

Alderwood
Consulting Limited



**Arboricultural
Impact Assessment
in connection with development
at Land adj. Woodcroft Primary
School, WaterlooVille
PO8 9QD**

Prepared by
Jonathan Fulcher DipArb FArborA

LPA Planning Reference: APP/15/01235

Report Reference: D1859AIAa

Report Date: 4th July 2019

Alderwood Consulting Ltd, Chapel House, 1 Peartree Road, Southampton, SO19 7GU

Tel: 02380 444612 Mobile: 07736 230057 Email: jonathan@alder-wood.co.uk

Web: www.alder-wood.co.uk



Table of Contents

	Page
1 INTRODUCTION	3
2 SITE VISIT AND OBSERVATIONS	4
3 ARBORICULTURAL IMPACT APPRAISAL - TREES	5
4 ARBORICULTURAL IMPACT APPRAISAL - DEVELOPMENT	6
5 ARBORICULTURAL METHOD STATEMENT	9
6 ARBORICULTURAL METHOD STATEMENT - DETAILED SPECIFICATIONS	10
7 SUMMARIES	11
 Appendices	
1 Qualifications and experience	13
2 Tree schedule and explanatory notes	14
3 Specification for temporary tree protective fencing	22
Plan AC01	

1 INTRODUCTION

- 1.1 **Brief:** I have been instructed by Exbury Homes Ltd to inspect the significant trees close to the proposed development at land adjacent to Woodcroft Primary School, Woodcroft Lane, Waterloooville, PO8 9QD and to provide advice on the successful retention and incorporation of trees of amenity value within and closely adjacent to the proposals. In addition this report includes the following information in connection with the planning application:-
- a schedule of the relevant trees giving dimension data and an assessment of their condition;
 - an assessment of the layout proposal with appropriate suggestions for reducing any impact on amenity; and
 - arboricultural method statement elements.
- 1.2 **Proposed development:** The development proposed is residential development for 43 residential dwellings with access off Woodcroft Lane and emergency access off Eagle Avenue.
- 1.3 **Documents provided:** I have been provided with the 'Proposed Site Plan' by Boyle + Summers Ltd drawing number WLW-BSL-ZZ-XX-DR-A 2001-DF revision I dated 10-07-19 based on the site survey and indicating the positions of trees on and adjacent to the site, with the proposed siting of the development. An annotated copy of this drawing with tree schedule numbering and indicating the location of special measures in respect of trees is attached as Plan AC01.
- 1.4 **Planning context:** Havant Borough Council granted outline planning permission for residential development for 43 residential dwellings with access off Woodcroft Lane and emergency access off Eagle Avenue subject to conditions, the decision published on 5th August 2016. This permission made reference to the Illustrative Site Plan; Dwg No.100; File Ref Y0422, Rev A – dated 18/02/16. An arboricultural report was submitted with the application leading to the planning permission. That report was not referred to in the permission or its conditions. However, that report with the illustrative site plan established a position in respect of the management of trees in the context of the proposed development, and this present report refers to those established management proposals. Similarly, the access and emergency access drawings establish tree management principles deemed acceptable, and this report follows those established principles.

- 1.5 **Qualifications and experience:** I have based this report on my site observations and the provided information, and I have come to conclusions in the light of my experience. I have experience and qualifications in arboriculture, details of which are listed in Appendix 1.
- 1.6 **Tree constraints:** I have not myself seen specific tree preservation orders (TPOs) relating to this site. The Havant Borough Council website suggests that trees on land to the north west and individual trees along Renown Gardens are protected by TPO; and the site is not within a Conservation Area. The proposal is to retain trees where it is appropriate and reasonable to do so (and see paragraph 3.2 below) and consider them in the planning submissions as if they were formally protected. Where tree work is proposed for trees protected by TPO, this report serves as an application for consent, with a planning permission being deemed consent for the proposed works. In any event this arboricultural impact assessment has been prepared in acknowledgement of the general planning principle that trees are a material consideration in the planning process, and in tacit acknowledgment of the Council's relevant tree policies.

2 SITE VISIT AND OBSERVATIONS

- 2.1 **Site visit:** I carried out a site visit on 10th December 2018 to collect tree information to complete and update the previously submitted tree schedule information. I visited the site again on 16th May 2019 to add details of trees along the Eagle Avenue boundary and for trees adjacent to the north west corner of the site. All my observations were from ground level without detailed investigations and I estimated all dimensions unless otherwise indicated. I did not have permissive access to trees outside the boundaries and have confined observations of them to what was visible from within the property. The weather at the time of the first inspection was dry and overcast with a light breeze and good visibility; and for the second visit, dry, sunny and still with good visibility.
- 2.2 **Collection of data:** I inspected each significant tree and the numbering is indicated on the annotated site layout attached as Plan AC01. For each tree, I collected information as recommended in BS 5837:2012 – *Trees in relation to design, demolition and construction - Recommendations*. I have recorded this information in the tree schedule at Appendix 2.
- 2.3 **Subjective assessment of trees:** The information collected at the site visits was used to prepare a tree schedule in line with the recommendations in BS 5837:2012. Trees are categorised on the basis of their suitability for retention on

a development site, and brief details of the reasons for each category allocation are provided. There are four categories, which are summarised below:

- Category A:** Trees of high quality and value
- Category B:** Trees of moderate quality and value
- Category C:** Trees of low quality and value
- Category U:** Trees unsuitable for retention, usually to be removed

- 2.4 **The root protection areas and location of protective fencing:** BS 5837:2012 gives recommendations for the areas of root protection to be equivalent to the area of a circle centred on the tree with a radius of least 12 times the trunk diameter. This distance is given for guidance for each tree in the tree schedule. In practice the siting of the specific protection measures may be different. The implication of the root protection area is that no significant disturbance should occur within it if the trees are to be successfully retained.

3 ARBORICULTURAL IMPACT APPRAISAL - TREES

- 3.1 **Overview:** The significant trees relating to the proposed development are on and near the site boundaries; and in groups within the site. Trees on and near the boundaries provide screening for the site from roads and provide useful separation between the site and the adjacent land to the north west and south west. Trees on the north east edge of the site are effectively in a linear group along the edge of Woodcroft Lane. Species, sizes and conditions vary. Few of the trees have particular individual amenity value, being predominately in groups of similar trees, so that their contribution to the landscape is generally as part of a population. The groups of trees along the boundaries are useful for giving the site definition and a degree of seclusion and separation from the neighbouring properties. With the noted exceptions, the proposal is for these trees to be retained and protected during development.
- 3.2 **Tree removals proposed:** The proposals include the removal of two individual trees 1079 and 1095. Tree 1085 was shown removed in the approved access plan. The ash tree 1079 is in an untenable location, trapped between fences and close to structures in neighbouring property. Continued retention will lead to significant problems as the tree grows and is not sustainable. The proposals include the removal of groups of trees. The original tree schedule showed separate Groups, from G3 to G6 and G8 to G11. In practice, these are not distinctly different or readily distinguishable as separate groups on site. In any event, the 'consented' illustrative layout plan showed groups G3, G4, G5, G6 and G8 removed. These are generally groups of young and semi-mature trees

with an understorey of shrubby growth, of limited prospects and requiring substantial management intervention. The significant boundary groups G12 and G13 (these last two effectively off-site) will be retained. G7 has been reappraised and separated out, with trees identified individually and proposed for retention; and the scrubby understorey proposed for removal. Proposals for the internal groups G9, G10 and G11 and trees 1082-1085 are discussed at 4.10 below.

4 ARBORICULTURAL IMPACT APPRAISAL - DEVELOPMENT

- 4.1 Preliminary matters:** I met Council Tree Officers on site on 16th May 2019 to discuss elements of the proposals for which they had concerns or questions. The matters raised were discussed at the meeting, and are dealt with in the following report, at the places indicated. The matters discussed were:
- a) Trees on the Eagle Avenue boundary and their effects on proposed dwellings (see 4.4, 4.9.1 and 6.1)
 - b) Trees to the northwest and their effects on proposed dwellings (see 4.4, 4.9.2 and 6.1)
 - c) Proposals for pruning for retained trees near the Woodcroft Lane access / dwellings (see 4.12)
 - d) Management of groups G9, G10 and G11 (see 3.2 and 4.10)
- 4.2 Site access:** The site access for development will be the proposed new access off Woodcroft Lane. The programme for the installation of this access is to be determined, but Condition 8 looks for installation to at least base course prior to the first occupation. For tree matters relating to the surface installation at the site entrance from Woodcroft Lane, see 4.5 below. In general, the tree protection measures in connection with site access will be temporary tree protective fencing installed as shown on plan AC01.
- 4.3 Demolition and removal of structures:** There are no existing buildings within the RPAs of trees and proposed for removal. There will be no fires within 10m of the canopy of any retained tree, and no storage or mixing of harmful materials e.g. DERV fuel, concrete within 10m of the trunk of any retained tree. The combination of these measures with the temporary tree protective fencing will reduce any risk of damage to retained trees to an acceptable minimum.
- 4.4 Construction of new buildings:** The proposed dwellings are indicated outside the RPAs of trees proposed for retention. In consideration of all the circumstances, special design and construction of foundations is

disproportionate, and 'conventional' construction is proposed for the foundations for the dwellings.

- 4.5 **Installation of new surfaces:** The new site access from Woodcroft Lane passes between trees in the tree line along the Woodcroft Lane south west edge. There is a natural gap between trees and a dropped kerb already exists giving access for site management. The access is likely to be to adoptable standard and the plan AC01 shows a location that has been deemed acceptable. There are no special installation measures proposed for this access in respect of trees, except the use of temporary tree protective fencing. This is because there are no tree-friendly installation measures compatible with normal adoptable standards for an access in the place shown. Similarly, for the emergency access, there are no measures proposed for installation in respect of trees, except the use of temporary tree protective fencing.
- 4.6 **Services:** It is assumed at present that services will be provided under or in a service strip against the main site access from Woodcroft Lane. Part of this access is within the root protection areas of trees in the Woodcroft Lane frontage tree line, although at least one tree here will be removed, which will diminish the perceived tree constraints. Given that the installation of the access will be 'conventional', to adoptable standard, the additional excavation for services is not likely to cause significant additional harm, and no special measures are proposed for the installation of services in respect of trees.
- 4.7 **Construction access:** The RPAs of retained trees do not unduly affect construction access and provided that the temporary fencing as proposed is installed/retained, there will be no significant adverse effects on trees from construction access.
- 4.8 **Storage and movement of materials:** There is ample space within the site for the delivery, storage and movement of materials without pressure on tree protection and without a significant risk of harm to retained trees.
- 4.9.1 **Post occupation pressures on trees – plots 16-24:** The Council officers were particularly concerned about the rear aspects of the dwellings near the Eagle Avenue boundary, as the Hampshire County Council plan available at that time appeared to show trees close to the rear elevations of the proposed dwellings on plots 16-25. The site visit on 16th May 2019 was useful in understanding the vegetation on this edge of the site. Foliage density is formed primarily from low-level vegetation, typically blackthorn, suckering freely into the open ground to the north of the boundary. Additional tree schedule information and attention to the site topographical survey identified a sporadic line of eight trees set back towards Eagle Avenue (my trees T1 – T8). The plan AC01 has been

annotated with the tree locations, indications of actual crown spreads, and root protection areas. This shows clearly that trees are distant from the rear elevations of the dwellings by 13m or more. Management of the low-level vegetation will open up the space and the tree will be much less significant than the density of the vegetation currently suggests. In fact, new occupants are likely to welcome some vegetation along this edge to separate the rear elevation views from the road, providing a degree of screening and noise attenuation.

4.9.2 Post occupation pressures on trees – plot 43: The site visit on 16th May 2019 was again useful in understanding the vegetation at the north west corner of the site. Additional tree schedule information and attention to the site topographical survey identified four trees on land adjacent to the site (my trees TA, TB, TC and TD). The plan AC01 has been annotated with the tree locations, indications of actual crown spreads, and root protection areas. This shows clearly that trees are distant from the side elevation of the dwelling on plot 43 by 12m or more. At this distance and in this orientation, trees will not be a significant or unreasonable influence on occupation.

4.10 Tree removal / management – discussion: The groups G9, G10 and G11 form one small area of copse, with distinctions between the groups not really discernible. The problem with this combined group is one of long term management. The access for the west end of the site, passing as close as possible to the school boundary, nonetheless requires the removal of part of the eastern edge of the copse, diminishing it by up to a third. There is no indication that trees in the copse have been managed since they were planted, and there is significant mutual suppression, with the tendency for individuals to have narrow suppressed crowns. Regardless of development, thinning would normally be required, to allow trees to develop as reasonable individuals. The understory of scrubby vegetation around the edge of the copse would also be cleared, to allow access for management. What may work for this development is that those trees that remain after the setting out of the access are thinned e.g. by 30%, leaving the best individuals. The understory can be removed, to improve light and to make the copse more suitable for incorporation into a residential development. A management plan can be drawn up, to be taken forward and implemented by whoever is charged with the maintenance of the open space within the site. This will also allow the retention of trees where those trees have local connections e.g. if school children were involved in planting. This element could be the subject of a separate agreement with the Local Planning Authority. Trees 1082-1085 are three ash and an oak, standing close to the place where the emergency access will be installed. These trees are not particularly good, and ash is under threat at present from ash die-back, making the retention of any ash trees a gamble. There are opportunities for the replacement of these trees I landscape planting within the site.

- 4.11 **Tree works:** Tree crowns over the new access off Woodcroft Lane may need to be raised to allow reasonable clearance; and tree crowns towards plot 1 may need to be reduced / lifted to ensure a reasonable separation. The proposed pruning is lifting of the crowns of trees T1093, T1094 and T1096 to give a clearance over the new access of up to 5m; and the pruning of the crown of tree T1094 on its south side to give a clearance above the ground of 4-5m. Pruning works will be in accordance with BS3998:2010 *Recommendations for Tree Work* and will not have a significant adverse effect on the amenity value or health of the trees.

5 ARBORICULTURAL METHOD STATEMENT

5.1 Planning conditions relating to trees:

- 5.1.1 There are two conditions relating to trees. These are Conditions 6 and 13 of the planning consent and are given verbatim in full below:

Condition 6	No development shall take place until all trees and hedgerows that are to be retained within or adjacent to the site have been enclosed with temporary protective fencing in accordance with BS5837:2012 '<i>Trees in relation to design, demolition and construction. Recommendations</i>'. The fencing shall be retained throughout the period of construction and no activity prohibited by BS5837:2012 shall take place within such protective fencing during the construction period. Reason: To safeguard the continued health and presence of such existing vegetation and protect the amenities of the locality and having due regard to policies CS11, CS16 and DM8 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.
Condition 13	No development shall commence until a Arboricultural Impact Assessment and Method Statement has been submitted and agreed in writing by the Local Planning Authority. The proposed works shall be carried out in accordance with the approved details. Reason: To ensure the trees are not adversely affected by the construction of the development and having due regard to policy DM8 of the Havant Borough Local Plan (Core Strategy) which forms part of the Development Plan and National Planning Policy Framework, March 2012.

5.2 Condition compliance – preliminary matters

- 5.2.1 **Condition 6:** This is a performance condition, requiring retained trees and hedges to be protected by temporary fencing. Fencing will be erected at the locations shown on plan AC01 and as indicated at Appendix 3.
- 5.2.2 **Condition 13:** This condition requires an Arboricultural Impact Assessment (AIA) and Arboricultural Method Statement (AMS) to be submitted and approved. The primary reason given for this condition is ensure that trees are not adversely affected by the construction of the development. The AIA is effectively the first part of this report, from Section 1 through to Section 4. The AMS is Sections 5 and 6. The plan AC01 and Appendix 3 refer to both the AIA and AMS.

6 ARBORICULTURAL METHOD STATEMENT DETAILED SPECIFICATIONS

- 6.1 **Specification for tree protective fencing:** The location of the fencing is shown on the annotated site layout plan AC01 by diagonal red hatching enclosed by a dashed red line. The fencing will be erected prior to any development activity and retained in the positions shown until the completion of development. The fencing will be to the standard recommended in BS5837:2012 i.e. a driven braced scaffold pole framework with plywood facings or preformed galvanised steel mesh panels ('Heras' or similar) of at least 2m in height securely attached to the driven braced framework. Details are attached to this AMS at Appendix 3. The position of the fencing shall be altered only with agreement from Havant Borough Council. The satisfactory erection of the fencing shall be confirmed in writing to the Council on inspection by a person suitably qualified in arboriculture. **Note:** The fencing proposed for trees T1-8 and trees TA-TD is based on new tree survey information and measured trunk diameters, and this demonstrates that fencing can be erected at appropriate BS5837 distances from these trees and still leave adequate space for the process of construction.

6.2 Details of general arboricultural matters

- 6.2.1 **Storage of materials, concrete mixing, use of fires:** The temporary fencing defines the areas available for site access and the storage of non-toxic materials. In addition, the following precautions will be taken:
- There will be no fires on the site without the express permission in writing of the Local Planning Authority
 - There will be no storage or mixing of harmful materials e.g. DERV fuel, concrete within 10m of the trunk of any retained tree

- If concrete is to be mixed within 10m of any retained tree, it shall be in a watertight bund, with any outfall outside the 10m exclusion zone
- 6.3 **Construction of arboriculturally sensitive structures:** The arboricultural submissions in support of the planning application did not identify structures with particular arboricultural sensitivity and there were no comments about this aspect of the proposed development.
- 6.4 **Details of the works requiring arboricultural supervision:** This is not a complex site in terms of the tree protection measures. Once the proposed temporary tree protective fencing is installed, it should be reasonably practicable to retain it in the positions shown until the completion of the development. The erection of the fencing to specification and in the right locations can be confirmed to the Council on inspection by an appropriately qualified and experienced arboricultural person. Thereafter there are no planned operations that require arboricultural monitoring. Any changes to the location of the fencing, including the removal of it at the end of the development may need a visit and reporting confirmation to the Council by the appropriately qualified and experienced arboricultural person
- 6.5 **Details of other activities with implications for trees:** The Conditions and the resulting AMS are both reasonably comprehensive and no other activities with implications for trees have been identified.

7 SUMMARIES

- 7.1 **Summary of control during development:** In order to minimise any adverse effects on the retained trees identified, I advise that:-
- Tree surgery including tree removal is carried out prior to the erection of protective fencing and before the commencement of development
 - Temporary tree protective fencing is installed at appropriate locations before commencement of development and is retained until the completion of development
 - Tree protective fencing may be moved only with the consent of the Council
 - There will be no fires within 10m of the canopy of any retained tree, and no storage or mixing of harmful materials e.g. DERV fuel, concrete within 10m of the trunk of any retained tree
- 7.2 **Summary of the impact on local amenity:** This layout retains the significant trees on and adjacent to the site, with scope for proper provisions for their

protection during development, and their subsequent management, where they lie within the site. If adequate precautions to protect the retained trees are implemented as recommended in this report, the overall impact of the proposal on local amenity will be low and limited to the short term only. These submissions demonstrate that it is reasonably practicable to develop in accordance with the proposals for the submitted scheme without significant harm to retained trees.



Jonathan Fulcher **DipArb FARborA**

Appendix 1

Brief qualifications and experience of Jonathan Fulcher

1. **Qualifications:** I hold the City and Guilds Certificate in Arboriculture, and the Royal Forestry Society's Professional Diploma in Arboriculture, which is one of the premier qualifications within the Arboricultural Profession. I am also a Registered Consultant of the Arboricultural Association.
2. **Practical experience:** I have worked in local government tree management for over twenty years. After cutting my teeth as an arborist at London Borough of Redbridge, I moved to London Borough of Islington where I supervised direct works for three years. I joined New Forest District Council in 1987, where I made and administered Tree Preservation Orders and advised on arboricultural issues relating to planning applications. In 1991, I moved to Poole Borough Council as Senior Arboricultural Officer, leading a small professional team providing a comprehensive arboricultural service to the Council. Duties included arboricultural consultancy on major development proposals, acting as arboricultural witness at Public Inquiries and setting and running tree work contracts. I joined Barrell Treecare as a self-employed arboricultural consultant in March 1998, leaving in early 2003 to become a fully independent consultant. My clients include local and national development companies, schools, public utilities and Local Planning Authorities. From 2003-2008 I was also one of a small number of arboricultural consultants appointed by the Department for Communities and Local Government (DCLG) for the determination of Tree Preservation Order application appeals. This function is continued now by the Planning Inspectorate for whom I have been an Inspector for Tree Preservation Order application and High Hedge appeals.
3. **Continuing professional development:** I am a Fellow of the Arboricultural Association by examination, and have served the Association as a member of their Local Authority Committee, including one year as committee chair. I have been co-organiser of national seminars on Tree Strategies and Tree Preservation Order Enforcement, and given papers and chaired sessions at the Association's annual conferences. I am currently a member of the Association's Consultants Working Party and an assessor for the Association's Registered Consultant scheme. I keep professionally current through professional reading, subscription to professional journals and by regular attendance at seminars and conferences.

Appendix 2
Land to south of Woodcroft School, Waterloo
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
1076	Hornbeam	9	34	4	4	2.5	EM	Semi-upright form	20+	B	4.2
1077	Alder	11	36	4	4	2.5	SM	Minor cavity at base and at 3m	10+	C	4.2
1078	Hornbeam	9	34	4	4	2.5	EM	Semi-upright form	20+	B	4.2
1079	Ash	9	40?	3	3	1	SM	Stands between elements of boundary fence, abuts shed, not a sustainable location	<10	U	N/A
1080	Oak	18	74	5	5	2.5	M	Dense ivy into middle crown	40+	A	9.0
1081	Ash	15	41	3	3	4	EM	Minor basal damage	20+	B	4.8
1082	Ash	10	24	3	3	2.5	SM	Minor basal damage, slightly suppressed	10+	C	3.0
1083	Ash	13	36	3	3	4	EM	Minor basal damage, slightly suppressed	10+	C	4.2
1084	Ash	12	37	4	4	4	EM	Minor basal damage, slightly suppressed	10+	C	4.5
1085	Oak	10	49	2	2		EM	Minor basal damage, poor crown form	10+	C	6.0
1086	Oak	17	65	9	9	3	EM		40+	A	7.8
1087	Oak	15	48	7	7	4	EM	Part of boundary linear group, slightly suppressed	20+	B	5.7

Appendix 2
Land to south of Woodcroft School, Waterloo
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
1088	Oak	15	40	4	4	4	EM	Part of boundary linear group, slightly suppressed	20+	B	4.8
1089	Oak	15	41	5	5	4	EM	Part of boundary linear group, slightly suppressed	20+	B	4.8
1090	Oak	14	33	4	4	4	EM	Part of boundary linear group, slightly suppressed	20+	B	3.9
1091	Oak	14	35	4	4	4	EM	Part of boundary linear group, slightly suppressed	20+	B	4.2
1092	Oak	15	62	5	5	4	EM	Part of boundary linear group, slightly suppressed	20+	B	7.5
1093	Oak	14	64	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	7.8
1094	Oak	16	64	4	4	1	EM	Part of boundary linear group, slightly suppressed	20+	B	7.8
1095	Oak	14	51	5	5	4	EM	Part of boundary linear group, slightly suppressed	20+	B	6.0
1096	Oak	14	62	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	7.5
1097	Oak	14	56+25	6	6	4	EM	Part of boundary linear group, two stems from ground level, slightly suppressed	20+	B	6.9
1098	Oak	15	58	5	5	4	EM	Part of boundary linear group, slightly suppressed	20+	B	6.9

Appendix 2
Land to south of Woodcroft School, Waterloo
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
1099	Oak	15	52+39	6	6	4	EM	Part of boundary linear group, two stems from ground level, slightly suppressed	20+	B	6.6
				6	6						
1100	Oak	14	50	5	5	4	EM	Part of boundary linear group, slightly suppressed	20+	B	6.0
				5	5						
1101	Oak	13	49	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	6.0
				6	6						
1102	Oak	14	61	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	7.2
				6	6						
1103	Oak	14	32	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	3.9
				6	6						
1104	Oak	14	45	6	6	4	EM	Part of boundary linear group, slightly suppressed	20+	B	5.4
				6	6						
1105	Oak	14	63	7	7	4	EM	Part of boundary linear group	40+	A	7.5
				7	7						
G1	Oak	<13	<45	<5	<5	3.5	EM	Part of tree line along Woodcroft Lane, variable in condition	20+	B	5.4
				<5	<5						
G2	Oak	<13	<45	<5	<5	3.5	EM	Part of tree line along Woodcroft Lane, variable in condition	20+	B	5.4
				<5	<5						

Appendix 2
Land to south of Woodcroft School, Waterloo
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
G3/G4/G5/G6/G7	Goat willow, field maple, hawthorn, blackthorn, hazel, holly	<10	<250	<5	<5	0	Y/SM/EM	Vegetation belt along the Eagle Avenue boundary. Variable in species and condition, with saplings and older trees. Would benefit from dynamic management. See also trees T1-T8	10+	C	3.0
				<5	<5						
G8/G9/G10/G11	Goat willow, oak, hazel, birch, holly, hornbeam, field maple, ash	<10	<24	<3	<3	0	Y/SM	Amorphous group of saplings and small trees with a scrubby understorey. No individual trees of specimen merit. Would benefit from dynamic management.	10+	C	3.0
				<3	<3						
G12	Oak, ash, field maple holly, hazel	<20	<50	<6	<6	0	SM/EM	Tree belt, predominately oak with scrubby understorey	40+	A	6.0
G13	Oak, field maple, holly, hazel	<20	<50	<6	<6	0	SM/EM	Tree belt, predominately oak with scrubby understorey.	40+	A	6.0

Appendix 2
Land to south of Woodcroft School, Waterloooville
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
TA	Oak	17	90?	8	8	4	M	On adjacent land. One-sided crown form, large dead wood.	20+	B	10.8
				8	8						
TB	Oak	17	50?	2	3	1	EM	On adjacent land. Very one-sided crown form.	10+	C	6.0
				3	7						
TC	Oak	17	60?	7	7	7	EM	On adjacent land. 80% dead.	<10	U	7.2
				7	7						
TD	Oak	17	60?	3	3	1	EM	On adjacent land. Very one-sided crown form, suppressed.	20+	B	7.2
				3	9						

Appendix 2
Land to south of Woodcroft School, Waterloooville
Tree Schedule and Explanatory Notes

Tree No	Species	Height (m)	Trunk Diameter (cm)	Crown spread (m)		Crown height above ground	Life stage	General observations	Estimated contribution in years	BS 5837 cat	Root protection distance (m)
T1	Ash	15	M<25	2	2	4	SM	Multi-stemmed from ground level, poor form and structure	10+	C	4.2
				2	2						
T2	Oak	16	61	5	3	4	EM	Slightly one-sided	40+	A	7.2
				8	5						
T3	Oak	16	39	7	7	4	EM	Reduced vigour	20+	B	4.8
				7	7						
T4	Ash	17		6	6	10	EM	Multi-stemmed from ground level	20+	B	8.4
				6	6						
T5	Oak	15	49	8	8	5	EM		40+	A	6.0
				8	8						
T6	Oak	15	74	11	7	4	M		40+	A	9.0
				9	19						
T7	Ash	16		9	9	8	EM	Multi-stemmed from ground level, poor structure, canker, dead wood, thin crown	10+	C	10.8
				9	9						
T8	Oak	15	46	8	5	5	EM	Leans, one-sided crown form	10+	C	5.7
				5	5						

Appendix 2
Land to south of Woodcroft School, Waterloooville
Tree Schedule and Explanatory Notes

Explanatory Notes

Abbreviations:

m	: Metre
nm	: Not measured
>	: Greater than
<	: Less than

Botanical tree names:

Alder	: <i>Alnus glutinosa</i>
Ash	: <i>Fraxinus excelsior</i>
Birch	: <i>Betula pendula</i>
Blackthorn	: <i>Prunus spinosa</i>
Field maple	: <i>Acer campestre</i>
Goat willow	: <i>Salix caprea</i>
Hawthorn	: <i>Crataegus monogyna</i>
Hazel	: <i>Corylus avellana</i>
Holly	: <i>Ilex aquifolium</i>
Hornbeam	: <i>Carpinus betulus</i>
Oak	: <i>Quercus robur</i>

- **Species:** Species identification is based on visual observations.
- **Height:** Height is estimated to the nearest metre.
- **Trunk diameter:** Trunk diameter for accessible trees has been measured with a diameter tape and recorded in centimetres.
- **Crown spread:** Crown spread for trees within the site is estimated at the four cardinal compass points. The distances given as appropriate correspond to crown spreads to the four cardinal compass points as shown in the grid below:

N	E
W	S

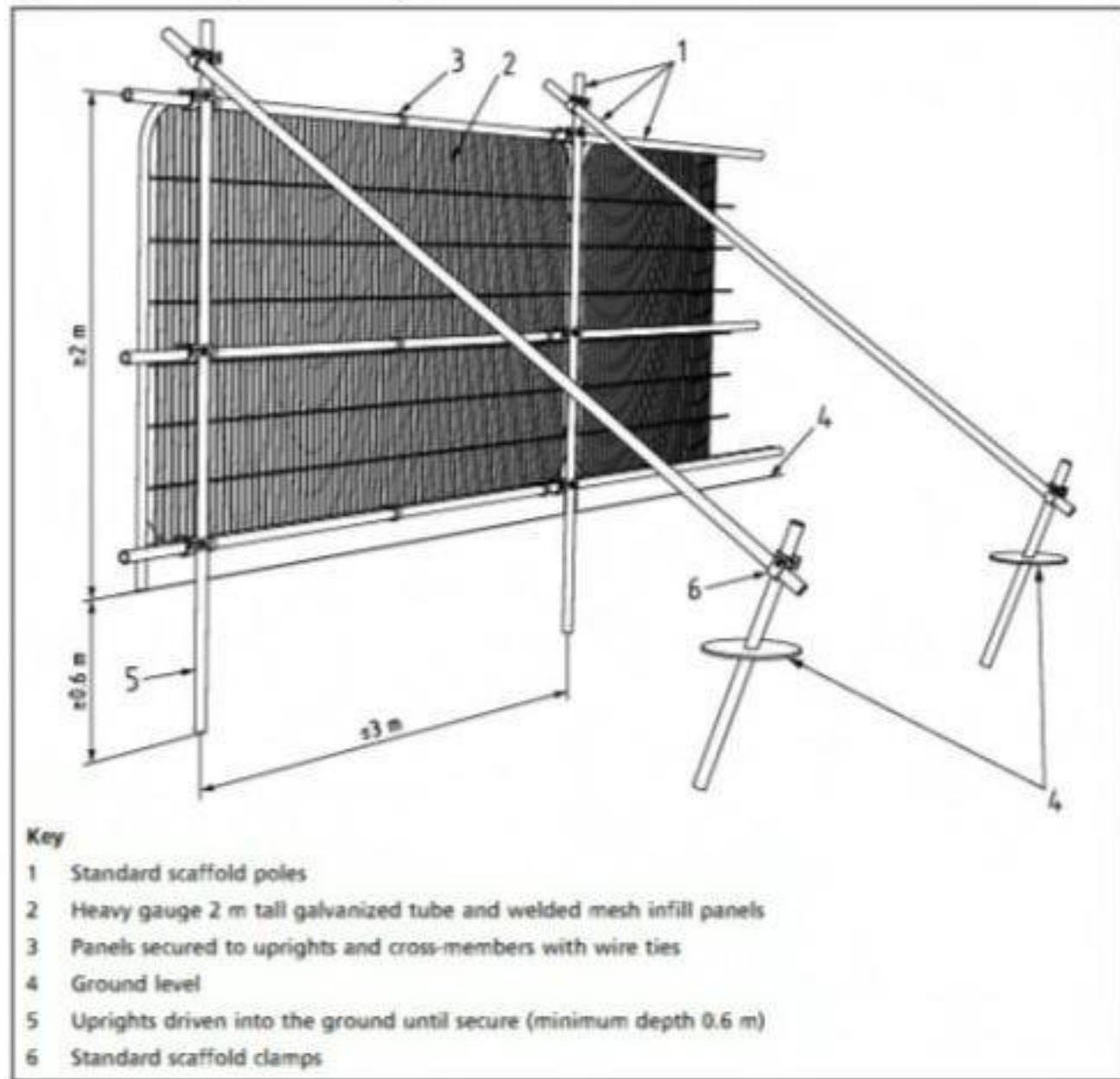
- **Crown height above ground:** The height of the crown clearance above the ground over the site is estimated to the nearest 0.5m.
- **Life stage:** The life stage categories correspond to the classes given in BS 5837:2012, which are Young (Y), Semi-mature (SM), Early Mature (EM),

Appendix 2
Land to south of Woodcroft School, Waterloooville
Tree Schedule and Explanatory Notes

Mature (M) and Over-mature (OM). There are no over mature or veteran trees included in the schedule.

- **General observations:** These comment on the health and physiological and structural condition of the tree, with management recommendations where appropriate.
- **Estimated contribution in years:** <10, 10+, 20+, 40+, as advised in BS 5837:2012.
- **BS 5837 category:** As advised in BS 5837:2012. This grading is based on an assessment of tree quality and an estimated remaining contribution in years i.e. A – Trees of high quality, more than 40 years; B – Trees of moderate quality, 20-40 years; C – Trees of low quality, 10-20 years; U – Trees unsuitable for retention, less than 10 years.
- **Root protection area:** The area of root protection should be equivalent to the area of a circle centred on the tree with a radius of least 12 times the trunk diameter. This column gives the radius of such a circle; the distance may not be the same as the distance for protective fencing.

Appendix 3 Land to south of Woodcroft School, Waterloooville

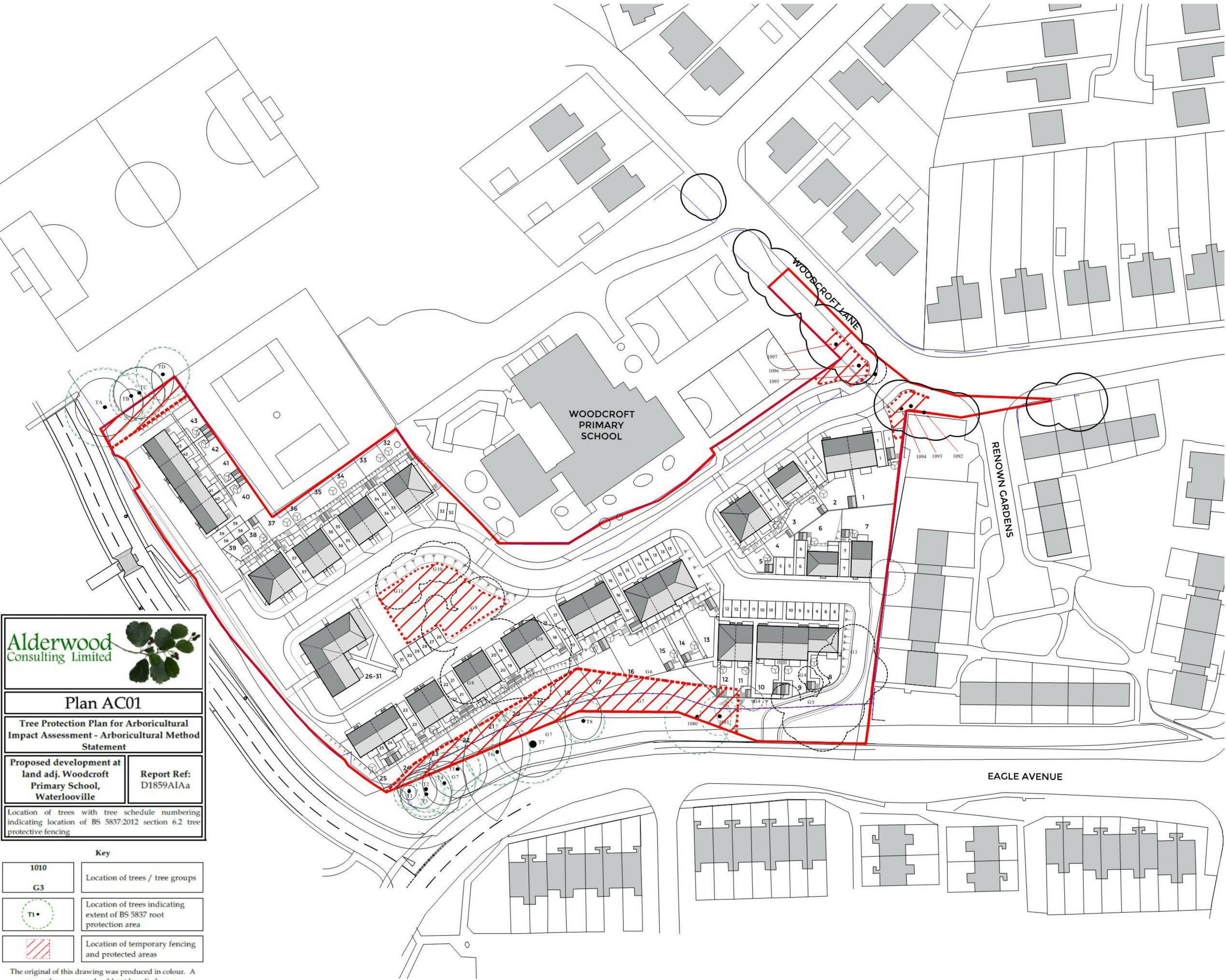


Purpose: Fencing will be installed to protect trees during the development process. Fencing should:

- Exclude construction activity
- Be appropriate to the degree and proximity of work taking place around the retained tree(s)
- Be installed in a fashion that makes it difficult to move easily
- Be maintained to ensure that they remain rigid and complete
- Be installed in the positions agreed with the Local Planning Authority and shown on the fencing plan

Specification: Fencing should satisfy the above criteria. A typical construction is indicated in BS 5837:2012 and illustrated above. The fencing on this site will be to the standard recommended in BS 5837:2012 i.e. a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. On this, weldmesh panels should be securely fixed with wires or scaffold clamps.

Location: The location of the fencing is shown on the annotated site layout plan. The fencing will be erected prior to any demolition or development activity and retained in the positions shown until the completion of development or as required for landscaping and path installation. The position of the fencing shall be altered only with agreement from the Local Planning Authority.



Key Information

- Fence line relating to topographical survey drawing number S418/0306/P/0001

- Red line relating to Ownership boundary drawing number A/13/732 provided by HCC

Note

This drawing is based is on the overlay of topographical survey drg no.S418/0306/P/0002 - Warner Surveys, OS data drg no. E793/2007/500 - Site Survey on OS, Section 38 general arrangement - Road_drg no. 17-110/1100 -Odyssey.

The red line is based on the site boundary from Hampshire County Council Property Services, drg no. A/13/732, which has then been amended to follow fence lines on the topo survey.

Alderwood
Consulting Limited

Plan AC01

Tree Protection Plan for Arboricultural Impact Assessment - Arboricultural Method Statement

Proposed development at land adj. Woodcroft Primary School, Waterlooille

Report Ref: D1859AIAa

Location of trees with tree schedule numbering indicating location of BS 5837:2012 section 6.2 tree protective fencing

Key

1010

G3

Location of trees / tree groups

T1

Location of trees indicating extent of BS 5837 root protection area

Location of temporary fencing and protected areas

The original of this drawing was produced in colour. A monochrome copy should not be relied upon.

Alderwood Consulting Ltd, 1 Peartree Road, Southampton, SO19 7GU
Tel 02380 446612 Mobile 07736 230057
Email jonathan@alder-wood.co.uk

I	10-07-19	Arboricultural information added	IC	RS
H	02-07-19	Plot 18, 19 amended to semi-detached House Type D. Plot 20, 21, 22, 23 amended to semi-detached House Type C. Plot 2, 17, 15 paths amended. Plot 24, 25 moved NE to increase distance to SW side boundary.	IC	RS
G	06-03-19	Plot 13,14,15 rear gardens amended to suite engineer feedback. Site Boundary amended to include road. Rear emergency access road realigned.	3C	PF
F	19-02-19	Plot 13 adjoined to plots 14,15. Footpaths, sheds, dryers, patios added to rear garden, site plan amended to suite.	3C	PF
E	13-02-19	Plots 7 changed to House Type D, parking reorganised SE of site. House Type E re sized to be 1m deeper, roof pitches added	3C	PF
D	22-01-19	Plots 1,2,6,7 re-orientated to suit engineers notes, minor parking layout amendment for mix flats.	3C	PF
C	11-01-19	Updated topographical survey.	3C	PF
B	04-01-19	Redesign of road, plots re-arranged to suite	3C	PF
A	03-01-19	Layout change for Plots 8,9,10,11,12, car parking added to east of site	3C	PF
Rev	Date	Description	Drawn	Check

BOYLE+SUMMERS
ARCHITECTURE AND MASTERPLANNING

Canute Chambers
Canute Road
Southampton
Hampshire
SO14 3AB

Client Exbury Homes Ltd.

Project Woodcroft Lane, Waterlooille

Title Proposed Site Plan

WLW - BSL - ZZ - XX - DR - A

2001 - DF - I

B+S Ref.	Date	Scale @ A1	Drawn	Checked
17053	Mar 2019	1:500	JG	PF

Tel: 023 8063 1432

www.boyleandsummers.co.uk

Other than for the purposes of planning, do not scale these drawings. Use written dimensions only. All dimensions to be checked on site prior to commencement of work.

This drawing is © Boyle+Summers Ltd and may not be reproduced, copied or altered in any way without written authority.

