

8854_AN.001 May 2015 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

LAND EAST OF WOODSTOCK, OXFORDSHIRE: ARBORICULTURAL IMPACT ASSESSMENT ADDENDUM

1. Further to arboricultural details submitted as part of a hybrid application for residential led development at land east of Woodstock, Aspect Arboriculture have prepared the following addendum in light of proposed to changes to the scheme, these changes are listed below.

2. Concept Masterplan (Phase 1):

Aspects of the revised concept master plan for Phase 1 that influence existing tree cover are as follows;

- 4no pedestrian foot links to the wider site;
- A secondary road link to the wider site;
- Reconfiguration of a primary road and secondary road to the wider site.

The above revisions to the masterplan result in the loss of 12no individual trees, c.20m of H2 and c.26m of H11 (refer to Table 1. overleaf). Previously, tree losses amounted to 15no of trees and a total of c.79m of H11. The revised layout for Phase 1 therefore facilitates in the additional retention of 3no individual trees and c.33m of hedgerow (Table 1.).



Table.1: Tree Removals to Implement Revised Masterplan (by category)				
В	C	U		
T339 Weeping Willow	T230 Common Ash	[T237] Elm		
T343 Weeping Willow	T315 Sycamore	[T307] Dead		
H12 partial clearance (c.58m)	T316 Ash	[T320] Sycamore		
	T317 Field Maple	[T326] Elm		
	T318 Common Lime	[T327 & T328] Dead		
	T324 Field Maple	[T338] Field Maple		
	T325 Lime			
	T340 Field Maple			
	T341 Ash			
	T342 Field Maple			
	H2 partial clearance (c.20m)			
	H11 partial clearance (c.26m)			

3. Concept Masterplan (Wider Site):

Aspects of the revised concept masterplan for the wider site that influence existing tree cover are as follows;

- 2no access pedestrian foot links from Oxford Road;
- 1no pedestrian foot links through from Shipton Road.

The above revisions to the masterplan result in the loss of c.10m of H3. The route of the foot link from Shipton Road utilises an existing unsurfaced track transecting G2. The track appears to be compacted by regular pedestrian use and agricultural trafficking. The introduction of the access is not considered likely to result in harm to trees or incur tree losses. A precautionary approach to ensure this remains the case is to construct this feature above soil as per a similar feature described in section 6.4.5 of the submitted AIA (enclosure C).

4. Relocation of proposed Upper Campsfield Road vehicular access:

The layout for the proposed Upper Campsfield Road vehicular access has been relocated approximately 70m south. This incurs the removal of 36no individual trees, 2no of which are category B (refer Table.2 overleaf). The previous layout incurred the removal of 33no individuals trees, however 6no of those were category B.



Table.2: Tree Removals to Implement Relocated Upper Campsfield Road (by category) B C U				
64 & 81 English Oak	42 & 43 Sycamore	[60], [71] & [80] English Oak		
	44 & 45 English Oak			
	46 - 49 Sycamore			
	58 Sycamore			
	59 Common Ash			
	61 - 63 Sycamore			
	65 Sycamore			
	66 Common Ash			
	67 English Oak			
	68 & 69 Sycamore			
	70 English Oak			
	72 - 74 Common Ash			
	75 Sycamore			
	76 – 79 Common Ash			
	82 English Oak			
	83 Common Ash			
	84 & 86 English Oak			
	87 & 88 Sycamore			
	94 Sycamore			

An unwooded area of c.332m² is available to the north and south of the relocated roundabout which could receive reinforcement plantings to create a new wind-firm edge adjacent to cleared areas. This area is less than that achieved with the previous layout (c.500m²); however, this is due to the presence of more existing trees that can be retained north and south of the proposed roundabout.

Mitigation planting could be further extended within the retained sections north and south of the proposed roundabout through selective thinning and replacement of category U trees. This could be included within a wider programme of management typical of woodland and shelterbelts, i.e. by condition or reserved matters application for the wider site.

The installation of kerb setts associated with the Upper Campsfield Road access should be manually excavated due to its proximity to RPAs of retained edge trees within G1. The proposed access road should also be manually excavated where occurring within the RPAs of tree nos. T33, T41, T57, T85, T92, T93 and T96. The procedure for manual excavation is detailed within the submitted AIA (refer to enclosure C, section 6.4.10 – 6.4.11).

5. Conclusions

It is our professional opinion that the amendments made to the concept masterplan and the access proposals do not result in material change to our previous conclusions, i.e. the proposal



as formulated would not adversely affect important trees, and where tree losses are incurred they may be adequately mitigated for.

Enclosures:

- A: Tree Protection Plan 8854 TPP 07 (Masterplan)
- B: Tree Protection Plan 8854 TPP 07 (Upper Campsfield Road Access)
- C: Arboricultural Impact Assessment 8854_AIA.001



ENCLOSURE A:

Tree Protection Plan 8854 TPP 07 (Masterplan)

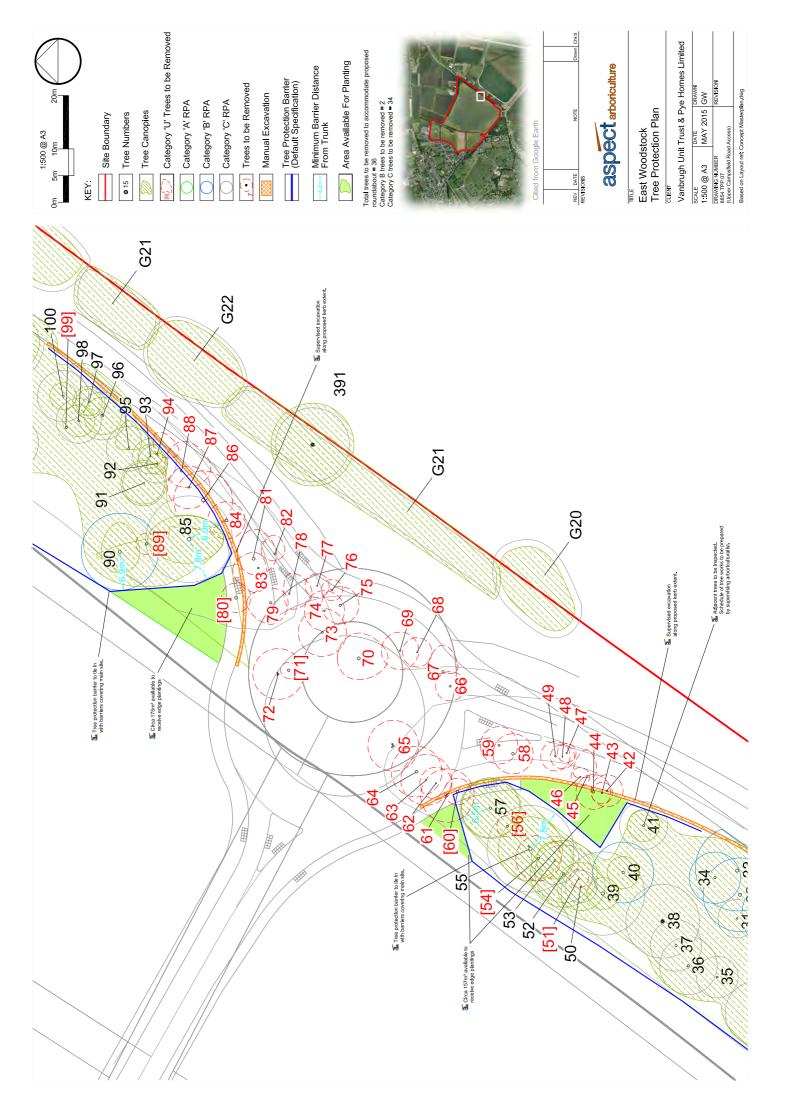




ENCLOSURE B:

Tree Protection Plan 8854 TPP 07 (Upper Campsfield Road Access)





ENCLOSURE C:

Arboricultural Impact Assessment 8854_AIA.001



VANBRUGH UNIT TRUST PYE HOMES LIMITED



PROPOSED DEVELOPMENT AT LAND EAST OF WOODSTOCK,

Arboricultural Impact Assessment

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

APPENDIX G



MASTERPLAN

CONTENTS

1. INTRODUCTION		1	
2.	2. POLICY CONSIDERATIONS		
3. STATUTORY DESIGNATIONS RELATING TO ARBORICULTURE		6	
4.	4. BASELINE INFORMATION		
5.	5. TREE CONSTRAINTS		
6.	6. IMPACT ASSESSMENT		
7.	CONCLUSIONS	21	
8.	RECOMMENDATIONS	22	
APPENDICES			
SURV	EY BOUNDARY PLAN	APPENDIX A	
TREE SURVEY SCHEDULE		APPENDIX B	
TREE CONSTRAINTS PLAN		APPENDIX C	
PREL	IMINARY TREE PROTECTION PLANS		
	PHASE 1 DETAILED AREA APPENDIX		
UPPER CAMPSFIELD ROAD ACCESS APPENDIX		APPENDIX E	
	BUS LINK WITH SHIPTON ROAD	APPENDIX F	

1 INTRODUCTION

1.1 Instruction

- 1.1.1 Aspect Arboriculture has been commissioned to prepare an Arboricultural Impact Assessment (AIA) to accompany a hybrid planning application for residential led development on land to the east of Woodstock, Oxfordshire.
- 1.1.2 The proposals are put forward jointly by the Vanbrugh Unit trust and Pye Homes Limited, and relate to:
- 1.1.3 'Outline Planning Application for up to 1,500 dwellings, including affordable housing and up to a 150 unit care village with associated publicly accessible ancillary facilities; site for a new primary school; up to 930sqm of retail space; up to 7,500sqm locally led employment (B1/B2/B8) including link and ride; site for a Football Association step 5 football facility with publicly accessible ancillary facilities; public open space; associated infrastructure, engineering and ancillary works, with vehicular access provided from Upper Campsfield Road (A4095), Shipton Road and Oxford Road (A44)'

1.2 **Scope**

- 1.2.1 This work provides an appraisal of the relationship between the application area's existing trees and the development proposals. Detailed assessment is prepared for the detailed area of Phase 1 and the proposed vehicular access introduced from Upper Campsfield Road only; in respect of the outline areas of the application, 'in principle' recommendations are provided by reference to the wider site Masterplan.
- 1.2.2 In line with current industry advice, the arboricultural information presented herein has been guided by the recommendations within British Standard document BS5837:2012 'Trees in Relation to Design, Demolition and Construction'.

1.3 Site Description

1.3.1 The site currently comprises three large arable fields and one playing field located on the eastern edge of Woodstock (Refer to plan SBP.01 within Appendix 1). The southeastern site boundary abuts the A4095 Upper Campsfield Road; the southwest



boundary adjoins the A44 Oxford Road; Shipton Road and the most of the adjoining residential development lie to the north and northwest of the site.

1.3.2 Internally, the field boundaries vary from managed low-level hedgerows to more established hedges with hedgerow trees. Areas adjacent to the A4095 and Shipton Road are more readily defined by managed deciduous tree belts; along the Oxford Road the tree cover is comprised of mostly established agricultural hedgerows, but the presence of offsite mature trees affords it a sylvan presence, particularly where opposite Campsfield Wood. Hedgerow with established trees serves to separate the site from existing residential development which lies immediately to the west.

1.4 Limitations

- 1.4.1 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.
- 1.4.2 This work relates to arboriculture, therefore reliance should not be given to comments made in respect of other disciplines i.e. landscape, ecology or civil engineering without first consulting an appropriate expert.



2 LOCAL POLICY CONSIDERATIONS

2.1 Administration

- 2.1.1 The site straddles the administrative boundaries of Cherwell District Council (CDC) and West Oxfordshire District Council (WODC). In terms of development control, both CDC and WODC have 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). In response to this requirement, both Councils have prepared specific standards and policies within their primary development control documents.
- 2.1.2 A review of this information has been undertaken to assist reaching balanced conclusions regarding the significance of the site's existing trees, and the influence upon them arising from the proposals put forward.

2.2 Cherwell Local Plan 1996 and draft Cherwell Local Plan 2006-2031

- 2.2.1 Trees are of particular relevance to Policies C14 and C28 in part within the 2006 Local Plan wherein the Council recognises the important contribution that trees make to the amenity of urban and rural areas as natural features. The screening and amenity potential associated with trees is also cited as being able to enhance the appearance of new development.
- 2.2.2 In the context of proposed development, there is presumption in favour of tree retention pursuant to which the applicant is expected to identify and retain important tree cover. To establish the presence of important trees, balance tree retention/removal and inform landscape mitigation proposals, the Council recommends applicants refer to guidance provided within BS5837.
- 2.2.3 Wherever new tree or hedge planting is considered justified by the nature or scale of a proposed development, the Council require the provision of mitigation proposals; for example to offset the removal of less-important trees whose removal is demonstrated to be unavoidable.
- 2.2.4 Policy ESD 10 within the draft Local Plan (adopted for development control), maintains a presumption for tree retention on account of the multiple benefits and values associated with trees in the preceding plan. Supporting text also includes an



expectation for developers to incorporate and enhance biodiversity and the natural environment e.g. through design and protection during construction, with trees being an implicit consideration.

2.3 Policy C14 – Trees and Landscaping

'In exercising its development control functions the council will normally accept opportunities for countryside management projects where

- (i) all important trees, woodland and hedgerows are retained,
- (ii) the ecological value of the site will not be reduced; and
- (iii) new tree and hedgerow planting using species native to the area is provided.

2.4 Policy C28 - Layout, design and external appearance of new development

2.4.1 'C28 control will be exercised over all new development... to ensure that the standards of layout, design and external appearance... are sympathetic to the character of the urban or rural context of that development.... The Council will seek to avoid discordant or badly designed development that would harm the appearance and character of the existing built environment, the Green Belt or the countryside'.

2.5 Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment

2.5.1 'Protection and enhancement of biodiversity and the natural environment will be achieved by the following ...the protection of trees will be encouraged with an aim to increase the number of trees in the district'.

2.6 West Oxfordshire District Council Local Plan 2011:

2.6.1 Policy NE6 of the Plan and supporting text highlights the amenity contribution provided by trees and its' importance to the character of West Oxfordshire. In terms of development, trees are specifically acknowledged with screening views of development and softening its impact, improving its appearance, and facilitating in its integration within the wider setting. The influence of trees in terms of reducing the



energy demand and carbon footprint of a development is also cited as a desirable feature of retained tree cover. Subsequently, there is a presumption during determination of a planning application that trees will be retained, particularly where shown to be of significant visual, historic or biodiversity value.

2.7 Policy NE6 - Retention of Trees, Woodlands and Hedgerows

- 2.7.1 'Planning permission will not be granted for proposals that would result in the loss of trees, woodlands or hedgerows, or their settings, which are important for their visual, historic, or biodiversity value. Removal will only be allowed where it can be demonstrated that the proposed development would enhance the landscape quality and nature conservation value of the area'.
- 2.7.2 Although there is a presumption against the clearance of trees and particularly woodland, the Local plan does not preclude the removal of trees to enable development. The removal of trees is permitted if it can be demonstrated that the proposed development will provide opportunities to enhance local landscape and be of value to nature conservation. The provision of a comprehensive replanting scheme is therefore a requisite expectation where tree removal is necessary as part of development. In line with national objectives, new planting is promoted by the District Council through individual trees, but also though rejuvenated hedgerows, shelterbelts, copses and woodland.
- 2.7.3 Applicants are required to demonstrate that existing trees have been considered during design and construction, the Council therefore expects proposals for development to include a tree survey showing position, size and species, followed by plans detailing appropriate measures for the retention of existing (suitable) trees within an appropriate space and setting.

2.8 Comment

2.8.1 This document has been prepared in direct response to CDC's and WODC Policy requests. It provides an assessment of the trees within influence of the application area, 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 DESIGNATIONS RELATING TO ARBORICULTURE

3.1 Tree Preservation Order(s)

- 3.1.1 The effect of a proposed development on trees is a material consideration therefore CDC and WODC have a duty to ensure that provision is made for protecting important trees when granting planning permission, this includes the use of Tree Preservation Orders before a planning application is made. In term of development a TPO serves to safeguard high quality trees during design and to enforce their protection during site clearance and building operations.
- 3.1.2 Online enquiries to CDC and WODC reveal the absence of TPOs confirmed within the survey population tree cover (Pers. com. September and October 2014).

3.2 Conservation Area(s)

- 3.2.1 Trees within conservation areas that are not subject to a TPO are afforded protection through a Section 211 of the Town and Country Planning Act 1990. Under a section 211 'notice' CDC and WODC are required to receive six weeks prior notice of an intention to fell or work on a tree within a conservation area. The purpose of the requirement is to provide either LPA with the opportunity to make a TPO if considered to be appropriate for the tree(s) in question.
- 3.2.2 Online enquiries to CDC and WODC show that the site does not fall within a conservation area (Pers. com. September and October 2014).



4 BASELINE INFORMATION

4.1 Tree survey

- 4.1.1 Pursuant to the policy requirements of both Council's 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 391no. individual trees, 23 groups¹ of trees and 16 hedgerows².
- 4.1.2 Drawing SBP.001 in appendix A indicates the extent of the tree survey which corresponds to the application site boundary. As a precaution against harming offsite trees, the survey area is shown to extend to trees within third party ownership that may be influenced by future development on the site, e.g. through overhanging canopies or potential for root development within the site.
- 4.1.3 The survey provides a record of the species assemblage, dimensions, age, physiological and structural condition, and the perceived visual importance of each tree/hedgerow. Full details of each tree, group of trees and hedgerow are provided in schedule TS.001 in appendix B and the distribution of the trees is illustrated in appendix C.
- 4.1.4 The tree survey seeks to provide a baseline on which to balance the demands of the layout with tree retention and opportunities for enhancing the existing tree stock. To achieve this position, the tree survey has been undertaken independently of a detailed proposed layout and prior to any form preparatory works occurring on site.
- 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.

² Hedgerows and substantial internal or boundary hedges are recorded in a similar fashion to groups with distinctions made for woody plants that comprise distinct trees or significant variations in the structure/composition. It is not within our scope of work to identify the importance of hedgerows as it is defined within the Hedgerows Regulations 1997.



7

¹ 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.

5 TREE CONSTRAINTS

5.1 **Design Principles**

- 5.1.1 Proposals for development of the site have been informed by the direct and indirect constraints provided by the existing tree cover. Over a number of months the emerging designs for phase 1 and the access from Upper Campsfield Road have been tested against the tree constraints, incurring revisions to the design that seek to achieve confident long-term retention of existing trees, particularly those of importance to amenity.
- 5.1.2 A summary of the constraints considered during design is provided under the following subheadings. Details of each of the listed constraints specific to individual trees, groups and hedgerows is provided within the tree schedule found in Appendix B and illustrated on the Tree Constraints Plan TCP 01 within Appendix C.
- 5.1.3 Where detailed design is not currently being prepared, the constraints serve to inform the siting of development in principle, but all cases there is a presumption against avoidable tree losses and future pressures for tree clearance post-completion of the development.

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.



5.2.4 Crown height is provided in order that the design is able to prevent an unreasonable obstruction to daylight associated with canopy shade. It is however accepted that some shade may be desirable or acceptable in certain circumstances.

5.3 Root Protection Areas

- 5.3.1 RPAs are illustrated within Appendix C 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 permanent features of the development are precluded from this are during design, and that this area remains undisturbed and sacrosanct during construction related activity.
- 5.3.2 It is our opinion that the morphology and disposition of tree roots will, in some instances, have been influenced by barriers and restrictions to root development, e.g. adopted highways.
- 5.3.3 Where the shape of an RPA has been manipulated, this has been done to include areas that are considered to be more advantageous to root development. During manipulation, the area of the RPA has not been reduced.
- 5.3.4 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 for tree classification; there are four categories within this model, all of which feature on the site. A synopsis of the trees is proved below by reference to category.

5.5 Category A tree cover

5.5.1 Representing the principle arboricultural features of the application area, category A tree cover occurs less frequently than the other classifications. It has been reserved for a single Sycamore (T15) considered be a very good example of its type and of visual significance to the category A woodland belt in which it occurs (as a principle component within G1).



5.5.2 Trees occurring within the footprint of groups G1 and G2 (inclusive of understory) comprise dense wooded belts adjacent to Campsfield Road and Shipton Road. Collectively these groups are of particular visual importance as arboricultural and landscape features. The long-term potential of these groups is facilitated by evidence of recent intervention which includes restocking.

5.6 Category B tree cover

- 5.6.1 Category B trees are present throughout the application area, occurring frequently as standalone trees which demonstrate remediable visual defects yet lacking the quality normally expected of a very good example of the species within the setting.
- 5.6.2 This level of classification has also been assigned to numbers of trees which attract a higher collective rating than they might as individuals, particularly in terms of their visual significance. This is therefore relevant to collections of early mature planted standard trees set within hedgerows, and the more established Oak and Ash present within groups G1 and G2.
- 5.6.3 Category B trees represent moderate arboricultural features of the existing site and are considered to be important trees that is desirable to retain within a completed development; they subsequently represent a significant constraint during the architectural design process and are more abundant than category A tree cover.

5.7 Category C tree Cover

- 5.7.1 With exception of category U trees, all remaining tree cover identified on the site and its boundaries is considered to represent generally unremarkable examples of its type i.e.: trees that demonstrate compromised structure, signs of stress; trees of indifferent structural and physiological appearance and those providing limited or transient benefits which may be readily replaced. This includes trees that are not conferred a higher value when present in numbers.
- 5.7.2 The retention of category C trees is recognised as important where practicable during design as they help maintain the semi-rural appearance of the site, nonetheless they are of less priority for retention than category A and B tree cover.



5.8 Category U tree cover

- 5.8.1 Where tree numbers are enclosed by brackets on the appended plans, this denotes category U tree cover. Category U trees are of particularly reduced physiological and or structural condition, such that they are not considered suitable for retention as living tree in the short term (circa 10 years).
- 5.8.2 This classification includes trees demonstrating irremediable and serious structural defects likely to result in early loss i.e. by collapse; the classification also includes trees that are dead or showing signs of irreversible, significant and immediate decline, and trees with pathogenic infections of significance to adjacent tree cover.
- 5.8.3 Despite representing the least level of constraint during design of the proposals, category U trees are acknowledged to have existing or potential ecological value which it might be desirable to preserve³.

³ Quantifying this value is outside the scope of this document and is the focus of a separate ecological study prepared by others as part of the current application.



_

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 impact upon existing trees is presented in the format of Tree Protection Plans. A suite of TPP's have been produced which relate to Phase 1, the Upper Campsfield Road Access; the bus link with Shipton Road and the Masterplan in general. These drawings are prefixed with TPP 05 and provided in appendices D-G respectively.
- 6.1.2 The purpose of teach TPP is to identify: a) 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 development and mitigate with new tree planting.
- 6.1.3 Our assessment and the TPP are informed by the tree survey and constraints plan balanced with the requirements of the layout and adopted policy. The tolerance of the trees to disturbance based on species, age, condition and the presence of surrounding trees and features of the existing site has also been considered.

6.2 Tree Removals

- 6.2.1 It is our professional opinion that trees should be recommended for removal where, a) it is necessary and unavoidable to site development within close proximity to existing trees, such that they cannot be confidently retained as living features, and/or b), where the amenity value of the tree will be significantly reduced as a result of the proposals, particularly if already of a low retention priority. In both cases, there is a presumption that removal will be justified by the provision of replacement trees of equal or improved suitability for the setting.
- 6.2.2 Trees recommended for removal are distinguishable from retained trees through the absence of an RPA or a hatched canopy; identification numbers are shown coloured red and canopy edges are both dashed and coloured red.



6.2.3 Phase 1: Excluding Category U trees, it is necessary to recommend the removal of 15no individual trees and 3no sections of hedgerow to implement the proposals. Category U trees are listed on account that their removal is recommended in the interest of sound arboricultural management associated with their reduced life expectancy in the existing and the proposed setting.

Table.1: Tree removals to Implement Phase 1 (by category)

В C U T339 Weeping Willow T314 Ash [T237] Elm T343 Weeping Willow T315 Sycamore [T307] Dead H12 partial clearance (c.58m) T316 Ash [T320] Sycamore T319 Sycamore [T326] Elm T321 Norway Maple [T327 & T328] Dead T322 - T324 Field Maple [T338] Field Maple T325 Lime T329 Norway Maple T340 Field Maple T341 Ash T342 Field Maple H11partial clearance (c.79m)

- 6.2.4 The proposed vehicular access to Phase 1 from the Oxford Road (A44) includes revisions to an existing ditch parallel to the existing kerb. The combined impact of the highway footprint and re-aligned ditch equates to excavations across c.65 and c.40 percent of the RPAs for T339 and 343 (respectively). Combined with alterations to existing levels, the introduction of hard surfaces and a pruning requirement to achieve visibility at the junction, the level of disturbance is considered high. Despite their apparent contribution to the amenity of the site frontage, it is reasonable to conclude that the impact exceeds reasonable expectations for the trees' capacity to tolerate the change and subsequently, their suitability for safe, long-term retention adjacent to the highway. Similar impacts associated with this feature justify the removal of three of the category C trees and section of H12 within Phase 1.
- 6.2.5 It is our follow-on opinion that T339 and T343 are not in-keeping with the wider species assemblage setting and will not fulfil their maximum amenity potential as a result of the proposals. On balance the loss of these two particular trees is considered to present an opportunity for introducing more appropriate replacements to the frontage and in more harmony with the revised access arrangements.



- 6.2.6 The remaining category C tree removals occur within the east-west hedge to the north of the site (H11); in total six standard trees within this feature are recommended for removal.
- 6.2.7 Three of the trees including 19m of H11 are shown removed to accommodate the vehicle link to the wider site. The remaining three and 22m section of H1 recommended for removal to accommodate built form associated with the care development to the east. In the case of the latter removals, this is also advised in the interest of reducing foreseeable pressure to fell as the trees develop, but may be overcome by design as part of more detailed proposals put forward in the future.
- 6.2.8 It is considered that the category C tree removals (in addition to category U tree failures) within the north of Phase 1 and the care facility are of a current size that ensures that they can be readily replaced.
- 6.2.9 Upper Campsfield Road Vehicular Access: The requirement to introduce a vehicular access to the site at this location means that it is necessary to remove trees within category A group G1.
- 6.2.10 In order to determine the nature and extent of influence, this particular group has been surveyed in particular detail i.e. there are 223no individual trees surveyed within G1 with more than 40no attaining category A or B as individual components.
- 6.2.11 With the exception of category B trees which are established (but not essential) components of G1, the majority of the tree removals are concentrated on trees with reduced individual impact, i.e. The proposals incur the removal of 33no individual trees, 6no of which are category B (refer table.2).
- 6.2.12 Whilst the proposals will transect G1, the impact is localised to the access point through: the avoidance of additional pedestrian footways to the northbound verge, retention of existing levels tree side of the kerb and the siting of services within the carriageway footprint.
- 6.2.13 G1 demonstrates evidence of re-stocking and this should be extended to reinforcing the exposed faces to ensure a new wind-firm edge adjacent to cleared areas. An approximate area of 500m² is available to the north and south of the new roundabout



which could receive reinforcement plantings. This could be further extended within the retained sections through selective thinning of category U trees as part of a wider programme of management typical of woodland and shelterbelts, i.e. by condition or reserved matters application for the wider site.

6.2.14 By virtue of the density of the understory and the spacing of the more established components within G1, the interior of both retained sections is also not considered to be over-compromised by exposure pursuant to restocking.

Table.2: Tree Removals to Implement Upper Campsfield Road (by category)

В	С	U
81 English Oak	82 English Oak	[80] English Oak
90 English Oak	84 - 86 English Oak	[89] English Oak
103 Sycamore	87 & 88 Sycamore	[99] Field Maple
108 & 109 Sycamore	91 - 94 Sycamore	
111 English Oak	95 English Oak	
	96 Field Maple	
	97 & 98 Sycamore	
	100 English Oak	
	101 & 102 Sycamore	
	104 Ash	
	105 - 107 Sycamore	
	110 Sycamore	
	119 English Oak	
	120 Beech	
	121 Sycamore	
	122 Sycamore	
	125 Sycamore	

- 6.2.15 Bus Link with Shipton Road: Tree removal through the realignment of the Shipton Road is concentrated at the extremity of established category B collections G3 and G19 which bound the existing highway. The removals are however, not of an extent that will comprise the integrity of G3 as the principal arboricultural feature at this location. Similarly the removal of a single young Ash within the site interior (T226) is not considered significant and both may be readily mitigated with infill plantings of improved seasonal interest.
- 6.2.16 The majority of the removals are concentrated on maintained field boundary hedgerow bounding Shipton Road (H1). It is reasonable to propose that due to their maintained appearance, these particular sections of hedgerow can be replaced and



enhanced in terms of their structural diversity as part of the landscape proposals for the wider site.

Table.3: Tree Removals to Implement Shipton Road bus link (by category)

В	С
	_
T224 Ash	H1 partial clearance (c.68m)
G3 partial clearance (c.6m)	H2 partial clearance (c.33m)
G10 partial clearance (c.14m)	H14 partial clearance (c.19m)
	T226 Common Ash

6.3 Mitigation Planting

- 6.3.1 As part of the proposals, a scheme of soft landscape treatment has been prepared to ensure that the proposed development is set within a robust, high quality landscape setting and that an appropriate transition between the proposals and the wider landscape context is created.
- 6.3.2 The proposed landscape scheme seeks to provide a significant number of trees across the development site and reinforce the existing vegetation associated with the site's boundaries. The numbers of new trees being proposed will more than make up for the relatively small number of individual tree losses incurred within the detailed and outline areas of the supplication.
- 6.3.3 Substantial landscape buffers including appropriate structure planting to the A44 frontage are being provided and will assist the visual integration of the proposals into the immediate setting and enhance the approaches to Woodstock. The use of tree lined avenues is also considered appropriate in the context of the Blenheim estate to the south.
- 6.3.4 The proposed tree planting will incorporate a range of sizes to ensure a varied, high quality and successful scheme is achieved. Native species will be focused around the perimeters of the site and within the natural and semi-natural greenspaces. Within the built environment the use of ornamental species will create a high quality landscaped setting which complements the proposed built form.



6.4 Construction Mitigation

- 6.4.1 **Protective Barriers:** Pursuant to the Councils' advice, it will be necessary to protect the above and below ground structures of retained offsite boundary tree cover from damage during construction.
- 6.4.2 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 barriers are erected prior to occupation of the site for construction related purposes.



Plate.1 Default Protective Barrier Specification

6.4.3 The siting of tree protection barriers is illustrated within appendices D – G, which in all instances is considered to be practicable without conflicting with construction if located either on the edge of the RPA or the canopy extents (whichever is the greater). Where proposed access is required with RPA's (see below), any activity will be undertaken in the presence of a supervising arboriculturalist and barrier positions can be repositioned appropriately as part of this brief.



- 6.4.4 It would be prudent for the project arboriculturalist to oversee the initial erection of tree protection barriers and provide written confirmation to both CDC and WODC's arboricultural officers once barrier erection is complete.
- 6.4.5 **Proposed Hard Surfaces:** the introduction of a footpath is proposed east of G15. The approximate route is currently unsurfaced and compacted by regular pedestrian use and agricultural trafficking, but under the proposals put forward will be formalised with the use of a permanent sub base and wearing course. The new footpath will occupy a maximum of ~7 percent of RPA of individual trees along the route.
- 6.4.6 A precautionary approach to managing the incursions will be to incorporate the design recommendations listed in 7.4.2 of BS5837:2012, i.e. the preclusion of excavation into soil, avoidance of localised compaction, and maintained permeability. This can be achieved if the path is founded on 75mm Standard Cell CellWeb® overlain by a permeable tarmac wearing course (i.e. TarmacDry®) with non-invasive retaining edges. Arboricultural supervision during these works is strongly recommended.
- 6.4.7 The extent of the incursion (detailed above) is considered reasonable, particularly where exchanged for the previously unmanaged route leading to localised compaction. To ensure confidence in the trees tolerances towards proposed no-dig incursions and to overcome any existing compaction within RPAs, it is strongly recommended that the full RPA (where on site) were to be Terravented incorporating a Mychorizial Fungi and Bio stimulant injection. This work should be undertaken prior to the laying go the cellweb sub-base.
- 6.4.8 Subject to detail, the Masterplan for the east of the site includes an informal pedestrian footpath within wooded belts G1 and G2. It is recommended that an exact route is manipulated around the trees with a clearance of 500mm from trunks considered appropriate. To avoid the need for tree felling the path profile adopts a non-invasive design -cellweb overlain with clean gravel would be appropriate. Vegetation removal to install this feature should be limited to understory and pruning works required to achieve 2.4m crown clearance over the path, e.g. limited to low-level primary and secondary branches, with branch shortening preferred to branch removal where appropriate.



- 6.4.9 **Supervised excavations**: The installation of kerb setts associated with the Upper Campsfield Road access will take place within and in close proximity to RPAs of retained edge trees within G1. The proposals do not encroach beyond 3 percent into RPAs of the retained trees (refer toT133 English Oak) lining the route.
- 6.4.10 As a precaution against avoidable disturbance to the RPAs, including damage to tree root structures it is recommend that works adopt advice provided in section 7.2 of BS5837:2012 under the heading 'Avoiding Physical Damage to Tree Roots during Demolition or Construction'.
- 6.4.11 An arboricultural watching brief and the adoption of the procedures for manual excavation should be combined with the siting of barriers 500mm back from the proposed kerb route to enable sufficient working room.
- 6.4.12 The approach outlined above is also advised for a c.7% incursion within the RPA of G17 (Sycamore and Horse Chestnut) by a footpath section in the east of Phase 1.
- 6.4.13 Phasing and Services: At this stage, Aspect has not been able to assess the influence of all proposed services, levels, 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 Cherwell District Council and West Oxfordshire Council, it is anticipated that these details will be the subject of a condition i.e. the focus of an Arboricultural Method Statement and detailed Tree Protection Plan.
- 6.4.14 By design it is however known that the foul water rising main for phase 1 and the wider avoids cumulative tree removals, i.e. this feature has been pulled clear of G1 and G2, and where it enters the site from Woodstock Road and Shipton Road, the route utilises the gaps necessitated by the access at both locations.

6.4.15 Future Pressure

6.4.16 Tolerance to trees is a subjective matter and seasonably variable, therefore it is reasonable to presume that potential occupiers will factor the presence of retained trees and hedgerows as a major feature of the development when deciding whether to commit to living within close proximity to them.



- 6.4.17 As a precaution against post-occupation pressure to fell retained trees on the grounds of apprehension or annoyance associated with shade and canopy processes, the design within phase 1 has sought to preclude inappropriate siting of dwellings. An example is shown in the siting and orientation of plot 6 in relation to the shade prediction for T299 Ash.
- 6.4.18 Across the wider site this design approach will continue to be adopted to ensure that the spatial relationship between the proposals and retained trees/hedgerows enables adequate clearance for continued maintenance access or unmaintained canopy growth where appropriate.



7 CONCLUSIONS

- 7.1 In accordance with the adopted policies of Cherwell District Council and West Oxfordshire District Council in the context of proposed development, a BS5837:2012 survey and assessment has been prepared to inform the retention of important trees and their contribution to amenity.
- 7.2 The proposals identify and accommodate all of the tree cover considered to be important to the amenity of the existing (and proposed) site. In addition, the long-term integration of significant trees and groups is considered practicable subject to temporary protection during construction and mitigation for permanent development within RPAs.
- 7.3 Regardless of poor quality trees that should be removed irrespective of development, the proposals incur the necessary removal of a number of trees and hedgerow sections. The impact of these removals is considered to be acceptable through confident, long-term, integration of appropriate tree cover, alongside opportunities to provide diverse mitigation. Replacement tree planting is expected to increase the canopy area of the site and reinforce the site boundaries, and enhance the long-term amenity potential of the site's overall tree stock.
- 7.4 In the absence of long-term harm to important trees in particular, it is our professional opinion that the proposals put forward by Vanbrugh Unit Trust and Pye Homes Itd. allow for technical confidence in the long-term viability of retained and appropriate tree cover. The proposals are therefore considered supportable from the arboricultural perspective and in terms of Local Plan Policy where it relates to trees. This opinion is subject to the provision of replacement tree cover, and the adoption of future safeguards as identified within this document.



8 RECOMMENDATIONS (future work)

8.1 For Phase 1 and the Upper Campsfield Road Access in particular, a detailed Arboricultural Method Statement should be required by Condition and subsequently prepared which expands on appendices D and E.

8.2 Heads of Terms for the Method Statement are advised to include: specifications for tree protection barriers, including revisions to barrier locations; a schedule of tree works; a procedure for above soil installations, hard surface removal and excavations within RPAs; phasing of work; and a scheme for auditing tree protection and subsequent reporting to the LPA should feature explicitly throughout.

8.3 Detailed Tree Protection Drawings should be prepared to 1:200 scale to support the AMS, with detail given of proposed levels and service routes.

8.4 A detailed arboricultural Impact Assessment proceeded by design input by an arboriculturalist should be prepared for subsequent phases of the Masterplan once further details become available.

PREPARED BY:

Dr Richard Curtis Bsc (Hons) PgDip PhD MArborA Senior Arboricultural Consultant

E: richard.curtis@aspect-arbor.com

T: 01295 276066



APPENDICES

APPENDIX A

SURVEY BOUNDARY PLAN (8854 SBP)





Extent of Tree Survey (not application area boundary)



aspect arboriculture

South East Woodstock Survey Boundary Plan

Vanbrugh Unit Trust & Pye Homes Limited

DRAWN	GW	REVISION	⋖
DATE	NOV 2014 GW		ev A
SCALE	Not to scale	DRAWING NUMBER	8854 SBP 01 Rev A

Cited from Google Earth

1	

APPENDIX B

TREE SURVEY SCHEDULE (8854 TS 01)



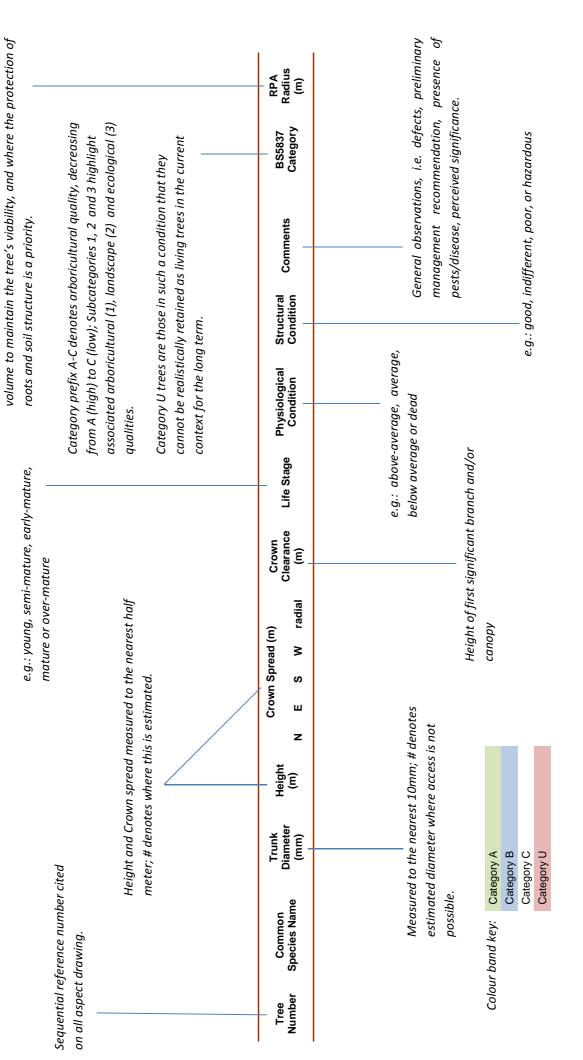


BS 5837:2012 Tree Schedule: Land South East of Woodstock



BS5837:2012 Tree Survey: Explanation of Survey Criteria

Area around tree deemed to contain sufficient roots and rooting



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.



5.7	B2	Indifferent	Average	Early mature	2.5	3.00					470	English Oak	40
7.8	C12	Indifferent	Below average	Mature	4.5			,	3.00		650	English Oak	39
6.9	C12	Indifferent	Average	Mature	<u> </u>			4.25			x 220 av.	7	38
4.8	C12	Indifferent	Average	Early mature	5.5		5.00				400	English Oak	37
5.4	C12	Indifferent	Average	Early mature	5.25		5.00				440	Sycamore	36
3.9	C12	Indifferent	Average	Early mature	6		4.75	ı	,		330	Sycamore	35
4.8	B2	Indifferent	Average	Early mature	5.75	4.50					410	English Oak	34
7.2	B12	Moderate	Average	Mature	1.5	5.25					590	Field Maple	33
6.9	B2	Indifferent	Average	Mature	Сī		2.75	# 4.00	6.00#	2.00	580m	English Oak	32
3.6	C12	Indifferent	Average	Early mature	1.5	2.75					290	English Oak	31
7.2	B2	Indifferent	Average	Mature	2			, #	5 6.00#	2.75	600	English Oak	30
4.8	C12	Indifferent	Average	Early mature	4	3.50					410	Sycamore	29
6	C12	Indifferent	Average	Early mature	<u></u>	4.75					510	English Oak	28
4.5	C12	Indifferent	Average	Early mature	0.75	3.25					380	English Oak	27
7.8	B2	Indifferent	Below average	Mature	ΟΊ	5.00					650	English Oak	26
5.1	B2	Indifferent	Average	Early mature	2	3.50					430	English Oak	25
4.8	C12	Indifferent	Average	Early mature	-	5.25					410	English Oak	24
3.9	C12	Indifferent	Average	Early mature	0.5	3.50					320	Sycamore	23
5.4	C12	Indifferent	Average	Early mature	ω	3.50					460	English Oak	
9.3	C12	Indifferent	Below average	Mature	4.5	4.25					770	English Oak	21
7.8	B2	Moderate	Average	Mature	4.75	3.50					640	English Oak	20
6.6	C12	Indifferent	Average	Mature	,		3.00	4.50		2.50	550	English Oak	19
6.3	C12	Indifferent	Average	Early mature	2.75		3.75	4.00	3.00	3.00	520	English Oak	18
6.3	C12	Indifferent	Below average	Early mature	3.75	4.00					520	English Oak	17
7.2	C12	Indifferent	Average	Mature	2	4.00					600	English Oak	16
10.8	A12	Good	Average	Mature	2		7.00	6.00	8.75	15m 8.00	910	Sycamore	
N/A	C	Poor	Below average	Early mature	1.5	3.00				5m	330	English Oak	
4.5	C12	Indifferent	Below average	Early mature	ω	3.25					380	English Oak	
6	C12	Indifferent	Average	Early mature	1.75	3.25					490	English Oak	12
6.3	C12	Indifferent	Below average	Mature	0.5		4.25			5.00	530	English Oak	
4.2	C12	Indifferent	Average	Early mature	<u>.</u>		3.75	3.00) 4.50	3.50 4.50	350	English Oak	10
1 5.4		Indifferent	Below average	Early mature	ى ب ن ر		3.00			5.00	440	English Cak	
N/A	2 -	Poor	Below average	Early mature	2 ~	2.25					410	English Oak	
7.2	C12	Poor	Below average	Mature	2.5		2.00	7.50		5.00	590	English Cak	ı o
6	C12	Poor	Average	Early mature	2	2.75					510	English Oak	
4.2	C12	Poor	Below average	Early mature	1.75	1.50					360	English Oak	4
7.5	C12	Indifferent	Average	Mature	4	2.75					620	English Oak	ω
N/A	C	Poor	Below average	Early mature	1.75	2.50					340	English Oak	2
9.6	C12	Poor	Below average	Mature	5		¢ 2.00	# 5.00#	2.00#	0.00	800	English Oak	_
(m)	Category	Condition	Condition	Life Stage	Clearance (m)	radial	8	ဟ	т	Height (m) N	Diameter He (mm)		Number
RPA Radius	BS5837	Structural	Physiological	?	Crown		ead (m)	Crown Spread (m)	Cr	•		Common Species	Tree





5.4	C12	Indifferent	Average	Early mature	4	3.50					440	Sycamore	75
3.6	C12	Indifferent	Average	Early mature	8.75	3.75					300	Common Ash	74
4.2	C12	Indifferent	Below average	Early mature	5.25	4.50					350	Common Ash	73
4.5	C12	Poor	Below average	Semi mature	4.25		4.75		1		300 170 170	Common Ash	72
N/A	C	Poor	Below average		3.5	1.50					460	English Oak	71
6.9	C12	Poor	Below average	Mature	2.75		4.00	5.50	00 4.75	4.00	570	English Oak	70
ω	C12	Indifferent	Average	Early mature	3.25	3.50					240	Sycamore	69
2.7	C12	Indifferent	Average	Early mature	3.5	2.75					220	Sycamore	68
5.4	C12	Poor	Below average	Early mature	51		0.00	# 2.50	50 5.00#	2.50	450	English Oak	67
4.2	C12	Indifferent	Average	Early mature	5.25	2.75					360	Common Ash	66
5.4	C12	Poor	Average	Early mature	3.5		4.75		1		320 190 260	Sycamore	65
N/A	B2	Indifferent	Average	Early mature	4.5		4.75		1		530	English Oak	64
2.4	C12	Indifferent	Average	Early mature	5.5		4.75				210	Sycamore	63
2.7	C12	Indifferent	Average	Early mature	0.25		3.00				220	Sycamore	62
4.2	C12	Poor	Below average	Early mature	0.25		5.00				310 180	Sycamore	61
N/A	C	Poor	Dead	Early mature	6.25	2.50					450	English Oak	60
4.5	C12	Indifferent	Average	Early mature	6.5	3.50					370	Common Ash	59
6	C12	Indifferent	Average	Mature	0	3.75					490	Sycamore	58
5.7	C12	Poor	Average	Mature	4				5.50	-	470	Sycamore	57
N/A	_	Poor	Dead	Early mature	5	2.00					420	English Oak	56
8.1	C12	Poor	Average	Mature	0		6.00				620 270	Sycamore	55
N/A	C	Poor	Dead	Early mature	3.75		4.25				410	English Oak	54
4.5	C12	Indifferent	Below average	Early mature	7.25		3.50				380	English Oak	53
5.4	C12	Indifferent	Below average	Early mature	4.75		6.25				460	English Oak	52
N/A	C	Poor	Dead	Early mature	5	1.75					320	English Oak	51
ω	C12	Indifferent	Average	Early mature	4.25		4.50	ı	į		240	Sycamore	50
3.6	C12	Indifferent	Average	Early mature	2	2.75					300	Sycamore	49
2.1	C12	Indifferent	Average	Early mature	4	2.25					180	Sycamore	48
2.7	C12	Indifferent	Average	Early mature	4	1.75					220	Sycamore	47
2.4	C12	Indifferent	Below average	Early mature	4.25	1.75					200	Sycamore	46
3.6	C12	Poor	Below average	Early mature	4.25		0.00	# 1.25	25 5.00#	2.25	310	English Oak	45
5.4	C12	Indifferent	Below average	Early mature	6.25	3.25					450	English Oak	44
ω	C12	Indifferent	Average	Early mature	6	2.00					250	Sycamore	43
3.6	C12	Indifferent	Average	Early mature	ω	3.00					300	Sycamore	42
4.5	C12	Indifferent	Average	Early mature	5ī	3.00					380	English Oak	41
KPA Kadius (m)	Category	Structural Condition	Physiological Condition	Life Stage	Crown Clearance (m)	radial	V	σ.		Height (m) N	Diameter (mm)	Common Species Name	Tree Number
))) :			<u>!</u>		,		Crown Spread (m)	wn Spr	Cro		Trunk))	'





l ree Number	Name	Diameter (mm)	Height (m)	z	т	တ	\$	radial	Clearance (m)	Life Stage	Condition	Condition	Category	(m)
76	Common Ash	270						2.00	4.5	Early mature	Average	Indifferent	C12	3.3
77	Common Ash	200						2.25	1.5	Early mature	Average	Indifferent	C12	2.4
78	Common Ash	280		1.00	3.75	4.25	2.75		4.5	Early mature	Average	Indifferent	C12	3.3
79	Common Ash	430		4.50	2.75	3.25	4.00		2	Early mature	Average	Indifferent	C12	5.1
80	English Oak	550 (over ivy)						2.75	5.5	Mature	Average	Poor	C	N/A
81	English Oak	560		3.00	5.50	4.25	3.00		3.5	Mature	Below average	Indifferent	B2	6.6
82	English Oak	320		2.50	3.50	1.75	1.25		1.75	Early mature	Average	Indifferent	C12	3.9
83	Common Ash	320		4.75	2.75	1.50	4.50		4.25	Early mature	Average	Indifferent	C12	3.9
84	English Oak	480						3.50	5.5	Early mature	Below average	Poor	C12	5.7
85	English Oak	680		7.75	4.50	6.50	4.50		2	Mature	Below average	Poor	C12	8.1
86	English Oak	630			5.50				3.75	Mature	Below average	Indifferent	C12	7.5
87	Sycamore	310						4.00	0.25	Early mature	Average	Indifferent	C12	3.6
88	Sycamore	410		3.00	5.50	5.50	3.00		4.75	Early mature	Average	Indifferent	C12	4.8
89	English Oak	460						2.00	1.5	Early mature	Below average	Poor	C	N/A
90	English Oak	610		3.50	5.50	3.75	4.00		0.5	Mature	Below average	Indifferent	B2	7.2
91	Sycamore	330						4.25	ω	Early mature	Average	Indifferent	C12	3.9
92	Sycamore	310						2.00	ω	Early mature	Average	Indifferent	C12	3.6
93	Sycamore	270						2.25	4.5	Early mature	Average	Indifferent	C12	3.3
94	Sycamore	270		0.00	4.00	4.00	0.00		0	Early mature	Average	Indifferent	C12	3.3
95	English Oak	360		2.00	5.25	2.00	0.00		ω	Early mature	Average	Poor	C12	4.2
96	Field Maple	320 200						3.50	1.75	Early mature	Average	Indifferent	C12	4.5
97	Sycamore	260						2.50	0.5	Early mature	Average	Indifferent	C12	ω
98	Sycamore	350						3.00	4.75	Early mature	Average	Indifferent	C12	4.2
99	Field Maple	420						4.00	4.25	Mature	Below average	Indifferent	_	N/A
100	English Oak	400						2.50	ω	Early mature	Average	Indifferent	C12	4.8
101	Sycamore	460						4.00	1.725	Early mature	Average	Indifferent	C12	5.4
102	Sycamore	390						3.50	ω	Early mature	Average	Indifferent	C12	4.8
103	Sycamore	880	15m	7.75	8.25	7.50	7.00		0.75	Mature	Average	Moderate	B12	10.5
104	Common Ash	440 460		5.50	7.00	7.50	6.75		0.75	Mature	Below average	Poor	C12	7.5
105	Sycamore	350						3.25	2.25	Early mature	Average	Indifferent	C12	4.2
106	Sycamore	320						3.25	_	Early mature	Average	Indifferent	C12	3.9
107	Sycamore	410						4.50	2.5	Early mature	Average	Indifferent	C12	4.8
108	Sycamore	370						3.00	1.25	Early mature	Average	Indifferent	B2	4.5
109	Sycamore	310		2.75	4.75	4.00	1.00		0.75	Early mature	Average	Indifferent	B2	3.6
110	Sycamore	410						5.25	3.5	Early mature	Average	Indifferent	C12	4.8
111	English Oak	520						4.00	4.5	Early mature	Average	Moderate	B12	6.3
112	Sycamore	380		200	1							D 1:40 000+		1





5.4 8.4	B ₂	Indifferent Indifferent	Average Average	Mature Mature	0 2		5.50 7.75) 4.50	3.00	5.75 8.25	16m	450 690	Sycamore Sycamore	145 146
3.3	C12	Indifferent	Average	Mature	4.25					6.00		270	Common Ash	144
ω	C12	Indifferent	Average	Mature	σ		5.00	2.50	1.50	3.00		250	Common Ash	143
3.6	C12	Indifferent	Average	Mature	o	4.50						300	Common Ash	142
3.3	C12	Indifferent	Below average	Mature	o	4.00						280	Common Ash	141
N/A	C	Poor	Poor	Mature	6.5	3.00						515	English Oak	140
9.3	B2	Indifferent	Below average	Mature	ω		7.25	8.50	5.25	6.00	15m	770 (over ivy)	English Oak	139
3.9	C12	Poor	Average	Mature	0.2		3.75	5.50	2.75	2.50		320 (over ivy)	Sycamore	138
4.5	C12	Poor	Poor	Mature	ω		1.00	5.50	4.00	2.00		380 (over ivy)	English Oak	137
4.8 6	C12 C12	Poor Indifferent	Poor Below average	Mature Mature	4.75 0		2.50 4.00) 3.25) 7.75	3.00	2.00 2.50		410 490	English Oak Common Ash	135 136
6	B2	Poor	Average	Mature	0.25		8.00) 5.75	5.00	5.50	15m	470 195	Beech	134
6.9	C12	Indifferent	Below average	Mature	2.5		2.00	5.75	3.50	5.00		580 (over ivy)	English Oak	133
4.2	C12	Indifferent	Average	Mature	ω		3.00	3.25	2.75	5.75		360	Sycamore	132
7.2	C12	Indifferent	Below average	Mature	1.5		3.75	3.75	2.25	5.25		610 (at 0.2m)	English Oak	131
3.3	C12	Indifferent	Average	Early mature	7.5	2.50						270	Sycamore	130
N/A	_	Poor	Dead	Early mature	5.5	2.00						340	English Oak	129
4.2	C12	Indifferent	Average	Early mature	1.5		4.50	3.50	1.75	4.50		340	Sycamore	128
4.5	C12	Indifferent	Average	Early mature	1.5		3.00	4.50	3.00	3.00		370	Sycamore	127
N/A	C	Poor	Dead	Mature	N/A					0.00		800#	English Oak	126
5.7	C12	Indifferent	Average	Mature	0.5	3.50						480	Sycamore	125
4.2	C12	Poor	Below average	Early mature			0.00)# 2.50	5.00#	0.00		360	English Oak	124
4.8	C12	Indifferent	Average	Early mature	ı	4.00						410	Sycamore	123
3.3	C12	Indifferent	Average	Early mature	1.75		1.50			1.50		270	Sycamore	122
3.3	C12	Indifferent	Average	Early mature	4.25					4.00		280	Sycamore	121
3.9	C12	Poor	Average	Early mature	4		7.25			6.50		330	Beech	120
7.2	C12	Poor	Average	Mature	თ		1.50	6.75	6.50	2.00		590	English Oak	119
4.2	C12	Poor	Average	Early mature	_	4.00						350	English Oak	118
N/A	C	Poor	Average	Early mature	0.5	3.75						230 190	Sycamore	117
N/A	C	Poor	Average	Early mature	1.75	3.50						310	Sycamore	116
3.9	C12	Indifferent	Average	Early mature	ω					3.25		330	Sycamore	115
8.1	B 2	Indifferent	Average	Mature	1.5		4.00	5.75	4.50	3.50	14m	680	English Oak	114
N/A	C	Poor	Dead	Early mature	4.75	1.75						450	English Oak	113
RPA Radius (m)	BS5837 Category	Structural Condition	Physiological Condition	Life Stage	Crown Clearance (m)	radial	Crown Spread (m)	rown Sp	шΩ	ਤ 2	Height (m)	Trunk Diameter (mm)	Common Species Name	Tree Number





Tree Number	Common Species Name Sycamore	Trunk Diameter (mm) 340 (over ivy)	Height (m)	3.25 z	Crow E	Crown Spread (m) E S W 50 5.00 3.50	yad (m) W 3.50	radial	Crown Clearance (m)	Life Stage Mature	ë	Physiological Gendition		Physiological Condition Average
147 148	Sycamore Common Ash	340 (over ivy) 425	(T) (a)				3.50 4.00		4 ω	Mature Mature		Average Below average		Indifferent Indifferent
149	English Oak	480	N) (2.75		თ (Mature	ē ē		Below average	Below average Indifferent
150	English Oak	550 (over ivy)						3.50	4.2	<	Mature		Below average	Below average
151	English Oak	745 (over ivy)	6	6.00 5	5.75 7	7.50	6.00		ഗ		Mature	Mature Below average		Below average
152	Common Ash	2 x 470 (over ivy)						8.00	2		Mature	Mature Good		Good
153	English Oak	605 (over ivy)	0	0.00 3	3.00 9	9.00	7.00		ω		Mature	Mature Below average		Below average
154	English Oak	475						4.50	4		Mature	Mature Below average		Below average
155	Common Ash	320 (over ivy)	4	4.50 3	3.50 4	4.25	3.00		2.5		Mature			Average
156	English Oak	520 (over ivy)						6.00	ω		Mature	Mature Average		Average
157	English Oak	475						3.75	2		Mature	Mature Below average	Below average	Below average
158	English Oak	485	n	n 0	T .	3	3 70 0	4.50	<u>,</u> ¬		Mature		Average	Average
160	English Oak	510							4		Mature	Mature Below average		Below average Poor
161	English Oak	300	_	1.00 -					6		Mature		Poor	Poor Poor
162	Sycamore	560	6	6.75 -					0		Mature		Good In	Good Indifferent
163	Field Maple	5 x 270 av.	4	4.75 -					1.5		Mature	Mature Below average		Below average Poor
164	English Oak	495						3.75	2		Mature	Mature Below average	Below average In	Below average Indifferent
165	English Oak	550	(.)	3.50 -)) -1:51		Mature		Poor	Poor Poor
167	Field Maple	320		1.00 2	2.00 3	3.00	1.00	į	ω {		Mature	Mature Below average		Below average
168	Sycamore	370						4.25	ω		Mature		Good In	Good Indifferent
169	Field Maple	220 240	N	2.00 3	3.00 1	1.50	5.00		1.5		Mature	Mature Below average		Below average
170	Sycamore	310						3.75	ω		Mature	Mature Average		Average
171	English Oak	650	17m 8	8.75 6	6.00 5	5.75 (6.50		0		Mature		Good In	Good Indifferent
172	Sycamore	605	(T)	5.75 1	1.50 4	4.00 (6.00		4		Mature	Mature Below average	Below average In	Below average
173	Sycamore	410	4				3.00		6		Mature		Average	Average Poor
174 175	English Oak Sycamore	370 510	.	3.00 3	3.00 4	4.00	4.50 5.00		10 4		Mature Mature	Mature Average Mature Below average		Average Below average
176	Sycamore	180 250	N				3.00		0		Early mature		Average	Average Poor
177	English Oak	305						4.00	0.25	Ш	Early mature	arly mature Average		Average Indifferent
178	Sycamore	400						2.75	∞		Mature	Mature Poor		Poor





Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	z	Crowi E	Crown Spread (m)	w (m)	radial	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	BS5837 Category	RPA Radius (m)
179	Sycamore	280	2.25		2.25 2	2.25	1.50		ယ	Mature	Average	Indifferent	C12	3.3
180	English Oak	510						5.75	4	Mature	Good	Indifferent	B12	6
181	Field Maple	320	5.00		1.75 1	1.75	2.25		ω	Mature	Below average	Poor	C12	3.9
182	Field Maple	410	3.25		1.75 5	5.00	1.75			Mature	Below average	Indifferent	C12	4.8
183	English Oak	440	3.00		3.00 3	3.75	3.75		2	Mature	Below average	Indifferent	C12	5.4
184	English Oak	605	4.00				3.00		6	Mature	Poor	Poor	C12	7.2
185	Yew	260#	4.25		4.25 6	6.00 3	3.00		0	Mature	Average	Poor	C12	ω
186	English Oak	630	7.25		4.00 7	7.00 (6.75		Ŋ	Mature	Below average	Indifferent	B2	7.5
187	English Oak	600 (over ivy)	8.00		4.75 1	1.75 (6.50		4	Mature	Below average	Poor	C12	7.2
188	English Oak	(over ivy)	3.00		2.00 2	2.00 (6.00		2	Mature	Poor	Poor	C12	6.9
189	English Oak	250	2.25		3.75 3	3.75	1.75		0.5	Mature	Poor	Poor	C12	ω
190	Common Ash	470	3.25		4.00 7	7.50	3.00		ω	Mature	Below average	Poor	C12	5.7
191	Beech	280	1.00		3.00 3	3.00 3	3.00		2	Mature	Below average	Poor	C12	3.3
192	English Oak	335	2.00		1.00 4	4.00 ;	3.00		7	Early mature	Below average	Poor	C12	3.9
193	English Oak	490 (over ivy)						2.00	ΟΊ	Mature	Poor	Poor	C	N/A
194	English Oak	460	6.00				2.00		4	Mature	Below average	Poor	C12	5.4
195	Sycamore	305	4.	4.00 2	2.00.2	2.25	3.00		c	Mature	Average	Toor	CTZ	3.6
196	English Oak	(over ivy)						2.00	o	Mature	Dead	Poor	C	N/A
197	English Oak	(over ivy)	17m 4.25		7.50 6	6.00 9	9.00		ω	Mature	Below average	Indifferent	B2	10.5
198	English Oak	495						4.00	5	Dead	Dead	Poor	C	N/A
199	English Oak	460	2.00		7.00 8	8.00	3.00		ω	Mature	Below average	Poor	C12	5.4
200	Field Maple	4 x 180 av.	2.00		1.75 4	4.00 2	2.50			Mature	Below average	Poor	C12	4.2
201	Sycamore	280#	2.75		3.50 4	4.50 2	2.00		0	Mature	Average	Poor	C12	3.3
202	English Oak	670	4.50		4.00 4	4.00 2	2.75		51	Mature	Poor	Indifferent	C12	8.1
203	Sycamore	360	6.00		4.50 5	5.00	3.00		4	Mature	Average	Indifferent	C12	4.2
204	English Oak	450#						3.50	ω	Mature	Poor	Poor	C12	5.4
205	English Oak	400#						3.00	ω	Mature	Poor	Poor	C	N/A
206	English Oak	520						5.50	5.25	Mature	Below average	Indifferent	B2	6.3
207	English Oak	480	3.	3.00 1	1.00 4	4.00	1.00		ω	Mature	Dead	Poor	C	N/A
208	English Oak	780 (over ivy)	6.00		4.00 1	11.00	7.00		3.5	Mature	Below average	Poor	C12	9.3
209	Beech	390						5.00	_	Mature	Average	Indifferent	B12	4.8
210	Sycamore	450#	5.75		5.75 2	2.00	5.75		0	Mature	Good	Indifferent	C12	5.4
211	Sycamore	715	23m 7.:	7.25 3	3.75 7	7.50	7.50			Mature	Good	Indifferent	B2	8.7
212	English Oak	375	5.25				1.50			Mature	Poor	Poor	C12	4.5
213	Sycamore	495	3.25		2.25 3	3.25	1.00			Mature	Poor	Poor	C12	6





Tree	Common Species	Trunk Diameter	Heiaht (m)		Crow	Crown Spread (m)	ad (m)		Crown	Life Stage	Physiological	Structural		BS5837
Number	Name	(mm)	9	z	т	တ	\$	radial	Clearance (m)	Ġ	Condition	Condition	Category	`
214	English Oak	320						0.00		Mature	Dead	Poor	C	
215	Sycamore	380		3.25	4.75	2.00	3.75			Mature	Below average	Indifferent	C12	
216	Sycamore	585		4.75	5.00	7.75	6.75			Mature	Good	Indifferent	B2	
217	Common Ash	540# 400#		6.25	3.00	6.50	3.75			Mature	Below average	Poor	B 2	
218	Sycamore	380		5.25	2.75	5.75	6.25			Mature	Average	Indifferent	C12	
219	English Oak	405		4.75	5.00	2.50	3.00			Mature	Below average	Indifferent	C12	
220	English Oak	460		2.00	2.00	6.50	2.25			Mature	Poor	Poor	C12	
221	Sycamore	575		4.75	3.00	7.00	7.00			Mature	Below average	Indifferent	B2	
222	Sycamore	255 270 185		3.25	3.25	4.50	3.75			Mature	Average	Poor	C12	
223	Syacmore	570						8.25		Mature	Average	Indifferent	B2	
224	Common Ash	3 x 300 av. 2 x 110 av	14m					5.75	2	Mature	Average	Poor	B2	
225	Norway Maple	480 (at 0.5m over ivy)	9m					4.75	1.75	Mature	Below average	Indifferent	C12	
226	Common Ash	2 x 295	10m					3.75	ω	Mature	Good	Indifferent	C12	
227	Norway Maple	455	11m					5.50	2	Mature	Average	Indifferent	C12	
228	Common Ash	220	7m					4.50	1.5	Early mature	Average	Indifferent	C12	
229	Norway Maple	2 x 155	7m					3.00	2.75	Early mature	Below average	Indifferent	C12	
230	Common Ash	145 1an	7m					2.50	2.75	Early mature	Below average	Poor	C12	
231	Norway Maple	260#	7m					2.25	2.75	Early mature	Below average	Poor	C12	
232	Common Ash	165	5m					2.00	2.75	Early mature	Below average	Poor	C12	
233	Field Maple	3 x 150	5m					2.25	2	Mature	Average	Poor	C12	
234	Norway Maple	210	8m					2.25	Ν	Early mature	Below average	Indifferent	C12	
235	English Oak	800#	7m					6.00	1.75	Mature	Below average	Poor	C12	
236	Common Ash	2 x 150 100	7m					3.75	2.75	Early mature	Below average	Indifferent	C12	
237	Elm	200	7m					2.50	ω	Early mature	Below average	poor	C	
238	Elm	200#	8m					2.50	ω	Early mature	Below average	Poor	C12	
239	Common Ash	7 x 380 av. 3 x 195 av.	18m					9.75	-	Mature	Good	Poor	B2	
240	Sycamore	5 x 220# av.	11m					4.00	3.5	Mature	Average	Poor	B2	
241	Sycamore	330# 100#	11 m					4.00	ω	Mature	Average	Poor	B2	





Number 242	Name	(mm)	i eigin (iii)	z	т	S	W ra	radial	Clearance (m)	Lie	Condition	Condition	Category	(m)
242														
	Sycamore	250#	9m				4	4.00	3.5	Early mature	Below average	Indifferent	C12	ω
243	Lawson Cypress	120#	7m					1.00	0	Early mature	Average	Indifferent	C12	1.5
244	Lawson Cypress	120#	7m					1.00	0	Early mature	Average	Indifferent	C12	1.5
245	Sycamore	5 x 300# av.	16m				7.	7.00	ω	Mature	Good	Poor	B2	8.1
246	Sycamore	4 x 250# av.	12m				ω	3.75	ω	Mature	Good	Poor	C12	6
247	Field Maple	5 x 120# av.	6m				Οī	5.25	ω	Mature	Average	Poor	C12	3.3
248	Pine spp.	400#	12m				5	5.25	2.75	Mature	Average	Indifferent	B2	4.8
249	Pine spp.	380#	12m				ζī	5.25	2.75	Mature	Average	Indifferent	B2	4.5
250	Norway Maple	300#	10m				ω	3.00	2.75	Early mature	Below average	Poor	C12	3.6
251	Norway Maple	400#	8m				51	5.25	2.75	Mature	Average	Indifferent	B2	4.8
252	Norway Maple	150#	6m				2	2.00	2.75	Early mature	Below average	Indifferent	C12	1.8
253	Pine spp.	220#	11m				4	4.00	2.75	Mature	Average	Indifferent	B2	2.7
254	Pine spp.	500#	12m				4	4.00	2.75	Mature	Average	Below average	B2	6
255	Field Maple	300#	8m				4	4.25	ω	Mature	Below average	Indifferent	B2	3.6
256	Field Maple	380#	8m				ر ن	5.00	ω	Mature	Good	Indifferent	B2	4.5
257	Goat Willow	420#	6m				٥.	5.00	2.75	Mature	Good	Indifferent	B2	5.1
258	Field Maple	280	7m				4	4.50	2.75	Mature	Below average	Indifferent	B2	3.3
259	Norway Maple	310#	9m				4	4.75	2.75	Mature	Average	Indifferent	B2	3.6
260	Pine spp.	220#	9m				4	4.75	2.75	Mature	Average	Poor	B2	2.7
261	Pine spp.	400#	10m				6	6.00	2.75	Mature	Average	Indifferent	B2	4.8
262	Field Maple	200#	6m				ω	3.50	2.75	Early mature	Average	Indifferent	C12	2.4
263	Whitebeam	150#	5m				2	2.00	2.75	Semi mature	Below average	Indifferent	C12	1.8
264	Pine spp.	350#	9m				4	4.75	2.75	Mature	Average	Indifferent	B2	4.2
265	Whitebeam	180#	5m				ω	3.00	2.75	Semi mature	Below average	Indifferent	C12	2.1
266	Norway Maple	240#	9m				ω	3.75	2.75	Mature	Average	Indifferent	B2	ω
267	Pine spp.	250#	9m				ω	3.00	2.75	Mature	Below average	Indifferent	B2	ω
268	Pine spp.	280#	10m				4	4.25	2.75	Mature	Average	Indifferent	B2	3.3
269	Pine spp.	340#	11m				ω	3.50	2.75	Mature	Average	Indifferent	B2	4.2
270	Norway Maple	250#	10m				ω	3.75	ω	Mature	Average	Poor	B2	ω
271	Scots Pine	260#	9m				4	4.00	2	Mature	Average	Indifferent	B2	ω
272	Norway Maple	250#	7m				4	4.75	ω	Mature	Below average	Indifferent	B2	ω
273	Field Maple	220#	6m				4	4.25	1.75	Mature	Average	Indifferent	B2	2.7
274	Field Maple	250#	7m				4	4.00	2.75	Mature	Average	Indifferent	B2	ω
275	Norway Maple	300#	8m				4	4.25	ω	Mature	Below average	Indifferent	B2	3.6
276	Field Maple	280#	6m				ω	3.00	2.75	Mature	Below average	Indifferent	B2	3.3
277	Norway Maple	400#	10m				6	6.75	3.75	Mature	Below average	Indifferent	B2	4.8
278	Weeping Willow	330#	9m				51	5.00	0.5	Mature	Average	Indifferent	C12	3.9
279	Elder	2 x 220#	7m				ω	3.00	2.50	Mature	Average	Poor	C12	3.6





Tree	Common Species	Trunk Diameter	Height (m)		Crown	Crown Spread (m)	d (m)		Crown	Life Stage	Physiological	Structural	BS5837	RPA Radius
Number	Name	(mm)	e .	z	т	σ	€	radial	Clearance (m)		Condition	Condition	Category	(m)
280	Norway Maple	205 3 x 140 av.	8m					3.50	0.50	Mature	Average	Poor	C12 (B2 as collection with T281, T282)	3.9
281	Norway Maple	8 x 125 av.	7m					4.00	0.50	Mature	Average	Poor	C12 (B2 as collection with T280, T282)	3. 3
282	Norway Maple	355	9m					4.00	0.50	Mature	Average	Poor	C12 (B2 as collection with T280, T281)	4.2
283	3 x Cherry	110	5m					1.00	0.50	Semi mature	Below average	Poor	_	N/A
284	Norway Maple	2 x 175	7m					4.25	2.00	Early mature	Average	Poor	C12	3
286	Common Ash	2 x 220#	10m	4.00#	2.00# 4.00# 3.5#	ر ا	*	3.75	6.50	Early mature	Average	Poor	C12	3.6
287	Golden Lawson Cypress	350#	10m#					3.00#	0#	Mature	Good	Indifferent	C12	4.2
288	Weeping Willow	430#	8m					4.00	0.50	Mature	Good	Indifferent	C12	5.1
289	Weeping Willow	430#	8m					4.00	0.5	Mature	Good	Indifferent	C12	5.1
290	Eucalyptus	300#	6m					4.00	ω	Mature	Average	Indifferent	C12	3.6
291	Golden Lawson Cypress	250#	8m#					2.25#	0#	Early mature	Good	Indifferent	C12	ω
292	Leyland Cypress	150 180	5m#					3.00#	-	Mature	Average	Poor	C12	2.7
293	Sycamore	120#	6m				2.75		2	Semi mature	Average	Poor	C12	1.5
294	Wild Cherry	280#	11 _m				5.50		o N	Mature	Below average	Poor	C12	ນ ຜ. ກ່.ວ
296	Sycamore	400#	15m					6.00	ω	Mature	Below average	Indifferent	B2	4.8
297	Common Lime	380#	12m					5.00	2.25	Mature	Good	Indifferent	B12	4.5
298	English Oak	420#	10m					2.00	7	Mature	Average	Indifferent	B12	5.1
299	Common Ash	980#	22m					3.50	7	Over mature	Average	Indifferent	C12	11.7





							7
305	304	303	302	301a	301	300	Tree Number
Norway Maple	Norway Maple	Norway Maple	Norway Maple	Field Maple	Cherry	Common Lime	Common Species Name
200#	200#	190#	260#	200#	200#	320#	Trunk Diameter (mm)
7m (as average of collection	Height (m)						
							z
							Crov
							Crown Spread (m)
							ad (m) W
3.50	3.25	3.25	2.50	2.00	2.25	3.00	radial
3.25 (as average of collection)	Crown Clearance (m)						
Early mature	Life Stage						
Average	Physiological Condition						
Indifferent	Structural Condition						
C12	BS5837 Category						
2.4	2.4	2.4	ω	2.4	2.4	3.9	RPA Radius (m)





312	311	310	309	308	307	306	Tree Number
2 Common Lime	1 Field Maple	0 Common Lime	9 Common Ash	8 Common Lime	7 Standing Deadwood	6 Norway Maple	e Common Species ber Name
130#	240#	140#	130#	260#	150#	250#	Trunk Diameter (mm)
7m (as average of collection	Height (m)						
							z
							Crowr
							Crown Spread (m) E S W
,		.,		0			
1.75	3.25	2.25	1.50	3.00	2.00	3.50	radial
3.25 (as average of collection)	3.25 (as average of G16)	3.25 (as average of collection)	Crown Clearance (m)				
Early mature		Early mature	Life Stage				
Average	Average	Average	Average	Average	Dead	Average	Physiological Condition
Indifferent	Indifferent	Indifferent	Indifferent	Indifferent	Poor	Indifferent	Structural Condition
C12	C12	C12	C12	C12	C	C12	BS5837 Category
1.5	ω	. 1.2 .00	1.5	ω	Z/ A	ω	RPA Radius (m)





Tree Number	3 3 3	314	315	316	317	318	319
Common Species Name	Field Maple	Common Ash	Sycamore	Common Ash	Field Maple	Common Lime	Sycamore
Trunk Diameter (mm)	300#	160#	310#	190#	220#	290#	130#
Height (m)	7m (as average of collection						
z							
E Cro							
Crown Spread (m) E S W							
ead (m)							
radial	4.25	3.25	3.25	2.00	3.50	3.00	2.25
Crown Clearance (m)	3.25 (as average of collection)						
Life Stage	Early mature						
Physiological Condition	Average						
Structural Condition	Indifferent						
BS5837 Category	C ₁₂	C12	C ₁₂	C12	C12	C12	C12
RPA Radius (m)	3.6	1.8	3.6	2.4	2.7	3.6	1.5





								z
327	326	325	324	323	322	321	320	Tree Number
Standing Deadwood	Elm	Common Lime	Field Maple	Field Maple	Field Maple	Norway Maple	Sycamore	Common Species Name
220#	205#	215	290#	290#	290#	190#	190#	Trunk Diameter (mm)
7m (as average of collection	Height (m)							
								z
								Crown
								Crown Spread (m) E S W
2.00	2.75	3.00	2.50	3.25	3.25	2.25	2.50	m) / radial
3.25 (as average of G16)	3.25 (as average of G16)	3.25 (as average of collection)	3.25 (as average of G16)	Crown Clearance (m)				
		Early mature		Life Stage				
Dead	Poor	Average	Average	Average	Average	Average	Poor	Physiological Condition
Poor	Poor	Indifferent	Indifferent	Indifferent	Indifferent	Indifferent	Poor	Structural Condition
C	C	C12	C12	C12	C12	C12	C	BS5837 Category
2.7	2.4	2.7	33 50	. . 6	3.6	2.4	N/A	RPA Radius (m)





Tree Number	328	329	330	331	332	333	334
Common Species Name	Standing Deadwood	Norway Maple	Field Maple	Field Maple	Field Maple	Field Maple	Common Ash
Trunk Diameter (mm)	250#	250#	200#	260#	310#	250#	180
Height (m)	7m (as average of collection						
z							
Crown S							
Crown Spread (m) E S W							
) radial	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Crown Clearance (m)	3.25 (as average of G16)	3.25 (as average of collection)					
Life Stage		Early mature					
Physiological Condition	Dead	Average	Average	Average	Average	Poor	Average
Structural Condition	Poor	Indifferent	Indifferent	Indifferent	Indifferent	Indifferent	Indifferent
BS5837 Category	C	C12	C12	C12	C12	C12	C12
RPA Radius (m)	N/A	ω	2.4	ω	3.6	ω	2.1





4.2	B12	Poor	Average	Mature	3.5	3.75				8m	350#	Norway Maple	367
4.2	B12	Poor	Average	Mature	ω		2.75	0 3.50	4.50 4.50	8m .	350#	Norway Maple	366
4.2	B12	Poor	Average	Mature	2	5.25				9m	350	Norway Maple	365
2.1	C12	Poor	Average	Mature	2	3.00				5m	180	Whitebeam	364
2.4	C12	Poor	Average	Mature	3.5		2.75	0 2.50	4.00 3.00	5m ,	200	Whitebeam	363
4.5	B12	Poor	Average	Early Mature	2.5	4.00				10m	370	Norway Maple	362
2.4	C12	Poor	Average	Early Mature	2.5	2.75				5m	200	Whitebeam	361
2.7	C12	Poor	Average	Mature	2.75	3.00				6m	215	Whitebeam	360
3.9	B12	Poor	Average	Mature	2.75	4.50				9m	330	Norway Maple	359
4.2	B12	Poor	Average	Early Mature	2.75	4.00				10m	350	Norway Maple	358
2.7	B12	Poor	Average	Early Mature	2.75	3.00				7m	230	Lime	357
ω	B12	Poor	Average	Early Mature	2.75	3.50				7m	250	Lime	356
2.4	B12	Poor	Average	Early Mature	2.75	2.75				5m	205	Lime	355
ω	B12	Poor	Average	Early Mature	2.75	3.25				7m	250	Lime	354
2.7	C12	Poor	Average	Early Mature	2.75	2.50				7m	220	Cherry	353
ω	B12	indifferent	Average	Early Mature	2.75	3.00				7m	250	Cherry	352
2.4	C12	indifferent	Average	Semi-mature	2.75	2.00				6m	200	Norway Maple	351
6.3	B2	Indifferent	Below average	Mature	1.5	6.25				14m	520#	Sycamore	350
3.3	C12	Poor	Poor	Mature	_		2.50	0 2.50	0.50 2.50	6m (2 x 200# av.	Hawthorn	349
9.6	B2	Poor	Good	Mature	0.5		7.50	5 7.50	6.00 7.25	14m	810 (at 0.75)	Sycamore	348
4.2	B2	Indifferent	Average	Mature	2		5 6.00	5 6.75	6.00 5.25	12m (340	Common Ash	347
3.6	C12	Poor	Below average	Mature	2.5		1.00	0 4.50	3.50 4.50	9m :	300	Scots Pine	346
5.4	B2	Poor	Average	Mature	2.5		6.00	0 6.50	5.00 2.50	12m (305 315	Common Ash	345
5.4	B2	Poor	Good	Mature	N	7.00				13m	4 x 230 av.	Common Ash	344
6.9	B2	Poor	Good	Mature	0.5	6.50				12m	570	Weeping Willow	343
3.6	C12	Indifferent	Average	Mature	ω		2.00	5 3.00	4.75 4.75	10m -	300#	Common Ash	342
5.4	C12	Indifferent	Below average	Over mature	ហ		6.00#	2.00# 4.00#	3.00# 2.00#	9m 3.0	450#	Field Maple	341
6.6	C12	Indifferent	Poor	Over mature	4	6.00				10m	550#	Field Maple	340
9.6	B2	Poor	Good	Mature	0.5		5.00#	8.75 8.00#	5.75 8.7	15m	810 (over ivy)	Weeping Willow	339
N/A	C	Poor	Poor	Over mature	7	6.50				12m	700#	Field Maple	338
8.4	C12	Poor	Poor	Over mature	4		5.00	0 3.00	3.00 6.00	7m :	600#	Field Maple	337
3.3	C12	Indifferent	Average	Early mature	4	3.00				8m	290#	Sycamore	336
200	C12	Indifferent	Average	Early mature	3.25 (as average of collection)	2.00				7m (as average of collection	190#	Common Ash	335
RPA Radius (m)	BS5837 Category	Structural Condition	Physiological Condition	Life Stage	Crown Clearance (m)	radial	٤ ,	ω.	z m	Height (m)	Diameter (mm)	Common Species Name	Tree Number
]	7	•			•		ead (m)	Crown Spread (m)	Cro		Trunk		•





Comr	Diameter	Height (m)		Crown	Crown spread (m)	(m)		Crown	Life Stage	Physiological	Structural	BS5837	RPA Radius
Number Name	(mm)	9	z	т	S	8	radial	Clearance (m)		Condition	Condition	Category	2
368 Lime	230#	7m	2.75	1.75	2.75	1.75		ω	Semi mature	Average	Poor	C12	
369 Norway Maple	330#	7m	4.00	3.50		4.00		2.5	Mature	Average	Indifferent	B12	
	340#	7m	3.25			3.25		2.75	Early Mature	Average	Indifferent	B12	
371 Cherry	390#	6m	4.00	5.00	5.00	4.75		2.75	Mature	Average	Indifferent	B12	
372 Cherry	390#	6m	3.00	4.00	2.50	1.00		2.5	Mature	Average	Poor	C12	
373 Lime	300	8m	3.00	3.00	2.75	3.00		2.752.75	Early Mature	Average	Indifferent	B12	
374 Cherry	250	5m					3.00	2.75	Early Mature	Average	Indifferent	C12	
375 Lime	340	8m	3.75	4.50	4.00	4.00		2	Early Mature	Average	Indifferent	B12	
376 Cherry	370#	7m	3.75	4.00	4.00	4.25		ω	Mature	Average	Indifferent	B12	
377 Cherry	330#	7m					4.75	ω	Mature	Average	Indifferent	B12	
378 Lime	220#	7m					3.50	2.75	Early Mature	Average	Indifferent	B12	
379 Corsican Pine	440	12m	4.50	5.00	3.00	\$		3.25	Mature	Average	Indifferent	B12	
380 Norway Maple	490#	14m	7.00	6.50	4.50	7#		2.5	Mature	Average	Indifferent	B12	
381 Norway Maple	390#	12m	3.75	6.00	5.25 6.75#	75#		4.25	Mature	Average	Indifferent	B12	
382 Field Maple	270#	5m	2#	3.00	3.00	3#		4.25	Early Mature	Below Average	Poor	C12	
383 Norway Maple	400#	14m	5.00			6.00		ω	Mature	Average	Poor	B2	
384 Goat Willow	380#	8m	4.00	4.50	6.00	\$		2.75	Mature	Average	Indifferent	B12	
385 Plum	4 × 200#	8m					5.00	3.5	Mature	Average	Indifferent	C12	
386 Lime	410	13m	4.00	5.00	4.00 2	2.00		3.75	Mature	Below Average	Poor	B2	
387 Hawthorn	3 x 60#	5m					2.75	0.5	Mature	Average	Indifferent	C12	
388 Lime	660	16m	6.50	5.00	5.50 1	1.00		2.75	Mature	Average	Poor	B2	
389 Lime	510	16m	3.50	3.50	4.75 3	3.75		O	Mature	Below Average	Indifferent	B2	
390 Ash	215	10m	3.50	3.50	3.50 (0.50		2.25	Early Mature	Average	Poor	C12	
391 Sycamore	6 x 230	11m					7.75	0	Mature	Average	Poor	C12	
Understory of: Common Ash Hazel G1 Elder Hawthorn Sycamore Field Maple	N A	Z >					Z >	N _A	Young to Mature	Poor to Average	Poor to Indifferent	A123	





വ	G	0	0		6	0	0	0	e	N Tr
G11	G10	69	G8	G7	G6	G5	G4 	G3	G2	Tree Number
Sycamore	Sycamore Common Ash Understory of: Elm Blackthorn	Sycamore Common Ash	Common Ash	Blackthorn English Oak Hawthorn	Common Ash Sycamore	Common Ash Silver Birch	Sycamore x 6	Sycamore Common Ash English Oak Understory: Hazel Field Maple Hawthorn Lilac	English Oak Sycamore Common Ash Field Maple Understory of: Ash Hazel Elder Hawthorn Sycamore Field Maple	Common Species Name
5 x 280 av. Max	520 360 350 max	4 x 200 av. max	335 max	6 x 110 av. max	305 400 max	450 max (over ivy)	5 x 190# av. Max	2 x 400 max (over ivy at 0.5m)	700 4 x 550 (max at site edge border)	Trunk Diameter (mm)
13m max	17m max	14m max	14.5m max	6m max	19m max	11m max	14m	13m max 4m min	N/A	Height (m)
										z
										Crown Spread (m)
										spread (r s w
5.75	7.75	6.00	6.25	4.50 max	7.50 max	5.50	5.50	6.25 max	Z/A	n) radial
ω	ω	ω	ω	_	2	ω	_	ω	∠ A	Crown Clearance (m)
Mature	Mature	Mature	Mature	Early Mature to Mature	Mature	Mature	Mature	Mature	Young to Mature	Life Stage
Average	Average	Good	Average	Poor to Average	Average	Poor to Average	Average	Below average to Good	Poor to Average	Physiological Condition
Poor	Poor to Indifferent	Poor	Poor	Poor to Indifferent	Pooor to Indifferent	Poor	Poor	Poor to Indifferent	Poor to Indifferent	Structural Condition
B2	B ₂	B2	B2	C12	B2	C12	B2	B 2	A123	BS5837 Category
7.5	10.8	4.8	3.9	3.3 3.	ō	5.4	5.1	6. 9	15	RPA Radius (m)





G 16	O 15	G 14	G13	G12	Tree Number
Bamboo Silver Birch Cherry Hornbeam Italian Alder Himalayan Birch Elm Leapold Norway Maple Purple Norway Maple	Sycamore Field Maple Lawson Cypress Silver Birch Horse Chestnut Common Ash Elm Understory of: Dogwood Field Maple Blackthorn Hawthorn Beech	Hawthorn Norway Maple English oak Field Maple Laburnum Elm Understory of: Blackthorn Hawthorn Elm Field Maple	Lawson Cypress Sycamore Common Lime	Norway Maple Sumac Understory of: Dogwood Norway Maple Lilac	Common Species Name
420# max	550# max	340 max (over ivy)	500# max	2 x 160# max	Trunk Diameter (mm)
6.5m to 11m	13m max	9m max	16m max	7m max	Height (m)
					z
					Crown E
					Crown Spread (m) E S W
m 1	ചത	⊐ 01	o o	N	
1.75 max into site	max	5.00 max	6.50	2.75	radial (
N	1.5 to 3	1.5 to 2	2#	0	Crown Clearance (m)
Semi-mature to mature	Early mature to Mature	Mature	Mature	Early Mature to Mature	Life Stage
Average	Poor to Average	Average	Average	Below average to Average	Physiological Condition
Indifferent	Poor to Indifferent	Indifferent	Indifferent	Poor to Indifferent	Structural Condition
B2	B 2	B2	B12	C12	BS5837 Category
5 1	<u>ი</u> . ი	4.2	Ō	2.7	RPA Radius (m)





G23	G22	G21	G20	G19	G18	G17	Tree Number
Sycamore Field Maple Elder Blackthorn	Sycamore	Blackthorn Hawthorn Elder Sycamore Field Maple Plum Dogwood	Sycamore	Scots Pine Sycamore Field Maple English Oak Ash	Field Maple Elm Blackthorn	Sycamore Ash Plum Blackthorn Elm	Common Species Pr Name
6 x 190 max.	6 x 190 max.	4 x 70 max.	6 x 190 max.	900# max.	300# 200# max	5 x 230# av. max	Trunk Diameter (mm)
12 max	14 max	6 max.	14 max	25m max 23m ave.	9m max	16m max	Height (m)
							z
							Crov
							Crown Spread (m) E S W
							ad (m) W
4.50	5.00	2.50	4.50	5.50	4.50	6.25 max	radial
2.5	2.5	0.5	2.5	N	4	4	Crown Clearance (m)
Mature	Mature	Young to Mature	Mature	Mature	Mature	Mature	Life Stage
Average	Average	Average	Average	Average	Average	Average	Physiological Condition
Poor	Poor	Poor	Poor	Indifferent	Indifferent	Poor to Indifferent	Structural Condition
C12	C12	C12	C12	A12	B12	B12	BS5837 Category
5.7	5.7	1.00	5.7	10.8 max	4.2	6.3	RPA Radius (m)





Н9	Н8	H7	Н6	H5	H	н	H2	<u>∓</u>	Tree Number
Sycamore Bird Cherry# Mexican Orange Blossom Leyland Cypress Lilac Cotoneaster	Sycamore Cherry Lilac Cotoneaster	Prunus	Holly Elder Lilac Cotoneaster	Hawthorn Sycamore	Plum Elder Dead Elm Elm Field Maple	Hawthorn Sycamore Elm Common Ash	Elm Sycamore Dogwood Blackthorn Field Maple Hawthorn	Hawthorn Field Maple Elm Common Ash Blackthorn Sycamore Privet	Common Species Name
120# max	3 x 100# max	100# max	200# max	100# max	200# max	200 max	150# max	100# max	Trunk Diameter (mm)
6m max	5m	3m	2m to 4m	1.5m to 3m	2m to 7m	3m	2m to 4m	2m to 3m	Height (m)
									z
									Crown Spread (m) E S W
									pread (m W
2.00	3.00	2.00	1.50	1.50	2.50	1.50	1.75	1.5 max	radial
0	0	0	0	0	2m	0	0	0	Crown Clearance (m)
Early mature to Mature	Mature	Mature	Early mature to Mature	Mature	Early mature to Mature	Mature	Mature	Mature	Life Stage
Average	Average	Average	Average	Good	Dead to Average	Average	Good	Good	Physiological Condition
Indifferent	Indifferent	Indifferent	Indifferent	Indifferent	Poor to Indifferent	Indifferent	Indifferent	Indifferent	Structural Condition
C1 22	C12	C12	C12	B12	B ₂	B2	C12	C12	BS5837 Category
1.5	2.1	1.2	2.4	1.2	2.4	2.4	1.8	1.2	RPA Radius (m)





Tree	Common Species	Trunk			Crown Spread (m)	Spread	(m)		Crown	<u>.</u>	Physiological	Structural	BS5837	BS5837 RPA Radius
Number	Name	Diameter (mm)	Height (m)	z	т	S	W	radial	Clearance (m)	Life Stage	Condition	Condition	Category	(m)
H10	Elm Hawthorn Elder	150# max	4.5m max				,	1.50	0	Early mature	Poor to Average	Poor to	C12	
	Sycamore Norway Maple Laburnum									to Mature		indilierent		
H11	Blackthorn Elm	100# max	4m max					1.50	0	Mature	Average	Indifferent	C12	1.2
H 12	Blackthorn Common Ash Sycamore Field Maple Dogwood Elm Dead Elm	300# max	2m to 6m				.,	2.00	0	Mature	Poor to Good	Poor to Indifferent	B ₂	3.6
H13	Pyracantha	70# max	1m to 2m					1.00	0	Mature	Average	Indifferent	C12	0.9
H14	Sycamore Hawthorn Elm Blackthorn	100# max	1.5m - 3m					2.50	0	Mature	Average	Indifferent	C12	1.2
H15	Dogwood Elm	100# max	1.5m					2.25	0	Mature	Average	Indifferent	C12	1.2
H16	Hawthorn Ash Norway Maple	70 max.	2m					1.50	0	Mature	Average	Indifferent	C12	0.9



APPENDIX C

TREE CONSTRAINTS PLAN (8854 TCP 01)





APPENDIX D

PRELIMINARY TREE PROTECTION PLAN (PHASE 1)

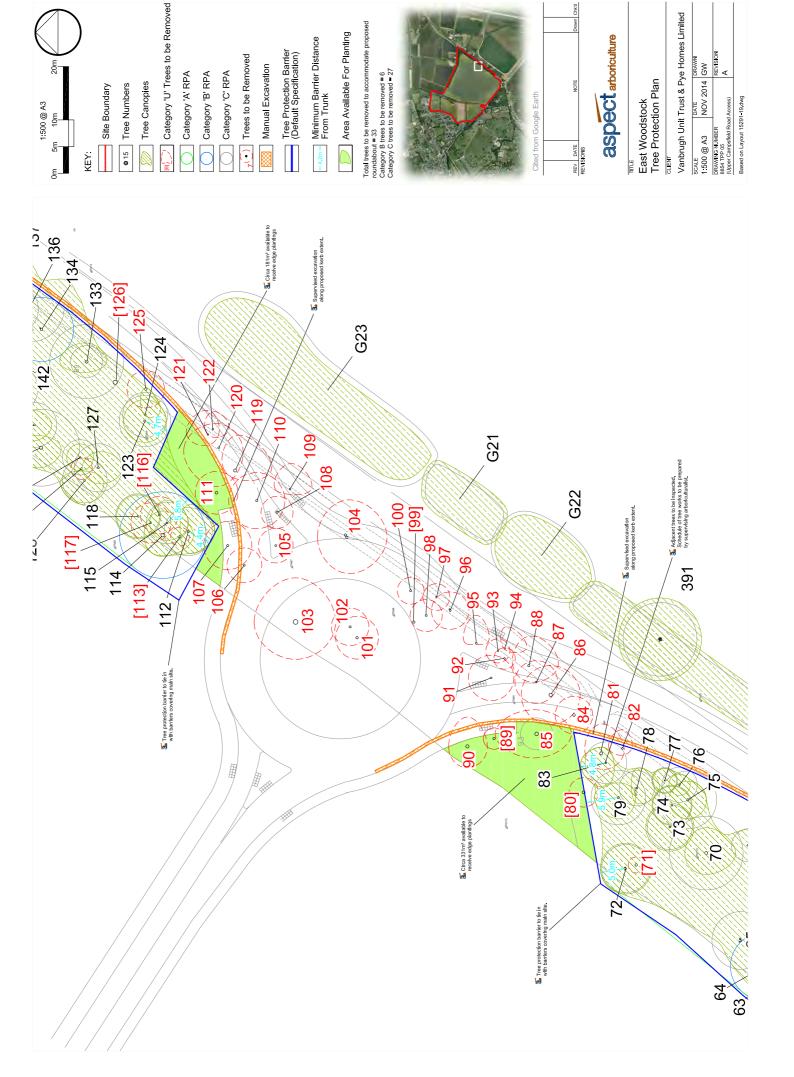




APPENDIX E

PRELIMINARY TREE PROTECTION PLAN (UPPER CAMPSFIELD ROAD)

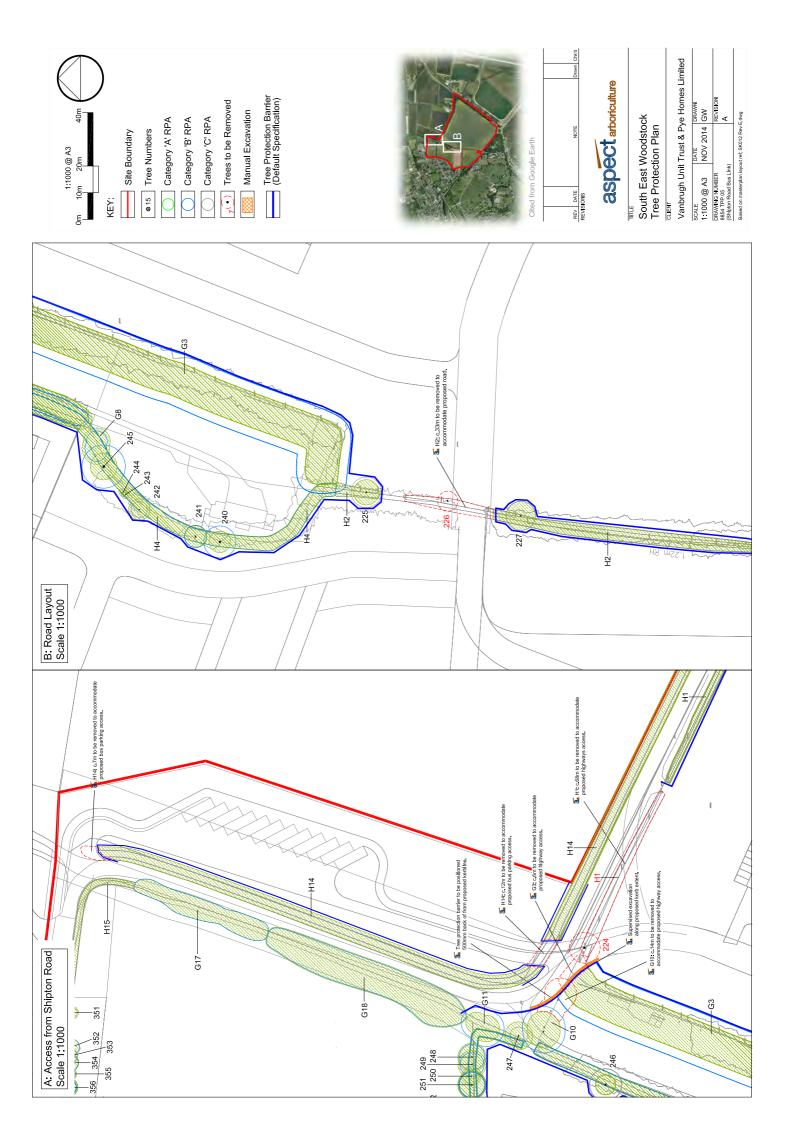




APPENDIX F

PRELIMINARY TREE PROTECTION PLAN (SHIPTON ROAD BUS LINK)





APPENDIX G

PRELIMINARY TREE PROTECTION PLAN (MASTERPLAN)





landscape planning . ecology . arboriculture



Aspect Amoricultum Life

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

01295 276066 01295 265072

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