

BOVIS HOMES



PARCELS D & E
LONGFORD PARK
BANBURY

Arboricultural Method Statement

February 2017
8667_AMS.003

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1 INTRODUCTION

1.1 Background

1.1.1 Aspect Arboriculture has been instructed by Bovis Homes to prepare an Arboricultural Method Statement (hereafter the AMS) to inform confident tree retention during construction of the approved Parcels D & E at Longford Park Banbury.

1.1.2 It is our understanding that this work will be submitted to, and approved by, Cherwell District Council (hereafter CDC) prior to the commencement of any extension works on site. Once approved, the works should be implemented as specified and maintained to CDC's satisfaction until completion of the works.

1.1.3 Planning permission for the development has been granted subject to conditions (ref. 05/01337/OUT). Condition no.18 includes the requirement for an Arboricultural Method Statement to clearly specify the measures to confidently protect retained trees within the site and on the boundaries, and hedgerow separating the parcels. This arboricultural method statement and tree protection plan has been prepared in direct response to this request.

1.1.4 The confident protection of retained trees will be achieved through the use of the appended Tree Protection Plan (Appendix A) and Works Auditing Schedule (Appendix B) alongside other supporting documents included within Appendices C & D.

1.2 Scope

1.2.1 This work relates to arboriculture therefore reliance should not be given to comments made in respect of other disciplines i.e. civil engineering or construction phasing, without first referencing an appropriate expert.

1.3 **Limitations**

- 1.3.1 This document has been prepared in to inform safeguarding measures during extension works, 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, however trees are prone to natural failure without warning; no guarantee can be made as to the absolute safety of any of the trees surveyed.
- 1.3.2 The survey was undertaken by Aspect during May 2015. Aspect's opinion of tree condition and structural potential is valid for limited period of 12 months from the date of survey. Validity is assumed in the absence of inclement weather and no change to the trees' existing context.

2 ESSENTIAL WORK

2.1 Tree Protection Plan

2.1.1 The tree protection drawing provided in Appendix A will be relied upon during development works. It should be read in conjunction with the entirety of this document.

2.1.2 To prevent avoidable damage to retained trees or erroneous tree loss, a scaled A1 copy of the TPP accompanied by a copy of this document will be provided to the site manager. This will ensure they are able to:

- Identify retained trees;
- Identify the correct locations for tree protection barriers and ground protection;
- Identify features of the site that must be prepared/installed under an arboricultural watching brief;
- Request attendance of the project arboriculturist on site for site monitoring and to provide advice in case of any emerging issue;
- Demonstrate compliance with the Council's consent for development by completing the Works Auditing Schedule (Appendix B).

2.2 Tree Removals

2.2.1 Tree removals necessary to facilitate the proposals are limited to:

- **G32** Hawthorn, Ash, Elm, Field Maple, Elder (Partial Removal of c.5m to facilitate proposed pedestrian link)
- **G40** Cedar, Lawson Cypress, Plum, Laurel (Partial removal of onsite components to facilitate construction of proposed screen wall)
- **G41** Hawthorn, Field Maple (Partial removal of onsite components to facilitate construction of proposed screen wall)

2.2.2 It is recommended that sections of groups to be removed are spray marked with a red flash by the project arboriculturist. The presence of the appointed arboricultural contractor is also recommended during this process to safeguard against erroneous felling.

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

2.2.4 This work should be undertaken in accordance with the principles within BS3998:2010 by a qualified and competent contractor to ensure that cuts are performed correctly, and positioned so as to avoid damage/harm to surrounding retained trees.

The Works Auditing Schedule (Appendix B) shall be signed on completion of tree removals.

2.3 Tree Pruning Works

2.3.1 It will be necessary to selectively prune **T106** (by c.3.75m) to provide sufficient clearance to erect scaffolding to construct proposed garages associated with plot nos. 921 & 922.

2.3.2 It will also be necessary to return **G32** into a regime of hedgerow maintenance, and to crown lift **T105** by c.0.3m to enable the erection of a proposed closeboard fence adjacent to the site boundary.

2.3.3 Dead branches should be removed from the canopies of retained trees. Although this work is not required to facilitate the construction of the proposed built form, it will help mitigate the risk of future tree related hazards emerging. It would be prudent for this work to coincide with clearance works on account that access to the trees will be unimpeded.

2.3.4 The above works should be undertaken in accordance with sections 7.3 (for removal of deadwood) and 7.8 (for selective pruning) of BS3998:2010. A qualified and competent contractor should be employed to ensure that cuts are performed correctly, and positioned so as to avoid future structural defects or physiological issues, facilitate growth and maintain aesthetic value.

2.4 **Protective Barriers**

2.4.1 To safeguard the retained tree cover from damage during development, it will be necessary to protect the trees using tree protection barriers. The location for the barriers has been informed by the retained trees' RPAs and their canopy extents. Default tree protection barriers' locations are illustrated within Appendix A with a bold blue line.

2.4.2 The default barrier specification is required for direct tree protection and is to be of the specification provided in BS5837:2012 (shown below). It is essential that this is erected prior to occupation of the site for construction related purposes.

2.4.3 The project arboriculturist will inspect tree protection barriers and provide written confirmation to the LPA's arboricultural officer on completion. The **site manager** will be responsible for arranging attendance of the project arboriculturist to monitor barriers at appropriate intervals for the duration of the development; issues will be resolved on site and reported to the LPA's arboricultural officer by the project arboriculturist.

Plate.1 Default Protective Barrier Specification



The Works Auditing Schedule (Appendix B) will be used as a record to show that barriers have been correctly sited.

2.5 Ground Protection

2.5.1 It is necessary to offset the tree protection barriers by c.2m from the external walls of the garages associated with plot nos. 921 & 922. The intermediate area of the RPA of **T106** must be protected from compaction and disturbance during development, using polyethylene trakmats (or similar) for the duration of construction. The area is illustrated within Appendix A with a blue hatch.

2.6 Supervised Excavation

2.6.1 As part of the proposals, it will be necessary to introduce the sithern extent of proposed garages within the RPA of retained tree number **T106**. The proposals also necessitate excavation works within the RPA of **G32**, to install the footings of plot no. 927, a proposed footpath and proposed car parking. These areas are illustrated within Appendix A with an orange hatch.

2.6.2 The areas have all been subject to regular agricultural cultivation, thereby reducing the rooting volume within the upper soil horizons within these areas. As a precautionary measure to avoid detriment to the retained tree cover, and pursuant

to the confident retention of G32 as required within condition 18, the excavation works must be carried out under arboricultural supervision, adopting the principles within section 7.2 of BS5837:2012.

2.6.3 During supervised excavations within the RPAs, the following procedure will be adopted:

- a) The breaking up and clearance of the existing soils must be undertaken under arboricultural supervision.
- b) During the works the protective bark of larger roots is not to be damaged.
- c) If necessary, roots that are less than 25mm diameter can to be pruned back, preferably to a side branch, using sharp cutting tools i.e. bypass secateurs or pruning saw.
- d) No roots over 25mm are to be severed without approval of the LPA's Arboricultural Officer and the appointed onsite arboriculturist as they may be integral to tree health and stability.
- e) Areas adjacent to roots that are to be filled with concrete will be lined with an impermeable membrane to prevent concrete leachate coming into contact with tree roots.
- f) Exposed roots must be covered in hessian sack or clean top soil to protect from dehydration and temperature flux. The hessian sack is to be removed prior to backfilling. Exposed roots are to be surrounded with sharp sand. Builders' sand will not be used because of its' high salt content which is toxic to roots.
- g) Any use of an excavator to complete excavations must occur from outside of the RPAs (which will be spray-marked on the ground in advance of the works taking place). A toothless bucket will be utilised at all times.
- h) A record of exposed roots will be made and accompanied by a photographic log.

- i) Should any issues be raised during supervision then the arboriculturist should inform the developer and the LPA's arboricultural officer, indicating the nature of the problem and recommendations for action required.
- j) Tree protection barriers are to be reinstated or repositioned on completion - whichever is within the interest of protecting RPAs. This is to be determined by the supervising arboriculturist.
- k) Upon request, written confirmation of the works being undertaken to a satisfactory standard can be provided to the Site Manager and the LPA's Arboricultural Officer by the supervising arboriculturist.

The Works Auditing Schedule (Appendix B) will be signed on completion of the works detailed above.

2.7 **Proposed Order of Works**

- a) Pre-commencement site meeting between the project arboriculturist, site manager, tree contractor and the LPA's arboricultural officer. Tree removals, supervision of works, inspection and monitoring requirements will be identified/agreed.
- b) Necessary tree removals as illustrated within Appendix A to be carried out prior to installation of tree protection barriers and commencement of construction works.
- c) Tree protection barriers are to be installed following removals and prior to construction works. Upon request, barrier positions can be set-out by the project arboriculturist, as detailed within this document.
- d) The LPA's arboricultural officer shall be informed of the proposed commencement date as soon as possible, to allow the inspection of protection measures.

- e) The **site manager** will assume responsibility for arranging the attendance of the project arboriculturist to oversee relocation of barriers, and excavation works within RPAs, as detailed with the works auditing schedule (Appendix B).
- f) The **site manager** will assume responsibility for arranging attendance of the project arboriculturist for the monitoring of barriers at appropriate intervals for the duration of the development works. Erection of barriers and monitoring is included within the works auditing schedule (Appendix B).

2.8 **Site Manager's Point of Contact For Arboricultural Input:**

Dr Richard Curtis or Mr James Bardey (Aspect Arboriculture)

Telephone: 01295 276066

Email: Richard.Curtis@aspect-arbor.com James.Bardey@aspect-arbor.com

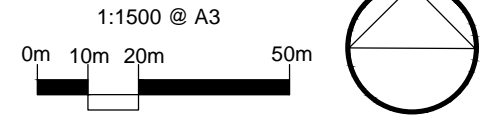
3 **CONCLUSIONS**

- 3.1 This document has been prepared in response to condition no.18 of the existing planning permission (ref. 05/01337/OUT) for development at Longford Park, Banbury. It has been informed by guidance provided in BS5837:2012 including an arboricultural survey of the site's existing trees undertaken during May 2015.
- 3.2 Pursuant to the instruction, this document and its supporting work (Appendices A - D) identifies all features of the extension works that must be managed to facilitate confident tree retention during the construction process.
- 3.3 To ensure confident tree retention; aspects of the development, including siting of tree protection barriers, and specified excavation works must be audited by the project arboriculturist; the outcome of these works will be reported to the LPA's arboricultural officer on completion. These areas are specified within the works auditing schedule (Appendix B).
- 3.4 It is Aspect's opinion that, subject to strict adherence to this document, the construction works can be undertaken without affecting the confident retention of retained trees and tree groups.

APPENDICES

APPENDIX A

TREE PROTECTION PLAN (8667 TPP 10 Rev A)



- KEY:**
- Site Boundary
 - 15 Trees Numbers
 - Tree Canopies
 - 8 Category 'U' Trees
 - 7 Category 'C' RPA
 - 7 Trees to be Removed
 - Tree Protection Fencing
 - Manual Excavation
 - Ground Boarding

G40 & G41: Removal of onsite components to allow construction of brick screen wall.

T105: To be crown lifted by c.0.3m to facilitate proposed close board fence.

T106: Ground boarding to be positioned between footprint of proposed garage and tree protection barriers to protect RPA.

T106: Footprint of proposed garage within RPA to be manually excavated under direct arboricultural supervision.

T106: To be target pruned by c.3.75m to facilitate construction room for proposed garage.

T103: To be target pruned by c.0.75m to facilitate construction room for proposed garage.

G32: Footprint of proposed footpath within RPA to be manually excavated under direct arboricultural supervision.

G32: Footprint of proposed road/parking within RPA to be manually excavated under direct arboricultural supervision.

G32: Removal of c.5m to accommodate proposed pedestrian link.

G32: Footprint of proposed building within RPA to be manually excavated under direct arboricultural supervision.

REV	DATE	NOTE	Drawn	Chk'd
REVISIONS				



TITLE
**Longford Park, Parcel D/E
 Tree Protection Plan**

CLIENT
Bovis Homes

SCALE 1:1500 @ A3	DATE FEB 2017	DRAWN GW
DRAWING NUMBER 8667 TPP 10 Rev A	REVISION A	

Based on Architects drawing ref: Approved RGP D and E layout.dwg

APPENDIX B

WORKS AUDITING SCHEDULE

Works Auditing Schedule

This schedule will be completed as evidence that works have been undertaken as per the approved methodology.

Works Requiring Auditing	Tree No.	Date Undertaken	Date Reported to LPA
1. Pre-commencement meeting identifying tree removals, pruning works, tree protection barrier locations and ground protection as specified within 8667_AMS.003 and illustrated on drawing no. 8667_TPP.10 Rev A.	As drawn
2: Inspection of tree protection barriers prior to commencement of development works by LPA's arboricultural officer/project arboriculturist.	As drawn
3: Arboricultural watching brief during excavations within RPAs as specified within 8667_AMS.003 and illustrated on drawing no. 8667_TPP.10 Rev A.	T106 G32
Inspection of installed tree protection barriers as specified within 8667_AMS.003 and illustrated on drawing no. 8667_TPP.10 Rev A (appropriate basis).	As drawn

APPENDIX C

TREE SURVEY SCHEDULE (8667 TS 01)

**BS 5837:2012 Tree Schedule: Parcel D & E
Longford Park,
Banbury**

BS5837:2012 Tree Survey: Explanation of Survey Criteria

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)					Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
		N	E	S	W	radial									
Sequential reference number cited on all aspect drawing.		Height and Crown spread measured to the nearest half meter; # denotes where this is estimated.			e.g.: young, semi-mature, early-mature, mature or over-mature					Area around tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of roots and soil structure is a priority.					
		Measured to the nearest 10mm; # denotes estimated diameter where access is not possible.			Height of first significant branch and/or canopy					e.g.: above-average, average, below average or dead			General observations, i.e. defects, preliminary management recommendation, presence of pests/disease, perceived significance.		
Colour band key:		Category A		Category B		Category C		Category U		e.g.: good, indifferent, poor, or hazardous					

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

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W								radial
102	Field Maple	5 x 250#	9m					5.75	2	Mature	Average	Indifferent		C 12	6.6
103	Silver Birch	300#	8m					4	2	Early Mature	Average	Indifferent		C 12	3.6
104	Silver Birch	250#	12m					3.5	2	Early Mature	Average	Indifferent		C 12	3
105	Beech	400# 200#	12m					6	1.5	Early Mature	Average	Indifferent		C 12	5.4
106	Beech	490 620 390	11m					7.25	2	Mature	Average	Poor		C 12	10.5
107	Horse Chestnut	130	2.5m					1.5	2	Young	Below Average	Poor		U	N/A
108	Field Maple	400#	9m					4.25	2	Mature	Average	Indifferent		C 12	4.8
G25	Hawthorn Ash Elder	200	2-3m					1.5	0.5	Early Mature	Average	Indifferent		C 12	2.4
G26	Hawthorn Ash Blackthorn Field Maple	200	2-4m					1.75	0.5	Early Mature	Average	Indifferent		C 12	2.4
G32	Hawthorn Ash Elm Field Maple Elder	400 max @ base	3-4.5m					2	0.5	Mature	Average	Indifferent		C 12	4.8
G40	Cedar Lawson Plum Laurel	500, 300 max (5m back)	4-10m					2.5 @ boundary	0.5-2.5	Early Mature - Average	Average	Indifferent		C 12	6.9
G41	Hawhorn Field Maple	100 max	1.5m					1	0.5	Early Mature	Average	Indifferent		C 12	1.2
G42	Leyland Elder	100 max	2-3.5m					1.5	0.5	Early Mature	Average	Indifferent		C 12	1.2
G43	Elder Plum Ash	400 max	2-12m					6	0.5-3	Early Mature - Mature	Average	Indifferent - Poor		C 12	4.8

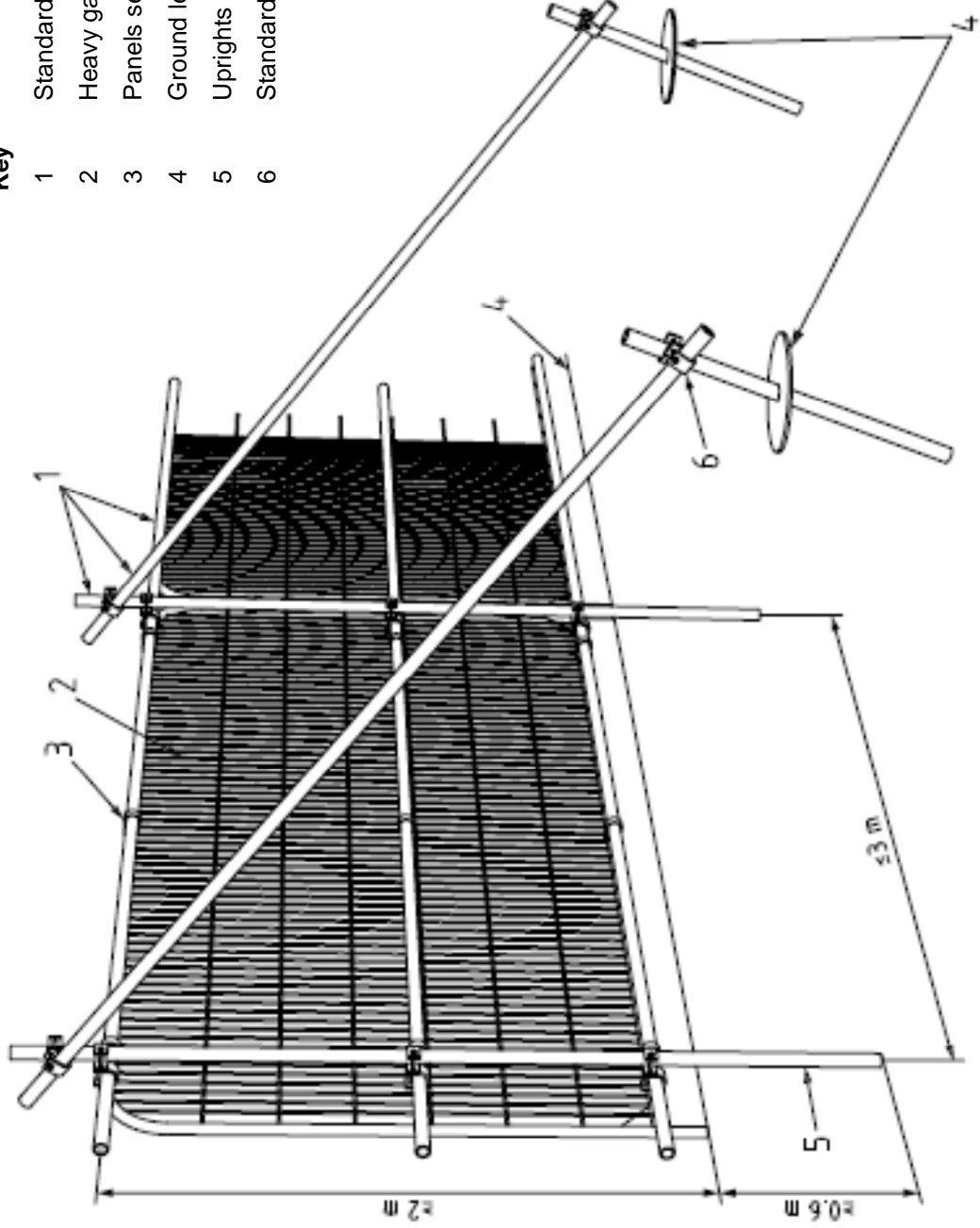
APPENDIX D

TREE PROTECTION BARRIER SPECIFICATIONS

Recommended Tree Protection Fencing Specification for this Development
 (Source: BS 5837: 2012)

Key

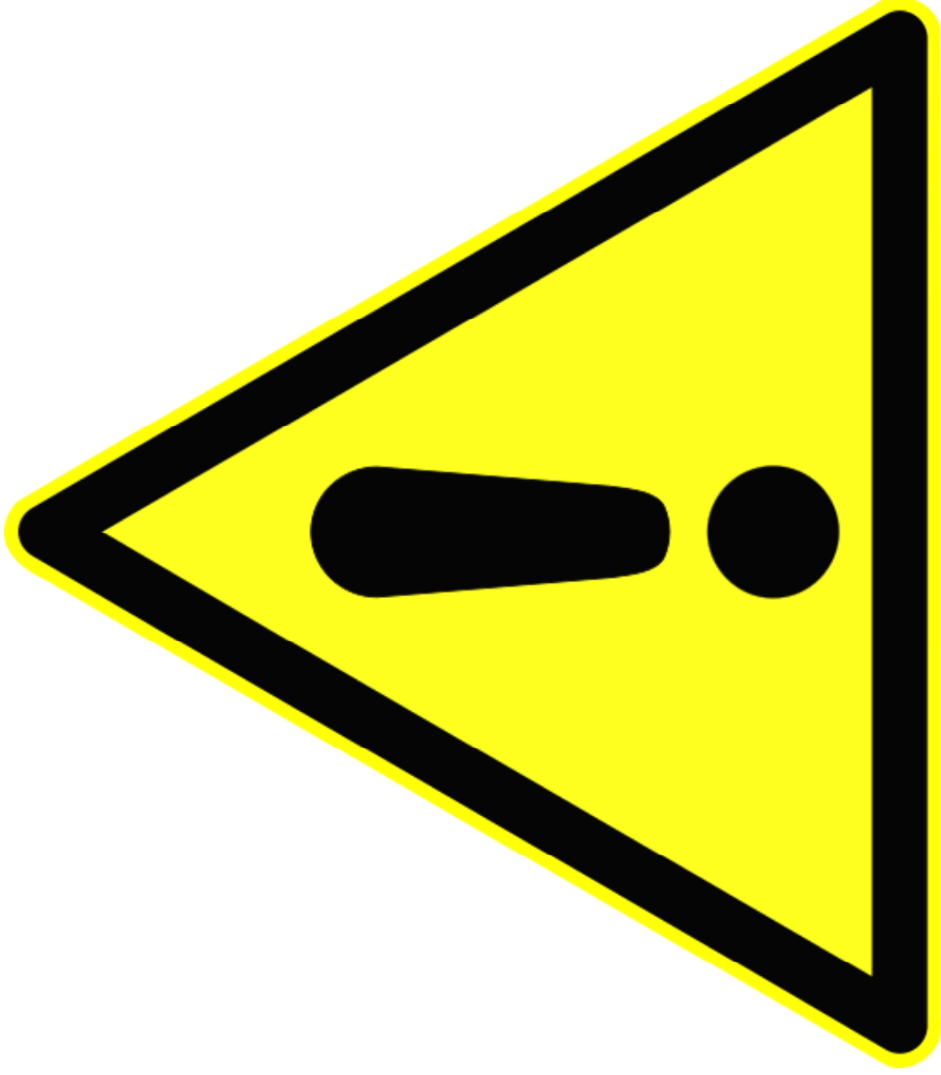
- 1 Standard scaffold poles
- 2 Heavy gauge 2m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6m)
- 6 Standard scaffold clamps



Notes:

- Supports are to be sited tree side of the panel front face.
- All weather notices should be attached to every fourth panel highlighting the importance of the barrier in its correct position. An example is provided overleaf which may be duplicated for use on this development.

TREE PROTECTION BARRIER



- DO NOT MOVE THIS FENCE
- NO SITE ACTIVITY TREE SIDE OF FENCE
- NO STORAGE TREE SIDE OF FENCE
- For assistance call Aspect Arboriculture:
01295 276066

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