



# SJ Stephens Associates

ARBORICULTURAL, LANDSCAPE &  
MANAGEMENT CONSULTANTS

Savernake Barn  
Stokke Common  
Great Bedwyn  
Marlborough  
Wiltshire SN8 3LL  
Tel: 01672 871 862  
www.sjstephens.co.uk  
e: info@sjstephens.co.uk

## **Arboricultural Impact Assessment**

- Tree Survey
- Tree Protection Plan
- Arboricultural Method Statement

### **At:-**

Cow shed proposals  
Yew Tree Farm  
Ascott under Wychwood  
Chipping Norton  
OX7 6AX

### **On behalf of:-**

Bloombridge Development Partners  
4th Floor, Venture House,  
27-29 Glasshouse Street,  
London,  
W1B 5DF

### **Prepared by:**

Simon Stephens MA Oxon, Dip  
Arb(RFS), MArborA, C Env. MICFor  
Email: [simon@sjstephens.co.uk](mailto:simon@sjstephens.co.uk)

Survey Date: 6<sup>th</sup> November 2018  
Report Date: 3<sup>rd</sup> December 2020  
Project no: 1279

## **CONTENTS**

- 1 BACKGROUND**
- 2 SURVEY DETAILS AND SCOPE**
- 3 SURVEY LIMITATIONS**
- 4 LEGAL PROTECTION OF TREES**
- 5 ARBORICULTURAL METHOD STATEMENT**
- 6 ARBORICULTURAL IMPACT ASSESSMENT**
- 7 REFERENCES**

## **Appendices**

- A Tree Protection Plan: drawing no: 1243-04revA**
- B Tree Schedule**
- C BS 5837:2012 - Trees in relation to design, demolition and construction, Table 1**
- D Tree Protection Fencing Detail**
- E Site photos**
- F Proposed Site Plan**

## **1 BACKGROUND**

- 1.1** This Arboricultural Impact Assessment has been instructed by Bloombridge Development Partners to assess the arboricultural impact of the proposed construction of 7 new dwellings on the site of former cow sheds at Yew Tree Farm.
- 1.2** Trees were surveyed on 6<sup>th</sup> November 2018, with findings shown in the Tree Schedule in Appendix B and shown plotted on the Tree Protection Plan in Appendix A. This also includes tree protection measures, which are specified in the Arboricultural Method Statement in section 5 below. The arboricultural impact is assessed in section 6, which assumes that these recommendations are followed.
- 1.3** The tree survey was undertaken, and this report has been prepared, by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, C Env, MICFor a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.
- 1.4** This survey and report have been prepared in accordance with recommendations provided in BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations.

## 1.5 Documentation supplied:

- Topographical Survey
- SJ Stephens Associates, Tree Constraints Plan, drawing no:1243-01
- Magnalls Architecture: Proposed Site Plan – drawing no: 012-02 Issue A, dated 27-11-2020

## 2 SURVEY DETAILS AND SCOPE

- 2.1 The site survey included trees and shrubs, within influencing distance of the proposed development, with a stem diameter over 75mm at 1.5m height, located within the area shown on the Tree Protection Plan, included as Appendix A.
- 2.2 Tree inspection took place from ground level with the use of binoculars, sounding hammer and metal probe using the Visual Tree Assessment method (Mattheck & Breloer 1994). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- 2.3 Tree diameters were measured using a girthing tape and tree heights were measured using a hypsometer. Where use of a tape was restricted by site factors, diameters were estimated, with the diameter recorded in the tree schedule as eg “est 300”. At the time of the survey, the weather was fine, with no restrictions to visibility. Broadleaf trees were not in leaf. There were no limitations to access around the trees.
- 2.4 The suitability of trees for inclusion in the future development was considered, in particular considering the safe useful life expectancy, and sustainability, of trees on the site after development is completed.
- 2.5 Tree details have been added to the plan received, which is included as Appendix A. Tree locations have been taken from the topographical survey provided. Where not included on the topographical survey, they have been determined by measuring distances from features shown on the plan, using a laser measuring device. The following information was recorded for each tree, and is shown in the Tree Schedule included as Appendix B:
- **Number:** an identity number for each tree, prefixed with a “T”, which cross references locations shown on the plan with the schedule in Appendix B. Where a number of trees, normally of the same species, are located close together and are similar in character and requirements, they have been treated as a Group under a single Number, prefixed with a “G”.
  - **Species:** common name.
  - **Tree height:** approximate height in metres.

- **Stem diameter:** diameter in millimetres, taken at 1.5m above ground. Where there are a number of stems, stem diameters are recorded in the condition column.
- **Branch spread:** approximate spread in metres to N,S,E and W of the trunk. The approximate branch spread is drawn on the plan.
- **Canopy clearance:** approximate height of the canopy above ground. Where a significant, low lateral branch is present, its height and direction of growth is included in the Condition column.
- **Age class:** Young, Semi-mature, Early mature, Mature, Over-mature, Veteran.
- **Condition:** features that affect the safe useful life expectancy and amenity of the tree, including the presence of decay or any physical defect.
- **Management Recommendations:** recommendations to ensure the health and safety of the tree, within the future development.
- **Estimated Remaining Contribution:** <10 years, 5-15 years, 10-20 years, 15-30 years, 20-40 years, >40 years.
- **Category grading:** tree classification taken from BS 5837:2012, Trees in relation to design, demolition and construction (see Appendix C for details), as follows:
  - Category U: Unsuitable for retention, trees with less than 10 years life expectancy, normally recommended for removal (Red)
  - Category A: high quality trees, able to make a substantial contribution for at least 40 years, normally retained unless there is an over-riding reason for removal and appropriate mitigation. (Green)
  - Category B: moderate quality trees, able to make a significant contribution for at least 20 years, normally retained. (Blue)
  - Category B/C: an intermediate category between categories B and C (not specifically described in BS5837). Trees, which should be retained wherever possible, providing retention does not unreasonably constrain the layout. (Blue)
  - Category C: low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter. Trees which can be removed to allow the desired layout or new planting. (Grey)

For category A, B and C trees, a subcategory has been allocated, providing information on the reasons for selection of a specific category, as follows:

- Subcategory 1: mainly arboricultural values.
- Subcategory 2: mainly landscape values.
- Subcategory 3: mainly cultural values, including conservation.
- Trees have been classified irrespective of the possible proximity to future construction. The BS 5837 category is colour coded, as indicated above, on the plan included as Appendix A.
- **Protection Distance:** the protection distance in metres required to provide the Root Protection Area recommended in BS 5837, assuming a circular area centred on the tree.
- **Root Protection Area (RPA):** the area in m<sup>2</sup>, as recommended in BS 5837, to provide sufficient rooting area to ensure tree survival and which, in most

situations, should be fenced off to prevent root damage from construction activities.

### **3 SURVEY LIMITATIONS**

- 3.1 No internal decay devices, or other invasive tools to assess tree condition, were used.
- 3.2 No soil excavation or root inspection was carried out.
- 3.3 This survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.
- 3.4 The tree survey has been undertaken for planning purposes. Although any obvious structural defects have been noted, a Tree Hazard Assessment has not been carried out. Mature trees close to highly populated areas or public highways should normally be checked for safety annually, by a suitably qualified person.

### **4 LEGAL PROTECTION OF TREES**

- 4.1.1 The West Oxfordshire District Council website was viewed on 30-08-2019, showing that the site does not contain any Tree Preservation Orders, nor does it fall within a Conservation Area. The presence of Planning Conditions currently attached to the site, was not checked.
- 4.1.2 Although no Tree Preservation Orders showed on the council website, this must be checked with the council before any tree work is undertaken.

### **5 ARBORICULTURAL METHOD STATEMENT**

#### **5.1 Site Overview**

- 5.1.1 The proposal is for the construction of 7 new dwellings on the site of former cow sheds at Yew Tree Farm. The proposed site plan is included as Appendix F and the footprint of proposed buildings and hard surfacing has been added to the survey drawing, along with tree details, to create the Tree Protection Plan attached as Appendix A.

- 5.1.2 There are a number of important landscape trees growing around the proposed development. To the south there are three large, mature poplar (T14 – T16) and to the north there is a block of poplar and Norway maple, screening the site from agricultural land beyond. Photos are included in Appendix E.
- 5.1.3 The soil on the site is a shallow lime-rich soil over chalk or limestone, as defined by the National Soil Resources Institute (NSRI) at Cranfield University. ([www.landis.org.uk](http://www.landis.org.uk)). This indicates that tree roots are likely to be close to the surface and to extend at least as far as the edge of the Root Protection Areas indicated.

## 5.2 Tree Work

- 5.2.1 Details of proposed tree works are included in the Tree Schedule included as Appendix B.
- 5.2.2 Three trees and two sections of hedging are proposed for removal, as detailed in section 6.1 below.
- 5.2.3 All tree work must be undertaken to the standards set out in BS 3998:2010 Tree work – Recommendations.

## 5.3 Root Protection Areas

- 5.3.1 Root Protection Areas are shown for all trees in the tree schedule attached as Appendix B. They are also shown for all retained trees, as circular areas centred on the trunk, on the Tree Protection Plan attached as Appendix A. This shows the distance from a tree in which all construction activity must normally be excluded, to provide the Root Protection Area as per BS 5837, unless appropriate protection measures are implemented.
- 5.3.2 For tree number T33, where the hard surfacing within the Root Protection Area will have inhibited root growth, the Root Protection Area has been offset by 20% away from the hard surfacing to more closely reflect the likely actual root spread.

## 5.4 Tree Protection Fencing

- 5.4.1 Tree Protection Fencing must be erected where shown on the Tree Protection Plan, attached as Appendix A. This will provide full protection of the Root Protection Areas of all retained trees, other than for:-
- areas hatched in blue on the Tree Protection Plan, where No-Dig Construction must be used, as described in section 5.5 below, to protect underlying roots.
  - areas hatched cyan on the Tree Protection Plan, indicating Ground Protection Areas, where roots must be protected, as described in section 5.6 below.

- 5.4.2 Tree works can be completed before Tree Protection Fencing is erected, however no contractors plant or vehicles must be allowed to track within the Root Protection Areas unless ground protection panels are laid.
- 5.4.3 Tree Protection Fencing must be from weldmesh panels, at least 2m high, securely fixed, with wire or scaffold clamps, to a rigid framework. This framework must be constructed from scaffold tubes with vertical tubes, at a maximum interval of 3m and driven into the ground at least 0.6m. The structure must be well braced to resist impacts, constructed as per Figure 2 of BS5837:2012, which is reproduced in Appendix D. Alternatively, weldmesh panels can be supported on blocks, providing the blocks are pinned to the ground with road pins, or similar, and the panels are braced, as per Figure 3 of BS5837:2012, which is also reproduced in Appendix D.
- 5.4.4 After erection of Tree Protection Fencing and installation of ground protection, 2 days notice must be given to the Local Planning Authority before demolition or construction, including any ground work, starts on site. Tree Protection Fencing must be maintained and retained for the duration of the works, or until such time as agreed in writing with the Local Planning Authority.
- 5.4.5 Weatherproof notices must be fixed to the Tree Protection Fencing, and maintained, stating:-

**TREE PROTECTION AREA  
KEEP OUT**

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS  
CONTRAVENTION MAY LEAD TO CRIMINAL PROSECUTION  
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:

- The Protection Fence must not be moved
- No person or machine must enter the area
- No materials or spoil must be deposited
  - No excavation must be permitted

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

## **5.5 No-Dig Construction Areas**

- 5.5.1 The No-Dig areas, shown hatched blue on the Tree Protection Plan included as Appendix A, must be constructed without excavation apart from the removal of turf/organic matter, which must be carried out by hand. Excavators, dumpers and other site traffic must not be allowed to track on the No-Dig areas until roots are protected by the No-Dig surfacing or ground protection.

5.5.2 Engineering details must avoid localised compaction, using both a two dimensional geogrid, and a three dimensional cellular confinement system as integral components of the sub-base. A typical section is shown on the Tree Protection Plan included as Appendix A. As well as being fit for purpose, the design and methodology must protect tree roots, by ensuring the following:-

- topsoil/turf can be removed carefully by hand to a maximum of 75mm, but less if roots are found nearer the surface.
- following leveling with soil or sand, a permeable, non-woven geotextile membrane, must be laid.
- a suitable two dimensional geogrid, such the TriAx Geogrid supplied by Tensar International ([www.tensar.co.uk](http://www.tensar.co.uk)), or the Biaxial Geogrid supplied by Geosynthetics Ltd ([www.geosyn.co.uk](http://www.geosyn.co.uk)), must be laid over the entire area and underneath the edging.
- pressure treated timber edging boards, supported by driven stakes must be used.
- a suitable cellular confinement system must then be laid to manufacturers instructions on top of the geogrid. Products that might be considered include Geoweb, supplied by Greenfix ([www.greenfix.co.uk](http://www.greenfix.co.uk)) or Cellweb, supplied by Geosynthetics Ltd ([www.geosyn.co.uk](http://www.geosyn.co.uk)). The depth of the system must be adequate to take the maximum axle weight, as per manufacturers guidance.
- the cellular confinement system must be filled with clean (no fines), washed angular, 20/40mm, stone to provide load support, while allowing air and moisture to permeate to the root zone.
- a further permeable, non-woven geotextile membrane, such as TreetexT300, or an alternative approved product which has similar oil trapping qualities, must be laid over the cellular confinement system.
- a porous, surfacing material, free from contaminants, must then be laid. Either sand bedding and block paving, gravel or permeable tarmac would be suitable.
- removed turf/topsoil can be used to grade surrounding ground levels.

5.5.3 Site traffic, including pedestrians, must not be allowed on the No-Dig areas until roots are protected by the No-Dig surfacing, or unless suitable ground protection has been laid. If access is required across No-Dig areas for plant, before the No-Dig surfacing is laid, ground protection panels must be laid. Either Trakmats (supplied by the Marwood Group, [www.marwoodgroup.co.uk](http://www.marwoodgroup.co.uk)), Groundtrax panels (see [www.groundtrax.com](http://www.groundtrax.com)), Ground-Guards, as supplied by Greentek ([www.greentek.org.uk](http://www.greentek.org.uk)), or a similar approved product, must be used, laid on top of a compressible layer of sand or woodchips, laid onto a geotextile. If access is required for pedestrians, 25mm plywood or side butting scaffold boards must be laid, on top of a compressible layer of sand or woodchips, laid onto a geotextile.

5.5.4 No-Dig construction will result in an increase in levels. This must be fully taken account of in all other aspects of the design.



## **5.6 Ground Protection Areas**

- 5.6.1 The Ground Protection Areas, which are hatched cyan on the Tree Protection Plan, contain hard surfacing which is protecting any underlying roots. No excavation must be permitted beneath the base course within these areas.
- 5.6.2 The existing hard surfacing, where within the Ground Protection Areas, must remain in situ to protect any underlying roots during the construction period. On completion, during landscaping of the site, the hard surfacing can be lifted to be replaced with soft landscaping.
- 5.6.3 An excavator must only be used for the removal of the existing hard surfacing within the Ground Protection Areas, if it can work only from areas of hardstanding, or from outside the Ground Protection Area. A banksman must be present during this operation and excavation must go no deeper than the existing base course and must cease immediately if roots are found. Once hard surfacing has been removed, the area must immediately be topsoiled using good quality topsoil supplied to BS3882:2015.

## **5.7 General measures**

- 5.7.1 No construction activity whatsoever, including routing of underground services, storage of materials or on-site parking, must be allowed within Root Protection Areas, other than that specifically described above.
- 5.7.2 No mixing or storage of cement, concrete, oil, fuel, bitumen or other chemicals must be permitted within 10m of the trunk of any retained trees, nor in any position where the slope of the ground could lead to contamination of the Root Protection Area.
- 5.7.3 Fires must not be lit in a position where their flames could extend to within 10m of foliage, branches or trunk.
- 5.7.4 Landscape works carried out within Root Protection Areas must be undertaken with great care so as not to damage shallow roots. Tractor mounted rotovators or other heavy mechanical cultivation must not be used within the Root Protection Areas.
- 5.7.5 If any retained tree is removed, uprooted, destroyed or dies, another tree shall be planted at the same place, at a size and species and planted at such time, that must be agreed in writing with the Local Planning Authority.
- 5.7.6 A copy of this report and the Tree Protection Plan must be kept on site and must be fully understood by the Site Agent.

## **5.8 Bat roosts**

- 5.8.1 The current legislation makes it a criminal offence to disturb, damage or destroy any bat roost or hibernation area. Contractors must be reminded of their responsibilities and should contact the relevant authorities if any signs of bats are found.

## **5.9 Birds**

- 5.9.1 The current legislation makes it a criminal offence to disturb nesting birds. The nesting season is generally assumed to be from 1<sup>st</sup> March to 31<sup>st</sup> July, however this can vary depending on species and location. During these months a careful inspection must be made before work commences and works must be postponed if active nests are found.

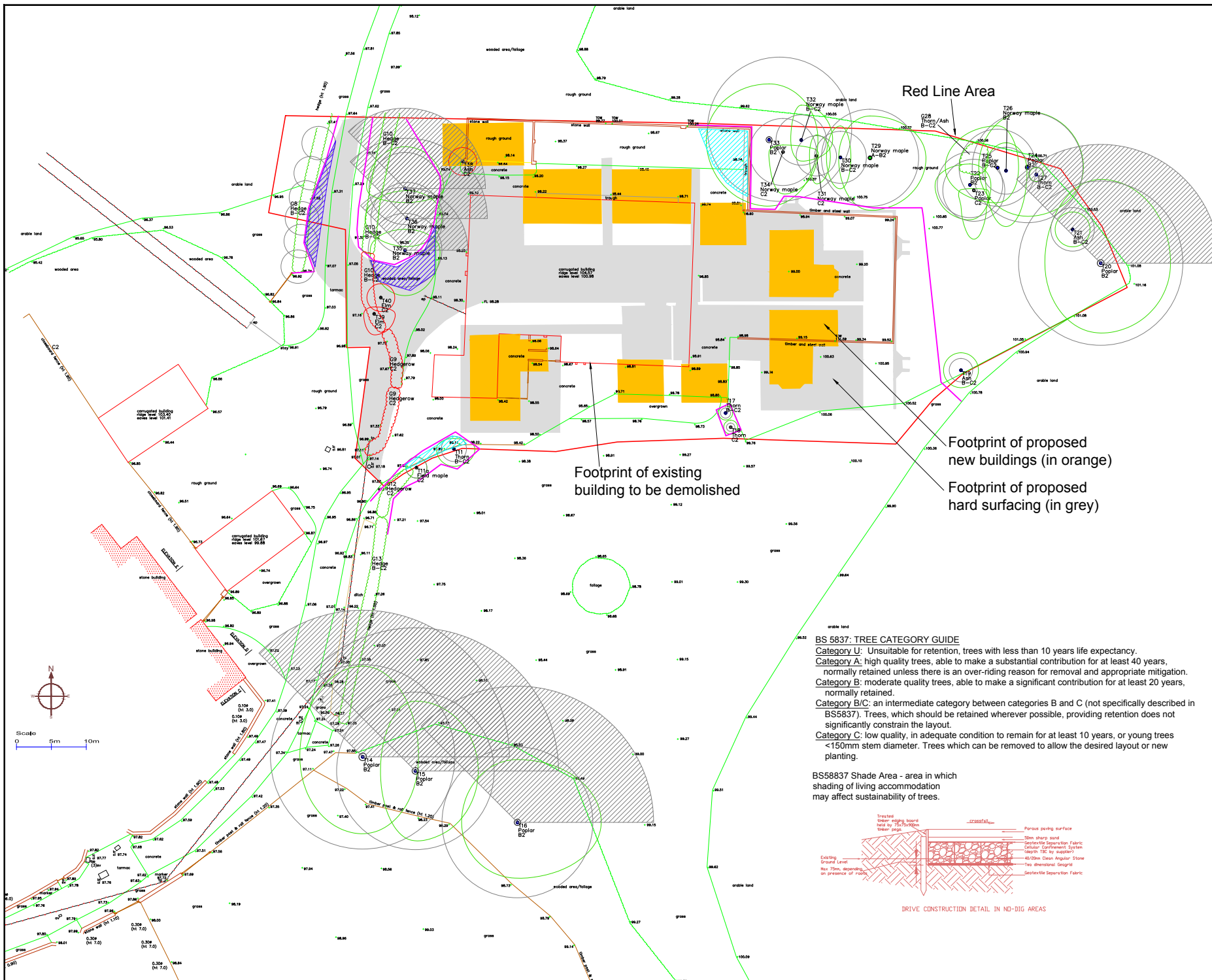
## **6 ARBORICULTURAL IMPACT ASSESSMENT**

- 6.1 The following trees / tree groups, categorized as per BS 5837 (see Appendix C for details), are proposed for removal:
- Category C – low quality:
    - G9 – a section of hedge, which is almost entirely bramble and elder.
    - T38- a low quality 4m ash
    - T39 and T40 – 6-7m elm, likely to succumb to disease
  - Category B/C – between categories B and C
    - G10(part) – approx 12m of 1.9m tall rural hedge.
- 6.2 No trees of any significance are proposed for removal and new building has been kept back from trees to provide adequate separation distances to ensure their future sustainability.
- 6.3 Protection measures have been specified to protect the Root Protection Area of all retained trees.
- 6.4 Although preservation of Root Protection Areas is deemed to protect tree roots, in some cases buildings may need to be set further back to ensure the future sustainability of trees. If large trees are too close to buildings, future occupiers may be likely to seek their reduction, or removal, if they are cutting out excessive sunlight or providing a claustrophobic or threatening environment. Section 5.2.2 of BS 5837:2012 states that “an indication of potential direct obstruction of sunlight can be illustrated by plotting a segment with a radius from the centre of the stem equal to the height of the tree, drawn from due North West to due East, indicating the shadow pattern through the main part of the day.”
- 6.5 Shading patterns for key trees have been shown on the plan. This shows that new dwellings are outside potential shading areas.

**6.6** Provided the recommendations in this report are followed, the arboricultural impact of this development on existing trees is considered acceptable.

## **7 REFERENCES**

- *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.*
- *BS3998:2010 Tree Work. Recommendations.*
- *Mattheck & Breloer (1994). HMSO London. Research of Amenity Trees No4: The Body Language of Trees.*

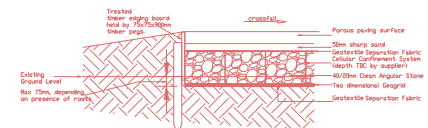


**Key**

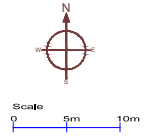
- Category U
- Category A
- Category B
- Category C
- Crown spread: retained trees
- Trees For Removal
- Root Protection Area
- Tree Protection Fence
- Ground Protection Area
- No Dig Construction
- BS 5837 Shade Area

**BS 5837: TREE CATEGORY GUIDE**  
**Category U:** Unsuitable for retention, trees with less than 10 years life expectancy.  
**Category A:** high quality trees, able to make a substantial contribution for at least 40 years, normally retained unless there is an over-riding reason for removal and appropriate mitigation.  
**Category B:** moderate quality trees, able to make a significant contribution for at least 20 years, normally retained.  
**Category B/C:** an intermediate category between categories B and C (not specifically described in BS5837). Trees, which should be retained wherever possible, providing retention does not significantly constrain the layout.  
**Category C:** low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter. Trees which can be removed to allow the desired layout or new planting.

BS58837 Shade Area - area in which shading of living accommodation may affect sustainability of trees.



DRIVE CONSTRUCTION DETAIL IN NO-DIG AREAS



**SJ Stephens Associates**  
 Savernake Barn, Stokke Common  
 Great Bedwyn  
 Marlborough  
 Wiltshire SN8 3LL  
 01672 871862  
 www.sjstephens.co.uk

JOB TITLE  
 ASCOTT UNDER WYCHWOOD  
 -COW SHED

DRAWING TITLE  
 TREE PROTECTION PLAN

DRAWING NUMBER  
 1243-04

REV  
 A

REVISIONS

SCALE  
 1: 250 at A1

DATE  
 DEC 20

DRAWN BY  
 SJS

**Yew Tree Farm Cow shed site  
Ascott under Wychwood**

**Appendix B  
BS 5837: 2012 Tree Schedule**

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)				Canopy Clearance (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect ion Distnce (m)	Root Protect. Area (m2)
				N	S	E	W								
G8	Hedge	1.9	200					0.2	Mature	Stem diameter 100-200mm. Regularly maintained hedge including thorn, elder, elm and ash.		15-30	B-C2	2.4	18
G9	Hedgerow	1.6	25					0	Mature	Almost entirely bramble, with occasional elder.	Remove to widen access	5-15	C2	0.3	0
G10	Hedge	1.9	125					0.2	Mature	Stem diameter 75-125mm. Regularly maintained hedge including elm, thorn, blackthorn and ash. Gaps in parts.	Remove southern section to widen access	15-30	B-C2	1.5	7
T11	Thorn	4	150	1.5	2.5	3	2.5	0.5	Mature	Regularly cut back adjacent to farm access.		15-30	B-C2	1.8	10
T11a	Field maple	2	125	1.5	1.5	1.5	1.5	0.5	Semi-mature	Regularly topped, creating a poorly structured tree.		20-40	C2	1.5	7
G12	Hedgerow	1.6	25					0	Mature	Almost entirely bramble, with occasional elder.		5-15	C2	0.3	0
G13	Hedge	1.8	175					0.2	Mature	Stem diameter 100-175mm. Regularly maintained hedge including mostly thorn with some hazel.		15-30	B-C2	2.1	14
T14	Poplar	21	est 1100	13	11	8	9	3	Mature	Major limb to northeast from 2m. Prominent landscape tree. Risk of future branch breakout.		20-40	B2	13.2	547
T15	Poplar	20.5	est 940	10	10	9	5	2	Mature	Dense ivy to base.		20-40	B2	11.3	400
T16	Poplar	19.5	est 900	9	8	12	8	1.7	Mature	Slight lean to northeast. Dense ivy to base.		20-40	B2	10.8	366
T17	Thorn	2.2	60	1	1	1	1	0.3	Early mature	Approximately 5 stems from base- average 25mm.		15-30	B-C2	0.7	2
T18	Thorn	2	50	1	1	1	1	0.5	Semi-mature			20-40	C2	0.6	1
T19	Ash	6	est 140	2.5	2.5	2.5	2.5	2	Semi-mature	Growing up through dense bramble- detailed inspection not possible.		15-30	B-C2	1.7	9
T20	Poplar	17	980	12	10	10	8	1.8	Mature	Major limb to southwest from 1.5m.		20-40	B2	11.8	434
T21	Ash	8	260	2.5	2.5	2.5	2.5	1	Early mature	Three stems from base- 75,140,210mm- tight forks.		15-30	B-C2	3.1	31
T22	Poplar	16.5	390	3	5	3	5	1.8	Early mature			20-40	B2	4.7	69
T23	Poplar	15.5	370	0	7	2	2	1.6	Early mature	Three stems from base- 190,210,230mm- all leaning to south. Could consider removal to allow T22 to develop.		15-30	C2	4.4	62
T24	Poplar	19.5	660	8	7	8	7	5	Mature	Reasonable form and structure.		20-40	B2	7.9	197
T25	Poplar	19.5	460	6	5	3	7.5	2.5	Early mature	Twin stem from base- 300,350mm- both leaning to northwest.		15-30	B-C2	5.5	96
T26	Norway maple	10	280	4	8	3	3	0.5	Early mature	Contributing to windbreak.		>40	B2	3.4	35

**Yew Tree Farm Cow shed site  
Ascott under Wychwood**

**Appendix B  
BS 5837: 2012 Tree Schedule**

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)				Canopy Clearance (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect ion Distance (m)	Root Protect. Area (m <sup>2</sup> )
				N	S	E	W								
T27	Thorn	5	90	1	1	1	1	0.5	Early mature	Growing up through canopy of T24. Twin stemmed poplar growing around base.	Remove twin stem poplar, together with low branch on T24 to allow to develop.	15-30	B-C2	1.1	4
G28	Thorn/ash	3-4.5	125					0.5	Semi- mature	Stem diameter 70-125mm. Contributing to windbreak.		15-30	B-C2	1.5	7
T29	Norway maple	15.5	580	6	7.5	8	4.5	0.6	Early mature	Bushy form, but an attractive landscape tree.		>40	A-B2	7.0	152
T30	Norway maple	9	310	4.5	4.5	1.5	2	1.5	Early mature	Drawn up by group pressure.		15-30	B-C2	3.7	43
T31	Norway maple	9	240	3	4	2	1	1.6	Early mature	Dead branches to north.		10-20	C2	2.9	26
T32	Norway maple	10.5	300	5	3	4.5	1.5	0.4	Early mature	Suppressed by T33. Leaning to north.		15-30	B-C2	3.6	41
T33	Poplar	19.5	860	8	9.5	7	9	2	Mature	Wide spreading tree, with heavy low limbs to south and west.	Remove stone blocks around base.	20-40	B2	10.3	334
T34	Norway maple	11	400	1	6	5	2	1	Early mature	Twin stem from 0.9m-280,290mm- tight fork, leaning stems.		10-20	C2	4.8	72
T35	Norway maple	9	440	3	6.5	5	5	1.4	Early mature	Providing good screening.	Lift canopy and prune back to clear turning area.	20-40	B2	5.3	88
T36	Norway maple	11.5	430	4	4	5	6	1.5	Early mature	Five stems at 1.5m- average 190mm.		20-40	B2	5.2	84
T37	Norway maple	11.5	430	6	2	5.5	5.5	1.1	Early mature	Good low canopy screening.		20-40	B2	5.2	84
T38	Ash	4	140	2	2	2	2	1	Semi- mature	Growing out of foundations of pen.	Remove	10-20	C2	1.7	9
T39	Elm	6.5	200	1	3	3	1.5	1.7	Semi- mature	Growing out of hedge. Likely to succumb to disease.	Remove	10-20	C2	2.4	18
T40	Elm	6	170	2	2	2	2	1.5	Semi- mature	Likely to succumb to disease.	Remove	10-20	C2	2.0	13

**BS 5837:2012, Table 1 Cascade chart for tree quality assessment**

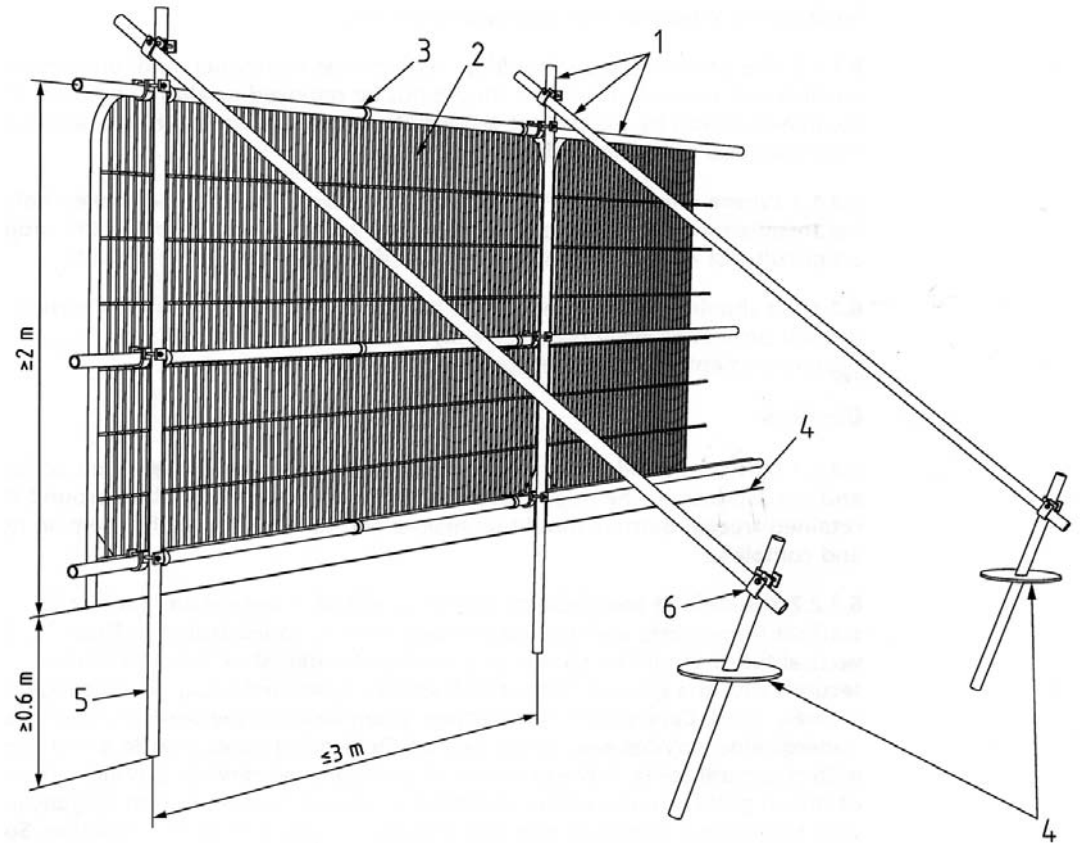
Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<b>Trees unsuitable for retention (see Note)</b>				
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infested with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</li> </ul>			Canopy coloured red
<i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>				
<b>Trees to be considered for retention</b>				
<b>Category A</b> <b>Trees of high quality</b> with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Canopy coloured green
<b>Category B</b> <b>Trees of moderate quality</b> with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Canopy coloured blue
<b>Category C</b> <b>Trees of low quality</b> with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Canopy coloured grey



Figure 2

**Key**

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



**Examples of above-ground stabilising systems**

Figure 3a

Stabiliser strut with base plate secured with ground pins

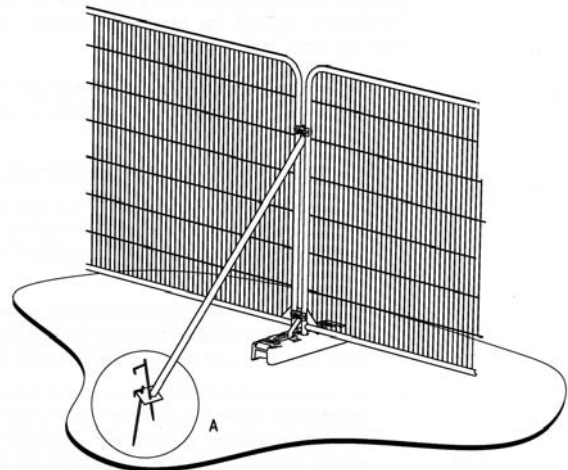
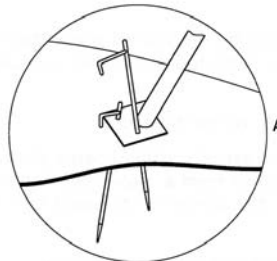
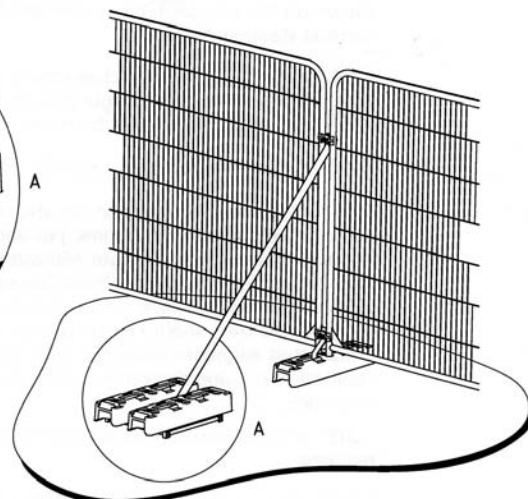
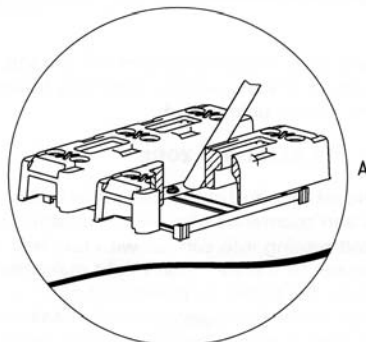


Figure 3b

Stabiliser strut mounted on block tray



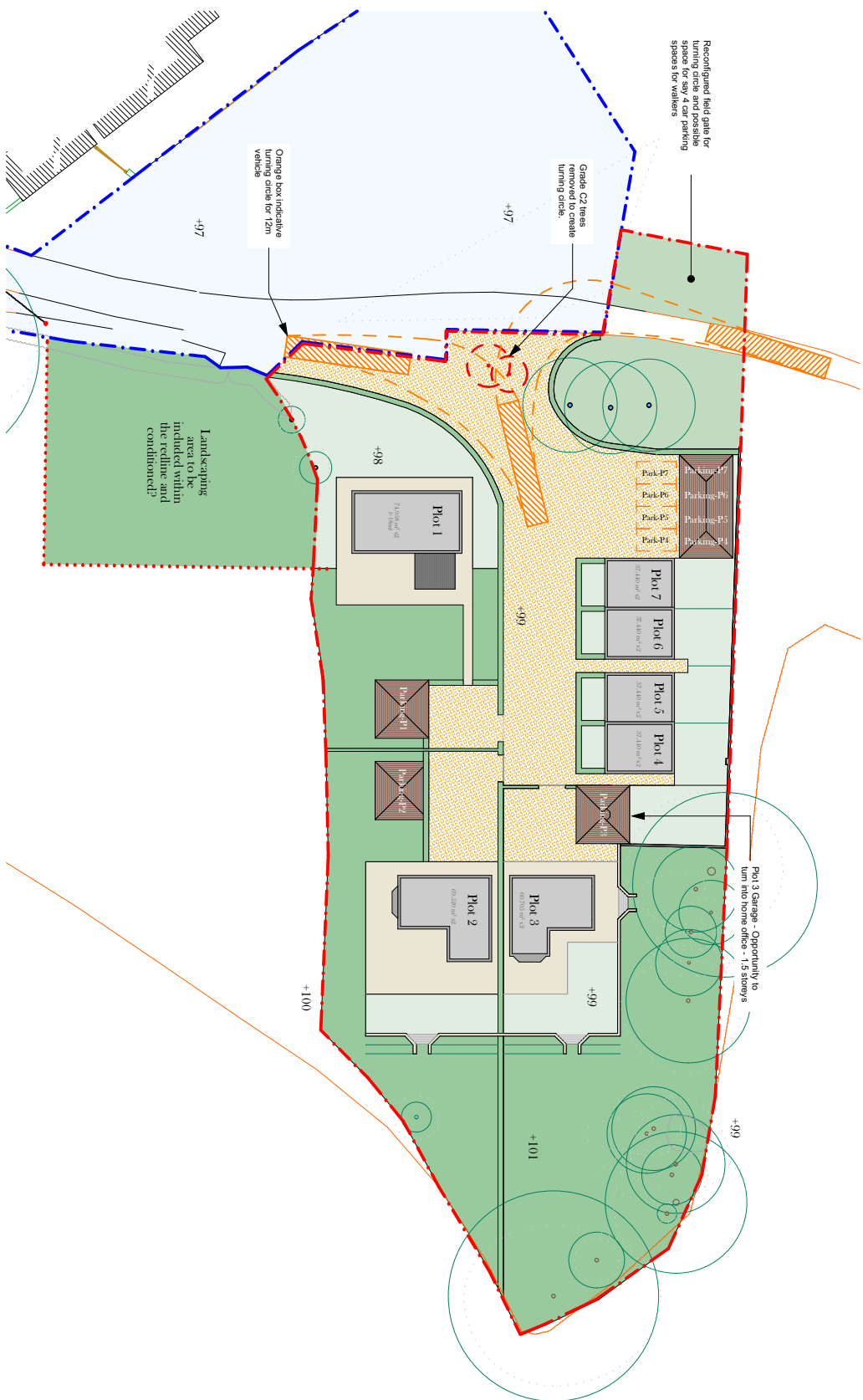












- NOTES - Total GIA of Plots = 728m<sup>2</sup>
- Terrace of plot 4, 5, 6, & 7 centred to avoid overlooking plot 1.
  - Parking and garage/car ports to the west of the terrace set back.