TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2005 and current good arboricultural practice.

- Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, or immediately above the root flare for multi-stemmed trees, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y	=	**young trees**
MA	=	**middle aged trees**
M	=	**mature trees**
OM	=	**over-mature trees**
V	=	**veteran**

- An assessment of a tree's physiological condition is defined as:

Good	=	**fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure**
Fair	=	**fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure**
Poor	=	**a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure**
Dead	=	**dead**

- An assessment of a tree's structural condition is defined as:

Good	=	**no significant structural defects**
Fair	=	**structural defects which could be alleviated through remedial tree surgery or management practices**
Poor	=	**structural defects which cannot be alleviated through tree surgery or management practices**
Dead	=	**dead**

- An assessment of a tree's future life expectancy is defined as: **<10, 10-20, 20-40 or >40 years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2005. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category R	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees in such a condition that any value would be lost within 10 years or should be removed for reasons of sound arboricultural management				**DARK RED**
Category A				
Trees of high quality and value: in such a condition as to make a substantial contribution (40 years or more is recommended)	Trees that are a particularly good example of their species, rare or unusual, essential components of groups or of formal or semi-formal features.	Trees, groups or woodlands providing definite screening of views in and out of the site, or softening effect to the locality, or those of particular visual importance.	Trees, groups or woodlands of significant conservation, historical or other value (e.g. veteran or wood-pasture)	LIGHT GREEN

Category B				
Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years.	Trees which might be included in the A category, but are downgraded due to impaired conditions/remediable defects.	Trees in numbers, that collectively form a distinct landscape feature but are not individually an essential component of a formal or semi-formal feature. These are likely to be trees situated mainly within the site with little visual impact on the surrounding locality.	Trees with clearly identifiable conservation or other cultural benefits.	**MID BLUE**
Category C				
Trees of low quality and value which might remain for a minimum of 10 years or young tress with stems of less than 150mm diameter.	Trees not qualifying in higher categories	Trees in groups or woodlands without having significant landscape value or offering low or temporary screening value	Trees with very limited conservation or other cultural benefits	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. It will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either "*full ground level inspection*" or "*climbing inspection required*". There may also be a further reference to the need for "*decay detection equipment*" to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

CBA Trees.

TREE SURVEY SCHEDULE

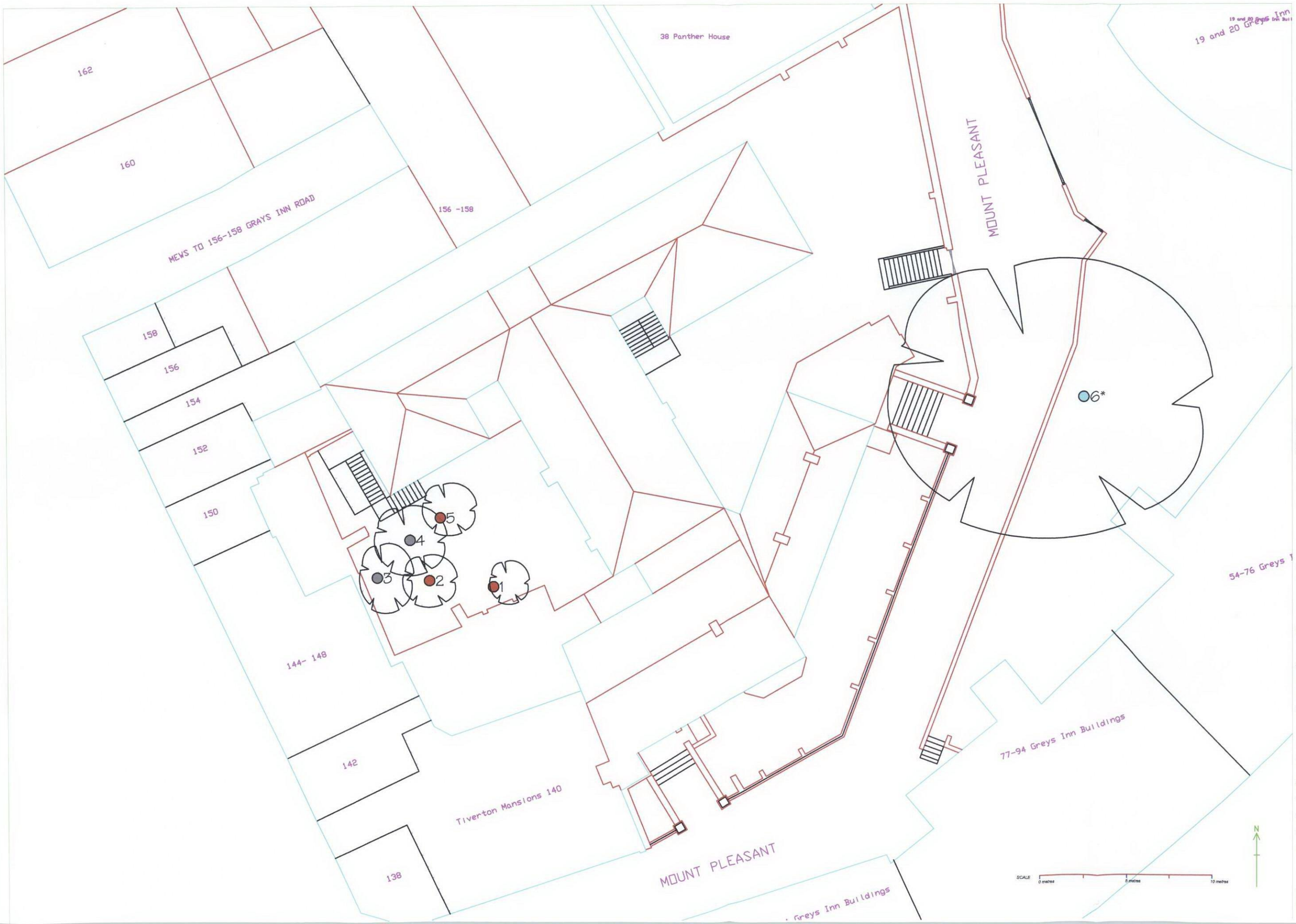
Client:	Camden Council	**Site:**	52-54 Mount Pleasant, London, WC1X 0AL
Date:	20 October 2011	**Consultant:**	James Fuller *FDSc Arb, ND Arb*
Tagged:	No	**Weather:**	Sunny

Notes:-

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing.

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Age	Physio-logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1	Pyracantha *Pyracantha spp*	3	MS	100	1.5	2.0	1.0	0.0	1.5	1.5	2.0	-	Y	Poor	Fair Trifurcated at ground level Growing in planter Poor quality tree Old pruning wounds Low crown density	Advise removal	<10	R

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Age	Physio-logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
2	Eleagnus *Eleagnus spp*	7	S	205	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0	M	Poor	Poor Growing in planter Roots breaking planter Old pruning wounds on trunk Previously crown lifted Previously crown reduced Major dieback in crown Previously topped at 7m above ground level Root growing out of planter into surrounding area	Advise removal	<10	R
3	Eleagnus *Eleagnus spp*	4	S	140	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.5	MA	Fair	Poor Growing in planter Stem previously broken off on North side at base Multi-stemmed at 2m above ground level Stem previously removed at multi-stemmed union	None required at time of survey	10-20	C1
4	Eleagnus *Eleagnus spp*	6	S	145	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	MA	Fair	Fair Growing in planter Mahonia growing at base Old pruning wounds on trunk Minor deadwood in crown	None required at time of survey	10-20	C1
5	Eleagnus *Eleagnus spp*	6	MS	400	2.0	2.0	1.0	1.0	3.0	3.0	3.0	3.0	MA	Dead	Dead tree Growing in broken planter	Advise removal within 6 months	<10	R
6	London Plane *Platanus x hispanica*	19	S	Est 850	8.0	Est 7.0	Est 8.0	11.0	2.0	4.0	6.0	3.0	M	Good	Fair Off-site tree Unable to verify health and safety due to no access Bifurcated at 2.5m above ground level Old pruning wounds in crown occluding Fused branches in crown	Gain access and re-survey within 1 month	>40	B1 Interim



DO NOT SCALE OFF THIS DRAWING
ALL DIMENSIONS MUST BE CHECKED ON SITE
INFORM THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION
PLOT SIZE: A1

PETER BARBER
ARCHITECTS

173 Kings Cross Road LONDON WC1X 9BZ
T:020 7833 4499 F:020 7833 4999
e:architecture@peterbarberarchitects.com

Indicative

NOTE
Trees marked * are indicatively plotted only and should be verified by Land Surveyor.

REV A 17 NOV 2011
Amendments to titleblock.

KEY
- category A trees
- category B trees
- category C trees
- category R trees

CLIENT
Camden Council

JOB TITLE
52-54 Mount Pleasant
London

DRAWING TITLE
Tree Survey Plan

DRAWING No.
CBA7740.01A

SCALE
1:100@A1, 1:200@A3

DRAWN
la

DATE
Oct 2011

CBA Trees, Apex House, Apex Centre, Church Lane, Colden Common, Winchester, Hampshire, SO21 1TN.


CB2

	TREE ROOT PROTECTION AREA SCHEDULE			
	Client:	Camden Council	**Site:**	52-54 Mount Pleasant, London, WC1X 0AL
	Date:	20 October 2011	**Consultant:**	James Fuller *FDSc Arb, ND Arb*

Notes:
1. This is an assessment of the Root Protection Area (RPA) required, based on the individual tree data collected and Table 2 of BS5837:2005.
2. At this juncture this document is for your sole guidance and ongoing discussions purposes only and is not intended for general circulation, as it assumes that all but the 'R' trees will be retained, which clearly may not be the case.
3. For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m2 in accordance with Section 5.2.3 of BS5837:2005.

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
1	Pyracantha	R	MS	100	-	-
2	Eleagnus	R	S	205	-	-
3	Eleagnus	C1	S	140	1.68	8.87
4	Eleagnus	C1	S	145	1.74	9.51
5	Eleagnus	R	MS	400	-	-
6	London Plane	B1 Interim	S	850	10.20	326.89


CB3

DO NOT SCALE OFF THIS DRAWING
ALL DIMENSIONS MUST BE CHECKED ON SITE

INFORM THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION

PLOT SIZE: A1

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Indicative

38 Panther House

19 and 20 Grays Inn Building

MEWS TO 156-158 GRAYS INN ROAD

160

136 -158

158

156

154

152

150

144- 148

142

138

Tiverton Mansions 140

MOUNT PLEASANT

95 - 104 Grays Inn Buildings

77-94 Grays Inn Buildings

54-76 Grays Inn

GRAYS INN ROAD

ROSE

T1

T2

T3

T4

T5

T6*

Offsite trees to be retained. and protected in accrancde with BS5837:2005

Trees to be removed to facilitate development subject to Local Authority approval. (T1, 2 and 5)

Trees to be removed for sound arboricultural management subject to Local Authority approval

Root Protection Area (RPA)

Adjusted Root Protection Area (RPA) to take into account obstruction to root growth

Section of canopy to be pruned in accordance with Section 9 of CBA Trees Arboricultural Development Statement Feb 2012 (ADS)

NOTE
Trees marked * are indicatively plotted only and should be verified by Land Surveyor.

KEY
- category A trees
- category B trees
- category C trees
- category R trees

CLIENT
Camden Council

JOB TITLE
52-54 Mount Pleasant
London

DRAWING TITLE
Tree Protection Plan

DRAWING No.
CBA 7740.02

SCALE 1:100@A1

DRAWN lg

DATE Feb 2012

CBA Trees, 14 Dameon Crescent,

Key
- Existing Buildings
- Green Sedum Roofs
- Terraces
- Chimney
- Lift Over-run
- S
- Dormer Window

N


CB4

CBA7740

CBA Trees	TREE WORKS SCHEDULE			
	Client:	Camden Council	**Site:**	52 – 54 Mount Pleasant, London WC1X 0AL
	Date:	February 2012	**Consultant:**	James Fuller *FdSc.Arb, BTEC Nat.Dip Arb, TechArbor.A*

Tree No.	Species	Recommended Works
1	Pyracantha	• Remove
2	Eleagnus	• Remove
3	Eleagnus	• Remove
4	Eleagnus	• Remove
5	Eleagnus	• Remove
6	London Plane	• Crown reduce on West side as detailed in the potographs 1, 2 & 3 (Section 9) CBA Trees Arboricultural Development Statement (ADS) February 2012.

- All tree works are advised to be carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998 – Tree Works. Only natural target pruning method to be used.
- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.


CB5

TREES AT_____:

SUMMARY OF TREE PROTECTION MEASURES

Introduction

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under **LEGAL PROTECTION** and damaging them can result in heavy fines.

Two common misconceptions about trees:

MYTH: Trees have deep taproots and so shallow excavations will not harm the tree.
FACT: 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.
MYTH: Trees will quickly heal over any bark wound, with no ill effect.
FACT: Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.

Tree Protection

All trees adjacent to unsupervised work areas have been protected by fencing.

This fencing must be respected at all times and no attempts shall be made to damage, bypass or ignore it.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- **No** digging or scraping
- **No** storage of plant or materials
- **No** vehicular access
- **No** fire lighting
- **No** handling, discharge or spillage or any chemical substance
- **No** water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.

- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaved of 20m.

Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **CBA Trees** as follows:

Office Telephone: 01962 715407

REMEMBER:

ALL TREE DAMAGE IS AVOIDABLE –

SO AVOID IT!

PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

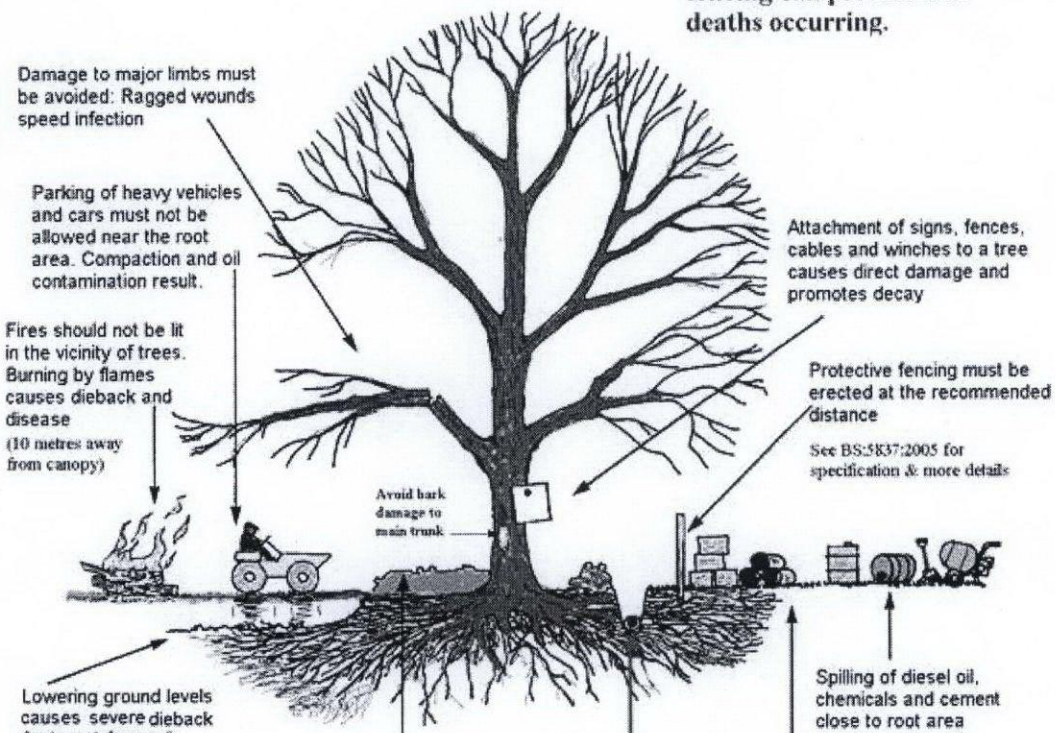
TREE PROTECTION AREA
KEEP OUT !

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

Common causes of Tree Death

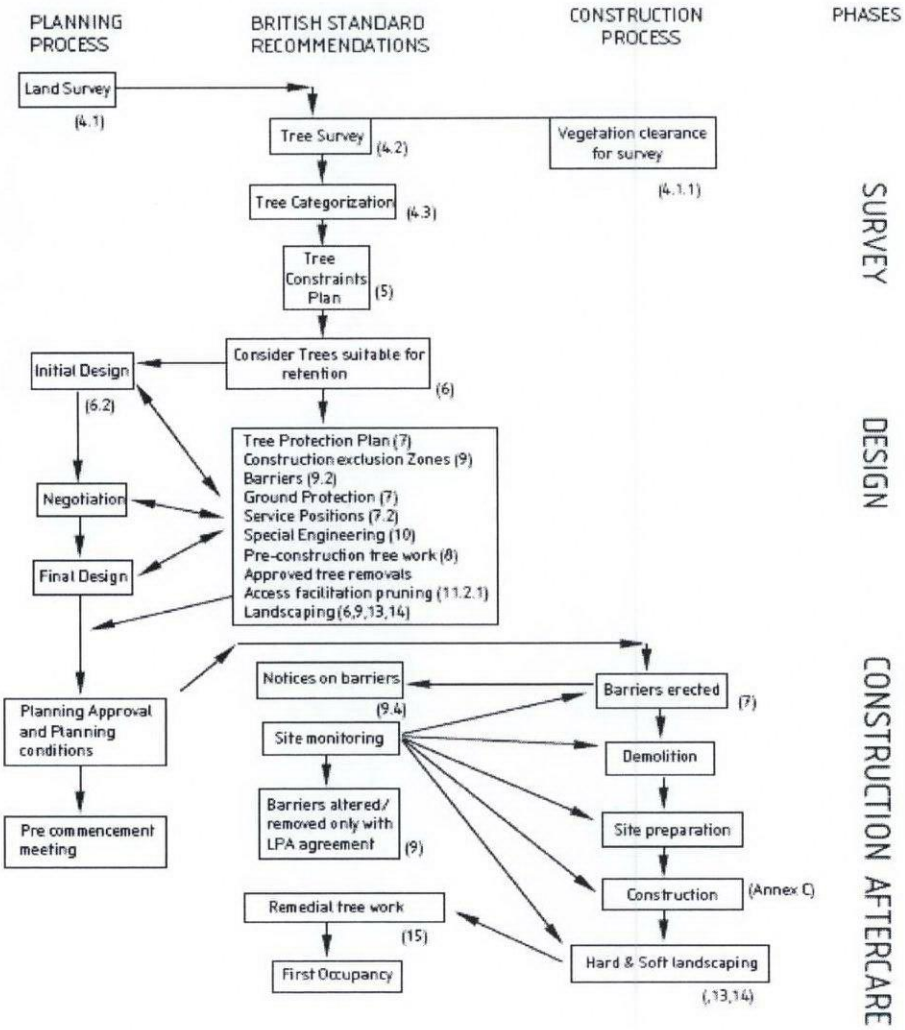
The use of properly positioned protective fencing can prevent tree deaths occurring.



Please use copies of this as an on-site poster for personnel

(Source: Arboricultural Information Exchange website, 2005)


CB6



Figures in brackets refer to Clause numbers.

Figure 1 — Flow diagram, summarizing planning for trees on development sites

3.2.2 The layout of this standard follows the sequence of the flow diagram in Figure 1. Following the land survey (see 4.1) the existing trees on and adjacent to the site should be surveyed (see 4.2) and categorized (see 4.3). The constraints these trees pose should be plotted on a tree constraints plan (see Clause 5) and those selected for retention should be plotted on a tree protection plan as a result of the negotiations within the design process (see Clause 7). Areas for new landscaping should be identified at this time (see 6.2.2). The position of all excavations and any special engineering required can be specified in the form of arboricultural method statements. Once work is due to begin on site the arboriculturist should meet the site agent at a pre start meeting to ensure the correct erection of barriers and ground protection forming the construction exclusion zone (see Clause 9).


CB7