Tree Survey to BS5837 – Unit 1, Victoria Road, South Ruislip, Middlesex, HA4 0QB

Author: Alan Thompson FdSc (Arb), TArborA

ARBTECH

ENVIRONMENTAL SERVICES

Mr James Barret
Lidl UK
33 Aberconway Road
Morden
London
SM4 5LN

11/12/12

Dear James,

BS5837 Tree Survey – Unit 1, Victoria Road, South Ruislip, Middlesex, HA4 0QB

Lidl UK appointed Arbtech Consulting Ltd. in November 2012 to undertake a BS5837 Tree Survey and Tree Constraints Plan at the aforementioned site. Our arboricultural consultant, Mr. Alan. Thompson undertook the survey on the 5th of December 2012; subsequently we have produced this summary of our findings. Mr. Alan Thompson FdSc has over 4 years experience in both local authority and private practice environments.

Tree Survey Executive Summary

A total of 17 individual trees and 1 area of grouped trees were surveyed. In general the tree stock on site is young to semi mature in age range.

The vast majority of trees surveyed were in an acceptable or good condition at the time of the survey. No trees were deemed to be in an unsafe or unstable condition, however tree T7 appears to be entering terminal decline and is recommended for removal.

All trees within the property have been surveyed using techniques demanded by BS5837 Trees in Relation to Construction.

Individual notes on each tree's structural and physiological condition are found in the Notes section of the survey schedule.

The following content is for educational and informative purposes; so parts of it are reproduced with the kind permission of BSI Global.

BS5837 Scope

This standard recognizes that there can be problems of development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees in relation to construction to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

Definitions

Arboriculturist

An arboriculturist (or arboricultural consultant) is a person who has, through relevant education, training and experience, gained recognized qualifications and expertise in the field of trees in relation to construction.

Tree Survey

A tree survey should be undertaken by an arboriculturist and should record information about the trees on a site independently of and prior to any specific design for development. As a subsequent task, and with reference to a design or potential design, the results of the survey should be included in the preparation of a tree constraints plan, which should be used to assist with site layout design.

Tree Constraints Plan

A TCP is plan, typically delivered as an AutoCAD drawing (.dwg file format), prepared by an arboriculturist for the purposes of layout design showing the root protection area and representing the effect that the mature height and spread of retained trees will have on layouts through shade, dominance, etc.

Root Protection Area

An RPA is a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m².

Construction Exclusion Zone (*also termed* Tree Protection Zone)

A construction exclusion or tree protection zone is an area based on the RPA (in m²), identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

Tree Protection Plan

A TCP is plan, typically delivered as an AutoCAD drawing (.dxf file format), prepared by an arboriculturist showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement, which can be shown graphically.

Arboricultural Impact Assessment

This is a study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

Arboricultural Method Statement

This is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree. The AMS is likely to include details of an on-site tree protection monitoring regime.

Methodology

The methodology used to assess the trees was the British Standard 5837:2012 ‘Trees in Relation to Construction’ tree survey method. The aim of the survey is to establish which trees are moderate and good quality; suitable for retention and justifying protection, and, which trees are low or poor quality; either undesirable or unsuitable to retain and protect.

The tree survey includes all trees included in the land survey red line boundary plan, as well as any that may have been missed, and it should categorize trees or groups of trees, including woodlands for their quality and value within the existing context, in a transparent, understandable and systematic way. Where the arboriculturist has

deemed it appropriate, the trees have been tagged with small metal or plastic tags, placed as high as is convenient on the stem of each tree.

Whilst masterplan proposals for the proposed development of the site might be available, the trees have been surveyed without taking these into consideration. All detailed design work on site layout should take into consideration the results of the tree survey (and the TCP).

Trees forming groups and areas of woodland (including orchards, wood pasture and historic parkland) are identified and considered as groups where the arboriculturist has determined that this is appropriate, particularly where they contain a variety of species and age classes that could aid long-term management. It is often expedient to assess the quality and value of such groups of trees as a whole, rather than as individuals. However, an assessment of individuals within any group has been undertaken if they are open-grown or if there is a need to differentiate between them.

The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories; A, B, C, or R (highest to lowest quality respectively). The categories are differentiated on the tree survey plan by colour, or by suffixing the category adjacent to the tree identification number on the TCP.

The survey schedule lists all the trees or groups of trees. The following information is also provided:

I. reference number (to be recorded on the tree survey plan);
II. species (common or scientific names);
III. height in metres;
IV. stem diameter in millimetres at 1.5 m above adjacent ground level or immediately above the root flare for multi-stemmed trees;
V. branch spread in metres taken at the four cardinal compass points;
VI. height in metres of crown clearance above adjacent ground level;
VII. age class (young, middle aged, mature, over-mature, veteran);
VIII. physiological condition (e.g. good, fair, poor, dead);
IX. structural condition, e.g. collapsing, the presence of any decay and physical defect;
X. preliminary management recommendations, including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat; and
XI. category grading to be recorded in plan on the tree survey plan.

Limitations

Trees were inspected from using visual observation from ground level only. Trees were not climbed or inspected below ground level. Inaccessible trees will have best estimates made about the location, physical dimensions and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our Client for the extent of the survey. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

Appendices

The following documents were released to the Client as appendices to this report:

- Survey Schedule (PDF)
- Tree Constraints Plan drawing (AutoCAD DXF drawing file and PDF)

If you require clarification of information contained herein, please do not hesitate to contact us via 08450 176950.

Yours Sincerely,

Alan Thompson FdSc Arb, TArborA

Arboricultural Surveyor.

Tel. 07703 676216

Chester. Murlain House, Union Street, Chester, Cheshire CH1 1QP

London. New Broad Street House, 35 New Broad Street, London EC2M 1NH

Client: Lidl UK
Project: Unit 1, Victoria Road, South Ruislip, HA4 0QB
Survey Date: 05/12/2012
Surveyor: Alan Thompson

BS5837:2012 Tree Survey

Arbtech Consulting Ltd.

Murlain House
Union Street
Chester
Cheshire
CH1 1QP
Phone: 08450 176 950

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
Group 1										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	7	1	90	N 2 E 2 S 2 W 2	2 2 2 2	Y	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	Group consists of 8 Young self seeded Sycamore trees. Measurements and dimensions given are averages for the group	C.1 20 to 40 yrs
T1											
Crack Willow *Salix fragilis*	4.5	10	126 (Eq)	N 2 E 2 S 2 W 2	1 1 1 1	Y	A: 7.2 R: 1.51	Good	C: Good S: Good B: Good	Self seeded Crack willow	C.1 20 to 40 yrs
T2											
Norway Maple *Acer platanoides*	7	1	300	N 3.5 E 3.5 S 3.5 W 3.5	3 3 3 3	SM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Early mature specimen	C.1.2 20 to 40 yrs
T3											
Norway Maple *Acer platanoides*	7	1	310	N 4 E 4 S 4 W 4	3 3 3 3	SM	A: 43.5 R: 3.72	Good	C: Good S: Good B: Good		C.1.2 20 to 40 yrs
T4											
Norway Maple *Acer platanoides*	4.5	1	130	N 2 E 2 S 2 W 2	2 2 2 2	Y	A: 7.6 R: 1.55	Fair	C: Good S: Fair B: Good	Moderate amount of bark damage in stem at 1m	C.1 20 to 40 yrs

Age Classifications:
N Newly planted
Y Young
SM Semi-mature
M Mature
OM Over Mature
D Dead

Condition:
C Crown
S Stem
B Basal area

Stems:
Ø Diameter
(Eq) Equivalent stem diameter using BS5837:2012 definition

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T5											
Norway Maple *Acer platanoides*	3.5	1	60	N 1 E 1 S 1 W 1	1.7 1.7 1.7 1.7	Y	A: 1.6 R: 0.71	Fair	C: Fair S: Fair B: Fair	Tree's leader has snapped. Moderate amount of bark damage in stem and at base. Tree is located in a raised planting bed.	C.1 20 to 40 yrs
T6											
Norway Maple *Acer platanoides*	4	1	70	N 1.5 E 1.5 S 1.5 W 1.5	1.5 1.5 1.5 1.5	Y	A: 2.2 R: 0.83	Good	C: Good S: Good B: Good	Tree is located in a raised planting bed	C.1 20 to 40 yrs
T7											
Norway Maple *Acer platanoides*	3.5	1	60	N 1.5 E 1.5 S 1 W 1	1.5 1.5 1.5 1.5	Y	A: 1.6 R: 0.71	Poor	C: Fair S: Poor B: Poor	Tree has a large amount of bark damage in stem and at base. Minor deadwood in crown	U <10 yrs
T8											
Prunus 'Kanzan' *Prunus 'Kanzan'*	6.5	1	390	N 6 E 5 S 5 W 5	3 3 3 3	M	A: 68.8 R: 4.67	Good	C: Good S: Good B: Good		B.2 20 to 40 yrs
T9											
Norway Maple *Acer platanoides*	9	1	220	N 3 E 4 S 3 W 4	5 5 5 5	SM	A: 21.9 R: 2.64	Good	C: Good S: Good B: Good		C.1.2 20 to 40 yrs
T10											
Norway Maple *Acer platanoides*	9.5	1	260	N 4.5 E 4.5 S 4.5 W 4.5	7 4 3 7	SM	A: 30.6 R: 3.12	Good	C: Good S: Good B: Good		C.1.2 >40 yrs

Age Classifications:
N Newly planted
Y Young
SM Semi-mature
M Mature
OM Over Mature
D Dead

Condition:
C Crown
S Stem
B Basal area

Stems:
Ø Diameter
(Eq) Equivalent stem diameter using BS5837:2012 definition

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T11											
Wild Cherry *Prunus avium*	5.5	1	160	N 2.5 E 2 S 2 W 2	2 2 2 2	Y	A: 11.6 R: 1.92	Good	C: Good S: Good B: Good		**C.1** 20 to 40 yrs
T12											
Unknown - -	3	1	80	N 2 E 2 S 2 W 2	1.5 1.5 1.5 1.5	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good		**C.1** 20 to 40 yrs
T13											
Norway Maple *Acer platanoides*	6	1	200	N 3 E 3 S 3 W 3.5	2 2 2 2	SM	A: 18.1 R: 2.4	Good	C: Good S: Good B: Good		**C.1** 20 to 40 yrs
T14											
Norway Maple *Acer platanoides*	5.5	1	140	N 2 E 2 S 2 W 2.5	2 2 2 2	Y	A: 8.9 R: 1.68	Good	C: Good S: Good B: Good		**C.1** 20 to 40 yrs
T15											
Norway Maple *Acer platanoides*	5.5	1	170	N 2.5 E 2.5 S 2.5 W 3	2 2 2 2	Y	A: 13.1 R: 2.04	Good	C: Good S: Good B: Good		**C.1** 20 to 40 yrs
T16											
Common Ash *Fraxinus excelsior*	4	1	50	N 1.5 E 1.5 S 1.5 W 1.5	1 1 1 1	Y	A: 1.1 R: 0.59	Good	C: Good S: Good B: Good	Young self seeded Ash tree	**C.1** >40 yrs

Age Classifications:
N Newly planted
Y Young
SM Semi-mature
M Mature
OM Over Mature
D Dead

Condition:
C Crown
S Stem
B Basal area

Stems:
Ø Diameter
(Eq) Equivalent stem diameter using BS5837:2012 definition

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T17										Estimated Measurements	
Silver Birch	13	1	240	N 5	3	SM	A: 26.1	Good	C: Good		**C.1.2**
Betula pendula				E 5	5		R: 2.88		S:		
				S 5	5				B:	Tree is located in a neighbouring property to which access was not gained. Therefore the tree could not be fully inspected, and the stem diameter measurement given is an estimate	20 to 40 yrs
				W 5	5						

Age Classifications:
N Newly planted
Y Young
SM Semi-mature
M Mature
OM Over Mature
D Dead

Condition:
C Crown
S Stem
B Basal area

Stems:
Ø Diameter
(Eq) Equivalent stem diameter using BS5837:2012 definition

Report selection criteria.

Projects.

Unit 1, Victoria Road, South Ruislip, HA4 0QB

Date Range.

Any Date

Work types.

----> -No Selection made-

Latest Survey.

All surveys for the selected trees.
---> Last survey for each selected tree.

Work Completed.

---> Work Completed
---> Work Not Completed

Number of trees in selected Project(s)	**18**
Number of trees in Report selection	**18**

Age Classifications:	N	Newly planted	M	Mature	**Condition:**	C	Crown	**Stems:**	Ø	Diameter
	Y	Young	OM	Over Mature		S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition
	SM	Semi-mature	D	Dead		B	Basal area			