QUINN ESTATES LTD / MILDVALLEY HOMES LTD

ALBERT ROAD
DEAL
KENT

Arboricultural Impact Assessment

December 2015
8801_AIA.001

COPYRIGHT

The copyright of this document remains with Aspect Arboriculture Ltd. The contents of this document therefore must not be copied or reproduced in whole or in part for any purpose without the written consent of Aspect Arboriculture Ltd.

Aspect Arboriculture Ltd
Hardwick Business Park
Noral Way
Banbury
Oxfordshire
OX16 2AF

t 01295 276066
f 01295 265072

e info@aspect-arbor.com
w www.aspect-arbor.com

CONTENTS

APPENDICES

1 INTRODUCTION

1.1 Instruction

1.1.1 This Arboricultural Impact Assessment has been prepared by Aspect Arboriculture to inform a planning application submitted by Quinn Estates Ltd / Mildvalley Homes Ltd.

1.1.2 The proposals relate to the introduction of mixed use residential led development with associated access and car parking to an existing industrial site.

1.2 Scope

1.2.1 In keeping with current industry advice, this work has been guided by BS5837:2012 Trees in Relation to Design, Demolition and Construction and provides an assessment of the application areas existing trees, and their relationship with the proposed development.

1.3 Limitations

1.3.1 This work relates to arboriculture, therefore reliance should not be given to comments made in respect of other disciplines, i.e. landscape planning or civil engineering without first consulting an appropriate expert.

1.3.2 This assessment has been prepared in respect of proposed development and should not be interpreted as a report on tree health and safety. Reasonable effort has been made to identify visible defects whilst undertaking the tree survey; trees are however, prone to natural failure without warning therefore no guarantee can be made as to the absolute safety of any of the trees surveyed. Aspect's opinion of tree condition and structural potential is therefore valid for a limited period of 12 months from the date of inspection. Validity is assumed in the absence of inclement weather and no change to the trees existing context.

1.4 Site Description

1.4.1 The application area is currently comprised of a parcel of land located between Albert Road, and Southwall Road, Deal, Kent. The site currently contains industrial buildings and associated hard surfacing. The site is administered by Dover District Council (DDC) as the Local Planning Authority.

1.4.2 Existing tree cover occurs primarily on the site boundaries and divides the eastern and western sections of the application area.

2 POLICY CONSIDERATIONS

2.1 Dover District Local Plan

2.1.1 The site occurs within the administrative control of Dover District Council which has a statutory obligation to ensure adequate provision is made for the preservation of trees through Section 197 of the Town and Country Planning Act (1990). It is understood that the Council's primary development control documents, which relate to trees, are the adopted Core Strategy (February 2010), and the adopted Local Plan (2002).

2.1.2 Within the Council's development control documents, the relationship between trees and development are understood to be included within Policy DM15 of the Core Strategy & Policies LE5 & CO8 of the Local Plan. In the context of development, there is a default preference for important trees to be retained and protected within new developments.

2.1.3 **POLICY DM15 Protection of the Countryside**

Development which would result in the loss of, or adversely affect the character or appearance, of the countryside will only be permitted if it is:

i. *In accordance with allocations made in Development Plan Documents, or*
ii. *justified by the needs of agriculture; or*
iii. *justified by a need to sustain the rural economy or a rural community;*
iv. *it cannot be accommodated elsewhere; and*
v. *it does not result in the loss of ecological habitats.*

Provided that measures are incorporated to reduce, as far as practicable, any harmful effects on countryside character.

2.1.4 **POLICY LE5**

Planning permission for the development of land at Albert Road, Deal for Use Classes B1 and B2, and for the extension of the adjacent Builder Centre and Timber Yard only will be permitted provided:

iv. existing boundary vegetation will be retained and enhanced

2.1.5 **POLICY CO8**

Development which would adversely affect a hedgerow will only be permitted if:-

i. no practicable alternatives exist;
ii. suitable native replacement planting is provided; and
iii. future maintenance is secured through the imposition of conditions or legal agreements.

2.1.6 This document has been prepared in direct response to DDC's Policy requests. It provides an assessment of the trees within influence of the application area, their visual significance, their suitability for integration within a completed development, an assessment of the potential for tree loss/tree works, and to inform opportunities for replacement tree planting.

3 STATUTORY DESIGNATIONS RELATING TO ARBORICULTURE

3.1 Tree Preservation Order(s)

3.1.1 Enquiries made into Dover District Council's Tree Preservation Orders has confirmed the absence of Tree Preservation Orders confirmed within influence of the application area (DDC, February 2015).

3.2 Conservation Area

3.2.1 Background checks also show that the site does not occur within a conservation area. The Council is therefore understood not to require notice of any intention to undertake works to trees in order to consider the making of new TPOs (DDC, December 2015).

4 BASELINE INFORMATION

4.1 Tree survey

4.1.1 Pursuant to the Council's policy requirements combined with best practice, the site's existing trees have been surveyed under guidance provided by BS5837:2012. Existing trees within influence of the application area can subsequently be described by reference to 15no. individual trees, 8no. groups of trees and 2no. hedgerows.

4.1.2 The survey provides a record of species, dimensions, age, physiological and structural condition and the perceived visual importance of each tree/hedgerow. A red line plan of the survey area is included in Appendix A.

4.1.3 Note that baseline tree survey work has been undertaken independently of any proposals and prior to any form of preparatory works occurring on site. Aspect's opinion of the trees' significance is therefore independent of specific proposals for development.

4.1.4 The trees have been assessed on an individual tree basis, however where appropriate, trees have also been assessed as groups. The term 'group' is used to define trees that form a cohesive arboricultural feature, i.e. aerodynamically, visually or culturally. The assessment of individuals within groups has also been undertaken where it will be advantageous to make such a differentiation.

4.1.5 In all instances, the tree survey has been undertaken visually, from ground level and from land on which access was permitted. Where access was not available or practicable, measurements have been estimated; this also typically applies to the trunk diameters of small trees occurring as understory to larger independently surveyed tree groups.

4.1.6 *Full detail of the tree stock is provided within Appendix B; the distribution of the trees is illustrated in Appendix C. Details of the applied methodology are provided in Appendix E.*

5 TREE CONSTRAINTS

5.1 The proposals have been designed with the overall objective of achieving confident long-term retention of existing trees, particularly those of importance to the site's amenity. This includes minimisation of future pressures for tree clearance and nuisance complaints post-completion of the development. To facilitate this relationship, the following constraints have been provided:

5.2 Canopies

5.2.1 The distribution of the Site's canopy area is illustrated on the Tree Constraints Plan in Appendix C. Canopies have been measured at cardinal points for individual trees and informed by a topographical survey.

5.2.2 It has been Aspect's default position that no proposed buildings are sited within the canopy spreads of retained trees; where it is necessary for proposed structures to be sited within close proximity to canopies; this has been balanced with an allowance for future growth and with species attributes.

5.2.3 Vertical canopy clearance has been referenced where it is necessary to permit access beneath canopies, albeit where justifiable. Our default position has been to avoid access beneath canopies where possible.

5.3 Root Protection Areas

5.3.1 RPAs are illustrated as a radius from the trunk in plan form and represent the minimum soil surface area required to enable each tree/group's confident retention. It has been our default position that this area remains undisturbed and sacrosanct during development of the Site.

5.3.2 In accordance with table.2 of BS5837:2012, the relative quality of the trees in respect to suitability for retention is illustrated by the colour of their Root Protection Area.

5.4 Grading Categories

5.4.1 The quality of the trees is described by reference to BS5837 categories which in this instance range B, C and U in order of their constraint.

5.5 **Category B Tree Cover**

5.5.1 **T1** Hybrid Black Poplar, **T5** Sycamore, **G2 & G3:** Boundary groups and individual trees within the applicant's control, located between the industrial and open areas of the site; considered to provide a moderate contribution to the site's visual amenity.

5.5.2 **T15** Silver Birch: Located offsite within the industrial area of the site, although demonstrating some damage to the lower stem, this tree is considered to provide a moderate individual contribution to amenity.

5.6 **Category C Tree Cover**

5.6.1 With the exception of category U trees, all remaining tree cover is considered to represent generally unremarkable examples of their type i.e.: trees that demonstrate compromised structure, signs of stress; trees of indifferent structural and physiological appearance and of limited or transient amenity value which may be readily replaced without significant individual impact on the amenity of the site.

5.6.2 Irrespective of their quality, particular benefits provided by category C components relate to: filtering views of the site and contributing to the definition of the site boundaries.

5.7 **Category U Tree Cover**

5.7.1 **G4** Leyland Cypress: This group is considered to warrant category U on the grounds that at the time of survey it was partially dismantled and is of significantly reduced future potential if retained within its current context.

6 IMPACT ASSESSMENT

6.1 Preliminary Tree Protection Plan

6.1.1 In keeping with the recommendations of BS5837:2012, our assessment of the proposed layout in relation to the existing trees is presented as a *Preliminary* Tree Protection Plan (refer to Appendix D).

6.1.2 The purpose of the TPP is to: a) identify trees to be retained and integrated within the proposed setting, b) illustrate safeguarding measures to ensure that retained trees are not harmed, either during the course of construction, or as a result of the development; and lastly, c) identify trees that it is necessary to remove in order to implement the proposed framework.

6.1.3 Our assessment and the TPP are informed by the tree survey and constraints plan balanced with the requirements of the proposals and adopted policy. The tolerance of the trees to disturbance, based on species, age, condition and the presence of surrounding trees has also been considered. Our opinion of the quality and value of the trees is taken into account, with high quality and offsite trees adjacent to the site prioritised for retention by default.

6.2 Tree Removals Necessary To Implement proposed development

5.7.2 The proposed layout necessitates the removal of 8no. category C trees, 1no. category C group of trees and partial removal of one further category B group. The required removals are detailed within the table below:

Table 1. Tree Removals by Category

Category B	Category C
G2 Sycamore, Hawthorn, Elder (Partial Removal)	T6 Common Ash T8-T14 Silver Birch G5 Beech, Hawthorn, Elder

6.2.1 The removals listed within table 1 are predominantly low quality, and are not considered significant, subject to appropriate replacement mitigation planting proposals.

6.2.2 Tree cover to be removed is illustrated in Appendix D and is distinguishable from retained trees through the absence of an RPA or a hatched canopy; the identification numbers of trees recommended for removal are shown coloured red and canopy edges are both dashed and coloured red. As a precaution against erroneous felling, it is recommended that the project arboriculturist spray-marks the trees with a red flash in the presence of an appointed arboricultural contractor as part of a pre-commencement meeting.

6.2.3 It is recommended that clearance works should be timed to avoid the main nesting season for birds between 1st March and 31st August. If scheduled within this period it is recommended that an ecologist is present to advise on any necessary protective measures, and on hand to confirm that tree works are not likely to cause disturbance to nesting birds.

6.3 Protective Barriers

6.3.1 Pursuant to the Council's advice, it will be necessary to protect the above and below ground structures of retained trees from damage during construction. To achieve this, the barrier specification for direct protection should consist of the default specification provided in BS5837:2012 (shown overleaf). It is considered essential that this is erected prior to occupation of the site for construction related purposes.

6.3.2 The location for the tree protection barriers is illustrated within Appendix D with a bold blue line. It would be prudent for the project arboriculturist to oversee the initial setting out of tree protection barriers and provide written confirmation to DDC's arboricultural officer on completion.

Plate.1 Default Protective Barrier Specification

6.4 Access Facilitation

6.4.1 It will be necessary to prune H1 and G1 to provide construction access for proposed built form and car parking respectively. The extent of pruning is to be determined on site, but is anticipated to amount to the shortening of minor branches only, and is considered achievable without detriment to retained boundary tree cover.

6.4.2 Throughout the remaining site, dead branches should be entirely removed from the canopies of retained trees on the boundaries. Although this work is not required to facilitate construction, it will help mitigate the risk of future tree related hazards emerging. It would be prudent for this work to coincide with clearance work on account that access to the trees will be unimpeded.

6.4.3 The above works should be undertaken in accordance with BS3998:2010 by a competent tree contractor to ensure that cuts are performed correctly, and positioned so as to avoid future structural defects or physiological issues, facilitate growth and maintain aesthetic value.

6.5 Manual Excavation

6.5.1 There are is one section of proposed internal road where excavation will be required within the western periphery of the RPA of T1. This incursion is considered acceptable subject to the precautionary measure of any excavation works within the RPA being undertaken by hand, following the principles contained within section 7.2 of BS5837:2012 'Avoiding physical damage to the roots during demolition or construction'. To ensure that the principles are adhered to, it is recommended that the works within the RPA are carried out under direct arboricultural supervision.

6.6 Mitigation

6.6.1 Trees that are recommended for removal can be mitigated for as part of a comprehensive scheme of soft landscaping submitted separately. It is known that this work introduces specimen trees to the site interior, alongside enhancement of the boundary tree cover. It is also understood that the proposed SUDS provide a further opportunity for mitigation tree planting. These measures will ensure enhancement in terms of the future amenity potential of the application area, and increase the proportion of the site under canopy.

6.6.2 Depending on species choice, i.e. native species and cultivars that are appropriate for inclusion within a residential setting, new specimen trees will ensure continuity with the important, amenity trees retained on the boundaries.

6.6.3 The use of advanced nursery stock that seeks to provide seasonal interest is also more likely to provide immediate and improved amenity benefits within external *and* internal views.

6.7 Future Pressure

6.7.1 The spatial relationship between future detailed proposals and retained trees will need to continue to demonstrate an avoidance of direct and indirect conflict with retained trees. This can be achieved through adequate clearance for unmaintained canopy growth and requirements for tree root development where appropriate. It is reasonable to presume that future layouts will be able to accommodate these factors during design.

6.8 **Phasing and Services**

6.8.1 At this stage, Aspect has not been able to assess the influence of proposed services, or provided input regarding the phasing of construction works as part of the application put forward. Pending the acceptability of the scale and nature of the proposed development to DDC, it is anticipated that these details will be the subject of a detailed application i.e. the focus of an Arboricultural Method Statement and *detailed* Tree Protection Plan.

7 CONCLUSIONS

7.1 Pursuant to the Council's policy requirements and current best practice in the context of proposed development, a BS5837:2012 survey and assessment has been prepared to inform the retention and protection of the application area's existing trees and hedgerows.

7.2 By design, it is our professional opinion that the proposals allow for confidence in the long-term retention of trees considered to be important to the future amenity of the site, and in facilitating the proposal's integration within the wider setting.

7.3 The principle of the proposed development is considered supportable from the arboricultural perspective and in terms of Local Policy where it relates to trees. This opinion is strongly subject to appropriate mitigation planting proposals, arboricultural input during detailed design, and the adoption of future safeguards for protecting trees.

8 RECOMMENDATIONS

8.1 Pursuant to the Council's preference to ensure tree retention during development, a detailed Arboricultural Method Statement should be prepared which expands on Appendix D, this could be requested by condition.

8.2 Heads of Terms could include: specifications for tree protection barriers, including any revisions to barrier locations; a schedule of tree works; phasing of work; safeguarding procedures for development within RPAs, and a scheme for auditing

tree protection and subsequent reporting to DDC's arboricultural officer should feature explicitly throughout.

8.3 Detailed Tree Protection Drawings should be prepared to 1:500 scale to support the AMS, with detail given of proposed levels and service routes.

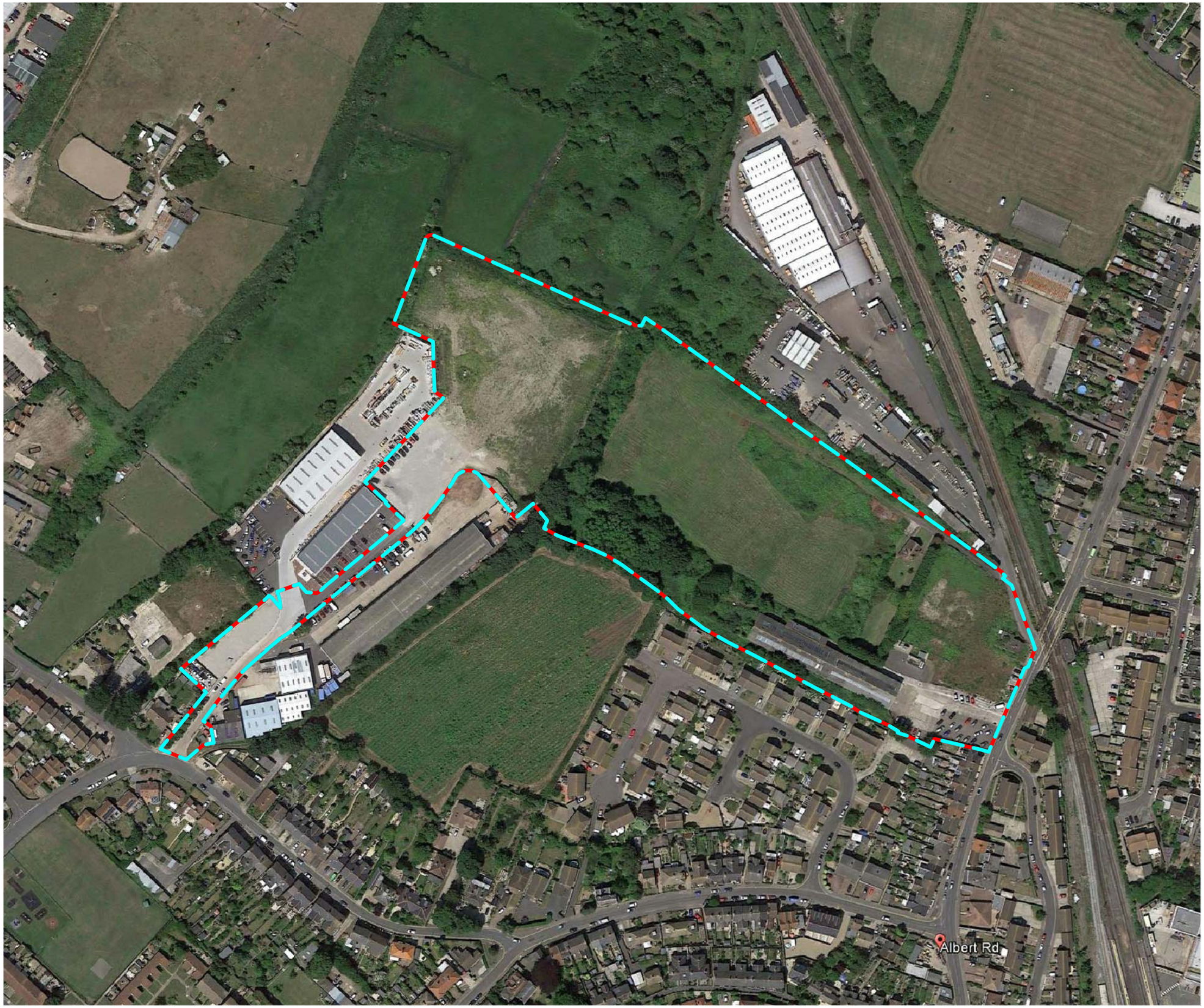
PREPARED BY:

James Bardey Bsc (Hons) TechArborA
Senior Arboricultural Consultant
E: james.bardey@aspect-arbor.com
T: 01295 276066

APPENDICES

APPENDIX A

SURVEY BOUNDARY PLAN (8801 SBP 01)



KEY:

Site Boundary

Extent of Tree Survey
(not application area boundary)

REV	DATE	NOTE	Drawn	Chk'd

REVISIONS

aspect arboriculture

TITLE

Albert Road, Deal
Survey Boundary Plan

CLIENT

Quinn Estates Ltd / Mildvalley Homes Ltd

SCALE	DATE	DRAWN
Not to scale	DEC 2015	GW

DRAWING NUMBER	REVISION
8801 SBP 01	

Cited from Google Earth

APPENDIX B

TREE SURVEY SCHEDULE (8801 TS 01)

aspect
arboriculture

BS 5837:2012 Tree Schedule: Albert Road, Deal

aspect arboriculture

BS5837:2012 Tree Survey: Explanation of Survey Criteria

Area around tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of roots and soil structure is a priority.

e.g.: young, semi-mature, early-mature, mature or over-mature

Sequential reference number cited on all aspect drawing.

Category prefix A-C denotes arboricultural quality, decreasing from A (high) to C (low); Subcategories 1, 2 and 3 highlight associated arboricultural (1), landscape (2) and ecological (3) qualities.

Height and Crown spread measured to the nearest half meter; # denotes where this is estimated.

Category U trees are those in such a condition that they cannot be realistically retained as living trees in the current context for the long term.

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)					Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
				N	E	S	W	radial							

Measured to the nearest 10mm; # denotes estimated diameter where access is not possible.

e.g.: above-average, average, below average or dead

General observations, i.e. defects, preliminary management recommendation, presence of pests/disease, perceived significance.

Height of first significant branch and/or canopy

e.g.: good, indifferent, poor, or hazardous

Colour band key:

- Category A
- Category B
- Category C
- Category U

The following survey should not be interpreted as a report on tree health and safety. Aspect's opinion of tree condition and structural potential is valid for a limited period of 12 months from the date of inspection. Validity is assumed in the absence of inclement weather and no change to the trees existing setting.

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m) N	E	S	W	radial	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
1	Hybrid Black Poplar	780 850 (over Ivy)	23m	8.50	7.25	9.00	8.50		2.5	Mature	Average	Poor	Stream 1m E and 2m S of stem Multi-stemmed from base into 2 x co-dominant stems Heavy Ivy growth in stem/crown previously severed at base Fracture in primary limb NE at 5m Upper canopy has structure typical for species Considered to be of moderate arboricultural value	B2	13.8
2	Sycamore	270 (over Ivy)	9m					3.00	3	Semi-mature	Average	Indifferent	Likely self-set specimen Stem forks at 1.6m into 2 x co-dominant stems Obscurred by Ivy Upper canopy has structure typical for species	C12	3.3
3	Hawthorn	290 (over Ivy)	5m	2.00	2.50#	4.00	4.00		0.75	Mature	Average	Indifferent	Structure is typical for species Obscurred by Ivy	C12	3.6
4	Crack Willow	350 380	16m	7.00	5.25	3.00	8.00		3	Early-mature	Average	Poor	Multi-stemmed from base into 2 x co-dominant stems 2 x sub-dominant stems previously removed Poor crown architecture Distinct lean to N	C12	6.3
5	Sycamore	900# (at base)	16m					6.75	5	Mature	Average	Poor	Established S side of stream at 1.5m Visible root flare/surface roots to N extending to stream edge Previously coppiced now forming 5 x co-dominant stems Upper canopy has structure typical for species Considered to be of moderate arboricultural value	B2	10.8
6	Common Ash	340 400	14m	8.00	7.00	6.00	6.75		2.8	Mature	Below Average	Poor	Multi-stemmed from base into 2 x co-dominant stems Bacterial canker/bark necrosis in co-dominant stem to S from base up to 2.5m Damaged surface root to E Upper canopy has structure typical for species Structural defect to S stem warrants transient quality and value	C12	6.3
7	Common Ash	4 x 220# av.	11m					6.75 (site)	1.75 (site)	Mature	Average	Poor	Limited visibililty/restricted access Established N side of stream Prolific Ivy growth Upper canopy appears to have a structure typical for species	C12	5.4
8	Silver Birch	210	8m		2.75				2.75	Early-mature	Average	Indifferent	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side Sycamore suckers at base	C12	2.4
9	Silver Birch	2 x 150	8m		3.50				2.75	Early-mature	Average	Poor	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Multi-stemmed from base Crown lifted site side	C12	2.4
10	Silver Birch	245	7m		4.00				2.75	Early-mature	Below Average	Indifferent	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side	C12	3
11	Silver Birch	260	7m		3.75				2.75	Early-mature	Below Average	Indifferent	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side	C12	3

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m) N	E	S	W	radial	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
12	Silver Birch	140	6m		2.25				2.75	Early-mature	Below Average	Poor	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side	C12	1.8
13	Silver Birch	200	7m		2.50				2.75	Early-mature	Average	Indifferent	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side	C12	2.4
14	Silver Birch	300	7m		3.25				2.75	Early-mature	Average	Indifferent	Ornamental planting Established within concrete/pebble stone inlay directly up to base of stems Crown lifted site side	C12	3.6
15	Silver Birch	320 300	11m	4.50	5.00	5.00	5.00		1.5 (at tips)	Mature	Average	Indifferent	Ornamental planting Hard surface (tarmac) road 5.25m S of stem Hard surface (block paving) car parking bay directly NE of stem Stem forks at 0.25m into 2 x co-dominant stem with well distributed crown Cambial damage to lower stem with visible discoloured heartwood Considered to be of moderate arboricultural value	B2	5.4
G1	Elder Hawthorn	2 x 200 max	5m max					2.75 av. (as drawn)	0	Mature	Average	Poor	Area of scrub Predominantly established N side of stream	C12	3.3
G2	Sycamore Hawthorn Elder	8 x 300 av. max	15m max					7.50 max (as drawn)	4 av.	Mature	Average	Poor	Copse of Sycamore forming a cohesive canopy Heavy ivy growth throughout group Understory of Hawhtorn and Elder Of low quality and value as individuals, considered to be of moderate arboricultural value as a collective	B2	10.2
G3	Sycamore Common Ash Privet Hawthorn Buddleigha	620# max	16m max					7.25 max	3.6 (over stream)	Mature to Over-mature	Average	Poor to Indifferent	Established S side of stream running E to W at approx. 1m from stems Stream runs within ditch falling 2.5m below site ground level to N	B2	7.5
G4	Leyland Cypress x 6	250 max	9m max					2.50	3 av.	Early-mature	Below Average	Poor	Partially dismantled	U	N/A
G5	Beech Hawthorn Blackthorn	150 max	7m max					2.50 av.	0	Semi-mature	Average	Indifferent	Tree line of Beech bordering garden Low quality/value shrubs to N	C12	1.8
G6	Crack Willow Sycamore Elder	150# max	5m max					2m (site)	0	Semi-mature to Mature	Average	Poor	Predominantly self-set/regenerating Crack Willow with low quality/value Sycamore trees and Elder shrubs Established N side of stream Predominantly multi-stemmed from base in structure Site crown edge pruned back to stream	C12	1.8
G7	Crack Willow Sycamore	8 x 160 av. Max	9m max					1.5 av. 6.25 max (as drawn)	1.75 av.	Semi-mature to Mature	Average	Poor	Predominantly self-set/regenerating Crack Willow with low quality/value Sycamore trees and Elder shrubs Established N side of stream Poor structural condition throughout	C12	5.4

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)					Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
				N	E	S	W	radial							
G8	Beech x 4	230# max	8m max					5.75 max	3 to 4	Early-mature	Average	Poor	Offsite Heavily 'topped' to recorded height Restricted access/limited visibility Hard surface to N/S	C12	2.7
H1	Elder Hawthorn Bramble	100 max	4m max					1.5 av. (to site)	0	Mature	Average	Indifferent	Area of intermittant scrub forming hedge-like structure	C12	1.2
H2	Leyland Cypress	200# max	5m max					1.50	0.5	Early-mature	Average	Indifferent	Established ornamental hedgerow Hard surface access road (tarmac) 0.5m S of stems	C12	2.4

APPENDIX C

TREE CONSTRAINTS PLAN (8801 TCP 01)

1:1500 @ A3

0m 10m 20m 50m

KEY:

- 15 — Tree Numbers
- Tree Canopies
- [8] — Category 'U' Trees
- Category 'B' RPA
- Category 'C' RPA

Note: Trees 7 & 15, Groups G1, G4-G7 and Hedgerows H1 & H2 are not on the topographical survey and their locations are approximated using scale aerial photographs combined with measurements taken on site.

Cited from Google Earth

REV	DATE	NOTE	Drawn	Chk'd

REVISIONS

aspect arboriculture

TITLE

Albert Road, Deal
Tree Constraints Plan

CLIENT

Quinn Estates Ltd / Mildvalley Homes Ltd

SCALE	DATE	DRAWN
1:1500 @ A3	DEC 2015	GW

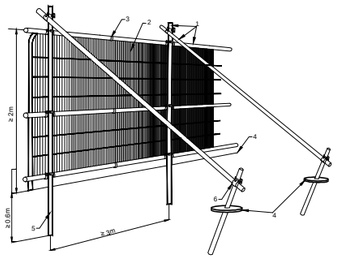
DRAWING NUMBER	REVISION
8801 TCP 01 Rev A	

Based on os base ref: deal level survey_02.dwg

APPENDIX D

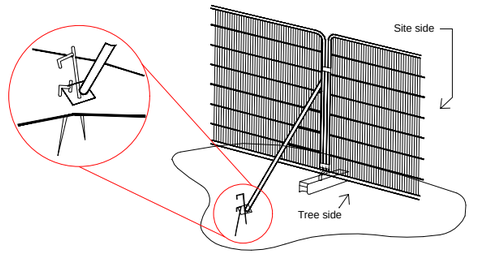
TREE PROTECTION PLAN (8801 TPP 01)

Default Barrier Specification, cited BS 5837:2012



Key
1 Standard scaffold poles
2 Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6m)
6 Standard scaffold clamps

Secondary Barrier Specification, cited BS 5837:2012



Heras panels supported with stabiliser strut with base plate secured with ground pins

G1: To be pruned back to facilitate proposed parking spaces.

H1: To be pruned back to facilitate proposed building and road and to allow room for construction

T1: Footprint of proposed road within RPA to be manually excavated under direct arboricultural supervision. Tree protection barriers to be relocated to secondary position during construction.

1:1500 @ A3

0m 10m 20m 50m

KEY:

- Site Boundary
- 15 Tree Numbers
- Tree Canopies
- [8] Category 'U' Trees
- Category 'B' RPA
- Category 'C' RPA
- 7 Trees to be Removed
- Manual Excavation
- Tree Protection Barrier
- Tree Protection Barrier (Secondary Specification)
- Tree Protection Barrier (2nd Position)

Cited from Google Earth

REV	DATE	NOTE	Drawn	Chk'd

REVISIONS

aspect arboriculture

TITLE

Albert Road, Deal
Tree Protection Plan

CLIENT

Quinn Estates Ltd / Mildvalley Homes Ltd

SCALE	DATE	DRAWN
1:1500 @ A3	DEC 2015	GW

DRAWING NUMBER	REVISION
8801 TPP 01	

Based on proposed layout ref: 22209_Final Masterplan.dwg

APPENDIX E

TREE SURVEY METHODOLOGY

Tree Survey Methodology

The tree survey is a form of Visual Tree Assessment undertaken on 2nd December 2014, at the time of the survey, the weather was overcast. Tree locations are identified via a topographical survey; locations of any trees excluded from the topographical survey were plotted on site. The purpose of the survey is to record information about trees on or adjacent to the site to inform design options. In keeping with clause 4.4 of BS5837: 2012 'Trees in Relation to Design, Construction and Demolition', the survey provides a record of the following parameters:

Tree Numbers: all individual trees are sequentially numbered. Groups of trees, woodlands and hedgerow are also sequentially numbered with a corresponding prefix relevant to their type e.g. G, W or H respectively; the identification of trees as woodland, groups of trees or within hedgerows is undertaken where appropriate. The identification of trees as individuals within collections has been made where it is considered sensible to make such a differentiation.

Species: listed by common name

Stem Diameter: given in millimetres and obtained by measuring single/multiple stems at 1.5m using a diameter tape in accordance with Annex C within BS5837:2012. Diameters of inaccessible trunks are estimated and provided with the suffix '#'.

Tree Heights: determined using a clinometer and measured to the nearest 500mm. Heights are estimated where specific triangulation is not achievable and by reference to measured trees nearby (provided with the suffix '#').

Crown Spreads: measured at cardinal points using a Leica Disto™ laser distance measurer. Measurements were recorded to the nearest 250mm. Inaccessible crown spreads are estimated based on measured canopies nearby and provided with the suffix '#'

Crown Clearance: The height of the first significant living branch and/or canopy (as appropriate) is recorded using a Leica Disto™ laser distance measurer to inform vertical ground clearance. Crown clearance may be higher or lower than the first significant branch. Estimated clearances are provided with the suffix '#'. Height of first significant branch will be provided where considered advantageous to make the distinction.

Life Stage – The age of trees, groups of trees, hedges and woodlands are defined as follows:

- Young (within the first 1/4th of life expectancy)
- Semi-mature (within the second 1/4th of life expectancy)
- Early Mature (within the third 1/4th of life expectancy)
- Mature (within the fourth 1/4th of life expectancy)
- Over Mature and Veteran (exceeding normal life expectancy)
- Veteran (significantly exceeding normal life expectancy)

Physiological and structural condition: physiological condition defined as follows; good, above average, average, below average, poor or dead. Structural condition is defined as: good, moderate, indifferent, poor or hazardous

Comments: further observations were recorded where necessary i.e. details regarding defects, preliminary management recommendations, presence of pest/disease and perceived significance.

BS5837 Category: pursuant to BS5837:2012 section 4.5 and cascade chart for tree quality assessment (refer to reproduced Table 1 overleaf). Trees qualifying under a given category (A-C and U) and any appropriate subheading (1-3) are considered to fall within the scope of that category's definition.

Estimated Remaining Contribution. Described` as a guideline only and in terms of years: <10, 10+, 20+ and 40+ relevant to category U, C, B and A respectively. This information is not provided on the tree schedule to avoid conclusions based upon 'life expectancy'.

Table 1 **Cascade chart for tree quality assessment**

Category and definition	**Criteria (including subcategories where appropriate)**		
Trees unsuitable for retention (see Note)			
Category U Those 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 have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.*		
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**
Trees to be considered for retention			
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	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)
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	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	Trees with material conservation or other cultural value
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	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	Trees with no material conservation or other cultural value

landscape planning • ecology • arboriculture

aspect

Aspect Arboriculture Ltd
West Court
Hardwick Business Park
Noral Way
Banbury
Oxfordshire OX16 2AF

T: 01295 276066
F: 01295 265072
E: info@aspect-arbor.com
W: www.aspect-arbor.com