those of moderate quality with an estimated remaining life expectancy of at least 40 years;

Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;

Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837 Sub Category Table 1 of BS 5837:2012 also requires a sub-category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows:

Sub-Category 1 - Mainly arboricultural qualities

Sub-Category 2 - Mainly landscape qualities

Sub-Category 3 - Mainly cultural values, including conservation

Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub-Category.

Recommended Works Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems in the setting at the time of the inspection.

Priority This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey.

1 Urgent – works required immediately;

2 Works required within 6 months;

3 Works required within 1 year;

4 Re-inspect in 12 months,

Tree Preservation Order / Conservation Area Online Mapping Extract

